

Aerospace

henchman

Serving your business with quality service and tools for over 20 years









Our story...

Henchman Group Pty Ltd is an international supplier and manufacturer of professional tools, tool control solutions and custom toolkits for Aircraft mechanics, technicians and engineers.

Established in 1999 in Newcastle NSW as a one man business, we were drawn quickly into the aerospace industry within the first year of business to provide toolkitting solutions for a large local airbase. This has grown to become an extremely significant part of our business for both local and international customers. Since then, Henchman has grown from strength to strength and expanded globally with branch offices in New Zealand, Singapore, Europe and the US, while still remaining an Australian owned family business.

We have grown steadily as a reputable and reliable solution provider. We aim to be known as a consultant, sourcing and specifying tools and equipment that increase our customers bottom line – by improving productivity as well as reducing money and time spend on searching for and replacing lost tools.

The Regulation Part 145 requires an organization to demonstrate effective tool control. Henchman helps our customers to be compliant by providing the very best in custom toolkits with visual tool control foam inlays and laser etched identification.

In case the extensive range of products in this catalogue doesn't meet your specific requirements, please get in touch with our experienced sales staff and we will strive to continue to help you work, professionally!

Our vision...

- Commitment to impeccable customer service
- Positivity, honesty and integrity
- To be recognised as a leading supplier of tooling solutions, toolkits and tools across all industries

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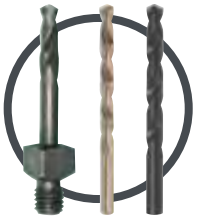
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Contents

Contents 1-7



Tool Control & Storage 9
Electronic Tool Control (henchmanTRAKTM) 10
Configurable Standard Toolkits 18
Customisation 20
Custom Foam & Fitout 21
Henchman Tool Storage Solutions 22
Henchman Toolkits 27



Drilling, Reaming & Cutting 43
Desoutter Drills 44
Desoutter Tappers 57
Sioux Drills 58
Dotco Drills 59
Henchman Pneumatic Drills 60
Drilling Attachments 62
Aircraft Threaded Drills 64
Aircraft HSS Jobber Drills 66
Aircraft Cobalt Drills 68
Aircraft Extension Drills 70
Specialist Drills 72
Taper-Lok Cutters 75
Drilling Accessories 76
Nut Plate Drill Jigs 80
Holefinders & Manual Deburring 82
Carbide Burrs 86
Deburring Tools & Rivet Shavers 93
Desoutter Routers 95
Composite Cutting Tools 97
Aircraft Reamers 99
Holesaws & Saws 105



Grinding & Sanding 109

Grinders 110
Sanders 124
Clayton Dustless Sanding 140
- Backup Pads 144
- Shrouds 146
- Dustmaster 158
- Hornet 164

Hoses 174
Pneumatic Fittings 176
Abrasives 179
Policaps 188
Abrasive Brushes 189
Files 190



Riveters & Riveting 193

Riveting Hammers 194
Rivet Sets 198
Tungsten Bucking Bars 204
Steel Bucking Bars 206
Desoutter Rivet Squeezers 208
Other Rivet Squeezers 210
Manual Rivet Squeezers 212
Gage Bilt Riveters 214
Gage Bilt Power Tools 217
Hi-Lok® Tooling 221
Hi-Lok® Box Ratchets 224
Hi-Lok® Roller Ratchets 226
Hand Tools 234
Temporary Fasteners 236
WCI Cold Expansion Technology 240



Sealant Application & Removal 243

Sealant Sky Scrapers & Kits 244
Sealant Guns & Accessories 247



1/4 Inch Drive Sockets & Ratchets 249

Drive Tools 250
Sockets 258
Universal Sockets 266
Bit Sockets 268
Crowring Wrenches 270
Crowfoot Wrenches 271
Sets 272



3/8 Inch Drive Sockets & Ratchets 279

Drive Tools 280
Sockets 288
Universal Sockets 297
Bit Sockets 300
Crowfoot Wrenches 303
Torque Adapters 308
Sets 312



1/2 Inch Drive Sockets & Ratchets 321

Tools 322
Sockets 330
Universal Sockets 339
Bit Sockets 340
Crowfoot Wrenches 343
Sets 350



Large Series Sockets 357

3/4” Drive Tools 358
3/4” Drive Sockets 360
3/4” Drive Sets 364
1” Drive Tools 366
1” Drive Sockets 368
1” Drive Sets 370

INDEX



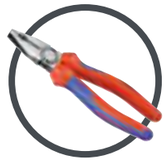
Spanners & Wrenches 373
Combination Spanners & Sets 374
Ring-Ring Spanners & Sets 389
Open-End Spanners & Sets 399
Flexhead Wrenches & Sets 407
Flarenut Spanners & Sets 409
Combination Ratchet Wrenches & Sets 413
Ring Ratchet Wrenches & Sets 432
Service Wrenches 442
Single-end Spanners 443
Adjustable Wrenches & Sets 445
Hook Wrenches 446
Box Spanner Sets 447
GearWrench Tap & Die 448
L-Keys & Sets 450



Striking, Hooks & Pry Bars 457
Hammers 458
Punches 465
Chisels 468
Punch & Chisel Sets 469
Hole Punches 472
Punch Accessories 473
Picks & Probes 474
Pry Tools 475



Drivers & Screw Extraction 477
Apex Screwdriver Bits 478
Wiha Screwdriver Bits 480
PROTO® Bit Adapters 484
Ratchet Screwdriver Sets 485
Ratcheting Drivers 486
Wiha SoftFinish® Screwdrivers 488
Wiha Hex Bolster Screwdrivers 491
Specialist Drivers 491
PROTO® Screwdrivers 492
Wiha System 6 Reversible Blade System 493
Wiha System 4 Reversible Blade System 494
Wiha PicoFinish® Screwdrivers 495
Screw Extractors & Sets 497



Pliers, Cutters & Shears 501
Knipex Pliers & Cutters 502
PROTO® Pliers 506
Multigrip & Soft Jaw Pliers 509
Circlip Pliers 510
Tsunoda Electronic Series Pliers 513
Wiha ESD Cutters 514
Wire Twisting Pliers 516
Other Pliers 517
Shears & Scissors 518
Knives 520



Cable Strippers & Crimpers 523
Cable Cutters & Wirestrippers 524
Ideal Wirestrippers 526
Mil-Spec Connector Tooling 530
Pneumatic Crimpers 541
Connector Tooling Kits 547



Clamps, Vises & Pullers 549
Visegrip 550
Irwin Clamps 552
PanaVise 554
Bearing Pullers 555



Fluke Test Equipment 557
Digital Multimeters 558
Infrared Thermometers 568
Insulation Testers 572
Clamp Meters 574
Electrical Testers 579
Bonding Testers 579
Test Leads, Probes & Clips 580



Avionics Laboratory/PCB Level 583
Static Control.....584
ESD Test Equipment.....588
ESD Cleaning.....589
Purex Fume Extraction.....590
JBC Soldering Equipment.....592
Hakko Soldering Equipment.....594
Various Soldering.....596
Ultrasonic Cleaning Baths.....597



Force, Tension & Torque..... 599
Torque Screwdrivers.....600
Coaxial Torque Wrench.....604
Torque Wrenches.....605
Digital Torque Wrenches.....612
Torque Adapters & Multipliers.....622
Torque Drivers.....624
Torque Nutrunners.....630
Desoutter Tool Management.....636
Desoutter Torque Controllers.....637
Torque Testing Solutions.....638
Tensiometers & Equipment.....648



Inspect, Measure & Lighting.....651
Feeler Gauges.....652
Measuring.....654
Pin Gauges.....657
Inspection.....658
Magnifying.....659
Lighting.....660
Hawkeye Precision Borescope.....664
Optical Micrometer.....665



Miscellaneous.....667
Ruggedized Industrial PC's.....668
Glue Guns.....670
Heat Guns.....671
Power Tools.....672
Milwaukee Tools.....674
Vacuum Cleaners.....676
Permaswage.....680
Latchways.....682

Index.....684
Conversion Charts.....692
Notes.....703

Tool Control & Storage

Electronic Tool Control (henchmanTRAK™) 10

Configurable Standard Toolkits..... 18

Customisation 20

Custom Foam & Fitout 21

Henchman Tool Storage Solutions..... 22

Henchman Toolkits 27

Electronic Tool Control

HenchmanTRAK™ records every user and the tools or toolkits issued or returned, providing accountability at all times, reducing the number of misplaced tools and increasing efficiency.

Unlike other Electronic Tool Control Systems that use scanning systems or require tool modifications, kabTRAK™ is fitted with a highly sensitive modular sensor system developed by Henchman (Patent Pending).

The status of multiple units is viewable on a central cloud dashboard, where monitoring and reporting of transactions or unserviceable tools is available, making service scheduling of calibratable tools simple.

HENCHMANTRAK







The HenchmanTRAK family

The system currently consists of four key physical products:

- **kabTRAK™** is a premium quality tool cabinet fitted with our advanced sensing system (Patent Pending), designed to make tool control as effortless, reliable and simple for the engineer as it can possibly be. It tracks the issue and return of hand tools and smaller items – right at the point of use.
- **portaTRAK™** is a unique system to track the issue and complete return of portable toolkits using accurate weight measurement.
- **cribTRAK™** bridges the gap using RFID tags and/or barcodes to monitor manual tool movement. This system is used to track the issue and return of portable toolkits or power tools from/to a toolcrib.
- **lokkaTRAK™** incorporates the capability of a cribTRAK™ into a cabinet, providing unmanned and secure storage of larger tools and equipment or smaller toolkits close to the point of use, while limiting access to the items stored inside.

Your Benefits:

- **Fast & Effortless:** Issue/return of tools in seconds, identification of missing tools with one click on the screen to view transactions, monitoring of tools broken/due for service and list to order replacements
- **Safe:** Reliable check that the toolkit is complete (Part 145/FOD)
- **Transparent:** Instant report if tools are missing, or service/replacement is needed – on the unit and on the dashboard
- **Efficient:** Reduction of time wasted to issue/return tools and look for misplaced tools
- **Custom-build:** Fully customizable and scalable to your requirements





Find out more on
henchmanTRAK.com

kabTRAK™ Automated Electronic Smart Toolbox

The patent pending kabTRAK™ system is a smart toolbox that ensures fast and efficient electronic automated tool control. Mechanical hand and power tools are laid out in custom-cut two-coloured foam inlays that make it easy to identify where each tool belongs, and if a tool is missing.

The interactive touch display is easy to use, tracking the issue and return of hand tools and smaller items – directly at your job site.

How it works



When an authorised user presents their access card, they are then requested to select their proposed work location/tail number. The cabinet is then unlocked. As any drawer is opened, the screen will instantly display a live infographic with the status of each tool – tools available, tools issued to other users and tools issued to current user, making it easy to return tools to the correct tool pocket. Once all drawers are closed, the user can instantly lock the cabinet at the push of a button. Should the cabinet be accidentally left unlocked it will automatically lock after a short lapse of time. The status of "tools out" will then show on the guest screen.



Cabinet Sizes

The kabTRAK™ can be fitted with any combination of drawers providing they total exactly the cabinets "useable height":

100mm Height Drawer – actual internal size of 70mm H x 600mm D (Widths shown below)

150mm Height Drawer – actual internal size of 120mm H x 600mm D (Widths shown below)

225mm Height Drawer – actual internal size of 195mm H x 600mm D (Widths shown below)

300mm Height Drawer – actual internal size of 270mm H x 600mm D (Widths shown below)

Part No.	Dimensions (excluding wheels and tablet)			Cabinet "Useable Height" (mm)	Standard Drawer Height Combinations (mm)	Internal Drawer width
	Width (mm)	Height (mm)	Depth (mm)			
KABTRAK-0	710	810	755	675	3 x 100h, 1 x 150h, 1 x 225h	600
KABTRAK-1	1010	810	755	675	3 x 100h, 1 x 150h, 1 x 225h	900
KABTRAK-2	1010	1185	755	1050	9 x 100h, 1 x 150h	900
KABTRAK-3	1410	1185	755	1050	9 x 100h, 1 x 150h	1200

Some distinct Benefits of the kabTRAK™ System

- The kabTRAK™ can manage almost any possible tool variety, for example cutting tools or extremely small tools, and requires no tool modification to work.
- No delay time: Every tool movement is recorded instantaneously as a tool is lifted or returned, with no requirement for the drawer to be fully extended and no scanning time.
- Mobility: The system can be used outside and has a battery backup.
- Audit function: intuitive audit function so that supervisor can clear box prior to aircraft flying
- Calibration Management: Restricts use of any tool that has expired, giving an optional step to ensure the user checks the actual date on the tool when issuing, and an early warning to the supervisor of any imminent expiry.
- Broken tools: Should a tool be broken during use, on return it can be quickly marked "unserviceable" which will then restrict further use of this tool. A notification can be sent to the supervisor.
- Wearing tools: The kabTRAK™ can be kitted up with a debris catchment bin. Should the tool be not only worn out but say shattered into pieces, a return of debris can be accounted for.
- Consumable items: The kabTRAK™ can maintain a record of what has been consumed, whilst allowing return of any non-consumed items.
- Restocking and Re-ordering: The dashboard or direct messages to the supervisor provide updates of consumed and unserviceable tools, making restocking and re-ordering simple.
- No camera: The kabTRAK™ system specifically has no camera fitted to meet requirements of restricted/classified areas.

Comparison of kabTRAK™ with other known Technologies

	kabTRAK™ technolgy	Camera technology	RFID technology
Tool movement detection whilst drawer is open	✓	X	X
No scanning time to capture transactions	✓	X	X
No tool modification needed	✓	✓	X
No light interference	✓	X	✓
No camera fitted – suiting restricted areas	✓	X	✓
No ongoing maintenance, eg: adjustment to sensitivity of system or retagging of tools	✓	X	X

Three key Reasons for selecting a kabTRAK™

There are even more benefits and unique features which could be mentioned.

We recommend a demonstration, however, in our experience, there are three key reasons customers choose a kabTRAK™:

- The kabTRAK™ system operates as fast as you can possibly use it – no system is faster and more user friendly.
- The technology does not require ongoing adjustment (service cost) to maintain its optimum performance. The technology is as optimized on "Day 1" as it will be 5 years down the track.
- Flexibility is extremely high on the list of our customers specific requirements – from tools and cabinet sizes through to software and reporting.

portaTRAK™ Portable Kit Management System

The portaTRAK™ is a unique tracking system for the fast issue and return of portable toolkits using accurate weight measurement - down to detecting a missing 1/4 inch drive screwdriver bit.



How it works

After the user signs in with a tap of his card, he places a toolkit on the scales that will be recognized by the portaTRAK™ using an RFID tagging system. The weight of the kit is checked against the recorded weight, and if it matches (within a 4 gram tolerance) the kit will be issued or returned.

Seamless Integration

Multiple portaTRAK™ units can be used seamlessly and they can also be used alongside kabTRAK™ and cribTRAK™. This allows us to tailor a tool tracking solution to your specific requirements.

Features

Should a kit being returned have a broken tool in it, when returning this kit can be marked unserviceable so that it cannot be issued after this. A note can be inserted to inform the supervisor what tool is faulty.

Shoudl the kit have a calibrated tool inside, thie kit can have a expiry date recorded in the system to avoid the kit being issued once expired

The portaTRAK™ can effectively be used for any type of toolset, not only portable type toolkits but also items like fixtures, jigs Test Equipment, basically any set of items that shoudl be issued as a set and returned as a set with no missing parts. It is an ideal aid for any toolcrib to ensure tool sets are returned as complete.

The portaTRAK™ as standard is supplied for kits weighing up 50kg as a maximum.

For more information on the DURABOOK tablets we use with our HenchmanTRAK systems, please see page 668.

portaTRAK+ Locker Module

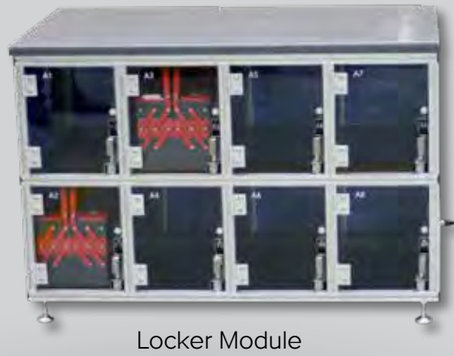
The portaTRAK™ can be used as a stand-alone system or its capability can be extended by adding the electrically connected locker module (portaTRAK+). This essentially forms an unmanned and secure storage system for portable kits or specific tools.

The locker modules are customised to suit your specific size tool boxes.

How it works

The user signs in with a swipe of his card, then selects “Issue Kit” on the touch screen and the tail number of the aircraft to be worked on. The portaTRAK+ will then open a locker, giving access to a specified toolkit. The kit is checked according to recorded weight using the portaTRAK™ loadcell.

When returning the kit, the correct weight will be verified and if correct, will open a locker door. Once the kit is replaced and the locker door is closed, the transaction is complete and the status screen updated.



Locker Module



portaTRAK™

cribTRAK™ Toolcrib Barcode System

The cribTRAK™ bridges the gap using RFID tagging and/or barcoding to monitor manual tool movement with a scanning system.

This is the simplest way to track items often stored in a toolcrib, as well as large items that do not fit into portable toolkits or a kabTRAK™.



How it works

To use the cribTRAK™, the user swipes their access badge and enters an aircraft registration number. The user then scans the barcode on the item using the built-in scanner to issue or return the item.

The cribTRAK™ has a green display when all tools are present or red when any tools are out. When tools are out, simply touching the display opens a list of tools issued and the user that took them.

lokkaTRAK™ Locker Cabinet

The lokkaTRAK™ system provides unmanned and secure storage of larger tools and equipment or smaller toolkits close to the point of use, while limiting access to the items stored inside.

Both available versions – RFID and Barcode Scanner - provide access control, inventory management and the recording of tool movements against employee and job number to ensure accountability and traceability, should an item not be returned.

Other features include marking items as unserviceable / replacement needed as well as tracking the calibration status. All data is remotely accessible through the henchmanTRAK™ dashboard, giving a supervisor access to tool status and other reports, to schedule calibration or order replacements.

RFID Automated Locker Cabinet

The RFID version of the lokkaTRAK™ removes all human error by automatically scanning and recording any tool movements.

The user signs in with a tap of their card and enters an aircraft registration number to unlock the cabinet. They can then remove or return items, that are each fitted with an RFID tag. Once the cabinet door is closed, the system scans the contents and records all item movements, before locking and logging the user out.



Barcode Scanning Cabinet

The barcode version of the lokkaTRAK™ incorporates the capability of a cribTRAK™ barcode scanner into a cabinet.

The user signs in with a tap of his card and enters an aircraft registration number to unlock the cabinet. The user then scans the barcode on the item they would like to issue or return using the barcode scanner. The cabinet automatically locks when the door is closed, logging the user out.

Seamless Integration

Multiple lokkaTRAK™ units can be used seamlessly and they can also be used alongside other henchmanTRAK™ solutions.

The cribTRAK™ barcode scanner system can be used to monitor and control the access to almost any type of storage solution, including cabinets with multiple doors or with many pigeon holes.

Customization can include:

- Limiting access to specific parts of the cabinet or specific pigeon holes
- Making sure an item is returned to the same spot within the storage
- Including charging stations

henchmanTRAK™ Mobile App

The henchmanTRAK™ Mobile App tracks the issue and return of portable toolkits against tail number or works order using a smartphone or tablet. It allows for the seamless control and real-time recording of all item movement and engineer workflow data, utilising existing personal devices. The tracked toolkits can be stored in a toolcrib or in unmanned lockers that are accessed and unlocked through the app via Bluetooth.



- Simple, fast and easy to use
- Fully scalable for the use by a single engineer or very large MRO applications
- Cloud-based data storage with central viewing access on the universal henchmanTRAK dashboard
- Seamless integration alongside other henchmanTRAK solutions
- Records are synchronised with the database in real time
- Removal of staff pinch-points experienced with Electronic Tool Control

henchmanTRAK™ Dashboard

The henchmanTRAK™ software is a powerful bespoke user interface, with a proven SQL database for records of tooling. Each unit has live integration with a central cloud database. Responsive web portal access to this database provides managers with a live snapshot of tool status including which aircraft they are being used on.

The henchmanTRAK™ smartphone App is simplifying the management of portable kits on the run.





Administrator functions

- User access management
- Entering of aircraft registration numbers
- Recording of serviceable and calibrated tooling
- Extraction of standard or customized reports

The henchmanTRAK™ system can work with existing access badges, or additional tags can be provided. At Henchman we understand that every customer has different requirements and we are able to integrate at certain levels with 3rd party systems.

Configurable Standard Toolkits

Reduce your time and money sourcing equipment and assembling toolkits when you have more worthwhile expertise. As a single-source supplier we design your toolkit with over 20 years of experience, to meet the requirements of engineers/mechanics or technicians at your manufacturing plant or maintenance facility. We work with you to lay out your tool in the most user friendly and professional presentation.

Your custom toolkits can easily be modified and quickly re-ordered as a “single-part number” to significantly reduce your order processing time ongoing.

Your Benefits:

- Single-source supplier for all your tooling needs
- Easy order process for additional toolkits and the replacement of individual tools
- Wide range of storage options available – with pouches, straps or custom-cut foam inlays
- Top quality tools and cases direct from manufaturers at cost effective pricing



Visual Tool Control

In a toolkit with **Shadow Foam** for visual tool control there is an allocated place for every tool, reducing downtime caused by searching for lost tools and increasing efficiency. It will let you see instantly which tools are in use.

Laser Etching the toolkit number onto the tools will also let you know which toolkit a tool belongs to. And etching the tool number onto the hard wearing top layer of the foam inlay clearly identifies which slot the tool belongs into.

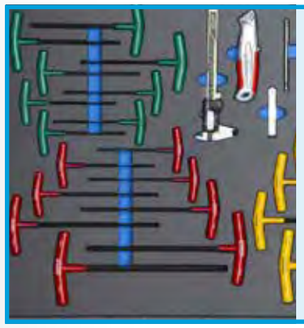
Storage Options

Henchman has large range of storage options to suit every requirement. Our range includes everything from small canvas bags to fully automated electronic tool boxes.

Explorer Transit Cases are virtually indestructible. Their dust and waterproof qualities make them ideal for use in the harshest of environments.

Our heavy-duty **Roller Cabinets and Workbenches** can be customised for any type of application.

How To Build Your Custom Toolkit



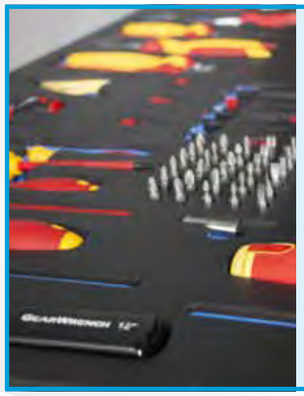
Create your Tool List (Templates available)

Henchman has many toolkit lists on file should you require assistance in making up a kit.

Having produced toolkits for over 20 years, these lists have proved very valuable to customers even as prompts when making their selections.

Typically there is always some unique requirement/s which is why we offer customised solutions.

1



Select your Tool Brand(s)

The choice of tool brand is yours!

In our experience, every discerning engineer would admit “no *ONE* tool brand is the best” – to explain, arguably Knipex is the best plier manufacturer, Fluke makes the best multimeters, Stahlwille make the best torque wrenches, Lindstrom the finest electronic series side cutters, etc...

Apart from this, our range extends to way beyond just mechanical tools. We take pride in offerring the “pick of the bunch” and at the same time with cost savings.

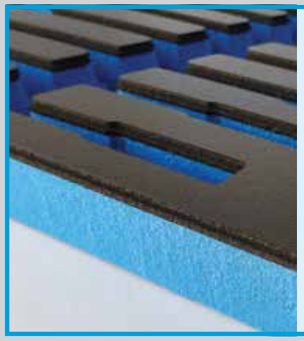
2



Select your Storage Option

From soft cases or hard cases with wheels or drawers to roll cabinets, automated electronic smart boxes or container workshops – our customized toolkits are scalable to every storage option and come in a range of shapes and sizes.

3



Upgrade to Custom Foam Inlays

- High density Polyethylene (PE) foam faced with a hard layer of chemical resistant Polypropylene (PP)
- Digitised into our CAD software to individual case layouts.
- In-house design and manufacture of foam inserts
- Custom made to any configuration
- Kits assembled and supplied complete

4

Customisation: Pick Your Options

Henchman is widely known as the leading custom case toolkit provider for the aircraft industry globally. Our long experience in customising superbly fitting foam case interiors for a large range of applications allows us to deliver a superior service, product and price.



Foam Colour Selection

Our most standard colour combination is blue foam with a black top, but we can offer a variety of colour combinations for you to choose.

- Protective black polyethelene top layer thermally bonded with small rebate to allow tools in and out easily
- 5mm layer black high density foam to maximise the visual toolcontrol contrast comparing tools in against tools out
- High density contrasting blue polyethelene foam, various heights available
- 1mm Polypropylene bottom layer to provide some rigidity



Foam Laser Marking

The bright coloured high-density Polyethylene foam receives a contrasting Polypropylene top layer, which is very hard wearing, easy to clean and ideal for labelling or marking.

Tool part numbers or sizes can be laser marked next to each slot, making it easy to select the right socket, for example, without having to remove multiple sockets to check the etching on the item.



Tool Laser Marking

Toolkit numbers can be laser marked onto every tool in the kit as an almost permanent marking.

When a loose tool is found, these markings can be used to identify which toolkit the tool belongs to.

Laser etching combined with our HenchmanTRAK system provides a perfectly effective alternative to barcodes or RFID tags on individual tools.



Tool Tags

Tool tags (tool chits) for manual tool control has beeen used extensively by the defense forces in most countries over many years.

Henchman can provide various tool tag solutions for use on our shadow boards.



Inventory Lists

We can provide a list of the toolkit contents on laminated cards, showing the layout of the kit and it's contents for easy reference.

This provides all relevant information, like the part number, a clear description, the quantity and location within the kit, making it easy to identify (and also reorder) a missing tool.



Outside Labelling

We offer various label options for the outside of your chosen tool storage, including but not limited to:

- part number emblems for easy identification of the kit
- branding options like your company logo, name, slogan and contact details
- HiViz labelling in various colours

Custom Foam & Fitout

Our toolkits are scalable and come in almost every shape and size - there are more options than just the traditional toolbox or case.

Toolcrib & Container Setup

Henchman can fit out containers as a mobile toolcrib, fitted with workbenches and storage for tools, toolkits and equipment.

It can also be manged by our HenchmanTRAK™ Electronic Tool Control System to track the issue and return of tools to and from the tool crib or store.



Drawer Fitout

Our two-coloured foam inlays are also suitable for vehicle trundle trays, built-in drawers and toolboxes.

Multiple layers and liftouts are possible, due to the rigidity of our foam.

We work with you to ensure that all your tools are laid out for optimum accessibility and ease of use.

Our foam is water-repellant, wipeable and non-soaking – to ensure durability and make it suitable for extreme applications.



Custom Foam

Apart from new tools in foam, we also supply replacement foam for existing kits. and precisely fit sensitive equipment into protective foam,

eg: inspection equipment, weapons, electronics including laptops, multimeters and worklights.

For equipment needing to be charged during storage we offer customised cases with ventilation, powerpoints and plugs.











Henchman Tool Storage Solutions

The Henchman range of Tool Storage Solutions includes the family of heavy duty Professional ToolKabs produced in Australia to our stringent requirements. The cabinets are modular range where there are diferent cabinet heighs and various drawer heights so that a combination of drawer heights can be selected to fill the usable height of the cabinet

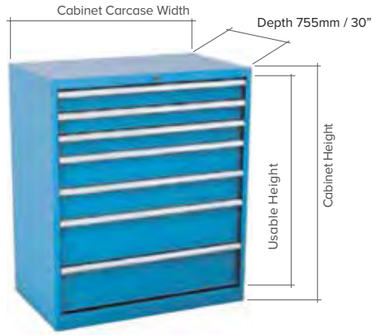


Features:

- Slam catches on drawers prevent overbalancing
- Upgrades for timber or stainless steel tops available
- 200kg / 440lbs load capacity of drawers
- Drawers run on sealed ball bearings for smooth drawer opening
- Cabinet depth front to rear 755mm / 30 inch

Below is a selection table of cabinet carcases and the range of drawer sizes. Ensure that the total of the drawer heights fill the given usable height 100%.
If you prefer, you may opt to choose from the standard options over the following pages.

Bear in mind, the final height of the cabinet once castors are fitted is not the carcase height, you need add 140mm / 5.5” on top of the carcase height.



In order to build an order code:

- Select the cabinet width and height you require taking as an example carcase number H4032.
- Note the usable height which in this case is 675mm / 27”.
- Then select what drawer combination you require, You could fit say 3 x 100mm / 4” drawers and 1 x 150mm / 6” drawer and 1 x 225mm / 9” to fill this usable height.

The example order code is then: **H4032-B3C1D1**

Cabinet Carcase Widths	Cabinet Carcase Heights			
	660mm / 26”	810mm / 32”	1185mm / 47”	1485mm / 59”
710mm / 28”	H2826	H2832	H2847	H2859
1010mm / 40”	H4026	H4032	H4047	H4059
1410mm / 55”	H5526	H5532	H5547	H5559
Usable Height	**525mm / 21”**	**675mm / 27”**	**1050mm / 42”**	**1350mm / 54”**

For Cabinet Widths	Drawer Heights				
	75mm / 3”	100mm / 4”	150mm / 6”	225mm / 9”	300mm / 12”
710mm / 28”					
1010mm / 40”	A	B	C	D	E
1410mm / 55”					

HENCHMAN PROFESSIONAL TOOLKABS 710MM / 28” WIDE

Henchman Professional ToolKabs are designed and made in Australia to high specifications to meet our Aerospace and industrial customer’s high expectations and needs. These tool boxes are in another class, not to be compared with general tool boxes where the load capacity of the drawers is at least double if not triple the load capacity per drawer.

Features:

- Slam catches on drawers prevents overbalancing
- Upgrades for timber or stainless steel tops available
- 200kg / 440lbs load capacity of drawers
- Drawers run on sealed ball bearings for smooth drawer opening
- Optional stainless handlle
- Cabinet depth front to rear 755mm / 30”



Part No.	Description	No of Drawers	Drawer Heights
H2832-B3C1D1	28” Professional ToolKab	5	100mm/ 4” (3), 150mm / 6”(1), 225mm /9” (1)

HENCHMAN PROFESSIONAL TOOLKABS 1010MM / 40” WIDE

Henchman Professional ToolKabs are designed and made in Australia to high specifications to meet our Aerospace and industrial customer’s high expectations and needs. These tool boxes are in another class, not to be compared with general tool boxes where the load capacity of the drawers is at least double if not triple the load capacity per drawer.

Features:

- Slam catches on drawers prevents overbalancing
- Upgrades for timber or stainless steel tops available
- 200kg / 440lbs load capacity of drawers
- Drawers run on sealed ball bearings for smooth drawer opening
- Optional stainless handlle
- Cabinet depth front to rear 755mm / 30”



Part No.	Description	No of Drawers	Drawer Heights
H4032-B3C1D1	40” Professional ToolKab	5	100mm/ 4” (3), 150mm / 6” (1), 225mm /9” (1)
H4047-B9C1	40” Professional ToolKab	10	100mm/ 4” (9), 150mm / 6” (1)

HENCHMAN PROFESSIONAL TOOLKABS 1410MM / 55” WIDE

Henchman Professional ToolKabs are designed and made in Australia to high specifications to meet our Aerospace and industrial customer’s high expectations and needs. These tool boxes are in another class, not to be compared with general tool boxes where the load capacity of the drawers is at least double if not triple the load capacity per drawer.

Features:

- Slam catches on drawers prevents overbalancing
- Upgrades for timber or stainless steel tops available
- 200kg / 440lbs load capacity of drawers
- Drawers run on sealed ball bearings for smooth drawer opening
- Optional stainless handlle
- Cabinet depth front to rear 755mm / 30”



Part No.	Description	No of Drawers	Drawer Heights
H5532-B3C1D1	55” Professional ToolKab	5	100mm/ 4” (3), 150mm / 6” (1), 225mm /9” (1)
H5547-B9C1	55” Professional ToolKab	10	100mm/ 4” (9), 150mm / 6” (1)

HENCHMAN PRO-SERIES ROLLCABS

Henchman Pro-Series Rollcabs are designed and made to high specifications to meet our Aerospace and industrial customer’s high expectations and needs, these tool boxes are exceptional quality for their value compared to similar boxes on the market.

Constructed from 1.0mm steel which gives the cabinet a lot more strength (and weight), the Cabinets are fitted with quality ball bearing slides, solid aluminium drawer handles and heavy duty, easy locking casters.

Features:

- Polished aluminium drawer handles
- Polished aluminium side trims
- 100lbs ball bearing slides for easy and smooth drawer opening & closing
- Black MDF melamine timber work top
- Heavy Duty 5 x 2 inch PU casters, 2 swivel with brakes, 2 rigid



A

762mm x 1033mm x 460mm
30” x 40.5” x 18.4”



B

1056mm x 1033mm x 460mm
41.5” x 40.5” x 18.4”



C

1380mm x 1049mm x 460mm
54.3” x 41.3” x 18.4”

Part No.	Fig	No of Drawers	Drawer Sizes
3007RC-BK	A	7 Drawers	617 x 50mm (5), 617 x 125mm (1), 617 x 200mm (1)
4111RC-BK	B	11 Drawers	951 x 126mm (1), 594 x 51mm (3), 594 x 126mm (1), 594 x 201mm (1), 298 x 51mm (3), 298 x 126mm (1), 298 x 126mm (1)
5413RC-BK	C	13 Drawers	1275 x 142mm (1), 594 x 72mm (8), 594 x 147mm (4)

HENCHMAN TOOLWAGON

The Henchman Toolkab is a purpose designed and built toolwagon for the aerospace industry. It was initially fully engineered based on the requirements of the Royal Australian Air Force. It is ideal for Aircraft Engineering operations and well suited to the requiremnts of the USAF.

The Toolkab toolwagon can be supplied empty or fully configured with tool control foams and tools. This Toolwagon is used extensively in the Defense, and internatonal airlines - the ultimate toolwagon with park brake, engineered tie-down points and sharp turning circle.

Features:

- Robust drawer system with interlocking drawer mechanism.
- Fully engineered with spare parts available and after sales support
- Towable in airport environment at max towable speed 20 km/h
- Automatic park brake (discc brakes) when towbar stowed
- Quick release towbar stowage
- Fully lockable safety slam-catch drawers
- Ball bearing drawer runners, 150kg weight capacity
- Commercial pneumatic tyres
- Engineered tie-down points for transport
- 2 year warranty on chassis,
- 5 year warranty on drawers and runners
- Tight turning circle, ax turning angle: 40°
- Load rated alloy wheels, USA specified
- Other combinations of drawer sizes available









Part No.	Description	Dimensions Width (mm)	Height (mm)	Depth (mm)	Gross Load Rating (kg)	Drawer Height Left (mm)	Drawer Height Right (mm)
TC2700B-II	Toolwagon empty	2660	1690	965	1600	2 x 75, 4 x 100 1 x 200	6 x 100 1 x 150

HENCHMAN INDUSTRIAL WORKBENCH

The Henchman industrial Workbenches provide a multi-functional design and flexible workflow are suited to the most demanding industrial applications.. Available in 3 widths and several configurations, Heavy Duty Workbenches can be assembled to meet the specific requirements of individual work environments.

With a 35mm compressed timber laminated top, thick tubular legs and heavy duty levelling feet, these workbenches have the capacity to hold an impressive static UDL distributed load of 1 Tonne on the bench top and 50kg from the optional under shelf.

The storage of tools and hardware are easily catered for with under bench drawers, fixed shelves, adjustable shelves, louvre panels, pegboards and tool hooks. Many custom workbench combinations can be configured through the large variety of accessories and widths.

Combinations are too many to list in this catalogue, please enquire

Options:

- Various combinations of drawer sizes available
- Pegboard / Louvered rear panel options
- Adustable shelf option
- Castors if required



Part No.	Description	No of Drawers	Bench Size (mm) L x D x H	Bench Size (In) L x D x H
H6036-WB	Workbench (not including drawers or rear panel)	0	1500 x 750x 900	60 x 30x 36
H7236-WB	Workbench (not including drawers or rear panel)	0	1800 x 750 x 900	72 x 30 x 36
H7236-WB10	Workbench with Drawers (no rear panel or shelf	4	1800 x 750 x 900	72 x 30 x 36
H8436-WB	Workbench (not including drawers or rear panel)	0	2100 x 750 x 900	84 x 30 x 36
H8436-WB10	Workbench with Drawers (no rear panel or shelf)	4	2100 x 750 x 900	84 x 30 x 36

MODULAR A-FRAME TOOLBOARD (EMPTY)

Fully customisable Toolboard with foam for easy Visual Tool Control.

Features:

- With either 4 lockable castors or adjustable feet
- Solid base provides shelf space
- Can be fitted with battery chargers for power tools
- Can be fitted with various user tag systems
- Multiple boards can be joined depending on storage space required
- Solid powder-coated steel frame
- Flat-pack shipping
- Pull-out rear wheel for support when relocating unit
- Tools not included



1 unit



2 units



4 units

Part No.	Description	Dimensions			
		Width (mm)	Height (mm)	Depth (mm)	
MAFTB-3	A-Frame Toolboard empty	990	1975	460	

FLIGHTLINE TOOLBOARD WITH CLEAR ROLLER SHUTTER DOOR (EMPTY OR COMPLETE)

Toolboard in a robust flightline cabinet with clear lockable roll down door. Fitted with cnc-cut shadow foam layers for visual tool control. Tools can be laser marked and various tool tag systems are available to order.

Features:

- Robust, all steel construction
- Ball-bearing castors, two of them lockable
- Double or single-sided setup
- Boards are mounted on an angle to prevent tools from falling out
- Pull down polycarbonate clearview locking door(s) for safe storage
- Velcro-attached foam panels for easy modification
- Select our tool board with tools or empty

Scan the QR code with your phone camera to see the Kit contents on our website!



Part No.	Description	Dimensions			Gross Load Rating (kg)
		Width (mm)	Height (mm)	Depth (mm)	
HTFLD-SGL	Flightline Toolboard one-sided empty	2020	2570	755	1600
HTFLD-DBL	Flightline Toolboard two-sided empty	2020	2570	755	1600
HTFLK.SGL	Flightline Toolboard one-sided with Tools as per Picture	2020	2570	755	1600

Henchman Toolkits

MICRO LMO GRAB KIT

"Small and Compact", with an excellent assortment of tools essential for basic Line Maintenance requirements. Convenient shoulder strap supplied as an optional extra takes the hassle out of the long walks.

Engineers simply love this kit!

Features:

- 24 Tools included
- Includes shoulder Strap (SHOULDERKIT.U)



Dimensions mm: 326 x 269 x 75
Dimensions Inches: 12.8 x 10.6 x 3

Part No.	Description
LK1-3005H	Micro LMO Grab Kit

CABIN LAVATORY KIT

Aircraft toilet kit specifically set out in a yellow case to indicate a Bio-Hazard kit and designate a contamination risk. .

Features:

- 20 Tools included
- Includes anti tamper screwdriver for B737
- Includes 2 x Quad Tips for A330 Toilet Shroud



Dimensions mm: 420 x 325 x 180
Dimensions Inches: 16.5 x 12.8 x 7

Part No.	Description
TK1-4000BW	Compact LMO Kit

CABIN MAINTENANCE KIT

This Cabin Kit tool list was developed with a leading Airline company to their requirements. The toolkit is supplied standard with blue high density foam and black PP which provides instant visual tool control to the kit to avoid FOD issues.

Features:

- 61 Tools included, plus a combi padlock
- Extremely compact



Dimensions mm: 360 x 304 x 194
Dimensions Inches: 14.2 x 12 x 7.6

Part No.	Description	Wrench/Socket Brand
LK2-3317S	Cabin Maintenance Kit	Stahlwille
LK2-3317P	Cabin Maintenance Kit	Proto

MINI LINE ENGINEERS TOOLKIT

High quality compact toolkit with a selection of the most commonly used tools in the mechanical maintenance of an aircraft.

Excellent for work in the cabin or as a Line Engineers Toolkit.

Features:

- 62 Tools included, plus a combi padlock
- Extremely compact





Dimensions mm: 360 x 304 x 194
Dimensions Inches: 14.2 x 12 x 7.6

Part No.	Description	Wrench/Socket Brand
LK4-3317S	Mini Line Engineers Toolkit	Stahlwille
LK4-3317P	Mini Line Engineers Toolkit	Proto

LAME CANTILEVER TOOLKIT

Extremely compact toolkit developed with a leading Airline company to their requirements.
This toolkit is supplied in two-colour high density foam which provides visual tool control for FOD issues.
Often selected as an apprentice kit for B1 Mechanics or LAME (Licenced Aircraft Maintenance Engineers) .

Features:

- Proto or Stahlwille versions available, depending on your preference, along with other high quality brands such as Wiha and Knipex
- Cantilever toolbox for quick visual check
- Visual Tool Control foam in-lays
- Extremely compact
- Suited to PART 145 compliant organizations





Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
MK1-0013S	LAME Cantilever Toolkit	Stahlwille	89	560 x 220 x 238	22 x 8.7 x 9.4
MK1-0013P	LAME Cantilever Toolkit	Proto	89	560 x 220 x 238	22 x 8.7 x 9.4

LINE ENGINEERS TOOLKIT

Our standard LAME kit is used extensively by a growing number of airlines and MRO's worldwide. The tools have been carefully selected based on direct input from the industry. We have put together a kit combining top quality brands of tools which are ideally suited to the mechanical maintenance of an aircraft.

Tools are laid out in two-colour high density foam which provides visual tool control. Excellent for flyaway applications or issued personal toolkit.

All foams are cut in-house in our facility by our experienced staff giving you better service, quality and quicker lead times. We also offer laser marking service meaning all your tools can be delivered with your company name and tool kit number, giving even the most basic tool control system a high level of accountability and control.

Proto or Stahlwille versions available, depending on your preference, along with other high quality brands such as Wiha and Knipex.





Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
LK3-3818S	Line Engineers Toolkit	Stahlwille	80	410 x 340 x 205	16.1 x 13.4 x 8
LK3-3818P	Line Engineers Toolkit	Proto	80	410 x 340 x 205	16.1 x 13.4 x 8

B1 FLYAWAY KIT WITH LIFT-OUT TRAYS

Our standard LAME kit is used extensively by a growing number of airlines and MRO's worldwide. The tools have been carefully selected based on direct input from the industry. We have put together a kit combining top quality brands of tools which are ideally suited to the mechanical maintenance of an aircraft. Tools are laid out in two-colour high density foam which provides visual tool control. Excellent for flyaway applications or issued personal toolkit.

Features:

- A selection of commonly used tools for LAME work
- Proto or Stahlwille versions available, depending on your preference, along with other high quality brands such as Wiha and Knipex
- Waterproof, virtually indestructible, Skydrol-resistant case
- Combi Padlock supplied as part of 102 tools
- Suited to PART 145 compliant organizations





Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
MK2-5122S	B1 Flyaway Kit with Lift-Out Trays	Stahlwille	102	546 x 347 x 247	21.5 x 13.6 x 9.7
MK2-5122P	B1 Flyaway Kit with Lift-Out Trays	Proto	102	546 x 347 x 247	21.5 x 13.6 x 9.7

B1 FLYAWAY KIT IN CASE WITH DRAWERS

This wheeled Mechanical Kit tool list was developed with a leading Airline company to their requirements. The toolkit is supplied standard with blue high density foam and black PP which provides instant visual tool control to minimize FOD issues. (other colour options are available)

Our standard LAME kit is used extensively by a growing number of airlines and MRO's worldwide. The tools have been carefully selected based on direct input from the industry. We have put together a kit combining top quality brands of tools which are ideally suited to the mechanical maintenance of an aircraft. Tools are laid out in two-colour high density foam which provides visual tool control. Excellent for flyaway applications or issued personal toolkit.

Features:

- A selection of commonly used tools for LAME work
- Proto or Stahlwille versions available, depending on your preference, alo quality brands such as Wiha and Knipex
- Waterproof, virtually indestructible, Skydrol-resistant case
- Combi Padlock supplied as part of 102 tools
- Suited to PART 145 compliant organizations





Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
MK2-5140S	B1 Flyaway Kit in Case with Drawers	Stahlwille	102	581 x 381 x 455	22.9 x 15 x 17.9
MK2-5140P	B1 Flyaway Kit in Case with Drawers	Proto	102	581 x 381 x 455	22.9 x 15 x 17.9

AIRCRAFT MECHANICS FLYAWAY KIT

Our B1 LAME kit was cionfigured to suit one the airlines and has been found to be a very popular selection. This kit can be fitted out to your choice with either Stahlwille Tools (German) or Proto tools (USA), for wrenches and sockets. Henchman prides itself in bringing together a kit combining top quality brands of tools from world renowned manufacturers which meet the expectations of engineers performing daily mechanical maintenance of aircraft.

Tools are laid out in two-colour high density foam which provides visual tool control in a robust, easily deployable All-in-One toolbox. Excellent for flyaway applications or issued as a personal toolkit.

Features:

- Proto or Stahlwille versions available, depending on your preference, along with other high quality brands such as Wiha and Knipex
- High quality brands suiting aviation requirements
- Skydrol Resistant Case
- Visual tool control
- Suited to PART 145 compliant organizations





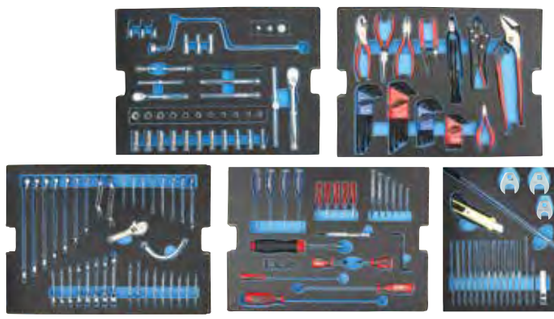
Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
MK3-5140S	Aircraft Mechanics Flyaway Kit	Stahlwille	140	581 x 381 x 455	22.9 x 15 x 17.9
MK3-5140P	Aircraft Mechanics Flyaway Kit	Proto	140	581 x 381 x 455	22.9 x 15 x 17.9

B1 MECHANICAL ENGINEERS FLYAWAY TOOLKIT

This wheeled Mechanical Kit tool list was developed with a leading Airline company to their requirements. The toolkit is supplied standard with blue high density foam and black PP which provides instant visual tool control to minimize FOD issues. (other colour options are available)

Features:

- Proto or Stahlwille versions available, depending on your preference, along with other high quality brands such as Wiha and Knipex
- Waterproof, virtually indestructible case
- Visual tool control
- Skydrol Resistant Case
- Combi Padlock supplied as part of 145 tools





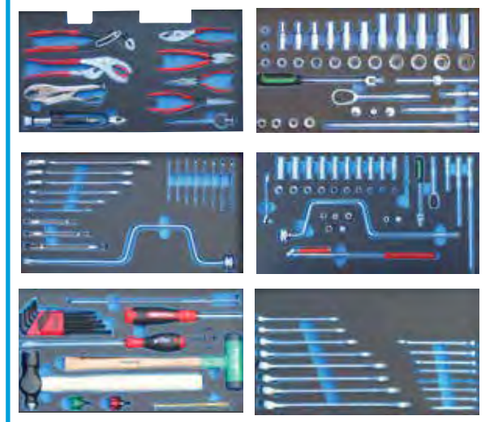
Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
MK1-5326S	B1 Mechanical Engineers Flyaway Toolkit	Stahlwille	153	410 x 340 x 205	16.1 x 13.4 x 8
MK1-5326P	B1 Mechanical Engineers Flyaway Toolkit	Proto	153	410 x 340 x 205	16.1 x 13.4 x 8

B1 FLYAWAY KIT – VERSION B

The MECHKIT-3B was compiled by a major international MRO and based on their widespread usage, we have made it available. This kit is fitted with a combination of both Stahlwille and Proto tools. Further customisation is possible and Henchman prides itself in bringing together kits combining top quality brands of tools which meet the expectations of engineers performing daily mechanical maintenance of aircraft.

Tools are laid out in two-colour high density foam which provides visual tool control in a robust, easily deployable All-in-One toolbox. Excellent for flyaway applications or issued as a personal toolkit.

Proto or Stahlwille versions available, depending on your preference, along with other quality brands such as Wiha and Knipex.



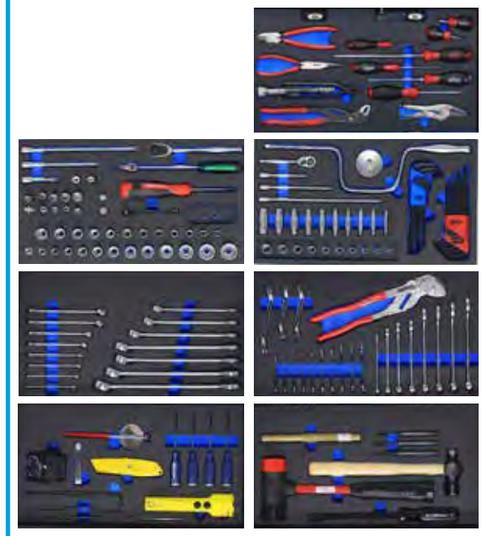


Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
MK6-5140S	B1 Flyaway Kit – Version B	Stahlwille	145	581 x 381 x 455	22.9 x 15 x 17.9
MK6-5140P	B1 Flyaway Kit – Version B	Proto	145	581 x 381 x 455	22.9 x 15 x 17.9

B1 FLYAWAY KIT – METRIC/IMPERIAL

This kit is based on the regular B1 Flyaway Kit, but also contains metric tools. It can be fitted out to your choice with either Stahlwille Tools (German) or Proto tools (USA), for wrenches and sockets. Henchman prides itself in bringing together a kit combining top quality brands of tools from world renowned manufacturers which meet the expectations of engineers performing daily mechanical maintenance of aircraft.

Tools are laid out in two-colour high density foam which provides visual tool control in a robust, easily deployable All-in-One toolbox. Excellent for flyaway applications or issued as a personal toolkit.





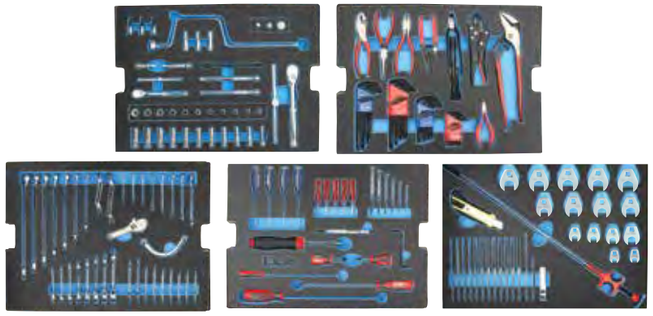
Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
MK4-5140S	B1 Flyaway Kit Large – Metric/Imperial	Stahlwille	171	581 x 381 x 455	22.9 x 15 x 17.9
MK4-5140P	B1 Flyaway Kit Large – Metric/Imperial	Proto	171	581 x 381 x 455	22.9 x 15 x 17.9

MECHANICAL FLYAWAY TOOLKIT

Comprehensive mechanical flyaway kit available with a selection of the most commonly used tools. This toolkit is supplied with five trays of two-colour high density foam which provides visual tool control. Convenient portable kit for hangar use or flyaway applications.

Features:

- A selection of commonly used tools for mechanical work
- Proto or Stahlwille versions available, depending on your preference, along with other high quality brands such as Wiha and Knipex
- Skydrol-resistant case
- Visual tool control
- Suited to PART 145 compliant organizations





Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
MK5-5326S	Mechanical Flyaway Toolkit	Stahlwille	192	627 x 475 x 292	24.7 x 18.7 x 11.5
MK5-5326P	Mechanical Flyaway Toolkit	Proto	192	627 x 475 x 292	24.7 x 18.7 x 11.5

COMPREHENSIVE AIRFRAME KIT

Complete toolkit available with a selection of the most commonly used tools the mechanical maintenance of aircraft set out in a sturdy Rollcab.

This toolkit is supplied in two-colour high density foam which provides good visual tool control for FOD issues

Excellent for maintennance applications in the hangar.

Features:

- A selection of commonly used tools for mechanical work
- Proto or Stahlwille versions available, depending on your preference, along with other high quality brands such as Wiha and Knipex
- Heavy Duty Rollcab
- Visual tool control
- Suited to PART 145 compliant organizations





Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
HK1-4111S	Comprehensive Airframe Kit	Stahlwille	242	1056 x 460 x 1033	41.6 x 18.1 x 40.7
HK1-4111P	Comprehensive Airframe Kit	Proto	242	1056 x 460 x 1033	41.6 x 18.1 x 40.7

WIDE BODY WHEEL CHANGE TOOLKIT

This kit for Wide Body aircraft is fitted predominatly with USA made PROTO tools. Further customisation is possible and Henchman prides itself in bringing together kits combining top quality brands of tools which meet the expectations of engineers performing daily mechanical maintenance of aircraft.

Tools are laid out in two-colour high density foam which provides visual tool control in a robust, easily deployable case with wheels. Excellent for flyaway applications or issued as a personal tool kit.

All foams are cut in-house by our experienced staff, giving you better service, quality and quicker lead times.

We also offer laser marking. All your tools can be delivered with your company name and toolkit number, giving even the most basic tool control system a high level of accountability and control.





Part No.	Description	Predominant Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
WC3-5122H	Wheel Change Toolkit	Proto	38	546 x 347 x 247	21.5 x 13.6 x 9.7

A320 WHEEL CHANGE TOOLKIT

Portable wheel change kit for A320 & 787 developed with a leading Airline to their requirements. Tools are laid out in two-colour high density foam which provides visual tool control. Excellent for flyaway applicatons or issued as a personal tool kit.

WC2-4412H

WC1-4412H

Features:

- 1 foam lift-out tray & one base foam.
- High quality Brands such as PROTO, Wiha, Knipex
- Visual Tool Control Foam in-lays
- Suited to PART 145 compliant organizations

The Dash 8 Wheelchange Kit is suited for smaller aircraft.
Originally designed for the Bombardier Q400, Q300 and Q200, it's also suitable for the Boeing 717.







Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
WC2-4412H	A320 Wheel Change Toolkit	Proto	28	474 x 415 x 149	18.7 x 16.3 x 5.9
WC1-4412H	Dash 8 Wheelchange Kit (not shown)	Proto	15	474 x 415 x 149	18.7 x 16.3 x 5.9

FLYAWAY SHEETMETAL TOOLKIT

Our three-layered Master Sheetmetal Tool Kit contains just about everything you will need to build or maintain any sheet metal aircraft. Our kit contains tools you will use! It is not loaded with tools, which have little or no use.

If you want to add or delete an item, just ask! We are more than happy to customize the kit to your specific needs.

Only the contents that are currently available on our website are shown in the list below. For a complete list please open the Product Data Sheet below.







Part No.	Description	Qty Tools Included	Dimensions (mm)	Dimensions (In)
AS1-4820H	FlyAway Sheetmetal Kit	377	520 x 435 x 230	20.5 x 17.1 x 9

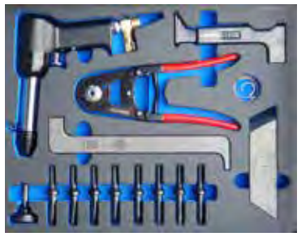
PORTABLE SHEETMETAL TOOLKIT

Our three-layered Master Sheetmetal Tool Kit contains just about everything you will need to build or maintain any sheet metal aircraft. Our kit contains tools you will use! It is not loaded with tools, which have little or no use.

If you want to add or delete an item, just ask! We are more than happy to customize the kit to your specific needs.

Only the contents that are currently available on our website are shown in the list below. For a complete list please open the Product Data Sheet below.







Part No.	Description	Qty Tools Included	Dimensions (mm)	Dimensions (In)
SM1-4419H	Portable Sheetmetal Kit	43	474 x 415 x 214	18.7 x 16.3 x 8.4

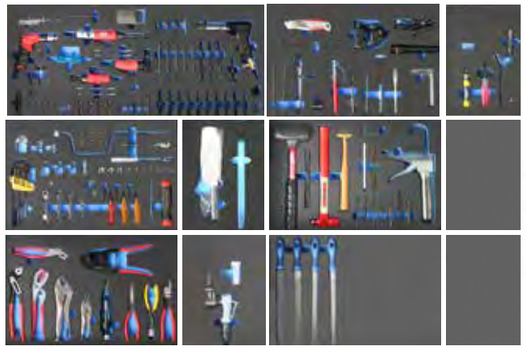
SHEETIE MAINTENANCE TOOLKIT

This Sheet Metal toolkit is an an ideal structural maintenance toolkit with a good selection of air tools, riveting tools, drilling, countersink cutters and Hi-Lok tooling

This toolkit is supplied in two-colour high density foam which provides good visual tool control to prevent FOD issues Excellent for maintenance applications in the hangar workshop.

Features:

- A selection of commonly used tools for mechanical work
- Heavy Duty Rollcab
- Visual tool control
- Suited to PART 145 compliant organizations





Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
SM1-4111H	Sheetie Maintenance Toolkit	Proto	164	1056 x 460 x 1033	41.6 x 18.1 x 40.7

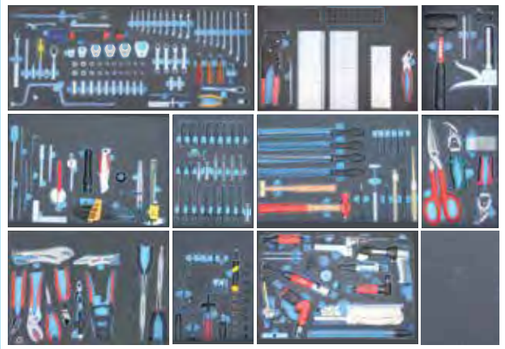
COMPREHENSIVE SHEETMETAL KIT

This Sheetie toolkit includes a selection of mechanical and riviting related tooling for structural maintenance of aircraft. It covers a pretty comprehensive range of air tools, riveting tools, temporary fasteners and drills set out on convenient holders, and hand tools.

This toolkit is supplied in two-colour high density foam which provides good visual tool control to prevent FOD issues Excellent for maintenance applications in the hangar workshop.

Features:

- A selection of commonly used tools for mechanical work
- High quality brands such as PROTO, Wiha, Knipex
- Heavy Duty Rollcab
- Visual tool control
- Suited to PART 145 compliant organizations





Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
AS2-4111H	Comprehensive Sheetmetal Kit	Proto	223	1056 x 460 x 1033	41.6 x 18.1 x 40.7

COMPREHENSIVE AIRCRAFT STUCTURES KIT

Multi-user structures kit set out in a sturdy Australian-made tool cabinet. Whilst this selection covers a good portion of commonly used tools for structural maintenance of aircraft there is still some space available yet to add in any extra personalised requirements.

This toolkit is supplied in two-colour high density foam which provides good visual tool control to prevent FOD issues.

Excellent for maintennance applications in the hangar.





Part No.	Description	Qty Tools Included	Dimensions (mm)	Dimensions (In)
AS3-1010H	Comprehensive Aircraft Stuctures Kit	381	1010 x 755x 1015	39.8 x 29.7 x 40

STRUCTURAL REPAIR KIT

This Structures kit was selected for maintainenance of the F35. The kit has beeen codified with a NSN code. It is an ideal kit for general structures repair. Spare drawer for expansion.

The toolkit is supplied in two-colour high density foam which provides good visual tool control to prevent FOD issues Excellent for maintenance applications in the hangar workshop.

Features:

- A selection of commonly used tools for mechanical work
- Heavy Duty Rollcab
- Visual tool control
- NSN Code: 4920-66-166-8444
- Suited to PART 145 compliant organizations















Part No.	Description	Qty Tools Included	Dimensions (mm)	Dimensions (In)
AS2-1010H	Structural Repair Kit	303	1056 x 460 x 1033	41.6 x 18.1 x 40.7

HI-LOK INSTALLATION AND REMOVAL KIT

Task specific kit for removal and installation of Hilok fasteners. Set out in a protective waterproof case, for ultimate protection and storage.

Features:

- A selection of commonly used tools for iLok installation & removal
- Waterproof, virtually indestructible case
- Visual tool control
- Extremely compact
- Suited to PART 145 compliant organization







Part No.	Description	Qty Tools Included	Dimensions (mm)	Dimensions (In)
HL1-4412H	Hi-Lok Installation and Removal Kit	42	474 x 415 x 149	18.7 x 16.3 x 5.9

OXY KIT

This Oxy Kit was developed along with a leading international Airline company to be used as generic Oxy Kit for all their aircraft. All wrenches are chrome polished finish for easy cleaning. This toolkit is supplied in two-colour high density foam which provides visual tool control to combat FOD. Other tool configurations can be customised to suit.

Features:

- High quality brands such as PROTO, Wiha, Knipex
- Visual Tool Control Foam in-lays
- Waterproof, virtually indestructible case
- Extremely compact
- Suited to PART 145 compliant organizations







Part No.	Description	Predominant Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
OX1-3818P	Oxy AviationToolkit	Proto	25	410 x 340 x 205	16.1 x 13.4 x 8

PORTABLE COMPOSITE TOOLKIT

Portable toolkit with an excellent choice of tools suited for composite work. Tools are laid out in two-colour high density foam lif-out trays providing good visual tool control to minimize FOD risk.

with

Features:

- 2 x lift-out trays & one base foam.
- Ruggedized transit case
- Visual Tool Control Foam in-lays
- Suited to PART 145 compliant organizations









For a list of kit contents please view on our website or Contact our sales team.

Part No.	Description	Qty Tools Included	Dimensions (mm)	Dimensions (In)
CK1-4820H	Portable Composite Toolkit	61	520 x 435 x 230	20.5 x 17.1 x 9

MECHANICAL AVIONICS KIT

This Avionics Toolkit includes a very good selection of mechanical aalong with a drawer of wiring related tools for Avionics. This toolkit contains a very comprehensive range of tools covering a wide area of maintence work. Tools are laid out in two-colour high density foam providing good visual tool control for the prevention of FOD. This cabinet has 10 drawers and 3 are empty for expansion. This can be varied.

Features:

- A large selection of mechanical tools and wiring tools
- High quality brands such as Stahlwille, Wiha, Knipex
- Heavy Duty Rollcab
- Visual tool control
- Suited to PART 145 compliant organizations





Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
AV1-1410S	Mechanical Avionics Toolkit	Stahlwille	620	627 x 475 x 292	24.7 x 18.7 x 11.5

COMPREHENSIVE AIRCRAFT AVIONICS KIT

The Henchman Avionics Flyaway kit is one of our standard kits, has been selected by professional aircraft engineers and is already used in MRO facilities of some of the worlds leading airlines.

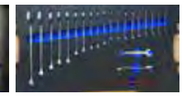
This kit contains a selection of the most used hand tools including crimping and contact installation as well as a Fluke Multimeter. The tools of world leading brands such as Astro, Knipex, Wiha, Snap-On and for sockets and wrenches predominantly Proto or Stahlwille (depending on your preference) are all laid out in the premium foam inserts we manufacture in-house.

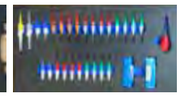
Tools are laid out in two colour high density foam which provides visual tool control. Excellent for flyaway applications or issued as a personal tool kit in a robust and conveniently deployable All-In-One toolbox.

Features:

- High quality tools for general aviation requirements
- Water- and dustproof hard case with wheels and telescopic handle
- Visual tool control to reduce the risk of foreign object debris (FOD)
- Suited to PART 145 compliant organizations
- Proto or Stahlwille versions available, depending on your preference, along with other high quality brands such as Wiha and Knipex
- Total Weight is approximately 27kg

















Part No.	Description	Wrench/Socket Brand	Qty Tools Included	Dimensions (mm)	Dimensions (In)
AV1-5140S	Comprehensive Aircraft Avionics Kit	Stahlwille	116	581 x 381 x 455	22.9 x 15 x 17.9
AV1-5140P	Comprehensive Aircraft Avionics Kit	Proto	116	581 x 381 x 455	22.9 x 15 x 17.9

ELECTRICAL CONNECTOR MAINTENANCE KIT

The tools contained in this kit were selected for maintaining the Augusta AW139 helicopter. The tools in this kit may not entirely correspond to the OEM wiring manual but are largely Military Specified tools, The kit is more suited to maintenance requiremnts for the AW139.

Whilst this particular kit is a comprehensive kit, Henchman does not guarantee that this kit will cover every requirement on the AW139. From experience we have found that it also goes a long way on many other aircraft too. Henchman can customise to your requiremnts and has done other connector tooling kits in this way which may cover your needs. Henchman takes pride in producing many customised toolkits to meet task specific requirements.

This toolkit is supplied in two-colour high density foam which provides visual tool control in a robust, deployable All-in-One toolbox.

Note: Due to updates and protection of our proprietory knowledge base, tooling lists for our Connector Tool kits are not available for distribution.

Features:

- Mil-Spec tooling
- Skydrol Resistant Case
- Visual tool control
- Suited to PART 145 compliant organizations



















Part No.	Description	Qty Tools Included	Dimensions (mm)	Dimensions (In)
HCT1973A	Electrical Connector Maintenance Kit	206	581 x 381 x 455	22.9 x 15 x 17.9

CONNECTOR WIRING TOOLKITS

Henchman assembles connector wiring tool kits laid out in two-colour high density foam trays to reduce FOD risk and offer the highest level of tool control. Kitted out with high quality tools meeting military specifications for stripping, crimping and terminating of the electrical wiring system within an aircraft. Kits are equipped with necessary tooling required for each listed aircraft, to cover stripping of wire, crimping of contacts, installation or removal of contacts from connectors.

The toolkits have been compiled with mostly military spec tools that are well suited to maintenance/servicing applications of aircraft rather than production. Tools may not necessarily match identically to the tools listed/ specified by the OEM so that verification of suitability is required.



Toolkits come in various forms depending on the number of tools. Typically toolkits are supplied in ruggedized transit cases which may either be a case with layers or case with drawers. Larger kits may be supplied in metal roll cabinets.



Part No.	Aircraft Manufacturer	Aircraft Model Number	Number of Tools *
HCT1280	Airbus	EC-135 Eurocopter	116
HCT1808	Airbus	H-145, EC-145 Eurocopter	136
HCT850	Airbus	BK-117 Eurocopter	131
HCT1807	Airbus	A319	101
HCT2267	Airbus	AIRBUS AS350 (B2/B3)	444
HCT30	Airbus	A300, A310, A330, A340	251
HCT333	Airbus	A300, A310	152
HCT519	Airbus	A320, A330, A340	102
HCT1354	Bell	412SP	255
HCT441	Bell	206 JetRanger & LongRanger	114
HCT491	Bell	212, 412	106
HCT1384	Bombardier	Dash-8, Q400	163
HCT1591	Bombardier	CRJ-700, CRJ-900	185
HCT1851	Bombardier	Challenger 300	135
HCT2206	Bombardier	Global 7000	274
HCT315A	Bombardier	Challenger CL-600, CL-601-3A	145
HCT584	Bombardier	CRJ-100, CRJ-200	119
HCT1000	Boeing	B787 Dreamliner	182
HCT201MOD1	Boeing	B747-100, B747-200, B747-SP	100
HCT567MOD1	Boeing	B757, B767	175
HCT769	Boeing	B737 (Early Models)	120
HCT977	Boeing	B777	279
HCT262	Boeing/McDonnell Douglas	DC-8, DC-9, DC-10	122
HCT498-1003	Boeing/McDonnell Douglas	F/A-18A Hornet	352
HCT1264	Boeing/McDonnell Douglas	B737-600, B737-700, B737-800, B737-900	163
HCT17A	Boeing/McDonnell Douglas	C-17 Globemaster	187
HCT603	Boeing/McDonnell Douglas	MD-500E, MD-503F	48
HCT1253	Gulfstream	G500, G550	209
HCT1898	Gulfstream	G650	205
HCT197	Gulfstream	GII	17
HCT871	Gulfstream	GIII, GIV	126
HCT1278	Embraer	ERJ-145	125
HCT1521	Embraer	ERJ-170, ERJ-175, ERJ-190, ERJ-195 & Legacy Series	167
HCT1570	Embraer	EMB-314 Super Tucano	165
HCT1220	Lockheed	C-130H	165
HCT1362MOD1	Lockheed	C-130J	213
HCT1700C	Lockheed	F-35 Lightning	352
HCT216	Lockheed	F-16 Falcon	144
HCT314MOD1	Lockheed	F-16 Falcon	220
HCT1060	Learjet	60 Series	120
HCT204	Learjet	35	109
HCT852	Learjet	25, 35, 55	126
HCT1973A	Augusta Westland	AW-139	206
HCT728	BAE	Hawk	107
HCT787	Sikorsky	S-70	112
HCT839	Fokker	50, 100	145

* Number of Tools shown in kits may vary marginally as updates take place

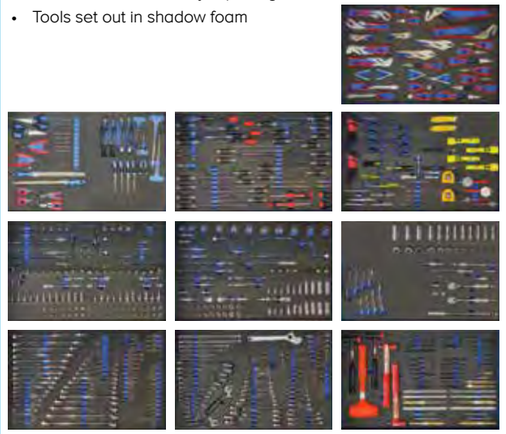
KABTRAK™ MECHANICAL TOOLKIT COMPLETE

The KabTRAK™ 2100P Smart Electronic Toolbox is kitted out with a popular choice of tools for automated electronic tool control applicatiosn. Fitted with high quality tools, largely made in USA and Germany and in most cases covered by lifetime warranty.

This KabTRAK™ has 10 drawers and is a robust cabinet fitted with heavy duty castors.

Features:

- Stand-alone system that can report to a cloud based dashboard for central viewing
- Controlled by a Mil-Spec certified rugged tablet with touch screen
- Back-up battery included
- Suits most proximity cards
- SQL Database for easy reporting
- Tools set out in shadow foam





Part No.	Dimensions (excluding wheels and tablet)			Available Drawer Useable Height	Drawer Combination
	Width	Height	Depth		
KT2-100P	1010mm / 40 in	1185mm / 47 in	755mm / 30 in	1050mm / 41 in	9x100mm / 4 in + 1x150mm / 6 in

KABTRAK™ STRUCTURES TOOLKIT COMPLETE

The KabTRAK™ 3070P Smart Electronic Toolbox is kitted out with a popular choice of tools for automated electronic tool control applicatiosn. Fitted witha comprehensive range of tools to cover structures work.

This KabTRAK™ stands approximately at "bench height", is our full width version cabinet with 7 drawers fitted with heavy duty castors.

Features:

- Stand-alone system that can report to a cloud based dashboard for central viewing
- Controlled by a Mil-Spec certified rugged tablet with touch screen
- Back-up battery included
- Suits most proximity cards
- SQL Database for easy reporting
- Tools set out in shadow foam





Part No.	Dimensions (excluding wheels and tablet)			Available Drawer Useable Height	Drawer Combination
	Width	Height	Depth		
KABTRAK-3070P	1410mm / 56 in	850mm / 34 in	755mm / 30 in	675mm / 27 in	3x75mm / 3 in; 3 x 100mm / 4 in+ 1 x150mm / 6 in



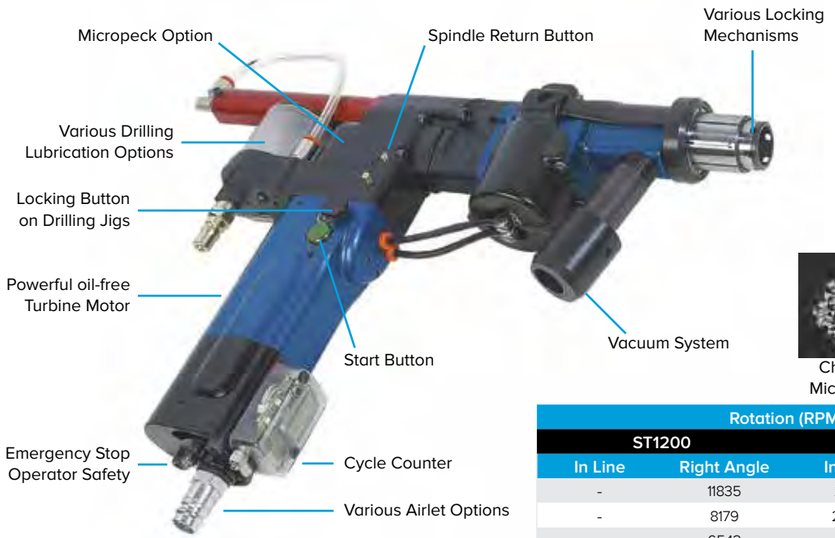
Drilling, Reaming & Cutting

Desoutter Drills 44
Desoutter Tappers 57
Sioux Drills 58
Dotco Drills 59
Henchman Pneumatic Drills 60
Drilling Attachments 62
Aircraft Threaded Drills 64
Aircraft HSS Jobber Drills 66
Aircraft Cobalt Drills 68
Aircraft Extension Drills 70
Specialist Drills 72
Taper-Lok Cutters 75
Drilling Accessories 76
Nut Plate Drill Jigs 80
Holefinders & Manual Deburring 82
Carbide Burrs 86
Deburring Tools & Rivet Shavers 93
Desoutter Routers 95
Composite Cutting Tools 97
Aircraft Reamers 99
Holesaws & Saws 105

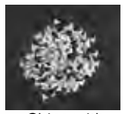
Desoutter Automatic Drilling Unit

The SETITEC line offers best in class performance, quality and reliability for the most demanding drilling applications worldwide. They have already been adopted by all major Aircraft manufacturers worlwide.

Dedicated to highly demanding drilling, reaming, countersinking applications, where quality, precision and repeatability are critical, its innovative design make one step drilling, reaming, countersinking possible, and will help driving down your cycle time. The modular design and the wide variety of clamping options will suit most of your applications.



Any specific requirement can be handled by SETITEC Line design team. Contact us.


Chips with Micropeck


without Micropeck

	ST1200		ST2200	
Power	2.8 HP, with torque limiter at lower speed			
Weight	1.5kg (3.3 lb)		4.2kg (9.2lb)	
Stroke	Unlimited		Unlimited	
Feed Rate	0.010	mm/rev	0.032	mm/rev
	0.021	mm/rev	0.047	mm/rev
	0.038	mm/rev	0.059	mm/rev
	0.058	mm/rev	0.095	mm/rev
	0.077	mm/rev	0.120	mm/rev
	0.095	mm/rev	0.146	mm/rev
	0.115	mm/rev	0.182	mm/rev
	0.154	mm/rev	0.200	mm/rev
	0.350	mm/rev	0.315	mm/rev

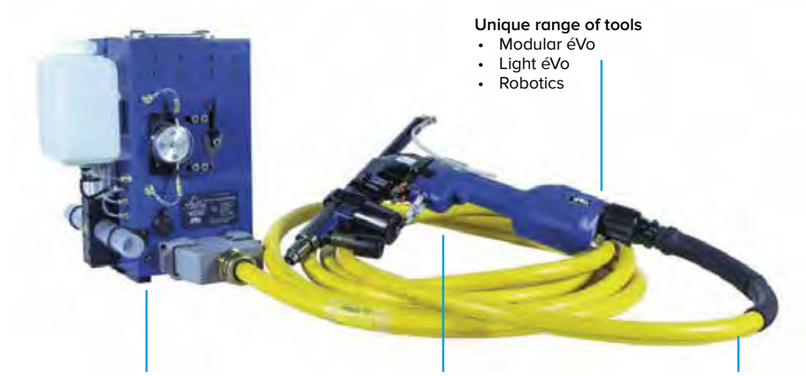
Hole Diameter	Aluminium Composite	Titanium Hard Metal	Aluminium Composite	Titanium
	Straight Hole		Countersink Hole	
< 4,8mm - 3/16"	ST1200	ST1200	ST1200	ST1200
< 6,35mm - 1/4"				
< 7,9mm - 5/16"				
< 9,5mm - 3/8"				
< 11,1mm - 7/16"				
< 12,7mm - 1/2"				
< 14,3mm - 9/16"		ST2200	ST2200	ST2200
< 15,9mm - 5/8"				
< 19,5mm - 3/4"				
< 22,2mm - 7/8"	ST2200			
< 25,4mm - 1"				
> 25,4mm - 1"				

Rotation (RPM)			
ST1200		ST2200	
In Line	Right Angle	In Line	Right Angle
-	11835	2919	2195
-	8179	2560	1925
-	6543	1717	1291
-	6543	1216	915
-	6000	2017	1517
5550	4674	1770	1331
3514	2959	1187	892
2811	2367	841	632
2428	2045	1614	1214
2008	1691	1416	1065
1943	1636	949	714
1554	1309	672	506
1388	1168	730	549
1110	935	640	481
878	740	429	323
793	668	304	229
703	592	584	439
562	473	512	385
502	423	343	258
402	338	243	183
287	242	174	131



	Concentric Collet	Bayonet 1/4 Turn	Croco Clamp	Jack Clamp	Template Foot	Crow-foot
Thick jig	ST1200 ST2200					
Thick jig with rail or screws		ST1200 ST2200				ST1200 ST2200
Thin jig			ST1200	ST1200	ST1200	
No jig (pre-hole)			ST1200	ST1200	ST1200	

Desoutter SETITEC éVo



Control box
- Open architecture
- Drilling cycle storage
- Drilling curves storage
- Ready for network integration
- Drilling management of robotics applications

Heads & Equipments
- Wide range of heads & equipments covering all drilling applications
- Full modularity between pneumatic & electric range

Multi Energy Cable
Robust and flexible cable for:
- Lubrication
- Power
- Air
- Data

Software suite
- Create and optimize your drilling cycle
- Setup your tool
- Setup your maintenance strategy
- Live visualization of drilling operation

Full speed range coverage
- Patented winch system, to cover high speed & high torque applications

Display
- Tool/head/drilling cycle information
- Operator feedback

Robust and Powerful Motors
- 2 independent motors for speed & feed


Modular éVo

Light éVo

Head	Right Angle	In-Line
Small		
Large		
X Large		

Hole Diameter					
mm		Ø 4.0 to 6.4	Ø 6.4 to 12.7	Ø 12.7 to 25.4	> Ø 25.4
inch		Ø 4/32 " to 1/4"	Ø 5/16" to 1/2"	Ø 1/2 " to 1"	> Ø 1"
Alu / Alu		Light	Light	Modular	Modular
CFRP / CFRP		Light	Light	Modular	Modular
CFRP / Alu		Light	Light	Modular	Modular
Stack Titanium & Hard Metal		Light	Modular	Modular	Modular

Hole Diameter		Straight Hole		Countersink Hole	
mm	inch	Alu/CFRP	Titanium/ Hard Metal	Alu/CFRP	Titanium/ Hard Metal
<4,8	<3/16"	Small	Small	Small	Small
<6,35	<1/4"				
<7,9	<5/16"				Small + GEAR
<9,5	<3/8"				
<11,1	<7/16"				
<12,7	<12,7"				
<14,3	<14,3"		Small + GEAR	Large	Large / GEAR
<15,9	<15,9"				
<19,05	<19,05"	Small + GEAR	Large / GEAR	Large / GEAR	
<22,2	<22,2"	Large / GEAR	X Large	X Large	X Large
<25,4	<25,4"				
>25,4	>25,4"				

Desoutter XPB

The aerospace world is transforming from the design phase to the production shopfloor. Robotic solutions, digitalized instructions, augmented reality are now used on a daily basis in all the aerospace plants worldwide.

Aerospace players deserve the most advanced technologies, and are looking at solutions to increase their flexibility, up-time & productivity.

As aerospace experts, Desoutter & SETITEC have designed a platform taking manual operation to an advanced level while satisfying today's and tomorrow's most demanding challenges.

Full speed coverage*
Full drilling speed range available in a single tool for all aerospace materials

Ergonomy – Health & safety
Perfect balance
Ergonomic handle
Low sound levels

Cycle counter
Get control over your tool mainte-nance & cutting tool lifetime

Go electric
High performance Desoutter standard batteries, 2 battery positions for accessibility reasons



Multi-applications heads*
Wide range of heads covering various applications
Automatic head recognition with RFID technology
Fully customizable heads

Operator feedback*
Integrated smart lighting
LED flash for alerts
Bright drilling area

Smart trigger
Adjust drilling speed to material

Display Screen
Easily selection of speed
Operator feedback (error messages...)



XPB One
- Drilling applications only
- Speeds adjustable via software



+ Options

XPB Advanced
- Drilling applications only
- Display screen
- Up to 6 drilling cycles



+ Options

XPB Modular
- Multi applications
- Automatic cycle selection via RFID technology

Multi-applications heads

Drilling



Straight Head



All Drilling Heads



All Offset Heads



HCU Heads

Temporary fasteners installation*



Heads for Lisi



Heads for Monogram

Frangible Collars



Desoutter Drill Selection Guide

Tool Type	FREE SPEED	titanium	stainless STEEL	hard cast iron, MEDIUM HARD STEEL	soft cast iron, MILD STEEL [1]	HARD PLASTICS	aluminium, brass, copper, bronze	composite	wood, soft plastics, chipboard
	rpm / Drill ø mm		9-15m/min	10-20m/min	20-35m/min	30-40m/min	50-80m/min	50-100m/min	80-120m/min
STRAIGHT CASE									
DR300-T	20000							4.0 (5/32")	2.0 (5/64")
ø 8-10 mm (5/16" - 3/8") cap.	5500						4.0 (5/32")	5.0 (3/16")	6.0 (1/4")
	4500					3.0 (1/8")	6.0 (1/4")		8.0 (5/16")
	3000				4.0 (5/32")	5.0 (3/16")	8.0 (5/16")		
	2000		3.0 (1/8")	4.0 (5/32")	6.0 (1/4")	8.0 (5/16")			
	1000	3.0 (1/8")	4.0 (5/32")	6.0 (1/4")	8.0 (5/16")				
	550	6.0 (1/4")	8.0 (5/16")						
30°, 45°, 90°, 360° COMPACT HEAD									
DR300-QR/-T5-S5	5500	–	–	–	–	3.0 (1/8")	5.0 (3/16")	5.0 (3/16")	5.0 (3/16")
	4500	–	–	–	–	3.0 (1/8")	5.0 (3/16")	5.0 (3/16")	5.0 (3/16")
	3000 [3]	–	–	–	3.0 (1/8") [2]	5.0 (3/16")	5.0 (3/16")	5.0 (3/16")	–
	2000	–	3.0 (1/8")	4.0 (5/32")	5.0 (3/16")	–	–	–	–
	1000	–	4.0 (5/32")	5.0 (3/16")	–	–	–	–	–
45°, 90°, 360° STANDARD HEAD									
DR300-QR/-T6-S6	5500	–	–	–	–	3.0 (1/8")	6.0 (1/4")	5.0 (3/16")	6.5 (1/4")
	4500	–	–	–	–	3.0 (1/8")	6.0 (1/4")	5.0 (3/16")	6.5 (1/4")
	3000	–	–	–	3.0 (1/8")	5.0 (3/16")	6.5 (1/4")	6.5 (1/4")	–
	2000	–	3.0 (1/8")	4.0 (5/32")	6.5 (1/4")	6.5 (1/4")	–	6.5 (1/4")	–
	1000	–	4.0 (5/32")	6.0 (1/4")	6.5 (1/4")	–	–	–	–
	550	6.0 (1/4")	6.5 (1/4")	6.5 (1/4")	–	–	–	–	–
DR450-T6/S6	18500	–	–	–	–	–	–	4.0 (5/32")	2.0 (5/64")
ø 8-13 mm (5/16" - 1/2") cap.	5800	–	–	–	–	–	4.0 (5/32")	5.0 (3/16")	6.0 (1/4")
	4300	–	–	–	–	3.0 (1/8")	6.0 (1/4")	10.0 (13/32")	12.0 (1/2")
	2700	–	–	3.0 (1/8")	4.0 (5/32")	5.0 (3/16")	8.0 (5/16")	12.0 (1/2")	–
	1800	–	3.0 (1/8")	4.0 (5/32")	6.0 (1/4")	8.0 (5/16")	10.0 (13/32")	–	–
	1400	–	4.0 (5/32")	5.0 (3/16")	9.0 (11/32")	11.0 (7/16")	–	–	–
90° HEAVY DUTY									
DR300-THD/SHD	2000	–	3.0 (1/8")	3.0 (1/8")	6.0 (1/4")	8.0 (5/16")	8.0 (5/16")	8.0 (5/16")	8.0 (5/16")
	900	–	7.0 (9/32")	8.0 (5/16")	8.0 (5/16")	–	–	–	–
DR450-THD/SHD	2000	–	3.0 (1/8")	3.0 (1/8")	6.0 (1/4")	6.5 (1/4")	6.5 (1/4")	6.5 (1/4")	6.5 (1/4")
	900	–	7.0 (9/32")	8.0 (5/16")	8.0 (5/16")	–	–	–	–
	600	–	8.0 (5/16")	10.0 (13/32")	10.0 (13/32")	8.0 (5/16")	–	–	–
PISTOL GRIP									
DR350	20000							4.0 (5/32")	2.0 (5/64")
ø 8-10 mm (5/16" - 3/8") cap.	5500						4.0 (5/32")	5.0 (3/16")	6.0 (1/4"
	4500					3.0 (1/8")	6.0 (1/4")		8.0 (5/16")
	3000				4.0 (5/32")	5.0 (3/16")	8.0 (5/16")		
	2000		3.0 (1/8")	4.0 (5/32")	6.0 (1/4")	8.0 (5/16")	10.0 (13/32")		
	1000		4.0 (5/32")	6.0 (1/4")	8.0 (5/16")				
	550	6.0 (1/4")	8.0 (5/16")						
DR500	18500							4.0 (5/32")	2.0 (5/64")
ø 8-13 mm (5/16" - 1/2") cap.	5800						4.0 (5/32")	5.0 (3/16")	6.0 (1/4")
	4300					3.0 (1/8")	6.0 (1/4")	10.0 (13/32")	12.0 (1/2")
	2700			3.0 (1/8")	4.0 (5/32")	5.0 (3/16")	8.0 (5/16")	12.0 (1/2")	
	1800		3.0 (1/8")	4.0 (5/32")	6.0 (1/4")	8.0 (5/16")	10.0 (13/32")		
	1400		4.0 (5/32")	5.0 (3/16")	9.0 (11/32")	11.0 (7/16")			
	1000		5.0 (3/16")	6.0 (1/4")	10.0 (13/32")				
	600	3.0 (1/8")	7.0 (9/32")	8.0 (5/16")	12.0 (1/3")				
	400	6.0 (1/4")	8.0 (5/16")	10.0 (13/32")					
DR750	20000						2.0 (5/64")	2.0 (5/64")	
ø 8-13 mm (5/16" - 1/2") cap.	6000						4.0 (5/32")	5.0 (3/16")	6.0 (1/4")
	4100					3.0 (1/8")	6.0 (1/4")	8.0 (5/16")	10.0 (13/32")
	3300				3.0 (1/8")	4.0 (5/32")	8.0 (5/16")	10.0 (13/32")	12.0* (1/2")
	2700			3.0 (1/8")	4.0 (5/32")	5.0 (3/16")	10.0 (13/32")	13.0* (1/2")	15.0* (19/32")
	1300		4.0 (5/32")	5.0 (3/16")	9.0 (11/32")	11.0* (7/16")	19.0* (3/4")		30.0* (13/16")
	750	3.0 (1/8")	7.0 (9/32")	8.0 (5/16")	15.0* (19/32")	19.0* (3/4")	30.0* (13/16")		
	400	6.0 (1/4")	8.0 (5/16")	10.0 (13/32")					

* above standard chuck capacity

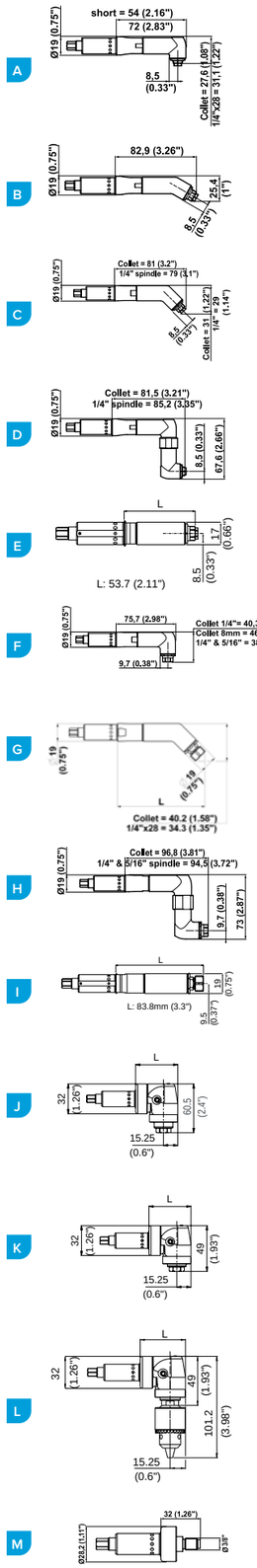
DESOUTTER QUICK-RELEASE MULTIDRILLS



Model	Part No.	Pic Ref	Free Speed	Motor Power		Weight		Length		Air Flow		Air Inlet	Hose int. ø	
			rpm	W	hp	kg	lb	mm	in.	l/s	cfm	in.	mm	in.
Multi-Drills – Pistol														
DR350-P5500-QR	205 147 984 4	A	5500	350	0.5	0.50	1.10	169	6.65	9.5	20	1/4	6	1/4
DR350-P4500-QR	205 147 983 4	A	4500	350	0.5	0.50	1.10	169	6,65	9.5	20	1/4	6	1/4
DR350-P3000-QR	205 147 528 4	A	3000	350	0.5	0.50	1.10	169	6.65	9.5	20	1/4	6	1/4
DR350-P1000-QR	205 147 981 4	A	1000	350	0.5	0.58	1.27	187	7.36	9.5	20	1/4	6	1/4
DR500-P5800-QR	615 176 190 0	B	5800	500	0.68	0.58	1.25	174	6.85	14	30	1/4	6	1/4
DR500-P4300-QR	615 176 189 0	B	4300	500	0.68	0.58	1.25	174	6.85	14	30	1/4	6	1/4
DR500-P2700-QR	615 176 188 0	B	2700	500	0.68	0.58	1.25	174	6.85	14	30	1/4	6	1/4
DR500-P1800-QR	615 176 187 0	B	1800	500	0.68	0.66	1.45	188	7.40	14	30	1/4	6	1/4
DR500-P1400-QR	615 176 186 0	B	1400	500	0.68	0.66	1.45	188	7.40	14	30	1/4	6	1/4
DR500-P1000-QR	615 176 185 0	B	1000	500	0.68	0.66	1.45	188	7.40	14	30	1/4	6	1/4
Other speed on request (550, 2000 & 4500 rpm)														
Multi-Drills – Straight														
DR300-T5500-QR	615 176 071 0	C	5500	300	0.4	0.52	1.14	179	7.05	9.5	20	1/4	6	1/4
DR300-T4500-QR	615 176 070 0	C	4500	300	0.4	0.52	1.14	179	7.05	9.5	20	1/4	6	1/4
DR300-T3000-QR	615 176 069 0	C	3000	300	0.4	0.52	1.14	179	7.05	9.5	20	1/4	6	1/4
DR300-T2000-QR	615 176 068 0	C	2000	300	0.4	0.52	1.14	179	7.05	9.5	20	1/4	6	1/4
DR300-T1000-QR	615 176 067 0	C	1000	300	0.4	0.61	1.34	195.5	7.7	9.5	20	1/4	6	1/4
DR300-T1000-QR - BRB	615 176 118 0	C	1000	300	0.4	0.64	1.41	217.8	8.57	9.5	20	1/4	6	1/4
DR300-T550-QR	615 176 066 0	C	550	300	0.4	0.61	1.34	195.5	7.7	9.5	20	1/4	6	1/4
DR450-T5800-QR	615 176 162 0	D	5800	450	0.6	0.64	1.41	193	7.60	14	30	1/4	6	1/4
DR450-T4300-QR	615 176 161 0	D	4300	450	0.6	0.64	1.41	193	7.60	14	30	1/4	6	1/4
DR450-T2700-QR	615 176 160 0	D	2700	450	0.6	0.64	1.41	193	7.60	14	30	1/4	6	1/4
DR450-T1800-QR	615 176 159 0	D	1800	450	0.6	0.72	1.58	207	8.15	14	30	1/4	6	1/4
DR450-T1400-QR	615 176 158 0	D	1400	450	0.6	0.72	1.58	207	8.15	14	30	1/4	6	1/4
DR450-T1000-QR	615 176 157 0	D	1000	450	0.6	0.72	1.58	207	8.15	14	30	1/4	6	1/4

DESOUTTER QUICK-RELEASE HEADS

Part No.	Description	Pic Ref	Length		Collet max. Capacity		Weight	
			mm	in.	mm	in.	kg	lb
Compact Angle Heads								
205 053 981 3	Short Compact 90° angle head Collet spindle	A	54.0	2.13	5.0	3/16	0.15	0.33
205 050 331 3	Compact 90° angle head Collet spindle	A	72.0	2.83	5.0	3/16	0.17	0.37
205 050 332 3	Compact 90° angle head 1/4" x 28 spindle	A	72.0	2.83	-	-	0.17	0.37
205 050 329 3	Compact 30° angle head Collet spindle	B	82.9	3.26	5.0	3/16	0.17	0.37
205 050 330 3	Compact 30° angle head 1/4" x 28 spindle	B	82.9	3.26	-	-	0.17	0.37
205 050 335 3	Compact 45° angle head Collet spindle	C	81.0	3.19	5.0	3/16	0.17	0.37
205 050 336 3	Compact 45° angle head 1/4" x 28 spindle	C	79.0	3.11	-	-	0.17	0.37
205 050 333 3	Compact 360° angle head Collet spindle	D	81.5	3.21	5.0	3/16	0.25	0.55
205 050 334 3	Compact 360° angle head 1/4" x 28 spindle	D	85.2	3.35	-	-	0.25	0.55
615 399 569 5	Short compact straight head Collet spindle	E	53.7	2.11	5.0	3/16	0.14	0.31
615 399 570 5	Short compact straight head 1/4"x28 Spindle	E	53.7	2.11	-	-	0.14	0.31
615 399 571 5	Compact straight head Collet spindle	E	71.7	2.82	5.0	3/16	0.16	0.35
615 399 572 5	Compact straight head 1/4"x28 Spindle	E	71.7	2.82	-	-	0.16	0.35
Standard Angle Heads								
205 050 338 3	Standard 90° angle head Collet spindle	F	75.7	2.98	6.4	1/4	0.23	0.51
205 050 353 3	Standard 90° angle head Collet spindle	F	75.7	2.98	8.0	5/16	0.23	0.51
205 050 339 3	Standard 90° angle head 1/4" x 28 spindle	F	75.7	2.98	-	-	0.24	0.53
205 050 340 3	Standard 90° angle head 5/16" x 24 spindle	F	75.7	2.98	-	-	0.23	0.51
615 398 702 5	Standard 45° angle head Collet spindle	G	90.7	3.57	6.4	1/4	0.23	0.51
615 398 704 5	Standard 45° angle head 1/4" x 28 spindle	G	87.9	3.46	-	-	0.23	0.51
205 050 341 3	Standard 360° angle head Collet spindle	H	96.8	3.81	6.4	1/4	0.32	0.70
205 050 342 3	Standard 360° angle head 1/4" x 28 spindle	H	94.5	3.72	-	-	0.32	0.70
205 050 343 3	Standard 360° angle head 5/16" x 24 spindle	H	94.5	3.72	-	-	0.32	0.70
615 399 573 5	Standard straight head Collet spindle	I	83.8	3.3	6.4	1/4	0.2	0.44
615 399 574 5	Standard straight head 1/4"x28 Spindle	I	83.8	3.3	-	-	0.2	0.44
Heavy Duty heads								
615 399 575 5	Heavy Duty 90° head Collet spindle	J	48.8	1.92	8	5/16	0.31	0.68
615 399 576 5	Heavy Duty 90° head 1/4"x28 Spindle	K	48.8	1.92	-	-	0.3	0.66
615 399 577 5	Heavy Duty 90° head Chuck output	L	48.8	1.92	-	-	0.43	0.95
Straight head								
205 050 543 3	Chuck mounting 3/8" x 24	M	32.0	1.26			0.25	0.55

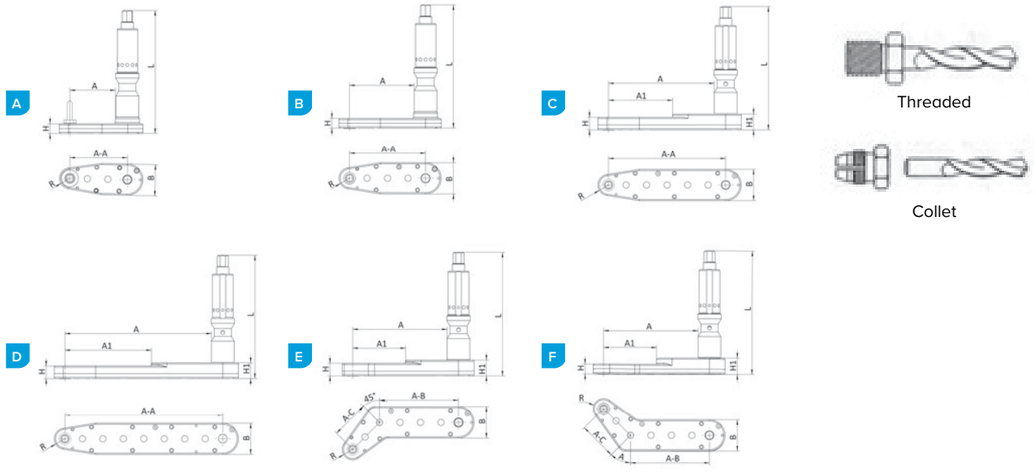


OPTIONAL ACCESSORIES



Part No.	Description	Ref
205 050 299 3	Short lever	1
615 399 266 0	Start button	2
615 399 265 0	Side handle	3
205 055 272 3	Keyed chuck C6 - 3/8"x24 (Cap. 0.5 to 6.5mm)	
205 053 013 3	Keyed chuck C8 - 3/8"x24 (Cap. 0.5 to 8mm)	
268263	Flat wrenches 8-9.5mm for Angle heads C, D, E & F	
615 399 313 0	Kit silencer NPT	4
615 399 311 0	Kit silencer BSP	4
615 399 312 0	Kit Bumper	4

DESOUTTER DRILLING OFFSET HEADS



Output

Model		Ref Pic	Drilling Direction	Max Drilling Capacity		H		H1		A		A1		A-A		A-B		A-C		B		R		L		Angle
Thread 1/4"x28"	Thread 9/32"-40			mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	
DB13S2-CP2	DB13S3-CP2	A	Backward	5.0	3/16"	7.5	0.29	-	-	37.6	1.48	-	-	46.8	1.84	-	-	-	-	25.4	1	8.5	0.33	99.9	3.93	-
DB13S2-CP6	DB13S3-CP6	A	Backward	5.0	3/16"	7.9	0.30	-	-	37.6	1.48	-	-	46.8	1.84	-	-	-	-	25.4	1	8.5	0.33	178.8	7.03	-
DB23S2-CP2	DB23S3-CP2	A	Backward	6.35	1/4"	10.0	0.39	-	-	37.6	1.48	-	-	46.8	1.84	-	-	-	-	25.4	1	8.5	0.33	99.9	3.93	-
DB23S2-CP6	DB23S3-CP6	A	Backward	6.35	1/4"	10.0	0.39	-	-	37.6	1.48	-	-	46.8	1.84	-	-	-	-	25.4	1	8.5	0.33	178.8	7.03	-
DB33S2-CP2	DB33S3-CP2	A	Backward	8.0	5/16"	12.6	0.49	-	-	37.6	1.48	-	-	46.8	1.84	-	-	-	-	25.4	1	8.5	0.33	99.9	3.93	-
DB33S2-CP6	DB33S3-CP6	A	Backward	8.0	5/16"	12.6	0.49	-	-	37.6	1.48	-	-	46.8	1.84	-	-	-	-	25.4	1	8.5	0.33	178.8	7.03	-
DB04S2-CP	-	B	Forward	5.0	3/16"	7.5	0.29	-	-	32.2	1.26	-	-	42.7	1.68	-	-	-	-	16.0	0.62	7.5	0.29	95.4	3.75	-
DB14S2-CP2	DB14S3-CP2	B	Forward	5.0	3/16"	7.9	0.30	-	-	52.7	2.07	-	-	61.9	2.43	-	-	-	-	25.4	1	8.5	0.33	99.9	3.93	-
DB14S2-CP6	DB14S3-CP6	B	Forward	5.0	3/16"	7.5	0.29	-	-	52.7	2.07	-	-	61.9	2.43	-	-	-	-	25.4	1	8.5	0.33	178.8	7.03	-
DB24S2-CP2	DB24S3-CP2	B	Forward	6.35	1/4"	10.0	0.39	-	-	52.7	2.07	-	-	61.9	2.43	-	-	-	-	25.4	1	8.5	0.33	99.9	3.93	-
DB24S2-CP6	DB24S3-CP6	B	Forward	6.35	1/4"	10.0	0.39	-	-	52.7	2.07	-	-	61.9	2.43	-	-	-	-	25.4	1	8.5	0.33	178.8	7.03	-
DB34S2-CP2	DB34S3-CP2	B	Forward	8.0	5/16"	12.6	0.49	-	-	52.7	2.07	-	-	61.9	2.43	-	-	-	-	25.4	1	8.5	0.33	99.9	3.93	-
DB34S2-CP6	DB34S3-CP6	B	Forward	8.0	5/16"	12.6	0.49	-	-	52.7	2.07	-	-	61.9	2.43	-	-	-	-	25.4	1	8.5	0.33	178.8	7.03	-
DB06S2-CP	-	C	Forward	5.0	3/16"	7.5	0.29	7.5	0.29	54.1	2.13	-	-	64.7	2.54	-	-	-	-	16.0	0.62	7.5	0.29	95.4	3.75	-
DB16S2-CP2	DB16S3-CP2	C	Forward	5.0	3/16"	7.9	0.30	12.6	0.49	86.0	3.38	52.1	2.05	95.3	3.75	-	-	-	-	25.4	1	8.5	0.33	99.9	3.93	-
DB16S2-CP6	DB16S3-CP6	C	Forward	5.0	3/16"	7.9	0.30	12.6	0.49	86.0	3.38	52.1	2.05	95.3	3.75	-	-	-	-	25.4	1	8.5	0.33	178.8	7.03	-
DB26S2-CP2	DB26S3-CP2	C	Forward	6.35	1/4"	10.0	0.39	12.6	0.49	86.0	3.38	52.1	2.05	95.3	3.75	-	-	-	-	25.4	1	8.5	0.33	99.9	3.93	-
DB26S2-CP6	DB26S3-CP6	C	Forward	6.35	1/4"	10.0	0.39	12.6	0.49	86.0	3.38	52.1	2.05	95.3	3.75	-	-	-	-	25.4	1	8.5	0.33	178.8	7.03	-
DB36S2-CP2	DB36S3-CP2	C	Forward	8.0	5/16"	12.6	0.49	12.6	0.49	86.0	3.38	-	-	95.3	3.75	-	-	-	-	25.4	1	8.5	0.33	99.9	3.93	-
DB36S2-CP6	DB36S3-CP6	C	Forward	8.0	5/16"	12.6	0.49	12.6	0.49	86.0	3.38	-	-	95.3	3.75	-	-	-	-	25.4	1	8.5	0.33	178.8	7.03	-
DB08S2-CP	-	D	Forward	5.0	3/16"	7.5	0.29	7.5	0.29	76.0	2.99	-	-	86.6	3.40	-	-	-	-	16.0	0.62	7.5	0.29	95.4	3.75	-
DB18S2-CP2	DB18S3-CP2	D	Forward	5.0	3/16"	7.9	0.30	12.6	0.49	119.3	4.69	70.4	2.77	128.6	5.06	-	-	-	-	25.4	1	8.5	0.33	99.9	3.93	-
DB18S2-CP6	DB18S3-CP6	D	Forward	5.0	3/16"	7.9	0.30	12.6	0.49	119.3	4.69	70.4	2.77	128.6	5.06	-	-	-	-	25.4	1	8.5	0.33	178.8	7.03	-
DB28S2-CP2	DB28S3-CP2	D	Forward	6.35	1/4"	10.0	0.39	12.6	0.49	119.3	4.69	70.4	2.77	128.6	5.06	-	-	-	-	25.4	1	8.5	0.33	99.9	3.93	-
DB28S2-CP6	DB28S3-CP6	D	Forward	6.35	1/4"	10.0	0.39	12.6	0.49	119.3	4.69	70.4	2.77	128.6	5.06	-	-	-	-	25.4	1	8.5	0.33	178.8	7.03	-
DB38S2-CP2	DB38S3-CP2	D	Forward	8.0	5/16"	12.6	0.49	12.6	0.49	119.3	4.69	-	-	128.6	5.06	-	-	-	-	25.4	1	8.5	0.33	99.9	3.93	-
DB38S2-CP6	DB38S3-CP6	D	Forward	8.0	5/16"	12.6	0.49	12.6	0.49	119.3	4.69	-	-	128.6	5.06	-	-	-	-	25.4	1	8.5	0.33	178.8	7.03	-
DB06R2-CP	-	E	Forward	5.0	3/16"	7.5	0.29	7.5	0.29	46.5	1.83	-	-	-	-	43.3	1.70	21.4	0.84	16.0	0.62	7.5	0.29	95.4	3.75	50°
DB16R2-CP2	DB16R3-CP2	E	Forward	5.0	3/16"	7.9	0.30	12.6	0.49	76.9	3.02	43.1	1.69	-	-	64.3	2.53	31.0	1.22	25.4	1	8.5	0.33	99.9	3.93	45°
DB16R2-CP6	DB16R3-CP6	E	Forward	5.0	3/16"	7.9	0.30	12.6	0.49	76.9	3.02	43.1	1.69	-	-	64.3	2.53	31.0	1.22	25.4	1	8.5	0.33	178.8	7.03	45°
DB26R2-CP2	DB26R3-CP2	E	Forward	6.35	1/4"	10.0	0.39	12.6	0.49	76.9	3.02	43.1	1.69	-	-	64.3	2.53	31.0	1.22	25.4	1	8.5	0.33	99.9	3.93	45°
DB26R2-CP6	DB26R3-CP6	E	Forward	6.35	1/4"	10.0	0.39	12.6	0.49	76.9	3.02	43.1	1.69	-	-	64.3	2.53	31.0	1.22	25.4	1	8.5	0.33	178.8	7.03	45°
DB36R2-CP2	DB36R3-CP2	E	Forward	8.0	5/16"	12.6	0.49	12.6	0.49	76.9	3.02	-	-	-	-	64.3	2.53	31.0	1.22	25.4	1	8.5	0.33	99.9	3.93	45°
DB36R2-CP6	DB36R3-CP6	E	Forward	8.0	5/16"	12.6	0.49	12.6	0.49	76.9	3.02	-	-	-	-	64.3	2.53	31.0	1.22	25.4	1	8.5	0.33	178.8	7.03	45°
DB06L2-CP	-	F	Forward	5.0	3/16"	7.5	0.29	7.5	0.29	47.0	1.85	-	-	-	-	43.3	1.70	21.4	0.84	16.0	0.62	7.5	0.29	95.4	3.75	50°
DB16L2-CP2	DB16L3-CP2	F	Forward	5.0	3/16"	7.9	0.30	12.6	0.49	76.9	3.02	43.1	1.69	-	-	64.3	2.53	31.0	1.22	25.4	1	8.5	0.33	99.9	3.93	45°
DB16L2-CP6	DB16L3-CP6	F	Forward	5.0	3/16"	7.9	0.30	12.6	0.49	76.9	3.02	43.1	1.69	-	-	64.3	2.53	31.0	1.22	25.4	1	8.5	0.33	178.8	7.03	45°
DB26L2-CP2	DB26L3-CP2	F	Forward	6.35	1/4"	10.0	0.39	12.6	0.49	76.9	3.02	43.1	1.69	-	-	64.3	2.53	31.0	1.22	25.4	1	8.5	0.33	99.9	3.93	45°
DB26L2-CP6	DB26L3-CP6	F	Forward	6.35	1/4"	10.0	0.39	12.6	0.49	76.9	3.02	43.1	1.69	-	-	64.3	2.53	31.0	1.22	25.4	1	8.5	0.33	178.8	7.03	45°
DB36L2-CP2	DB36L3-CP2	F	Forward	8.0	5/16"	12.6	0.49	12.6	0.49	76.9	3.02	-	-	-	-	64.3	2.53	31.0	1.22	25.4	1	8.5	0.33	99.9	3.93	45°
DB36L2-CP6	DB36L3-CP6	F	Forward	8.0	5/16"	12.6	0.49	12.6	0.49	76.9	3.02	-	-	-	-	64.3	2.53	31.0	1.22	25.4	1	8.5	0.33	178.8	7.03	45°

COLLETS FOR ANGLE HEADS: C, D, E & F (30°, 45°, 90° & 360°) AND COMPACT ANGLE DRILLS DR300-T5

Collet Capacity	Part No.	Collet Capacity	Part No.	Collet Capacity	Part No.	Collet Capacity	Part No.	Collet Capacity	Part No.
ø 0.8mm	2152	ø 1.8mm	2252	ø 2.8mm	2352	ø 3.8mm	2452	ø 4.8mm	2552
ø 0.9mm	2162	ø 1.9mm	2262	ø 2.9mm	2362	ø 3.9mm	2462	ø 4.9mm	2562
ø 1.0mm	2172	ø 2.0mm	2272	ø 3.0mm	2372	ø 4.0mm	2472	ø 5.0mm	2572
ø 1.1mm	2182	ø 2.1mm	2282	ø 3.1mm	2382	ø 4.1mm	2482		
ø 1.2mm	2192	ø 2.2mm	2292	ø 3.2mm	2392	ø 4.2mm	2492	ø 1/16"	91442
ø 1.3mm	2202	ø 2.3mm	2302	ø 3.3mm	2402	ø 4.3mm	2502	ø 3/32"	91452
ø 1.4mm	2212	ø 2.4mm	2312	ø 3.4mm	2412	ø 4.4mm	2512	ø 1/8"	91462
ø 1.5mm	2222	ø 2.5mm	2322	ø 3.5mm	2422	ø 4.5mm	2522	ø 5/32"	91472
ø 1.6mm	2232	ø 2.6mm	2332	ø 3.6mm	2432	ø 4.6mm	2532	ø 11/64"	108172
ø 1.7mm	2242	ø 2.7mm	2342	ø 3.7mm	2442	ø 4.7mm	2542	ø 3/16"	91482



COLLETS FOR ANGLE HEADS: G, H & J (45°, 90°, 360°) AND STANDARD ANGLE DRILLS DR300-T6

Collet Capacity	Part No.	Collet Capacity	Part No.	Collet Capacity	Part No.	Collet Capacity	Part No.
ø 1.6mm (1/16")	18922	ø 3.0mm	18992	ø 4.4mm (11/64")	19072	ø 5.8mm	19152
ø 1.8mm	18932	ø 3.2mm (1/8")	19002	ø 4.6mm	19082	ø 6.0mm (15/64")	19162
ø 2.0mm (5/64")	18942	ø 3.4mm	19022	ø 4.8mm (3/16")	19092	ø 6.2mm	19172
ø 2.2mm	18952	ø 3.6mm (9/64")	19032	ø 5.0mm	19102	ø 6.4mm (1/4")	19182
ø 2.4mm	18962	ø 3.8mm	19042	ø 5.2mm (13/64")	19122		
ø 2.6mm	18972	ø 4.0mm (5/32")	19052	ø 5.4mm	19132		
ø 2.8mm (7/64")	18982	ø 4.2mm	19062	ø 5.6mm (7/32")	19142		



Each collet covers 0.2mm capacity.

Example: P/N 19092 covers from 4.6 to 4.8mm

COLLETS FOR ANGLE HEAD: P.N. 205 050 353 3

Collet Capacity	Part No.	Collet Capacity	Part No.	Collet Capacity	Part No.	Collet Capacity	Part No.
ø 2.0mm	615 526 066 0	ø 4.0mm	615 526 071 0	ø 5.9mm	615 526 078 0	ø 7.5mm	615 526 084 0
ø 2.4mm	615 526 067 0	ø 4.5mm	615 526 073 0	ø 6.0mm	615 526 079 0	ø 7.7mm	615 526 085 0
ø 2.5mm	615 526 068 0	ø 5.0mm	615 526 075 0	ø 6.3mm	615 526 080 0	ø 7.9mm	615 526 087 0
ø 3.0mm	615 526 069 0	ø 5.2mm	615 526 076 0	ø 6.5mm	615 526 081 0	ø 8.0mm	615 526 088 0
ø 3.5mm	615 526 070 0	ø 5.5mm	615 526 077 0	ø 7.0mm	615 526 083 0		



COLLET FOR HEAVY DUTY ANGLE DRILLS DR300-THD.. – MAXIMUM CAPACITY: 8 MM (5/16")

Collet Capacity	Part No.	Collet Capacity	Part No.	Collet Capacity	Part No.	Collet Capacity	Part No.
ø 2.4mm (3/32")	2592	ø 4.0mm (5/32")	2672	ø 5.6mm	2752	ø 7.2mm	2832
ø 2.6mm	2602	ø 4.2mm	2682	ø 5.8mm	2762	ø 7.4mm	2842
ø 2.8mm (7/64")	2612	ø 4.4mm	2692	ø 6.0mm	2772	ø 7.6mm	2852
ø 3.0mm	2622	ø 4.6mm	2702	ø 6.2mm	2782	ø 7.8mm	2862
ø 3.2mm (1/8")	2632	ø 4.8mm (3/16")	2712	ø 6.4 (1/4")	2792	ø 8.0mm (5/16")	2872
ø 3.4mm	2642	ø 5.0mm	2722	ø 6.6mm	2802		
ø 3.6mm (9/64")	2652	ø 5.2mm	2732	ø 6.8mm	2812		
ø 3.8mm	2662	ø 5.4mm	2742	ø 7.0mm	2822		



Additional Collets can be found on page 57

DESOUTTER COMPACT ANGLE DRILLS – COLLET TYPE

Compact Head - Max capacity: 5mm (3/16")
Collet & 1/4" x 28 Spindle

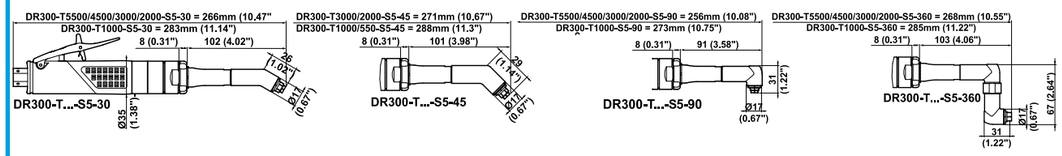
*BRB
Button + Rear
Bumper
also available as
Accessory


A


B


C


D



Model	Part No.	Pic Ref	Model	Part No.	Free Speed rpm	Motor Power W	Motor Power HP	Weight kg	Weight lb
30° – COLLET SPINDLE			**30° – 1/4" x 28 SPINDLE**		**Max. capacity: 5mm (3/16")**				
DR300-T5500-T5-30	615 176 077 0	A	DR300-T5500-S5-30	615 176 133 0	5500	300	0.4	0.66	1.45
DR300-T4500-T5-30	615 176 076 0	A	DR300-T4500-S5-30	615 176 132 0	4500	300	0.4	0.66	1.45
DR300-T3000-T5-30	615 176 074 0	A	DR300-T3000-S5-30	615 176 075 0	3000	300	0.4	0.66	1.45
DR300-T3000-T5-30 - BRB*	615 176 119 0	A			3000	300	0.4	0.66	1.45
DR300-T2000-T5-30	615 176 073 0	A	DR300-T2000-S5-30	615 176 131 0	2000	300	0.4	0.66	1.45
DR300-T1000-T5-30	615 176 072 0	A	DR300-T1000-S5-30	615 176 130 0	1000	300	0.4	0.76	1.67
45° – COLLET SPINDLE			**45° – 1/4" x 28 SPINDLE**		**Max. capacity: 5mm (3/16")**				
DR300-T5500-T5-45	615 176 096 0	B	DR300-T5500-S5-45	615 176 146 0	5500	300	0.4	0.67	1.47
DR300-T4500-T5-45	615 176 095 0	B	DR300-T4500-S5-45	615 176 145 0	4500	300	0.4	0.67	1.47
DR300-T3000-T5-45	615 176 093 0	B	DR300-T3000-S5-45	615 176 094 0	3000	300	0.4	0.67	1.47
DR300-T2000-T5-45	615 176 092 0	B	DR300-T2000-S5-45	615 176 144 0	2000	300	0.4	0.67	1.47
DR300-T1000-T5-45	615 176 091 0	B	DR300-T1000-S5-45	615 176 143 0	1000	300	0.4	0.76	1.67
DR300-T550-T5-45	615 176 090 0	B	DR300-T550-S5-45	615 176 142 0	550	300	0.4	0.76	1.67
90° – COLLET SPINDLE			**90° – 1/4" x 28 SPINDLE**		**Max. capacity: 5mm (3/16")**				
DR300-T5500-T5-90	615 176 083 0	C	DR300-T5500-S5-90	615 176 137 0	5500	300	0.4	0.68	1.5
DR300-T4500-T5-90	615 176 082 0	C	DR300-T4500-S5-90	615 176 136 0	4500	300	0.4	0.68	1.5
DR300-T4500-T5-90 - BRB*	615 176 120 0	C			4500	300	0.4	0.68	1.5
DR300-T3000-T5-90	615 176 080 0	C	DR300-T3000-S5-90	615 176 081 0	3000	300	0.4	0.68	1.5
DR300-T2000-T5-90	615 176 079 0	C	DR300-T2000-S5-90	615 176 135 0	2000	300	0.4	0.68	1.5
DR300-T1000-T5-90	615 176 078 0	C	DR300-T1000-S5-90	615 176 134 0	1000	300	0.4	0.78	1.72
360° – COLLET SPINDLE			**360° – 1/4" x 28 SPINDLE**		**Max. capacity: 5mm (3/16")**				
DR300-T5500-T5-360	615 176 089 0	D	DR300-T5500-S5-360	615 176 141 0	5500	300	0.4	0.74	1.63
DR300-T4500-T5-360	615 176 088 0	D	DR300-T4500-S5-360	615 176 140 0	4500	300	0.4	0.74	1.63
DR300-T3000-T5-360	615 176 086 0	D	DR300-T3000-S5-360	615 176 087 0	3000	300	0.4	0.74	1.63
DR300-T2000-T5-360	615 176 085 0	D	DR300-T2000-S5-360	615 176 139 0	2000	300	0.4	0.74	1.63
DR300-T1000-T5-360	615 176 084 0	D	DR300-T1000-S5-360	615 176 138 0	1000	300	0.4	0.84	1.85

DESOUTTER STANDARD ANGLE DRILLS – COLLET TYPE

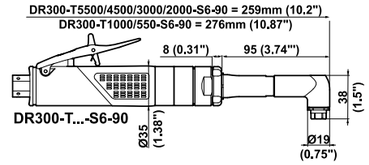
Standard Head - Max capacity: 6.4mm (1/4")
Collet & 1/4" x 28 Spindle
All models: Air flow: 9.5 l/s (20 cfm) - Air inlet 1/4" - Hose int. 6 mm (1/4")

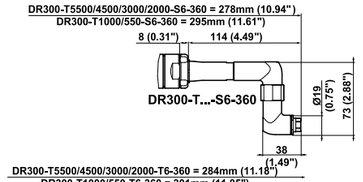
*BRB
Button + Rear
Bumper
also available as
Accessory


A


B


C





Model	Part No.	Pic Ref	Model	Part No.	Free Speed rpm	Motor Power W	Motor Power HP	Weight kg	Weight lb
90° – COLLET SPINDLE			**90° – 1/4" x 28 SPINDLE**		**Max. capacity: 6.4mm (1/4")**				
DR300-T5500-T6-90	615 176 103 0	A	DR300-T5500-S6-90	615 176 151 0	5500	300	0.4	0.7	1.54
DR300-T4500-T6-90	615 176 102 0	A	DR300-T4500-S6-90	615 176 150 0	4500	300	0.4	0.7	1.54
DR300-T4500-T6-90 - BRB*	615 176 124 0	A	DR300-T3000-S6-90	615 176 101 0	3000	300	0.4	0.7	1.54
DR300-T3000-T6-90	615 176 100 0	A	DR300-T2000-S6-90	615 176 149 0	2000	300	0.4	0.7	1.54
DR300-T3000-T6-90 - BRB*	615 176 123 0	A	DR300-T1000-S6-90	615 176 148 0	1000	300	0.4	0.79	1.74
DR300-T2000-T6-90	615 176 099 0	A	DR300-T550-S6-90	615 176 147 0	550	300	0.4	0.79	1.74
DR300-T2000-T6-90 - BRB*	615 176 122 0	A			1000	300	0.4	0.82	1.81
DR300-T1000-T6-90	615 176 098 0	A			2000	300	0.4	0.72	1.59
DR300-T1000-T6-90 - BRB*	615 176 121 0	A			3000	300	0.4	0.72	1.59
DR300-T550-T6-90	615 176 097 0	A			4500	300	0.4	0.72	1.59
90° – COLLET SPINDLE			**90° – 1/4" x 28 SPINDLE**		**Max. capacity: 6.4mm (1/4")**				
DR450-T5800-T6-90	615 176 167 0	B	DR450-T5800-S6-90	615 176 172 0	5800	450	0.6	0.76	1.67
DR450-T4300-T6-90	615 176 166 0	B	DR450-T4300-S6-90	615 176 171 0	4300	450	0.6	0.76	1.67
DR450-T2700-T6-90	615 176 165 0	B	DR450-T2700-S6-90	615 176 170 0	2700	450	0.6	0.76	1.67
DR450-T1800-T6-90	615 176 164 0	B	DR450-T1800-S6-90	615 176 169 0	1800	450	0.6	0.85	1.87
DR450-T1400-T6-90	615 176 163 0	B	DR450-T1400-S6-90	615 176 168 0	1400	450	0.6	0.85	1.87
360° – COLLET SPINDLE			**360° – 1/4" x 28 SPINDLE**		**Max. capacity: 5mm (3/16")**				
DR300-T5500-T6-360	615 176 110 0	C	DR300-T5500-S6-360	615 176 156 0	5500	300	0.4	0.82	1.81
DR300-T4500-T6-360	615 176 109 0	C	DR300-T4500-S6-360	615 176 155 0	4500	300	0.4	0.82	1.81
DR300-T3000-T6-360	615 176 107 0	C	DR300-T3000-S6-360	615 176 108 0	3000	300	0.4	0.82	1.81
DR300-T3000-T6-360-BRB*	615 176 125 0	C	DR300-T2000-S6-360	615 176 154 0	2000	300	0.4	0.82	1.81
DR300-T2000-T6-360	615 176 106 0	C	DR300-T1000-S6-360	615 176 153 0	1000	300	0.4	0.91	2
DR300-T1000-T6-360	615 176 105 0	C	DR300-T550-S6-360	615 176 152 0	550	300	0.4	0.91	2
DR300-T550-T6-360	615 176 104 0	C			3000	300	0.4	0.72	1.59

DESOUTTER PISTOL GRIP DRILLS

All models DR350: Air Flow: 9.5 l/s (20 cfm) - Air Inlet 1/4'' - Hose int. 6 mm (1/4'') / * Chuck spindle 3/8" x 24 UNF
All models DR500: Air Flow: 14 l/s (30 cfm) - Air inlet: 1/4'' - Hose int. 10 mm (3/8'') / * Chuck spindle 3/8'' x 24 UNF
All models DR750: Air Flow: 14 l/s (30 cfm) - Air inlet: 1/4'' - Hose int. 10 mm (3/8'') / Chuck spindle: * 3/8'' x 24 UNF / **1/2'' x 20 UNF




Color rings to identify your tools speed

Model	Part No.	Pic Ref	Model	Part No.	Free Speed	Motor Power		Stall Torque		Weight w/o Chuck		OAL (L)	
					rpm	W	HP	Nm	in.lb	kg	lb	mm	in
DR350 – KEY CHUCK			**DR350 – WITHOUT CHUCK**										
DR350-P20000-C8	205 147 252 4	A	DR350-P20000*	205 147 359 4	20000	350	0.5	0.6	5.3	0.49	1.1	120	4.72
DR350-P5500-C8	205 147 250 4	A	DR350-P5500*	205 147 358 4	5500	350	0.5	2.3	20.4	0.49	1.1	136	5.35
DR350-P4500-C8	205 147 382 4	A	DR350-P4500*	205 147 384 4	4500	350	0.5	2.7	23.9	0.49	1.1	136	5.35
DR350-P3000-C8	205 147 248 4	A	DR350-P3000*	205 147 357 4	3000	350	0.5	4.0	35.4	0.49	1.1	136	5.35
DR350-P2000-C8	205 147 246 4	A	DR350-P2000*	205 147 356 4	2000	350	0.5	5.4	47.8	0.49	1.1	136	5.35
DR350-P1000-C10	205 147 244 4	A	DR350-P1000*	205 147 355 4	1000	350	0.5	12.7	112.4	0.57	1.3	154	6.06
DR350-P550-C10	205 147 242 4	A	DR350-P550*	205 147 354 4	550	350	0.5	18.6	164.6	0.57	1.3	154	6.06
DR500 – KEY CHUCK			**DR500 – WITHOUT CHUCK**										
DR500-P18500-C8	205 147 676 4	B	DR500-P18500*	205 147 678 4	18500	500	0.68	1.0	8.85	0.56	1.2	141	5.55
DR500-P5800-C8	205 147 673 4	B	DR500-P5800*	205 147 675 4	5800	500	0.68	3.1	27.4	0.56	1.2	141	5.55
DR500-P4300-C8	205 147 670 4	B	DR500-P4300*	205 147 672 4	4300	500	0.68	4.2	37.2	0.56	1.2	141	5.55
DR500-P2700-C8	205 147 667 4	B	DR500-P2700*	205 147 669 4	2700	500	0.68	6.9	61.1	0.56	1.2	141	5.55
DR500-P1800-C10	205 147 664 4	B	DR500-P1800*	205 147 666 4	1800	500	0.68	9.9	87.6	0.64	1.4	155	6.1
DR500-P1400-C10	205 147 661 4	B	DR500-P1400*	205 147 663 4	1400	500	0.68	13.4	118.6	0.64	1.4	155	6.1
DR500-P1000-C10	205 147 658 4	B	DR500-P1000*	205 147 660 4	1000	500	0.68	18.0	159	0.64	1.4	155	6.1
DR500-P600-C13	205 147 655 4	B	DR500-P600*	205 147 657 4	600	500	0.68	28.7	254	0.64	1.4	155	6.1
DR500-P400-C13	205 147 652 4	B	DR500-P400*	205 147 654 4	400	500	0.68	46.0	407	0.64	1.4	155	6.1
DR750 – KEY CHUCK			**DR750 – WITHOUT CHUCK**										
DR750-P20000-C8	205 146 659 4	C	DR750-P20000*	205 147 458 4	20000	750	1	1.6	14.2	0.9	2.0	152	5.98
DR750-P6000-C8	1465124	C	DR750-P6000*	205 147 417 4	6000	750	1	5.3	46.9	0.9	2.0	152	5.98
DR750-P4100-C8	1465114	C	DR750-P4100*	205 147 456 4	4100	750	1	7.1	62.8	0.9	2.0	152	5.98
DR750-P3300-C10	1465104	C	DR750-P3300*	205 147 455 4	3300	750	1	9.6	85.0	0.9	2.0	152	5.98
DR750-P2700-C10	1465094	C	DR750-P2700*	205 147 416 4	2700	750	1	11.1	98.2	0.9	2.0	152	5.98
DR750-P1300-C10	1465084	C	DR750-P1300*	205 147 415 4	1300	750	1	23.9	211	1.15	2.5	184	7.24
DR750-P750-C13	1465074	C	DR750-P750**	205 147 452 4	750	750	1	41.0	363	1.15	2.5	184	7.24
DR750-P400-C13	205 146 658 4	C	DR750-P400**	205 147 451 4	400	750	1	55.0	487	1.15	2.5	184	7.24
			DR750 – JACOBS TAPER 1 SPINDLE – WITHOUT CHUCK										
		D	DR750-P20000-JT1	205 146 667 4	20000	750	1	1.6	14.2	0.9	2.0	152	5.98
		D	DR750-P6000-JT1	205 146 666 4	6000	750	1	5.3	46.9	0.9	2.0	152	5.98
		D	DR750-P3300-JT1	205 146 664 4	3300	750	1	9.6	85.0	0.9	2.0	152	5.98
		D	DR750-P2700-JT1	205 146 663 4	2700	750	1	11.1	98.2	0.9	2.0	152	5.98
		D	DR750-P1300-JT1	205 146 662 4	1300	750	1	23.9	211	1.15	2.5	184	7.24
		D	DR750-P750-JT1	205 146 661 4	750	750	1	41.0	363	1.15	2.5	184	7.24
		D	DR750-P400-JT1	205 146 660 4	400	750	1	55.0	487	1.15	2.5	184	7.24

CHUCK SELECTION GUIDE FOR DR300-T... / DR350-P... / DR500-P... / DR750-P.

* To use 2JT chuck on DR750, add adaptor P.N. 12243

Part No. Chuck	Chuck Mount	Chuck Capacity		Dimensions D1		Dimensions D2		Weight		Part No. Key	DR3..-P...C8 DR500-P...C8 DR750-P...C8	DR3..-P...C10 DR500-P...C10 DR750-P...C10	DR500-P...C13 DR750-P...C13	DR750-P.. JT1
		mm	in	mm	in	mm	in	g	lb		lb	mm	in.	in.
205 055 272 3	3/8''-24	0.5 - 6.5	1/4	29.3	1.15	42.5	1.67	121	0.27	29182	Optional	Optional	Optional	
205 053 013 3	3/8''-24	0.5 - 8	5/16	29.3	1.15	42.5	1.67	120	0.26	410213	Included			
205 052 954 3	3/8''-24	1 - 10	3/8	37	1.46	49.5	1.95	204	0.45	29232		Included		
473113	3/8''-24	1.5 - 13	1/2	42	1.67	59	2.32	371	0.82	895 101 145 3			Included	
29142	1/2''-20	1.5 - 13	1/2	42	1.67	59	2.32	362	0.80	895 101 145 3			Included	
29492	1JT	0.5 - 6.5	1/4	29.3	1.15	42.5	1.67	112	0.25	29182				Optional
29042	1JT	0.8 - 10	3/8	34.5	1.36	48	1.89	231	0.51	29232				Optional
34752	2JT	1 - 10	3/8	42	1.67	61.5	2.4	386	0.85	895 101 145 3				Optional*
34332	2JT	1 - 13	1/2	50	1.97	67.5	2.66	900	1.98					Optional*
473433	3/8''-24	0 - 8	5/16	32	1.26	61.5	2.4	285	0.63		Optional	Optional		
473423	3/8''-24	0.5 - 10	3/8	35.8	1.4	66	2.6	390	0.86			Optional		
205 047 819 3	3/8''-24	1 - 13	1/2	40	1.58	76.3	3	559	1.23				Optional	
205 056 060 3	1/2''-20	1 - 13	1/2	40	1.58	76.3	3	548	1.21				Optional	
524.09	1JT	0 - 6.5	1/4	32	1.26	59.5	2.34	284	0.62					Optional
524.15	1JT	0.5 - 10	3/8	35.8	1.4	66	2.6	390	0.86					Optional
524.10	2JT	0.5 - 10	3/8	40	1.58	87.5	3.4	636	1.4					Optional*
524.16	2JT	1 - 13	1/2	46	1.8	91	3.6	904	1.99					Optional*

DESOUTTER HEAVY DUTY 90° ANGLE DRILLS

Air flow: Hose int. 6 mm (1/4'')



Collets can be found on page 51 & 57

Model	Part No.	Pic Ref	Free Speed	Motor Power		Weight		Length		Air Flow		Air Inlet	Hose int. ø	
			rpm	W	hp	kg	lb	mm	in.	l/s	cfm	in.	mm	in.
90° – Collet Spindle Max Capacity 8mm (5/16'')														
DR300-T2000-THD-90	615 176 111 0	A	2000	300	0.4	0.73	1.61	189.5	7.46	9.5	20	1/4	6	1/4
DR300-T900-THD-90	615 176 112 0	A	900	300	0.4	0.83	1.83	206	8.11	9.5	20	1/4	6	1/4
DR300-T600-THD-90	615 176 116 0	A	600	300	0.4	0,83	1.83	206	8.11	9,5	20	1/4	6	1/4
DR450-T3000-THD-90	615 176 176 0	C	3000	450	0.6	0.8	1.76	191.5	7.54	14	30	1/4	6	1/4
DR450-T1800-THD-90	615 176 175 0	C	1800	450	0.6	0.8	1.76	191.5	7.54	14	30	1/4	6	1/4
DR450-T1000-THD-90	615 176 174 0	C	1000	450	0.6	0.89	1.96	205.5	8.09	14	30	1/4	6	1/4
DR450-T650-THD-90	615 176 173 0	C	650	450	0.6	0.89	1.96	205.5	8.09	14	30	1/4		
90° – Key Chuck Max Capacity 8mm (5/16'')														
DR300-T2000-SHD-90	615 176 113 0	B	2000	300	0.4	0.86	1.89	189.5	7.46	9.5	20	1/4	6	1/4
DR300-T900-SHD-90	615 176 114 0	B	900	300	0.4	0.96	2.11	206	8.11	9.5	20	1/4	6	1/4
DR300-T600-SHD-90	615 176 117 0	B	600	300	0.4	0.96	2.11	206	8.11	9.5	20	1/4	6	1/4
DR450-T3000-SHD-90	615 176 180 0	D	3000	450	0.6	0.92	2.03	191.5	7.54	14	30	1/4	6	1/4
DR450-T1800-SHD-90	615 176 179 0	D	1800	450	0.6	0.92	2.03	191.5	7.54	14	30	1/4	6	1/4
DR450-T1000-SHD-90	615 176 178 0	D	1000	450	0.6	1.02	2.25	205.5	8.09	14	30	1/4	6	1/4
DR450-T650-SHD-90	615 176 177 0	D	650	450	0.6	1.02	2.25	205.5	8.09	14	30	1/4		

DESOUTTER STRAIGHT GRIP DRILLS

All models DR300: Air Flow: 9.5 l/s (20 cfm) - Air Inlet 1/4" – Hose int. 6 mm (1/4") / Chuck spindle 3/8" x 24 UNF



Model	Part No.	Pic Ref	Model	Part No.	Free Speed	Motor Power		Stall Torque		Weight w/o Chuck		OAL (L) w/o Chuck	
					rpm	W	HP	Nm	in.lb	kg	lb	mm	in
DR300 – KEY CHUCK			DR300 – WITHOUT CHUCK										
DR300-T20000-C8	615 176 065 0	A	DR300-T20000	615 176 064 0	20000	300	0.4	0.6	5.3	0.44	0.97	138	7.28
DR300-T5500-C8	615 176 063 0	A	DR300-T5500	615 176 062 0	5500	300	0.4	2.3	20.4	0.49	1.08	167	6.57
DR300-T4500-C8	615 176 061 0	A	DR300-T4500	615 176 060 0	4500	300	0.4	2.7	23.9	0.49	1.08	167	6.57
DR300-T3000-C8	615 176 059 0	A	DR300-T3000	615 176 058 0	3000	300	0.4	4.0	35.4	0.49	1.08	167	6.57
DR300-T2000-C8	615 176 057 0	A	DR300-T2000	615 176 056 0	2000	300	0.4	5.4	47.8	0.49	1.08	167	6.57
DR300-T1000-C10	615 176 055 0	A	DR300-T1000	615 176 054 0	1000	300	0.4	12.7	112.4	0.60	1.32	184	7.24
DR300-T550-C10	615 176 053 0	A	DR300-T550	615 176 052 0	550	300	0.4	18.6	164.6	0.60	1.32	184	7.24

Desoutter Controlled Drilling

Full range of solutions for composite drilling applications. Avoid quality issues with thrust limitation device, which eliminates composite delamination, Breakout burrs and excessive wear on cutters

- Easily adaptable to standard Desoutter pistol & straight drills
- Fully customizable (bushing, Vacuum...)
- Easy cutter change





DR500 - P18500 - STR25 - 4.5 NVT

- Nose type: N: No tripod, V: Vacuum, T: Tripod
- Cutter Size*: Collets Series 200
- HCU Unit Stroke: STR25: 25mm (1") / STR37 : 37mm (1.5")
- Tool Speed
- Tool Power & Ergonomy: Pistol tools: see page 206; DR350: 350W (0,5hp); DR500: 500W (0,68hp)
- Straight Tools: see page 206; DR300: 300W (0,4hp); DR450: 450W (0,6hp)

Part No.	* Cutter Sizes
615 526 061 0	Collet Ø2.4 to 3.2mm
615 526 151 0	Collet Ø3.2 to 4mm
615 526 152 0	Collet Ø3.7 to 4.5mm
615 526 153 0	Collet Ø4.2 to 5mm
615 526 062 0	Collet Ø 5.2 to 6mm
615 526 064 0	Collet Ø7.2 to 8mm
615 526 065 0	Collet Ø 8.7 to 9.5mm
615 526 063 0	Collet Ø1/4" (Ø5.55 to 6.35mm)

Desoutter Tappers

DESOUTTER TAPPERS

All models T500-P:
Hose int. 10 mm (3/8")



Model	Part No.	Pic Ref	Free Speed	Re-verse Speed	Motor Power		Max. Tapping Torque		Weight		OAL		Air Flow		Air Inlet
			rpm	rpm	W	hp	Steel	Alu	kg	lb	mm	in	l/s	cfm	in.
T500-P400	205 147 995 4	A	400	800	0.5	0.68	M10	M12	0.64	1.4	263	10.35	14	30	1/4
T500-P600	205 147 996 4	A	600	1200	0.5	0.86	M10	M12	0.64	1.4	263	10.35	14	30	1/4
T450-T400	615 176 181 0	B	400	800	0.5	0.68	M10	M12	0.64	1.4	263	10.35	14	30	1/4
T450-T600	615 176 182 0	B	600	1200	0.5	0.86	M10	M12	0.64	1.4	263	10.35	14	30	1/4

OPTIONAL ACCESSORIES



Part No.	Description	Ref
29042	Keyed chuck (1JT) – 0,8 to 10mm (3/8") (with key) T500-P400	1
29492	Keyed chuck (1JT) – 0,5 to 6,5mm (1/4") (with key) T500-P600	1
29232	Chuck key – T500-P400	•
410213	Chuck key – T500-P600	•
29452	Precision collet tap holder (including collet cap. M3 to M8)	2
29482	Collet capacity M3 to M7 (1/8" to 9/32")	•
29472	Collet capacity M4 to M8 (5/32" to 5/16")	•
97982	Collet capacity M6 to M12 (15/64" to 15/32")	3
69922	Tap Holder (1 JT)	4
16852	Quick Release Chuck (1 JT)	5
69872	Quick Release Tap Holder (1 JT)	6

COLLETS FOR TAP HOLDERS



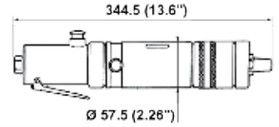
Part No.	Tap Size		BA	Shank Diameter
	mm	in		mm
2612	M2.2 & M2.5		6 & 8	2.8
2632	M3	1/8	5	3.2
2652	M3.5		4	3.6
2672	M4			4.0
2702	M4.5		3	4.5
2722	M5	3/16	2	5.0
2752	M5.5	7/32	1	5.6

Part No.	Tap Size		BA	Shank Diameter
	mm	in		mm
2792	M6	1/4	0	6.3
2832	M7	9/3		7.1
2872	M8 & M11	5/1 & 7/16		8.0
69882	M9 & M12	1/2		9.0
69892	M10	3/8		10.0
29443	*Wrench for Tap Holder collet nut			
206773	*2mm A/F hexagon key for Tap Holder grub screws			

DESOUTTER TAPPERS

All models 2H16-L:
Hose int. 10mm (3/8")





Model	Part No.	Pic Ref	Low Speed Setting	High Speed Setting	Max. Tapping Torque				Weight		Air Flow		Air Inlet
					Low Speed		High Speed						
			rpm	rpm	Nm	ft.lb	Nm	ft.lb	kg	lb	l/s	cfm	in.
2H16-L-160/500-B18	1434264	A	160	500	140	103	47	34.7	3.1	6.8	15.6	33	3/8
2H16-L-90/250-B18	1434344	A	90	250	240	177	90	66.4	3.1	6.8	15.6	33	3/8

Sioux™ Drills

SIOUX™ STRAIGHT CHUCK DRILL 3/8”

- Ergonomic grips
- Rear exhaust



Part No.	RPM	Power	Capacity	Length	Weight
SDR10S26N3	2600	0.75kw	3/8”	211mm	1.05kg

SIOUX™ PISTOL DRILLS 1/4”

- Ergonomic comfort grip
- Reversible models available
- Smooth teasing trigger for controlled starts



1410

Part No.	RPM	Power	Capacity	Length	Weight
1410	2600	0.25kw	1/4”	160mm	0.6kg
1410R	2000	0.15kw	1/4”	160mm	0.6kg
1412R	2600	0.15kw	1/4”	160mm	0.6kg

SIOUX™ PISTOL DRILLS 3/8” & 1/2” DRIVE

- Moulded ergonomic comfort grip
- 3 Idler gear system for increased life
- Precision motors with runout of less than 0.005” measured at 2.5” from the chuck!

Please contact us for more models and sizes



SDR10P26N3

Part No.	RPM	Power	Capacity	Length	Weight
SDR10P4N4	400	0.75kw	1/2”	215mm	1.5kg
SDR10P7N3	700	0.75kw	3/8”	205mm	1.3kg
SDR10P26N3	2600	0.75kw	3/8”	180mm	1.1kg
SDR10P40N3	4000	0.75kw	3/8”	180mm	1.1kg

SIOUX™ is a registered trademark of Sioux Tools, Inc.

Dotco® Drills

DOTCO® ANGLE DRILLS

- Ergonomic safety lever
- Comfortable textured grip
- Rear exhaust
- 0.3kw power



Part No.	RPM (no load)	Head Type	Head Part No.	Spindle Type	OAL
15LF283-62	3300	90°	1025409	1/4” x 28	272mm
15LF283-63	3300	90°	1025313	9/32” x 40	272mm
15LF283-42	3300	45°	1025730	1/4” x 28	276mm
15LF283-43	3300	45°	1025731	9/32” x 40	276mm
15LF283-92	3300	360°	1025694	1/4” x 28	272mm

DOTCO® PISTOL DRILLS 1/4”

- Ergonomically designed for operator comfort
- Ideal for tight quarters and cramped areas
- Heat-treated alloy steel gears
- Non-reversible



14CSL91-38

Part No.	RPM	Power	Capacity	Length	Weight
14CFS93-38	3200	0.30kw	1/4”	146mm	0.7kg
14CFS94-38	2400	0.30kw	1/4”	146mm	0.7kg
14CSL91-38	5200	0.45kw	1/4”	160mm	1.0kg

CLECO® VARIABLE SPEED DRILL

- The only accurately variable speed drill on the market.
- Includes appropriate Size chuck as indicated.
- Speed selection via calibrated dial on rear of tool
- 0.52kw power



135DPV-7B-43

Part No.	Capacity	RPM - governed	RPM - no load
135DPV-7B-43	3/8”	150 to 550	600
135DPV-14B-51	3/8”	400 t0 1200	1250
135DPV-28B-51	3/8”	700 to 2400	2600
135DPV-7B-50	1/2”	150 to 550	600
135DPV-14B-50	1/2”	400 to 1200	1250
861006	Handle, Req for 1/2” Models		

CLECO® & DOTCO® are both registered trademarks of Cooper Industries/(Apex Tool Goup)

Henchman Pneumatic Drills

HENCHMAN PISTOL GRIP DRILLS

- Light Weight: Aluminum housing.
- Compact Design: Minimize operator's work during continuous hard drilling operation.
- Air valves can be started slowly during high-speed operation, to protect workpiece.
- Minimal vibration during operation.





Figure 1



Figure 2

Part No.	RPM	Power	Capacity	Reversible	Fig
H-10014	4000	0.6hp	1/4"	No	1
H-10038	2800	0.6hp	3/8"	Yes	2
H-10012	500	1.0hp	1/2"	Yes	2

STRAIGHT DRILL 3/8"

- Ergonomic Grip
- Rear exhaust



Part No.	Description	RPM	Power	Capacity	OAL	Weight
H-20038	Drill 3/8" Reversible	2500	0.4hp	3/8"	215mm	1.04kg

ANGLE DRILL 3/8" – REVERSIBLE

- Reverse at the touch of a button
- Rear exhaust
- Ideal in confined spots



Part No.	Description	RPM	Power	Capacity	OAL	Weight
T-7787R	Taylor Angle Drill 3/8" Reversible	1400	0.5hp	3/8"	209mm	0.91kg

ANGLE DRILL 1/4" x 28

- Supplied with a safety lever
- Rear exhaust
- Ideal for home builder or small maintenace hangar
- 0.33Hp



Part No.	Description	RPM (no load)	Head	Spindle Type	OAL
T-9750	Taylor Angle Drill 1/4" x 28	2800	90°	1/4" x 28	245mm
H-19014	Henchman Angle Drill 1/4" x 28	2800	90°	1/4" x 28	245mm
T-9751	Taylor Angle Drill 1/4" x 28	2800	45°	1/4" x 28	245mm
H-14514	Henchman Angle Drill 1/4" x 28	2800	45°	1/4" x 28	245mm
T-9753	Taylor Angle Drill 1/4" x 28	2800	360°	1/4" x 28	245mm
H-13614	Henchman Angle Drill 1/4" x 28	2800	360°	1/4" x 28	245mm

TAYLOR ANGLE DRILL 1/4" x 28 – EXTENDED

- Supplied with a safety lever
- Extended reach to get into dificult areas
- Ideal for home builder or small maintenace hangar
- 0.33Hp



Part No.	RPM (no load)	Head	Spindle Type	OAL
T-9750EX	2800	0.5hp	1/4" x 28	336mm

Drilling Attachments

PANCAKE THREADED DRILL 1/4-28

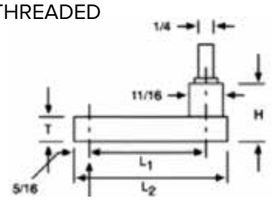
- Housing milled from solid stock
- Low cost option suiting student, kit builder or small maintenance hangar
- Rear exhaust



Part No.	RPM	Power	Reach	OAL	Weight
PC1200	3300	0.5hp	75mm	206mm	0.84kg

PANCAKE DRILL ATTACHMENTS 1/4-28 THREADED

- Offset angle head drilling attachments feature hardened shafts and bearing supported spindle gears
- Straight style with 1/-28 Spindle

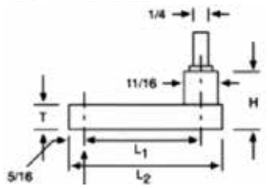




Part No.	Height (H)	Thickness (T)	L1	OAL (L2)
PC2008	1-1/8"	3/8"	2-7/16"	3-3/16"
PC2010	1-1/8"	3/8"	3-3/4"	4-1/2"

LONG PANCAKE DRILL ATTACHMENT 1/4-28 THREADED

- Offset angle head drilling attachments feature hardened shafts and bearing supported spindle gears
- Straight style with 1/-28 Spindle

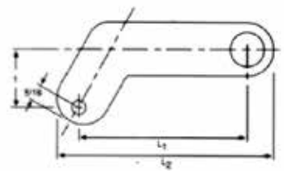




Part No.	Height (H)	Thickness (T)	L1	OAL (L2)
PC2835	4-9/16"	3/8"	2-7/16"	3-3/16"

LONG OFFSET PANCAKE DRILL ATTACHMENTS 1/4-28 THREADED

- Offset angle head drilling attachments feature hardened shafts and bearing supported spindle gears
- Left hand or right hand 30° offset end (RH shown)





Part No.	Offset	Height (H)	Thickness (T)	L1	OAL (L2)
PC2845	RH	4-9/16"	3/8"	3-1/8"	4"
PC2855	LH	4-9/16"	3/8"	3-1/8"	4"

90° MIDGET DRILL ATTACHMENT 1/4-28 THREADED

- Quickly connects to any drill chuck
- Convenient & inexpensive close-quarter drilling tool attachment with 1/4-28 spindle



Part No.	Description	Diameter	OAL	Overall Height
DA3011	90° Midget Drill Attachment	13mm	155mm	30mm

HEAVY DUTY 90° DRILL ATTACHMENT 1/4-28 THREADED



Part No.	Description	Diameter	OAL	Overall Height
DA3003	90° Heavy Duty Drill Attachment	19mm	181mm	33mm

45° DRILL ATTACHMENT 1/4-28 THREADED

- Quickly connects to any drill chuck
- Convenient & inexpensive close-quarter drilling tool attachment with 1/4-28 spindle



Part No.	Description	Diameter	OAL	Overall Height
DA3345	45° Midget Drill Attachment	19mm	191mm	30mm

360° DRILL ATTACHMENT 1/4-28 THREADED



Part No.	Description
DA3045	360° Drill Attachment
DA3041	360° Drill Attachment - Light Duty

30" HEAVY DUTY 90° FLEX DRILL ATTACH. 1/4-28 THREADED

- 90° Drill Snake Attachment
- Length: 762mm



Part No.	Description	OAL
DA4063	90° Drill Snake Attachment	762mm

LIGHT DUTY 90° DRILL ATTACHMENT 1/4-28 THREADED



Part No.	Description
DA5090	90° Drill Attachment Economy

Aircraft Threaded Drills

COBALT EXTRA STUBBY 1/4"-28 THREADED SHANK ADAPTER DRILLS



- Extra Stubby Threaded Cobalt Drill Bits
- Type "D" NAS 965 threaded shank adapter drills are made from cobalt high speed steel and are manufactured to Type "D" specifications with 135° heavy duty split points and surface treated for drilling hard and high tensile strength materials.
- Cobalt Type "D" drills can be used in place of standard HSS for higher tensile drilling applications providing significant extended life to cutting edges of drills.

Part No.	Size	Dec	OAL
DT41098	#40	.0980	3/8"
DT41128	#30	.1285	3/8"
DT41144	#27	.1440	3/8"
DT41159	#21	.1590	3/8"
DT41161	#20	.1610	3/8"
DT41177	#16	.1770	3/8"
DT41185	#13	.1850	3/8"
DT41193	#10	.1935	3/8"
DT41199	#8	.1990	3/8"
DT41250	1/4"	.2500	3/8"

COBALT STUBBY 1/4"-28 THREADED SHANK ADAPTER DRILLS

- Stubby Threaded Cobalt Drill Bits
- Type "D" NAS 965 threaded shank adapter drills are made from cobalt high speed steel and are manufactured to Type "D" specifications with 135° heavy duty split points and surface treated for drilling hard and high tensile strength materials.
- Cobalt Type "D" drills can be used in place of standard HSS for higher tensile drilling applications providing significant exten-ded life to cutting edges of drills.

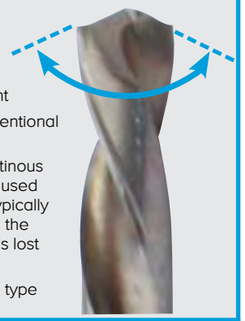


Part No.	Size	Dec	OAL
DT31070	#50	.0700	1/2"
DT31093	3/32"	.0938	1/2"
DT31098	#40	.0980	1/2"
DT31125	1/8"	.1250	9/16"
DT31128	#30	.1285	9/16"
DT31136	#29	.1360	9/16"
DT31144	#27	.1440	9/16"
DT31156	5/32"	.1562	9/16"
DT31159	#21	.1590	9/16"
DT31161	#20	.1610	9/16"
DT31166	#19	.1660	9/16"
DT31177	#16	.1770	9/16"
DT31180	#15	.1800	9/16"
DT31185	#13	.1850	9/16"
DT31187	3/16"	.1875	9/16"
DT31189	#12	.1890	9/16"
DT31191	#11	.1910	9/16"

Part No.	Size	Dec	OAL
DT31193	#10	.1935	9/16"
DT31196	#9	.1960	9/16"
DT31199	#8	.1990	9/16"
DT31201	#7	.2010	9/16"
DT31203	13/64"	.2031	9/16"
DT31204	#6	.2040	9/16"
DT31205	#5	.2055	9/16"
DT31213	#3	.2130	9/16"
DT31218	7/32"	.2188	9/16"
DT31221	#2	.2210	9/16"
DT31228	#1	.2280	9/16"
DT31246	"D"	.2460	9/16"
DT31250	1/4"	.2500	9/16"
DT31257	"F"	.2570	9/16"
DT31261	"G"	.2610	9/16"
DT31312	5/16"	.3125	9/16"
DT31375	3/8"	.3750	3/4"



135° Angle Split-Point Drill



- Self centering due to split-point
- Less force required than conventional 118° drills
- Quicker cutting, making a continous swarf (peeling type shaving) if used at correct RPM for material - typically a slower speed. If run too fast, the efficiency of the cutting edge is lost which leads to bluntning
- Better suited to hand portable type drilling

According to NAS 907 Type D specifications
Cobalt drills are denoted by Square shanks (stocked).
HSS drills are denoted by Hex shanks (available to order)

1/4"-28 THREADED HOLDER

- A convenient way to store up to 30 threaded tools
- Made of HDPE.



Part No.	Description	Dimensions
TDH030	1/4"-28 Threaded Holder	

COBALT SHORT THREADED 1/4"-28 DRILLS

- Short Threaded Cobalt Drill Bits
- Type "D" NAS 965 threaded shank adapter drills are made from cobalt high speed steel and are manufactured to Type "D" specifications with 135° heavy duty split points and surface treated for drilling hard and high tensile strength materials.
- Cobalt Type "D" drills can be used in place of standard HSS for higher tensile drilling applications providing significant extended life to cutting edges of drills.



Part No.	Size	Dec	OAL
DT21070	#50	.0700	1"
DT21093	3/32"	.0938	1"
DT21098	#40	.0980	1"
DT21125	1/8"	.1250	1-1/4"
DT21128	#30	.1285	1-1/4"
DT21136	#29	.1360	1-1/4"
DT21144	#27	.1440	1-1/4"
DT21156	5/32"	.1562	1-1/4"
DT21159	#21	.1590	1-1/4"
DT21161	#20	.1610	1-1/4"
DT21166	#19	.1660	1-1/4"
DT21177	#16	.1770	1-1/4"
DT21180	#15	.1800	1-1/4"
DT21185	#13	.1850	1-1/4"
DT21187	3/16"	.1875	1-1/4"
DT21189	#12	.1890	1-1/4"
DT21191	#11	.1910	1-1/4"

Part No.	Size	Dec	OAL
DT21193	#10	.1935	1-1/4"
DT21196	#9	.1960	1-1/4"
DT21199	#8	.1990	1-1/4"
DT21201	#7	.2010	1-1/4"
DT21203	13/64"	.2031	1-1/4"
DT21204	#6	.2040	1-1/4"
DT21205	#5	.2055	1-1/4"
DT21213	#3	.2130	1-1/4"
DT21218	7/32"	.2188	1-1/4"
DT21221	#2	.2210	1-1/4"
DT21228	#1	.2280	1-1/4"
DT21246	"D"	.2460	1-1/4"
DT21250	1/4"	.2500	1-1/4"
DT21257	"F"	.2570	1-1/4"
DT21261	"G"	.2610	1-1/4"
DT21312	5/16"	.3125	1-1/4"
DT21375	3/8"	.3750	1-1/4"

COBALT LONG 1/4"-28 THREADED SHANK ADAPTER DRILLS

- Long Threaded Cobalt Drill Bits
- Type "D" NAS 965 threaded shank adapter drills are made from cobalt high speed steel and are manufactured to Type "D" specifications with 135° heavy duty split points and surface treated for drilling hard and high tensile strength materials.
- Cobalt Type "D" drills can be used in place of standard HSS for higher tensile drilling applications providing significant extended life to cutting edges of drills.



Part No.	Size	Dec	OAL
DT11070	#50	.0700	2-1/8"
DT11093	3/32"	.0938	2-1/8"
DT11098	#40	.0980	2-1/8"
DT11125	1/8"	.1250	2-1/8"
DT11128	#30	.1285	2-1/8"
DT11136	#29	.1360	2-1/8"
DT11144	#27	.1440	2-1/8"
DT11156	5/32"	.1562	2-1/8"
DT11159	#21	.1590	2-1/8"
DT11161	#20	.1610	2-1/8"
DT11166	#19	.1660	2-1/8"
DT11177	#16	.1770	2-1/8"
DT11180	#15	.1800	2-1/8"
DT11185	#13	.1850	2-1/8"
DT11187	3/16"	.1875	2-1/8"
DT11189	#12	.1890	2-1/8"
DT11191	#11	.1910	2-1/8"

Part No.	Size	Dec	OAL
DT11193	#10	.1935	2-1/8"
DT11196	#9	.1960	2-1/8"
DT11199	#8	.1990	2-1/8"
DT11201	#7	.2010	2-1/8"
DT11203	13/64"	.2031	2-1/8"
DT11204	#6	.2040	2-1/8"
DT11205	#5	.2055	2-1/8"
DT11213	#3	.2130	2-1/8"
DT11218	7/32"	.2188	2-1/8"
DT11221	#2	.2210	2-1/8"
DT11228	#1	.2280	2-1/8"
DT11246	"D"	.2460	2-1/8"
DT11250	1/4"	.2500	2-1/8"
DT11257	"F"	.2570	2-1/8"
DT11261	"G"	.2610	2-1/8"
DT11312	5/16"	.3125	2-1/8"
DT11375	3/8"	.3750	2-1/8"

Aircraft HSS Jobber Drills

HSS JOBBER DRILLS NUMBERS SIZES – NAS907

HSS with 135° split points made according to National Aerospace Standard 907 Type J specifications



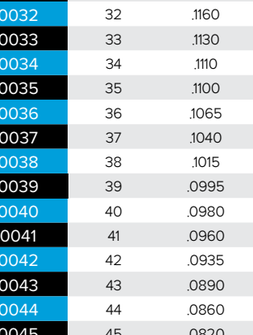
Part No.	Drill Dia.	Dec	OAL	FL
DH70001	1	.2280	3 7/8"	2 5/8"
DH70002	2	.2210	3 7/8"	2 5/8"
DH70003	3	.2130	3 3/4"	2 1/2"
DH70004	4	.2090	3 3/4"	2 1/2"
DH70005	5	.2055	3 3/4"	2 1/2"
DH70006	6	.2040	3 3/4"	2 1/2"
DH70007	7	.2010	3 5/8"	2 1/4"
DH70008	8	.1990	3 5/8"	2 1/4"
DH70009	9	.1960	3 5/8"	2 1/4"
DH70010	10	.1935	3 5/8"	2 1/4"
DH70011	11	.1910	3 1/2"	2 1/4"
DH70012	12	.1890	3 1/2"	2 1/4"
DH70013	13	.1850	3 1/2"	2 3/16"
DH70014	14	.1820	3 1/2"	2 3/16"
DH70015	15	.1800	3 3/8"	2 3/16"
DH70016	16	.1770	3 3/8"	2 3/16"
DH70017	17	.1730	3 3/8"	2 3/16"
DH70018	18	.1695	3 1/4"	2 1/8"
DH70019	19	.1660	3 1/4"	2 1/8"
DH70020	20	.1610	3 1/4"	2 1/8"
DH70021	21	.1590	3 1/4"	2 1/8"
DH70022	22	.1570	3 1/8"	2"
DH70023	23	.1540	3 1/8"	2"
DH70024	24	.1520	3 1/8"	2"
DH70025	25	.1490	3"	1 7/8"
DH70026	26	.1470	3"	1 7/8"
DH70027	27	.1440	3"	1 7/8"
DH70028	28	.1405	2 7/8"	1 3/4"
DH70029	29	.1360	2 7/8"	1 3/4"
DH70030	30	.1285	2 3/4"	1 5/8"

Part No.	Drill Dia.	Dec	OAL	FL
DH70031	31	.1200	2 3/4"	1 5/8"
DH70032	32	.1160	2 3/4"	1 5/8"
DH70033	33	.1130	2 5/8"	1 1/2"
DH70034	34	.1110	2 5/8"	1 1/2"
DH70035	35	.1100	2 5/8"	1 1/2"
DH70036	36	.1065	2 1/2"	1 7/16"
DH70037	37	.1040	2 1/2"	1 7/16"
DH70038	38	.1015	2 1/2"	1 7/16"
DH70039	39	.0995	2 3/8"	1 3/8"
DH70040	40	.0980	2 3/8"	1 3/8"
DH70041	41	.0960	2 3/8"	1 3/8"
DH70042	42	.0935	2 1/4"	1 1/4"
DH70043	43	.0890	2 1/4"	1 1/4"
DH70044	44	.0860	2 1/8"	1 1/8"
DH70045	45	.0820	2 1/8"	1 1/8"
DH70046	46	.0810	2 1/8"	1 1/8"
DH70047	47	.0785	2"	1"
DH70048	48	.0760	2"	1"
DH70049	49	.0730	2"	1"
DH70050	50	.0700	2"	1"
DH70051	51	.0670	2"	1"
DH70052	52	.0635	1 7/8"	7/8"
DH70053	53	.0595	1 7/8"	7/8"
DH70054	54	.0550	1 7/8"	7/8"
DH70055	55	.0520	1 7/8"	7/8"
DH70056	56	.0465	1 3/4"	3/4"
DH70057	57	.0430	1 3/4"	3/4"
DH70058	58	.0420	1 5/8"	11/16"
DH70059	59	.0410	1 5/8"	11/16"
DH70060	60	.0400	1 5/8"	11/16"



135° Conventional Angle Drill Point

- General Purpose Use
- Suited better to softer materials
- Not Self-Centering
- Better suited to Stationary Machine drilling



HSS JOBBER DRILLS, FRACTIONAL SIZES – NAS907

HSS with 135° split points made according to National Aerospace Standard 907 Type J specifications



Part No.	Size	Dec	OAL	FL
DH710164	1/64"	.0156	1 3/16"	11/32"
DH710132	1/32"	.0313	1 3/16"	11/32"
DH710116	1/16"	.0625	1 7/8"	7/8"
DH710564	5/64"	.0781	2"	1"
DH710332	3/32"	.0938	2 1/4"	1 1/4"
DH710764	7/64"	.1094	2 5/8"	1 1/2"
DH710018	1/8"	.1250	2 3/4"	1 5/8"
DH710964	9/64"	.1406	2 7/8"	1 3/4'
DH710532	5/32"	.1563	3 1/8"	2"
DH711164	11/64"	.1719	3 1/4"	2 1/8"
DH710316	3/16"	.1875	3 1/2"	2 5/16"
DH711364	13/64"	.2031	3 5/8"	2 7/16"
DH710732	7/32"	.2188	3 3/4"	2 1/2"
DH711564	15/64"	.2344	3 7/8"	2 5/8"
DH710014	1/4"	.2500	4"	2 3/4'

Part No.	Size	Dec	OAL	FL
DH711764	17/64"	.2656	4 1/8"	2 7/8"
DH710932	9/32"	.2813	4 1/4"	2 15/16"
DH711964	19/64"	.2969	4 3/8"	3 1/16"
DH710516	5/16"	.3125	4 1/2"	3 3/16"
DH712164	21/64"	.3281	4 5/8"	3 5/16"
DH711132	11/32"	.3438	4 3/4"	3 7/16"
DH712364	23/64"	.3594	4 7/8"	3 1/2"
DH710038	3/8"	.3750	5"	3 5/8"
DH712564	25/64"	.3906	5 1/8"	3 3/4"
DH711332	13/32"	.4063	5 1/4"	3 7/8"
DH712764	27/64"	.4219	5 3/8"	3 15/16"
DH710716	7/16"	.4375	5 1/2"	4 1/16"
DH712964	29/64"	.4531	5 5/8"	4 3/16"
DH711532	15/32"	.4688	5 3/4"	4 5/16"
DH713164	31/64"	.4644	5 7/8"	4 3/8"
DH710012	1/2"	.5000	6"	4 1/2"

HSS JOBBER DRILLS, LETTER SIZES – NAS907

HSS with 135° split points made according to National Aerospace Standard 907 Type J specifications



Part No.	Drill Dia.	Dec	OAL	FL
DH72001	A	.2340	3 7/8"	2 5/8"
DH72002	B	.2380	4"	2 3/4"
DH72003	C	.2420	4"	2 3/4"
DH72004	D	.2460	4"	2 3/4"
DH72005	E	.2500	4"	2 3/4"
DH72006	F	.2570	4 1/8"	2 7/8"
DH72007	G	.2610	4 1/8"	2 7/8"
DH72008	H	.2660	4 1/8"	2 7/8"
DH72009	I	.2720	4 1/8"	2 7/8"
DH72010	J	.2770	4 1/8"	2 7/8"
DH72011	K	.2810	4 1/4"	2 15/16"
DH72012	L	.2900	4 1/4"	2 15/16"
DH72013	M	.2950	4 3/8"	3 1/16"

Part No.	Drill Dia.	Dec	OAL	FL
DH72014	N	.3020	4 3/8"	3 1/16"
DH72015	O	.3160	4 1/2"	3 3/16"
DH72016	P	.3230	4 5/8"	3 5/16"
DH72017	Q	.3320	4 3/4"	3 7/16"
DH72018	R	.3390	4 3/4"	3 7/16"
DH72019	S	.3480	4 7/8"	3 1/2"
DH72020	T	.3580	4 7/8"	3 1/2"
DH72021	U	.3680	5"	3 5/8"
DH72022	V	.3770	5"	3 5/8"
DH72023	W	.3860	5 1/8"	3 3/4"
DH72024	X	.3970	5 1/8"	3 3/4"
DH72025	Y	.4040	5 1/4"	3 7/8"
DH72026	Z	.4130	5 1/4"	3 7/8"

Aircraft Cobalt Jobber Drills

COBALT JOBBER DRILLS, NUMBER SIZES – NAS907

- Cobalt Jobber Drills are manufactured according to National Aerospace Standards meeting NAS907 Type J specifications. surface treated and heavy duty construction for portable or machine drilling for drilling in tough, high tensile strength materials like stainless steel, titanium and inconel
- The self-centering 135° split-point helps to eliminate walking of the drill point thus providing more accurate drilling
- These HSSCO drills are made from heat resistant cobalt steel, with heavy duty construction suited to drilling high strength alloys.



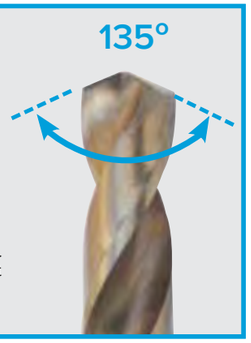
Part No.	Drill Dia.	Dec	OAL	FL
DC70001	1	.2280	3 7/8"	2 5/8"
DC70002	2	.2210	3 7/8"	2 5/8"
DC70003	3	.2130	3 3/4"	2 1/2"
DC70004	4	.2090	3 3/4"	2 1/2"
DC70005	5	.2055	3 3/4"	2 1/2"
DC70006	6	.2040	3 3/4"	2 1/2"
DC70007	7	.2010	3 5/8"	2 1/4"
DC70008	8	.1990	3 5/8"	2 1/4"
DC70009	9	.1960	3 5/8"	2 1/4"
DC70010	10	.1935	3 5/8"	2 1/4"
DC70011	11	.1910	3 1/2"	2 1/4"
DC70012	12	.1890	3 1/2"	2 1/4"
DC70013	13	.1850	3 1/2"	2 3/16"
DC70014	14	.1820	3 1/2"	2 3/16"
DC70015	15	.1800	3 3/8"	2 3/16"
DC70016	16	.1770	3 3/8"	2 3/16"
DC70017	17	.1730	3 3/8"	2 3/16"
DC70018	18	.1695	3 1/4"	2 1/8"
DC70019	19	.1660	3 1/4"	2 1/8"
DC70020	20	.1610	3 1/4"	2 1/8"
DC70021	21	.1590	3 1/4"	2 1/8"
DC70022	22	.1570	3 1/8"	2"
DC70023	23	.1540	3 1/8"	2"
DC70024	24	.1520	3 1/8"	2"
DC70025	25	.1490	3"	1 7/8"
DC70026	26	.1470	3"	1 7/8"
DC70027	27	.1440	3"	1 7/8"
DC70028	28	.1405	2 7/8"	1 3/4"
DC70029	29	.1360	2 7/8"	1 3/4"
DH70030	30	.1285	2 3/4"	1 5/8"

Part No.	Drill Dia.	Dec	OAL	FL
DC70031	31	.1200	2 3/4"	1 5/8"
DC70032	32	.1160	2 3/4"	1 5/8"
DC70033	33	.1130	2 5/8"	1 1/2"
DC70034	34	.1110	2 5/8"	1 1/2"
DC70035	35	.1100	2 5/8"	1 1/2"
DC70036	36	.1065	2 1/2"	1 7/16"
DC70037	37	.1040	2 1/2"	1 7/16"
DC70038	38	.1015	2 1/2"	1 7/16"
DC70039	39	.0995	2 3/8"	1 3/8"
DC70040	40	.0980	2 3/8"	1 3/8"
DC70041	41	.0960	2 3/8"	1 3/8"
DC70042	42	.0935	2 1/4"	1 1/4"
DC70043	43	.0890	2 1/4"	1 1/4"
DC70044	44	.0860	2 1/8"	1 1/8"
DC70045	45	.0820	2 1/8"	1 1/8"
DC70046	46	.0810	2 1/8"	1 1/8"
DC70047	47	.0785	2"	1"
DC70048	48	.0760	2"	1"
DC70049	49	.0730	2"	1"
DC70050	50	.0700	2"	1"
DC70051	51	.0670	2"	1"
DC70052	52	.0635	1 7/8"	7/8"
DC70053	53	.0595	1 7/8"	7/8"
DC70054	54	.0550	1 7/8"	7/8"
DC70055	55	.0520	1 7/8"	7/8"
DC70056	56	.0465	1 3/4"	3/4"
DC70057	57	.0430	1 3/4"	3/4"
DC70058	58	.0420	1 5/8"	11/16"
DC70059	59	.0410	1 5/8"	11/16"
DC70060	60	.0400	1 5/8"	11/16"



135° Angle Split-Point Drill

- Self centering due to split-point
- Less force required than conventional 118° drills
- Cuts a continous swarf (peeling type shaving) if used at correct RPM for material - typically a slower speed. If run too fast, the efficiency of the cutting edge is lost which leads to bluntning
- Better suited to hand portable type drilling



COBALT JOBBER DRILLS, FRACTIONAL SIZES – NAS907

- Cobalt Jobber Drills are manufactured according to National Aerospace Standards meeting NAS907 Type J specifications.
- Surface treated and heavy duty construction for portable or machine drilling for drilling in tough, high tensile strength materials like stainless steel, titanium and inconel
- The self-centering 135° split-point helps to eliminate walking of the drill point thus providing more accurate drilling
- These HSSCO drills are made from heat resistant cobalt steel, with heavy duty construction suited to drilling high strength alloys.



Part No.	Size	Dec	OAL	FL
DC710164	1/64"	.0156	1 3/16"	11/32"
DC710132	1/32"	.0313	1 3/16"	11/32"
DC710116	1/16"	.0625	1 7/8"	7/8"
DC710564	5/64"	.0781	2"	1"
DC710332	3/32"	.0938	2 1/4"	1 1/4"
DC710764	7/64"	.1094	2 5/8"	1 1/2"
DC710018	1/8"	.1250	2 3/4"	1 5/8"
DC710964	9/64"	.1406	2 7/8"	1 3/4'
DC710532	5/32"	.1563	3 1/8"	2"
DC711164	11/64"	.1719	3 1/4"	2 1/8"
DC710316	3/16"	.1875	3 1/2"	2 5/16"
DC711364	13/64"	.2031	3 5/8"	2 7/16"
DC710732	7/32"	.2188	3 3/4"	2 1/2"
DC711564	15/64"	.2344	3 7/8"	2 5/8"
DC710014	1/4"	.2500	4"	2 3/4'

Part No.	Size	Dec	OAL	FL
DC711764	17/64"	.2656	4 1/8"	2 7/8"
DC710932	9/32"	.2813	4 1/4"	2 15/16"
DC711964	19/64"	.2969	4 3/8"	3 1/16"
DC710516	5/16"	.3125	4 1/2"	3 3/16"
DC712164	21/64"	.3281	4 5/8"	3 5/16"
DC711132	11/32"	.3438	4 3/4"	3 7/16"
DC712364	23/64"	.3594	4 7/8"	3 1/2"
DC710038	3/8"	.3750	5"	3 5/8"
DC712564	25/64"	.3906	5 1/8"	3 3/4"
DC711332	13/32"	.4063	5 1/4"	3 7/8"
DC712764	27/64"	.4219	5 3/8"	3 15/16"
DC710716	7/16"	.4375	5 1/2"	4 1/16"
DC712964	29/64"	.4531	5 5/8"	4 3/16"
DC711532	15/32"	.4688	5 3/4"	4 5/16"
DC713164	31/64"	.4644	5 7/8"	4 3/8"
DC710012	1/2"	.5000	6"	4 1/2"

COBALT JOBBER DRILLS, LETTER SIZES – NAS907

- Cobalt Jobber Drills are manufactured according to National Aerospace Standards meeting NAS907 Type J specifications.
- Surface treated and heavy duty construction for portable or machine drilling for drilling in tough, high tensile strength materials like stainless steel, titanium and inconel
- The self-centering 135° split-point helps to eliminate walking of the drill point thus providing more accurate drilling
- These HSSCO drills are made from heat resistant cobalt steel, with heavy duty construction suited to drilling high strength alloys.



Part No.	Drill Dia.	Dec	OAL	FL
DC72001	A	.2340	3 7/8"	2 5/8"
DC72002	B	.2380	4"	2 3/4"
DC72003	C	.2420	4"	2 3/4"
DC72004	D	.2460	4"	2 3/4"
DC72005	E	.2500	4"	2 3/4"
DC72006	F	.2570	4 1/8"	2 7/8"
DC72007	G	.2610	4 1/8"	2 7/8"
DC72008	H	.2660	4 1/8"	2 7/8"
DC72009	I	.2720	4 1/8"	2 7/8"
DC72010	J	.2770	4 1/8"	2 7/8"
DC72011	K	.2810	4 1/4"	2 15/16"
DC72012	L	.2900	4 1/4"	2 15/16"
DC72013	M	.2950	4 3/8"	3 1/16"

Part No.	Drill Dia.	Dec	OAL	FL
DC72014	N	.3020	4 3/8"	3 1/16"
DC72015	O	.3160	4 1/2"	3 3/16"
DC72016	P	.3230	4 5/8"	3 5/16"
DC72017	Q	.3320	4 3/4"	3 7/16"
DC72018	R	.3390	4 3/4"	3 7/16"
DC72019	S	.3480	4 7/8"	3 1/2"
DC72020	T	.3580	4 7/8"	3 1/2"
DC72021	U	.3680	5"	3 5/8"
DC72022	V	.3770	5"	3 5/8"
DC72023	W	.3860	5 1/8"	3 3/4"
DC72024	X	.3970	5 1/8"	3 3/4"
DC72025	Y	.4040	5 1/4"	3 7/8"
DC72026	Z	.4130	5 1/4"	3 7/8"

Aircraft Extension Drills

COBALT EXTENSION DRILLS NUMBERS SIZES – NAS907

- Cobalt Aircraft Extension Drills are manufactured according to National Aerospace Standards meeting NAS907 Type J specifications. Flute lengths are identical to Jobber drills but with an extended shank for drilling holes in hard to reach places. Surface treated and heavy drilling for drilling in tough, high tensile strength materials like stainless steel, titanium and inconel
- The self-centering 135 degree split-point helps to eliminate walking of the drill point thus providing more accurate drilling
- These HSSCO drills are made from heat resistant cobalt steel, with heavy duty construction suited to drilling high strength alloys.



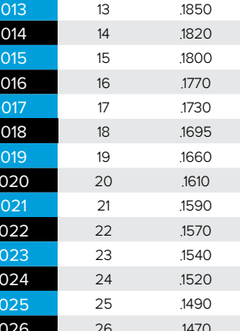
Part No.	Drill Dia.	Dec	OAL	FL
DC80010	10	.1935	6"	2 1/4"
DC80011	11	.1910	6"	2 1/4"
DC80012	12	.1890	6"	2 1/4"
DC80013	13	.1850	6"	2 3/16"
DC80014	14	.1820	6"	2 3/16"
DC80015	15	.1800	6"	2 3/16"
DC80016	16	.1770	6"	2 3/16"
DC80017	17	.1730	6"	2 3/16"
DC80018	18	.1695	6"	2 1/8"
DC80019	19	.1660	6"	2 1/8"
DC80020	20	.1610	6"	2 1/8"
DC80021	21	.1590	6"	2 1/8"
DC80022	22	.1570	6"	2 1/8"
DC80023	23	.1540	6"	2 1/16"
DC80024	24	.1520	6"	2 1/16"
DC80025	25	.1490	6"	2 1/16"
DC80026	26	.1470	6"	2 1/16"
DC80027	27	.1440	6"	2 1/16"
DC80028	28	.1405	6"	1 15/16"
DC80029	29	.1360	6"	1 15/16"
DC80030	30	.1285	6"	1 15/16"
DC80031	31	.1200	6"	1 7/8"
DC80032	32	.1160	6"	1 7/8"
DC80033	33	.1130	6"	1 7/8"
DC80034	34	.1110	6"	1 7/8"
DC80035	35	.1100	6"	1 7/8"
DC80036	36	.1065	6"	1 13/16"
DC80037	37	.1040	6"	1 13/16"
DC80038	38	.1015	6"	1 13/16"
DC80039	39	.0995	6"	1 13/16"
DC80040	40	.0980	6"	1 13/16"
DC80041	41	.0960	6"	1 13/16"

Part No.	Drill Dia.	Dec	OAL	FL
DC90010	10	.1935	12"	2 1/4"
DC90011	11	.1910	12"	2 1/4"
DC90012	12	.1890	12"	2 1/4"
DC90013	13	.1850	12"	2 3/16"
DC90014	14	.1820	12"	2 3/16"
DC90015	15	.1800	12"	2 3/16"
DC90016	16	.1770	12"	2 3/16"
DC90017	17	.1730	12"	2 3/16"
DC90018	18	.1695	12"	2 1/8"
DC90019	19	.1660	12"	2 1/8"
DC90020	20	.1610	12"	2 1/8"
DC90021	21	.1590	12"	2 1/8"
DC90022	22	.1570	12"	2 1/8"
DC90023	23	.1540	12"	2 1/16"
DC90024	24	.1520	12"	2 1/16"
DC90025	25	.1490	12"	2 1/16"
DC90026	26	.1470	12"	2 1/16"
DC90027	27	.1440	12"	2 1/16"
DC90028	28	.1405	12"	1 15/16"
DC90029	29	.1360	12"	1 15/16"
DC90030	30	.1285	12"	1 15/16"
DC90031	31	.1200	12"	1 7/8"
DC90032	32	.1160	12"	1 7/8"
DC90033	33	.1130	12"	1 7/8"
DC90034	34	.1110	12"	1 7/8"
DC90035	35	.1100	12"	1 7/8"
DC90036	36	.1065	12"	1 13/16"
DC90037	37	.1040	12"	1 13/16"
DC90038	38	.1015	12"	1 13/16"
DC90039	39	.0995	12"	1 13/16"
DC90040	40	.0980	12"	1 13/16"
DC90041	41	.0960	12"	1 13/16"
DC90042	42	.0935	12"	2 1/4"
DC90043	43	.0890	12"	2 1/4"
DC90044	44	.0860	12"	2 1/8"



135° Angle Split-Point Drill

- Self centering due to split-point
- Less force required than conventional 118° drills
- Cuts a continous swarf (peeling type shaving) if used at correct RPM for material - typically a slower speed. If run too fast, the efficiency of the cutting edge is lost which leads to bluntning
- Better suited to hand portable type drilling



COBALT EXTENSION DRILLS FRACTIONAL SIZES – NAS907

- Cobalt Aircraft Extension Drills are manufactured according to National Aerospace Standards meeting NAS907 Type J specifications. Flute lengths are identical to Jobber drills but with an extended shank for drilling holes in hard to reach places. Surface treated and heavy drilling for drilling in tough, high tensile strength materials like stainless steel, titanium and inconel
- The self-centering 135 degree split-point helps to eliminate walking of the drill point thus providing more accurate drilling
- These HSSCO drills are made from heat resistant cobalt steel, with heavy duty construction suited to drilling high strength alloys.



Part No.	Drill Dia.	Dec	OAL	FL
DC810116	1/16"	.0625	6"	7/8"
DC810564	5/64"	.0781	6"	1"
DC810332	3/32"	.0938	6"	1 1/4"
DC810764	7/64"	.1094	6"	1 1/2"
DC810018	1/8"	.1250	6"	1 5/8"
DC810964	9/64"	.1406	6"	1 3/4'
DC810532	5/32"	.1562	6"	2"
DC811164	11/64"	.1719	6"	2 1/8"
DC810316	3/16"	.1875	6"	2 5/16"
DC811364	13/64"	.2031	6"	2 7/16"
DC810732	7/32"	.2188	6"	2 1/2"
DC811564	15/64"	.2344	6"	2 5/8"
DC810014	1/4"	.2500	6"	2 3/4'
DC811764	17/64"	.2656	6"	2 7/8"
DC810932	9/32"	.2812	6"	2 15/16"
DC811964	19/64"	.2969	6"	3 1/16"
DC810516	5/16"	.3125	6"	3 3/16"
DC812164	21/64"	.3281	6"	3 5/16"
DC811132	11/32"	.3438	6"	3 7/16"
DC812364	23/64"	.3594	6"	3 1/2"
DC810038	3/8"	.3750	6"	3 5/8"
DC812564	25/64"	.3906	6"	3 3/4"
DC811332	13/32"	.4062	6"	3 7/8"
DC812764	27/64"	.4219	6"	3 15/16"
DC810716	7/16"	.4375	6"	4 1/16"
DC812964	29/64"	.4531	6"	4 3/16"
DC811532	15/32"	.4688	6"	4 5/16"
DC813164	31/64"	.4244	6"	4 3/8"
DC810012	1/2"	.5000	6"	4 1/2"

Part No.	Drill Dia.	Dec	OAL	FL
DC910116	1/16"	.0625	12"	7/8"
DC910564	5/64"	.0781	12"	1"
DC910332	3/32"	.0938	12"	1 1/4"
DC910764	7/64"	.1094	12"	1 1/2"
DC910018	1/8"	.1250	12"	1 5/8"
DC910964	9/64"	.1406	12"	1 3/4'
DC910532	5/32"	.1562	12"	2"
DC911164	11/64"	.1719	12"	2 1/8"
DC910316	3/16"	.1875	12"	2 5/16"
DC911364	13/64"	.2031	12"	2 7/16"
DC910732	7/32"	.2188	12"	2 1/2"
DC911564	15/64"	.2344	12"	2 5/8"
DC910014	1/4"	.2500	12"	2 3/4'
DC911764	17/64"	.2656	12"	2 7/8"
DC910932	9/32"	.2812	12"	2 15/16"
DC911964	19/64"	.2969	12"	3 1/16"
DC910516	5/16"	.3125	12"	3 3/16"
DC912164	21/64"	.3281	12"	3 5/16"
DC911132	11/32"	.3438	12"	3 7/16"
DC912364	23/64"	.3594	12"	3 1/2"
DC910038	3/8"	.3750	12"	3 5/8"
DC912564	25/64"	.3906	12"	3 3/4"
DC911332	13/32"	.4062	12"	3 7/8"
DC912764	27/64"	.4219	12"	3 15/16"
DC910716	7/16"	.4375	12"	4 1/16"
DC912964	29/64"	.4531	12"	4 3/16"
DC911532	15/32"	.4688	12"	4 5/16"
DC913164	31/64"	.4244	12"	4 3/8"
DC910012	1/2"	.5000	12"	4 1/2"

Due to the range and combinations of sizes, a min. order quantity (MOQ) may apply.

Specialist Drills

LEFT HAND DRILLS 118° HSS

For use in left hand spindle rotation typically for use in screw extraction when drilling out broken studs or fasteners



Part No.	Drill Diameter	OAL (Nom.)
300LH-5/64	5/64	50mm
300LH-3/32	3/32	57mm
300LH-7/64	7/64	66mm
300LH-1/8	1/8	70mm
300LH-9/64	9/64	73mm
300LH-5/32	5/32	78mm

Part No.	Drill Diameter	OAL (Nom.)
300LH-11/64	11/64	82mm
300LH-3/16	3/16	89mm
300LH-13/64	13/64	91mm
300LH-7/32	7/32	95mm
300LH-15/64	15/64	97mm
300LH-1/4	1/4	101mm

SOLID CARBIDE STUBBY DRILL

For drilling abrasive type materials when drilling accuracy must be maintained. Used in high temperature applications. Typically used to drill cast iron, aluminium, copper, plastics, bronze and other simialr materials. Not recommended for drilling steel.



Part No.	Drill Diameter	OAL (Nom.)
C600-3/32	3/32	44mm
C600-7/64	7/64	46mm
C600-1/8	1/8	47mm
C600-9/64	9/64	49mm
C600-5/32	5/32	52mm
C600-11/64	11/64	54mm

Part No.	Drill Diameter	OAL (Nom.)
C600-3/16	3/16	55mm
C600-13/64	13/64	57mm
C600-7/32	7/32	60mm
C600-15/64	15/64	62mm
C600-1/4	1/4	64mm

SOLID CARBIDE DRILL

For drilling abrasive type materials when drilling accuracy must be maintained. Used in high temperature applications. Typically used to drill cast iron, aluminium, copper, plastics, bronze and other simialr materials. Not recommended for drilling steel.



Part No.	Drill Diameter	OAL (Nom.)
C800-3/64	3/64	38mm
C800-1/16	1/16	38mm
C800-5/64	5/64	44mm
C800-3/32	3/32	51mm
C800-7/64	7/64	57mm
C800-1/8	1/8	57mm
C800-9/64	9/64	64mm

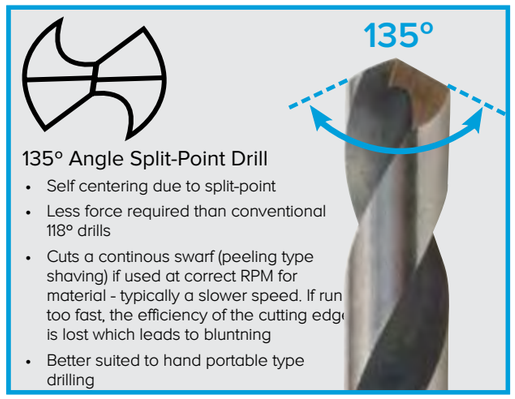
Part No.	Drill Diameter	OAL (Nom.)
C800-5/32	5/32	64mm
C800-11/64	11/64	70mm
C800-3/16	3/16	70mm
C800-13/64	13/64	76mm
C800-7/32	7/32	76mm
C800-15/64	15/64	83mm
C800-1/4	1/4	83mm

COBALT AIRCRAFT STOVE BURNER DRILLS

Part No.	Drill Diameter	OAL	FL
DSB96008	#8	6"	7/8"
DSB96010	#10	6"	1"
DSB96011	#11	6"	1 1/4"
DSB96012	#12	6"	1 1/2"
DSB96013	#13	6"	1 5/8"
DSB96015	#15	6"	1 3/4'
DSB96016	#16	6"	2"
DSB96020	#20	6"	2 1/8"
DSB96021	#21	6"	2 5/16"
DSB96027	#27	6"	2 7/16"
DSB96030	#30	6"	2 1/2"
DSB96040	#40	6"	2 5/8"
DSB96065	1/8"	6"	2 3/4'
DSB96067	5/32"	6"	2 7/8"
DSB96069	3/16"	6"	2 15/16"
DSB96093	D	6"	3 1/16"
DSB96073	1/4"	6"	3 3/16"
DSB96077	5/16"	6"	3 5/16"



Cobalt HSS in jobber sizes, 135° split point, uncleared for improved roundness



135° Angle Split-Point Drill

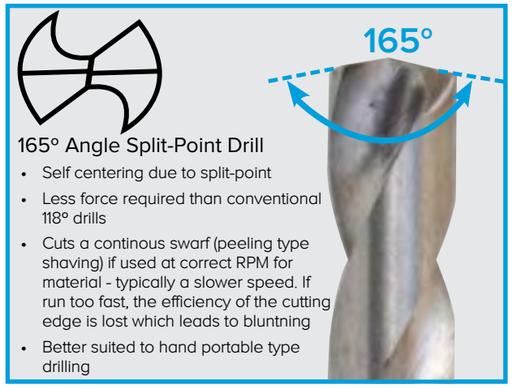
- Self centering due to split-point
- Less force required than conventional 118° drills
- Cuts a continous swarf (peeling type shaving) if used at correct RPM for material - typically a slower speed. If run too fast, the efficiency of the cutting edg is lost which leads to bluntning
- Better suited to hand portable type drilling

COBALT AIRCRAFT GUN BARREL DRILLS

Cobalt HSS in jobber sizes, 165° point uncleared for improved roundness

Part No.	Drill Diameter	OAL	FL
DGB96008	#8	92mm	62mm
DGB96010	#10	92mm	62mm
DGB96011	#11	89mm	59mm
DGB96012	#12	89mm	59mm
DGB96013	#13	89mm	59mm
DGB96015	#15	86mm	59mm
DGB96016	#16	86mm	56mm
DGB96020	#20	83mm	54mm
DGB96021	#21	83mm	54mm
DGB96027	#27	76mm	48mm
DGB96030	#30	70mm	42mm
DGB96040	#40	61mm	35mm
DGB96065	1/8"	70mm	42mm
DGB96067	5/32"	79mm	51mm
DGB96069	3/16"	89mm	59mm
DGB96093	D	102mm	70mm
DGB96073	1/4"	102mm	70mm
DGB96077	5/16"	114mm	81mm





165° Angle Split-Point Drill

- Self centering due to split-point
- Less force required than conventional 118° drills
- Cuts a continous swarf (peeling type shaving) if used at correct RPM for material - typically a slower speed. If run too fast, the efficiency of the cutting edge is lost which leads to bluntning
- Better suited to hand portable type drilling

COBALT AIRCRAFT GUN BARREL DRILLS 1/4 – 28 THREADED

Other sizes available – please enquire.

Theaded cobalt HSS Drill, 165° point uncleared for improved roundness hole.

Part No.	Drill Diameter	OAL (Nom.)
DGB97008	#8	54mm
DGB97010	#10	54mm
DGB97011	#11	54mm
DGB97012	#12	54mm
DGB97013	#13	54mm
DGB97015	#15	54mm
DGB97016	#16	54mm
DGB97020	#20	54mm
DGB97021	#21	54mm
DGB97027	#27	54mm
DGB97030	#30	54mm
DGB97040	#40	54mm
DGB97065	1/8"	54mm
DGB97067	5/32"	54mm
DGB97069	3/16"	54mm
DGB97093	D	54mm
DGB97073	1/4"	54mm
DGB97077	5/16"	54mm
DGB981250	0.1250"	54mm
DGB981256	0.1256"	54mm
DGB981562	0.1562"	54mm
DGB981610	0.1610"	3-1/8"
DGB981850	0.1850"	54mm
DGB981870	0.1870"	54mm
DGB981875	0.1875"	54mm
DGB981900	0.1900"	54mm
DGB981990	0.1990"	54mm
DGB982000	0.2000"	54mm
DGB982090	0.2090"	54mm
DGB982150	0.2150"	54mm





165° Angle Split-Point Drill

- Self centering due to split-point
- Less force required than conventional 118° drills
- Cuts a continous swarf (peeling type shaving) if used at correct RPM for material - typically a slower speed. If run too fast, the efficiency of the cutting edge is lost which leads to bluntning
- Better suited to hand portable type drilling

Part No.	Drill Diameter	OAL (Nom.)
DGB982160	0.2160"	54mm
DGB982460	0.2460"	54mm
DGB982470	0.2470"	54mm
DGB982480	0.2480"	54mm
DGB982630	0.2630"	54mm
DGB983090	0.3090"	54mm
DGB983100	0.3100"	54mm
DGB983410	0.3410"	54mm
DGB983430	0.3430"	54mm
DGB983750	0.3750"	54mm

DRILL SETS – NUMBER, LETTER & FRACTIONAL SIZES – NAS907

- HSS & Cobalt Drill Sets with 135° split points.
- Strong, rugged metal case



Part No.	Description	Type	No. of Drills	Size Range
DHS 7115	Jobber Drill Set	HSS	135pce	1/16-1/2 (64ths), A-Z, #1-#80
DCS 7115	Jobber Drill Set	Cobalt	135pce	1/16-1/2 (64ths), A-Z, #1-#80

STANDARD DRILL SETS – IMPERIAL

- HSS Titanium Nitride coated with 135° split points.
- Strong, rugged metal case



SI13



SI29

Part No.	No. of Drills	Size Range
SI13	13	1/16 - 1/4"
SI21	21	1/16 - 3/8"
SI29	29	1/16 - 1/2" Straight Shank
SI29R	29	1/16 - 1/2" Reduced Shank

STANDARD DRILL SETS – METRIC

- HSS Titanium Nitride coated with 135° split points.
- Strong, rugged metal case



SM13



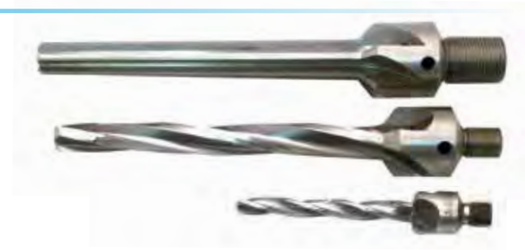
SM25

Part No.	No. of Drills	Size Range
SM13	13	1.5 - 6.5mm
SM19	19	1.0 - 10.0mm
SM25	25	1.0 - 13.0mm Straight Shank
SM25R	25	1.0 - 13.0mm Reduced Shank

Taper-Lok Cutters

TAPER-LOK CUTTERS

Taper-Lok drills and reamers are manufactured to the most stringent tolerances for precision hole preparation. Standard in HSS or M7 high speed steel, they are also available in cobalt and carbide. A complete line of Taper-Lok guaging tools is also available.



Part No.	Part No.	Part No.	Part No.
TLD2040AR1-04	TLD2040BR1-04	TLD2060AR1-04	TLD2060BR1-04
TLD2040AR1-05	TLD2040BR1-05	TLD2060AR1-05	TLD2060BR1-05
TLD2040AR1-3	TLD2040BR1-3	TLD2060AR1-3	TLD2060BR1-3
TLD2040AR1-07	TLD2040BR1-07	TLD2060AR1-07	TLD2060BR1-07
TLD2040AR1-4	TLD2040BR1-4	TLD2060AR1-4	TLD2060BR1-4
TLD2040AR1-5	TLD2040BR1-5	TLD2060AR1-5	TLD2060BR1-5
TLD2040AR1-6	TLD2040BR1-6	TLD2060AR1-6	TLD2060BR1-6
TLD2040AR1-7	TLD2040BR1-7	TLD2060AR1-7	TLD2060BR1-7
TLD2040AR1-8	TLD2040BR1-8	TLD2060AR1-8	TLD2060BR1-8
TLD2040AR1-9	TLD2040BR1-9	TLD2060AR1-9	TLD2060BR1-9
TLD2040AR2-3	TLD2040BR2-3	TLD2060AR2-3	TLD2060BR2-3
TLD2040AR2-4	TLD2040BR2-4	TLD2060AR2-4	TLD2060BR2-4
TLD2040AR2-5	TLD2040BR2-5	TLD2060AR2-5	TLD2060BR2-5
TLD2040AR2-6	TLD2040BR2-6	TLD2060AR2-6	TLD2060BR2-6
TLD2040AR2-7	TLD2040BR2-7	TLD2060AR2-7	TLD2060BR2-7
TLD2040AR2-8	TLD2040BR2-8	TLD2060AR2-8	TLD2060BR2-8
TLD2040AR2-9	TLD2040BR2-9	TLD2060AR2-9	TLD2060BR2-9
TLD2040AR2-10	TLD2040BR2-10	TLD2060AR2-10	TLD2060BR2-10
TLD2040AR3-3	TLD2040BR3-3	TLD2060AR3-3	TLD2060BR3-3
TLD2040AR3-4	TLD2040BR3-4	TLD2060AR3-4	TLD2060BR3-4
TLD2040AR3-5	TLD2040BR3-5	TLD2060AR3-5	TLD2060BR3-5
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TLD2040AR3-7	TLD2040BR3-7	TLD2060AR3-7	TLD2060BR3-7
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TLD2040AR3-9	TLD2040BR3-9	TLD2060AR3-9	TLD2060BR3-9
TLD2040AR3-10	TLD2040BR3-10	TLD2060AR3-10	TLD2060BR3-10
TLD2040AR3-12	TLD2040BR3-12	TLD2060AR3-12	TLD2060BR3-12
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TLD2040AR5-6	TLD2040BR5-6	TLD2060AR5-6	TLD2060BR5-6
TLD2040AR5-7	TLD2040BR5-7	TLD2060AR5-7	TLD2060BR5-7
TLD2040AR5-8	TLD2040BR5-8	TLD2060AR5-8	TLD2060BR5-8
TLD2040AR5-9	TLD2040BR5-9	TLD2060AR5-9	TLD2060BR5-9
TLD2040AR5-10	TLD2040BR5-10	TLD2060AR5-10	TLD2060BR5-10
TLD2040AR5-12	TLD2040BR5-12	TLD2060AR5-12	TLD2060BR5-12
TLD2040AR5-14	TLD2040BR5-14	TLD2060AR5-14	TLD2060BR5-14
TLD2040AR5-16	TLD2040BR5-16	TLD2060AR5-16	TLD2060BR5-16

TLD2040 AR 1- 5

- Nominal Bolt Diameter
  In 1/16
  or 1/32, if preceeded by "0" (-05)
- Bolt Group
- Type of Bolt
  AR: Flush Head
  BR: button/protruding head
- HSS Cutter Series

CUSTOM KITS AVAILABLE ON REQUEST

Taper-Lok Tooling Kit





Taper-Lok Kit

Taper-Lok Gauge Kit



Drilling Accessories

DRILL STOPS

Drill stops with coiled spring to prevent surface damage from uncontrolled break-through when drilling. The Drill stops feature a positive stop and cushioned spring contact,while the rounded smooth face eliminates marking and prevents the drill chuck from marring the surface.



Part No.	Drill Size	Length	Colour
DS1050	#50	33mm	
DS1041	#41	33mm	
DS1040	#40	33mm	Zinc
DS1030	#30	33mm	Copper
DS1028	#28	33mm	
DS1027	#27	33mm	
DS1021	#21	38mm	Black
DS1020	#20	38mm	Zinc
DS1017	#17	38mm	
DS1016	#16	38mm	
DS1012	#12	38mm	
DS1011	#11	38mm	
DS1010	#10	38mm	Brass
DS1006	#6	38mm	
DS1001	#1	38mm	

Part No.	Drill Size	Length	Colour
DS1973	7/32"	54mm	70mm
DS1993	9/32"	54mm	81mm
DS1938	3/8"	54mm	
DS1971	7/16"	54mm	

5 PIECE DRILL STOP SET – NO-MAR

"NO-MAR" Drill Stops feature a plastic nose piece where you want to reduce the chance of material damage: ideally suited for use on composite surfaces, polished/painted surfaces, or any sensitive type area.

Contents:
#40; #30; #20; #10; 1/4"



Part No.	Description
DS2000	5 Piece Drill Stop Set No-Mar

RIVET FAN SPACING TOOL

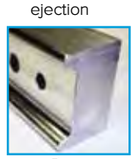
- Accordion fan spacing tool easily marks from 1/2" to 2" spacing in 1/4" increments
- Marked for standard rivet spacing increments
- Spacing Sizes are stamped on the tool for easy reference
- Quick, accurate layout of even spaced rivet holes



Part No.	Description
RS4002	Rivet Fan Spacing Tool 20 Hole
RS4001	Rivet Fan Spacing Tool 10 Hole

DRILL BLOCK

- Drill block, 94 x 38 x 25mm with drill bushings
- Set up with #40, #30, #21, #10 Drill Sizes
- Profile is has "feet" on the bottom, permitting quick chip ejection



Rear



Part No.	Description
DB1000	Drill Block 4 Hole

SMALL OD DRILL BUSHINGS

Press-fit drill bushings are characterized by the tight dimensional and positional tolerances in connection with the hardened and precision machined surface

Can be supplied as a kit of 17 PCS
Part no: **DB4500**:



Part No.	Size OD	Decimal OD	Size ID	Decimal ID
DB4481	#21	0.1590	#40	0.0980
DB4482	#13	0.1850	#40	0.0980
DB4483	#10	0.1935	#40	0.0980
DB4484	#10	0.1935	#30	0.1285
DB4485	#8	0.1990	#40	0.0980
DB4486	#8	0.1990	#30	0.1285
DB4487	#3	0.2130	#30	0.1285
DB4488	D	0.2460	#30	0.1285
DB4489	D	0.2460	#10	0.1935
DB4490	1/4"	0.2500	#40	0.0980
DB4491	1/4"	0.2500	#30	0.1285
DB4492	1/4"	0.2500	#10	0.1935
DB4493	0.2600	0.2600	#30	0.1285
DB4494	0.2600	0.2600	#10	0.1935
DB4495	5/16"	0.3125	#30	0.1285
DB4496	5/16"	0.3125	#10	0.1935
DB4497	5/16"	0.3125	1/4"	0.2500

COLLET CHUCKS 1/4"-28

- Chuck holds one Size, as per specified Size
- 1/4"-28 thread standard



Part No.	Description	Size
CC4040	Collet Chuck	#40
CC4030	Collet Chuck	#30
CC4027	Collet Chuck	#27
CC4021	Collet Chuck	#21
CC4019	Collet Chuck	#19
CC4016	Collet Chuck	#16
CC4013	Collet Chuck	#13
CC4011	Collet Chuck	#11
CC4010	Collet Chuck	#10
CC4008	Collet Chuck	#8
CC4933	Collet Chuck	3/32"
CC4918	Collet Chuck	1/8"
CC4953	Collet Chuck	5/32"
CC4914	Collet Chuck	1/4"

THREADED PAINT CUTTERS 1/4"-28

- Designed to remove a small ring of paint around the head of screws that have been painted over
- Reduces paint chipping during screw removal
- Ideally used in Chuck to Threaded Drill Adapter Extensions



Part No.	Fastener Size	Cutter Diameter	Colour
PC1003	3/32"	3.17mm / 0.187"	Silver
PC1004	1/8"	6.45mm / 0.254"	Copper
PC1006	5/32"	7.13mm / 0.281"	Black
PC1007	3/16"	8.33mm / 0.328"	Brass
PC1009	1/4"	11.5mm / 0.453"	Copper

COLLET HOLDER

- A convenient way to store up to 12 threaded COLLETS
- 9/32-40 threaded holes to securely hold your COLLETS.
- Made of Aluminium



Part No.	Description	Dimensions
DCH012	Collet Holder	80 x 50 x 12 mm

DRILL COLLETS 9/32-40

For use on all 9/32-40 internal spindle angle drills. collets are made to the highest standard. Designed for use on Atlas Copco, Desoutter (D375, D370, D331, D321, D33, D32) and Ingersoll Rand angle drills.



Part No.	Size	Decimal Eq.	Closest Metric
DC1052	#52	.0635"	1.6mm
DC1051	#51	.0670"	1.7mm
DC1050	#50	.0700"	1.8mm
DC1049	#49	.0730"	1.9mm
DC1048	#48	.0760"	1.9mm
DC1047	#47	.0785"	2.0mm
DC1046	#46	.0810"	2.1mm
DC1045	#45	.0820"	2.1mm
DC1044	#44	.0860"	2.2mm
DC1043	#43	.0890"	2.3mm
DC1042	#42	.0935"	2.4mm
DC1041	#41	.0960"	2.4mm
DC1040	#40	.0980"	2.5mm
DC1039	#39	.0995"	2.5mm
DC1038	#38	.1015"	2.6mm
DC1037	#37	.1040"	2.6mm
DC1034	#36	.1065"	2.7mm
DC1035	#35	.1110"	2.8mm
DC1034	#34	.1110"	2.8mm
DC1033	#33	.1130"	2.9mm
DC1032	#32	.1160"	2.9mm
DC1031	#31	.1200"	3.0mm
DC1030	#30	.1285"	3.3mm
DC1029	#29	.1360"	3.5mm
DC1028	#28	.1405"	3.6mm

Part No.	Size	Decimal Eq.	Closest Metric
DC1027	#27	.1440"	3.7mm
DC1026	#26	.1470"	3.7mm
DC1025	#25	.1495"	3.8mm
DC1024	#24	.1520"	3.9mm
DC1023	#23	.1540"	3.9mm
DC1022	#22	.1570"	4.0mm
DC1021	#21	.1590"	4.0mm
DC1020	#20	.1610"	4.1mm
DC1019	#19	.1660"	4.2mm
DC1018	#18	.1695"	4.3mm
DC1017	#17	.1730"	4.4mm
DC1016	#16	.1770"	4.5mm
DC1015	#15	.1800"	4.6mm
DC1014	#14	.1820"	4.6mm
DC1013	#13	.1850"	4.7mm
DC1911	1/16"	.0625"	1.6mm
DC1956	5/64"	.0781"	2.0mm
DC1933	3/32"	.0937"	2.4mm
DC1976	7/64"	.1094"	2.8mm
DB 1918	1/8"	.1250"	3.2mm
DC1996	9/64"	.1406"	3.6mm
DC1953	5/32"	.1562"	4.0mm
DC1964	11/64"	.1719"	4.4mm
DC1931	3/16"	.1875"	4.8mm

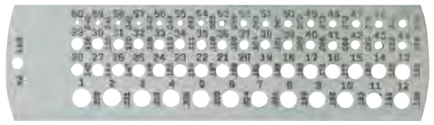
DRILL GAGES

- High quality, heavy guage drill gages for easy identification of Drill Sizes.
- Machined and ground to close tolerances with hole Sizes permanently etched into the face of each gauge.

DG0198



DG0186



DG0187



Part No.	Description	Drill Type	Finish
DG0198	Drill Gage	A-Z	satin finish
DG0186	Drill Gage	1-60	matt black
DG0187	Drill Gage	1/16 - 1/2	satin finish

MINI CHUCK 1/4-28

Fits most angle drills with female 1/4" - 28 threaded spindle to use as an alternative to threaded shank adapter drills. (preferable to use threaded drills)



Part No.	Description	Capacity
CT1428	Mini Chuck	1/4"

MINI DRILL CHUCK THREADED 1/4-28 WITH CHUCK KEY

- Fits most angle drills with female 1/4" - 28 thread
- Use straight shank drills with any threaded spindle tool



Part No.	Description	Capacity
CM 1428	Mini Chuck	1/4"

CHUCK TO THREADED DRILL ADAPTER EXTENSIONS

Convert a standard chuck drill to accept 1/4 - 28 threaded drills



Part No.	Size
DA1247	Chucking Drill Extension 50mm
DA1248	Chucking Drill Extension 100mm
DA1249	Chucking Drill Extension 150mm
DA1250	Chucking Drill Extension 200mm

THREADED DRILL TO THREADED DRILL EXTENSION

Male 1/4-28 to female 1/4-28 extension, 50mm long



Part No.	Description
DA1246	Extension 1/4-28

SLIP BUSHING DRILL STAND – "EGG CUP"

- A guide assembly for keeping drills or taps at 90° to work surface.
- The guide housing is made in the USA of GE Lexan®, which is virtually unbreakable , No-Mar and ensures a well-lit work surface.
- Accepts industry standard 1/2" OD slip bushings



Part No.	Description
SBS1000	Drill Stand for Slip Bushings

CHIP CHASER – HEAVY DUTY

- For hooking out chips between sheets after drilling, easily forming to curves.
- With molded plastic handle, flexible steel blade with hook.
- Also great for removing screws and other items stuck in difficult to reach spots.



Part No.	Description	Blade Length
CC4100	Chip Chaser	75mm
CC4200	Chip Chaser	109mm
CC4300	Chip Chaser Set of 2	-

15 PIECE DRILL BUSHING KIT -SLIP TYPE

Contents:

- Slip bushings: #40, #30, #27, 5/32", #21, #20, #16, #13, 3/16", #10, #8, 1/4", D and 5/16"
- Drill Stand



Part No.	Description
SBK1000	15 Piece Drill Bushing Kit

SLIP BUSHINGS 1/2" OD

- Hardened steel to provide maximum wear and extended life
- For use with our "Egg Cup" Bushing Holder or our Slotted Bushing Holder (Snatch Block)



Part No.	Size	Closest Decimal
SB1040	#40	.0980
SB1918	1/8	.1250
SB1030	#30	.1285
SB1027	#27	.1440
SB1953	5/32	.1562
SB1021	#21	.1590
SB1020	#20	.1610
SB1019	#19	.1660
SB1016	#16	.1770
SB1013	#13	.1850
SB1931	3/16	.1875
SB1012	#12	.1890
SB1011	#11	.1910
SB1010	#10	.1935
SB1198	.198	.1980
SB1008	#8	.1990
SB1007	#7	.2010

Part No.	Size	Closest Decimal
SB1006	#6	.2040
SB1005	#5	.2055
SB1003	#3	.2130
SB1973	7/32	.2188
SB1001	#1	.2280
SB1915	15/64	.2344
SB1704	D	.2460
SB1914	1/4	.2500
SB1706	F	.2570
SB1707	G	.2610
SB1710	J	.2770
SB1993	9/32	.2812
SB1309	.309	.3090
SB1951	5/16	.3125
SB1938	3/8	.3750
SB1971	7/16	.4375

PRECISION OPTICAL HOLE LOCATOR "BOMBSITE"

- Made of virtually unbreakable optical grade clear acrylic
- Permanently etched crosshairs provide an extremely accurate and magnified reference point accurate to 0.001" dead centre
- Works with all standard 1/2" diameter slip bushing tools



Part No.	Description	Diameter
H72-349	Optical Hole Locator	1/2" / 12.7mm

SLOTTED BUSHING HOLDER – SNATCH BLOCK

- Accepts 1/2" slip bushings
- Slip bushings are locked in place with a grub screw
- Use draw clecos or bolts through slotted body to position the holder over a mis-matched hole. Then drill through slip bushing to rectify
- Also affectionately known as known as "Steam Boat"



Part No.	Description
SBH1000	Slotted Bushing Holder"

DRILL BAR

- Adjustable, slip-type, includes lock screw and liner
- Provides accurate placement and alignment of drilled holes
- Use with the spotter to centre the drill bar within 0.001", then replace the spotter with a slip bushing and drill.



Part No.	Description	Size (LxWxH)
H72-346	Drill Bar	6 x 1-1/2 x 3/4 in

CHANNEL DRILL STAND ONE HOLE

- Use in seat channels or other small areas
- Maintains your drill 90 degrees to the surface
- Made of clear plastic for easy viewing of hole location



Part No.	Description	Size (LxWxH)
H72-186	Channel Drill Stand	1-1/8 x 0.6x 1 in

THREADED BUSHING DRILL STAND – "EGG CUP"

- A guide assembly for keeping drills or taps at 90o to work surface.
- The guide housing is made in the USA of GE Lexan®, which is virtually unbreakable , No-Mar and ensures a well-lit work surface.
- Accepts 1/2"-13 threaded drill bushings,



Part No.	Description
TBS1000	Drill Stand for Threaded Slip Bushings

15 PIECE DRILL BUSHING KIT – THREADED TYPE

Contents:

- Slip bushings: #40, #30, #27, 5/32", #21, #20, #16, #13, 3/16", #10, #8, 1/4", D & 5/16"
- Drill Stand



Part No.	Description
TBK1000	15 Piece Drill Bushing Kit Threaded

Nut Plate Drill Jigs

Minimum order quantity may apply.

Anchor Nuts, or Nut Plate Jigs are manufactured to precise tolerances to facilitate accurate rivet hole drilling, reduction of wear and assurance of consistent hole-spacing. Optimum design of pins and pilots make the tool much easier to use. Ergonomically designed handles fitted to flexible stainless steel spring blades provides clearance while the drill jig is in use.

CORNER WING STANDARD (CWS)



Part No.	Spacing (A)	Pilot Dia. (C)	Drill Size (D)
NPJ518MB	.344	.1425	#40
NPJ518MC	.344	.1675	#40
NPJ518MD	.344	.192	#40
NPJ518MF	.500	.3145	#30
NPJ518MK	.344	.1645	#40
NPJ518ML	.344	.1875	#40
NPJ518MN	.500	.311	#30
NPJ518MP	.500	.373	#30
NPJ518MR	.562	.435	#30
NPJ518MT	.344	.2265	#40
NPJ518NAS-C-A5	.358	.312	#30
NPJ518R	.344	.139	#40
NPJ518S	.344	.164	#40
NPJ518T	.344	.191	#40
NPJ518U	.500	.248	#40
NPJ518V	.500	.312	#30
NPJ518W	.500	.372	#30
NPJ518X	.562	.4375	#30

CORNER WING MINIATURE (CWM)



Part No.	Spacing (A)	Pilot Dia. (C)	Drill Size (D)
NPJ518NAS-C-A02	.125	.086	#51
NPJ518NAS-C-A03	.138	.099	#51
NPJ518NAS-C-A04	.148	.112	#51
NPJ518SA	.203	.112	#40
NPJ518SB	.218	.139	#40
NPJ518SC	.234	.164	#40
NPJ518SD	.250	.191	#40
NPJ518SE	.281	.248	#40
NPJ518SF	.312	.312	#30
NPJ518SJ	.250	.1875	#40
NPJ518UA	.203	.14	#40
NPJ518UB	.218	.166	#40
NPJ518UC	.234	.193	#40
NPJ518UD	.250	.218	#40
NPJ518UE	.281	.281	#40
NPJ518UF	.312	.343	#30

SINGLE WING STANDARD (SWS)



Part No.	Nut Thread	Spacing (A)	Pilot Dia. (C)	Drill Size (D)
NPJ518G	#6	.344	.139	#40
NPJ518H	#8	.344	.164	#40
NPJ518J	#10	.344	.191	#40
NPJ518K	1/4"	.344	.248	#40
NPJ518NAS-D-A5	5/16"	.359	.312	#30
NPJ518NAS-D-A6	3/8"	.414	.372	#30
NPJ518RP	5/16"	.500	.3105	#30
NPJ518RG	5/16"	.500	.3145	#30
NPJ518FH	5/16"	.500	.372	#30
NPJ518RH	3/8"	.500	.373	#30
NPJ518RJ	7/16"	.500	.435	#30
NPJ518RB	#6	.344	.1425	#40
NPJ518RL	#8	.344	.1645	#40
NPJ518RC	#8	.344	.1675	#40
NPJ518RM	#10	.344	.1875	#40
NPJ518RD	#10	.344	.192	#40
NPJ518L	#10	.344	.213	#40
NPJ518RU	#8	.344	.2265	#40
NPJ518RE	1/4"	.344	.2555	#40
NPJ518LF	#8/#10	.344	.281	#40
NPJ518RW	1/4"	.344	.3105	#40
NPJ518RO	1/4"	.500	.248	#40
NPJ518RF	1/4"	.500	.2555	#40
NPJ518RX	1/4"	.500	.3105	#40
NPJ518YF	1/4"	.500	.343	#40

SINGLE WING MINIATURE (SWM)



Part No.	Nut Thread	Spacing (A)	Pilot Dia. (C)
NPJ518JA	#4	.203	.14
NPJ518JB	#6	.218	.166
NPJ518JC	#8	.234	.193
NPJ518JD	#10	.250	.218
NPJ518JE	1/4"	.281	.281
NPJ518NAS-B-A02	#2	.125	.086
NPJ518NAS-B-A03	#3	.133	.099
NPJ518NAS-B-A04	#4	.148	.112
NPJ518NAS-B-A06	#6	.171	.139
NPJ518PA	#4	.203	.112
NPJ518PB	#6	.218	.139
NPJ518PC	#8	.234	.164
NPJ518PD	#10	.250	.191
NPJ518PE	1/4"	.281	.248
NPJ518PF	-	.250	.1875

TWO-LUG DOUBLE WING MINIATURE (DWM)



Part No.	Spacing (A)	Spacing (B)	Pilot Dia. (C)	Drill Size (D)
NPJ518AA	.203	.406	.14	#40
NPJ518AB	.219	.437	.166	#40
NPJ518AC	.234	.468	.193	#40
NPJ518AD	.250	.500	.218	#40
NPJ518AE	.281	.562	.281	#40
NPJ518AF	.313	.625	.343	#30
NPJ518BA	.203	.406	.18	#40
NPJ518BB	.219	.437	.2055	#40
NPJ518BC	.234	.468	.234	#40
NPJ518BD	.250	.500	.257	#40
NPJ518BE	.281	.562	.323	#40
NPJ518BG	.359	.718	.373	#30
NPJ518NA	.203	.406	.112	#40
NPJ518NAS-1474A3	.295	.590	.191	#40
NPJ518NAS-A-A02	.125	.250	.086	#51
NPJ518NAS-A-A03	.133	.265	.099	#51
NPJ518NAS-A-A04	.148	.296	.112	#51
NPJ518NAS-A-A06	.172	.343	.139	#51
NPJ518NB	.218	.436	.139	#40
NPJ518NC	.234	.468	.164	#40
NPJ518ND	.250	.500	.191	#40
NPJ518NE	.281	.562	.248	#40
NPJ518NF	.313	.625	.312	#30
NPJ518NG	.234	.468	.1925	#40
NPJ518NH	.234	.468	.227	#40
NPJ518NJ	.250	.500	.1875	#40
NPJ518ZX	.539	.270	.248	#40

TWO-LUG DOUBLE WING STANDARD (DWS)



Part No.	Spacing (A)	Spacing (B)	Pilot Dia. (C)	Drill Size (D)
NPJ518A	.344	.688	.139	#40
NPJ518B	.344	.688	.164	#40
NPJ518BF	.344	.688	.281	#40
NPJ518C	.344	.688	.191	#40
NPJ518D	.500	1.00	.248	#40
NPJ518DF	.500	1.00	.343	#40
NPJ518E	.500	1.00	.312	#30
NPJ518F	.500	1.00	.372	#30
NPJ518GA	.500	1.00	.702	#30
NPJ518GB	.500	1.00	.593	#30
NPJ518GC	.687	.718	.718	#30
NPJ518GD	.500	1.00	.375	#30
NPJ518GE	.687	.500	.500	#30
NPJ518GF	.375	.750	.437	#40
NPJ518GG	.500	1.00	.656	#40
NPJ518GH	.375	.750	.397	#40
NPJ518GJ	.500	1.00	.281	#40
NPJ518GK	.500	1.00	.343	#30
NPJ518GL	.344	.688	.218	#40

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Part No.	Spacing (A)	Spacing (B)	Pilot Dia. (C)	Drill Size (D)
NPJ518GM	.344	.688	.312	#40
NPJ518GN	.625	.592	.592	#30
NPJ518GP	.562	.438	.4375	#30
NPJ518GR	.500	1.00	.271	#40
NPJ518GS	.500	1.00	.2955	#40
NPJ518GT	.438	.875	.373	#40
NPJ518HA	.687	.749	.749	#30
NPJ518HB	.687	.191	.191	#30
NPJ518HC	.687	.405	.405	#30
NPJ518HD	.500	1.00	.500	#30
NPJ518HE	.313	.625	.187	#40
NPJ518HF	.500	1.00	.191	#30
NPJ518HG	.500	1.00	.389	#30
NPJ518HH	.375	.750	.372	#40
NPJ518HJ	.500	1.00	.248	#30
NPJ518HK	.687	.656	.656	#30
NPJ518HL	.344	.688	.29	#40
NPJ518HM	.313	.625	.218	#40
NPJ518HN	.375	.750	.467	#40
NPJ518HO	.375	.750	.248	#40
NPJ518HP	.375	.750	.281	#40
NPJ518HS	.500	1.00	.561	#30
NPJ518HT	.500	1.00	.624	#30
NPJ518HU	.687	1.375	.938	#30
NPJ518HW	.592	.811	.811	#30
NPJ518HX	.450	.900	.372	#40
NPJ518HY	.700	1.40	.85.	#30
NPJ518KA	.344	.688	.1185	#40
NPJ518KB	.344	.688	.1425	#40
NPJ518KC	.344	.688	.1675	#40
NPJ518KD	.344	.688	.192	#40
NPJ518KE	.500	1.00	.2555	#40
NPJ518KF	.500	1.00	.3145	#30
NPJ518KG	.500	1.00	.373	#30
NPJ518KH	.687	.435	.435	#30
NPJ518KJ	.687	.498	.498	#30
NPJ518KL	.344	.688	.1875	#40
NPJ518KM	.500	1.00	.248	#40
NPJ518KN	.500	1.00	.3105	#30
NPJ518KP	.500	1.00	.457	#30
NPJ518KT	.344	.688	.2265	#40
NPJ518KU	.344	.688	.2555	#40
NPJ518KV	.500	1.00	.3105	#40
NPJ518M	.375	.750	.4375	#40
NPJ518N	.500	1.00	.6875	#30
NPJ518P	.687	1.375	.811	#30

MINIATURE ANCHORNUT (SLM)



Part No.	Spacing (A)	Spacing (B)	Pilot Dia. (C)
NPJ518TA	.250	.219	.191
NPJ518TB	.281	.219	.248
NPJ518TC	.312	.250	.312
NPJ518TD	.359	.269	.3125
NPJ518NAS-D-A5	.359	.269	.312
NPJ518NAS-D-A6	.414	.269	.372
NPJ518NAS-D-A08	.234	.219	.164
NPJ518TE	.250	.219	.1875

Holefinders and Manual Deburring

Minimum order quantity (MOQ) may apply.

PUNCH TYPE STRAP DUPLICATORS



The pin end locates into the hole below the panel. Duplication is performed by lightly tapping with a hammer to centre punch new panel.

Part No.	OAL	Drill Size & Pilot Dia.
SD1040	158mm	#40
SD1030	158mm	#30
SD1021	158mm	#21
SD1019	158mm	#19
SD1010-1	158mm	#10
SD1005	158mm	#5
SD1914	158mm	1/4
SD1704	158mm	F

Part No.	OAL	Drill Size & Pilot Dia.
SD4040	337mm	#40
SD4030	337mm	#30
SD4021	337mm	#21
SD4019	337mm	#19
SD4010	337mm	#10
SD4005	337mm	#5
SD4914	337mm	1/4
SD4704	337mm	F

BUSHING TYPE STRAP DUPLICATORS



Part No.	OAL	Drill Size & Pilot Dia.
SD2040	158mm	#40
SD2030	158mm	#30
SD2021	158mm	#21
SD2019	158mm	#19
SD2010	158mm	#10
SD2005	158mm	#5
SD2914	158mm	1/4
SD2704	158mm	F

Part No.	OAL	Drill Size & Pilot Dia.
SD5040	337mm	#40
SD5030	337mm	#30
SD5021	337mm	#21
SD5019	337mm	#19
SD5010	337mm	#10
SD5005	337mm	#5
SD5914	337mm	1/4
SD5704	337mm	F

BUSHING TYPE STRAP DUPLICATORS – INVERTED



Similar to bushing type except the pin end locates the hole to be duplicated from underneath.

Part No.	OAL	Drill Size & Pilot Dia.
SD3040	158mm	#40
SD3030	158mm	#30
SD3021	158mm	#21
SD3019	158mm	#19
SD3010	158mm	#10
SD3005	158mm	#5
SD3914	158mm	1/4
SD3704	158mm	F

Part No.	OAL	Drill Size & Pilot Dia.
SD6040	337mm	#40
SD6030	337mm	#30
SD6021	337mm	#21
SD6019	337mm	#19
SD6010	337mm	#10
SD6005	337mm	#5
SD6914	337mm	1/4
SD6704	337mm	F

TRANSFER PUNCH SETS

- Punches with Sharp point for transfering holes
- Punches are heat treated and about 124mm long



Part No.	Description	Drill Type	Pcs
TPS1328	Transfer Punch Set	3/32 - 1/2"	28
TPS1428	Transfer Punch Set, Economy	3/32 - 1/2"	28
TPS1326	Transfer Punch Set	A - Z	26
TPS1360	Transfer Punch Set	1 - 60	60

TRANSFER SCREW SETS

- Similar to Blind Hole Spotters, but threaded for use when you have existing nutplates
- Hollow handle stores six screws when not in use



Part No.	Description	Threaded Size
BHT0832	Transfer Screw Set	8-32
BHT1032	Transfer Screw Set	10-32
BHT1428	Transfer Screw Set	1/4-28

BLIND HOLE SPOTTERS

- Used to "spot" holes quickly
- High quality, heat treated



Part No.	Description	Diameter	
BHS1918	Blind Hole Spotter	1/8	6
BHS1030	Blind Hole Spotter	#30	6
BHS1953	Blind Hole Spotter	5/32	6
BHS1021	Blind Hole Spotter	#21	6
BHS1016	Blind Hole Spotter	#16	6
BHS1931	Blind Hole Spotter	3/16	6
BHS1010	Blind Hole Spotter	#10	6
BHS1914	Blind Hole Spotter	1/4	6
BHS1951	Blind Hole Spotter	5/16	6
BHS1938	Blind Hole Spotter	3/8	6
BHS1971	Blind Hole Spotter	7/16	6
BHS1912	Blind Hole Spotter	1/2	6

DEBURRING TOOLS – HEAVY DUTY

- Telescopic extension
- Curved blades swivel freely for easier reach
- Blades are stored in lightWeight plastic handle
- Includes four blades, also available individually for replacement



Part No.	Description
DT-5C-MK	Deburring Tool with 4 Blades
C10	3.2mm Blade for Steel, Copper, Aluminium, Zinc & Plastic
C20	3.2mm Blade for Brass & Cast Iron
P1	2.6mm Blade light duty/small components (materials C10)
P2	2.6mm Blade light duty/small components (materials C20)

EDGE BREAKER TOOL WITH SAFETY SHIELD



Part No.	Description
DB00514	Edge Breaker Tool

LIGHTWEIGHT DEBURRING TOOL

- Very popular all metal body with pocket clip
- Fitted with universal C10 swivel blade



Part No.	Description
DB6005	Economy Deburring Tool

BURNISHING TOOL

- Removes surface blemishes and scratches in sheet metal
- Comfortable-to-grip plastic handle



Part No.	Description
DB00103	Burnishing Tool

THREADED ROSEBUD DEBURRING BIT

- Six flute design reduces chattering and is ideal for quick deburring of holes from 1/16" - 3/8"
- Fits Dogleg Deburring tools and all 1/4-28 spindles



Part No.	Description
DB00525	Rosebud Deburring Bit

SPEED DRIVER DOG LEG DEBURRER

Permits quick deburring operations, accepting 1/4-28 threaded Rosebud deburring bits

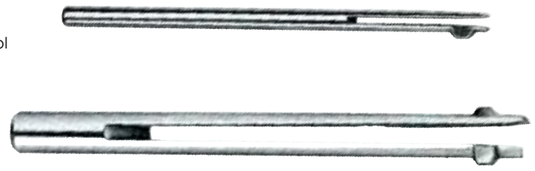


Part No.	Description
DB06005	Dog Leg Deburring Handle (with tip)

BURR-OFF® DEBURRING TOOLS

- Deburr both sides in one pass
- Deburr 5 to 15 thousand holes per grind, up to four grinds per tool
- Handles tough jobs: interrupted/interference cuts, holes close to shoulders etc.





Part No.	Range	Shank	OAL
CP-4	0.062" - 0.078"	0.061"	3" (76.2mm)
CP-5	0.078" - 0.094"	0.077"	3" (76.2mm)
CP-6	0.093" - 0.109"	0.092"	4" (102mm)
CP-7	0.140" - 0.156"	0.139"	4" (102mm)
CP-8	0.125" - 0.140"	0.124"	4" (102mm)
CP-9	0.140" - 0.156"	0.139"	4" (102mm)
CP-10	0.156" - 0.172"	0.155"	4" (102mm)
CP-11	0.172" - 0.187"	0.171"	4" (102mm)
CP-12	0.187" - 0.203"	0.186"	4" (102mm)
CP-13	0.203" - 0.219"	0.202"	4" (102mm)
CP-14	0.219" - 0.234"	0.218"	4" (102mm)
CP-15	0.234" - 0.250"	0.233"	4" (102mm)
CP-16	0.250" - 0.266"	0.249"	4" (102mm)
CP-17	0.266" - 0.281"	0.265"	4" (102mm)
CP-18	0.281" - 0.297"	0.280"	4" (102mm)
CP-19	0.297" - 0.313"	0.296"	4" (102mm)
CP-20	0.313" - 0.328"	0.315"	4" (102mm)
CP-21	0.328" - 0.343"	0.327"	4" (102mm)
CP-22	0.093" - 0.109"	0.092"	4" (102mm)

Part No.	Range	Shank	OAL
CP-23	0.359" - 0.375"	0.358"	4" (102mm)
CP-24	0.375" - 0.390"	0.374"	4-1/2" (114mm)
CP-25	0.390" - 0.406"	0.389"	4-1/2" (114mm)
CP-26	0.406" - 0.422"	0.405"	4-1/2" (114mm)
CP-27	0.422" - 0.437"	0.420"	4-1/2" (114mm)
CP-28	0.437" - 0.453"	0.436"	5-1/2" (140mm)
CP-29	0.453" - 0.468"	0.452"	5-1/2" (140mm)
CP-30	0.468" - 0.484"	0.467"	5-1/2" (140mm)
CP-31	0.484" - 0.500"	0.483"	5-1/2" (140mm)
CP-32	0.500" - 0.515"	0.499"	7" (178mm)
CP-33	0.515" - 0.531"	0.514"	7" (178mm)
CP-34	0.531" - 0.547"	0.530"	7" (178mm)
CP-35	0.547" - 0.563"	0.545"	7" (178mm)
CP-36	0.563" - 0.578"	0.562"	7.5" (190.5mm)
CP-37	0.578" - 0.594"	0.577"	7.5" (190.5mm)
CP-38	0.594" - 0.609"	0.593"	7.5" (190.5mm)
CP-39	0.609" - 0.625"	0.608"	7.5" (190.5mm)
CP-40	0.625" - 0.641"	0.624"	7.5" (190.5mm)

BURRAWAY® DEBURRING TOOLS

- Deburr both sides in one pass
- Set screw adjustment controls depth of cut and releases blade for replacement
- Type A tools (inch program; for hole sizes from .093 through .203 in.) and Type MA tools (metric program; sizes from 2 to 5mm) are a two-piece construction (arbor assembly and adapter). All Type A and MA arbor assemblies are interchangeable with their respective shank adapters.
- Type B tools (inch program; for hole sizes from .218 through .750 in.) and Type MB tools (metric program; sizes from 5.5 through 19mm) are a single-piece construction.

Other sizes are available upon request.



Part No.	Hole Size	Decimal	Pilot Length	Overall Length	Shank Type	Replacement Blade
BA 0938	3/32"	0.0938"	0.45"	3-3/8" (86mm)	Type A: 1/4" Shank	BA 0938-1
BA0109	7/64"	0.1094"	0.45"	3-3/8" (86mm)	Type A: 1/4" Shank	BA0109-1
BA0125	1/8"	0.1250"	0.45"	3-3/8" (86mm)	Type A: 1/4" Shank	BA0125-1
BA0156	5/32"	0.1562"	0.45"	3-3/8" (86mm)	Type A: 1/4" Shank	BA0156-1
BA0187	3/16"	0.1875"	0.72"	4-1/8" (105mm)	Type A: 1/4" Shank	BA0187-1
BA0218	7/32"	0.2188"	0.87"	4-1/2" (114mm))	Type B: Straight Shank	BA0218-1
BA0250	1/4"	0.2500"	0.87"	4-1/2" (114mm))	Type B: Straight Shank	BA0250-1
BA0281	9/32"	0.2812"	0.87"	4-1/2" (114mm))	Type B: Straight Shank	BA0281-1
BA0312	5/16"	0.3125"	0.96"	4-1/2" (114mm))	Type B: Straight Shank	BA0312-1
BA0343	11/32"	0.3438"	0.96"	4-1/2" (114mm))	Type B: Straight Shank	BA0343-1
BA0375	3/8"	0.3750"	1.00"	5" (127mm)	Type B: Straight Shank	BA0375-1
BA0406	13/32"	0.4062"	1.00"	5" (127mm)	Type B: Straight Shank	BA0406-1
BA0437	7/16"	0.4375"	1.09"	5-1/2" (140mm)	Type B: Straight Shank	BA0437-1
BA0468	15/32"	0.4688"	1.09"	5-1/2" (140mm)	Type B: Straight Shank	BA0468-1
BA0500	1/2"	0.5000"	1.09"	5-1/2" (140mm)	Type B: Straight Shank	BA0500-1
BA0531	17/32"	0.5312"	1.09"	5-1/2" (140mm)	Type B: Straight Shank	BA0531-1
BA0562	9/16"	0.5625"	1.31"	6-1/2" (165mm)	Type B: Straight Shank	BA0562-1
BA0593	19/32"	0.5938"	1.31"	6-1/2" (165mm)	Type B: Straight Shank	BA0593-1
BA0625	5/8"	0.6250"	1.31"	6-1/2" (165mm)	Type B: Straight Shank	BA0625-1
BA0656	21/32"	0.6562"	1.31"	6-1/2" (165mm)	Type B: Straight Shank	BA0656-1
BA0687	11/16"	0.6875"	1.31"	6-1/2" (165mm)	Type B: Straight Shank	BA0687-1
BA 0750	3/4"	0.7500"	1.31"	6-1/2" (165mm)	Type B: Straight Shank	BA 0750-1

BURRAWAY® 5 PIECE DEBURRING SET

Includes 1/8", 5/32", 3/16", 7/32", 1/4" tools and replacement blades in a fitted plastic case.



Part No.	Description
BA70938	5 Piece Deburring Set

UNIBIT STEP DRILLS

- Single-flute cutting edge for greater control through steps
- Hex shank prevents slipping in drill chuck
- New SpeedPoint tip penetrates faster than previous Unibits and prevents walking
- Ideal for drilling holes into thin materials such as stainless steel, copper, brass, aluminum, plastic and laminates



Part No.	Hole Sizes	No. of Holes	Mat. Thickn.
10231	1/8 - 1/2 in	13	1/8 in
10232	3/16 - 1/2 in	6	3/8 in
10233	1/4 - 3/4 in	9	1/8 in

COUNTERSINK 100° THREADED 1/4"-28

- Step drill that produces true, round holes
- Non-skid tip means no need for centre punches
- 3 flatted shanks prevent drill chuck slipping
- Made from durable heat-treated molybdenum steel



Part No.	Description	Shank Dia.
DB00525	Two Flute Countersink HSS	3/8"

CROSS HOLE COUNTERSINK 90° (general purpose)

- Most universal product suiting the widest range of materials.
- Optimum results in softer materials such as wood or plastic, however fluted countersinks are more suited for countersinking hard metals.



Part No.	Head Diameter	Shank Dia.
CSCH-10	5/16	6
CSCH-14	35/64	8
CSCH-21	27/32	10
CSCH-28	1 7/64	12
CSCH-35	1 3/8	15
CSCH-44	1 47/64	15

3 PIECE STEP DRILL SET

- Supplied in robust metal case
- Individual drills supplied in sealed plastic tube
- HSS Titanium Nitride coated
- Self-start points
- Automatically deburs holes



Part No.	Description	Size Range
STPSET3	3 Piece Step Drill Set	4-12, 4-20, 6-30mm

STEP DRILLS HSS TITANIUM NITRIDE COATED

- Self-start points
- Automatically deburs holes
- Individual drills supplied in sealed plastic tube



Part No.	No. of Steps	Size Range
9STM4-12	9 steps	4-12mm
9STM4-20	9 steps	4-20mm
9STM6-30	13 steps	6-30mm
9STI14-34	9 steps	1/4" - 3/4"

COUNTERSINK 100° CHATTERLESS



Part No.	Head Dia.	Flutes	Shank Dia.
498-1/4	1/4	6	1/4
498-5/16	5/16	6	1/4
498-3/8	3/8	6	1/4
498-1/2	1/2	6	1/4
498-5/8	5/8	6	1/2
498-3/4	3/4	6	1/2
498-1	1	6	1/2
498-1-1/4	1-1/4	6	3/4
498-1-1/2	1-1/2	6	3/4
498-1-3/4	1-3/4	6	1
498-2	2	6	1
498-2-1/2	2-1/2	6	1
498-3	3	6	1

COUNTERSINK 100°

High Speed Steel & Cobalt



Part No.	Head Dia.	Flutes	Shank Dia.
483-1/4	1/4	3	3/16
483-3/8	3/8	3	1/4
483-1/2	1/2	3	3/8
483-5/8	5/8	3	3/8
483-3/4	3/4	3	1/2
483-1	1	3	1/2
483-1-1/2	1-1/2	3	3/4
483-1-1/4	1-1/4	3	1/2
483-1/4x1/4	1/4	3	1/4
483-7/8x3/8	7/8	3	3/8
483-7/8x1/2	7/8	3	1/2

Carbide Burrs

CYLINDRICAL BURR 1/4” SHANK WITH END CUT



Part No.	OD x L	Style	OAL
CB44926	4 x 13mm	SB-11	55mm
CB44971	6 x 16mm	SB-14	55mm
CB45022	8 x 20mm	SB-1	60mm
CB45305	10 x 20mm	SB-3	60mm
CB45176	12 x 25mm	SB-5	65mm
CB45251	16 x 25mm	SB-6	65mm

CYLINDRICAL BURR 1/4” SHANK NO END CUT



Part No.	OD x L	Style	OAL
CB45435	4 x 3mm	SA-11	55mm
CB45480	6 x 16mm	SA-14	55mm
CB45541	8 x 20mm	SA-1	60mm
CB45879	10 x 20mm	SA-3	60mm
CB45695	12 x 25mm	SA-5	65mm
CB45800	16 x 25mm	SA-6	65mm

BALL SHAPED BURR 1/4” SHANK



Part No.	OD x L	Style	OAL
CB46791	4 x 3.6mm	SD-14	45mm
CB46821	6 x 5.4mm	SD-1	45mm
CB46883	8 x 7.0mm	SD-2	47mm
CB46951	10 x 9.0mm	SD-3	49mm
CB47033	12 x 10.8mm	SD-5	50mm
CB47132	16 x 14.3mm	SD-6	54mm
CB47224	20 x 18.0mm	SD-7	58mm

CONICAL BURR 1/4” SHANK WITH RADIUS END



Part No.	OD x L	Style	Radius	OAL
CB48481	10 x 20mm	SC-3	2.9mm	55mm
CB48634	12 x 30mm	SC-4	2.6mm	60mm
CB48719	16 x 30mm	SC-6	4.8mm	65mm

INVERTED TAPER BURR 1/4” SHANK



Part No.	OD x L	Style	OAL
CB40481	10 x 10mm	SN-2	60mm

OVAL BURR 1/4” SHANK



Part No.	OD x L	Style	Radius	OAL
CB48771	6 x 10mm	SE-1	2.8mm	50mm
CB48832	10 x 16mm	SE-3	4.0mm	56mm
CB48962	12 x 20mm	SE-5	5.0mm	60mm
CB49099	16 x 25mm	SE-6	6.5mm	65mm

POINTED TREE SHAPED BURR 1/4” SHANK



Part No.	OD x L	Style	OAL
CB47941	6 x 18mm	SG-1	55mm
CB48023	10 x 20mm	SG-3	60mm
CB48146	12 x 25mm	SG-5	65mm
CB48276	16 x 30mm	SG-6	70mm

TREE SHAPED BURR 1/4” SHANK WITH RADIUS END



Part No.	OD x L	Style	Radius	OAL
CB47606	6 x 18mm	SF-1	1.5mm	55mm
CB47705	10 x 20mm	SF-3	2.5mm	60mm
CB47781	12 x 25mm	SF-5	2.5mm	65mm
CB47873	16 x 30mm	SF-6	3.6mm	70mm

CONE POINTED BURR 1/4” SHANK



Part No.	OD x L	Angle	Style	OAL
CB47041	6 x 12mm	22°	SM-1	55mm
CB47023	6 x 20mm	14°	SM-2	60mm

CYLINDRICAL BURR 1/8” SHANK WITH END CUT



Part No.	OD x L	Style	OAL
CB49469	1.6 x 6mm	SA-41	40mm
CB49471	2.4 x 13mm	SA-42	40mm
CB49501	3.1 x 13mm	SA-43	40mm

POINTED CONE BURR 1/8” SHANK



Part No.	OD x L	Style	OAL
CB49853	3 .1x 11mm	SM-42	41mm

TAPER SHAPED BURR 1/8” SHANK



Part No.	OD x L	Style	OAL
CB49802	3.1 x 11mm	SL-42	41mm

INVERTED CONE SHAPED BURR 1/8” SHANK WITH END CUT



Part No.	OD x L	Style	OAL
CB49716	3.1 x 7mm	SN-42	37mm

BALL SHAPED BURR 1/8” SHANK



Part No.	OD x L	Style	OAL
CB49778	2.38mm	SD-41	33mm
CB49792	3.17mm	SD-42	34mm
CB49815	6.35mm	SD-51	35mm

CYLINDRICAL BURR 1/8” SHANK WITH RADIUS END



Part No.	OD x L	Style	OAL
CB49631	2.4 x 13mm	SC-41	40mm
CB49662	3.1 x 15mm	SC-42	43mm

TREE SHAPED BURR 1/8” SHANK



Part No.	OD x L	Style	OAL
CB49891	3.1 x 13mm	SF-42	37mm

POINTED TREE SHAPED BURR 1/8” SHANK



Part No.	OD x L	Style	OAL
CB49090	3.1 x 13mm	SG-43	37mm

12 PIECE BURR SET 1/4”

Contents:

- SA-1, SA-14, SC-1, SC-14, SD-1, SD-14, SE-1, SF-1, SG-1, SM-1, SM-2, SN-2



Part No.	Description
H79-028	12 Piece Burr Set 1/4” Shank

12 PIECE MINIATURE BURR SET 1/8” SHANK

Contents:

- SA-42, SA-43, SC-41, SC-42, SD-42, SE-41, SF-42, SG-43, SH-41, SL-42, SM-42, SN-42



Part No.	Description
H79-029	12 Piece Burr Set 1/8” Shank

OVAL BURR 1/8” SHANK



Part No.	OD x L	Style	OAL
CB49754	3.1 x 5mm	SE-41	40mm

FLAME SHAPED BURR 1/8” SHANK



Part No.	OD x L	Style	OAL
CB49704	3.1 x 6.35mm	SH-41	40mm

REVERSE SPOTFACE CUTTERS – HSS



Part No.	Cutter Dia.	Pilot Hole	Pilot Ref.
RC4051	1/4"	3/32"	PS-285-1
RC4052	1/4"	1/8"	PS-258-2
RC4053	5/16"	1/8"	PS-285-2
RC4054	5/16"	5/32"	PS-285-3
RC4055	3/8"	5/32"	PS-285-3
RC4056	3/8"	3/16"	PS-285-4
RC4057	7/16"	5/32"	PS-285-3
RC4058	7/16"	3/16"	PS-285-4

Part No.	Cutter Dia.	Pilot Hole	Pilot Ref.
RC4059	1/2"	3/16"	PS-285-4
RC4060	1/2"	1/4"	PS-285-5
RC4061	9/16"	3/16"	PS-285-4
RC4062	9/16"	1/4"	PS-285-5
RC4063	5/8"	1/4"	PS-285-5
RC4064	5/8"	5/16"	PS-285-6
RC4065	3/4"	5/16"	PS-285-7

14 PIECE REVERSE SPOTFACE CUTTER KIT

Contents:

- 9 Spotface Cutters: 3/32" x 1/4", 1/8" x 1/4", 5/16" x 1/8", 5/32" x 3/8", 5/32" x 7/16", 3/16" x 1/2", 1/4" x 1/2", 3/16" x 9/16", 1/4" x 5/8"
- 5 Pilots: 3/32", 1/8", 5/32", 3/16", 1/4"
- In polyethylene case





Part No.	Description
RC4080	14 Piece Reverse Spotface Cutter Kit

10 PIECE REVERSE COUNTERSINK CUTTER SET

Contents:

- 5 Spotface Cutters: 3/32" x 1/4", 1/8" x 1/4", 5/32" x 3/8", 3/16" x 1/2", 1/4" x 1/2"
- 5 Pilots: 3/32", 1/8", 5/32", 3/16", 1/4"
- In polyethylene case





Part No.	Description
RC4090	10 Piece Reverse Countersink Cutter Kit

REVERSE COUNTERSINK CUTTERS – 100° HSS

For machining the back of a hole with limited access



Part No.	Cutter Dia.	Pilot Hole	Pilot Ref.
RC4041	1/4"	3/32"	PS-285-1
RC4042	1/4"	1/8"	PS-258-2
RC4043	5/16"	1/8"	PS-285-2
RC4044	5/16"	5/32"	PS-285-3
RC4045	3/8"	5/32"	PS-285-3

Part No.	Cutter Dia.	Pilot Hole	Pilot Ref.
RC4046	3/8"	3/16"	PS-285-4
RC4047	7/16"	5/32"	PS-285-3
RC4048	7/16"	3/16"	PS-285-4
RC4049	1/2"	3/16"	PS-285-4
RC4050	1/2"	1/4"	PS-285-5

REVERSE SPOTFACER & REVERSE COUNTERSINK PILOTS

Pilot, Straight Shank for Back Countersinks or Reverse Counterbores (Back Spotface Cutters)



Part No.	Pilot Diameter	OAL
RP4061	3/32"	150mm
RP4062	1/8"	150mm
RP4063	5/32"	150mm
RP4064	3/16"	150mm
RP4065	1/4"	150mm
RP4066	5/16"	150mm
RP4067	3/8"	150mm
RP4068	1/2"	150mm

Due to the range and combinations of sizes, a min. order quantity (MOQ) may apply.

Solid carbide and carbide-tipped counter-bores, reverse countersinks, and reverse spotfacers are also available on request.

COUNTERBORES

High speed steel aircraft counterbores with 1/4" shanks to accept interchangeable pilots. Used to assure a flat seating surface for fasteners or mating parts that are 90° to the axis of the hole. A pilot is used to assure concentricity of the counterbore with the hole.

Counterbores are furnished without a "corner radius" unless specified.



Part No.	OD x L	OAL
CB390014	1/4"	3/32"
CB390516	5/16"	3/32"
CB390038	3/8"	3/32"
CB390716	7/16"	1/8"
CB392964	29/64"	1/8"
CB391532	15/32"	1/8"
CB490012	1/2"	1/8"
CB491732	17/32"	1/8"
CB490916	9/16"	1/8"

Part No.	OD x L	OAL
CB490058	5/8"	1/8"
CB 591116	11/16"	3/16"
CB 590034	3/4"	3/16"
CB 590078	7/8"	3/16"
CB 591316	13/16"	3/16"
CB 592932	29/32"	3/16"
CB 591516	15/16"	3/16"
CB 590001	1"	3/16"

COUNTERBORE PILOTS

- to be used with the Counterbores above



Part No.	Pilot Diameter	Shank Size
CB600040	#40	3/32"
CB690018	1/8"	3/32"
CB600030	#30	3/32"
CB600021	#21	3/32"
CB690316	3/16"	3/32"
CB600010	#10	3/32"
CB690014	1/4"	3/32"
CB700030	#30	1/8"
CB700021	#21	1/8"

Part No.	Pilot Diameter	Shank Size
CB790316	3/16"	1/8"
CB700010	#10	1/8"
CB790014	1/4"	1/8"
CB790516	5/16"	1/8"
CB890316	3/16"	3/16"
CB800010	#10	3/16"
CB890014	1/4"	3/16"
CB890516	5/16"	3/16"
CB890038	3/8"	3/16"

9 PIECE RIVET REMOVAL KIT

- Enables easy dilling out and removal of button head rivets
- Adjustable drill depth to avoid drilling beyond rivet head
- Includes guides and threaded drills to remove 3/32", 1/8", 5/32" and 3/16" rivets
- Replacement drills can be ordered using our long series threaded drills



Part No.	Description
RR3131	9 Piece Rivet Removal Kit

9 PIECE COUNTERSINK CAGE & CUTTER KIT

Contents:

- CC2001 adjustable microstop
- 8 Piloted Countersink Cutters: #40, 1/8", #30, 5/32", #21, 3/16", #10 & 1/4"



Part No.	Description
CCK1000	9 Piece Cage and Cutter Kit

COUNTERSINK CAGE – ADJUSTABLE

- Precise adjustment in increments of 0.01"
- Accepts 1/4 x 28 threaded countersinks



Part No.	Description	Mfr Ref No	Cutting Capacity	Rated At
CC1001	Microstop – Zephyr Brand	ZT680	5/8"	3 000 RPM
CC2001	Microstop – Economy	-	5/8"	3 000 RPM

COUNTERSINK CAGE – HEAVY DUTY

- Features ball bearings for ultra smooth operation and spinfdle support
- Precise adjustment in increments of 0.01"
- Accepts 1/4" x 28 threaded countersinks



Part No.	Description	Capacity	Rated At
CC1363	Made In USA	5/8"	10 000 RPM
CC2363	Economy	5/8"	10 000 RPM

COUNTERSINK CAGE – JUMBO

- Features dual bearings for upper and lower spindle support
- Accepts 3/8" x 24 threaded countersinks



Part No.	Description	Capacity	Rated At
CC1655	Jumbo Countersink Cage	1-1/4"	3 000 RPM

COUNTERSINK CAGE – "NO-MAR"

Includes a no-mar footpiece to reduce scratching and marking of surface.



Part No.	Description	Capacity	Max RPM
CC1002	Made in USA	5/8"	10 000
CC2002	Economy	5/8"	10 000

COUNTERSINK CAGE – SEAT TRACK

Diameter designed to fit inside most seat track cutouts.



Part No.	Description	Capacity	Max RPM
CC1361	Made in USA	1/2"	3 000
CC2361	Economy	1/2"	3 000

COUNTERSINK CAGE – EXTENDED FOOTPIECE

Designed to give extra reach, especially when working close to obstructions.



Part No.	Description	OAL	Capacity
CC1003	Extended Footpiece	6-1/4 in	5/8"

COUNTERSINK CAGE – MINIATURE TIGHT SPACE

Has a 1/4-28 threaded shank for use with a threaded drill motor in extremely tight areas.



Part No.	Description	OAL	Capacity
CC1362	Miniature Countersink Cage	1.65 in	1/2"

COUNTERSINK CUTTERS HSS 1/4"-28 WITH INTEGRAL PILOT – 3 FLUTE

- 3 Flute 100° angle countersink cutter with integral Pilots
- Used to make precision countersinks to accept Flush-head fasteners
- Cutters may be used in any micro-stop countersink cage that accepts 1/4" x 28 threaded shank cutters
- Typically used for countersinking holes for 1/4" or smaller Diameter fasteners
- Fits all 1/4" x 28 threaded adapters.
- Made of hardened high speed steel (HSS).

Carbide countersinks available to order.



Part No.	Description	Pilot Dia.	OAL Dia.
CS4933	Pilot Cutter	3/32"	7/16"
CS4918	Pilot Cutter	1/8"	7/16"
CS4953	Pilot Cutter	5/32"	7/16"
CS4931	Pilot Cutter	3/16"	7/16"
CS4973	Pilot Cutter	7/32"	7/16"
CS4914	Pilot Cutter	1/4"	7/16"
CS4040	Pilot Cutter	#40	7/16"
CS4030	Pilot Cutter	#30	7/16"
CS4021	Pilot Cutter	#21	7/16"
CS4010	Pilot Cutter	#10	7/16"
CS4706	Pilot Cutter	F	7/16"
CS3933	Pilot Cutter	3/32"	1/2"

Part No.	Description	Pilot Dia.	OAL Dia.
CS3918	Pilot Cutter	1/8"	1/2"
CS3953	Pilot Cutter	5/32"	1/2"
CS3931	Pilot Cutter	3/16"	1/2"
CS3973	Pilot Cutter	7/32"	1/2"
CS3914	Pilot Cutter	1/4"	1/2"
CS3040	Pilot Cutter	#40	1/2"
CS3030	Pilot Cutter	#30	1/2"
CS3021	Pilot Cutter	#21	1/2"
CS3019	Pilot Cutter	#19	1/2"
CS3012	Pilot Cutter	#12	1/2"
CS3010	Pilot Cutter	#10	1/2"
CS3706	Pilot Cutter	F	1/2"

JUMBO PILOT CUTTERS 3/8"-24 WITH INTEGRAL PILOT

2 Flute 100° HSS Pilot Cutters



Part No.	Description	Pilot Dia.	OAL Dia.
CS39516	Jumbo Pilot Cutter	7/8"	5/16"
CS39038	Jumbo Pilot Cutter	7/8"	3/8"
CS39716	Jumbo Pilot Cutter	7/8"	7/16"
CS39012	Jumbo Pilot Cutter	7/8"	1/2"

CARBIDE TIPPED COUNTERSINK WITH 3/32" PILOT BORE

- Featues a 3/32" through-hole to accept a pilot
- Pilots lock into place by means of a grub screw
- Two Flute, 1/2" Diameter, 100°



Part No.	Description
CS4405	Carbide Tipped Countersink Cutter

COUNTERSINK PILOT WITH 3/32" SHANK



Part No.	Description	Pilot Size
CS10040	Countersink Pilot	#40
CS19018	Countersink Pilot	1/8"
CS10030	Countersink Pilot	#30
CS10027	Countersink Pilot	#27
CS19532	Countersink Pilot	5/32"
CS10021	Countersink Pilot	#21
CS10020	Countersink Pilot	#20
CS10019	Countersink Pilot	#19
CS10016	Countersink Pilot	#16
CS10013	Countersink Pilot	#13
CS19316	Countersink Pilot	3/16"
CS10012	Countersink Pilot	#12
CS10011	Countersink Pilot	#11
CS10010	Countersink Pilot	#10
CS10008	Countersink Pilot	#8
CS17004	Countersink Pilot	D
CS19014	Countersink Pilot	1/4"

COUNTERSINKS FOR MS14218 & MS14219 RIVETS THREADED

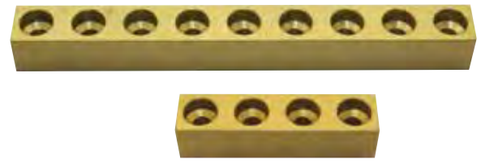
- Cuts a counterbore and countersink in the same hole – 120°
- Countersink to prepare holes for MS14218/9 rivets and Boeing BAC15/FV



Part No.	Accordance with	Pilot Size
CSB-3/32	MS14218/BACR15FV	3/32"
CSB-1/8	MS14218/BACR15FV	1/8"
CSB-5/32	MS14218/BACR15FV	5/32"
CSB-3/16	MS14218/BACR15FV	3/16"
CSB-7/32	MS14218/BACR15FV	7/32"
CSB-1/4	MS14218/BACR15FV	1/4"
CSB-9/32	MS14218/BACR15FV	9/32"
CSB-5/16	MS14218/BACR15FV	5/16"
CSBT-3/32	MS14219/BACR15	3/32"
CSBT-1/8	MS14219/BACR15	1/8"
CSBT-5/32	MS14219/BACR15	5/32"
CSBT-3/16	MS14219/BACR15	3/16"
CSBT-7/32	MS14219/BACR15	7/32"
CSBT-1/4	MS14219/BACR15	1/4"
CSBT-9/32	MS14219/BACR15	9/32"
CSBT-5/16	MS14219/BACR15	5/16"

HOLDER FOR COUNTERSINKS WITH 1/4"-28 THREADED HOLES

- Ideal for shadow tool boards
- Coveniently/safely store your countersinks (7/16" & 1/2") or other 1/4"-28 threaded tools



Part No.	Description	No. of Holes
HC 4454	Holder for Countersinks	4
HC 4459	Holder for Countersinks	9

1/4"-28 THREADED HOLDER

- A convenient way to store up to 30 threaded tools
- Made of HDPE.



Part No.	Description	Dimensions
TDH030	1/4"-28 Threaded Holder	

MULTI-FLUTE CARBIDE RIVET SHAVER BIT 1/4”-28

The 14 Flute design self centres and reduces chattering



Part No.	Description	Diameter
RS 1038	Multiflute Carbide Rivet Shaver Bit	3/8”

HOLLOW CUTTER – 1/4”-28 HI-SHEAR® OR HI-LOK® COLLARS

- These tools are designed to cut away swaged or threaded collars from fasteners so the fastener pin can be easily removed. They are ideal for removing Hi-Shear® rivets.
- The rotating cutter is applied to the collar until a sufficient amount of collar material has been removed. The pin is then easily removed with a punch. A microstop cage is typically used to prevent the cutter teeth from contacting and damaging the work surface.
- Four flute design for strength and increased tool life



Larger sizes available on request.

Part No.	Dash Size	Body Diameter (B)	Hole Diameter (H)	Fastener Size (in)
HC19018	-1	0.365	0.1240	1/8
HC19532	-2	0.365	0.1570	5/32
HC19316	-3	0.438	0.1875	3/16
HC19014	-4	0.500	0.2470	1/4
HC19516	-5	0.562	0.3100	5/16

CARBIDE TIPPED RIVET SHAVER BITS 1/4”-28

Rivet Shaver Cutters trim excess material from high rivets to complete flushness. They are precision-ground and carbide-tipped, ensuring less chatter and increasing the overall life of the cutter.



Part No.	Description	OAL Dia.
RS2514	Carbide Tipped Rivet Shaver Bits	1/4"
RS2516	Carbide Tipped Rivet Shaver Bits	5/16”
RS2038	Carbide Tipped Rivet Shaver Bits	3/8”
RS2716	Carbide Tipped Rivet Shaver Bits	7/16”
RS2012	Carbide Tipped Rivet Shaver Bits	1/2”
RS2916	Carbide Tipped Rivet Shaver Bits	9/16”
RS2058	Carbide Tipped Rivet Shaver Bits	5/8”
RS2534	Carbide Tipped Rivet Shaver Bits	3/4"

1/4”-28 THREADED HOLDER

- A convenient way to store up to 30 threaded tools
- Made of HDPE.



Part No.	Description	Dimensions
TDH030	1/4”-28 Threaded Holder	

Deburring Tools & Rivet Shavers

DESOUTTER DEBURRING TOOLS & RIVET SHAVER

*: If speed adjustment is needed, you can do it with flow regulator PN LC121737


A


C


E


B


D


F

Model	Part No.	Pic Ref	Free Speed	Maximum Cutter Dia.		Weight		Length		Air Flow		Air Inlet	Hose int. ø	
			rpm	mm	in	kg	lb	mm	in	l/s	cfm	in	mm	in
Hole Deburring Tools														
C27-LX-1450	615 176 115 0	A	6.4 (1/4")*	–	–	0.68	1.5	220.5	8.68	9.5	20	1/4	6	1/4
C27-LX300-T6-45 - BRB*	615 176 126 0	B	6.4 (1/4")*	–	–	0.82	1.81	291.5	11.48	8	17	1/4	6	1/4
C27-LX300-T6-90 - BRB*	615 176 128 0	C	6.4 (1/4")*	–	–	0.82	1.81	291.5	11.48	8	17	1/4	6	1/4
C27-LX400-T6-90 - BRB*	615 176 127 0	C	6.4 (1/4")*	–	–	0.82	1.81	291.5	11.48	8	17	1/4	6	1/4
C27-LX300-QR - BRB*	615 176 129 0	D	6.4 (1/4")*	–	–	0.58	1.27	187	7.36	8	17	1/4	6	1/4
Rivet Shaver														
RS450-T-18500 (1/4"UNF)	615 176 184 0	E	1/4"-28 UNF	14.3	9/16	1.2	2.64	216	8.5	14	30	1/4		
RS450-T-18500 (1/4"WHIT)	615 176 183 0	E	1/4"-26 WHIT	14.3	9/16	1.2	2.64	216	8.5	14	30	1/4		
RS500-P18500 (1/4"UNF)	205 148 129 4	F	1/4"-28 UNF	14.3	9/16	1.2	2.64	216	8.5	14	30	1/4	10	3/8
RS500-P18500 (1/4"WHIT)	205 148 130 4	F	1/4"-26 WHIT	14.3	9/16	1.2	2.64	216	8.5	14	30	1/4	10	3/8

DESOUTTER RIVET SHAVER – PISTOL

- Maximum cutter dia.: 9/16 in
- Length: 7.99 in
- Weight: 2.4 lb
- Air Flow: 19.7 cfm
- Air Inlet: 1/4 NPT
- Air Hose Bore: 3/8 in
- Sound Level: 78 dB(A)
- Vibration Level: <2.5 m/s²



Part No.	Description	RPM	Model Number
D156-P-20000	Rivet Shaver Pistol Grip	20,000	205 146 600 4

DESOUTTER RIVET SHAVER – STRAIGHT

- Maximum cutter dia.: 9/16 in
- Length: 9.13 in
- Weight: 2.2 lbs
- Air Flow: 19.7 cfm
- Air Inlet: 1/4 NPT
- Air Hose Bore: 3/8 in
- Sound Level: 77 dB(A)
- Vibration Level: <2.5 m/s²



Part No.	Description	RPM	Model Number
D156-S-20000	Rivet Shaver Straight	20,000	1275194

HENCHMAN 14 PIECE RIVET SHAVER KIT

Contents:

- 0.9 HP 21,000 RPM Rivet Shaver
- 6 cutters and skirt sets: 5/16", 3/8", 7/16", 1/2", 9/16", 5/8"
- Supplied with carrycase fitted with foam insert



Part No.	Description	RPM
H49-006	14 Piece Rivet Shaver Kit	21,000

17 PIECE RIVET SHAVER KIT

Contents:

- 1900RS Rivet Shaver
- 7 cutters and skirt sets: 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4"
- Removable Cutter Box
- Foam fitted Case



Part No.	Description
53-1900RS	17 Piece Rivet Shaver Kit

DOTCO® RIVET SHAVER – SMALL HANDLE PISTOL GRIP

- Ergonomic Design, Rear Exhaust
- Easliy adjustable positive lock
- Spring loaded nosepiece and stabilizer
- Cutter Adjustment: 0.00025 in
- Length: 8-1/4 in (210mm)
- Weight: 2.3 lbs (1.0 kg)
- HP: 0.4 (0.30 kW)



Part No.	Description	Capacity	RPM
14CFS60-98	Rivet Shaver Pistol Grip	1/2 in	29,000

DOTCO® is a registered trademark of Cooper Industries

SIOUX™ RIVET SHAVERS

- Ergonomic moulded handle for comfortable use
- Accepts standard 1/4-28 rivet shaver tips
- Spring loaded removable stabilizer
- Power: 1 Hp
- Uses 1/4"-28 Threaded Bits
- Made in USA



Part No.	Description	Capacity	RPM	OAL
SRS10P21-8	Rivet Shaver Pistol Grip	1/2 in	21,000	8 in (205mm)
SRS10S21-8	Rivet Shaver Lever Grip	1/2 in	21,000	10 in (255mm)

SIOUX™ is a registered trademark of Sioux Tools, Inc.

Desoutter Routers

DESOUTTER ROUTER 0.5HP

375 Watts (0.5 hp) - 20000 to 40000 rpm CNOMO type collet

Caution: comply with the speed recommended by component and abrasive manufacturers



Model No.	Free Speed	Power		Air Consumption at Free Speed		Air Consumption at Max Speed		Part No. CNOMO Collet (-7)	Part No. Series 200 Collet (-9)		Routing Kit Machined	Routing Kit Blank
	rpm	W	hp	l/s	cfm	l/s	cfm					
375 W (0.5 hp) – CNOMO TYPE COLLET											615 396 069 0	615 396 070 0
KC340-7	40 000	375	0.5	7.5	16.0	10.0	21	615 170 032 0	-	+		
KC331-7	31 000	375	0.5	4.5	9.5	9.5	20	615 170 031 0	-	+		
KC325-7	25 000	375	0.5	3.5	7.5	9.5	20	615 170 030 0	-	+		
KC320-7	20 000	220	0.3	2.5	5.0	8.0	17	615 170 029 0	-	+		

DESOUTTER ROUTER 0.8 & 1.21 HP

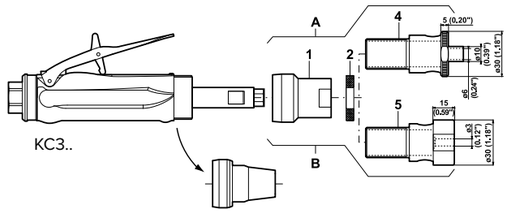
600 & 900 Watts (0.8 & 1.21 hp) - 12000 to 28000 rpm CNOMO type or Serie 200 Erickson collet

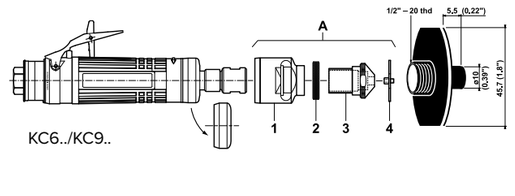
Caution: comply with the speed recommended by component and abrasive manufacturers



Model No.	Free Speed	Power		Air Consumption at Free Speed		Air Consumption at Max Speed		Part No. CNOMO Collet (-7)	Part No. SERIE 200 Collet (-9)		Routing Kit Machined	Routing Kit Blank
	rpm	W	hp	l/s	cfm	l/s	cfm					
600 & 900 W (0.8 & 1.21 hp) - CNOMO OR SERIE 200 COLLET											615 396 289 0	
KC628-	28 000	600	0.80	7.5	16.0	10.0	21	615 170 126 0	615 170 158 0	+		
KC624-	24 000	600	0.80	4.5	9.5	9.5	20	615 170 125 0	615 170 159 0	+		
KC922-	22 000	900	1.21	3.5	7.5	9.5	20	615 170 130 0	615 170 160 0	+		
KC619-	19 000	600	0.80	2.5	5.0	8.0	17	615 170 124 0	615 170 161 0	+		
KC918-	18 000	900	1.21	2.5	5.0	8.0	17	615 170 129 0	615 170 162 0	+		
KC615-	15 000	600	0.80	2.5	5.0	8.0	17	615 170 123 0	615 170 163 0	+		
KC915-	15 000	900	1.21	2.5	5.0	8.0	17	615 170 128 0	615 170 164 0	+		
KC912-	12 000	900	1.21	2.5	5.0	8.0	17	615 170 127 0	615 170 165 0	+		

To order a complete, standard Router tool use the Model KC624-9RT (24000 rpm) Part No. 615 170 159 0
If you need a specific speed or a higher power:
Select the motor, the speed of your choice below then add the routing kit.
For example: Tool with Series 200 collet -900 W - 22000 rpm (KC922-9) + routing kit
Order 615 170 160 0 + 615 396 289 0





OPTIONAL ACCESSORIES

615 396 069 0: Machined routing kit for burr, max. ø 6.4mm (1/4")

615 396 070 0: Blank routing kit - adapt blank to fit application

	Description	KC3..	KC6../KC9..
A	Machined routing kit	615 396 069 0	615 396 289 0
B	Blank routing kit (Item 1, 2, 5)	615 396 070 0	-
1	Flange	615 595 231 0	615 595 245 0
2	Adjusting nut	615 607 140 0	615 607 145 0
•	Circlip	-	615 687 056 0
•	Bearing	-	615 758 127 0
3	Router nose (including; circlips & bearing)	-	615 542 132 2
4	Machined routing guide	615 542 125 0	615 542 131 0
5	Blank routing guide	615 542 125 2	-



SIOUX™ 3 INCH NOSE ROUTER



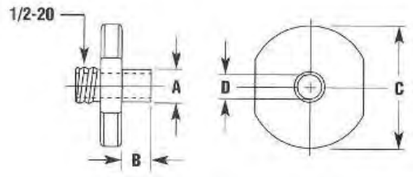
Designed with a focus on maximum operator comfort and productivity. Features include a heavy-duty three piece double tapered collet and a powerful 1 horse power motor - offering speed, power, and extreme accuracy. The countoured throttle lever with safety lock makes one handed operation effortless and the ergonomic composite handle with textured soft grip makes handling these tools truly comfortable.

- Weight 2.06 lbs
- Full 1 HP motor.
- Designed for use with our wide assortment of template guides – sold separately.

Part No.	Description	RPM	Length	Collet
SRT10S25N	Router	25,000	229mm / 9 in	1/4"

TEMPLATE GUIDES

1/2-20" threads attach directly to model SRT10S25N router



Part No.	A -Pilot OD	B -Pilot Length	C - Flange OD	D -Pilot ID
TP 6612	3/8"	1/4"	3/4"	9/32"
TP 6614	3/8"	3/8"	3/4"	9/32"
TP 6616	3/8"	1/2"	3/4"	9/32"
TP 6622	3/8"	1/8"	1-1/2"	9/32"
TP 6624	3/8"	1/4"	1-1/2"	9/32"
TP 6626	3/8"	3/8"	1-1/2"	9/32"
TP 6640	7/16"	1/4"	3/4"	21/64"
TP 6642	7/16"	3/8"	3/4"	21/64"
TP 6644	7/16"	1/8"	1-1/2"	21/64"
TP 6648	7/16"	1/4"	1-1/2"	21/64"
TP 6650	7/16"	3/8"	1-1/2"	21/64"
TP 6652	7/16"	1/2"	1-1/2"	21/64"
TP 6662	1/2"	1/4"	1-1/2"	11/32"
TP 6664	1/2"	3/8"	1-1/2"	11/32"
TP 6666	1/2"	1/2"	1-1/2"	11/32"
TP 6672	1/2"	1/2"	2-1/2"	11/32"

SIOUX™ TEMPLATE BASE ROUTER

- Designed for use as is without template guides
- Lockoff Lever Throttle, Front Exhaust, Interchangeable Base, Built-in Speed Control
- Hose Size: 3/8" (10 mm)
- Performance rated @ 90 psig (6.2 bar) air pressure
- Weight: 2.6 lb/1.15 kg
- Height: 8.3 in./210 lb
- Maximum Air Consumption: 30 cfm/14 l/s
- Sound Level: 78 dB(A)
- Power: 1 hp (0.75 kW)
- Country of Origin: USA



Part No.	Description	RPM	Length	Collet
SRT10S25B	Router	25,000	229mm	1/4"

AIRCRAFT TAPER ROUTER

Pin routers are used for "side cutting" on aluminium, plexiglass and other many other materials



Part No.	Description	Rivet Size
TR 19332	Taper Router	3/32"
TR 19018	Taper Router	1/8"
TR 19316	Taper Router	3/16"
TR 19014	Taper Router	1/4"

SIOUX™ is a registered trademark of Sioux Tools, Inc.

Composite Cutting Tools & Related

Henchman Products works closely with key cutting tool manufacturers in the USA keeping abreast with the continual advancements and use of new materials within the Aerospace Industry over recent years. More advanced tools are available through Henchman to machine complex materials including composites, carbon fibre, titanium, aluminium with higher silicon content and stacked material combinations.

Many of our standard composite tools supplied are produced in carbide material. Our PCD Tipped Diamond tools are produced to the most stringent controls within the industry, ensuring we can provide our Military and Commercial Aerospace customers with some of the most advance tooling available today in the industry.

DIAMOND CORE DRILL

- Standard with 40 grit electroplated diamond
- Wrap of diamond material is 1/8" from edge of cutting surface



Part No.	Description	Diameter
DD39012	Diamond Core Drill	1/2"
DD39916	Diamond Core Drill	9/16"
DD39058	Diamond Core Drill	5/8"
DD39034	Diamond Core Drill	3/4"
DD39078	Diamond Core Drill	7/8"
DD39001	Diamond Core Drill	1"

DIAMOND COATED DRILL BITS

Standard jobber Length drills in 100 grit diamond coating (other sizes available to order)



Part No.	Description	Diameter
DD49116	Diamond Core Drill	1/16"
DD49018	Diamond Core Drill	1/8"
DD49316	Diamond Core Drill	3/16"
DD49014	Diamond Drill Bits	1/4"
DD49038	Diamond Drill Bits	3/8"

MOUNTED DIAMOND SAW

- Electroplated 40 grit diamond with a wrap of 1/8" around edge of cutting surface
- Thicknesss: 3/32"



Part No.	Description	Diameter	Shank dia.
DS69012	Diamond Saw	1/2"	1/4"
DS69001	Diamond Saw	1"	1/4"
DS69002	Diamond Saw	2"	3/8"
DS69003	Diamond Saw	3"	1/2"

DIAMOND TAPERED HONE/BURR

- Standard with 150 grit diamond coating
- The sharp point permits precise material removal in a wide range of situations



Part No.	Description	Diameter
DH29014	Diamond Tapered Hone/Burr	1/4"

FLUTED DIAMOND ROUTERS

- Standard electroplated 40 grit diamond (other Sizes available to order)
- Length of cut: 25mm



Part No.	Description	Diameter	OAL
DR59018	Fluted Diamond Routers	1/8"	50mm
DR59014	Fluted Diamond Routers	1/4"	64mm

CARBIDE DAGGER DRILL

Our carbide dagger drills are designed to produce holes in composite materials without delamination around the hole or fraying of the composite material.



Part No.	Description	Decimal Size	Pilot Size
DGD0938	3/32	0.0938	4
DGD0980	#40	0.0980	4
DGD1250	1/8	0.1250	4
DGD1285	#30	0.1285	4
DGD1562	5/32	0.1562	4
DGD1590	#21	0.1590	4
DGD1610	#20	0.1610	4
DGD1875	3/16	0.1875	4
DGD1910	#11	0.1910	4
DGD1935	#10	0.1935	4
DGD1960	#9	0.1960	4
DGD1990	#8	0.1990	4
DGD2500	1/4	0.2500	4
DGD3125	5/16	0.3125	4
DGD3750	3/8	0.3750	4

SPECIAL ORDER COMPOSITE TOOLING – PLEASE ENQUIRE



Slow Spiral Router

This is an excellent router for composites. You can use it as a rough cutter or finisher (depending on type and thickness of material). The slower heliis reduces cutting force to prevent delamination.



Diamond Cut Router

This is a very versatile tool. Depending on your application and some customization, it can be a rough cut or finish router. For abrasive application it is manufactured with a CVD diamond coating for long tool life.



One-Shot Drill Reamer

This Drill Reamer has special geometries which easily cuts through composites to reduce break out and provide perfectly round holes.



Composite Drill Straight Flute

This straight flute hand drill with some special geometries easily cuts through composites and its low thrust allows for a smooth exit.



CLEAN-CUT BRAD POINT DRILLS

High speed steel Brad Point drill bits with significantly better edge holding properties than normal carbon steel. These bits have fine cutting edges and brad point tips to minimise tearout and provide a cut clean..



Compression Router

Advanced apposing geometries designed to compress layers, provide precision cutting action to eliminate delamination in composite materials. CVD diamond coating is gown onto the carbide substrate to provide long lasting cutting surface. This compression router was designed for the F-35 fighter jet.

OTHER COMPOSITE-SPECIFIC HAND TOOLS

(Many other tools suited to composite work can also be found in other related sections of the catalogue)

MATERIAL PRESSURE ROLLER



Part No.	Description
MR 1054	Steel Material Roller 2"

FIBREGLASS ROLLER

- Laminating roller for wet lay-up



Part No.	Description
FR 1121	Fiberglass Roller 1/2" x 3"

HONEYCOMB CORE KNIFE

- Blade: 4in. X 1¼in. (102mm x 32mm)
- Leather handle



Part No.	Description
HK 1039	Honeyconb Core Cutter Knifer

TAP HAMMER COMPOSITE

- Dimensions: 7.25 x 4 inch



Part No.	Description
H69-400	Tap Hammer Composite

WISS PINKING SHEARS

- Blade length: 4 1/2"
- Overall length: 8 1/4"



Part No.	Description
CB8	Wiss 8" Pinking Shears

WISS INDUSTRIAL SHEARS

- Blade length: 4"
- Overall length: 9 1/4"



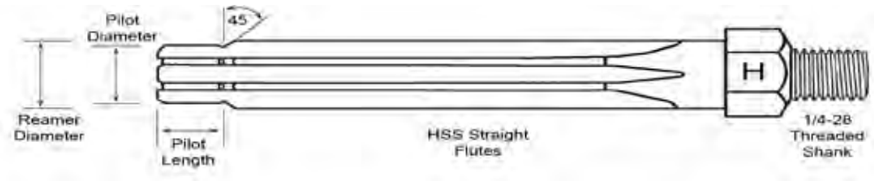
Part No.	Description
29N	Wiss 8" Tailors Shears

Aircraft Reamers

Henchman Products stocks a wide range of HSS piloted reamers in both threaded and straight shank type. We work closely with a select few discreet manufacturers who manufacture cutting tools according to aerospace standards and our laid down requirements.

Over the years Henchman has built up stock of an expansive range of off-the-shelf versions. Due to the unlimited possibilities of pilot size versus finished size, it is not possible to stock every permutation. The lists below represent popular sizes, but we do not guarantee to hold all on our shelf at all times, We will aim to provide the fastest response time and where no stock may have to impose a low MOQ at the time.

Henchman also offers complete Reamer kits, often customized kits as well as chucking reamers/kits.



HSS PILOTED REAMERS WITH THREADED SHANK

- Fitted with 1/4"-28 Threaded Shank adapter
- Six, straight flute HSS version



Part No.	Reamer Dia.	Piot Dia.
62-1285-0980	0.1285	0.0980
62-1530-1400	0.1530	0.1400
62-1590-1285	0.1590	0.1285
62-1610-1250	0.1610	0.1250
62-1680-1530	0.1680	0.1530
62-1840-1680	0.1840	0.1680
62-1850-1600	0.1850	0.1600
62-1860-1600	0.1860	0.1600
62-1985-1850	0.1985	0.1850
62-2000-1840	0.2000	0.1840
62-2140-1990	0.2140	0.1990
62-2150-2000	0.2150	0.2000
62-2310-2150	0.2310	0.2150
62-2460-2340	0.2460	0.2340
62-2470-2310	0.2470	0.2310
62-2500-2340	0.2500	0.2340
62-2570-2450	0.2570	0.2450
62-2610-2460	0.2610	0.2460
62-2620-2470	0.2620	0.2470
62-2760-2610	0.2760	0.2610
62-2780-2620	0.2780	0.2620
62-2930-2780	0.2930	0.2780
62-3085-2910	0.3085	0.2910
62-3090-2930	0.3090	0.2930
62-3125-2969	0.3125	0.2969
62-3235-3100	0.3235	0.3100

Part No.	Reamer Dia.	Piot Dia.
62-3250-3090	0.3250	0.3090
62-3390-3230	0.3390	0.3230
62-3400-3250	0.3400	0.3250
62-3560-3400	0.3560	0.3400
62-3710-3580	0.3710	0.3580
62-3720-3560	0.3720	0.3560
62-3750-3594	0.3750	0.3594
62-3860-3750	0.3860	0.3750
62-3870-3720	0.3870	0.3720
62-4015-3860	0.4015	0.3860
62-4030-3870	0.4030	0.3870
62-4180-4030	0.4180	0.4030
62-4335-4130	0.4335	0.4130
62-4340-4180	0.4340	0.4180
62-4375-4219	0.4375	0.4219
62-4495-4375	0.4495	0.4375
62-4500-4340	0.4500	0.4340
62-4650-4500	0.4650	0.4500
62-4688-4375	0.4688	0.4375
62-4810-4650	0.4810	0.4650
62-4960-4844	0.4960	0.4844
62-5000-4844	0.5000	0.4844
62-5120-5000	0.5120	0.5000
62-5270-5156	0.5270	0.5156
62-5290-5120	0.5290	0.5120

HSS CHUCKING REAMERS WITH STRAIGHT SHANK

High speed steel, straight shank, straight flute



Part No.	Reamer Dia.	Dec Eq.
60-0938	3/32"	0.0938
60-9800	#40	0.9800
60-1094	7/64"	0.1094
60-1250	1/8"	0.1250
60-1285	#30	0.1285
60-1406	9/64"	0.1406
60-1440	#27	0.1440
60-1562	5/32"	0.1562
60-1590	#21	0.1590
60-1610	#20	0.1610
60-1660	#19	0.1660
60-1719	11/64"	0.1719
60-1770	#16	0.1770
60-1800	#15	0.1800
60-1850	#13	0.1850
60-1875	3/16"	0.1875
60-1890	#12	0.1890
60-1910	#11	0.1910
60-9350	#10	0.9350
60-1960	#9	0.1960
60-1990	#8	0.1990
60-2010	#7	0.2010
60-2031	13/64'	0.2031
60-2040	#6	0.2040
60-2055	#5	0.2055
60-2130	#3	0.2130
60-2188	7/32"	0.2188
60-2210	#2	0.2210
60-2280	#1	0.2280

Part No.	Reamer Dia.	Dec Eq.
60-2344	15/64"	0.2344
60-2460	D	0.2460
60-2500	1/4"	0.2500
60-2570	F	0.2570
60-2610	G	0.2610
60-2656	17/64"	0.2656
60-2770	J	0.2770
60-2812	9/32"	0.2812
60-2969	19/64"	0.2969
60-3125	5/16"	0.3125
60-3230	P	0.3230
60-3281	21/64"	0.3281
60-3438	11/32"	0.3438
60-3594	23/64"	0.3594
60-3750	3/8"	0.3750
60-3906	25/64"	0.3906
60-4062	13/32"	0.4062
60-4219	27/64"	0.4219
60-4375	7/16"	0.4375
60-4531	29/64"	0.4531
60-4688	15/32"	0.4688
60-4844	31/64"	0.4844
60-5000	1/2"	0.5000
60-5312	17/32"	0.5312
60-5625	9/16"	0.5625
60-5938	19/32"	0.5938
60-6250	5/8"	0.6250
60-7500	3/4"	0.7500

CHUCKING REAMER SETS – STRAIGHT SHANK

- Straight chucking reamers in indexed metal boxes
- Available in HSS or Cobalt and supplied with straight shank/ straight Flute



Part No.	Description	Type
733-FRAC	Fractional 1/16" to 1/2" (29 Pcs)	HSS
1733-FRAC	Fractional 1/16" to 1/2" (29 Pcs)	Cobalt
733-1-60	#1 to #60 (60 Pcs)	HSS
1733-1-60	#1 to #60 (60 Pcs)	Cobalt
733-AZ	A to Z (26 Pcs)	HSS
1733-AZ	A to Z (26 Pcs)	Cobalt

HSS PILOTED REAMERS STRAIGHT SHANK



Part No.	Reamer Dia.	Piot Dia.
61-1250-1094	0.1250	0.1094
61-1265-1090	0.1265	0.1090
61-1285-0980	0.1285	0.0980
61-1406-1250	0.1406	0.1250
61-1530-1400	0.1530	0.1400
61-1540-1400	0.1540	0.1400
61-1560-1250	0.1560	0.1250
61-1560-1280	0.1560	0.1280
61-1562-1406	0.1562	0.1406
61-1590-1250	0.1590	0.1250
61-1590-1280	0.1590	0.1280
61-1590-1285	0.1590	0.1285
61-1600-1470	0.1600	0.1470
61-1600-1560	0.1600	0.1560
61-1602-1450	0.1602	0.1450
61-1610-1250	0.1610	0.1250
61-1610-1260	0.1610	0.1260
61-1610-1280	0.1610	0.1280
61-1610-1560	0.1610	0.1560
61-1610-1589	0.1610	0.1589
61-1618-1611	0.1618	0.1611
61-1625-1614	0.1625	0.1614
61-1630-1560	0.1630	0.1560
61-1650-1280	0.1650	0.1280
61-1650-1470	0.1650	0.1470
61-1719-1562	0.1719	0.1562
61-1750-1250	0.1750	0.1250
61-1790-1590	0.1790	0.1590
61-1810-1250	0.1810	0.1250
61-1820-1730	0.1820	0.1730
61-1830-1730	0.1830	0.1730
61-1840-1680	0.1840	0.1680
61-1840-1710	0.1840	0.1710
61-1850-1250	0.1850	0.1250
61-1850-1260	0.1850	0.1260
61-1850-1300	0.1850	0.1300
61-1850-1470	0.1850	0.1470
61-1850-1590	0.1850	0.1590
61-1850-1600	0.1850	0.1600
61-1850-1700	0.1850	0.1700
61-1852-1699	0.1852	0.1699
61-1860-1540	0.1860	0.1540
61-1860-1610	0.1860	0.1610
61-1860-1695	0.1860	0.1695
61-1860-1710	0.1860	0.1710
61-1865-1540	0.1865	0.1540
61-1870-1250	0.1870	0.1250
61-1870-1260	0.1870	0.1260
61-1870-1280	0.1870	0.1280
61-1870-1530	0.1870	0.1530
61-1870-1560	0.1870	0.1560
61-1870-1590	0.1870	0.1590
61-1870-1600	0.1870	0.1600
61-1870-1610	0.1870	0.1610
61-1870-1710	0.1870	0.1710
61-1870-1740	0.1870	0.1740
61-1875-1406	0.1875	0.1406
61-1875-1719	0.1875	0.1719
61-1890-1560	0.1890	0.1560
61-1890-1590	0.1890	0.1590
61-1890-1700	0.1890	0.1700
61-1895-1770	0.1895	0.1770
61-1900-1820	0.1900	0.1820

Part No.	Reamer Dia.	Piot Dia.
61-1910-1560	0.1910	0.1560
61-1910-1870	0.1910	0.1870
61-1920-1850	0.1920	0.1850
61-1930-1280	0.1930	0.1280
61-1930-1870	0.1930	0.1870
61-1960-1730	0.1960	0.1730
61-1960-1890	0.1960	0.1890
61-1970-1850	0.1970	0.1850
61-1980-1570	0.1980	0.1570
61-1980-1870	0.1980	0.1870
61-1985-1850	0.1985	0.1850
61-1990-1840	0.1990	0.1840
61-1990-1850	0.1990	0.1850
61-1990-1860	0.1990	0.1860
61-1990-1865	0.1990	0.1865
61-1990-1870	0.1990	0.1870
61-1990-1890	0.1990	0.1890
61-1990-1892	0.1990	0.1892
61-1990-1895	0.1990	0.1895
61-1990-1920	0.1990	0.1920
61-1995-1850	0.1995	0.1850
61-2000-1840	0.2000	0.1840
61-2000-1870	0.2000	0.1870
61-2000-1930	0.2000	0.1930
61-2010-1870	0.2010	0.1870
61-2010-1890	0.2010	0.1890
61-2020-1990	0.2020	0.1990
61-2026-1880	0.2026	0.1880
61-2026-1900	0.2026	0.1900
61-2031-1875	0.2031	0.1875
61-2035-1965	0.2035	0.1965
61-2040-1810	0.2040	0.1810
61-2049-1958	0.2049	0.1958
61-2090-1810	0.2090	0.1810
61-2090-1870	0.2090	0.1870
61-2130-1980	0.2130	0.1980
61-2130-1990	0.2130	0.1990
61-2130-2010	0.2130	0.2010
61-2140-1950	0.2140	0.1950
61-2140-1970	0.2140	0.1970
61-2140-1985	0.2140	0.1985
61-2140-1990	0.2140	0.1990
61-2140-2030	0.2140	0.2030
61-2147-1980	0.2147	0.1980
61-2150-1870	0.2150	0.1870
61-2150-1890	0.2150	0.1890
61-2150-1960	0.2150	0.1960
61-2150-1990	0.2150	0.1990
61-2150-2000	0.2150	0.2000
61-2155-1960	0.2155	0.1960
61-2155-1980	0.2155	0.1980
61-2158-2000	0.2158	0.2000
61-2160-1870	0.2160	0.1870
61-2160-1980	0.2160	0.1980
61-2160-1990	0.2160	0.1990
61-2165-2010	0.2165	0.2010
61-2180-1990	0.2180	0.1990
61-2186-2020	0.2186	0.2020
61-2188-1719	0.2188	0.1719
61-2188-1875	0.2188	0.1875
61-2188-2020	0.2188	0.2020
61-2188-2031	0.2188	0.2031
61-2190-2040	0.2190	0.2040
61-2280-2145	0.2280	0.2145
61-2283-1251	0.2283	0.1251
61-2300-2150	0.2300	0.2150
61-2310-2150	0.2310	0.2150
61-2310-2190	0.2310	0.2190
61-2314-2158	0.2314	0.2158
61-2340-1590	0.2340	0.1590
61-2340-1710	0.2340	0.1710
61-2340-1850	0.2340	0.1850

Part No.	Reamer Dia.	Piot Dia.
61-2340-1990	0.2340	0.1990
61-2340-2150	0.2340	0.2150
61-2340-2180	0.2340	0.2180
61-2344-1875	0.2344	0.1875
61-2344-2188	0.2344	0.2188
61-2362-2283	0.2362	0.2283
61-2440-1990	0.2440	0.1990
61-2440-2362	0.2440	0.2362
61-2450-1870	0.2450	0.1870
61-2450-1990	0.2450	0.1990
61-2460-1870	0.2460	0.1870
61-2460-2280	0.2460	0.2280
61-2460-2330	0.2460	0.2330
61-2460-2340	0.2460	0.2340
61-2460-2410	0.2460	0.2410
61-2460-2420	0.2460	0.2420
61-2462-2324	0.2462	0.2324
61-2470-1860	0.2470	0.1860
61-2470-1870	0.2470	0.1870
61-2470-1990	0.2470	0.1990
61-2470-2150	0.2470	0.2150
61-2470-2180	0.2470	0.2180
61-2470-2188	0.2470	0.2188
61-2470-2310	0.2470	0.2310
61-2470-2314	0.2470	0.2314
61-2470-2330	0.2470	0.2330
61-2470-2340	0.2470	0.2340
61-2470-2420	0.2470	0.2420
61-2480-2130	0.2480	0.2130
61-2480-2160	0.2480	0.2160
61-2480-2180	0.2480	0.2180
61-2485-2440	0.2485	0.2440
61-2495-2230	0.2495	0.2230
61-2495-2330	0.2495	0.2330
61-2496-2440	0.2496	0.2440
61-2500-1870	0.2500	0.1870
61-2500-1910	0.2500	0.1910
61-2500-1930	0.2500	0.1930
61-2500-2031	0.2500	0.2031
61-2500-2188	0.2500	0.2188
61-2500-2230	0.2500	0.2230
61-2500-2340	0.2500	0.2340
61-2500-2344	0.2500	0.2344
61-2500-2390	0.2500	0.2390
61-2500-2460	0.2500	0.2460
61-2500-2470	0.2500	0.2470
61-2502-2324	0.2502	0.2324
61-2510-2170	0.2510	0.2170
61-2540-2500	0.2540	0.2500
61-2570-2450	0.2570	0.2450
61-2585-2450	0.2585	0.2450
61-2600-2310	0.2600	0.2310
61-2602-2440	0.2602	0.2440
61-2610-2170	0.2610	0.2170
61-2610-2440	0.2610	0.2440
61-2610-2450	0.2610	0.2450
61-2610-2460	0.2610	0.2460
61-2610-2470	0.2610	0.2470
61-2610-2500	0.2610	0.2500
61-2618-2440	0.2618	0.2440
61-2620-2460	0.2620	0.2460
61-2620-2470	0.2620	0.2470
61-2620-2500	0.2620	0.2500
61-2621-2470	0.2621	0.2470
61-2630-2344	0.2630	0.2344
61-2630-2460	0.2630	0.2460
61-2630-2470	0.2630	0.2470
61-2630-2500	0.2630	0.2500
61-2635-2500	0.2635	0.2500
61-2650-2470	0.2650	0.2470
61-2650-2620	0.2650	0.2620
61-2651-2480	0.2651	0.2480



Part No.	Reamer Dia.	Piot Dia.
61-2651-2500	0.2651	0.2500
61-2656-2344	0.2656	0.2344
61-2656-2500	0.2656	0.2500
61-2660-2500	0.2660	0.2500
61-2680-2570	0.2680	0.2570
61-2750-2450	0.2750	0.2450
61-2760-2550	0.2760	0.2550
61-2760-2610	0.2760	0.2610
61-2760-2630	0.2760	0.2630
61-2760-2650	0.2760	0.2650
61-2770-2650	0.2770	0.2650
61-2780-2500	0.2780	0.2500
61-2780-2620	0.2780	0.2620
61-2780-2630	0.2780	0.2630
61-2780-2640	0.2780	0.2640
61-2780-2650	0.2780	0.2650
61-2782-2621	0.2782	0.2621
61-2790-2500	0.2790	0.2500
61-2790-2610	0.2790	0.2610
61-2790-2635	0.2790	0.2635
61-2807-2640	0.2807	0.2640
61-2810-2460	0.2810	0.2460
61-2810-2500	0.2810	0.2500
61-2810-2656	0.2810	0.2656
61-2810-2780	0.2810	0.2780
61-2812-2500	0.2812	0.2500
61-2812-2656	0.2812	0.2656
61-2820-2500	0.2820	0.2500
61-2820-2640	0.2820	0.2640
61-2930-2780	0.2930	0.2780
61-2930-2810	0.2930	0.2810
61-2939-2782	0.2939	0.2782
61-2940-2790	0.2940	0.2790
61-2960-1870	0.2960	0.1870
61-2960-2340	0.2960	0.2340
61-2960-2770	0.2960	0.2770
61-2960-2810	0.2960	0.2810
61-2969-2485	0.2969	0.2485
61-2969-2500	0.2969	0.2500
61-2969-2780	0.2969	0.2780
61-2969-2812	0.2969	0.2812
61-3080-2760	0.3080	0.2760
61-3080-2780	0.3080	0.2780
61-3085-2910	0.3085	0.2910
61-3090-2460	0.3090	0.2460
61-3090-2470	0.3090	0.2470
61-3090-2500	0.3090	0.2500
61-3090-2670	0.3090	0.2670
61-3090-2790	0.3090	0.2790
61-3090-2930	0.3090	0.2930
61-3090-2939	0.3090	0.2939
61-3090-2950	0.3090	0.2950
61-3090-2960	0.3090	0.2960
61-3095-2470	0.3095	0.2470
61-3100-3020	0.3100	0.3020
61-3110-2810	0.3110	0.2810
61-3110-2952	0.3110	0.2952
61-3110-3070	0.3110	0.3070
61-3120-2440	0.3120	0.2440
61-3120-2500	0.3120	0.2500
61-3120-2800	0.3120	0.2800
61-3120-2950	0.3120	0.2950
61-3120-3080	0.3120	0.3080
61-3122-3070	0.3122	0.3070
61-3122-3071	0.3122	0.3071
61-3125-2500	0.3125	0.2500
61-3125-2812	0.3125	0.2812
61-3125-2969	0.3125	0.2969
61-3125-2970	0.3125	0.2970
61-3149-3122	0.3149	0.3122
61-3155-3125	0.3155	0.3125
61-3200-3060	0.3200	0.3060

Part No.	Reamer Dia.	Piot Dia.
61-3228-3149	0.3228	0.3149
61-3230-3080	0.3230	0.3080
61-3235-3100	0.3235	0.3100
61-3240-3090	0.3240	0.3090
61-3240-3120	0.3240	0.3120
61-3250-3080	0.3250	0.3080
61-3250-3090	0.3250	0.3090
61-3250-3120	0.3250	0.3120
61-3251-3090	0.3251	0.3090
61-3251-3095	0.3251	0.3095
61-3260-3120	0.3260	0.3120
61-3271-3130	0.3271	0.3130
61-3276-3110	0.3276	0.3110
61-3280-3125	0.3280	0.3125
61-3281-3125	0.3281	0.3125
61-3350-3150	0.3350	0.3150
61-3380-3230	0.3380	0.3230
61-3380-3250	0.3380	0.3250
61-3390-3230	0.3390	0.3230
61-3400-3120	0.3400	0.3120
61-3400-3240	0.3400	0.3240
61-3400-3250	0.3400	0.3250
61-3407-3251	0.3407	0.3251
61-3410-3120	0.3410	0.3120
61-3410-3240	0.3410	0.3240
61-3420-3250	0.3420	0.3250
61-3420-3280	0.3420	0.3280
61-3432-3260	0.3432	0.3260
61-3438-3125	0.3438	0.3125
61-3438-3280	0.3438	0.3280
61-3438-3281	0.3438	0.3281
61-3500-3300	0.3500	0.3300
61-3560-3400	0.3560	0.3400
61-3560-3440	0.3560	0.3440
61-3560-3450	0.3560	0.3450
61-3590-3050	0.3590	0.3050
61-3590-3400	0.3590	0.3400
61-3590-3420	0.3590	0.3420
61-3594-3125	0.3594	0.3125
61-3594-3436	0.3594	0.3436
61-3594-3438	0.3594	0.3438
61-3600-3200	0.3600	0.3200
61-3600-3370	0.3600	0.3370
61-3710-3090	0.3710	0.3090
61-3710-3580	0.3710	0.3580
61-3710-3590	0.3710	0.3590
61-3710-3690	0.3710	0.3690
61-3720-3120	0.3720	0.3120
61-3720-3560	0.3720	0.3560
61-3720-3590	0.3720	0.3590
61-3720-3680	0.3720	0.3680
61-3730-3400	0.3730	0.3400
61-3745-3580	0.3745	0.3580
61-3750-2500	0.3750	0.2500
61-3750-3125	0.3750	0.3125
61-3750-3438	0.3750	0.3438
61-3750-3440	0.3750	0.3440
61-3750-3494	0.3750	0.3494
61-3750-3500	0.3750	0.3500
61-3750-3594	0.3750	0.3594
61-3750-3600	0.3750	0.3600
61-3850-3120	0.3850	0.3120
61-3856-3700	0.3856	0.3700
61-3860-3120	0.3860	0.3120
61-3860-3730	0.3860	0.3730
61-3860-3750	0.3860	0.3750
61-3870-3720	0.3870	0.3720
61-3870-3730	0.3870	0.3730
61-3906-3750	0.3906	0.3750
61-3910-3750	0.3910	0.3750
61-3917-3080	0.3917	0.3080
61-3930-3850	0.3930	0.3850



Part No.	Reamer Dia.	Piot Dia.
61-4000-3600	0.4000	0.3600
61-4015-3860	0.4015	0.3860
61-4020-3880	0.4020	0.3880
61-4030-3750	0.4030	0.3750
61-4030-3870	0.4030	0.3870
61-4057-3890	0.4057	0.3890
61-4060-3910	0.4060	0.3910
61-4062-3750	0.4062	0.3750
61-4062-3906	0.4062	0.3906
61-4180-4030	0.4180	0.4030
61-4210-4050	0.4210	0.4050
61-4219-4062	0.4219	0.4062
61-4220-4060	0.4220	0.4060
61-4330-4210	0.4330	0.4210
61-4335-4130	0.4335	0.4130
61-4340-4180	0.4340	0.4180
61-4340-4220	0.4340	0.4220
61-4370-3750	0.4370	0.3750
61-4370-4200	0.4370	0.4200
61-4375-4050	0.4375	0.4050
61-4375-4062	0.4375	0.4062
61-4375-4219	0.4375	0.4219
61-4380-4340	0.4380	0.4340
61-4480-4370	0.4480	0.4370
61-4490-4350	0.4490	0.4350
61-4495-4375	0.4495	0.4375
61-4500-4340	0.4500	0.4340
61-4531-4375	0.4531	0.4375
61-4540-4500	0.4540	0.4500
61-4560-4500	0.4560	0.4500
61-4640-4510	0.4640	0.4510
61-4650-4500	0.4650	0.4500
61-4682-4520	0.4682	0.4520
61-4688-4531	0.4688	0.4531
61-4690-4650	0.4690	0.4650
61-4810-4650	0.4810	0.4650
61-4844-4688	0.4844	0.4688
61-4850-3700	0.4850	0.3700
61-4960-4840	0.4960	0.4840
61-4960-4844	0.4960	0.4844
61-4970-4375	0.4970	0.4375
61-4970-4810	0.4970	0.4810
61-4980-4670	0.4980	0.4670
61-4987-4830	0.4987	0.4830
61-5000-4370	0.5000	0.4370
61-5000-4688	0.5000	0.4688
61-5000-4690	0.5000	0.4690
61-5000-4844	0.5000	0.4844
61-5120-4970	0.5120	0.4970
61-5120-5000	0.5120	0.5000
61-5140-4980	0.5140	0.4980
61-5156-5000	0.5156	0.5000
61-5270-5156	0.5270	0.5156
61-5290-5120	0.5290	0.5120
61-5430-5290	0.5430	0.5290

Due to the range and combinations of sizes, a min. order quantity may apply.

PILOTED REAMER SETS – 1/64” INCREMENTS

- Set out in CNC-cut high-density foam trays which are rigidized to facilitate lifting in and out of case
- Foam fitted into rugged, waterproof Explorer Case

Contents RK4419B:

Size	Flute Length	OAL
.5000/.4844	52mm	202mm
.5156/.5000	52mm	202mm
.5312/.5156	52mm	202mm
.5468/.5312	52mm	202mm
.5625/.5468	52mm	202mm
.5781/.5625	52mm	202mm
.5938/.5781	59mm	229mm
.6094/.5938	59mm	229mm
.6250/.6094	59mm	229mm
.6406/.6250	59mm	229mm
.6562/.6406	59mm	229mm
.6718/.6562	59mm	229mm
.6875/.6718	59mm	229mm
.7031/.6875	59mm	229mm
.7188/.7031	59mm	229mm
.7344/.7188	66mm	242mm
.7500/.7344	66mm	242mm
.7656/.7500	66mm	242mm
.7812/.7656	66mm	242mm
.7969/.7812	66mm	242mm
.8125/.7969	66mm	242mm
.8281/.8125	66mm	242mm
.8438/.8281	66mm	255mm
.8594/.8438	69mm	255mm
.8750/.8594	69mm	255mm
.8906/.8750	69mm	255mm
.9062/.8906	69mm	255mm
.9219/.0962	69mm	255mm
.9375/.9219	69mm	255mm
.9531/.9375	69mm	255mm
.9688/.9531	69mm	255mm
.9843/.9688	73mm	268mm
1.000/.9844	73mm	268mm

Contents RK3317B:

Size	Flute Length	OAL
.1250/.1094	24mm	91mm
.1562/.1406	27mm	105mm
.1406/.1250	27mm	105mm
.1719/.1562	30mm	116mm
.1875/.1719	30mm	115mm
.2188/.2031	33mm	127mm
.2031/.1875	33mm	127mm
.2344/.2188	38mm	152mm
.2656/.2500	38mm	152mm
.2500/.2344	38mm	152mm
.2812/.2656	38mm	152mm
.3125/.2969	38mm	152mm
.2969/.2812	38mm	152mm
.3438/.3281	38mm	152mm
.3281/.3125	38mm	152mm
.3594/.3438	45mm	177mm
.3750/.3594	45mm	177mm
.3906/.3750	45mm	177mm
.4062/.3906	45mm	177mm
.4531/.4375	45mm	178mm
.4375/.4219	45mm	178mm
.4219/.4062	45mm	178mm
.4688/.4531	45mm	178mm
.4844/.4688	51mm	203mm



RK3317B

Part No.	Description	Pieces	Case Dimension (Ext)
RK3317B	Reamer Set 1/8” - 1/2” (nominal) - small sizes	24	305 x 270 x 144mm
RK4419B	Reamer Set 1/2” - 1” (nominal) - large sizes	33	474 x 415 x 214mm

Holesaws & Saws

HOLESAWS – BI-METAL

- 4/6 variable tooth
- 35mm (1-3/8”) cutting depth
- Unique variable tooth geometry for consistent cutting ability in a wide range of materials
- Manufactured to strict Alpha specifications to suit demainding Australian conditions
- 8% cobalt Bi-metal gives ultimate performance and superior welding technology prevents tooth strippage
- 38mm cutting depth



Part No.	Diameter	Imperial Equivalent
HSV14	14 mm	9/16”
HSV16	16 mm	5/8”
HSV17	17 mm	11/16”
HSV19	19 mm	3/4”
HSV20	20 mm	-
HSV21	21 mm	13/16”
HSV22	22 mm	7/8”
HSV24	24 mm	15/16”
HSV25	25 mm	1”
HSV27	27 mm	1-1/16”
HSV29	29 mm	1-1/8”
HSV30	30 mm	1-3/16”
HSV32	32 mm	1-1/4”
HSV33	33 mm	1-5/16”
HSV35	35 mm	1-3/8”
HSV37	37 mm	1-7/16”
HSV38	38 mm	1-1/2”
HSV40	40 mm	1-9/16”
HSV41	41 mm	1-5/8”
HSV43	43 mm	1-11/16”
HSV44	44 mm	1-3/4”
HSV45	45 mm	1-25/32”
HSV46	46 mm	1-13/16”
HSV48	48 mm	1-7/8”
HSV50	50 mm	1-31/32”
HSV51	51 mm	2”
HSV52	52 mm	2-1/16”
HSV54	54 mm	2-1/8”
HSV55	55 mm	2-5/32”

Part No.	Diameter	Imperial Equivalent
HSV57	57 mm	2-1/4”
HSV59	59 mm	2-5/16”
HSV60	60 mm	2-3/8”
HSV64	64 mm	2-1/2”
HSV65	65 mm	2-9/16”
HSV67	67 mm	2-5/8”
HSV68	68 mm	2-21/32
HSV70	70 mm	2-3/4”
HSV73	73 mm	2-7/8”
HSV75	75 mm	2-15/16”
HSV76	76 mm	3”
HSV79	79 mm	3-1/8”
HSV83	83 mm	3-1/4”
HSV86	86 mm	3-3/8”
HSV89	89 mm	3-1/2”
HSV92	92 mm	3-5/8”
HSV95	95 mm	3-3/4”
HSV98	98 mm	3-7/8”
HSV100	100 mm	3-15/16”
HSV102	102 mm	4”
HSV105	105 mm	4-1/8”
HSV108	108 mm	4-1/4”
HSV114	114 mm	4-1/2”
HSV121	121 mm	4-3/4”
HSV127	127 mm	5”
HSV140	140 mm	5-1/2”
HSV146	146 mm	5-3/4”
HSV152	152 mm	6”

ARBORS – UNIVERSAL SIZING

Arbors to suit all holesaws



Part No.	Description	Suits Holesaws
ARB-1	Hex Shank Arbor - Hex	14-30mm
ARB-2	Hex Shank Arbor - Hex	32-198mm
ARB-SP2	Large Shank Arbor - SDS	32-198mm

12 PIECE HOLE SAW KIT

- M42 Cobalt Bi-Metal H

Contents:

- Hole Saws: 16, 19, 22, 29, 35, 38, 44, 51, 54, 64mm
- Adapter
- Small and Large Quick Release Arbors



Part No.	Description
HSKTR12	12 Piece Hole Saw Kit

PILOT DRILLS – UNIVERSAL SIZING

Part No.	Description	Suits Holesaws
PLD-1	3-1/4” Pilot Drill (ARB-1)	14-30mm
PLD-2	4-1/4” Pilot Drill (ARB-2)	32-198mm

ROTACUT® 10 PIECE HOLE SAW KIT

- Produces clean burr free round holes without deforming surrounding material
- 1/4-Inch depth of cut

Contents:

- Arbor Assembly
- Hole Saws: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4 in
- Centre Punch
- Extra pilot



Part No.	Description
RB 11075	10 Piece Rotacut® Hole Saw Kit

FINE TOOTH HOLE SAWS

Fine tooth hole saws are made from solid high speed steel. A back taper on the outside and inside diameters ensures fast, free cutting. The outside diameter is ground concentric with the tapped hole to produce close tolerance and perfectly round holes. These fine tooth hole saws are designed primarily for fast cutting through thin skins, steel, and other material, and are particularly useful for tubular assemblies.

Larger sizes available to order please enquire (up to 3") and also coarse thread versions too



Part No.	Diameter
HS400-1	3/8"
HS400-1A	13/32"
HS400-2	7/16"
HS400-2A	15/32"
HS400-3	1/2"
HS400-3A	17/32"
HS400-4	9/16"
HS400-4A	19/32"
HS400-5	5/8"
HS400-5a	21/32"

Part No.	Diameter
HS400-6	11/16"
HS400-6a	23/32"
HS400-7	3/4"
HS400-8	13/16"
HS400-8A	27/32"
HS400-9	7/8"
HS400-9A	29/32"
HS400-10	15/16"
HS400-10A	31/32"
HS400-11	1"

HOLE SAW ARBORS FOR FINE TOOTH HOLE SAWS



Part No.	"D" Pilot Dia.	Shank Dia.	Thread Size
HSA-0	Special	1/4	5/16-24
HSA-1	3/16	1/4	5/16-24
HSA-2	1/4	1/4	5/16-24

SHEET METAL NIBBLER

- For cutting iron, copper or aluminium sheet metal up to max. 1.2 mm thickness, plastic up to max. 2.0 mm thickness
- Materials are cut without deformation
- Clean cut edges – no trimming activities needed
- Tool body: special tool steel, rolled, oil-hardened
- With chip breaker
- Easy handling
- Blades: spe oil-hardene



Part No.	Description	Cutting Width
90 55 280	Sheet Metal Nibbler	2.7 mm

DOTCO® PANEL SAW

- Depth of cut by use of panel guard
- Uses 2" metal blades
- Maximum depth of cut 11.1mm



Part No.	RPM	Arbor Size	Body Length
12S1282-02	12,000	1/4"	180mm

KETT PANEL SAW

- Cuts mild steel up to 16 guage / aluminim up to 1/4"
- Depth of cut by use of panel guard
- Uses 1-3/4" or 2" metal blades (4 supplied with unit)



Part No.	Description	Arbor Size	Body Length
PS-526	Kett Panel Saw	7/16"	280mm

TAYLOR HEAVY DUTY SHEAR

- Head can be rotated a full 360° for ease of use
- A 1/4" strip is removed by the cutting action
- Cuts up to 18 guage sheet metal



Part No.	Description	RPM	Body Length
T-7700	Taylor Shear	25	210mm

TAYLOR AIR NIBBLER

- Head can be rotated a full 360o for ease of use
- Makes a 7/32" kerf as it cuts



Part No.	Description	RPM	Body Length
T-7711	Taylor Nibbler	25	177mm

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STANLEY® FATMAX® HIGH TENSION HACKSAW

- Durable, one-piece body is designed for ultra-high tension of 32,000 psi.
- Pre-tensioning mechanism holds blade in place for quick and easy blade changes.
- Thumb-dial adjustable tension mechanism allows for tension memory.
- Large cutting capacity – up to 4-3/4" throat depth for extra-deep cutting.
- Power load sliding tension delivers leverage when increasing tension and control when releasing blade.
- Contoured handle and front thumb grip are ergonomically designed for control.
- Blade can be positioned at 45° or 90° cutting angle.
- Accepts 12" blades only.
- 1 x hacksaw blade included (15-631)



Part No.	Blade Length	Throat Depth
20-531	12 inch (305mm)	4-3/4 in (121 mm)

STANLEY® COMPOSITE HACKSAW

- Unique 12" arc shape fixed frame allows for cutting in tight, hard-to-reach areas.
- I-beam frame provides strength and durability; made from high impact polymer with steel core.
- High-tension knob makes blade tension adjustment easy.
- Ergonomically designed non-slip grip handle for comfortable use.
- Carbon steel hacksaw blade (12 in x 24 TPI) included: 1
- 4" throat depth cuts large PVC pipes.
- Patented design.



Part No.	Blade Length	Throat Depth
15-892K	12 in (305mm)	4 in (102mm)

STANLEY® METAL MINI-HACK™ UTILITY SAW

- Cast aluminum handle is lightweight, comfortable and durable.
- Handle covers blade to protect end user's hands.
- High-performance blade included (15-628): 1.



Part No.	Blade Length	Teeth per Inch
15-809	10 in (254mm)	24TPI

HIGH SPEED 12" HACKSAW BLADES

- Combines the flexibility of carbon steel backs with the cutting performance of a high-speed steel cutting edge.
- Coated blade for corrosion protection, cuts most metals including unhardened tool steel and stainless steel.



Part No.	Blades	Length	Points per Inch	Teeth per Inch
15-612	10	12 in (305 mm)	19 PPI	18 TPI
15-613	10	12 in (305 mm)	25 PPI	24 TPI
15-614	10	12 in (305 mm)	33 PPI	32 TPI
15-628	1	12 in (305 mm)	25 PPI	24 TPI
15-630	1	12 in (305 mm)	33 PPI	32 TPI
15-631	1	12 in (305 mm)	25 PPI	24 TPI
15-632	1	12 in (305 mm)	19 PPI	18 TPI

HIGH SPEED STEEL 10" HACKSAW BLADES

- Ground tooth design for improved cutting performance versus traditional hacksaw blades.
- Flexible, high speed steel blade, cuts most metals including unhardened tool steel and stainless steel.
- Coated blade for corrosion protection.



Part No.	Blades	Length	Points per Inch	Teeth per Inch
15-802A	1	10 in (254 mm)	33 PPI	32 TPI
15-804A	1	10 in (254 mm)	25 PPI	24 TPI
15-808A	1	10 in (254 mm)	19 PPI	18 TPI
15-822A	1	10 in (254 mm)	33 PPI	32 TPI
15-842A	1	10 in (254 mm)	25 PPI	24 TPI
15-828A	1	10 in (254 mm)	19 PPI	18 TPI

CARBON STEEL 10" HACKSAW BLADES

- Flexible, high carbon steel blade.
- Coated blade for corrosion protection.
- Cuts mild steel, cast iron, aluminum, and copper.



Part No.	Blades	Length	Points per Inch	Teeth per Inch
15-902A	2	10 in (254 mm)	33 PPI	32 TPI
15-904A	2	10 in (254 mm)	25 PPI	24 TPI
15-908A	2	10 in (254 mm)	19 PPI	18 TPI
15-922A	2	10 in (254 mm)	33 PPI	32 TPI
15-924A	2	10 in (254 mm)	25 PPI	24 TPI
15-928A	2	10 in (254 mm)	19 PPI	18 TPI



Grinding & Sanding

Grinders 110
Sanders 124
Clayton Dustless Sanding 140
- Backup Pads 144
- Shrouds 146
- Dustmaster 158
- Hornet 164

Hoses 174
Pneumatic Fittings 176
Abrasives 179
Policaps 188
Abrasive Brushes 189
Files 190

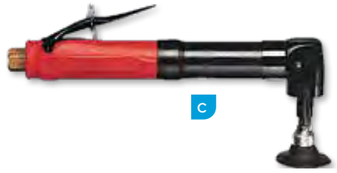
Grinders

DESOUTTER COLLET GRINDERS – CNOMO TYPE (FOR CARBIDE BURRS, MOUNTED POINTS AND SANDING DISCS)

- 300 and 375 Watts (0.4 and 0.5 hp) - 12000 to 40000 rpm
- Caution: comply with the speed recommended by component and abrasive manufacturers


A


B

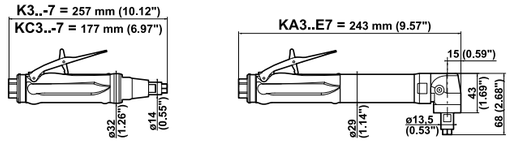

C

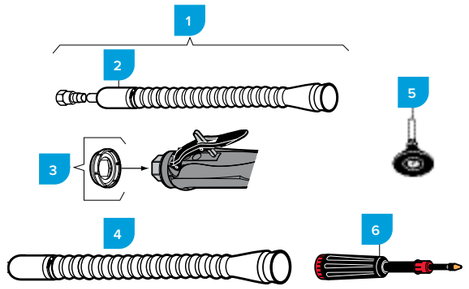

D


E

Part No.	Model	Pic Ref	Free Speed	Collet max Capacity		Power		Weight		Air Consumption Free Speed		Air Consumption Max Speed		Air Inlet	Hose int. Ø	
			rpm	mm	in.	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
Straight Grinders																
615 170 036 0	K340-7	A	40000	6.4	1/4	375	0.5	0.58	1.28	7.5	16.0	10.0	21	1/4	8	5/16
615 170 035 0	K331- 7	A	31000	6.4	1/4	375	0.5	0.58	1.28	4.5	9.5	9.5	20	1/4	8	5/16
615 170 034 0	K325-7	A	25000	6.4	1/4	375	0.5	0.58	1.28	3.5	7.5	9.5	20	1/4	8	5/16
615 170 033 0	K320-7	A	20000	6.4	1/4	375	0.5	0.58	1.28	2.5	5.0	8.0	17	1/4	8	5/16
615 170 032 0	KC340-7	B	40000	6.4	1/4	375	0.5	0.40	0.88	7.5	16.0	10.0	21	1/4	8	5/16
615 170 031 0	KC331-7	B	31000	6.4	1/4	375	0.5	0.40	0.88	4.5	9.5	9.5	20	1/4	8	5/16
615 170 030 0	KC325-7	B	25000	6.4	1/4	375	0.5	0.40	0.88	3.5	7.5	9.5	20	1/4	8	5/16
615 170 029 0	KC320-7	B	20000	6.4	1/4	375	0.5	0.40	0.88	2.5	5.0	8.0	17	1/4	8	5/16
Angle Grinders - 375 W (0.5 Hp)																
615 170 047 0	KA320E7	C	20000	6.4	1/4	375	0.5	0.60	1.32	6.5	13.5	10.0	21	1/4	8	5/16
615 170 039 0	KA312E7	C	12000	6.4	1/4	375	0.5	0.60	1.32	3.0	6.5	9.0	19	1/4	8	5/16
615 170 043 0	KA320-7	D	20000	6.4	1/4	375	0.5	0.50	1.10	6.5	13.5	10.0	21	1/4	8	5/16
615 170 037 0	KA312-7	D	12000	6.4	1/4	375	0.5	0.50	1.10	3.0	6.5	9.0	19	1/4	8	5/16
615 170 522 0	KA3.135-7	E	13500	8.0	5/16	300	0.4	0.60	1.32	9.5	20.0	-	-	1/4	6	1/4

Accessories optional	Part No. K3.. / KC3.. / KA3..	Part No. KA3.135
• Collet ø 2 mm		615 526 066 0
• CNOMO collet ø 2.5 mm	615 526 089 0	615 526 068 0
• CNOMO collet ø 3 mm	615 526 044 0	615 526 069 0
• CNOMO collet ø 3.2 mm (1/8")	615 526 045 0	
• Collet ø 3.5mm		615 526 070 0
• CNOMO collet ø 4 mm (5/32")	615 526 090 0	615 526 071 0
• CNOMO collet ø 4.5 mm		615 526 073 0
• CNOMO collet ø 5 mm	615 526 092 0	615 526 075 0
• Collet ø 5.5mm		615 526 077 0
• CNOMO collet ø 6.4 mm (1/4")	615 526 047 0	
• Collet ø 6.5mm		615 526 081 0
• Collet ø 7mm		615 526 083 0
• Collet ø 7.5mm		615 526 084 0
• Collet ø 8mm (5/16")		615 526 088 0
1 Complete silencer kit	615 396 101 0	615 399 423 0
2 Silencer	615 574 028 0	
3 Clippable silencer	615 396 124 0	
4 Exhaust hose L = 0.8m (31")		615 875 106 0
5 Backing pad ø 50mm		615 804 098 0
6 Grease gun (capacity 24g - 0.8 oz.)	615 990 149 0	
• Grease for bevel gear (1kg - 2.2lb)	615 990 148 0	





DESOUTTER COLLET GRINDERS (FOR CARBIDE BURRS AND MOUNTED POINTS)

- 600 to 1700 Watts (0.8 to 2.3 hp) - 12000 to 28000 rpm
- Caution: comply with the speed recommended by component and abrasive manufacturers


A


B


C


D

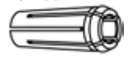

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F

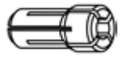

G


H

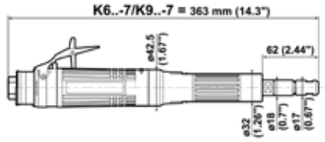
K6..-7 / K9..-7 / KC6..-7 / KC9..-7
CNOMO type collet

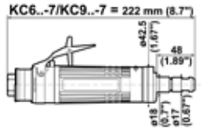


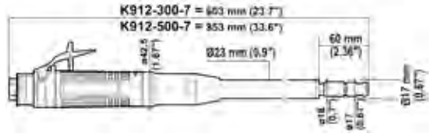
K6..-9 / KC9..-9 / KC6..-9 / KC9..-9 / KA1620-9 / K1180-9
Series 200 collet



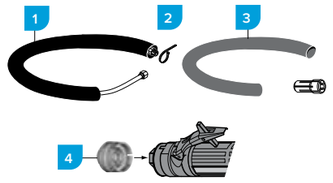
Part No.	Model	Pic Ref	Free Speed	Collet max Capacity		Power		Weight		Air Consumption Free Speed		Air Consumption Max Speed		Air Inlet	Hose int. Ø	
			rpm	mm	in.	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
CNOMO Collet																
615 170 107 0	K628-7	A	28000	8	5/16	600	0.80	1.3	2.9	16	34	15	32	3/8	10	3/8
615 170 106 0	K624-7	A	24000	8	5/16	600	0.80	1.3	2.9	10	21	15	32	3/8	10	3/8
615 170 119 0	K922-7	A	22000	8	5/16	900	1.21	1.4	3.1	13	28	18	38	3/8	10	3/8
615 170 105 0	K619-7	A	19000	8	5/16	600	0.80	1.3	2.9	6	13	15	32	3/8	10	3/8
615 170 117 0	K918-7	A	18000	8	5/16	900	1.21	1.4	3.1	10	21	18	38	3/8	10	3/8
615 170 104 0	K615-7	A	15000	8	5/16	600	0.80	1.3	2.9	6	13	15	32	3/8	10	3/8
615 170 114 0	K915-7	A	15000	8	5/16	900	1.21	1.4	3.1	8	17	17	36	3/8	10	3/8
615 170 110 0	K912-7	A	12000	8	5/16	900	1.21	1.4	3.1	6	13	16	34	3/8	10	3/8
615 170 126 0	KC628-7	B	28000	8	5/16	600	0.80	0.9	2.0	16	34	15	32	3/8	10	3/8
615 170 125 0	KC624-7	B	24000	8	5/16	600	0.80	0.9	2.0	10	21	15	32	3/8	10	3/8
615 170 130 0	KC922-7	B	22000	8	5/16	900	1.21	1.0	2.2	13	28	18	38	3/8	10	3/8
615 170 124 0	KC619-7	B	19000	8	5/16	600	0.80	0.9	2.0	6	13	15	32	3/8	10	3/8
615 170 129 0	KC918-7	B	18000	8	5/16	900	1.21	1.0	2.2	10	21	18	38	3/8	10	3/8
615 170 123 0	KC615-7	B	15000	8	5/16	600	0.80	0.9	2.0	6	13	15	32	3/8	10	3/8
615 170 128 0	KC915-7	B	15000	8	5/16	900	1.21	1.0	2.2	8	17	17	36	3/8	10	3/8
615 170 127 0	KC912-7	B	12000	8	5/16	900	1.21	1.0	2.2	6	13	16	34	3/8	10	3/8
615 170 108 0	K912-300-7	C	12000	8	5/16	900	1.21	2.1	4.6	6	13	16	34	3/8	10	3/8
615 170 109 0	K912-500-7	C	12000	8	5/16	900	1.21	2.7	5.9	6	13	16	34	3/8	10	3/8
Series 200 Collet																
615 170 150 0	K628-9	D	28000	9.5	3/8	600	0.80	1.3	2.9	16	34	15	32	3/8	10	3/8
615 170 151 0	K624-9	D	24000	9.5	3/8	600	0.80	1.3	2.9	10	21	15	32	3/8	10	3/8
615 170 152 0	K922-9	D	22000	9.5	3/8	900	1.21	1.4	3.1	13	28	18	38	3/8	10	3/8
615 170 153 0	K619-9	D	19000	9.5	3/8	600	0.80	1.3	2.9	6	13	15	32	3/8	10	3/8
615 170 154 0	K918-9	D	18000	9.5	3/8	900	1.21	1.4	3.1	10	21	18	38	3/8	10	3/8
615 170 155 0	K615-9	D	15000	9.5	3/8	600	0.80	1.3	2.9	6	13	15	32	3/8	10	3/8
615 170 156 0	K915-9	D	15000	9.5	3/8	900	1.21	1.4	3.1	8	17	17	36	3/8	10	3/8
615 170 157 0	K912-9	D	12000	9.5	3/8	900	1.21	1.4	3.1	6	13	16	34	3/8	10	3/8
615 170 158 0	KC628-9	E	28000	9.5	3/8	600	0.80	0.9	2.0	16	34	15	32	3/8	10	3/8
615 170 159 0	KC624-9	E	24000	9.5	3/8	600	0.80	0.9	2.0	10	21	15	32	3/8	10	3/8
615 170 160 0	KC922-9	E	22000	9.5	3/8	900	1.21	1.0	2.2	13	28	18	38	3/8	10	3/8
615 170 161 0	KC619-9	E	19000	9.5	3/8	600	0.80	0.9	2.0	6	13	15	32	3/8	10	3/8
615 170 162 0	KC918-9	E	18000	9.5	3/8	900	1.21	1.0	2.2	10	21	18	38	3/8	10	3/8
615 170 163 0	KC615-9	E	15000	9.5	3/8	600	0.80	0.9	2.0	6	13	15	32	3/8	10	3/8
615 170 164 0	KC915-9	E	15000	9.5	3/8	900	1.21	1.0	2.2	8	17	17	36	3/8	10	3/8
615 170 165 0	KC912-9	E	12000	9.5	3/8	900	1.21	1.0	2.2	6	13	16	34	3/8	10	3/8
615 170 169 0	K912-300-9	F	12000	9.5	3/8	900	1.21	2.1	4.6	6	13	16	34	3/8	10	3/8
615 170 170 0	K912-500-9	F	12000	9.5	3/8	900	1.21	2.7	5.9	6	13	16	34	3/8	10	3/8
615 170 443 0	KA16120-9	G	12000	9.5	3/8	1700	2.30	1.4	3.2	20	42	32	68	3/8	13	1/2
615 170 246 0	K1180-9	H	18000	9.5	3/8	1200	1.61	2.5	5.9	12	25	35	74	1/2	15	5/8

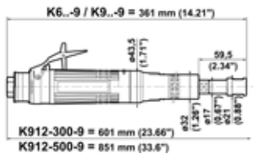


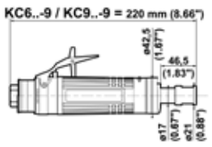




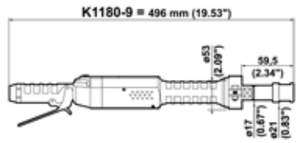
Accessories optional	Part No. K6..-7 / K9..-7 / KC6..-7 / KC9..-7
• Collet-holder extension L = 28mm (1.1")	615 523 019 0
• CNOMO collet ø 3 mm	615 526 048 0
• CNOMO collet ø 6.35 mm (1/4")	615 526 050 0
• CNOMO collet ø 8 mm	615 526 051 0
1 Complete silencer kit	615 396 166 0
2 Clamp	615 873 115 0
3 Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
4 Clippable silencer	615 396 655 0



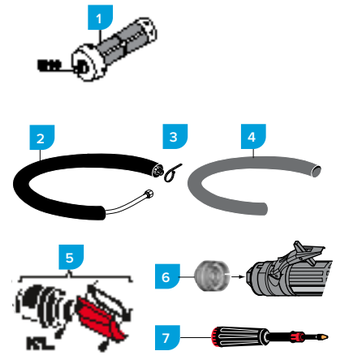


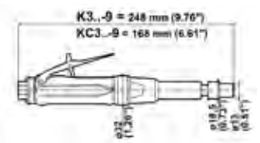


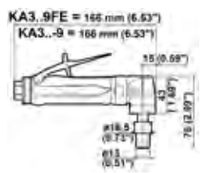


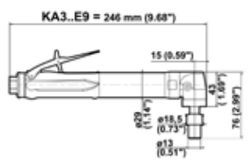


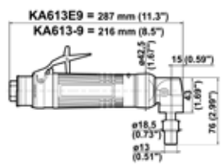
Accessories optional	Part No. K/KC6 / K/KC9 KA16120-9	Part No. K1180-9
• Series 200 resilient collet, collet ø 2.4 to 3.2mm (1/8")	615 526 061 0	615 526 061 0
• Series 200 resilient collet, collet ø 5.2 to 6mm	615 526 062 0	615 526 062 0
• Series 200 resilient collet, collet ø 7.2 to 8mm	615 526 064 0	615 526 064 0
• Series 200 resilient collet, collet ø 8.7 to 9.5mm (3/8")	615 526 065 0	
1 Vibration-damping handle for KA16120-9	615 576 066 0	
2 Complete silencer kit	615 396 166 0	
3 Clamp	615 873 115 0	
4 Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0	
5 Silencer kit		615 399 459 0
6 Clippable silencer	615 396 655 0	
6 Clippable silencer for KA16120-9	615 396 957 0	
7 Grease gun (capacity 24g - 0.8oz) for KA16120-9	615 990 149 0	
• Grease for bevel gear (1kg - 2.2lb) for KA16120-9	615 990 148 0	



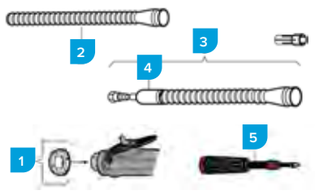






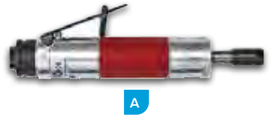


Accessories optional	Part No. 4734	Part No. K3../KC3..-9 KA3..E9/KA3..-9	Part No. KA3..-9FE
• Series 300 resilient collet, ø 0.4 to 1.2mm	615 526 052 0	615 526 052 0	615 526 052 0
• Series 300 resilient collet, ø 1.2 to 2mm	615 526 053 0	615 526 053 0	615 526 053 0
• Series 300 resilient collet, ø 1.7 to 2.5mm	615 526 054 0	615 526 054 0	615 526 054 0
• Series 300 resilient collet, ø 2.4 to 3.2mm (1/8")	615 526 055 0	615 526 055 0	615 526 055 0
• Series 300 resilient collet, ø 3.16 to 3.96mm	615 526 056 0	615 526 056 0	615 526 056 0
• Series 300 resilient collet, ø 3.95 to 4.75mm	615 526 057 0	615 526 057 0	615 526 057 0
• Series 300 resilient collet, ø 4.75 to 5.55mm	615 526 058 0	615 526 058 0	615 526 058 0
2 Exhaust hose L = 0.8 m (31")			615 875 106 0
3 Complete silencer kit		615 396 101 0	615 396 101 0
4 Silencer		615 574 028 0	615 574 028 0
1 Clippable silencer		615 396 124 0	
5 Grease gun (capacity 24g - 0.8 oz.)		615 990 149 0	615 990 149 0
• Grease for bevel gear (1kg -2.2 lb.)		615 990 148 0	615 990 148 0



DESOUTTER COLLET GRINDERS (FOR CARBIDE BURRS, MOUNTED POINTS AND SANDING DISCS)

- 300 to 600 Watts (0.4 to 0.8 hp) - 9000 to 40000 rpm
- Supplied with series 300 resilient collet, ø 5.55 to 6.35mm (1/4")
- Caution: comply with the speed recommended by component and abrasive manufacturers

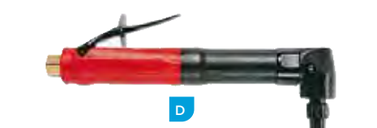




K3..-9 / KC3..-9 / KA3..(E)9 / KA3..-9FE / KA613(E)9
Series 300 collet















Part No.	Model	Pic Ref	Free Speed	Collet max Capacity		Power		Weight		Air Consumption Free Speed		Air Consumption Max Speed		Air Inlet	Hose int. Ø	
			rpm	mm	in.	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
Straight Grinders																
4734	4734	A	20000	6.35	1/4	300	0.4	0.60	1.32	8.5	18	10	21	1/4	10	3/8
615 170 139 0	K340-9	B	40000	6.35	1/4	375	0.5	0.57	1.26	7.5	16	10	21	1/4	8	5/16
615 170 140 0	K331-9	B	31000	6.35	1/4	375	0.5	0.57	1.26	4.5	9.5	9.5	20	1/4	8	5/16
615 170 141 0	K325-9	B	25000	6.35	1/4	375	0.5	0.57	1.26	3.5	7.5	9.5	20	1/4	8	5/16
615 170 142 0	K320-9	B	20000	6.35	1/4	375	0.5	0.57	1.26	2.5	5.0	8.0	17	1/4	8	5/16
615 170 143 0	KC340-9	C	40000	6.35	1/4	375	0.5	0.38	0.84	7.5	16	10	21	1/4	8	5/16
615 170 144 0	KC331-9	C	31000	6.35	1/4	375	0.5	0.38	0.84	4.5	9.5	9.5	20	1/4	8	5/16
615 170 145 0	KC325-9	C	25000	6.35	1/4	375	0.5	0.38	0.84	3.5	7.5	9.5	20	1/4	8	5/16
615 170 027 0	KC320-9	C	20000	6.35	1/4	375	0.5	0.38	0.84	2.5	5.0	8.0	17	1/4	8	5/16
615 170 196 0	KC318-9	C	18000	6.35	1/4	375	0.5	0.38	0.84	2.5	5.0	8.0	17	1/4	8	5/16
Angle Grinders																
615 170 146 0	KA320E9	D	20000	6.35	1/4	375	0.5	0.61	1.35	6.5	13.5	10	21	1/4	8	5/16
615 170 147 0	KA312E9	D	12000	6.35	1/4	375	0.5	0.61	1.35	3.0	6.5	9.0	9	1/4	8	5/16
615 170 148 0	KA320-9	E	20000	6.35	1/4	375	0.5	0.51	1.13	6.5	13.5	10	21	1/4	8	5/16
615 170 461 0	KA318-9	E	18000	6.35	1/4	375	0.5	0.51	1.13	6.5	13.5	10	21	1/4	8	5/16
615 170 149 0	KA312-9	E	12000	6.35	1/4	375	0.5	0.51	1.13	3.0	6.5	9.0	19	1/4	8	5/16
615 170 266 0	KA309-9	E	9000	6.35	1/4	375	0.5	0.50	1.10	3.0	6.5	9.0	19	1/4	8	5/16
615 170 206 0	KA320-9FE*	F	20000	6.35	1/4	375	0.5	0.51	1.13	6.5	13.5	10	21	1/4	8	5/16
615 170 205 0	KA312-9FE*	F	12000	6.35	1/4	375	0.5	0.51	1.13	3.0	6.5	9.0	19	1/4	8	5/16
615 170 136 0	KA613E9	G	13000	6.35	1/4	600	0.8	1.40	3.10	10	21	15	32	3/8	10	3/8
615 170 135 0	KA613-9	H	13000	6.35	1/4	600	0.8	1.10	2.40	10	21	15	32	3/8	10	3/8

Accessories optional	Part No. K6..-7 / K9..-7 / KC6..-7 / KC9..-7
• Series 300 resilient collet, ø 0.4 to 1.2 mm (3/64")	615 526 052 0
• Series 300 resilient collet, ø 1.2 to 2 mm (5/64")	615 526 053 0
• Series 300 resilient collet, ø 1.7 to 2.5 mm (3/32")	615 526 054 0
• Series 300 resilient collet, ø 2.4 to 3.2 mm (1/8")	615 526 055 0
• Series 300 resilient collet, ø 3.16 to 3.96 mm (5/32")	615 526 056 0
• Series 300 resilient collet, ø 3.95 to 4.75 mm (3/16")	615 526 057 0
• Series 300 resilient collet, ø 4.75 to 5.55 mm (7/32")	615 526 058 0
1 Complete silencer kit	615 396 166 0
2 Clamp	615 873 115 0
3 Clippable silencer	615 396 655 0
4 Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
• Grease for bevel gear (1 kg - 2.2 lb.)	615 990 148 0

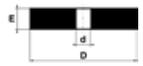


DESOUTTER GRINDERS (FOR CONE WHEELS AND TYPE 1 WHEELS)

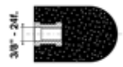
- 900 Watts (1.21 hp) - 12000 to 18000 rpmø 63mm (2-1/2") - ø 80mm (3") - ø 100mm (4")
- ø 63mm (2-1/2") - ø 80mm (3") - ø 100mm (4")
- * Reinforced resinoid wheel



Type 1 wheel

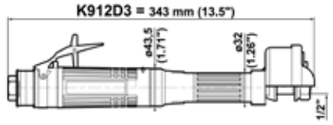


Wheel type 16, 18, 18R and 19

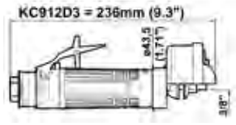


Part No.	Model	Pic Ref	Free Speed	Wheel max Capacity DxExd		Threaded Spindle	Power		Weight		Air Consumption Free Speed		Air Consumption Max Speed		Air Inlet	Hose int. Ø	
			rpm	mm	in.	in	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
615 170 118 0	K918C3	A	18000	*80x13x9.52	3x1/2x3/8	3/8-24	900	1.21	1.7	3.7	7	15	16	34	3/8	10	3/8
615 170 116 0	K915C3	A	15000	*80x13x9.52	3x1/2x3/8	3/8-24	900	1.21	1.7	3.7	7	15	16	34	3/8	10	3/8
615 170 111 0	K912C3	A	12000	*80x13x9.52	3x1/2x3/8	3/8-24	900	1.21	1.7	3.7	7	15	16	34	3/8	10	3/8
615 170 115 0	K915C25	B	15000	63x13x9.52	2-1/2x1/2x3/8	3/8-24	900	1.21	1.6	3.5	7	15	16	34	3/8	10	3/8
615 170 113 0	K912D3	C	12000	80x20x12.7	3x25/32x1/2	1/2-13	900	1.21	1.7	3.7	7	15	16	34	3/8	10	3/8
615 170 491 0	KC912D3	D	12000	80x20x12.7	3x25/32x1/2	1/2-13	900	1.21	1.3	2.9	7	15	16	34	3/8	10	3/8
615 170 112 0	K912C4	E	12000	100x13x9.52	4x1/2x3/8	3/8-24	900	1.21	1.8	4.0	7	15	16	34	3/8	10	3/8

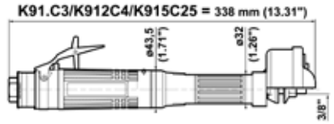
K912D3 = 343 mm (13.5")



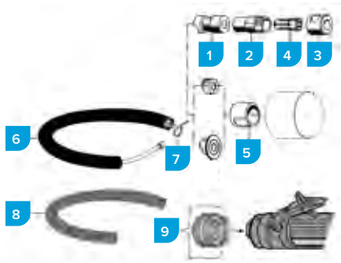
KC912D3 = 236mm (9.3")

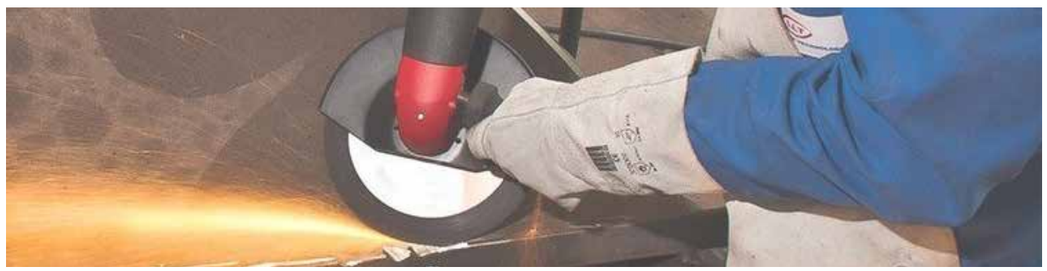


K91.C3/K912C4/K915C25 = 338 mm (13.31")



Accessories optional	Part No. K9..
1 Spacer for collet-holder	615 666 149 0
2 Series 200 collet-holder	615 523 023 0
3 Series 200 collet nut	615 607 144 0
4 Series 200 Erickson collet	(see page 214)
5 Spacer for threaded cone wheel 3/8"	615 503 516 0
• Rear flange supplied with tool 615 503 125 0 or 615 503 126 0	
6 Complete silencer kit	615 396 166 0
7 Clamp	615 873 115 0
8 Reinforced cloth-lined exhaust hose L = 0.75 m (30")	615 875 116 0
9 Clippable silencer	615 396 655 0





DESOUTTER GRINDERS (FOR CONE WHEELS AND TYPE 1 WHEELS)

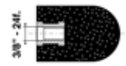
- 1000 to 2700 Watts (1.34 to 3.62 hp) - 4500 to 12000 rpm
- ø 80mm (3") - ø 100mm (4") - ø 150mm (6") - ø 200mm (8") - ø 230mm (9")
- Caution: comply with the speed recommended by component and abrasive manufacturers



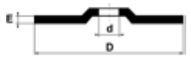
Type 1 wheel



Wheel type 16, 18, 18R and 19

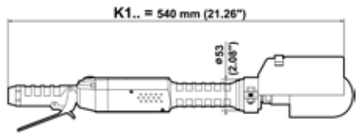


Type 27-42 wheel

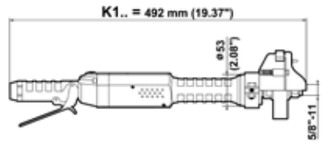


Part No.	Model	Pic Ref	Free Speed	Wheel max Capacity DxExd		Threaded Spindle	Power		Weight		Air Consumption Free Speed		Air Consumption Max Speed		Air Inlet	Hose int. Ø	
			rpm	mm	in.	in	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
615 170 005 0	K190B3CW	A	9000	80	3	5/8-11	1200	1.61	3.5	7.7	9	19	27	57	1/2	15	5/8
615 170 004 0	K190B4	B	9000	100x25x15.9	4x1x5/8	5/8-11	1200	1.61	3.2	7.0	9	19	27	57	1/2	15	5/8
615 170 003 0	K160B6	C	6000	150x25x15.9	6x1x5/8	5/8-11	1200	1.61	3.5	7.7	6	12	23	48	1/2	15	5/8
615 170 002 0	K145B6	C	4500	150x25x15.9	6x1x5/8	5/8-11	1000	1.34	3.5	7.7	5	10	20	42	1/2	15	5/8
615 170 010 0	K360B6	D	6000	150x25x15.9	6x1x5/8	5/8-11	2700	3.62	5.6	12.3	13	27	41	86	1/2	15	5/8
615 170 009 0	K345B8	E	4500	200x25x15.9	8x1x5/8	5/8-11	2400	3.22	6.3	13.9	8	17	33	70	1/2	15	5/8
615 170 521 0	K360B9	F	6000	230x6.4x22.2	9x1/4x7/8	5/8-11	2700	3.62	5.6	12.3	13	27	41	86	1/2	15	5/8
For USA Market only (to ANSI B186.1)																	
615 170 171 0	K1120B3CWY	A	12000	80	3	5/8-11	1300	1.74	3.0	6.6	16	34	30	64	1/2	15	5/8
615 170 172 0	K190B3CWY	A	9000	80	3	5/8-11	1200	1.61	3.0	6.6	9	19	27	57	1/2	15	5/8
615 170 173 0	K160B6Y	C	6000	150x25x15.9	6x1x5/8	5/8-11	1200	1.61	3.5	7.7	6	12	23	48	1/2	15	5/8
615 170 177 0	K360B6Y	D	6000	150x25x15.9	6x1x5/8	5/8-11	2700	3.62	5.6	12.3	13	27	41	86	1/2	15	5/8
615 170 178 0	K345B8Y	E	4500	200x25x15.9	8x1x5/8	5/8-11	2400	3.22	6.3	13.9	8	17	33	70	1/2	15	5/8

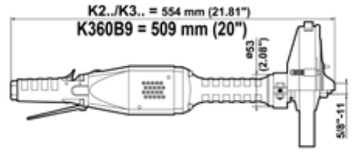
K1.. = 540 mm (21.26")



K1.. = 492 mm (19.37")



K2../K3.. = 554 mm (21.81")
K360B9 = 509 mm (20")



Accessories optional for K360B9 - ø 230 mm (9")	Part No. K1..	Part No. K2.. / K3..
1 Silencer Kit	615 399 298 0	-
2 Silencer Kit	615 399 459 0	-
3 Silencer Kit	-	615 399 460 0

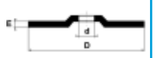


DESOUTTER GRINDERS (FOR DEPRESSED CENTRE WHEELS AND CUT-OFF WHEELS)

- 375 and 600 Watts (0.5 and 0.8 hp) - 13000 to 20000 rpm
- Ø 51mm (2") - Ø 76mm (3") - Ø 100mm (4")



Type 27-42 wheel



Type 41 wheel

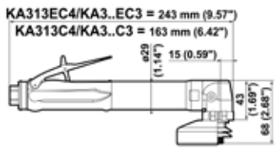


Part No.	Model	Pic Ref	Free Speed	Wheel max Capacity DxExd		Thread-ed Spindle	Power		Weight		Air Consumption Free Speed		Air Consumption Max Speed		Air Inlet	Hose int. Ø	
			rpm	mm	in.	in	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
615 170 487 0	KA320EC2	A	20000	51x7x9.52	2x1/4x3/8	3/8-24	375	0.5	0.81	1.78	6.5	13.5	10.0	21	1/4	8	5/16
615 170 046 0	KA320EC3	B	20000	76x7x9.52	3x1/4x3/8	3/8-24	375	0.5	0.81	1.78	6.5	13.5	10.0	21	1/4	8	5/16
615 170 045 0	KA318EC3	B	18000	76x7x9.52	3x1/4x3/8	3/8-24	375	0.5	0.81	1.78	4.5	9.5	9.5	20	1/4	8	5/16
615 170 050 0	KA313EC4	C	13000	100x7x9.52 & 15.9	4x1/4x3/8&5/8	3/8-24	375	0.5	0.83	1.83	3.0	6.5	9.0	19	1/4	8	5/16
615 170 488 0	KA320C2	D	20000	51x7x9.52	2x1/4x3/8	3/8-24	375	0.5	0.64	1.41	6.5	13.5	10.0	21	1/4	8	5/16
615 170 042 0	KA320C3	E	20000	76x7x9.52	3x1/4x3/8	3/8-24	375	0.5	0.64	1.41	6.5	13.5	10.0	21	1/4	8	5/16
615 170 041 0	KA318C3	E	18000	76x7x9.52	3x1/4x3/8	3/8-24	375	0.5	0.64	1.41	4.5	9.5	9.5	20	1/4	8	5/16
615 170 049 0	KA313C4	F	13000	100x7x9.52 & 15.9	4x1/4x3/8&5/8	3/8-24	375	0.5	0.66	1.45	3.0	6.5	9.0	19	1/4	8	5/16
615 170 138 0	KA613EC4	G	13000	100x7x9.52 & 15.9	4x1/4x3/8&5/8	3/8-24	600	0.8	1.50	3.30	10.0	21.0	15.0	32	3/8	10	3/8
615 170 137 0	KA613C4	H	13000	100x7x9.52 & 15.9	4x1/4x3/8&5/8	3/8-24	600	0.8	1.20	2.60	10.0	21.0	15.0	32	3/8	10	3/8

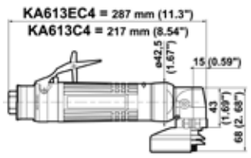
KA320EC2 = 243mm (9.57")
KA320C2 = 163mm (6.42")



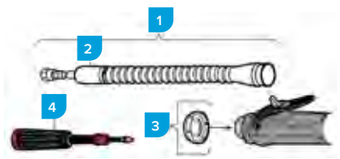
KA313EC4/KA3..EC3 = 243 mm (9.57")
KA313C4/KA3..C3 = 163 mm (6.42")



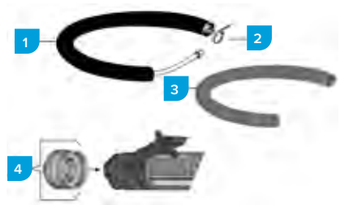
KA613EC4 = 287 mm (11.3")
KA613C4 = 217 mm (8.54")



Accessories optional	Part No. KA320EC2/C2 / KA3..EC3/C3 / KA313EC4/C4C
1 Complete silencer kit	615 396 101 0
2 Silencer	615 574 028 0
3 Clippable silencer	615 396 124 0
4 Grease gun includes (24g - 0.8oz)	615 990 149 0
• Grease for bevel gear (1kg - 2.2lb)	615 990 148 0



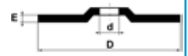
Accessories optional	Part No. KA613EC4 / KA613C4 - Ø 100mm (4")
1 Complete silencer kit	615 396 166 0
2 Clamp	615 873 115 0
3 Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
4 Clippable silencer	615 396 655 0
• Grease for bevel gear (1kg - 2.2lb)	615 990 148 0



DESOUTTER GRINDERS (FOR DEPRESSED CENTRE WHEELS, CUT-OFF WHEELS AND FLAP WHEEL)

- 1700 Watts (2.3 hp) - 12000 and 13500 rpm
- ø 100mm (4") - ø 115mm (4.5")
- Fixed wheel guard
- Multi-position guard
- Caution: comply with the speed recommended by component and abrasive manufacturers

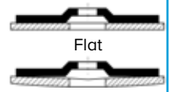
Type 27-42 wheel



Type 41 wheel



Depressed centre flap wheels









Part No.	Model	Pic Ref	Free Speed	Wheel max Capacity DxExD		Threaded Spindle	Power		Weight		Air Consumption Free Speed		Air Consumption Max Speed		Air Inlet	Hose int. Ø	
			rpm	mm	in.	in	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
Fixed Wheel Guard																	
615 170 441 0	KA16135C4FK		13500	100x6.4x16	4x1/4x5/8	3/8-24	1700	2.3	1.53	3.4	25	53	35	74	3/8	13	1/2
Multi-Position Guard																	
615 170 456 0	KA16120A45VK	A	12000	115x6.4x22.2	4.5x1/4x7/8	M14x2	1700	2.3	1.87	4.1	20	42	32	68	3/8	13	1/2
615 170 458 0	KA16120B45VK	A	12000	115x6.4x22.2	4.5x1/4x7/8	5/8-11	1700	2.3	1.87	4.1	20	42	32	68	3/8	13	1/2
615 170 455 0		B	12000	115x6.4x22.2	4.5x1/4x7/8	M14x2	1700	2.3	1.75	3.9	20	42	32	68	3/8	13	1/2
615 170 457 0	KA16120B45	B	12000	115x6.4x22.2	4.5x1/4x7/8	5/8-11	1700	2.3	1.75	3.9	20	42	32	68	3/8	13	1/2

KA16135C4FK = 238mm (9.37")



KA16120A45VK / B45VK = 238mm (9.37")



KA16120A45 / B45 = 238mm (9.37")



Accessories optional for KA16135C4FK ø 100mm (4")	Part No.
1 Clippable silencer	615 396 957 0
2 Grease gun includes 24g (0.8oz)	615 990 149 0
• Grease for bevel gear (1 kg - 2.2 lb)	615 990 148 0



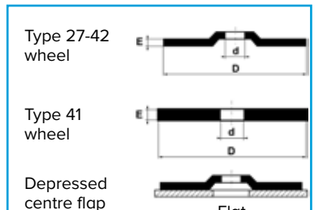
Accessories optional for KA16120A45, KA16120B45 ø 115mm (4.5")	Part No.
1 Complete silencer kit	615 396 166 0
2 Clamp	615 263 024 0
3 Reinforced cloth-lined exhaust hose L= 0.75m (30")	615 875 116 0
4 Vibration-damping side handle	615 576 066 0
5 Clippable silencer	615 396 957 0
6 Grease gun includes 24g (0.8oz)	615 990 149 0
• Grease for bevel gear (1 kg - 2.2lb)	615 990 148 0





DESOUTTER GRINDERS (FOR DEPRESSED CENTRE WHEELS, CUT-OFF WHEELS AND FLAP WHEEL)

- 1700 Watts (2.3 hp) - 12000 rpm
- ø 127mm (5")
- Quick Wheel change
- Multi-position guard
- Caution: comply with the speed recommended by component and abrasive manufacturers



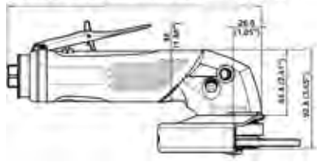




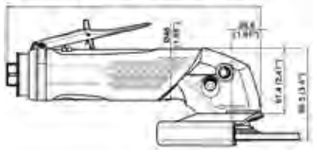


Part No.	Model	Pic Ref	Free Speed	Wheel max Capacity DxExD		Threaded Spindle	Power		Weight		Air Consumption Free Speed		Air Consumption Max Speed		Air Inlet	Hose int. Ø	
			rpm	mm	in.	in	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
615 170 438 0	KA16120A5VK	A	12000	127x6.4x22.2	5x1/4x7/8	M14x2	1700	2.3	1.90	4.2	20	42	32	68	3/8	13	1/2
615 170 454 0	KA16120B5VK	A	12000	127x6.4x22.2	5x1/4x7/8	5/8-11	1700	2.3	1.90	4.2	20	42	32	68	3/8	13	1/2
615 170 434 0	KA16120H5K	A	12000	127x6.4x22.2	5x1/4x7/8	HEX	1700	2.3	1.77	3.9	20	42	32	68	3/8	13	1/2
615 170 437 0	KA16120A5	B	12000	127x6.4x22.2	5x1/4x7/8	M14x2	1700	2.3	1.77	3.9	20	42	32	68	3/8	13	1/2
615 170 439 0	KA16120B5	B	12000	127x6.4x22.2	5x1/4x7/8	5/8-11	1700	2.3	1.77	3.9	20	42	32	68	3/8	13	1/2
615 170 444 0	KA16120H5	B	12000	127x6.4x22.2	5x1/4x7/8	HEX	1700	2.3	1.77	3.9	20	42	32	68	3/8	13	1/2

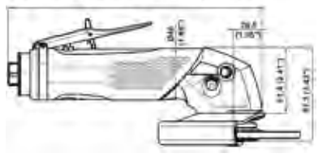
KA16120A5VK / B5VK = 238mm (9.37")



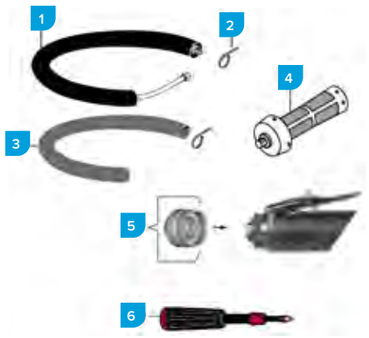
KA16120H5K / H5 = 238mm (9.37")



KA16120A5 / B5 = 238mm (9.37")



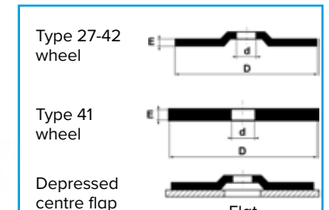
Accessories optional for KA16120A5 / B5 / H5 - ø 127mm (5")		Part No.
1	Complete silencer kit	615 396 166 0
2	Clamp	615 263 024 0
3	Reinforced cloth-lined exhaust hose L = 0.75 m (30")	615 875 116 0
4	Vibration-damping side handle	615 576 066 0
5	Clippable silencer	615 396 957 0
6	Grease gun includes 24g (0.8oz)	615 990 149 0
•	Grease for bevel gear (1kg - 2.2lb)	615 990 148 0





DESOUTTER GRINDERS (FOR DEPRESSED CENTRE WHEELS, CUT-OFF WHEELS AND FLAP WHEELS)

- 750 and 1600 Watts (1 and 2.15 hp) - 10000 and 12000 rpm
- ø 127mm (5") - ø 150mm (6")
- Fixed wheel guard
- Caution: comply with the speed recommended by component and abrasive manufacturers

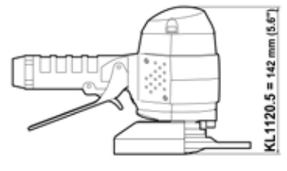




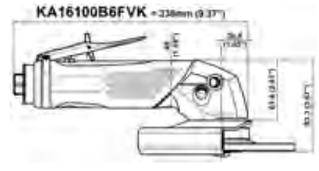




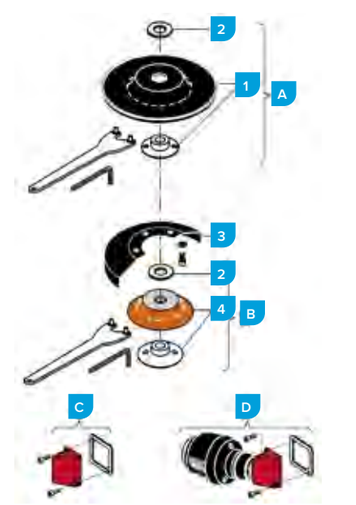
Part No.	Model	Pic Ref	Free Speed	Wheel max Capacity DxExD		Threaded Spindle	Power		Weight		Air Consumption Free Speed		Air Consumption Max Speed		Air Inlet	Hose int. Ø	
			rpm	mm	in.	in	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
615 170 013 0	KL1120A5	A	12000	127x6.4x22.2	5x1/4x7/8	M14x2	750	1.0	2.3	5.0	16	34	16	34	3/8	10	3/8
615 170 470 0	KA16100B6FVK	B	10000	150x7.0x22.2	6x1/4x7/8	5/8-11	1600	2.15	1.9	4.2	20	42	32	68	3/8	13	1/2



KA16100B6FVK = 238mm (9.37")



Accessories optional for KL1120A5 - ø 127mm (5") KL1120A M14x2		Part No.
	Sanding with standard Abrasive Disc ø 127mm (5")	
A	Soft sanding kit for abrasive disc (including item 1-2)	615 399 251 0
1	Ventilated backing pad with nut M14 (max. 12000 rpm)	615 990 127 0
•	Pin wrench, 35mm (1-3/8")	615 802 010 0
•	Hex key 8mm (5/16")	615 802 061 0
2	M14 Spacer	615 641 027 0
	Sanding with Semirigid Disc ø 127mm (5")	
3	Wheel guard	615 504 086 0
B	Sanding kit for semirigid disc (including item 4-2)	615 399 203 0
4	Backing pad with nut M14 (max. 12000 rpm)	615 990 129 0
2	M14 Spacer	615 641 027 0
•	Hex key 8mm (5/16")	615 802 061 0
•	Pin wrench, 35mm (1-3/8")	615 802 010 0
	Other	
C	Silencer kit	615 396 117 0
D	Silencer kit	615 399 462 0

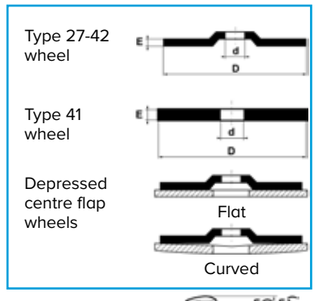


Accessories optional KA16100B6FVK - ø 150mm (6")		Part No.
1	Clippable silencer	615 396 957 0
2	Grease gun includes 24g (0.8oz)	615 990 149 0
•	Grease for bevel gear (1kg - 2.2lb)	615 990 148 0

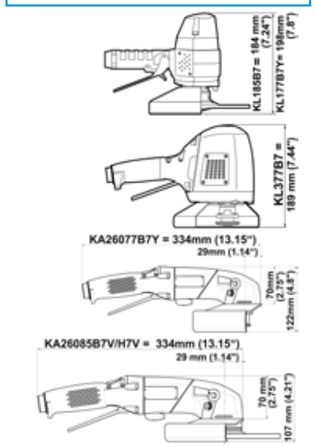


DESOUTTER GRINDERS (FOR DEPRESSED CENTRE WHEELS, CUT-OFF WHEELS AND FLAP WHEELS)

- 1200 to 3000 Watts (1.61 to 4.02 hp) - 6000 to 8500 rpm
- ø 180mm (7")





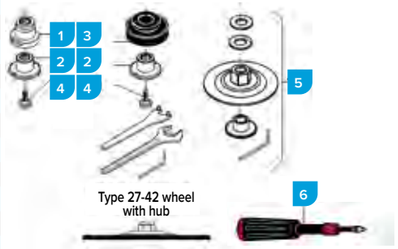


Part No.	Model	Pic Ref	Free Speed	Wheel max Capacity DxExd		Threaded Spindle	Power		Weight		Air Consumption Free Speed		Air Consumption Max Speed		Air Inlet	Hose int. Ø	
			rpm	mm	in.	in	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
Vertical Grinders																	
615 170 012 0	KL185B7	A	8500	180x9.5x22.2	7x3/8x7/8	5/8-11	1200	1.61	2.8	6.1	16	34	27	57	1/2	13	1/2
615 170 341 0	KL377B7	B	7700	180x9.5x22.2	7x3/8x7/8	5/8-11	3000	4.02	4.2	9.2	19	40	46	97	1/2	15	5/8
For USA Market only (to ANSI B186.1)																	
615 170 182 0	KL177B7Y	C	7700	180x9.5x22.2	7x3/8x7/8	5/8-11	1200	1.61	2.8	6.1	8	17	25	53	1/2	15	5/8
Low Vibration – Vertical Grinders																	
615 170 472 0	KL377B7V	B	7700	180x9.5x22.2	7x3/8x7/8	5/8-11	3000	4.02	4.3	9.4	19	40	46	97	1/2	15	5/8
Vertical Grinders for cup wheels																	
615 170 337 0	KL360B6C	D	6000	150	6	5/8-11	2400	3.22	4.2	9.2	9	19	39	82	1/2	15	5/8
For USA Market only (to ANSI B186.1)																	
615 170 351 0	KL360B6CY	D	6000	150	6	5/8-11	2400	3.22	4.2	9.2	9	19	39	82	1/2	15	5/8
Angle Grinders																	
615 170 476 0	KA26085B7V	E	8500	180x9.5x22.2	7x3/8x7/8	5/8-11	2100	2.82	2.7	5.9	17	36	36	77	1/2	15	5/8
615 170 489 0	KA26085H7V	E	8500	180x9.5x22.2	7x3/8x7/8	HEX.	2100	2.82	2.7	5.9	17	36	36	77	1/2	15	5/8
For USA Market only (to ANSI B186.1)																	
615 170 478 0	KA26077B7Y	F	7700	180x9.5x22.2	7x3/8x7/8	5/8-11	2100	2.82	2.7	6.6	16	33	32	69	1/2	15	5/8

Accessories optional KL360B6C / KL360B6CY - Ø 150mm (6")	Part No. KL185B7	KL377B7	KL177B7Y
A Silencer	615 399 462 0		615 399 462 0
B Silencer		615 399 463 0	
C Auto-Balancer	615 503 146 0		

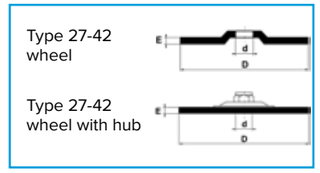


Accessories optional KA16100B6FVK - ø 150mm (6")	Part No.
1 Rear flange	615 503 103 0
2 Nut	615 542 104 0
3 Rear flange balancer	615 503 146 0
4 Safety screw	615 614 034 0
5 Wheel adaptor	C087920
• Pin wrench	615 802 010 0
• Flat wrench	615 801 077 0
• Hex key	615 802 056 0
6 Grease gun includes 24g (0.8oz)	615 990 149 0
• Grease for bevel gear (1kg - 2.2lb)	615 990 148 0



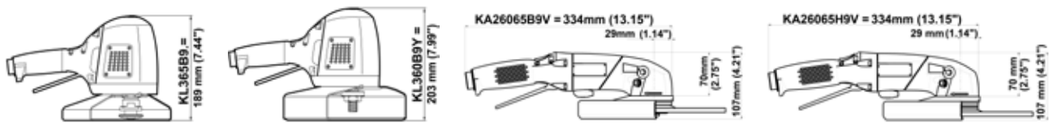
DESOUTTER GRINDERS (FOR DEPRESSED CENTRE WHEELS)

- 2100 and 2900 Watts (2.82 and 3.89 hp) - 6000 and 6500 rpm
- ø 230mm (9")

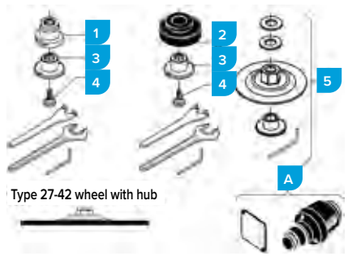




Part No.	Model	Pic Ref	Free Speed	Wheel max Capacity DxExd		Threaded Spindle	Power		Weight		Air Consumption Free Speed		Air Consumption Max Speed		Air Inlet	Hose int. Ø	
			rpm	mm	in.	in	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
Vertical Grinders																	
615 170 338 0	KL365B9	A	6500	230x6.4x22.2	9x1/4x7/8	5/8-11	2900	3.89	4.4	9.7	13	27	44	93	1/2	15	5/8
For USA Market only (to ANSI B186.1)																	
615 170 350 0	KL360B9Y	B	6000	230x6.4x22.2	9x1/4x7/8	5/8-11	2900	3.89	4.4	9.7	12	25	43	91	1/2	15	5/8
Low Vibration – Vertical Grinders																	
615 170 474 0	KL365B9V	A	6500	230x6.4x22.2	9x1/4x7/8	5/8-11	2900	3.89	4.5	9.9	13	27	44	93	1/2	15	5/8
Angle Grinders																	
615 170 477 0	KA26065B9V	C	6500	230x6.4x22.2	9x1/4x7/8	5/8-11	2100	2.82	2.9	6.4	21	44	38	80	1/2	15	5/8
615 170 490 0	KA26065H9V	C	6500	230x6.4x22.2	9x1/4x7/8	HEX.	2100	2.82	2.9	6.4	21	44	38	80	1/2	15	5/8



Accessories optional KL365B9 / KL365B9V / KL360B9Y - Ø 230mm (9")	Part No. KL365B9	KL360B9Y
1 Rear flange		615 503 103 0
2 Auto-balancer		615 503 146 0
3 Nut		615 542 104 0
4 Safety screw		615 614 034 0
5 Wheel adaptor		C087920
• Pin wrench, 35mm (1-3/8")		615 802 010 0
• Flat wrench, 27mm (1-1/16")		615 801 077 0
• Hex. Key 6mm		615 802 056 0
A Silencer kit	615 399 463 0	615 399 463 0



Accessories optional KA26065B9V / KA26065H9V - Ø 230mm (9")	Part No.
1 Grease gun includes 24g (0.8oz)	615 990 149 0
• Grease for bevel gear (1kg - 2.2lb)	615 990 148 0



DIE GRINDER – 90°

- Front exhaust Angle design provides comfortable grip.
- Strong and reliable, excellent for grinding, polishing, deburring and breaking sharp edges in confined areas.
- Hardened spiral bevel gears
- Front Exhaust
- Fall ball bearing construction
- Powerful .25HP motor
- Grease fitting in head
- Lock off lever



Part No.	Description	RPM	Power	Collet	OAL	Weight
T-7759R	Taylor Die Grinder	25,000	0.25 Hp	1/4"	140mm	1 lbs
H-29014	Henchman Die Grinder	25,000	0.25 Hp	1/4"	140mm	1 lbs

DIE GRINDER – STRAIGHT

- Fits in the palm of your hand. Easy accessibility to confined areas.
- Direct Drive
- Rear Exhaust
- Full ball bearing construction
- Powerful .25HP motor



Part No.	Description	RPM	Power	Collet	OAL	Weight
T-7758R	Taylor Die Grinder Straight	25,000	0.25 Hp	1/4"	170mm	0.8 lbs
H-20014	Henchman Die Grinder Straight	25,000	0.25 Hp	1/4"	170mm	0.8 lbs

DIE GRINDER – EXTENDED REACH

- Allows you to reach deep into areas that would be impossible with other tools.
- Rear Exhaust
- Full ball bearing construction
- Powerful .5HP motor



Part No.	Description	RPM	Power	Collet	OAL	Weight
T-7757RE	Taylor Die Grinder Extended	25,000	0.5 Hp	1/4"	336mm	2.6 lbs
H-20014-E	Henchman Die Grinder Extended	25,000	0.5 Hp	1/4"	336mm	2.6 lbs

UHT MICRO DIE GRINDER – 120° 1/8" COLLET

- High quality tool made in Japan
- For precision grinding or polishing



Part No.	RPM	Description	Collet	OAL	Weight
MAG121N1/8	35,000	Micro Grinder	1/8"	120mm	-

ARO PENCIL GRINDER

- Lightweight and easy to handle, this tool is easy to use for longer periods of time.
- Get your work done fast with this compact tool, which can reach tight spaces and hard-to-access angles.
- With a metal housing, this tool is built to last.



Part No.	RPM	Description	Collet	OAL	Weight
7114-E	20,000	Pencil Grinder	1/8"	152mm	370g

CRATEX MINI ROTARY HANDPIECE – 3/32" COLLET

- Stainless steel and aluminium construction
- Nylon braided hose with mufFLer
- Suits Cratex Rubber Abrasive mounted points
- Air consumption 90PSI



Part No.	RPM	Description	Collet	OAL	Weight
CTX801	25,000	Variable Speed Grinder	3/32"	127mm	-

DYNOBRADE PENCIL GRINDER

- Precision deburring and finishing
- Adjust speed (5.000 to 25.000 RPM) by rotating rear roll valve
- Collet cap with tactile grip to protect from rotating collet and allow fingertip control
- Changing of attachment with easy, two-wrench manoeuvre



Part No.	RPM	Description	Collet	OAL	Weight
52861	25,000	Pencil Grinder	1/8"	144mm	480g

AIR SCRIBER ENGRAVING PEN

- Highest durability in the market
- Hose 8ft (2.4m) length with air filter
- Convertible to a hammer or a light scaler
- Constructed of premium components
- Easy handling and comfortable use
- CP9361 with replaceable point
- CP9160 with non-replaceable point and 2m integrated hose
- Adjustable power for a variety of applications and materials such as: metals, plastics, ceramics, and glass



Part No.	Description	Blows p/Min	Collet	OAL	Weight
CP9361-1	Air Scriber Kit in Case	13,500	1/8"	127mm	140g
63213	Replacement Needle				
CP9160	Air Scriber Engraving Pen	32.400	-	147mm	120g

DESOUTTER AIR SCRIBE SET

Contents:

- Air Hose - 3.2mm bore - Length 2m (78.7") - 1/8" - 1/4" BSP
- Tungsten carbide tipped needle
- Key



Part No.	Model	Blows per minute	Weight		Air Consumption Free Speed		Air Inlet	Hose int. Ø	
		blows/min	kg	lb	l/s	cfm	in.	mm	in.
671094	VP2-X	11400	0.1	0.2	0.9	1.9	1/8	3.2	1/8

DESOUTTER GRINDERS FOR CARBIDE BURRS AND MOUNTED POINTS

- 44 to 100 Watts (0.06 to 0.13 hp) - 60000 to 100000 rpm
- Caution: comply with the speeds recommended by component and abrasive manufacturers.







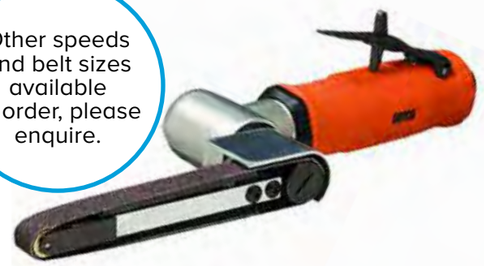
Part No.	Model	Pic Ref	Free Speed	Collet max Capacity		Power		Weight		Air Consumption Free Speed		Air Consumption Max Speed		Air Inlet	Hose int. Ø	
			rpm	mm	in.	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
Pencil Die Grinders																
615 170 313 0	KC1600-T	A	60000	3.00		1/8	0.13	0.15	0.33	4.9	10.4	1/4 BSP	6	1/4		
615 170 315 0	KC1600	B	60000	3.00		100	0.13	0.15	0.33	4.9	10.4	1/4 BSP	6	1/4		
Turbine Grinders																
205 146 638 4	KC061000	C	100000	3.00		44	0.06	0.24	0.53	8.5	18.0	1/4	5	3/16		
258984	05-X-80000	D	80000	3.17	1/8	75	0.1	0.30	0.66	2.8	5.9	1/8	5	3/16	8	5/16

Sanders

DOTCO® BELT SANDER – REAR EXHAUST

- Can grind, deburr, strap polish, and blend. Grind corners, enter grooves, debur, strap polish or enter channels
- Ergonomic housing that reduces cold air transmission to the operator
- Belt cover makes belt changes quick and easy, snaps on/off easily with no special tools needed allowing for quick belt changes
- Sanding attachment pivots 360° to allow flexibility in reaching confined areas
- Interchangeable arm to best suit a variety of applications

Other speeds and belt sizes available to order, please enquire.



Part No.	Description	Belt Size	RPM	OAL	Weight
12L1382 36B2	Belt Sander	1/2" x 12"	20,000	287mm	640g

BELT SANDER – REAR EXHAUST

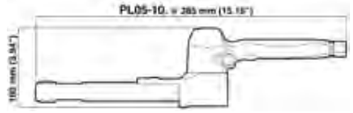
- A must for every workshop
- Uses 10 x 330mm belts, see our abrasives section
- For use on steel, aluminum, wood, plastic, rubber, etc.
- Adjustable Head
- Includes 2 belts
- Works well in corners and on irregular shapes



Part No.	Description	Belt Size	RPM	OAL	Weight
T-7010A	Taylor Belt Sander	3/8" x 13"	16,000	260mm	770g
H-33813	Henchman Belt Sander	3/8" x 13"	16,000	260mm	770g

DESOUTTER BELT SANDERS

- 300 Watts (0.4 hp) - 16000 rpm
- Caution: comply with the speed recommended by component and abrasive manufacturers





Part No.	Model No.	Ref	Free Speed	Belt Size		Power		Weight		Air Consumption max Output		Air Inlet	Hose int. Ø	
			rpm	mm	in	W	hp	kg	lb	l/s	cfm	in.	mm	in.
615 170 131 0	PL05-10D	A	16000	480 x 16	18-7/8 x 5/8	300	0.4	1.2	2.6	12	25.4	1/4	6	1/4
615 170 132 0	PL05-10E	B	16000	480 x 20	18-7/8 x 25/32	300	0.4	1.2	2.6	12	25.4	1/4	6	1/4
615 170 133 0	PL05-10F	C	16000	480 x 25	18-7/8 x 63/64	300	0.4	1.2	2.6	12	25.4	1/4	6	1/4

Replacement Sanding Belts on page 180

RUBBER SANDING BLOCK

- Solid rubber metal teeth to hold paper in position
- Easy to load paper



Part No.	Description	Pad Size
4130	Rubber Sanding Block	115 x 65mm

TAYLOR PALM GRIP ORBITAL SANDERS

- A great finishing sander. Smooth and quiet, yet has a fast cutting action
- Rear Exhaust
- Heavy duty ball bearing construction
- Paddle Lever
- Light and powerful



Part No.	Description	Pad Size	RPM
T-7445	Taylor Palm Grip Sander	5"	6,000
T-7446	Taylor Palm Grip Sander	6"	6,000

HENCHMAN PALM GRIP ORBITAL SANDERS

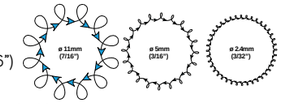
- A great finishing sander. Smooth and quiet, yet has a fast cutting action
- Rear Exhaust
- Heavy duty ball bearing construction
- Paddle Lever
- Light and powerful



Part No.	Description	Pad Size	RPM
H-32850	Henchman Palm Grip Sander	5"	6,000
H-32860	Henchman Palm Grip Sander	6"	6,000

DESOUTTER RANDOM ORBITAL SANDERS FOR ABRASIVE DISCS

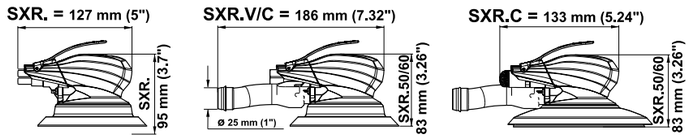
- Ø 89mm (3.5") - ø 127mm (5") - ø 150mm (6")
- 210 Watts (0.3 hp) - 12000 rpm
- Caution: comply with the speed recommended by component and abrasive manufacturers



SX R A 35 C

- C: external vacuum / V: self vacuum / - : non-vacuum
- 35: pad ø 89mm (3.5") / 50: pad ø 127mm (5") / 60: pad ø 150mm (6")
- A: orbit ø 2.4mm (3/32") / B: orbit ø 5mm (3/16") / C: orbit ø 11mm (7/16")
- R: Random orbital sander
- Name of the range



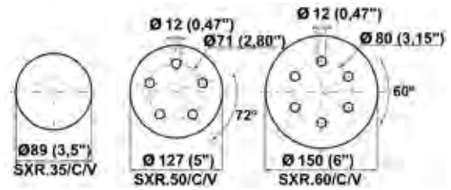


Pad Size		Part No.	Model No.	Part No.	Model No.	Part No.	Model No.	Weight		Air Consumption max Output		Air Inlet	Hose int. Ø	
mm	in							kg	lb	l/s	cfm	in.	mm	in.
RANDOM ORBITAL SANDERS, ORBIT ø 11mm (7/16")														
		non-vacuum		External vacuum		Self vacuum								
Ø 150	6	615 170 462 0	SXRC60	615 170 463 0	SXRC60C	615 170 464 0	SXRC60V	0.88	1.94	8.0	16.6	1/4	6	1/4
RANDOM ORBITAL SANDERS, ORBIT ø 11mm (7/16")														
		non-vacuum		External vacuum		Self vacuum								
ø 89	3.5	615 170 209 0	SXRB35	615 170 215 0	SXRB35C	615 170 212 0	SXRB35V	0.8	1.7	8.0	16.6	1/4	6	1/4
ø 127	5	615 170 210 0	SXRB50	615 170 216 0	SXRB50C	615 170 213 0	SXRB50V	0.8	1.7	8.0	16.6	1/4	6	1/4
ø 127	5	615 170 300 0	SXRB50*					0.8	1.7	8.0	16.6	1/4	6	1/4
ø 150	6	615 170 211 0	SXRB60	615 170 217 0	SXRB60C	615 170 214 0	SXRB60V	0.8	1.7	8.0	16.6	1/4	6	1/4
ø 150	6	615 170 317 0	SXRB60*					0.8	1.7	8.0	16.6	1/4	6	1/4
RANDOM ORBITAL SANDERS, ORBIT ø 2.4mm (3/32")														
		non-vacuum		External vacuum		Self vacuum								
ø 89	3.5	615 170 218 0	SXRA35	615 170 224 0	SXRA35C	615 170 221 0	SXRA35V	0.8	1.7	8.0	16.6	1/4	6	1/4
ø 127	5	615 170 219 0	SXRA50	615 170 225 0	SXRA50C	615 170 222 0	SXRA50V	0.8	1.7	8.0	16.6	1/4	6	1/4
ø 127	5	615 170 220 0	SXRA60	615 170 226 0	SXRA60C	615 170 223 0	SXRA60V	0.8	1.7	8.0	16.6	1/4	6	1/4

Accessories optional Pads: Thread 5/16"-24		Part No. For self-adhesive abrasive	For self-adhesive abrasive (v) or (c) with holes
1	Pad ø 89mm (3.5") - 80gr - SXR(.)35(.)	615 990 163 0	-
2	Pad ø 127mm (5") - 100gr - SXR(.)50	615 990 161 0	615 990 162 0
3	Pad ø 150mm (6") - 130gr - SXR(.)60	615 990 159 0	615 990 160 0
Vacuum skirts			
4	Vacuum skirt for SXR(.)35(.)		615 350 110 0
5	Vacuum skirt for SXR(.)50C		615 350 107 0
6	Vacuum skirt for SXR(.)60C		615 350 106 0
7	Vacuum skirt for SXR(.)50V		615 350 103 0
8	Vacuum skirt for SXR(.)60V		615 350 102 0
Adaptor			
9	Vacuum hose adaptor ø 25mm (1") / ø 32mm (1-1/4")	615 350 117 0	615 350 110 0
•	Vacuum hose adaptor ø 25mm (1") / ø 28mm (1-1/8")	615 804 448 0	615 350 107 0
Hose			
10	Dust extraction hose ø 25mm (1") L = 1.5m (60")		615 396 263 0
Bail Hook			
11	Bail hook		615 571 060 0





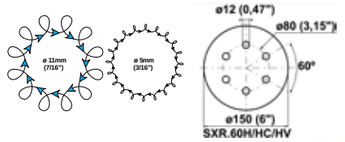






DESOUTTER RANDOM ORBITAL SANDERS FOR ABRASIVE DISCS

- Ø 150mm (6")
- 210 Watts (0.3 hp) - 12000 rpm
- Caution: comply with the speed recommended by component and abrasive manufacturers



SX R B 35 C (.)

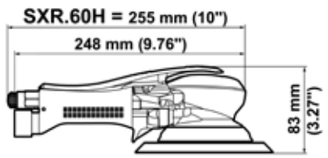
- (.): non-vacuum / C: external vacuum / V: self-vacuum
- H: two handed
- 60 : pad ø 150mm (6")
- B: orbit ø 5mm (3/16") / C: orbit ø 11mm (7/16")
- Random orbital sander
- Name of the range

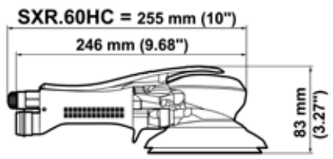

SXR.60H

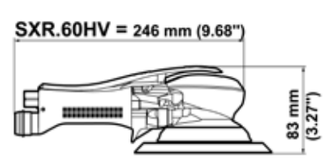

SXR.60HC


SXR.60HV

Pad Size		Part No.	Model No.	Part No.	Model No.	Part No.	Model No.	Weight		Air Consumption max Output		Air Inlet	Hose int. Ø	
mm	in							kg	lb	l/s	cfm	in.	mm	in.
RANDOM ORBITAL SANDERS, ORBIT ø 11mm (7/16")														
		non-vacuum		External vacuum		Self vacuum								
Ø 150	6	615 170 465 0	SXRC60H	615 170 466 0	SXRC60HC	615 170 467 0	SXRC60HV	0.88	1.94	8.0	16.6	1/4	6	1/4
RANDOM ORBITAL SANDERS, ORBIT ø 5mm (3/16")														
		non-vacuum		External vacuum		Self vacuum								
Ø 150	6	615 170 355 0	SXRB60H	615 170 362 0	SXRB60HC	615 170 359 0	SXRB60HV	0.9	2.0	8.0	16.6	1/4	6	1/4
Ø 150	6	615 170 356 0	SXRB60H*					0.9	2.0	8.0	16.6	1/4	6	1/4







Accessories optional Pads: Thread 5/16"-24		Part No. For self-adhesive abrasive	For self-adhesive abrasive (v) or (c) with holes
1	Pad ø 150mm (6") - 130gr - SXR(.)60	615 990 159 0	615 990 160 0
Vacuum skirts			
2	Vacuum skirt for SXR(.)60HC	615 350 106 0	615 350 110 0
3	Vacuum skirt for SXR(.)60HV	615 350 102 0	615 350 107 0
Adaptor			
4	Vacuum hose adaptor ø 25mm (1") / ø 32mm (1-1/4")		615 350 117 0
•	Vacuum hose adaptor ø 25mm (1") / ø 28mm (1-1/8")		615 804 448 0
Hose			
5	Dust extraction hose ø 25mm (1") L = 1.5m (60")		615 396 263 0
Bail Hook			
6	Bail hook		615 571 060 0

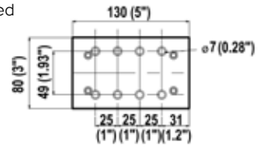






DESOUTTER RANDOM ORBITAL SANDERS FOR ABRASIVE DISCS

- 80 x 130mm (3"x 5") - 147 x 100mm (6"x 4")
- 210 Watts (0.3 hp) - 10000 rpm
- Caution: comply with the speed recommended by component and abrasive manufacturers



SX O A T1 C

- C: external vacuum
  V: self vacuum
  - : non-vacuum
- T1: triangular pad - Iron
  R1: rectangular pad
- A: orbit ø 2.4mm (3/32")
- Orbital sander
- Name of the range


SXOAR1


SXOAR1C

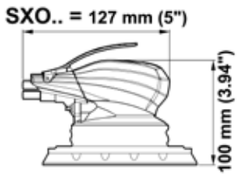

SXOAR1V

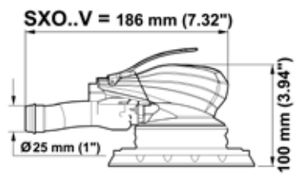

SXOAT1

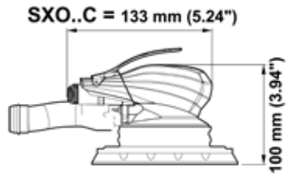

SXOAT1C


SXOAT1V

Pad Size		Part No.	Model No.	Part No.	Model No.	Part No.	Model No.	Weight		Air Consumption max Output		Air Inlet	Hose int. Ø	
mm	in							kg	lb	l/s	cfm	in.	mm	in.
ORBITAL SANDERS, ORBIT ø 2.4mm (3/32")														
		non-vacuum		External vacuum		Self vacuum								
80x130	3x5	615 170 233 0	SXOAR1	615 170 237 0	SXOAR1C	615 170 235 0	SXOAR1V	1.0	2.2	8.0	16.6	1/4	6	1/4
147x100	6x4	615 170 234 0	SXOAT1	615 170 238 0	SXOAT1C	615 170 236 0	SXOAT1V	1.0	2.2	8.0	16.6	1/4	6	1/4

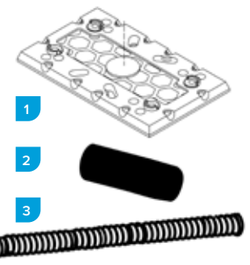







Kit supplied

Accessories optional	Part No.
• Paper holder kit	615 396 413 0
• Pad 80x130mm (3x5") for SXOAR..	615 350 123 0
Adaptor	
• Vacuum hose adaptor ø 25mm (1") / ø 32mm (1-1/4")	615 350 117 0
• Vacuum hose adaptor ø 25mm (1") / ø 28mm (1-1/8")	615 804 448 0
Hose	
• Dust extraction hose ø 25mm (1") L = 1.5m (60")	615 396 263 0





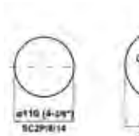
SXOAR1

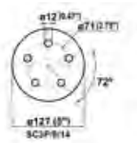


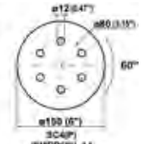
equipped with paper holder kit

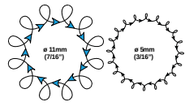
DESOUTTER RANDOM ORBITAL SANDERS FOR ABRASIVE DISCS

- ø 110mm (4-3/8") - ø 127mm (5") ø 150mm (6")
- 375 Watts (0.5 hp) - 10000 rpm
- Caution: comply with the speed recommended by component and abrasive manufacturers










SC4


SC4P

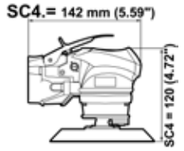

SMRD60H

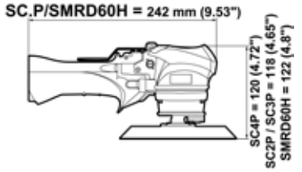

SC4-8

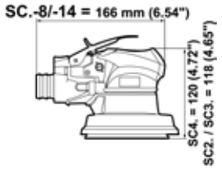

SC4P8 - SMRD60HC

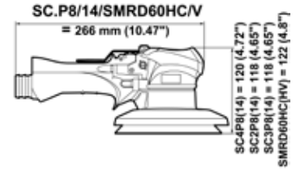

SC4P14 - SMRD60HV

Pad Size		Part No.	Model No.	Part No.	Model No.	Part No.	Model No.	Weight		Air Consumption max Output		Air Inlet	Hose int. Ø	
mm	in							kg	lb	l/s	cfm	in.	mm	in.
SANDERS WITH PALM GRIP, ORBIT ø 8mm (5/16")														
		non-vacuum		External vacuum		Self vacuum								
Ø 150	6	615 170 081 0	SC4	615 170 093 0	SC4-8	615 170 087 0	SC4-14	1.3	2.86	11	23	1/4	8	5/16
SANDERS WITH HANDLE GRIP, ORBIT ø 8mm (5/16")														
		non-vacuum		External vacuum		Self vacuum								
ø 110	4-3/8	615 170 077 0	SC2P	615 170 089 0	SC2P8	615 170 083 0	SC2P14	1.2	2.64	11	23	1/4	8	5/16
ø 127	5	615 170 079 0	SC3P	615 170 091 0	SC3P8	615 170 085 0	SC3P14	1.3	2.86	11	23	1/4	8	5/16
ø 150	6	615 170 078 0	SC4P	615 170 090 0	SC4P8	615 170 084 0	SC4P14	1.4	3.08	11	23	1/4	8	5/16
LARGE ORBIT SANDERS WITH HANDLE GRIP, ORBIT ø 14mm (9/16")														
		non-vacuum		External vacuum		Self vacuum								
Ø 150	6	615 170 280 0	SMRD60H	615 170 281 0	SMRD60HC	615 170 282 0	SMRD60HV	1.3	2.86	11	23	1/4	8	5/16

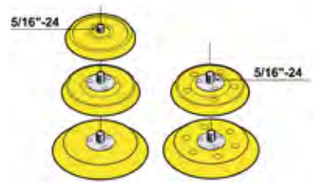








Accessories optional Pads: Thread 5/16"-24	Part No. For self-adhesive abrasive	 For self-adhesive abrasive (v) or (c) with holes
• Pad ø 110mm (4-3/8") - SC2P/8/14	615 990 101 0	-
• Pad ø 127mm (5") - SC3P	615 990 111 0	615 990 110 0
• Pad ø 150mm (6") - SC4(P) - SRMD60H.	615 990 119 0	615 990 118 0



DESOUTTER RANDOM ORBITAL SANDERS FOR ABRASIVE SHEETS

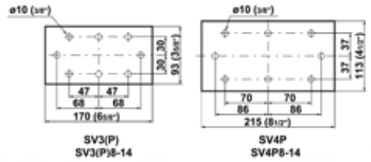
- 170 x 93mm (6-5/8"x 3-5/8") - 215 x 113mm (8-1/2"x 4-1/2")
- 375 Watts (0.5 hp) - 8000 rpm
- Caution: comply with the speed recommended by component and abrasive manufacturers



SV3



SV3P





SV3-8

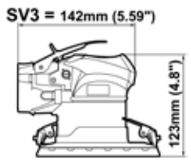


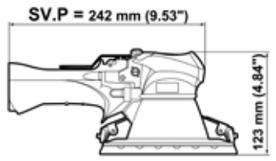
SV3P8

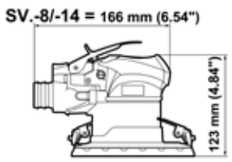


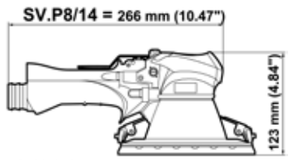
SV3P14

Pad Size		Part No.	Model No.	Part No.	Model No.	Part No.	Model No.	Weight		Air Consumption max Output		Air Inlet	Hose int. Ø	
mm	in							kg	lb	l/s	cfm	in.	mm	in.
SANDERS WITH PALM GRIP, ORBIT ø 5mm (3/16")														
		non-vacuum		External vacuum		Self vacuum								
170x93	65/8 x 35/8	615 170 066 0	SV3	615 170 074 0	SV3-8	615 170 070 0	SV3-14	1.7	3.74	11	23	1/4	8	5/16
SANDERS WITH HANDLE GRIP, ORBIT ø 5mm (3/16")														
		non-vacuum		External vacuum		Self vacuum								
170x93	65/8 x 35/8	615 170 067 0	SV3P	615 170 075 0	SV3P8	615 170 071 0	SV3P14	1.8	3.96	11	23	1/4	8	5/16
215x113	81/2 x 41/2	615 170 068 0	SV4P	615 170 076 0	SV4P8	615 170 072 0	SV4P14	1.9	4.19	11	23	1/4	8	5/16

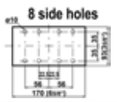








Accessories optional	Part No.
• Pad 170x93mm (6-5/8" x 3-5/8") - 8 side holes SV3(P)	615 350 057 0

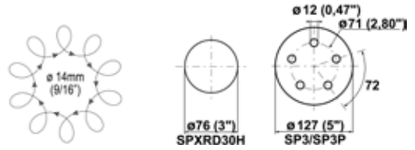






DESOUTTER RANDOM ORBITAL POLISHERS

- ø 76mm (3") - ø 127mm (5")
- 210 and 375 Watts (0.3 and 0.5 hp) - 10000 and 12000 rpm
- Caution: comply with the speed recommended by component and abrasive manufacturers





SP3



SP3P



SPXRD30H

Pad Size		Part No.	Model No.	Weight		Air Consumption max Output		Air Inlet	Hose int. Ø	
mm	in			kg	lb	l/s	cfm	in.	mm	in.
POLISHER WITH PALM GRIP, ORBIT ø 14mm (9/16")										
		non-vacuum								
Ø 127	5	615 170 198 0	SP3	1.2	2.64	11	23	1/4	8	5/16
POLISHER WITH HANDLE GRIP, ORBIT ø 14mm (9/16")										
		non-vacuum								
ø 76	3	615 170 332 0	SPXRD30H	0.9	1.98	11	23	1/4	8	5/16
ø 127	5	615 170 197 0	SP3P	1.3	2.86	11	23	1/4	8	5/16



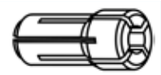




DESOUTTER SANDERS FOR EXPANDABLE WHEELS, FLAP WHEELS, BRUSHES

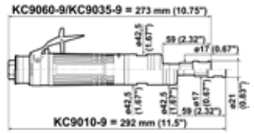
- 900 Watts (1.21 hp) - 1000 to 5500 rpm
- Supplied with series 200 Erickson collet, Ø 5.55 to 6.35mm (1/4")
- Caution: comply with the speed recommended by component and abrasive manufacturers

Series 200
Erickson collet



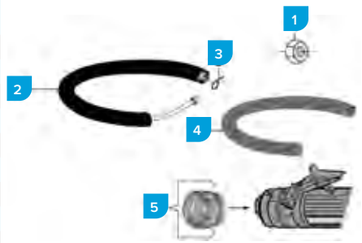






Part No.	Model	Pic Ref	Free Speed	Collet max Capacity		Power		Weight		Air Consumption Free Speed		Air Consumption Max Speed		Air Inlet	Hose int. Ø	
			rpm	mm	in.	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
615 170 166 0	KC9060-9	A	5500	9.5	3/8	900	1.21	1.38	3.0	10	21	16	34	3/8	10	3/8
615 170 167 0	KC9035-9	A	3500	9.5	3/8	900	1.21	1.38	3.0	6	13	14	30	3/8	10	3/8
615 170 168 0	KC9010-9	B	1000	9.5	3/8	900	1.21	1.45	3.2	10	21	16	34	3/8	10	3/8

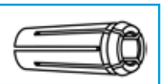
Accessories optional KC9060-9 / KC9035-9 / KC9010-9		Part No.
•	Series 200 resilient collet, ø 2.4 to 3.2mm (1/8")	615 526 061 0
•	Series 200 resilient collet, ø 5.2 to 6mm	615 526 062 0
•	Series 200 resilient collet, ø 7.2 to 8mm (5/16")	615 526 064 0
•	Series 200 resilient collet, ø 8.7 to 9.5mm (3/8")	615 526 065 0
1	Nut 3/8" - 24	615 608 044 0
2	Complete silencer kit	615 396 166 0
3	Clamp	615 873 115 0
4	Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
5	Clippable silencer	615 396 655 0



DESOUTTER SANDERS FOR EXPANDABLE WHEELS, FLAP WHEELS, BRUSHES...

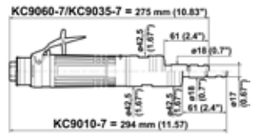
- 900 Watts (1.21 hp) - 1000 to 5500 rpm
- Supplied with CNOMO collet, Ø 6mm
- Caution: comply with the speed recommended by component and abrasive manufacturers

CNOMO
type collet



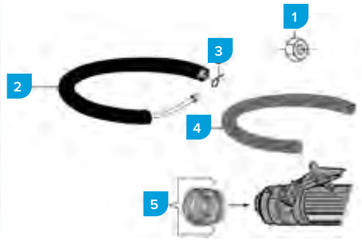






Part No.	Model	Pic Ref	Free Speed	Collet max Capacity		Power		Weight		Air Consumption Free Speed		Air Consumption Max Speed		Air Inlet	Hose int. Ø	
			rpm	mm	in.	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
615 170 122 0	KC9060-7	A	5500	8	5/16	900	1.21	1.38	3.0	10	21	16	34	3/8	10	3/8
615 170 121 0	KC9035-7	A	3500	8	5/16	900	1.21	1.38	3.0	6	13	14	30	3/8	10	3/8
615 170 120 0	KC9010-7	B	1000	8	5/16	900	1.21	1.45	3.2	10	21	16	34	3/8	10	3/8

Accessories optional KC9060-7 / KC9035-7 / KC9010-7		Part No.
•	CNOMO collet ø 3mm	615 526 048 0
•	CNOMO collet ø 6.35mm (1/4")	615 526 050 0
•	CNOMO collet ø 8mm (5/16")	615 526 051 0
1	Nut 3/8" - 24	615 608 044 0
2	Complete silencer kit	615 396 166 0
3	Clamp	615 873 115 0
4	Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
5	Clippable silencer	615 396 655 0



DESOUTTER ANGLE SANDERS FOR ABRASIVE DISCS

- 220 to 375 Watts (0.3 to 0.5 hp) - 2100 to 20000 rpm
- ø 76mm (3") - ø 100mm (4") - ø 127mm (5") - ø 150mm (6") - ø 180mm (7")
- Supplied with 1/4", 3/8" or M14 threaded spindle only
- Caution: comply with the speed recommended by component and abrasive manufacturers

CNOMO
type collet







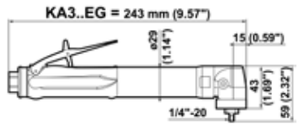


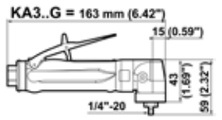


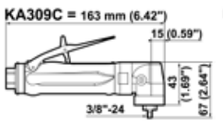


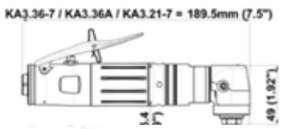


Part No.	Model No.	Pic Ref	Free Speed	Abrasive or Collet max Capacity		Threaded Spindle	Power		Weight		Air Consumption at Free Speed		Air Consumption at Max Speed		Air Inlet	Hose int. Ø	
			rpm	Ø mm	Ø in	in.	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
615 170 048 0	KA320EG	A	20000	76	3	1/4-20	375	0.5	0.67	1.47	6.5	13.5	10	21	1/4	8	5/16
615 170 040 0	KA312EG	A	12000	76	3	1/4-20	375	0.5	0.67	1.47	3.0	6.5	9	19	1/4	8	5/16
615 170 044 0	KA320G	B	20000	76	3	1/4-20	375	0.5	0.50	1.10	6.5	13.5	10	21	1/4	8	5/16
615 170 310 0	KA318G	B	18000	76	3	1/4-20	375	0.5	0.50	1.10	3.0	6.5	9	19	1/4	8	5/16
615 170 038 0	KA312G	B	12000	76	3	1/4-20	375	0.5	0.50	1.10	3.0	6.5	9	19	1/4	8	5/16
615 170 204 0	KA309G	B	9000	76	3	1/4-20	220	0.3	0.50	1.10	2.2	4.7	8	17	1/4	8	5/16
615 170 203 0	KA309C	C	9000	76	3	3/8-24	220	0.3	0.50	1.10	2.2	4.7	8	17	1/4	8	5/16
						Low Speed Sanders											
615 170 525 0	KA3.36A	D	3600	-	M14x2	300	0.4	0.70	1.54	9.5	20.0	-	-	1/4	6	1/4	
615 170 523 0	KA3.36-7	E	3600	cap. 8mm (5/16")		-	300	0.4	0.70	1.54	9.5	20.0	-	-	1/4	6	1/4
615 170 524 0	KA3.21-7	E	2100	cap. 8mm (5/16")		-	300	0.4	0.70	1.54	9.5	20.0	-	-	1/4	6	1/4



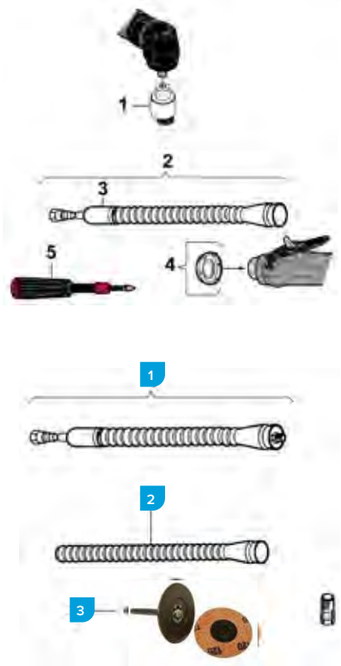






Accessories optional KA3..EG / KA3..G / KA309C		Part No.
1	Complete silencer kit	615 396 101 0
2	Complete silencer kit	615 396 101 0
3	Silencer	615 574 028 0
4	Clippable silencer	615 396 124 0
5	Grease gun (capacity 24g - 0.8oz)	615 990 149 0
•	Grease for bevel gear (1kg - 2.2lb)	615 990 148 0

Accessories optional KA3.36A / KA3.36-7 / KA3.21-7		Part No.		
		KA3.36A	KA3.36-7/KA3.21-7	
1	Complete silencer kit	615 399 423 0	615 399 423 0	
2	Exhaust hose L = 0.8m (31")	615 875 106 0	615 875 106 0	
3	Backing pad ø 50mm (31/32")		615 804 098 0	
•	Collet ø 2mm		615 526 066 0	
•	Collet ø 2.5mm		615 526 068 0	
•	Collet ø 3mm		615 526 069 0	
•	Collet ø 3.5mm		615 526 070 0	
•	Collet ø 4mm (5/32")		615 526 071 0	
•	Collet ø 4.5mm		615 526 073 0	
•	Collet ø 5mm		615 526 075 0	
•	Collet ø 5.5mm		615 526 077 0	
•	Collet ø 6mm		615 526 079 0	
•	Collet ø 6.5mm (1/4")		615 526 081 0	
•	Collet ø 7mm		615 526 083 0	
•	Collet ø 7.5mm		615 526 084 0	
•	Collet ø 8mm (5/16")		615 526 088 0	



DESOUTTER SANDERS FOR ABRASIVE DISCS

- 1350 to 1700 Watts (1.83 to 2.3 hp) - 6000 to 13500 rpm
- ø 100mm (4") - ø 127mm (5") - ø 150mm (6") ø 180mm (7")
- Supplied with M14 or 5/8" threaded spindle only
- Caution: comply with the speed recommended by component and abrasive manufacturers





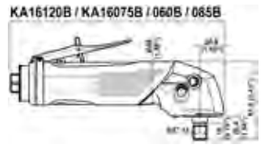




Part No.	Model No.	Pic Ref	Free Speed	Threaded Spindle	Power		Weight		Air Consumption at Free Speed		Air Consumption at Max Speed		Air Inlet	Hose int. Ø	
			rpm	in.	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
615 170 446 0	KA16135C4S	A	13500	3/8-24	1 700	2.28	1.48	3.3	25	53	35	74	3/8	13	1/2
615 170 435 0	KA16120A	B	12000	M14x2	1 700	2.28	1.39	3.0	20	42	32	68	3/8	13	1/2
615 170 445 0	KA16120B	B	12000	5/8-11	1 700	2.28	1.39	3.0	20	42	32	68	3/8	13	1/2
615 170 468 0	KA16085A	C/D	8500	M14x2	1 700	2.28	1.39	3.0	20	42	32	68	3/8	13	1/2
615 170 469 0	KA16085B	C/D	8500	5/8-11	1 700	2.28	1.39	3.0	20	42	32	68	3/8	13	1/2
615 170 448 0	KA16075A	C/D	7500	M14x2	1 500	2.01	1.39	3.0	15	32	27	57	3/8	13	1/2
615 170 452 0	KA16075B	C/D	7500	5/8-11	1 500	2.01	1.39	3.0	15	32	27	57	3/8	13	1/2
615 170 449 0	KA16060A	C/D	6000	M14x2	1 350	1.81	1.41	3.1	11	23	23	49	3/8	13	1/2
615 170 453 0	KA16060B	C/D	6000	5/8-11	1 350	1.81	1.41	3.1	11	23	23	49	3/8	13	1/2
For USA Market only (to ANSI B186.1)															
615 170 447 0	KA16120BY	B	12000	5/8-11	1 700	2.28	1.41	3.1	20	42	32	68	3/8	13	1/2
615 170 450 0	KA16075BY	D	7500	5/8-11	1 500	2.01	1.41	3.1	15	32	27	57	3/8	13	1/2
615 170 451 0	KA16060BY	D	6000	5/8-11	1 350	1.81	1.41	3.1	11	23	23	49	3/8	13	1/2



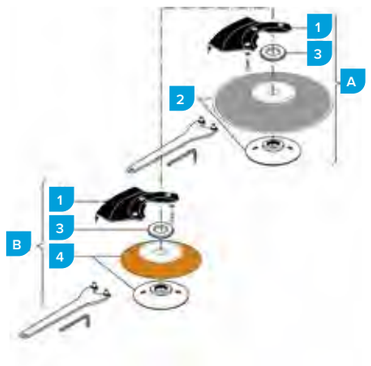






Accessories optional Sanding with standard abrasive disc ø127mm (5")		Part No. KA16120A KA16085/075/060A M14x2	KA16120B KA16085/075/060B 5/8"-11
A	Sanding kit for abrasive disc (including items 4-5)	615 396 072 0	615 396 072 0
1	Finger guard	615 504 145 0	615 504 145 0
2	Ventilated backing pad with nut M14 & 5/8" (max. 12.000 rpm)	615 990 127 0	615 990 127 0
•	Pin wrench, 35mm (1-3/8")	615 802 010 0	615 802 010 0
•	Hex key 8mm (5/16")	615 802 061 0	615 802 061 0
3	M14 Spacer	615 641 027 0	
3	5/8" Spacer		615 642 050 0

Accessories optional Sanding with semirigid disc ø 127mm (5")		KA16120A KA16085/075/060A M14x2
B	Sanding kit for semirigid disc (including items 5-6)	615 396 075 0
1	Finger guard	615 504 145 0
4	Backing pad with nut M14 (max. 12.000 rpm)	615 990 129 0*
•	Pin wrench, 35mm (1-3/8")	615 802 010 0
•	Hex key 8mm (5/16")	615 802 061 0
3	M14 Spacer	615 641 027 0



Accessories optional Sanding		Part No. KA16085/075/060A M14x2	KA16085/075/060B 5/8"-11	KA16075/060BY 5/8"-11
1	Sanding guard ø 180mm (7")	615 504 205 0*	615 504 205 0*	615 504 205 0*
2	Soft backing pad with nut M14 & 5/8" ø 180mm (7") (max. 8500 rpm)	615 990 133 0*	615 990 133 0*	
2	Rigid backing pad with nut M14 & 5/8" ø 180mm (7") (max. 8.500 rpm)	615 990 134 0*	615 990 134 0*	
•	Pin wrench 35mm (1-3/8")	615 802 010 0	615 802 010 0	
3	Spiracool pad whit nut ø 180mm (7") (max.8500 rpm)			S091836
4	Complete kit ø 180mm (7") (max.7000 rpm) for KA16060BY			K129587
•	Hex key 8mm (5/16")			615 802 061 0
5	Rigid velcro-backed backing pad ø 180mm (7") (max.8700 rpm)		615 990 146 0	
5	Rigid velcro-backed backing pad ø 150mm (6") (max.10000 rpm)		615 990 138 0	

Other Accessories optional		Part No.
6	Semi-hard backing pad with nut M14 & 5/8" - ø 127mm (5") (max. 12.000 rpm)	615 804 074 0
7	Complete silencer kit	615 396 166 0
8	Clamp	615 263 024 0
9	Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
10	Vibration-damping side handle	615 576 066 0
11	Clippable silencer	615 396 957 0
12	Grease gun includes 24g (0.8 oz)	615 990 149 0
•	Grease for bevel gear (1 kg -2.2 lb)	615 990 148 0











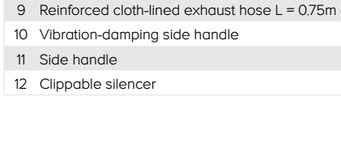


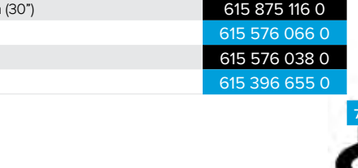
DESOUTTER POLISHING SANDERS FOR ABRASIVE DISCS

- 900 Watts (1.21 hp) - 2000 and 3000 rpm
- Ø 150mm (6") - Ø 180mm (7") - Ø 230mm (9")
- Supplied with M14 or 5/8" threaded spindle only
- Caution: comply with the speed recommended by component and abrasive manufacturers



Part No.	Model No.	Pic Ref	Free Speed	Threaded Spindle	Power		Weight		Air Consumption at Free Speed		Air Consumption at Max Speed		Air Inlet	Hose int. Ø	
			rpm	in.	W	hp	kg	lb	l/s	cfm	l/s	cfm	in.	mm	in.
615 170 098 0	KA9030A	A	3000	M14x2	900	1.21	1.6	3.5	13	27	17	36	3/8	10	3/8
615 170 099 0	KA9030B	A	3000	5/8-11	900	1.21	1.6	3.5	13	27	17	36	3/8	10	3/8
615 170 096 0	KA9020A	A	2000	M14x2	900	1.21	1.6	3.5	7	15	17	36	3/8	10	3/8
615 170 097 0	KA9020B	A	2000	5/8-11	900	1.21	1.6	3.5	7	15	17	36	3/8	10	3/8
For USA Market only (to ANSI B186.1)															
615 170 309 0	KA9030BY	A	3000	5/8-11	900	1.21	1.6	3.5	13	27	17	36	3/8	10	3/8







Accessories optional Sanding		KA90..A M14x2	Part No. KA90..B 5/8"-11	KA9030/20BY 5/8"-11
1	Soft backing pad with nut M14 & 5/8" ø 180mm (7") (max. 8500 rpm)	615 990 133 0	615 990 133 0	
1	Rigid backing pad with nut M14 & 5/8" ø 180mm (7") (max. 8500 rpm)	615 990 134 0	615 990 134 0	
•	Pin wrench, 35mm (1-3/8")	615 802 010 0	615 802 010 0	
2	Rigid velcro-backed backing pad ø 180mm (7") (max. 8700 rpm)		615 990 146 0	
2	Rigid velcro-backed backing pad ø 150mm (6") (max. 10000 rpm)		615 990 138 0	
3	Spiracool pad with nut ø 180mm (7") (max.8500 rpm)			S091836
3	Spiracool pad with nut ø 230mm (9") (max 6500 rpm)			S091839
4	Complete Kit ø 180mm (7") (max. 7000 rpm)			K129587
•	Hex. Key 8mm (5/16")			615 802 061 0

Accessories optional Polishing		KA90..A KA90..B
5	Soft backing pad with nut M14 & 5/8" ø 180mm (7") (max. 8500 rpm)	615 990 133 0
•	Pin wrench 35mm (1-3/8")	615 802 010 0
6	Sheepskin ø 180mm (7") (max. 2100 rpm)	615 845 999 0

Other Accessories optional		Part No.
7	Complete silencer kit	615 396 166 0
8	Clamp	615 873 115 0
9	Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
10	Vibration-damping side handle	615 576 066 0
11	Side handle	615 576 038 0
12	Clippable silencer	615 396 655 0



DESOUTTER SANDERS FOR ABRASIVE DISCS

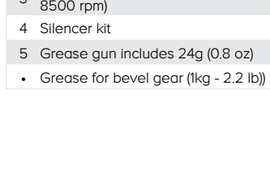
- 1200 and 2100 Watts (1.61 and 2.82 hp) - 6000 to 8500 rpm
- ø 180mm (7") - ø 230mm (9")
- Supplied with 5/8" threaded spindle only
- Caution: comply with the speed recommended by component and abrasive manufacturers

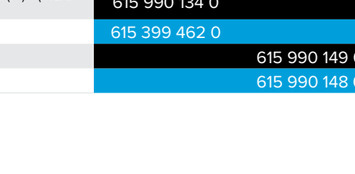






Part No.	Model No.	Pic Ref	Free Speed	Abrasive Max Capacity DxExd		Threaded Spindle	Power		Weight		Air Consumption at Free Speed		Air Consumption at Max Speed		Air Inlet	Hose int. Ø	
			rpm	Ø mm	Ø in	in	W	hp	kg	lb	l/s	cfm	l/s	cfm	in	mm	in
Vertical Sander																	
615 170 011 0	KL165B	A	6500	180	7	5/8-11	1200	1.61	2.3	5.1	6	13	25	53	1/2	13	1/2
Angle Sanders																	
615 170 479 0	KA26085BV	B	8500	180	7	5/8-11	2100	2.82	2.3	5.1	17	36	36	77	1/2	15	5/8
615 170 480 0	KA26065BV	B	6500	180-230	7-9	5/8-11	2100	2.82	2.3	5.1	21	44	38	80	1/2	15	5/8
For USA Market only (to ANSI B186.1)																	
615 170 481 0	KA26077BY	C	7700	180	7	5/8-11	2100	2.82	2.3	5.1	16	33	32	69	1/2	15	5/8
615 170 482 0	KA26060BY	C	6000	180-230	7-9	5/8-11	2100	2.82	2.3	5.1	18	38	37	77	1/2	15	5/8





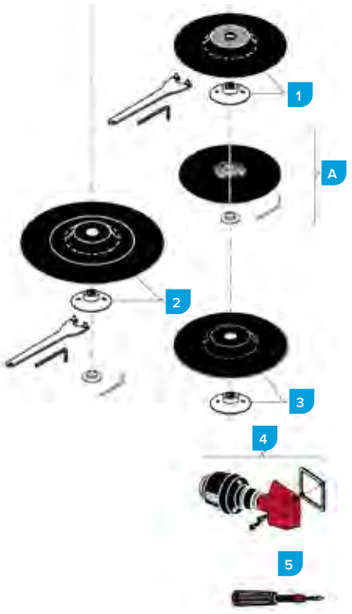


Accessories optional Sanding with standard abrasive disc ø 180mm (7")		KL165B	Part No. KA26085BV KA26077BY
•	Rear flange for KA26085BV		615 503 107 0
1	Soft Backing pad with nut 5/8", ø 180mm (7") - (max. 8500 rpm)	615 990 133 0*	615 990 133 0*
•	Pin wrench, 35mm (1-3/8")	615 802 010 0	615 802 010 0
•	Hex key 8mm (5/16")	615 802 061 0	

Accessories optional Sanding with Spiracool pad ø 180mm (7")		KA26077BY
A	Spiracool pad with nut 5/8", ø 180mm (7") - (Max. 8500 rpm)	S091836
•	Pin wrench 35mm (1-3/8")	615 802 010 0

Accessories optional Sanding with standard abrasive disc ø 230mm (9")		KA26065BV KA26060BY
•	Rear flange for KA26065BV	615 503 107 0
2	Soft Backing pad with nut 5/8", ø 230mm (9") - (max. 6500 rpm)	615 990 141 0
•	Pin wrench, 35mm (1-3/8")	615 802 010 0
•	Hex key 8mm (5/16")	615 802 061 0

Other Accessories optional		Part No. KL165B	KA26..
3	Rigid backing pad with nut 5/8", ø 180mm (7") - (max. 8500 rpm)	615 990 134 0	
4	Silencer kit	615 399 462 0	
5	Grease gun includes 24g (0.8 oz)		615 990 149 0
•	Grease for bevel gear (1kg - 2.2 lb))		615 990 148 0



DESOUTTER DUST EXTRACTION SYSTEMS FOR ANGLE GRINDERS AND SANDERS

- ⌀ 127mm (5") - ⌀ 180mm (7")
- 1350 to 1700 Watts (1.81 to 2.28 hp) - 6000 to 12000 rpm
- Caution: comply with the speed recommended by component and abrasive manufacturers



Cutting depth
26.5mm (1.04")

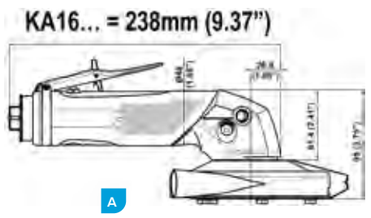
Dust extraction casing
for diamond disc ⌀ 127mm (5")
Vacuum hose ID 25mm (1")

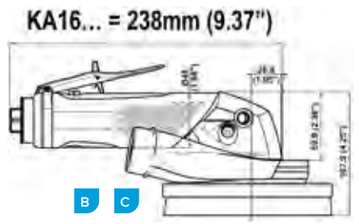




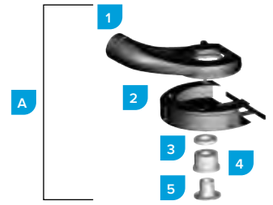
Vacuum hose ID 38mm (1-1/2")

Part No.	Dust Extraction Kit Ø 127mm (5")	Ø 180mm (7")	Model	Pic Ref	Free Speed	Threaded Spindle	Power		Weight		Air Inlet Thread
					rpm	in.	W	hp	kg	lb	in.
Cutting Ø 127mm (5") – M14 Output											
615 170 435 0	+ 615 397 830 0	-	KA16120A	A	12000	M14x2	1700	2.28	1.39	3.0	3/8
615 170 468 0	+ 615 397 830 0	-	KA16085A	A	8500	M14x2	1700	2.28	1.39	3.0	3/8
615 170 448 0	+ 615 397 830 0	-	KA16075A	A	7500	M14x2	1500	2.01	1.39	3.0	3/8
615 170 449 0	+ 615 397 830 0	-	KA16060A	A	6000	M14x2	1350	1.81	1.41	3.1	3/8
Cutting Ø 127mm (5") – 5/8" Output											
615 170 445 0	+ 615 397 830 0	-	KA16120B	A	12000	5/8-11	1700	2.28	1.98	4.4	3/8
615 170 469 0	+ 615 397 830 0	-	KA16085B	A	8500	5/8-11	1700	2.28	1.39	3.0	3/8
615 170 452 0	+ 615 397 830 0	-	KA16075B	A	7500	5/8-11	1500	2.01	1.39	3.0	3/8
615 170 453 0	+ 615 397 830 0	-	KA16060B	A	6000	5/8-11	1350	1.81	1.41	3.1	3/8
Cutting Ø 127mm (5") – 5/8" Output for USA Market only (to ANSI B186.1)											
615 170 447 0	+ 615 397 830 0	-	KA16120BY	A	12000	5/8-11	1700	2.28	1.98	4.4	3/8
615 170 450 0	+ 615 397 830 0	-	KA16075BY	A	7500	5/8-11	1500	2.01	1.39	3.0	3/8
615 170 451 0	+ 615 397 830 0	-	KA16060BY	A	6000	5/8-11	1350	1.81	1.41	3.1	3/8
Sanding Ø 127 mm (5") & Ø 180 mm (7") – M14 & 5/8" Output											
615 170 435 0	+ 615 397 828 0	-	KA16120A	B	12000	M14x2	1700	2.28	1.39	3.0	3/8
615 170 445 0	+ 615 397 828 0	-	KA16120B	B	12000	5/8-11	1700	2.28	1.39	3.0	3/8
615 170 468 0	+ 615 397 828 0	615 397 829 0	KA16085A	B/C	8500	M14x2	1700	2.28	1.39	3.0	3/8
615 170 469 0	+ 615 397 828 0	615 397 829 0	KA16085B	B/C	8500	5/8-11	1700	2.28	1.39	3.0	3/8
615 170 448 0	+ 615 397 828 0	615 397 829 0	KA16075A	B/C	7500	M14x2	1500	2.01	1.39	3.0	3/8
615 170 452 0	+ 615 397 828 0	615 397 829 0	KA16075B	B/C	7500	5/8-11	1500	2.01	1.39	3.0	3/8
615 170 449 0	+ 615 397 828 0	615 397 829 0	KA16060A	B/C	6000	M14x2	1350	1.81	1.41	3.1	3/8
615 170 453 0	+ 615 397 828 0	615 397 829 0	KA16060B	B/C	6000	5/8-11	1350	1.81	1.41	3.1	3/8

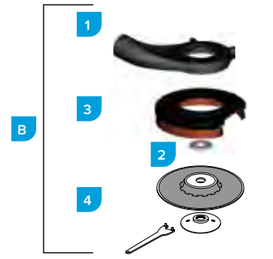




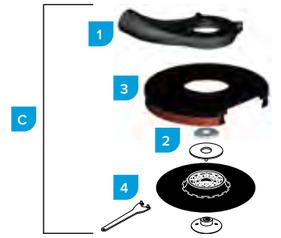
Accessories optional Composite cutting KA16120./ KA16085. / KA16075. / KA16060		Part No.
A	Dust extraction Kit for Diamond disk ⌀ 127mm (5")	615 397 830 0
1	Manifold with screws	615 504 217 0
2	Gable cover plate complet	615 504 218 0
3	Spacer 6mm - Hole 14mm	615 643 092 0
3	Spacer 6mm - Hole 16mm	615 643 091 0
4	Spacer for M14 spindle	615 643 089 0
4	Spacer for 5/8" spindle	615 643 090 0
5	Flange nut M14	615 606 046 0
5	Flange nut 5/8"	615 606 045 0
•	Pin key	615 802 067 0



Composite, non metal and metal sanding KA16120./085. / KA16075./060. Ø 127mm (5»)		Part No.
B	Dust Extraction Kit	615 397 828 0
1	Suction cap	615 504 194 0
2	Washer	615 643 083 0
3	Skirt with brush	615 570 234 0
4	Ventilated backing pad with nut M14 & 5/8" (max. 12000rpm)	615 990 127 0
•	Pin wrench, 35mm (1-3/8")	615 802 810 0



Composite, non metal and metal sanding KA16120./085. / KA16075./060. Ø 180mm (7»)		Part No.
C	Dust Extraction Kit	615 397 829 0
1	Suction cap	615 504 194 0
2	Washer	615 643 083 0
3	Skirt with brush	615 570 231 0
4	Rigid backing pad with nut M14 & 5/8" Ø 180mm (7") (max. 8500rpm)	615 990 134 0
•	Pin wrench, 35mm (1-3/8")	615 990 148 0



Other Accessories optional		Part No.
1	Diamond disc ⌀ 127mm (5")	615 804 915 0
2	Complete silencer kit	615 396 166 0
3	Clamp	615 263 024 0
4	Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
5	Vibration-damping side handle	615 576 066 0
6	Clippable silencer	615 396 957 0
•	Hex. key 8mm (5/16")	615 802 061 0
7	Grease gun includes 24g (0.8oz)	615 990 149 0
•	Grease for bevel gear (1 kg - 2.2 lb)	615 990 148 0

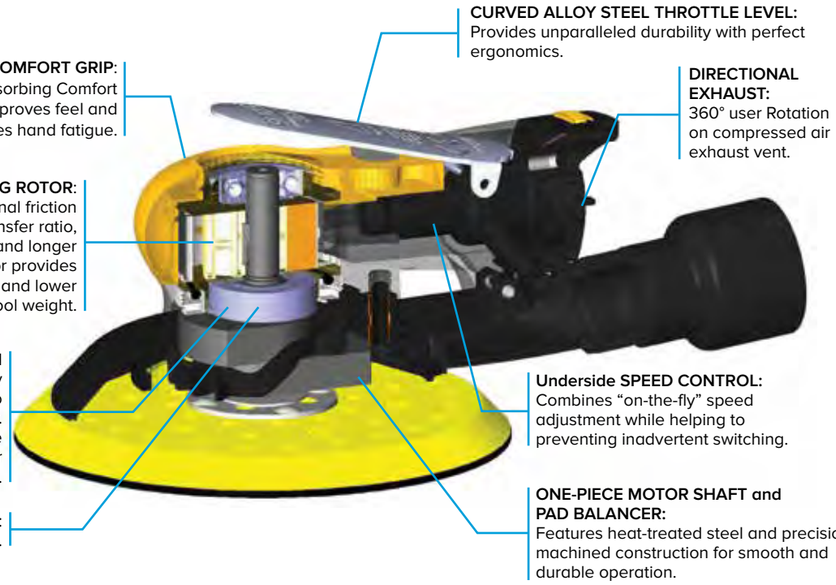


Clayton Dustless Sanders

This powerful line of Clayton sanders has been designed specifically for vacuum sanding. The dust shroud has been engineered to allow a clear, straight path for the dust to flow.
The tools are lightweight, rugged, and long-lasting. Clayton sanders feature a patented design which allows for some of the pressurized incoming air to flow over the bearing housing to prevent dust from entering the bearings and causing premature wear.

Are you looking for Spare Parts? Please contact us!

All Clayton pneumatic sanders are CE certified and have a 98% Dust Capture Rate.



Composite Rotor Assembly



- Supports both 10,000 & 12,000 RPM
- Five floating composite blades
- Produces .28 hp @ 90 psi – 17 cfm
- Simplifies maintenance

Vacuum Hose Size



Most sanders ship with both 3⁄4" and 1" vacuum hose swivel fittings.

Comfort Grips



Available in 3 sizes. Reduces fatigue and increases user comfort. All Clayton sanders come standard with medium grip. Small and Large grips are optional.

Backup Pads



Clayton backup pads are designed specifically for vacuum sanding.
The large number of holes provides unmatched airflow and dust capture.

RPM

All Random Orbital Sanders support both 10,000 and 12,000 RPM options. 12,000 RPM is standard on all Clayton ROS sanders.

Ergonomic Wrist Support



- Included on all Clayton sanders
- Shields against cold air fittings
- Facilitates two handed sanding
- Easily removed

Color Coded Paddles



- Grey 5⁄16" (8mm) dia. for aggressive sanding
- Chrome 3⁄16" (5mm) dia. for normal sanding
- Black 3⁄32" (2.5mm) dia. for finish sanding

Speed Control

- Infinitely adjustable
- Provides outstanding control over sander speed

CLAYTON ERGOLITE RANDOM ORBITAL SANDERS

Don't forget interface and protector pads to extend the life of your backup pad!

These sanders have lightweight & rugged composite housings and a patented bearing design for extended motor life.

- Standard Exhaust requires portable or central vacuum system for dust extraction.
- Bypass Exhaust channels the compressed air exhaust into the central vacuum line eliminating possible work surface contamination.
- Self Generated Vac sanders use the sanders compressed air exhaust to generate their own vacuum for dust extraction. They come standard with a 1in threaded vacuum port. Bag & 1in Bag Adapter Sold Separately. Exhaust flows through muffler for reduced noise.
- All tool performance ratings measured @ 90 PSI (620 kPa) compressed air pressure.
- Dual channel vacuum design dramatically increases vacuum flow and efficiency.

All models are also available with Aluminium housing (PuraLite)

Sanders include:

- J-Hook backup pad for hook & loop abrasives
- Vacuum hose swivel adapter 1in
- Ergonomic Wrist support
- 1⁄4" (6.4mm) Air inlet
- Consumes 17 cfm (481 lpm)
- Produces 12,000 rpm & .28 hp (209 w)

3" Random Orbital Sander (76mm)

Part No.	Exhaust	Orbit inch (mm)	Motor HP (W)	Sound dBA	Air Cons. CFM (LPM)	Weight lbs (kg)
770-12311J	Standard	3/32 (2)	0.28 (209)	74	17 (481)	1.7 (0.76)
770-12301J	Standard	3/16 (5)	0.28 (209)	74	17 (460)	1.7 (0.79)
770-12310J	Non Vac	3/32 (2)	0.28 (209)	74	17 (460)	1.7 (0.76)
770-12300J	Non Vac	3/16 (5)	0.28 (209)	74	17 (460)	1.7 (0.79)
770-12313J	Self Gen	3/32 (2)	0.28 (209)	87	17 (460)	1.7 (0.76)
770-12303J	Self Gen	3/16 (5)	0.28 (209)	87	17 (460)	1.7 (0.79)



5" Random Orbital Sander (125mm)

Part No.	Exhaust	Orbit inch (mm)	Motor HP (W)	Sound dBA	Air Cons. CFM (LPM)	Weight lbs (kg)
770-12511J	Standard	3/32 (2)	0.28 (209)	74	17 (481)	1.7 (0.77)
770-12501J *	Standard	3/16 (5)	0.28 (209)	74	17 (481)	1.8 (0.79)
770-12521J **	Standard	5/16 (8)	0.28 (209)	74	17 (481)	1.8 (0.82)
770-12510J	Non Vac	3/32 (2)	0.28 (209)	74	17 (481)	1.7 (0.77)
770-12500J	Non Vac	3/16 (5)	0.28 (209)	74	17 (481)	1.8 (0.79)
770-12520J	Non Vac	5/16 (8)	0.28 (209)	74	17 (481)	1.8 (0.82)
770-12513J	Self Gen	3/32 (2)	0.28 (209)	87	17 (481)	1.8 (0.82)
770-12503J	Self Gen	3/16 (5)	0.28 (209)	87	17 (481)	1.9 (0.85)
770-12523J	Self Gen	5/16 (8)	0.28 (209)	87	17 (481)	1.9 (0.88)

* NSN: 4130-01-504-3970 ** NSN: 4130-01-460-4055



6" Random Orbital Sander (152mm)

Part No.	Exhaust	Orbit inch (mm)	Motor HP (W)	Sound dBA	Air Cons. CFM (LPM)	Weight lbs (kg)
770-12611J	Standard	3/32 (2)	0.28 (209)	74	17 (481)	1.8 (0.82)
770-12601J *	Standard	3/16 (5)	0.28 (209)	74	17 (481)	1.9 (0.85)
770-12621J **	Standard	5/16 (8)	0.28 (209)	74	17 (481)	1.9 (0.88)
770-12610J	Non Vac	3/32 (2)	0.28 (209)	74	17 (481)	1.8 (0.82)
770-12600J	Non Vac	3/16 (5)	0.28 (209)	74	17 (481)	1.9 (0.85)
770-12620J	Non Vac	5/16 (8)	0.28 (209)	74	17 (481)	1.9 (0.85)
770-12613J	Self Gen	3/32 (2)	0.28 (209)	87	17 (481)	1.8 (0.82)
770-12603J	Self Gen	3/16 (5)	0.28 (209)	87	17 (481)	1.9 (0.85)
770-12623J	Self Gen	5/16 (8)	0.28 (209)	87	17 (481)	1.9 (0.88)

* NSN: 4130-01-517-1019 ** NSN: 4130-01-460-4052



AIR TOOL OIL

NSN: 4130-01-502-0850



Part No.	Description
678-20451	Air Tool Oil

SELF GEN SANDER BAGS



* NSN: 4130-01-460-8514

Part No.	Description
678-20453	3M Filter Bag Adapter
678-20452	3M Clean Sanding Filter Bag 10 pk
130123 *	3M Clean Sanding Filter Bag 100 pk

CLAYTON ERGOLITE ORBITAL SANDERS

Big power in a small package! The Clayton 3x4 inch Orbital Sander has found a home with the U.S. Armed Forces and automotive shops around the country.

This sander is ideal for sanding in tight areas and corners, where traditional round sanders can't reach. Lightweight and rugged composite housing with patented bearing design for extended motor life.

Sanders include:

- J-Hook backup pad for hook & loop abrasives
- Vacuum hose swivel adapter 1in
- Ergonomic Wrist support
- 1/4" (6.4mm) Air inlet
- Consumes 17 cfm (481 lpm)
- Produces 12,000 rpm & .28 hp (209 w)
- 1/8" (3.2mm) Orbit Finish Sanding



Don't forget interface and protector pads to extend the life of your backup pad!

All models are also available with Aluminium housing (PuraLite)

Part No.	Pad	Exhaust	Pad Size in (mm)	Motor HP (W)	Sound dBA	Air Consumption CFM (LPM)	Weight lbs (kg)
770-10341J	J Hook	Standard	3 x 4 (75 x 100)	0.28 (209)	72	17 (481)	1.8 (0.81)
770-10281J	J Hook	Standard	2-3/4 x 8" (70 x 200mm)	0.28 (209)	72	17 (481)	2.2 (1.0)
770-10340J	J Hook	Non Vac	3 x 4 (75 x 100)	0.28 (209)	83	17 (481)	1.7 (0.75)
770-10280J	J Hook	Non Vac	2-3/4 x 8" (70 x 200mm)	0.28 (209)	83	17 (481)	2.1 (0.95)
770-10343J	J Hook	Self Gen	3 x 4" (75 x 100mm)	0.28 (209)	83	17 (481)	1.6 (0.73)
770-10283J	J Hook	Self Gen	2-3/4 x 8" (70 x 200mm)	0.28 (209)	83	17 (481)	2.4 (1.07)

CLAYTON ERGOLITE RADIUS 3" x 5" ORBITAL SANDERS (75 x 127 MM)

This innovative sander was designed to help OEMs and maintainers deal with the concave surfaces of certain aircraft jet intakes. In the past, sanders would only make contact with the outer edges of the abrasive on concave surfaces. These tools follow the contour of the aircraft skin providing even contact over the entire abrasive surface. Lightweight and rugged composite housing with patented bearing design for extended motor life.

- Designed in cooperation with Lockheed Martin for F-22 intakes
- Designed in cooperation with Northrop Grumman for F-35 intakes
- Bypass exhaust prevents contamination of work surfaces
- Available in two sizes for narrow and wide concave areas
- Backup pad extended nose and tail allows sander to accept 5" disc abrasives

Sanders include:

- Curved J-Hook backup pad for hook & loop abrasives
- Swivel adapters for 3/4" and 1" vacuum hose
- Wrist support
- Standard 3/16" orbit and 10,000 RPM
- 1/4" (6.4mm) Air inlet
- CE certified



Part No.	Pad	Exhaust	Pad Size in (mm)	Motor HP (W)	Sound dBA	Air Consumption CFM (LPM)	Weight lbs (kg)
770-10341J-56R	J Hook	Standard	Radius 3 x 5" (75 x 127mm)	0.28 (209)	72	17 (481)	1.8 (0.82)
770-10341J-66R	J Hook	Standard	Radius 3 x 5" (75 x 127mm)	0.28 (209)	72	17 (481)	1.8 (0.82)
770-10343J-56R	J Hook	Self Gen	Radius 3 x 5" (75 x 127mm)	0.28 (209)	83	17 (481)	1.8 (0.73
770-10343J-66R	J Hook	Self Gen	Radius 3 x 5" (75 x 127mm)	0.28 (209)	83	17 (481)	1.8 (0.73

ⓘ The Bypass Exhaust channels the compressed air exhaust into the central vacuum line eliminating possible work surface contamination. Standard Exhaust requires portable or central vacuum system for dust extraction. Self Generated vacuum sanders include 2' of vacuum hose and dust collection bag.

ⓘ All tool performance ratings measured @ 90 PSI (620 kPa) compressed air pressure.

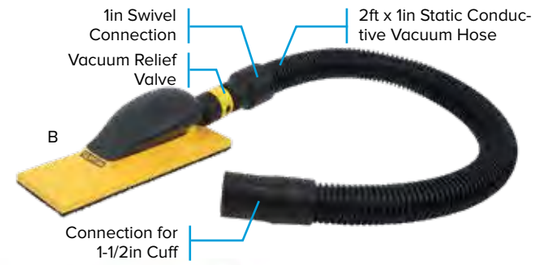
CLAYTON VACUUM HAND SANDING BLOCKS

Provide dust free sanding without a compressed air supply. They're ideal for quick spot repairs or areas where finesse is required. The hand sanding blocks can be easily connected to either a Clayton vacuum system or a central vacuum. The ergonomic design fits comfortably in the palm and ensures fatigue-free sanding. For best results, use these sanders with DustMaster Supreme Screen Abrasives.

The Symmetric Flex Hand Sanding Block can be adjusted to Concave, Flat, or Convex surfaces.

Included:

- Hook & Loop attachment for abrasives
- Vacuum Relief Valve
- 1in Swivel Connection
- 2ft x 1in Vacuum Hose and Cuff





Part No.	Fig	Description
680-A27505J *	A	Hand Sander 2.75in x 5in
680-A27508J	B	Hand Sander 2.75in x 8in
680-A27516J	C	Hand Sander 2.75in x 16in
680-A275R16J	D	Hand Sander 2.75in x 16in Symmetric Rigid
680-A275F16J	E	Hand Sander 2.75in x 16in Symmetric Flex
680-A275XXJ **	-	Hand Sander Kit 5in, 8in, 16in

* NSN: 4130-01-509-0261 ** NSN: 4130-01-509-0276

CLAYTON VACUUM HAND SANDING SHAPES KITS

Provide interchangeable concave and convex backup pads that snap on and off the hand sander bodies.



Part No.	Fig	Description
680-A27505CK	A	2-3/4 x 5 Curved Shapes Kit
680-A27508CK	B	2-3/4 x 8 Curved Shapes Kit
680-A27505DK	C	5in Disc Curved Shapes Kit
680-A275F16J	-	Hand Sander 2.75in x 16in Symmetric Flex

CLAYTON TWO-HAND SANDERS

Clayton two-hand sanders are a great choice for coatings removal and surface preparation. These sanders are designed for outstanding power and dust extraction. The two hand design incorporates cutting edge ergonomics, and will quickly become the tool of choice for long sanding jobs. The sanders include a sticky outer skin and reversible right angle handle, both of which provide maximum comfort and reduce fatigue.

Sanders include:

- J-Hook backup pad for hook & loop abrasives
- Swivel adapters for 3/4" and 1" vacuum hose
- 1/4" (6.4mm) Air inlet
- Reversible right angle handle
- CE certified



5" Two-Hand Sanders (127mm)						
Part No.	Exhaust	Orbit inch (mm)	Motor HP (W)	Sound dBA	Air Cons. CFM (LPM)	Weight lbs (kg)
676-12501J	Standard	3/16 (5)	0.45 (336)	79	22 (623)	2.7 (1.22)
676-12521J	Standard	3/8 (10)	0.45 (336)	79	22 (623)	2.7 (1.22)
6" Two-Hand Sanders (152mm)						
Part No.	Exhaust	Orbit inch (mm)	Motor HP (W)	Sound dBA	Air Cons. CFM (LPM)	Weight lbs (kg)
676-12601J	Standard	3/16 (5)	0.45 (336)	79	22 (623)	2.9 (1.29)
676-12621J	Standard	3/8 (10)	0.45 (336)	79	22 (623)	2.9 (1.29)
8" Two-Hand Sander (203mm)						
Part No.	Exhaust	Orbit inch (mm)	Motor HP (W)	Sound dBA	Air Cons. CFM (LPM)	Weight lbs (kg)
676-12801J	Standard	3/16 (5)	0.46 (343)	79	22 (623)	3.6 (1.61)

ⓘ All tool performance ratings measured @ 90 PSI (620 kPa) compressed air pressure.

Clayton Backup Pads

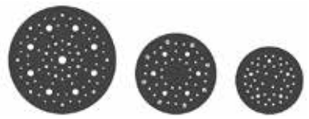
Clayton backup pads are designed specifically for vacuum sanding. The large number of holes provides unmatched airflow and dust capture.

The JHook Pads longer hooks hold the abrasive loops securely to the sander. The JHooks are longer than the average hooks and create a small space between the abrasive and foam pad. This channel provides more air flow and better transport for the dust across and thru the disc, and slightly more cushion for better performance on contours. JHook is preferred for screen abrasives.

CLAYTON DISC PADS HOOK & LOOP MULTI-HOLE

The large number of holes provides unmatched airflow and dust capture.

They come standard on all Clayton sanders and feature J-Hook abrasive attachment and multi-hole pattern for maximum air flow.


8in 6in 5in



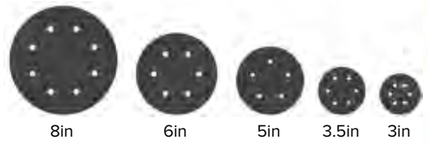
Part No.	Description	Size (in)	Holes	Edge	Abrasive Attachment	Stud Size
672-511H	Backup Pad	5	Multi	Low Profile	Hook	5/16-18 Stud
672-511J *	Backup Pad	5	Multi	Low Profile	J-Hook	5/16-18 Stud
672-511JH	Backup Pad Hard	5	Multi	Low Profile	J-Hook	5/16-18 Stud
672-511JS	Backup Pad Soft	5	Multi	Low Profile	J-Hook	5/16-18 Stud
672-611H	Backup Pad	6	Multi	Low Profile	Hook	5/16-18 Stud
672-611J **	Backup Pad	6	Multi	Low Profile	J-Hook	5/16-18 Stud
672-611JH	Backup Pad Hard	6	Multi	Low Profile	J-Hook	5/16-18 Stud
672-611JS	Backup Pad Soft	6	Multi	Low Profile	J-Hook	5/16-18 Stud
672-811H	Backup Pad	8	Multi	Low Profile	J-Hook	8 x 1/4-20 Female

* NSN: 4130-01-531-6807 ** NSN: 4130-01-531-6803

CLAYTON DISC PADS HOOK & LOOP STANDARD HOLE

The large number of holes provides unmatched airflow and dust capture.

They come standard on all Clayton sanders and feature J-Hook abrasive attachment and a hole pattern for maximum air flow.


8in 6in 5in 3.5in 3in

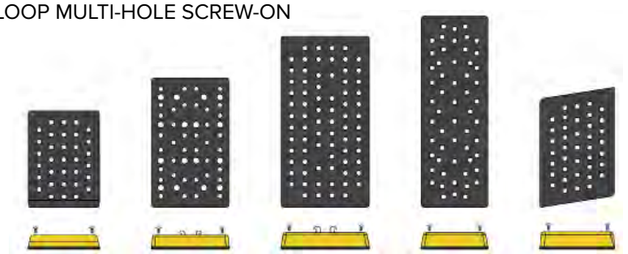


Part No.	Description	Size (in)	Holes	Edge	Abrasive Attachment
672-301H	Backup Pad	3	6	Low Profile	Hook
672-301J *	Backup Pad	3	6	Low Profile	J-Hook
672-351J **	Backup Pad	3-1/2	6	Low Profile	J-Hook
672-501H	Backup Pad	5	5	Low Profile	Hook
672-501J ***	Backup Pad	5	5	Low Profile	J-Hook
672-601H	Backup Pad	6	6	Low Profile	Hook
672-601J	Backup Pad	6	6	Low Profile	J-Hook
675-511H	Backup Pad	5	5	Tapered	Hook
675-511J	Backup Pad	5	5	Tapered	J-Hook
675-611H	Backup Pad	6	6	Tapered	Hook
675-611J	Backup Pad	6	6	Tapered	J-Hook

* NSN: 4130-01-459-5206 ** NSN: 4130-01-526-0051 *** NSN: 4130-01-531-6799

CLAYTON RECTANGULAR PADS HOOK & LOOP MULTI-HOLE SCREW-ON

4 screw holes for attachment to your sander, J-Hook abrasive attachment, and multi-hole pattern for better air flow


3x4in 3x5in 3-2/3x7in 2-3/4x8in Corner

Part No.	Description	Size (in)	Holes	Abrasive Attachment
675-702J	Backup Pad	3-2/3 x 7	Multi	Screw On
675-402J	Backup Pad	3x4	Multi	Screw On
675-281J	Backup Pad	2-3/4 x 8	Multi	Screw On
675-281J	Backup Pad	2-3/4 x 8	Multi	J-Hook
675-353J	Backup Pad	3x4 Corner	Multi	J-Hook

CLAYTON RADIUS PADS

This innovative backup pad was designed to help OEMs and maintainers deal with the concave surfaces of certain aircraft jet intakes. In the past, sanders would only make contact with the outer edges of the abrasive on concave surfaces. These pads follow the contour of the aircraft skin providing even contact over the entire abrasive surface.

- Designed in cooperation with Lockheed Martin for F-22 intakes
- Designed in cooperation with Northrop Grumman for F-35 intakes
- Available in two sizes for narrow and wide concave areas
- Extended nose and tail allows sander to accept 5" disc abrasives


Radius 56R 3.5 Dia Curve


Radius 66R 4.125 Dia Curve



Part No.	Size (in)	Holes	Radius	Abrasive Attachment
672-401J-56R	3 x 5	33	Short	J-Hook
672-401J-66R	3 x 5	33	Long (Dot)	J-Hook

CLAYTON PAD PROTECTORS

Extend the life of J-hook backup pads with pad protectors. Wear down these inexpensive disposable pads instead of valuable backup pads. Loop on one side, J-Hook on the other, these pads sit between your J-Hook backup pad and your abrasive.



Part No.	Size in (mm)	Thickness in (mm)	Qty
672-30JP	3 (76)	0.125 (3)	50
672-34JP	3x4 (76x102)	0.125 (3)	50
672-35JP *	3.5 (89)	0.125 (3)	50
672-37JP	3.66x7 (93x178)	0.125 (3)	50
672-50JP **	5 (127)	0.125 (3)	50
672-60JP ***	6 (150)	0.125 (3)	50


3in 3.5in 5in 6in 3x4in 3-2/3 x 7 in

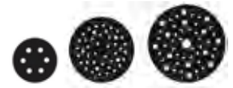
* NSN: 4130-01-459-5268 ** NSN: 4130-01-482-1558 *** NSN: 4130-01-459-5701

CLAYTON INTERFACE PADS

Ideal for contour sanding, Interface Pads work just like Pad Protectors but are much thicker, allowing the abrasive to conform to uneven surfaces, like the leading edge of wings. Loop on one side, J-Hook on the other, these pads sit between your J-Hook backup pad and your abrasive.



Part No.	Size in (mm)	Thickness in (mm)	Qty
672-31JP	3 (76)	0.25 (6)	25
672-52JP	5 (127)	0.5 (13)	25
672-62JP	6 (152)	0.5 (13)	25
692-205JP	2.75x5 (70x127)	0.25 (6)	5
692-208JP	2.75x8 (70x203)	0.25 (6)	5


3in 5in 6in


2.75x5in 2.75x8in

Clayton Shrouds

Clear Revolution 1", 2" & 3" Right Angle Sander Shrouds

Made of crystal clear Lexan, this is the future of shroud design. Built from the same material as aerospace cockpits, NASCAR windshields, and space helmets, it's virtually indestructible and guaranteed for life.

This shroud does not obscure the working edges of the abrasive discs, so users can easily see the work surface.

Every shroud includes: mandrel, disc pad, 2' x 1" hose whip, and swivel adapter for connection to 1" vacuum hoses.

Features:

- Fits ANY tool with a 1/4" collet – Straight or right angle sanders, grinders, routers, etc.
- Virtually indestructible Lexan is guaranteed for life
- Shroud does not obscure visibility
- Shroud swivels freely around mandrel, so the hose can be repositioned with ease
- Works with the grinders you already own – NO MODIFICATIONS REQUIRED
- Built-in Positive Lock swivel hose fitting – hoses won't pull free
- Recommended tool speed: 12,000 RPM – Max tool speed: 20,000 RPM
- Patented design maximizes dust capture



High flow 1" swivel hose connection for maximum dust extraction



Crystal clear window for 225° of visibility



Lexan polycarbonate shroud is virtually indestructible





For optimum dust extraction use Clayton ventilated abrasive discs (36, 60, 80, 120 grit) or surface prep discs (coarse, med, fine). All have holes for improved dust removal. Available in both TR and TS connection types.

CLAYTON CLEAR REVOLUTION 1" (25MM) RIGHT ANGLE SANDER & SHROUD

1" shroud swivel points horizontal or vertical for getting into deep or narrow locations



Part No.	Grinder	Mandrel	Abrasive Style	Orientation	Motor RPM	Motor Hp (W)	Air Inlet ID inch (mm)	Weight lbs (kg)
674-A1216TR	Grinder not Included	TR		-	-	-	-	-
690-51612KIT-TR	Dotco 12LF280-36	TR		Right Angle	12,000	0.4 (298)	1/4"	1.1 (0.5)
674-A1216TS	Grinder not Included	TS		-	-	-	-	-
690-51612KIT-TS	Dotco 12LF280-36	TS		Right Angle	12,000	0.4 (298)	1/4"	1.1 (0.5)
674-A1216TP	Grinder not Included	TP		-	-	-	-	-

CLAYTON CLEAR REVOLUTION 2" (50MM) RIGHT ANGLE SANDER & SHROUD

Never exceed the maximum operating speed of your abrasive.



Part No.	Description	Mandrel	Abrasive Style	Orientation	Motor RPM	Motor Hp (W)	Air Inlet ID inch (mm)	Weight lbs (kg)
674-A1232TR *	Grinder not Included	TR		-	-	-	-	-
690-53212KIT-TR **	Dotco 12LF280-36	TR		Right Angle	12,000	0.4 (298)	1/4"	1.1 (0.5)
674-A1232TS	Grinder not Included	TS		-	-	-	-	-
690-53212KIT-TS	Dotco 12LF280-36	TS		Right Angle	12,000	0.4 (298)	1/4"	1.1 (0.5)
674-A1232TP ***	Grinder not Included	TP		-	-	-	-	-
690-53212KIT-TP	Dotco 12LF280-36	TP		Right Angle	12,000	0.4 (298)	1/4"	1.1 (0.5)

* NSN: 4130-01-460-4048 ** NSN: 4130-01-458-8661 *** NSN: 4130-01-459-8280

CLAYTON CLEAR REVOLUTION 3" (76MM) RIGHT ANGLE SANDER & SHROUD



Part No.	Description	Mandrel	Abrasive Style	Orientation	Motor RPM	Motor Hp (W)	Air Inlet ID inch (mm)	Weight lbs (kg)
674-A1248TR	Grinder not Included	TR		-	-	-	-	-
690-54812KIT-TR *	Dotco 12LF280-36	TR		Right Angle	12,000	0.4 (298)	1/4"	1.1 (0.5)
674-A1248TS	Grinder not Included	TS		-	-	-	-	-
690-54812KIT-TS	Dotco 12LF280-36	TS		Right Angle	12,000	0.4 (298)	1/4"	1.1 (0.5)
674-A1248TP **	Grinder not Included	TP		-	-	-	-	-
690-54812KIT-TP	Dotco 12LF280-36	TP		Right Angle	12,000	0.4 (298)	1/4"	1.1 (0.5)

* NSN: 4130-01-458-8663 ** NSN: 4130-01-459-8287

CLAYTON CLEAR REVOLUTION SEAT TRACK CLEANING SHROUD

Never exceed the maximum operating speed of your abrasive.

Aircraft seat tracks are notoriously difficult to clean and typically consume large numbers of small abrasive discs.

Allows users to quickly change abrasives without wrenches or other tools. Replace or switch between cotton fiber and TS discs on the fly.

Shroud includes: mandrel, 2' x 1" hose whip, and swivel adapter for connection to 1" vacuum hoses.

Features:

- Works with Clayton 3⁄4" cotton fiber discs.
- Fits ANY tool with a 1⁄4" collet – Straight or right angle sanders, grinders, routers, etc.
- Virtually indestructible Lexan is guaranteed for life
- Shroud does not obscure visibility
- Shroud swivels freely around mandrel, so the hose can be repositioned with ease
- Works with the grinders you already own – NO MODIFICATIONS REQUIRED
- Built-in Positive Lock swivel hose fitting – hoses won't pull free



Mounted point on 1" shroud



Part No.	Description	Pad	Orientation	Motor RPM	Motor Hp (W)	Air Inlet ID inch (mm)	Weight lbs (kg)
674-A1216CF *	1" Seat Track Shroud for Cotton Fiber Disc						
800-12054C-50 **	Cotton Fiber Seat Track Disc 50 Pack						
674-A1416CF-02R	Seat Track Shroud with Dotco 12LF280-36	1/4-20 CF	Right Angle	12.000	0.4 (298)	1/4"	1.1 (0.5)

* NSN: 1680-01-641-7585 ** NSN: 5130-01-641-7594

CLAYTON CLEAR REVOLUTION CARTRIDGE ROLL SHROUD

Cartridge rolls are ideal for getting into small, hard to reach areas. As they wear, the wrapped layers of the cartridge roll continuously expose fresh abrasive layers for continual cutting action.

Every shroud includes: mandrel, 2' x 1" hose whip, and swivel adapter for connection to 1" vacuum hoses. Refer to hose and fitting section for other hose adapters.

Features:

- Mandrel Pilot 1" x 1⁄8" – Tapers from 1⁄8" to 1⁄4" over 3⁄4"
- Supports cartridge rolls < 1" D x 1 1⁄2" L x 1⁄8" ID
- Fits ANY tool with a 1⁄4" collet – Straight or right angle sanders, grinders, routers, etc.
- Virtually indestructible Lexan is guaranteed for life
- Shroud does not obscure visibility
- Shroud swivels freely around mandrel, so the hose can be repositioned with ease
- Works with the grinders you already own – NO MODIFICATIONS REQUIRED
- Built-in Positive Lock swivel hose fitting – hoses won't pull free



Part No.	Description	Orientation	Motor RPM	Motor Hp (W)	Air Inlet ID inch (mm)	Weight lbs (kg)
674-A1216CR	Cartridge Roll Shroud					
672-A015	Replacement Cartridge Roll Mandrel with Clips					
674-A1216CR-02R	Cartridge Roll Shroud with Dotco 12L1280-36	Right Angle	12.000	0.3 (220)	1/4"	1.1 (0.5)

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CLAYTON CLEAR REVOLUTION EDGE FINISHING & DEBURRING SHROUD

When finishing and deburring panel edges, the abrasive and shroud are typically perpendicular to the panel surface.This makes it difficult to collect the debris.

Our Edge Finishing Shroud has a skirt that surrounds the abrasive to physically contains the debris and effectively capture it.

Every shroud includes: mandrel, disc pad, 2' x 1" hose whip and swivel adapter for connection to 1" vacuum hoses. Refer to hose and fitting section for other hose adapters.

Features

- Fits ANY tool with a 1⁄4" collet – straight or right angle sanders, grinders, routers, etc.
- Virtually indestructible Lexan is guaranteed for life
- Shroud does not obscure visibility
- Shroud swivels freely around shaft, so the hose can be repositioned with ease
- Works with the grinders you already own – NO MODIFICATIONS REQUIRED
- Positive Lock hose fitting – hoses won't pull free
- Recommended tool speed: 12,000-20,000 RPM – Max tool speed: 25,000 RPM
- Shrouds with a 674- prefix have a 1/4in mandrel. For Metric Size Mandrel (6mm long, 6mm collet) replace 674- with 774- and append suffix -60L.





Side Slot Shroud



Centre Slot Shroud

Part No.	Description	Mandrel	Abrasive Style
674-A1248ETR	Edge Trimmer Shroud Kit Center & Side Slot	TR	
674-A1248ETS	Edge Trimmer Shroud Kit Center & Side Slot	TS	
674-A1248ETP	Edge Trimmer Shroud Kit Center & Side Slot	TP	

CLAYTON UNIVERSAL CUTOFF SAW SHROUDS

A grip on the top of the shroud aids in precise cuts. This puts your control above and in line with the cutting edge, making the tool much easier to control and more ergonomic. In addition, the grinder and shroud pivot independently, keeping the shroud flat on the work surface while the grinder pivots with your hand.

Every shroud includes: mandrel, 2' x 3⁄4" hose whip, and swivel adapter for connection to 1" or 3⁄4" vacuum hoses.

Features:

- Fits ANY tool with a 1⁄4" collet – straight or right angle sanders, grinders, etc.
- Accepts discs with 1⁄4" or 3⁄8" hole
- Precision finished anodized aluminum housing
- Positive Lock hose fitting – hoses won't pull free
- Built-in depth control with graduation marks, provides precise adjustment
- Ergonomic comfort grip molded into shroud
- Works with the grinders you already own – NO MODIFICATIONS REQUIRED
- Recommended tool speed: 20,000 – 23,000 RPM – Max tool speed: 25,000 RPM



2" Universal Cutoff Saw Shroud						
Part No.	Description	Orientation	Motor RPM	Motor HP (W)	Air Inlet ID inch (mm)	Weight lbs (kg)
674-A2032	Grinder not Included	-	-	-	-	-
690-72032-01R	Dotco 12L1281-36	Right Angle	20,000	0.3	1/4"	-
690-72032-01S	Dotco 12L2580-01	Straight	23,000	0.9	1/4"	-

3" Universal Cutoff Saw Shroud						
Part No.	Description	Orientation	Motor RPM	Motor HP (W)	Air Inlet ID inch (mm)	Weight lbs (kg)
674-A2048	Grinder not Included	-	-	-	-	-
690-72048-01R	Dotco 12L1281-36	Right Angle	20,000	0.3	1/4"	-
690-72048-01S	Dotco 12L2580-01	Straight	23,000	0.9	1/4"	-

CLAYTON UNIVERSAL RADIAL SHROUDS



Designed for 3M Bristle Discs or cut off wheels, this shroud does not obscure the working edge of the abrasive, so users can easily see the work surface.

Every shroud includes: mandrel, 2' x 1" hose whip and swivel adapter for connection to 1" vacuum hoses.

Features:

- Fits ANY tool with a 1/4" collet – straight or right angle sanders, grinders, routers, etc.
- Shroud does not obscure visibility
- Shroud swivels freely around shaft, so the hose can be repositioned with ease
- Works with the grinders you already own, up to 25,000 rpm - NO MODIFICATIONS REQUIRED
- Positive Lock hose fitting – hoses won't pull free
- Accepts up to 4 bristle discs with 3/8" centre hole

4" Radial Shroud Narrow (1 cutoff wheel 100mm)						
Part No.	Description	Orientation	Motor RPM	Motor HP (W)	Air Inlet ID inch (mm)	Weight lbs (kg)
674-A1664	Grinder not Included	-	-	-	-	-
674-A1664-02R	Dotco 12L1280-36	Right Angle	12,000	0.3 (220)	1/4"	1.1 (0.5)
674-A1664-03S	Dotco 12L2082-01	Straight	18,000	0.6 (448)	1/4"	1.4 (0.6)

3" Radial Shroud Wide (2-4 bristle discs 75mm)						
Part No.	Description	Orientation	Motor RPM	Motor HP (W)	Air Inlet ID inch (mm)	Weight lbs (kg)
674-A2148	Grinder not Included	-	-	-	-	-
674-A2148-02R	Dotco 12L1280-36	Right Angle	12,000	0.3 (220)	1/4"	1.1 (0.5)
674-A2148-03S	Dotco 12L2082-01	Straight	18,000	0.6 (448)	1/4"	1.4 (0.6)

3" Radial Shroud Narrow (1-2 bristle discs or 1 cutoff wheel 75mm)						
Part No.	Description	Orientation	Motor RPM	Motor HP (W)	Air Inlet ID inch (mm)	Weight lbs (kg)
674-A1648	Grinder not Included	-	-	-	-	-
674-A1648-02R	Dotco 12L1280-36	Right Angle	12,000	0.3 (220)	1/4"	1.1 (0.5)
674-A1648-03S	Dotco 12L2082-01	Straight	18,000	0.6 (448)	1/4"	1.4 (0.6)

CLAYTON CLEAR REVOLUTION 1" UNIVERSAL DRUM SANDER SHROUD

Never exceed the maximum operating speed of your abrasive.

Designed for 1" diameter and smaller sanding drums. This shroud does not obscure the working edges of the abrasive, so users can easily see the work surface and avoid damaging the substrate.

Every shroud includes: mandrel, drum 2' x 1" hose whip, and swivel adapter for connection to 1" vacuum hoses. Refer to hose and fitting section for other hose adapters.

Features:

- Fits ANY tool with a 1/4" collet – straight or right angle sanders, grinders, routers, etc.
- Virtually indestructible Lexan is guaranteed for life
- Shroud does not obscure visibility
- Shroud swivels freely around shaft, so the hose can be repositioned with ease
- Works with the grinders you already own - NO MODIFICATIONS REQUIRED
- Positive Lock hose fitting – hoses won't pull free
- Recommended tool speed: 12,000 RPM

For Metric Size Mandrels Replace 674- with 774- and append suffix -60L



1/2" to 1" Front View

Part No.	Description
674-A6016D08	Drum Sander Shroud 1in x 1/2
674-A6016D10	Drum Sander Shroud 1in x 5/8
674-A6016D12	Drum Sander Shroud 1in x 3/4
674-A6016D16	Drum Sander Shroud 1in x 1in



2" Front View

Part No.	Description
674-A6016D20	Drum Sander Shroud 1in x 1 1/4
674-A6016D24	Drum Sander Shroud 1in x 1 1/2
674-A6016D32	Drum Sander Shroud 1in x 2

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CLAYTON CLEAR REVOLUTION PILOTED BONDING ABRASIVE SHROUDS – 4 PIECE SYSTEM

Pilot Bonding Abrasives are recommended for cleaning paint, primer, and corrosion around rivet holes. This ensures a positive electrical contact to eliminate static electricity. Abrasives are available in various pilot diameters and overall diameters to meet the needs of just about any application.

Shrouds includes: mandrel, hose whip, and swivel adapter for connection to vacuum hoses. Pilot Tip, Friction Pad, and Abrasives sold separately.



Dust Collection Shroud

Pilot Tip

Friction Pad

Abrasive

Features:

- Fits ANY tool that accepts the mandrel options listed below
- Straight or right angle sanders, grinders, routers, etc.
- Shroud swivels freely around mandrel
- Works with the tools you already own
- Built-in Positive Lock swivel hose fitting

For Metric Size Mandrels Replace 674- with 774- and append suffix below.



674-A1113PT Front View



674-A1114PT Front View



674-A1216PT Front View

Step 1 – Select the Shroud based on the Abrasive OD Size

Part No.	Description
674-A1113PT	Tight Access Notched Pilot. Bond. Shroud 1/8in Mandrel
674-A1114PT	Tight Access Piloted Bonding Shroud 1/8in Mandrel
674-A1216PT	Clear Rev Piloted Bonding Shroud

Part No.	Mandrel Size	Collet Size
-48S	4.8mm short	4.8mm
-48L	4.8mm long	4.8mm
-60S	6mm short	6mm
-60L	6mm long	6mm

Step 2 – Select the Pilot Tip based on the Abrasive OD and Hole Size





Pilot Tips for 1/2in OD Abrasive		
Part No.	Description	Pilot Dia
672-08PE083-098	Hole Size #40 (.0980in) (2.49mm)	0.0830
672-08PE110-125	Hole Size 1/8in (.1250in) (3.175mm	0.1100
672-08PE113-128	Hole Size #30 (.1285in) (3.26mm)	0.1135
672-08PE141-156	Hole Size 5/32 in, (.1563in) (3.97 mm)	0.1413
672-08PE144-159	Hole Size #21 (.1590in) (4.04mm)	0.1440
672-08PE172-187	Hole Size 3/16in (.1875in) (4.76mm)	0.1725
672-08PE178-193	Hole Size #10 (.1935in) (4.91mm)	0.1785
672-08PE203-218	Hole Size 7/32 (.2188in) (5.56mm)	0.2038
672-08PE235-250	Hole Size 1/4in (.2500in) (6.35mm)	0.2350

Pilot Tips for 5/8in & 3/4in OD Abrasive		
Part No.	Description	Pilot Dia
672-12PE083-098	Hole Size #40 (.0980in) (2.49mm)	0.0830
672-12PE110-125	Hole Size 1/8in (.1250in) (3.175mm)	0.1100
672-12PE113-128	Hole Size #30 (.1285in) (3.26mm)	0.1135
672-12PE141-156	Hole Size 5/32 in, (.1563in) (3.97 mm)	0.1413
672-12PE114-159	Hole Size #21 (.1590in) (4.04mm)	0.1440
672-12PE172-187	Hole Size 3/16in (.1875in) (4.76mm)	0.1725
672-12PE178-193	Hole Size #10 (.1935in) (4.91mm)	0.1785
672-12PE203-218	Hole Size 7/32 (.2188in) (5.56mm)	0.2038
672-12PE235-250	Hole Size 1/4in (.2500in) (6.35mm)	0.2350

Step 3 – Select the Friction Pad based on the Abrasive OD and Hole Diameter





Friction Pads 10 pk for 1/2in OD Abrasive		
	Hole Diameter	
Part No.	From	To
672-0802FP-1	0.0775	0.1087
672-0802FP-2	0.1088	0.1399
672-0802FP-3	0.1400	0.1712
672-0802FP-4	0.1713	0.2024
672-0802FP-5	0.2025	0.2337
672-0802FP-6	0.2338	0.2649

Friction Pads 10 pk for 1/2in OD Abrasive		
	Hole Diameter	
Part No.	From	To
672-1202FP-1	0.0775	0.1087
672-1202FP-2	0.1088	0.1399
672-1202FP-3	0.1400	0.1712
672-1202FP-4	0.1713	0.2024
672-1202FP-5	0.2025	0.2337
672-1202FP-6	0.2338	0.2649

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Step 4 – Select the Abrasive based on the Abrasive OD, Abrasive Grit, and Hole Diameter

Abrasive 1/2in OD (100 pk)			
		Hole Diameter	
Part No.	Grit	From	To
800-08P-4-003	Crs	0.0775	0.1087
800-08P-4-006	Med	0.0931	0.1087
800-08P-4-009	Fine	0.1400	0.1712
800-08P-5-003	Crs	0.1713	0.2024
800-08P-5-006	Med	0.1088	0.1243
800-08P-5-009	Fine	0.2338	0.2649
800-08P-6-003	Crs		
800-08P-6-006	Med	0.1244	0.1399
800-08P-6-009	Fine		
800-08P-7-003	Crs		
800-08P-7-006	Med	0.1400	0.1555
800-08P-7-009	Fine		
800-08P-8-003	Crs		
800-08P-8-006	Med	0.1556	0.1712
800-08P-8-009	Fine		
800-08P-9-003	Crs		
800-08P-9-006	Med	0.1713	0.1868
800-08P-9-009	Fine		
800-08P-10-003	Crs		
800-08P-10-006	Med	0.1869	0.2024
800-08P-10-009	Fine		
800-08P-11-003	Crs		
800-08P-11-006	Med	0.2025	0.2180
800-08P-11-009	Fine		
800-08P-12-003	Crs		
800-08P-12-006	Med	0.2181	0.2337
800-08P-12-009	Fine		
800-08P-13-003	Crs		
800-08P-13-006	Med	0.2338	0.2493
800-08P-13-009	Fine		
800-08P-14-003	Crs		
800-08P-14-006	Med	0.2494	0.2649
800-08P-14-009	Fine		

Abrasive 5/8in OD (100 pk)			
		Hole Diameter	
Part No.	Grit	From	To
800-10P-4-003	Crs	0.0775	0.1087
800-10P-4-006	Med	0.0931	0.1087
800-10P-4-009	Fine	0.1400	0.1712
800-10P-5-003	Crs	0.1713	0.2024
800-10P-5-006	Med	0.1088	0.1243
800-10P-5-009	Fine	0.2338	0.2649
800-10P-6-003	Crs		
800-10P-6-006	Med	0.1244	0.1399
800-10P-6-009	Fine		
800-10P-7-003	Crs		
800-10P-7-006	Med	0.1400	0.1555
800-10P-7-009	Fine		
800-10P-8-003	Crs		
800-10P-8-006	Med	0.1556	0.1712
800-10P-8-009	Fine		
800-10P-9-003	Crs		
800-10P-9-006	Med	0.1713	0.1868
800-10P-9-009	Fine		
800-10P-10-003	Crs		
800-10P-10-006	Med	0.1869	0.2024
800-10P-10-009	Fine		
800-10P-11-003	Crs		
800-10P-11-006	Med	0.2025	0.2180
800-10P-11-009	Fine		
800-10P-12-003	Crs		
800-10P-12-006	Med	0.2181	0.2337
800-10P-12-009	Fine		
800-10P-13-003	Crs		
800-10P-13-006	Med	0.2338	0.2493
800-10P-13-009	Fine		
800-10P-14-003	Crs		
800-10P-14-006	Med	0.2494	0.2649
800-10P-14-009	Fine		

Abrasive 3/4in OD (100 pk)			
		Hole Diameter	
Part No.	Grit	From	To
800-12P-4-003	Crs	0.0775	0.1087
800-12P-4-006	Med	0.0931	0.1087
800-12P-4-009	Fine	0.1400	0.1712
800-12P-5-003	Crs	0.1713	0.2024
800-12P-5-006	Med	0.1088	0.1243
800-12P-5-009	Fine	0.2338	0.2649
800-12P-6-003	Crs		
800-12P-6-006	Med	0.1244	0.1399
800-12P-6-009	Fine		
800-12P-7-003	Crs		
800-12P-7-006	Med	0.1400	0.1555
800-12P-7-009	Fine		
800-12P-8-003	Crs		
800-12P-8-006	Med	0.1556	0.1712
800-12P-8-009	Fine		
800-12P-9-003	Crs		
800-12P-9-006	Med	0.1713	0.1868
800-12P-9-009	Fine		
800-12P-10-003	Crs		
800-12P-10-006	Med	0.1869	0.2024
800-12P-10-009	Fine		
800-12P-11-003	Crs		
800-12P-11-006	Med	0.2025	0.2180
800-12P-11-009	Fine		
800-12P-12-003	Crs		
800-12P-12-006	Med	0.2181	0.2337
800-12P-12-009	Fine		
800-12P-13-003	Crs		
800-12P-13-006	Med	0.2338	0.2493
800-12P-13-009	Fine		
800-12P-14-003	Crs		
800-12P-14-006	Med	0.2494	0.2649
800-12P-14-009	Fine		

CLAYTON MICROSTOP COUNTERSINK SHROUDS

Whether you're preparing carbon fiber, aluminum, or other panels, countersinks create a lot of dust, chips, and potentially hazardous debris and FOD. The Clayton clip-on countersink shrouds are designed to work with the cages you already own. They attach to different size cages, and allow you to vacuum away the debris from the work surface, reducing FOD and controlling potentially hazardous dust. The shrouds are available in a number of sizes to fit the outer diameter of a full range of microstop countersink cages. Just measure the OD of your cage, and select the shroud that fits your tool.

Individual Shrouds Include::

- Hose cuff
- 2ft of 1in vacuum hose
- Magnetic quick disconnect



Part No.	Description
674-MS10D11	Microstop Carbon Fiber Shroud for 0.625in Diameter
674-MS12D13	Microstop Carbon Fiber Shroud for 0.75in Diameter
674-MS14D15	Microstop Carbon Fiber Shroud for 0.875in Diameter
674-MS16D17	Microstop Carbon Fiber Shroud for 1in Diameter
674-MS18D19	Microstop Carbon Fiber Shroud for 1.125in Diameter
674-MS20D21	Microstop Carbon Fiber Shroud for 1.25in Diameter

Part No.	Description
674-MS22D23	Microstop Carbon Fiber Shroud for 1.375in Diameter
674-MS24D25	Microstop Carbon Fiber Shroud for 1.5in Diameter
674-MS26D27	Microstop Carbon Fiber Shroud for 1.625in Diameter
674-MS28D29	Microstop Carbon Fiber Shroud for 1.75in Diameter
674-MS30D31	Microstop Carbon Fiber Shroud for 1.875in Diameter
674-MS32D33	Microstop Carbon Fiber Shroud for 2in Diameter

Contents:

- 12 shrouds sizes .625in to 2in
- 2 vacuum hose adapters
- Magnetic quick disconnect
- Carry case



Part No.	Description
1535150 *	14 Piece Microstop Countersink Shroud Kit

* NSN: 4130-01-459-8316

CLAYTON UNIVERSAL DRILL SHROUD

This Universal Shroud design attaches between the drill and chuck and provides exceptional dust collection when used on composites or sheet metal. The shroud works with drill bits, reamers, and countersinks.

Every shroud includes: 1" x 2' vacuum hose whip, 2 interchangeable lexan tips, and swivel adapter for connection to 1" vacuum hoses.

Features:

- Universal Shroud design can be used with virtually any drill
- Precision finished anodized aluminum housing
- Crystal clear Lexan shroud does not obscure visibility (includes 2 sizes)
- Works with the drills you already own, up to 25,000 rpm
- Works with microstop countersinks up to 1.70" OD
- Removable/Replaceable Lexan shroud
- Positive Lock hose fitting – hoses won't pull free
- Shroud swivels freely around chuck, so the hose can be repositioned
- Shroud self centers on drill bit without the need for any expensive bushings
- Built-in depth control
- Fits non-reversing drills with a 3⁄8-24 threaded chuck




for 1-11/16" OD Microstop


for 1-3/16" OD Microstop

Part No.	Description	Chuck Size	Orientation	Motor RPM	Motor HP (W)	Air Inlet ID inch (mm)	Weight lbs (kg)
674-A3005	Drill not Included	-	-	-	-	-	-
690-73004-01	Dotco 14CNL92-51	3/8"	Pistol Grip	3,200	0.5 (373)	1/4"	2.5 (1.1)
690-73004-02	Dotco 14CSL95-51	3/8"	Pistol Grip	1,300		1/4"	
690-73004-03	Dotco 14CFS93-38	1/4"	Pistol Grip	3,200		1/4"	
690-73004-04	Dotco 14CSL92-51	3/8"	Pistol Grip	3,200	0.6	1/4"	
690-73004-20	Ingersoll Rand 728LA2	3/8"	Pistol Grip	2,850	0.9 (670)	1/4"	2.4 (1.0)

CLAYTON RIGHT ANGLE DRILL SHROUD

When it's time to make holes in tight spaces, the best tool for the job is the right angle drill. The drill's narrow stature gives it the ability to fit in tight quarters, but makes dust collection difficult. The Clayton drill shroud is a modular solution that can be easily clipped onto a drill to collect dust and chips while drilling. The base shroud collects from directly behind the bit, and optional attachments allow collection from the front or sides. The shroud can be easily removed for storage or to be moved to another tool.

Base shroud includes: 2' x 3/4" hose whip and swivel adapter for connection to 1" vacuum hoses. Base shroud is required for left, right and front attachments. Refer to hose and fitting section for hose adapters.

Features:

- Fits right angle drills with a 0.63" nominal shaft diameter
- Snaps on and off drill easily






Right Pickup


Back Pickup


Left Pickup


Front Pickup

Part No.	Description
674-A3010	Clip On Drill Shroud Base and Back Pickup
674-3010F	Clip on Drill Shroud Front Pickup only
674-3010L	Clip on Drill Shroud Left Pickup only
674-3010R	Clip on Drill Shroud Right Pickup only
674-A3010-K1	Clip on Drill Shroud 4pc Shadow Box Kit

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CLAYTON DRILL GUIDES

Designed to replace your existing drill blocks and egg cups, our vacuum Drill Guides accept a variety of bushings to hold your drill bit perfectly perpendicular to your work surface. They contain and extract drilling debris including dust, chips and swarf with a high flow 1in vacuum hose connection.

Features:

- Made of virtually indestructible crystal clear Lexan
- Includes 2ft of 1in vacuum hose and threaded 1in swivel cuff
- Slip Fixed Drill Guides accept any 1/2in OD Slip Fixed Bushings
- Threaded Drill Guides accept either 1/2-13 or 3/4-16 bushings depending on model
- Open Drill Shrouds provide a 3/4in opening for drilling without bushings.
- 2in Drill Guides will hold themselves on smooth vertical surfaces while vacuum source is active
- Requires a vacuum source sold separately
- Bushings sold separately



Part No.	Fig	Bushing Type	Accepts Bushings	Shroud Diameter	NSN
674-A1316-08SF	A	Slip Fixed	1/2" OD	1"	
674-A1332-08SF	B	Slip Fixed	1/2" OD	2"	
674-A13XX-08SF		Slip Fixed	1/2" OD	1" & 2"	4130-01-502-1336
674-A1316-08T	C	Threaded	1/2-13	1"	
674-A1332-08T	D	Threaded	1/2-13	2"	
674-A1316-12T		Threaded	3/4-16	1"	
674-A1332-12T		Threaded	3/4-16	2"	
674-A1316-12X	E	Open	None	1"	
674-A1332-12X	F	Open	None	2"	

CLAYTON 1/2” BELT SANDER SHROUD

Our Tool Specific Belt Sander Shroud complements a 12K RPM 6” x 1/2” Dotco belt sander.

The shroud does not obscure the working edges of the abrasive belt, so users can easily see the work surface and get into tight areas.

Every shroud includes: 2’ x 1” hose whip and swivel adapter for connection to 1” vacuum hoses.

Features:

- Compact 6” arm accepts 1/2” x 12” belts
- Precision finished anodized aluminum housing
- Shroud does not obscure visibility
- Shroud swivels on tool with sander belt
- Positive Lock hose fitting – hoses won’t pull free
- Abrasive belts available in standard grits and non-woven



Part No.	Description	Belt Size	Orientation	Motor RPM	Motor HP (W)	Air Inlet ID inch (mm)	Weight lbs (kg)
674-A4008	Sander not Included	-	-	-	-	-	-
690-74008 *	Dotco 12L1280-36B2	1/2"	-	12,000	0.3 (220)	1/4"	1.4 (0.6)

* NSN: 4130-01-460-8182

CLAYTON ROUTER SHROUD

Our Tool Specific Router Shroud complements a 23K RPM 1¼” Dotco Router.

Every shroud kit includes: Standard Shroud, Spanner Shroud, Router Adapter Ring, 2’ x 1” vacuum hose whip, and swivel adapter for connection to 1” or ¾” vacuum hoses.

Features:

- Precision finished anodized aluminum housing
- Shroud does not obscure visibility
- Positive Lock hose fitting – hoses won’t pull free
- Router adapter for depth control



Router Shroud Replacement Parts	
Part No.	Description
683-0022	Router Adapter Ring
602-0024	Polyethylene Standard Sole Plate
602-0021	Polyethylene Spanner Sole Plate

Router Shroud							
Part No.	Description	Grinder	Orientation	Motor RPM	Motor HP (W)	Air Inlet ID inch (mm)	Weight lbs (kg)
674-A3201	Shroud & Spanner	Not Included	-	-	-	-	-
674-A3202	Shroud	Not Included	-	-	-	-	-
690-73201-01S	Router Shroud & Spanner Kit	Dotco 12L2580-01	Straight	23,000	0.9	1/4"	
690-73202	Router Shroud Kit	Dotco 12L2580-01	Straight	23,000	0.9	1/4"	

CLAYTON 1-1/4” RIVET SHAVER SHROUD

Our Tool Specific Rivet Shaver Shroud complements a 20K RPM 1¼” Dotco Rivet Shaver.

The shroud can be used with or without stabilizer.

Every shroud includes: 2’ x ¾” hose whip, and swivel adapter for connection to 1” or ¾” vacuum hoses.

Features:

- Precision finished anodized aluminum housing
- Shroud does not obscure visibility
- Shroud swivels on tool with stabilizer
- Positive Lock hose fitting – hoses won’t pull free





Never exceed the maximum operating speed of your abrasive.

Part No.	Description	Cutter Capacity	Orientation	Motor RPM	Motor HP (W)	Air Inlet ID inch (mm)	Weight lbs (kg)
674-A3520	Rivet Shaver not Included	1-1/4"	-	-	-	-	-
690-73000-01	Dotco 14CNL60-95	1-1/4"	Pistol Grip	20,000	1	1/4"	4.5 (2.0)
690-73000-02	Dotco 14CFS60-95	1-1/4"	Pistol Grip	29,000	0.4	1/4"	-

CLAYTON ROTARY SHROUDS FOR HOOK & LOOP ABRASIVES

Looking for Inline Routers? Please contact us!

Tight Access shroud includes: disc holder, mandrel, 2' x 3/4" hose whip and swivel adapter for connection to 1" vacuum hoses.

Clear Revolution shroud includes: disc holder, mandrel, 2' x 1" hose whip and swivel adapter for connection to 1" vacuum hoses. Refer to hose and fitting section for other hose adapters.

Features:

- Fits ANY tool with collet sizes listed below – straight or right angle sanders, grinders, routers, etc.
- Lexan Shrouds are virtually indestructible and guaranteed for life
- Lexan Shrouds do not obscure visibility


A


D


E


B


C


F


G

For Metric Size Mandrels Replace 674- with 774- and append suffix on the right.

Part No.	Mandrel Size	Collet Size
-48S	4.8mm short	4.8mm
-48L	4.8mm long	4.8mm
-49S	4.95mm short	4.95mm
-49L	4.95mm long	4.95mm
-60S	6mm short	6mm
-60L	6mm long	6mm

Part No.	Fig	Type	Description
674-A1114J14	A	7/8in (22mm) JHook Shroud	Tight Access Shroud 1/8in Mandrel
674-A1216J14	E	7/8in (22mm) JHook Shroud	1 in Clear Rev Shroud
674-A1214J14	D	7/8in (22mm) JHook Shroud	1in Clear Rev Shroud Notched
674-A1232J20	G	1-1/4in (32mm) JHook Shroud	2in Clear Rev Shroud
674-A1230J20	F	1-1/4in (32mm) JHook Shroud	2in Clear Rev Shroud Notched
674-A1232J21		1-5/16 (33mm) JHook Shroud	Jhook Shroud
674-A1230J21		1-5/16 (33mm) JHook Shroud	Jhook Shroud Notched
674-A1248J40	C	2-1/2 (64mm) JHook Shroud	3in Clear Rev Shroud
674-A1246J40	B	2-1/2 (64mm) JHook Shroud	3in Clear Rev Shroud Notched

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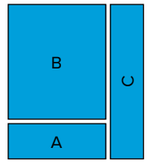


Clayton Dustmaster System

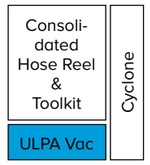
Dustless Sanding & Composite Fabrication

The Dustmaster System is a robust sytem supporting 3 users for dsutless sanding and grinding. It is a modular system which is built to customers requirements by combining components of the DustMaster system (like A+B+C). These components interlock to form a single standalone unit which can be further customised with a selection of sanders or grinders in toolcontrol foam.

The ULPA filters exceed HEPA standards ULPA filter captures 99.999% of particles 0.12 µm and larger. Made in the USA.



CLAYTON DUSTMASTER PNEUMATIC VACUUM



Features:

- Supports up to 3 users
- Auto On/Off System turns vacuum on when pneumatic tool is actuated (user adjustable)
- Uses a single compressed air line and an internal manifold to supply 3 users with compressed air
- Safe-Filter-Change protects users from exposure to hazardous dust when changing filters
- Self closing vacuum port prevents hazardous dust from escaping when not in use
- Low profile design won't tip
- Lightweight aluminum chassis
- Heavy duty dual pneumatic motors
- ULPA Filter is 99.9995% efficient @ 0.12 µm (U15)
- Pre-filter protects ULPA filter for longer life
- Includes all filters and bags
- NSN: 7910-01-520-6436

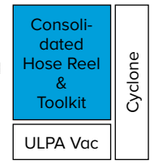




Model	Power	Weight lbs (kg)	Dimensions in (cm)	Consumption	CFM (lpm)	H2O (mbar)	dBA	HP
DM-104	Pneumatic	77 (35)	28w x 22d x 20h (71w x 55d x 50h)	75 CFM @ 90 PSI	212 (6003)	125 (310)	75	-

* CFM with cyclone pre-separator

CLAYTON DUSTMASTER CONSOLIDATED TOOL KIT & HOSE REEL



The Consolidated Tool Kit & Hose Reel provides storage for three vacuum hoses. The top of the CTK is a shadowboxed tool tray which holds sanders and tools. Every item is tethered or shadowed, so tool control can be easily maintained. Each compartment is lockable for tool security.

The CTK is available with wheels as a standalone unit or without wheels for mounting on a Clayton DustMaster™ Vacuum.

Includes:

- All steel powder coated construction
- Heavy duty tie down rings
- Foldable hose reel crank handle
- Heavy duty lift handles
- Gas struts hold lid open
- Large 5" locking casters on 650-301
- Lockable hasps
- Three position hose reel
- Two color shadow box foam

Hose reel provides storage for up to three 30' combination air/vacuum hoses.

Hoses sold separately.



Part No.	Description	Weight lbs (kg)	NSN
650-201	CTK without Casters	100 (45)	5140-01-520-8551
650-301	CTK with Casters	108 (49)	

CLAYTON CYCLONE PRE-SEPERATOR UNIT



Our Cyclonic pre-separator is an add-on unit that captures 99% of debris before it gets to the primary filter bag. This means fewer filter changes and less loss of suction. The cyclone add-on is only available for our CTK systems.

Features:

- Add-on to CTK/Dustmaster Vacuum to complete System
- Kit includes all mounting hardware

Model	Power	Weight lbs (kg)
682-A102	Cyclone Add-on Kit	40 (19)

CLAYTON DUSTMASTER STANDARD CONFIGURATIONS



A

Consolidated Hose Reel & Toolkit

HEPA Vac

Cyclone

The DustMaster ULPA Vacuum is available as a standalone unit. This is the Heart of the DustMaster System.



B

Consolidated Hose Reel & Toolkit

HEPA Vac

Cyclone

The Consolidated Hose Reel & Toolkit (CTK) provides storage for vacuum hoses, compressed air lines, sanders, tools, and abrasives. It's available with or without casters, and can ride atop the vacuum.



C

Consolidated Hose Reel & Toolkit

HEPA Vac

Cyclone

In this configuration the Consolidated Hose Reel & Toolkit (CTK) rides atop the vacuum creating a single unit for easy deployment and storage.



D

Consolidated Hose Reel & Toolkit

HEPA Vac

Cyclone

Our Cyclonic pre-separator is an add-on unit that captures 99% of debris before it gets to the primary filter bag. This means fewer filter changes and less loss of suction. The cyclone is only available with the CTK.

Part No.	Description	Power	Weight lbs (kg)	Ref
DM-100	DustMaster Vacuums	Electric	83 (37)	A
DM-104	DustMaster Vacuums	Pneumatic	112 (51)	A
650-201	CTK without casters		125 (57)	B
650-301	CTK with casters		134 (61)	B
DM-100CTK	DustMaster Systems (CTK)	Electric	208 (94)	C
DM-104CTK	DustMaster Systems (CTK)	Pneumatic	237 (107)	C
DM-300	DustMaster Systems (CTK & Cyclone)	Electric	249 (113)	D
DM-304	DustMaster Systems (CTK & Cyclone)	Pneumatic	278 (126)	D

CLAYTON DUSTMASTER PNEUMATIC SYSTEM WITH SANDERS & ABRASIVES

Consolidated Hose Reel & Toolkit

HEPA Vac

Cyclone

This DustMaster System is ideal for maintenance on both airframes and ground support equipment. A core set of tools provides flexibility to tackle larger surfaces like the wing or fuselage, or tighter areas and curves, like rotor blades or munitions. Multiple hoses and tools allow up to three artisans to work simultaneously.

Features:

- DustMaster ULPA Vacuum with patented Safe-Filter-Change.
- Consolidated Tool Kit (CTK) with shadow-boxed two-color foam
- One 2" Grinder kit with abrasives and accessories
- Two 3" Random Orbital Sanders, backup pads, protector pads, & 750 sheets of 3" abrasive
- Two 6" Random Orbital Sanders, backup pads, protector pads, and 750 sheets of 6" abrasive
- Two 20' Air/Vac work hoses, One 30' Air/Vac work hose
- One Compressed air supply line, and a complement of fittings

Other kits available and customized, please enquire.



Model	Description	Power	Contents
660-DM-1000-4	Dustmaster System with Sanders & Abrasives	Pneumatic	See list above

* NSN: 5130-01-413-9122

CLAYTON DUSTMASTER BAGS & FILTERS

Clayton HEPA and ULPA filters are engineered to provide maximum protection from hazardous dust. HEPA filters capture 99.97% of particles 0.3 µm or larger. ULPA filters capture 99.999% of particles 0.12 micron or larger. These filters are the ideal solution when working with chromated primers, lead paints, or composites.

Clayton Pre-filters have been designed to prolong the life of the HEPA and ULPA filters. Pre-filters provide protection from larger particles which might escape when a bag filter is installed incorrectly or has sustained damage.

Disposable bag filters are the first stage of filtration on most Clayton vacuums. These vacuum bags are designed to capture larger particles and debris. Most are manufactured with a lining to resist 'caking' of dust on the inside of the bag. Bag filters are intended for single use.



A



B



C



D



E



F

Part No.	Description	Ref	NSN
600-313A	Bag Filter 5 pack (DM Vac)	A	7910-01-520-6435
610-313A	Collection Bag 10 pack (Cyclone)	B	4310-01-520-8595
600-115	Pre-filter 3 pack	C	4310-01-519-5205
600-116	ULPA Filter 1 pack	D	4310-01-519-5796
600-114DM	Black 6 mil Poly Bag 25 pack	E	8105-01-521-2119
926-75F	Compressed Air Filter	F	
926-75F-01	Replacement Filter Element 40µm	-	

CLAYTON DUSTMASTER COVERS

This black nylon cover will keep your DustMaster looking like new.

- Dual ply 420 Denier Nylon with water proof urethane backing
- Cover is sized so that it will not drag on the ground
- Handle slots expose handle for easy movement
- Waterproof



Part No.	Description
954-006	System Cover for CTK system
954-005	System Cover for CTK Cyclone system

CLAYTON 3 PORT DISTRIBUTION MODULE

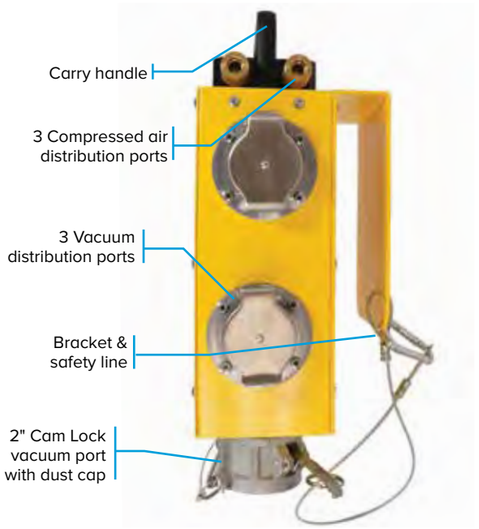
This Distribution module is based upon the needs expressed to us by the maintainers of the C-17... one of the largest and most advanced aircraft in production today. The need was for 2-3 maintainers to perform dustless sanding operations at a great distance from the vacuum - up to 80 feet away. The distribution module allows 3 simultaneous users to work from one vacuum with a negligible loss of suction. The module is paired with any one of our 2" Air / Vac Cam Lock hoses. Maintainers can simply plug their lightweight Clayton Work Hoses and airlines directly into the distribution module, and work up to a 30 foot radius around the module. The module distributes the vacuum suction and the compressed air. This module is often used on JLG lifts or scissor-style lifts, and its integral bracket and safety cable allows it to be hung from the railing of the lifts. It works equally well on maintenance stands or scaffolding. Some customers find that the module allows maintainers to work inside an aircraft comfortably, without having to maneuver the vacuum into the fuselage. This module can be fitted to any Clayton HEPA/ULPA Vacuum.

Features:

- Allows 3 maintainers to work simultaneously from one vacuum
- Extends vacuum range up to 80' (total length 120')
- Can be used with any brand vacuum (depending on vacuum strength)
- Lightweight aluminum construction - 12 lbs. total
- Attached dust cap prevents dust from escaping module when not in use
- Safety cable secures module to railings or structural components
- Integrated carry handle

NOTE: This module works in conjunction with a vacuum and requires a 2" Clayton extension hose and provides passive distribution only.







Workers sand a wing using hoses connected to a Clayton Distribution Module on an adjacent man lift.

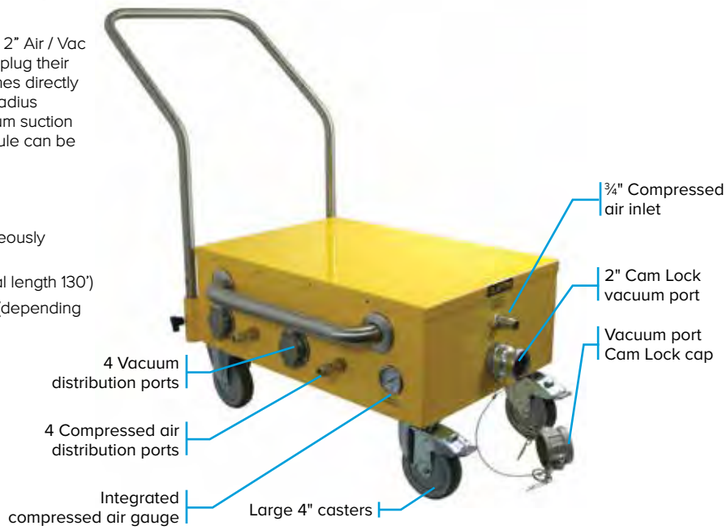
Part No.	Description	Vac Ports	Air Ports	Vac Hose	Air Hose	Length
923-A20315	Distribution Module	3	3	-	-	-
671-AVH2020X	2" Combination Air / Vac Cam Lock Hose	-	-	2"	1/2"	20'
671-AVH2040X	2" Combination Air / Vac Cam Lock Hose	-	-	2"	1/2"	40'
671-AVH2060X	2" Combination Air / Vac Cam Lock Hose	-	-	2"	1/2"	60'
671-AVH2080X	2" Combination Air / Vac Cam Lock Hose	-	-	2"	1/2"	80'

CLAYTON 4 PORT DISTRIBUTION ROVER

The module is paired with any one of our 2" Air / Vac Cam Lock hoses. Maintainers can simply plug their lightweight Clayton Work Hoses and airlines directly into the Rover, and work up to a 30 foot radius around it. The Rover distributes the vacuum suction and compressed air to 4 users. This module can be fitted to any Clayton Central Vacuum.

Features:

- Allows 4 maintainers to work simultaneously from one vacuum
- Extends vacuum range up to 100' (total length 130')
- Can be used with any brand vacuum (depending on vacuum strength)
- Attached dust cap prevents dust from escaping module when not in use



Part No.	Description	Vac Ports	Air Ports	Vac Hose	Air Hose	Length
923-A20415	Distribution Rover	4	4	-	-	-
671-AVHC32-40	2" Combination Air / Vac Cam Lock Hose	-	-	2"	3/4"	40'
671-AVHC32-60	2" Combination Air / Vac Cam Lock Hose	-	-	2"	3/4"	60'
671-AVHC32-80	2" Combination Air / Vac Cam Lock Hose	-	-	2"	3/4"	80'
671-AVHC32-100	2" Combination Air / Vac Cam Lock Hose	-	-	2"	3/4"	100'

CLAYTON TENT & VENT OVERSPRAY FILTRATION SYSTEM

Paint Anywhere, Any Shift! – NESHAP 98 – 3 Stage Method 319 Compliant

The Clayton Tent & Vent is designed to allow aircraft painting on the hangar floor without exposing workers to overspray and VOCs. The TV-1400 enables a better paint application with less rework, as it removes and filters overspray paint particulate which can often dry in the air and contaminate the fresh paint job.



Systems designed for the removal of airborne paint particulate, especially those containing chromates, must adhere to NESHAP 98 Test Method 319 for Aerospace painting and de-painting operations. The TV-1400 meets all standards for the safe evacuation and filtration of chromated primers and other coatings.

After the work area is masked with a poly tent, the TV-1400 is connected to compressed air. It maintains the tented area under negative pressure, rapidly turning over the air within, while three wet particulate filters collect overspray and a 24" charcoal filter absorbs VOCs returning clean odor free exhaust air back into the hangar. The TV-1400 exhaust can be connected to optional flex ducting to route the clean air to the outside.

- Exceeds the requirements of 40 CFR 63
- 1200 cfm of air flow easily evacuates 12x10x10 painting tents
- Includes 18" inlet extension and 12" muffler
- Air powered – requires 60cfm of compressed air @ 90psi
- 48w x 24d x 48h

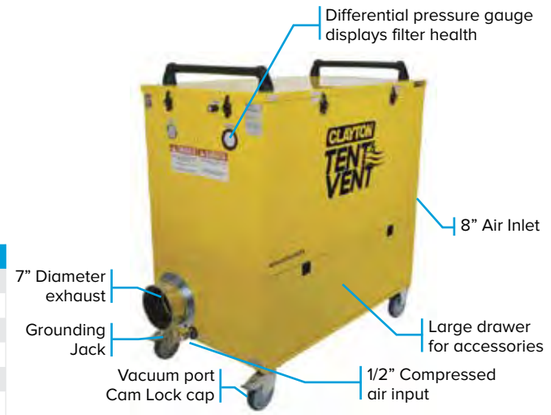


A



B

Part No.	Description	Fig
627-242401-PM08	Panel Filter 24x24 Merv8 (10pk)	
627-242401-PN99	Panel Filter 24x24 NESHAP 99 (10pk)	
627-242415-PM14	Multi-Pocket Filter 24x24x15 (5pk)	
627-242404PC-02	Carbon Filter 24x24x4 (2pk)	
671-VHD80-15	Flexible Ducting Inlet Extension 15ft	A
955-TVC5225	Duct Extension Kit with Cart	B



Part No.	Description	NSN
TV-1400	Tent-N-Vent Paint Tent Filtration System	
TV-1400-KIT1	Tent & Vent including Consumables	4130-01-503-9364
TV-1400-KIT2	Consumable Replenishment Kit Only	4130-01-460-8189

Clayton Hornet Vacuum

CLAYTON HORNET PNEUMTATIC HEPA VACUUM

Dustless Sanding & Composite Fabrication

This unit is small enough to carry out to the flightline, but packs more than enough power for corrosion control, surface prep, or general cleanup.

The Hornet is incredibly efficient and powerful enough to use with sanders, grinders, and cutting tools.

Designed for the removal of Hexavalent Chromium (Cr VI), paints containing lead or chromates, aluminum dust, carbon fiber, ceramic dust, fiberglass and mold, these units are extremely portable, lightweight and feature extra heavy duty components that ensure long life and extreme durability for industrial and military environments.

The Hornet pneumatic HEPA Vacuum incorporates Safe Filter Change™ unique to Clayton.

This means technicians can open the filter compartment and change the primary vacuum filter without protective gear or exposing other workers and environment to hazardous dust.

All this in a package so small, only 6" in diameter, and so portable that it can be used for deployment or mobile maintenance operations. Shops with central vacuum systems or larger mobile vacuums will find new freedom to perform spot repairs in the hangar or on the flight line, without exposing workers or the environment to hazardous dust.

Features:

- ATEX certified for use in explosive dust and gas atmospheres
- Recovery capacity 1 quart (1 liter)
- Vacuum and accessories are electrically bonded to ensure conductivity during use
- HEPA filter: Efficiency of 99.97% @ 0.3 micron
- Consumes 30-75 CFM @ 90 PSI (user adjustable)
- Includes ½" compressed airline with ½" industrial interchange fittings
- Quiet at only 77dBA
- Innovative cooling wand, keeps users cool and comfortable while working with the vacuum
- Static conductive air/vacuum hose with sheathing
- Ergonomic backpack harness (not shown) with chest clasp allows vacuum to be securely worn on back
- Tool Control - Shadow-boxed two-color foam for FOD control / prevention
- Rugged Construction - Packaged in an indestructible, lockable, wheeled Pelican Case
- Turn-key Operation upon receipt

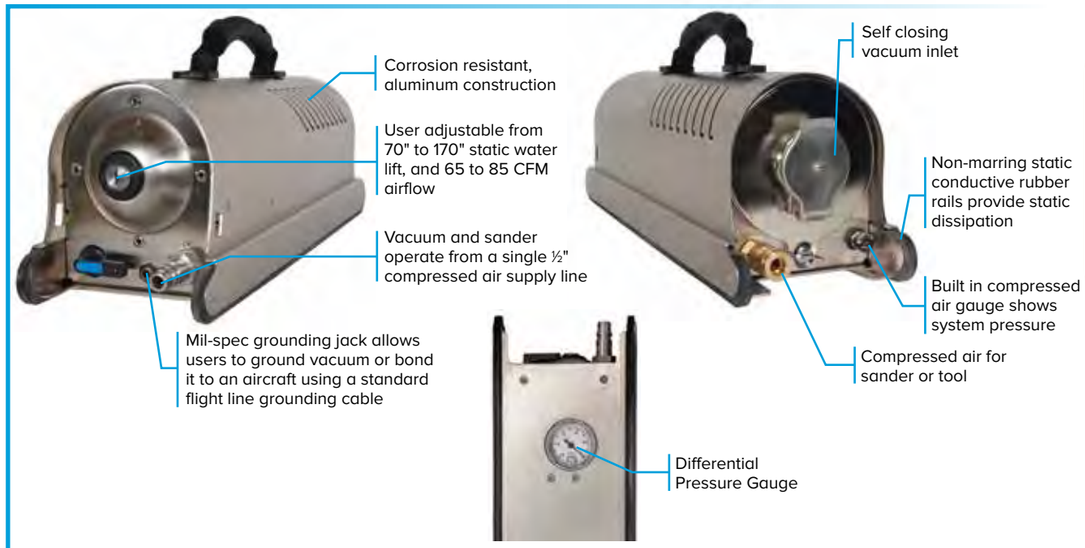


Small footprint at only
20" x 6" x 6.5" x 10 lbs
(51cm x 15cm x 16cm x 4.5kg)



II 2 G D c T6 T85 °C CE





Hornet Packages	ACE-1000 *	ACE-500	ACE-400	ACE-300	500-400
Hornet Vacuum	✓	✓	✓	✓	✓
Pelican Case	✓	✓	✓	✓	
FOD Wand	✓	✓	✓	✓	
30' x ½" Air Supply Line	✓	✓	✓	✓	
Vacuum Hose				✓	
Air / Vacuum Hose	✓	✓	✓		
Bag Filters 10 pack	✓	✓	✓	✓	
Backpack Harness	✓	✓	✓	✓	
Aircraft Grounding Cable	✓	✓	✓	✓	
3" Random Orbital Sander	✓				
5" Random Orbital Sander		✓			
6" Random Orbital Sander	✓				
Backup Pads 1 each	✓				
Pad Protectors 100 discs	✓				
180 grit abrasive 500 discs	✓				
240 grit abrasive 500 discs	✓				
320 grit abrasive 500 discs	✓				

* NSN: 7910-01-390-5761

The Hornet vacuum is available alone or in 4 package configurations:

ACE-1000

Turn-key Dustless Sanding System includes Clayton random orbital sanders with abrasives, backup pads, and protector pads for each.

ACE-500

Complete Dustless Sanding System includes 5" Clayton random orbital sander.

ACE-400

Basic Dustless Sanding System. Customer supplies sander or purchases a Clayton sander separately.

ACE-300

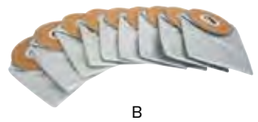
Cleanup Vacuum, great for FOD pickup.

500-400

Hornet vacuum only. All hoses and accessories sold separately.

CLAYTON HORNET ACCESSORIES


A


B


C


D

Part No.	Description	Ref
627-516H	HEPA filter	A
690-A0031	Bag Filter 10 pack	B
92X-A08H30-II	Compressed Airline 1/2" x 30'	C
67X-AVHW1616-08	Air/Vac Work Hose 8'	D
900-A001-30	Aircraft Grounding Cable 30'	E
500-415-1216	FOD Wand 3/4" x 1" x 18"	F
500-4017	Wall Mount Bracket	G
600-114DM	Black Poly Bag 25 pack	


E


F G

CLAYTON SCORPION HANDHELD HEPA VACUUM MILITARY COMBO KIT

The Scorpion HEPA Vacuum is an industry first.

The Scorpion is a pneumatic vacuum that is so small and light it can be carried by hand or worn over the shoulder. Its powerful air motor easily picks up dust and debris, and helps maintain control of FOD while also protecting them from exposure to heavy metals like cadmium, hexavalent chromium, lead, and more. The Scorpion can be used for cleanup after manufacturing and maintenance, or it can be paired with a shrouded tool to control dust and debris while sanding, grinding, cutting, or drilling.

The Scorpion features a tough Lexan canister which showcases the cyclonic action of the vacuum. You'll get hours of enjoyment watching rivets, dust, and metal shavings spinning around the belly of the Scorpion. The HEPA cartridge filter provides the right level of protection, exhausting clean air back into the workplace. For vacuum sanding or shrouded tools, the Scorpion features pass through compressed air, so you'll only need one air line to power the vacuum and the tool.

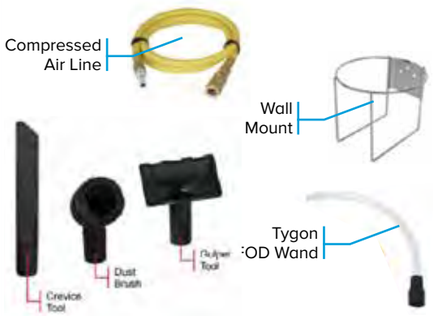
Features:

- Recovery capacity 1qt
- HEPA filter efficiency H13 99.97@ 0.3 mu
- Consumes 15 cfm @ 90 psi
- Produces 45 cfm @50 "H2O
- Quiet at only 77dBA
- Lexan canister is virtually indestructible
- 7" Diameter by 9" high

Military Combo Kit - Everything you need for vacuum sanding and cleanup:

- 4 x 1 Vac hose
- 4 x 1/4 Comp air line
- Assorted cleanup tools
- Prefilter 5 pack
- Extra HEPA filter





Part No.	Description	Capacity	NSN
SC-100MK	Scorpion Handheld Hepa Vacuum Kit	1 qt	4130-01-507-7013

CLAYTON SCORPION ACCESSORIES


A


B


C


D


E


G


F

Part No.	Description	Ref
627-516H *	HEPA Filter	A
627-516P	Prefilter, Pack of 5	B
671-VHA16-022	Adapter Hose 4ft - 1" hose to 1-1/4" Smooth Cuff	C
922-A04H04	Compressed Airline 1/4 in x 4 ft	D
922-A06H30	Compressed Airline 3/8 in x 30 ft	E
500-415-1216 **	FOD Wand 3/4 in x 1 in x 18 in (15 element)	F
604-005	Wall Mount Wire Form	G

* NSN: 4460-01-519-5158 ** NSN: 4130-01-478-3108

CLAYTON STINGRAY HEPA VACUUM – EX RATED, HAZLOC, HEPA

Designed for use in potentially explosive dust atmospheres, and for the removal of Hexavalent Chromium (Cr VI), paints containing lead or chromates, aluminum dust, carbon fiber, ceramic dust, fiberglass and mold. These units feature extra heavy duty components that ensure long life and extreme durability for industrial and military environments.

The Stingray HazLoc HEPA Vacuum incorporates Safe Filter for the containment of hazardous dust when changing filters.

Features:

- ATEX Certified for Use in Combustible Dust Atmospheres
- All Stainless Steel Non-Sparking Construction
- Machined Aluminum, Adjustable, Peripheral Injection, Annular Venturi
- Grounding Jack and Cable
- Conductive Compressed Air Line
- Self Closing Vacuum Port
- 5 & 15 Gal Capacities
- All components are electrically bonded to ensure conductivity during use
- H14 HEPA filter Efficiency of 99.995% @ 0.3 micron
- Built in Compressed Air Filter
- Ⓔx II 3 D T85 °C CE



Part No.	Description	Tank Capacity gal (liters)	Consumption	CFM (lpm)	Vacuum "H20 (mbar)	dBA
STX-305T-4	Stingray EXP HEPA Vacuum	5 ()	60 CFM @90PSI (1699 lpm @ 413kPa)	105 (2973)	180 (447)	79
STX-315T-4	Stingray EXP HEPA Vacuum	15 (57)				
STP-305T-4	Stingray EXP HEPA Vacuum	5 ()				
STP-315T-4	Stingray EXP HEPA Vacuum	15 (57)				

CLAYTON STINGRAY ACCESSORIES


A B C


D


E

Part No.	Description	Ref
627-1414BC	Filter Bag, 5 Gal Conductive, 5 Pk	A
627-16BC	Filter Bag, 15 Gal Conductive, 5 Pk	A
627-12HX	Hepa Filter (Conductive) H14	B
627-12P	Prefilter 3 pk	C
900-A001-30	Aircraft Grounding Wire & Plug 30ft	D
92X-A08H30-II	Compressed Air Hose 1/2" x 30' EXP	E

CLAYTON WART HOG G2 CLEANUP PNEUMATIC VACS

Available in both PNEUMATIC and ELECTRIC, the Wart Hog Series HEPA vacs are an ideal solution for dustless sanding, dust extraction, and general cleanup. They are designed for the removal of Hexavalent Chromium (Cr VI), paints containing lead or chromates, aluminum dust, carbon fiber, ceramic dust, fiberglass and mold. These units are extremely portable, lightweight and feature extra heavy duty components that ensure long life and extreme durability for industrial and military environments.

Y-Connector for the use of 2 tools: PN 671-150Y





15 Gallon Steel Version



15 Gallon Poly Version

Features:

- Tough impact-resistant poly tank withstands rough use and chemical/biological exposure
- Self closing vacuum port prevents hazardous dust from escaping when not in use
- Industrial pneumatic power head for both 5 and 15 gallon units
- Screw on HEPA filter captures 99.97% of particles 0.3µm and larger
- Pre-filter protects HEPA for longer life
- Hoses sold separately

Includes:

- HEPA filter
- Bag filter 5 pak

Pneumatic Power Head Specs

- Consumption: 60 CFM @ 90 PSI (50-70)*
- CFM: 105 (90 - 120)*
- H2O: 180 (150 - 200)*
- dBA: 70 - 75*

*Factory adjustable

Part No.	Description	Capacity (gal)	Weight lbs (kg)	Consumption	CFM (lpm)	Vacuum H_2O (mbar)
WGX-115G-4	Wart Hog G2 Pneumatic Vacuum Kit Poly Tank	15	-	60 CFM @ 90 PSI	120 (3398)	120 (298)
WGX-215G-4	Wart Hog G2 Pneumatic Vacuum Kit Steel Tank	15	-	60 CFM @ 90 PSI	120 (3398)	120 (298)



CLAYTON WART HOG G2 CLEANUP ELECTRIC VACUUM

Features:

- Screw on H14 HEPA filter captures 99.995% of particles 0.3µm and larger
- Self-Closing Inlet
- Manual On/Off
- 30ft 15A Power Cord

Includes:

- HEPA Filter / Pre-filter
- Bag Filter 5 Pak

Electric Power Head Specs

- Consumption: 220-240VAC @ 7.5A
- CFM: 115
- H2O: 115
- Hp: 2



15 Gallon Steel Version

15 Gallon Poly Version

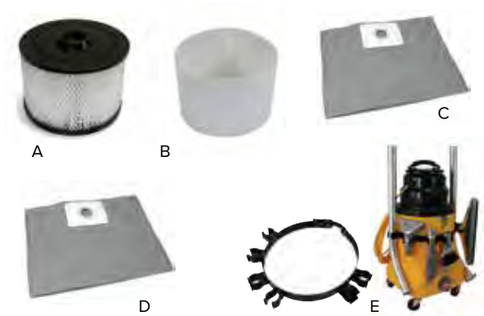


Part No.	Description	Capacity (gal)	Weight lbs (kg)	Consumption	CFM (lpm)	Vacuum H_2O (mbar)
WGX-115G-1	Wart Hog G2 Electric Vacuum Kit Poly Tank	15	-	220-240V	115 (2356)	115 (286)
WGX-215G-1	Wart Hog G2 Electric Vacuum Kit Steel Tank	15	-	220-240V	115 (2356)	115 (286)

CLAYTON WART HOG ACCESSORIES (STANDARD ELECTRIC OR PNEUMATIC)

Since the electric and pneumatic Hogs are based on the same design, they share accessories and consumables.

Part No.	Description	Ref
627-12H	HEPA filter	A
627-12P	PreFilter 3 pack	B
600-313A	Bag Filter 5 pack (WartHog 5 gal)	C
627-16B	Bag Filter 5 pack (WartHog 15 gal)	D
600-114DM	Black poly bag 25 pack	
630-A001	Cleanup Tools - Light Duty	
630-A002	Cleanup Tools - Heavy Duty	
630-A003	Cleanup Tools - Heavy Duty Wheeled	
630-A004-05	Tool Control Belt (WartHog 5 gal)	E
630-A004-15	Tool Control Belt (WartHog 15 gal)	
922-A08H30	Airline 1/2" x 30'	
671-VHX24-20	Vacuum Hose 1-1/2" x 20' (Static conductive)	



CLAYTON WART HOG G2 SANDING PNEUMATIC VACS

- Screw on H14 HEPA filter captures 99.995% of particles 0.3µm and larger
- Self-Closing Inlet
- Manual On/Off
- Auto On/Off for 2 Air Tools
- Auto System Time Delay Adjustment
- Auto System Time Delay Gauge
- Differential Pressure / Filter Change Gauge
- Safe-Filter-Change Port
- Grounding / Bonding Jack



15 Gallon Steel Version

Features:

- Tough impact-resistant poly tank withstands rough use and chemical/biological exposure
- Self closing vacuum port prevents hazardous dust from escaping when not in use
- Industrial pneumatic power head for both 5 and 15 gallon units
- Screw on HEPA filter captures 99.97% of particles 0.3µm and larger
- Pre-filter protects HEPA for longer life
- Hoses sold separately

Includes:

- HEPA filter
- Bag filter 5 pak

Pneumatic Power Head Specs

- Consumption: 60 CFM @ 90 PSI (50-70)*
- CFM: 105 (90 - 120)*
- H2O: 180 (150 - 200)*
- dBA: 70 - 75*

*Factory adjustable



15 Gallon Poly Version

Part No.	Description	Capacity (gal)	Weight lbs (kg)	Consumption	CFM (lpm)	Vacuum H_2O (mbar)
WTP-115T-4	Wart Hog G2 Pneumatic Vacuum Kit Poly Tank	15	-	60 CFM @ 90 PSI	105 (2973)	180 (447)
WTP-215T-4	Wart Hog G2 Pneumatic Vacuum Kit Steel Tank	15	-	60 CFM @ 90 PSI	120 (3398)	120 (298)

CLAYTON WART HOG G2 SANDING ELECTRIC VACUUM

Features:

- Screw on H14 HEPA filter captures 99.995% of particles 0.3µm and larger
- Self-Closing Inlet
- Manual On/Off
- Auto On/Off for 2 Air Tools
- 30ft 15A Power Cord
- Auto System Time Delay Adjustment
- Auto System Time Delay Gauge
- Differential Pressure / Filter Change Gauge
- Safe-Filter-Change Port
- Grounding / Bonding Jack



15 Gallon Steel Version



15 Gallon Poly Version

Part No.	Description	Capacity (gal)	Weight lbs (kg)	Consumption	CFM (lpm)	Vacuum H_2O (mbar)
WTP-115T-1	Wart Hog G2 Electric Vacuum Kit Poly Tank	15	-	220-240V	115 (3256)	115 (286)
WTP-215T-1	Wart Hog G2 Electric Vacuum Kit Steel Tank	15	-	220-240V	115 (3256)	115 (286)

CLAYTON TWIN TECH VACUUM MOUNTED WORKCENTER

- Portable work solution for vacuum sanding and repairs.
- Mounts directly to compatible Clayton vacuums
- Offers time saving features that increase productivity, but don't increase the footprint of the equipment.
- Designed around the needs of aerospace and automotive sanding applications, and its versatility can benefit any industry.
- Constructed with military grade components and stainless steel tubing to survive the toughest work environments.
- Double sided pegboard allows to transport and organize supplies and accessories to maintain the highest quality standards while getting the job done on time, every time.
- Work Surfaces: 12x19" and 10x19"
- Bins, Sander Holder, Paper Towel Holder, Work Surface
- Holds 40' of 1-1/2" Vacuum Hose





Part No.	Description
955-TB60-115	Mounted Vaccum Stand for 115 Poly Tank
955-TB60-215	Mounted Vacuum Stand for 215 Metal Tank

CLAYTON BARRACUDA SINGLE USER IMMERSION VAC / SEPARATOR

Designed specifically for the capture of live sparks, embers, and combustible dust, like aluminum and titanium, the Barracuda's powerful vacuum motor draws air and collected particulate into the immersion tank, and forces it through a roiling water bath, instantly quenching sparks, and thoroughly wetting dust out of the airstream. Three stages of additional filtration ensure that the air exhausted from the system is dust and moisture free.

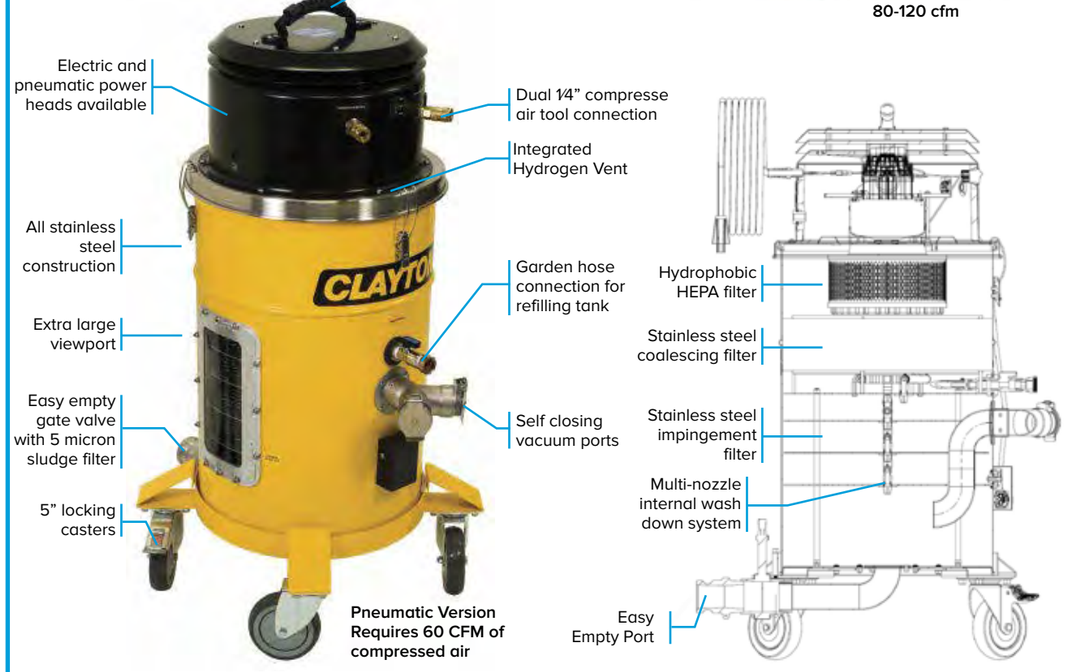
When it's time to empty the tank, simply pull the valve lever to dump the water and debris out through a filter sock and into any floor drain. Once the tank is empty, connect the system to a normal garden hose, and a series of spray heads inside the unit continue to flush the tank, ensuring that no sediment builds up on the internal components. The large window makes it simple to confirm the water level in the tank, and allows spectators to view the carnage as dust and debris gets consumed by the Barracuda.

Features:

- Single 2 User
- All stainless steel construction will never rust
- Multi nozzle internal wash down system keeps the unit clean
- Large window to monitor water level and vacuum activity
- 4 stage filtration system ensures dust containment
- Drain filter for easy collection and disposal of sludge
- Low level water shutoff
- Pneumatic tool sync auto on/off



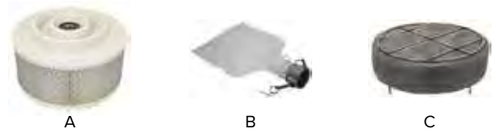
No Power Version
Requires an External Vacuum Source
80-120 cfm



Part No.	Description	Capacity gal (l)	Weight lbs (kg)	Consumption	CFM (lpm)	Vacuum H_2O (mbar)
CMP-315C-4	Barracuda Immersion Vac Pneumatic	4 (15)	-	60 CFM @ 90 PSI	105 (2973)	180 (447)
CMX-315C-X	Barracuda Immersion Vac No Power	4 (15)	-	-	-	-

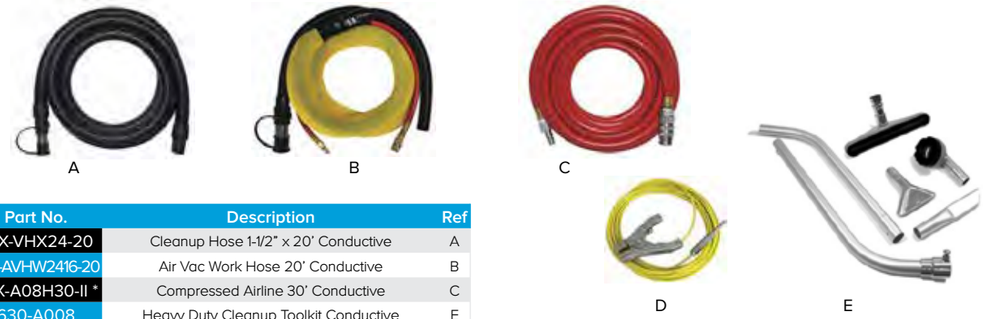
CLAYTON BARRACUDA CONSUMABLES

Part No.	Description	Ref
627-12C	HEPA Filter Coalescing Hydrophobic Barracuda	A
627-1218M10	Filter Sock Barracuda 12 x 18 x 1mu, 5 pk	B
627-16C	Coalescing Filter Stainless Steel	C



CLAYTON BARRACUDA EXP ACCESSORIES

Accessories for the Pneumatic Barracuda in a HazLoc environment.



Part No.	Description	Ref
67X-VHX24-20	Cleanup Hose 1-1/2" x 20' Conductive	A
67X-AVHW2416-20	Air Vac Work Hose 20' Conductive	B
92X-A08H30-II *	Compressed Airline 30' Conductive	C
630-A008	Heavy Duty Cleanup Toolkit Conductive	E
900-A001-30 **	Aircraft Grounding Cable	D

* NSN: 4720-01-663-1575 ** NSN: 6150-01-671-8172

CLAYTON BARRACUDA HEPA VAC ACCESSORIES

Part No.	Description	NSN
671-VHX24-10	Vacuum Cleanup Hose, 1.5in x 10ft	4130-01-460-6094
671-VHX24-15	Vacuum Cleanup Hose, 1.5in x 15ft	
671-VHX24-20	Vacuum Cleanup Hose, 1.5in x 20ft	4130-01-460-1448
671-VHX24-25	Vacuum Cleanup Hose, 1.5in x 25ft	
671-AVHW2416-10	Air Vac Combo Hose 1.5in x 1in x 10ft	4720-01-652-0544
671-AVHW2416-15	Air Vac Combo Hose 1.5in x 1in x 15ft	4130-01-460-6088
671-AVHW2416-20	Air Vac Combo Hose 1.5in x 1in x 20ft	4130-01-460-1438
671-AVHW2416-25	Air Vac Combo Hose 1.5in x 1in x 25ft	
630-A001	Clean Up Toolkit 5 Piece Light Duty	
630-A002	Clean Up Toolkit 5 Piece Heavy Duty	
922-A08H30	Compressed Air Hose 30ft x 1/2in Steel Fittings	4130-01-460-1337





CLAYTON CLEAN UP TOOLS LIGHT DUTY



Part No.	Fig	Description
642-24D56101		Wand – Aluminum 2 Piece 1.5in x 56in
642-24F14001		Floor Tool – Poly 1.5in x 14in Nylon Bristles
642-24V11001		Crevice Tool – Poly 1.5in x 11in
642-24G05001		Gulper Tool – Poly 1.5in x 5in
642-24R03001		Dust Brush – Poly 1.5in x 3in Nylon
642-24F14001-1		Bristles for 14in Floor Tool
642-24R03001-1		Bristles for 3in Dust Brush
642-20T11001	A	Turbine Brush 11IN Cuff Style

3⁄8” COMPRESSED AIR LINE

- Hose terminates in 1⁄4” female threaded brass fittings
- Includes 1⁄4” high flow coupler and plug
- 300 psi max pressure



Part No.	Description	Length
922-A06H10	3⁄8” Compressed Air Line	10
922-A06H20	3⁄8” Compressed Air Line	20
922-A06H30	3⁄8” Compressed Air Line	30
922-A06H40	3⁄8” Compressed Air Line	40
922-A06H50	3⁄8” Compressed Air Line	50

1⁄2” COMPRESSED AIR LINE

- Hose terminates in 1⁄2” female threaded brass fittings
- Includes 1⁄2” safety coupler and plug
- Safety coupler relieves line pressure before disconnecting
- 300 psi max pressure



Part No.	Description	Length
922-A08H10	1⁄2” Compressed Air Line	10
922-A08H20	1⁄2” Compressed Air Line	20
922-A08H30	1⁄2” Compressed Air Line	30
922-A08H40	1⁄2” Compressed Air Line	40
922-A08H50	1⁄2” Compressed Air Line	50

3⁄4” COMPRESSED AIR LINE

- Hose terminates in 3⁄4” female threaded brass fittings
- Includes 3⁄4” safety coupler and plug
- Safety coupler relieves line pressure before disconnecting
- 200 psi max pressure



Part No.	Description	Length
922-A12H10	3⁄4” Compressed Air Line	10
922-A12H20	3⁄4” Compressed Air Line	20
922-A12H30	3⁄4” Compressed Air Line	30
922-A12H40	3⁄4” Compressed Air Line	40
922-A12H50	3⁄4” Compressed Air Line	50

CLAYTON CLEANUP TOOL FOD WAND



Part No.	Description
500-415-1	FOD WAND - 1/2 LOCKLINE X 1IN SWIVEL

CLAYTON CLEAN UP TOOLS HEAVY DUTY



Part No.	Fig	Description
642-24D56101		Wand – Aluminum 2 Piece 1.5in x 56in
642-24F14101		Floor Tool – Aluminium 1.5in x 14in Nylon Bristles
642-24V11101		Crevice Tool – Aluminium 1.5in x 11in
642-24G06101		Gulper Tool – Aluminium 1.5in x 6in
642-24R05101		Dust Brush – Aluminium 1.5in x 5in Nylon
642-24F14101-1		Bristles for 14in Floor Tool
642-24R05101-1		Bristles for 5in Dust Brush
642-24F18101	A	Floor Tool – Aluminium 1.5in x 18in Wheeled

CLAYTON WORK HOSES – 1-1/2” COMBINATION AIR / VACUUM

Primarily used between a vacuum and tool such as a Clayton sander with 1” exhaust, the work hose supplies compressed air to tools and carries debris away in a single hose assembly.

- Provides virtually unrestricted air flow
- Hose reduces to 1” two feet before sander for maximum flexibility
- 1-1/2” metal sleeve connects to vacuum system, bare 1” hose connects to tool
- Carbon Black conductive hose and cuffs eliminate static buildup
- Resistivity < 106 ohms/sq
- 3/8” compressed air line and 1⁄4” high flow plug & coupler supply air to tool
- For tools with a 3/4” swivel request our 3⁄4” hose adapter



Part No.	Vac Hose	Air Line	Length
67X-AVHW2416-10	1-1/2 in	3/8 in	10'
67X-AVHW2416-20	1-1/2 in	3/8 in	20'
67X-AVHW2416-30	1-1/2 in	3/8 in	30'
67X-AVHW2416-40	1-1/2 in	3/8 in	40'
67X-AVHW2416-50	1-1/2 in	3/8 in	50'
67X-AVHW2416-75	1-1/2 in	3/8 in	75'

STRAIGHT BRAIDED ANTISTATIC HOSE

- Dissipates electro-static discharge
- Extreme flexibility
- Made of braided EPDM Rubber
- Max Working Pressure: 12 bar (174 PSI)
- Burst Pressure: 48 bar (696 PSI)

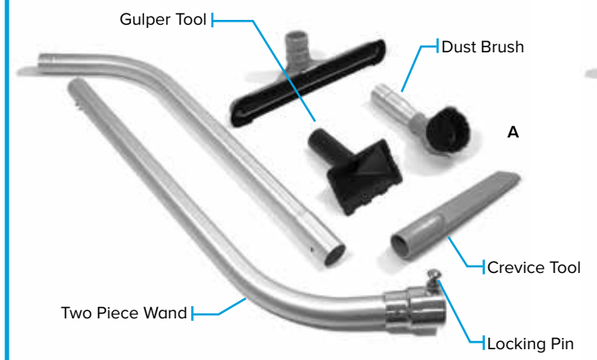


Part No.	ID x OD	Length
19 900 9920	8 x 15 mm	40 m
19 900 9918	10 x 17,5 mm	40 m
19 900 9921	12 x 19,5 mm	40 m

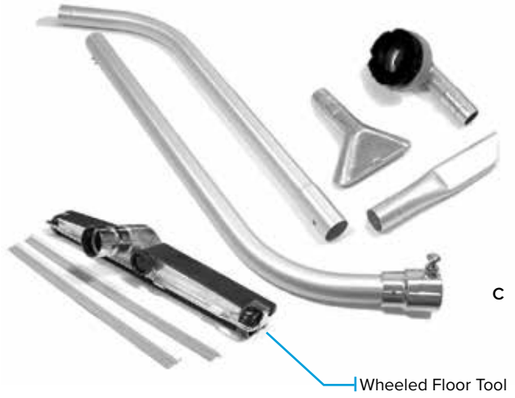
CLAYTON CLEANUP TOOL KITS

We provide a variety of attachments for general cleanup, sold as kits or individually. Each kit includes an aluminum two piece wand with pin lock for tool attachment. Heavy duty tools are all metal while some light duty tools are ABS or poly.

These tools are specifically designed with no loose parts that can inadvertently come off and become FOD.







For other Hoses and Accessories please contact us.

Part No.	Description	Ref
630-A001	Clean Up Toolkit - 5 Piece Light Duty	A
630-A002	Clean Up Toolkit - 5 Piece Heavy Duty	B
630-A003	Cleanup Toolkit - 5 Piece Heavy Duty Wheeled	C

EXTENSION HOSES – 1-1/2” COMBINATION AIR / VACUUM

Work hose isn’t long enough? Increase your reach with an extension hose. Made to fit between your vacuum and a work hose.

- Provides virtually unrestricted air flow
- 1-1/2” metal sleeve connects to vacuum, 1-1/2” cuff connects to work hose
- Carbon Black conductive hose and cuffs eliminate static buildup
- Resistivity < 106 ohms/sq
- 1/2” compressed air line and 1/4” high flow plug & coupler supply air to tool



Part No.	Vac Hose	Air Line	Length
671-AVHX24-10	1-1/2 in	1/2 in	10'
671-AVHX24-15	1-1/2 in	1/2 in	15'
671-AVHX24-20	1-1/2 in	1/2 in	20'
671-AVHX24-30	1-1/2 in	1/2 in	30'
671-AVHX24-40	1-1/2 in	1/2 in	40'
671-AVHX24-50	1-1/2 in	1/2 in	50'

CLEANUP HOSES – 1-1/2” VACUUM ONLY

- Provides virtually unrestricted air flow
- 1-1/2” metal sleeve connects to vacuum system
- 1-1/2” female cuff receives cleanup wand and tools
- Carbon Black conductive hose and cuffs eliminate static buildup
- Resistivity < 106 ohms/sq



Part No.	Vac Hose	Air Line	Length
67X-VHX24-10	1-1/2 in	-	10'
67X-VHX24-15	1-1/2 in	-	15'
67X-VHX24-20	1-1/2 in	-	20'
67X-VHX24-30	1-1/2 in	-	30'
67X-VHX24-40	1-1/2 in	-	40'
67X-VHX24-50	1-1/2 in	-	50'

Pneumatic Fittings

ADAPTER TO MALE THREAD

Interchangeable with Nitto fittings



Part No.	Size
NC20PM	1/4" BSP
NC30PM	3/8" BSP
NC40PM	1/2" BSP

ADAPTER TO FEMALE THREAD

Interchangeable with Nitto fittings



Part No.	Size
NC20PF	1/4" BSP
NC30PF	3/8" BSP
NC40PF	1/2" BSP

COUPLER TO MALE THREAD

Interchangeable with Nitto fittings



Part No.	Size
NC20SM	1/4" BSP
NC30SM	3/8" BSP
NC40SM	1/2" BSP

COUPLER TO FEMALE THREAD

Interchangeable with Nitto fittings



Part No.	Size
NC20SF	1/4" BSP
NC30SF	3/8" BSP
NC40SF	1/2" BSP

COUPLER TO HOSE TAIL

Interchangeable with Nitto fittings



Part No.	Size
NC20SH	5/16" Barb
NC30SH	3/8" Barb
NC40SH	1/2" Barb

COUPLER TO HOSE BARB

Interchangeable with Nitto fittings



Part No.	Size
NC20PH	5/16" Barb
NC30PH	3/8" Barb
NC40PH	1/2" Barb

ADAPTER TO MALE THREAD

Interchangeable with Nitto fittings



Part No.	Size
R2202	1/4" BSP
R2251	3/8" BSP

ADAPTER TO FEMALE THREAD

Interchangeable with Nitto fittings



Part No.	Size
R2203	1/4" BSP
R2266	3/8" BSP

COUPLER TO MALE THREAD

Interchangeable with Nitto fittings



Part No.	Size
R2201	1/4" BSP Male
R2244	3/8" BSP Male

COUPLER TO FEMALE THREAD

Interchangeable with Nitto fittings



Part No.	Size
R2200	1/4" BSP Female
R2243	3/8" BSP Female

COUPLER TO FEMALE THREAD

Interchangeable with Nitto fittings



Part No.	Size
R2245	1/4" Barb
R2240	5/16" Barb
R2241	3/8" Barb
R2242	1/2" Barb

COUPLER TO HOSE BARB

Interchangeable with Nitto fittings



Part No.	Size
R2205	1/4" Barb
R2206	5/16" Barb
R2206A	3/8" Barb
R2254	1/2" Barb

SAFETY COUPLERS

Fittings 12" and higher are designed with safety first. These large couplers are designed to depressurize the compressed air line before disconnecting. This eliminates the dangers associated with the quick release of high pressure lines.

II = Industrial Interchange HF = High Flow



Part No.	Description	Plug Side	Thread Size	Type
940-12CM16	Safety Coupler	3/4"	1" MNPT	II
940-12CM-PS	Safety Coupler	3/4"	3/4" MNPT	II
940-12CF-PS	Safety Coupler	3/4"	3/4" FNPT	II
940-08CM-PS	Safety Coupler	1/2"	1/2" MNPT	II
940-08CF-PS	Safety Coupler	1/2"	1/2" FNPT	II
940-011F	Safety Coupler	1/4"	1/4" FNPT	II & HF
940-011	Safety Coupler	1/4"	1/4" MNPT	II & HF
940-009	Safety Coupler	1/4"	3/8" Barb	II & HF

BRASS/STEEL NIPPLES

Brass and steel nipples are designed with a central hex to facilitate installation.



Part No.	Description	Material	A	B
915-8HN	Brass/Steel Nipple	Brass	1/2" NPT	1/2" NPT
915-12HN	Brass/Steel Nipple	Steel	3/4" NPT	3/4" NPT
915-16HN	Brass/Steel Nipple	Steel	1" NPT	1" NPT

REDUCING BUSHINGS

Adapt easily from one size pipe thread to another with these durable NPT bushings.



Part No.	Description	Material	A	B
918-06B04	Reducing Bushing	Brass	1/4" NPT	3/8" NPT
918-08B04	Reducing Bushing	Brass	1/4" NPT	1/2" NPT
918-08B06	Reducing Bushing	Brass	3/8" NPT	1/2" NPT
918-12B04	Reducing Bushing	Brass	1/4" NPT	3/4" NPT
918-12B06	Reducing Bushing	Brass	3/8" NPT	3/4" NPT
915-12B08	Reducing Bushing	Steel	1/2" NPT	3/4" NPT
915-16B08	Reducing Bushing	Steel	1/2" NPT	1" NPT
915-16B12	Reducing Bushing	Steel	3/4" NPT	1" NPT

TEES AND REDUCING TEES

To easily split a compressed air line.



Part No.	Description	A	B	C
918-04T	Tee	1/4" NPT	1/4" NPT	1/4" NPT
917-08T	Tee	1/2" NPT	1/2" NPT	1/2" NPT
917-12T	Tee	3/4" NPT	3/4" NPT	3/4" NPT
915-16T	Tee	1" NPT	1" NPT	1" NPT
918-16RT1212	Reducing Tee	3/4" NPT	1" NPT	

BALL VALVES

Nickel plated ball valves incorporate a zero-resistance full bore design to maximize air flow. Oversize handles provide the leverage needed to shut down larger valves.



Part No.	Description	In	Out	Type
924-1002	Ball Valve	1" FNPT	1" FNPT	II
924-0752	Ball Valve	3/4" FNPT	3/4" FNPT	II

SWIVEL ADAPTER

Interchangeable with Ryco fittings



Part No.	Description
R2202TP	BSP Swivel Adapter

BLOW GUN – PLASTIC WITH 4 IN NOZZLE

- Positive action trigger.
- Strong blow, low consumption, energy saving.
- Fit for the cleaning of any kinds of machines and equipment
- Steel or Aluminum nozzle



Part No.	Description
H71-514	Blow Gun Plastic Pistol

BLOW GUN – METAL, STRAIGHT

- Includes interchangeable rubber tip nozzle and metal "safety" nozzle.
- Body is constructed of cast zinc and chrome plated for durability.
- 4 in long.



Part No.	Description
BG0620	Blow Gun Metal Straight

RETRACTA HOSE REELS COMPLETE 3/4" COMPRESSED AIR LINE

Supplied with reinforced PVC hose in red casing. Spring rewind with operating pressure up to 1700 kPa (250 psi). Reel has a 3/8" BSP (F) reel inlet.
Complete with carry handle and mounting bracket.



Part No.	Hose Size	Hose Outlet
AR2101	20M x 10mm ID.	1/4" BSP (M)
AR2121	15M x 12.5mm ID.	3/8" BSP (M)

MANIFOLDS – ANODISED ALUMINIUM

Select and add fittings to your requirements



Part No.	Size
10MAN04X3	1/4" Inlet x 1/4" Outlet - 3 Port
10MAN04X4	1/4" Inlet x 1/4" Outlet - 4 Port
10MAN04X5	1/4" Inlet x 1/4" Outlet - 5 Port

FLOW REGULATOR



Part No.	Description
FR300	1/4" BSP Flow Regulator

BSP SWIVEL



Part No.	Description
10S322	BSP to BSP Swivel

BLOW GUN – METAL, PISTOL



Part No.	Description
BG0600	Blow Gun Metal Pistol

POLYURETHANE SPIRAL HOSES

- Working pressure 120PSI / 840 KPA
- Polyurethane coil hoses fitted with 1/4 BSP ends



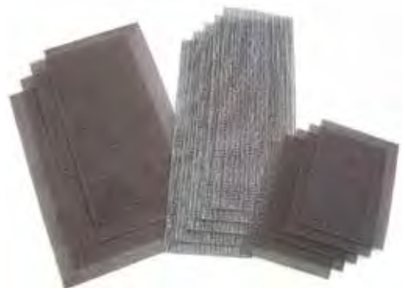
Part No.	Hose OD	Hose ID	Working Length
1308X5-2F4	8 mm	5 mm	2 M
1308X5-4F4	8 mm	5 mm	4 M
1308X5-8F4	8 mm	5 mm	8 M
1310X6-2F4	10 mm	6.5 mm	2 M
1310X6-4F4	10 mm	6.5 mm	4 M
1310X6-6F4	10 mm	6.5 mm	6 M
1310X6-8F4	10 mm	6.5 mm	8 M
1310X6-12F4	10 mm	6.5 mm	12 M
1312X8-4F4	12 mm	8 mm	4 M
1312X8-5F4	12 mm	8 mm	5 M
1213X8-8F4	12 mm	8 mm	8 M

Abrasives

ABRANET SCREEN ABRASIVE

The multifunctional and classic Abranet is especially developed for sanding putty, primers, lacquers, composite materials and a wide range of other materials for industrial use. Abranet combines high performance and a longer lifespan than traditional abrasives, making it a cost-effective solution. Designed for dry sanding by machine or by hand, its true dust-free sanding characteristics result in a cleaner work environment, as well as a better surface finish.





Part No.	Grit	Size	Pieces
5420305080	80		50
5420305010	100		50
5420305012	120		50
5420305015	150		50
5420305018	180		50
5420305025	240		50
5420305032	320	3 in / 77 mm	50
5420305037	360		50
5420305041	400		50
5420305051	500		50
5420305061	600		50
5420305081	800		50
5420305092	1000		50
5424105080	80		50
5424105010	100		50
5424105012	120		50
5424105015	150		50
5424105018	180		50
5424105022	240		50
5424105025	320	5 in / 125 mm	50
5424105032	360		50
5424105041	400		50
5424105051	500		50
5424105061	600		50
5424105081	800		50
5424105092	1000		50
5424105080	80		50
5424105010	100		50
5424105012	120		50
5424105015	150		50
5424105018	180		50
5424105022	220		50
5424105025	240	6 in / 150 mm	50
5424105032	320		50
5424105041	400		50
5424105051	500		50
5424105061	600		50
5424105081	800		50
5424105092	1000		

Part No.	Grit	Size	Pieces
5412905080	80		250
5412905012	120		250
5412905015	180		250
5412905018	240	3x4"	250
5412905025	320		250
5412905032	80		250
5412905041	120		250
5414905080	180		250
5414905012	240		250
5414905018	320		250
5414905025	80	2-3/4" x 5"	250
5414905041	120		250
5414905051	180		250
5414905061	240		250
5415005080	320		250
5415005012	400		250
5415005018	80		250
5415005025	120	2-3/4" x 8"	250
5415005032	180		250
5415005041	240		250
5415005051	320		250
5415005061	400		250

DUSTMASTER SUPREME COARSE SCREEN ABRASIVE

Aluminum Oxide, Zinc Stearated, Hook & Loop Mesh Abrasive

DM Coarse uses a nylon mesh backing material to create a more flexible, durable and consistent abrasive surface. As a result, Coarse produces a more consistent surface finish quicker, and because it also has excellent resistance to edge wear and clogging, it lasts longer too.



Part No.	Grit	Size	Pieces
830-HP040HV	40	3"	50
830-HP060HV	60		50
830-HP080HV	80		50
830-HP120HV	120		50
830-HP180HV	180		50
830-HP240HV	240		50
830-HP320HV	320		50
850-HP040HV	40	5"	50
850-HP060HV	60		50
850-HP080HV	80		50
850-HP120HV	120		50
850-HP180HV	180		50
850-HP240HV	240		50
850-HP320HV	320		50
860-HP040HV	40	6"	50
860-HP060HV	60		50
860-HP080HV	80		50
860-HP120HV	120		50
860-HP180HV	180		50
860-HP240HV	240		50
860-HP320HV	320		50

Part No.	Grit	Size	Pieces
880-HP080HV	80	8"	50
880-HP120HV	120		50
880-HP180HV	180		50
880-HP240HV	240		50
880-HP320HV	320		50
8160-HP080HV	80	16"	50
8160-HP120HV	120		50
8160-HP180HV	180		50
8160-HP240HV	240		50
8160-HP320HV	320		50
834-HP040HV	40	3x4	50
834-HP060HV	60		50
834-HP080HV	80		50
834-HP120HV	120		50
834-HP180HV	180		50
834-HP240HV	240		50
834-HP320HV	320		50
837-HP040HV	40	3 2/3 x 7	50
837-HP060HV	60		50
837-HP080HV	80		50
837-HP120HV	120		50
837-HP180HV	180		50
837-HP240HV	240		50
837-HP320HV	320		50

DUSTMASTER SUPREME COARSE SCREEN ABRASIVE

Aluminum Oxide, Zinc Stearated, Hook & Loop Mesh Abrasive

DM Coarse uses a nylon mesh backing material to create a more flexible, durable and consistent abrasive surface. As a result, Coarse produces a more consistent surface finish quicker, and because it also has excellent resistance to edge wear and clogging, it lasts longer too.



Part No.	Grit	Size	Pieces
850-DMC040HV	40	5"	50
850-DMC060HV	60		50
850-DMC080HV	80		50
850-DMC120HV	120		50

Part No.	Grit	Size	Pieces
860-DMC040HV	40	6"	50
860-DMC060HV	60		50
860-DMC080HV	80		50
860-DMC120HV	120		50

FILE SANDING BELTS – METAL OXIDE

- Other sizes and grit range manufactured on request.
- Also available in Aluminium Oxide and Zirconia material
- Aluminium Oxide for general purpose grinding
- Zirconia for aggressive grinding with high stock removal



Part No.	Size	Grit
7133040	10 x 330 mm	10
7133060	10 x 330 mm	20
7133080	10 x 330 mm	30
7133100	10 x 330 mm	40
7133120	10 x 330 mm	50

CRATEX Rubber Abrasive Points

For smoothing and polishing hard to reach surfaces: grooves, ball corners, holes, clasps, spirals, flutes and edges.

Widely used for polishing molds, dies, patterns and light castings; for cleaning contact points, solder spots and for relieving stress, micro-deburring, and damaskeening. Max safe speed 25,000 RPM.

Best results are usually obtained at 30% to 80% of Maximum safe speed. Use light work pressure.



CRATEX RUBBER ABRASIVE POINTS BULLET

Box of 100



Part No.	Description	Length	Dia (in)	Arbor
CR8	Bullet	1"	9/32	1/16
CR10	Bullet	5/8"	3/8	1/16
CR11	Bullet	1"	3/8	1/8
CR15	Bullet	7/8"	1/2	1/8

CRATEX SMALL WHEELS – TAPERED

Exceptionally versatile for fine work on small or delicate parts. Ideal for polishing, cleaning out and finishing decorative and intricate designs.



Part No.	Thickness (in)	Dia (in)	Arbor
CR1	3/32	3/8	1/16
CR2	3/32	5/8	1/16
CR5	1/8	1	1/8

CRATEX BLOCKS AND STICKS

Excellent hand tools for cleaning and polishing metal surfaces, for breaking edges, smoothing high spots, removing rust, heat marks, tarnish and stains. Can be mounted in tool holding fixtures, chucks or cradles.



Part No.	Description	Length (in)	Cross Section
CR6202	Square	6	1/4 x 1/4
CR6404	Square	6	1/2 x 1/2
CR6606	Square	6	3/4 x 3/4
CR6808	Square	6	1 x 1
CR3802	Oblong	3	1 x 1/4
CR4163	Oblong	4	2 x 3/8
CR6801	Oblong	6	1 x 1/8
CR6802	Oblong	6	1 x 1/4
CR6803	Oblong	6	1 x 3/8
CR6162	Oblong	6	2 x 1/4
CR6168	Oblong	6	2 x 1
CR8804	Oblong	8	1 x 1/2
CR036	Round	6	3/16
CR046	Round	6	1/4
CR056	Round	6	5/16
CR066	Round	6	3/8
CR086	Round	6	1/2
CR0106	Round	6	5/8
CR0126	Round	6	3/4
CR0146	Round	6	7/8
CR0166	Round	6	1

CRATEX RUBBER ABRASIVE POINTS CYLINDER

Box of 100



Part No.	Description	Length	Dia (in)	Arbor
CR4	Cylinder	1/2"	1/4	1/16
CR6	Cylinder	7/8"	1/4	1/16

CRATEX RUBBER ABRASIVE POINTS TAPERED

Box of 100



Part No.	Description	Length	Dia (in)	Arbor
CR12	Tapered	7/8"	3/8 to 5/16	1/8
CR14	Tapered	7/8"	5/8 to 1/8	1/8

CRATEX SMALL WHEELS – STRAIGHT

Can be used for countless operations requiring absolute control of metal removal such as micro-deburring, relieving stress concentration areas and polishing fatigue lines, scratches and other surface defects.



Part No.	Thickness (in)	Dia (in)	Arbor
CR53	3/32	5/8	1/16
CR54	1/8	5/8	1/16
CR59	1/4	5/8	1/16
CR74	1/8	7/8	1/16
CR76	3/16	7/8	1/16
CR79	1/4	7/8	1/16
CR74-2	1/8	7/8	1/8
CR76-2	3/16	7/8	1/8
CR79-2	1/4	7/8	1/8
CR83	3/32	1	1/16
CR80	1/8	1	1/16
CR86	3/16	1	1/16
CR88	1/4	1	1/16
CR83-2	3/32	1	1/8
CR80-2	1/8	1	1/8
CR86-2	3/16	1	1/8
CR88-2	1/4	1	1/8

Add Grit to Part Number:

Extra Fine – XF
Fine – F
Medium – M
Coarse – C

Wide range of shapes and sizes available , please enquire

22 PIECE RUBBER ABRASIVE KIT COMBINATION

Contents:

- 4 Tapered Cones No. 1345 - 1-1/4" length, tapered 7/8" to 1/4"
- 4 Cylinder Cones No. 1350 - 1" length x 7/8 dia.
- 4 Oblong Blocks No 6803 - 6" x 1" x 3/8"
- 4 Round Sticks No. 086 - 6" x 1/2" dia.
- 4 Straight Wheels No. 204 - 2" dia. x 1/4" thick x 1/4" hole
- 1 Cone Mandrel No. 1341 - 1/4" Shank
- 1 Wheel Mandrel No. 1342 - 1/4" Shank
- Equally assorted in the four Cratex Grit Textures C, M, F, XF



Part No.	Description
CR226	22 Piece Rubber Abrasive Point Kit Combination

20 PIECE RUBBER ABRASIVE CONE KIT – TEST

Contents:

- 2 Tapered Cones No. 1340 - 1" length, tapered 5/8" to 1/4"
- 2 Tapered Cones No. 1345 - 1-1/4" length, tapered 7/8" to 1/4"
- 2 Tapered Cones No. 1349 - 1-1/4" length, tapered 1" to 1/4"
- 2 Tapered Cones No. 1848 - 2" length tapered 1" to 1/2"
- 2 Cylinder Cones No. 1350 - 1" length x 7/8" dia.
- 2 Cylinder Cones No. 1351 - 1-1/2" length x 1" dia.
- 2 Pointed Cones No. 1357 - 1-1/4" length x 7/8" dia.
- 2 Pointed Cones No. 1358 - 1-3/4" length x 1" dia.
- 2 Bullet Cones No. 4707 - 1-3/4" length x 7/8" dia.
- 2 Cone Mandrels No. 1341 - 1/4" Shank
- Equally divided between [C] Coarse and [F] Fine Grit Textures



Part No.	Description
CR227	20 Piece Rubber Abrasive Cone Kit Test

44 PIECE RUBBER ABRASIVE KIT – POINT AND MANDREL

- Packed in a four compartment plastic box for easy selection

Contents:

- 8 Bullet Points No. 8 - 1" length x 9/32" dia.
- 8 Bullet Points No. 10 - 5/8" length x 3/8" dia.
- 8 Bullet Points No. 11 - 1" length x 3/8" dia.
- 8 Tapered Points No. 14 - 7/8" length to 1/8" dia.
- 8 Bullet Points No. 15 - 7/8" length x 1/2" dia.
- 2 Point Mandrels No. 4 - 1/8" shank
- 2 Point Mandrels No. 6 - 1/8" shank
- Equally assorted in four Cratex Grit Textures - C, M, F, XF



Part No.	Description
CR767	44 Piece Rubber Abrasive Kit Point and Mandrel

22 PIECE RUBBER ABRASIVE KIT – POINT MINI

- Max safe speed 25,000 RPM

Contents:

- 5x Q8 M (medium No. 8 bullet point 1 x 9/32 x 1/16 in)
- 5x Q8 C (coarse No. 8 bullet point 1 x 9/32 x 1/16 in)
- 5x Q11 M (medium No. 11 bullet point 1 x 3/8 x 1/8 in)
- 5x Q10 M (medium No. 10 bullet point 5/8 x 3/8 x 1/16 in)
- 1x Q4 Mandrel (point mandrel 1/8" shank 1/16" arbor)
- 1x Q6 Mandrel (point mandrel 1/8" shank 1/18" arbor)



Part No.	Description
CR167	22 Piece Rubber Abrasive Point Kit Mini

16 PIECE RUBBER ABRASIVE KIT – BLOCK/STICK

Contents:

- 4 Oblong Blocks No. 6803 - 6" x 1" x 3/8"
- 4 Square Blocks No. 6404 - 6" x 1/2" x 1/2"
- 4 Round Sticks No. 066 - 6" x 3/8" dia.
- 4 Round Sticks No. 086 - 6" x 1/2" dia.
- Equally assorted in the four Cratex Grit Textures C, M, F, XF



Part No.	Description
CR228	16 Piece Rubber Abrasive Kit Block/Stick

46 PIECE RUBBER ABRASIVE KIT – WHEEL AND MANDREL

- Packed in a four compartment plastic box for easy selection

Contents:

- 8 Straight Wheels No. 86 - 1" dia. x 3/16" thick
- 8 Straight Wheels No. 80 - 1" dia. x 1/8" thick
- 8 Straight Wheels No. 74 - 7/8" dia. x 1/8" thick
- 8 Straight Wheels No. 54 - 5/8" dia. x 1/8" thick
- 4 Tapered Edge Wheels No. 5 - 1" dia. x 1/8" thick
- 2 Wheel Mandrels No. 3 - 1/8" shank



Part No.	Description
CR707	46 Piece Rubber Abrasive Kit Wheel

84 PIECE RUBBER ABRASIVE INTRODUCTORY KIT

- Packed in a four compartment plastic box for easy selection

Contents:

- 8 Tapered Edge Wheels No. 2 - 5/8" dia.
- 16 Straight Wheels No. 74 - 7/8" dia. x 1/8" thick
- 8 Straight Wheels No. 86 - 1" dia. x 3/16" thick
- 16 Cylinder Points No. 6 - 7/8" length x 1/4" dia.
- 16 Bullet Points No. 8 - 1" length x 9/32" dia.
- 8 Bullet Points No. 10 - 5/8" length x 3/8" dia.
- 2 Wheel Mandrels No. 3 - 1/8" shank
- 2 Point Mandrels No. 4 - 1/8" shank



Part No.	Description
CR777	84 Piece Rubber Abrasive introductory Kit

68 PIECE RUBBER ABRASIVE KIT – POINT

- Packed in a four compartment plastic box for easy selection

Contents:

- 8 Cylinder Points No. 4 j- 1/2" length x 1/4" dia.
- 8 Cylinder Points No. 6 - 7/8" length x 1/4" dia.
- 8 Bullet Points No. 8 - 1" length x 9/32" dia.
- 8 Bullet Points No. 10 - 5/8" length x 3/8" dia
- 8 Bullet Points No. 11 - 1" length x 3/8" dia.
- 8 Tapered Points No. 12 - 7/8" length x 3/8" to 5/16" dia.
- 8 Tapered Points No. 14 - 7/8" length x 5/8" to 1/8" dia.
- 8 Bullet Points No. 15 - 7/8" length x 1/2" dia.
- 2 Point Mandrels No. 4 - 1/8" shank
- 2 Point Mandrels No. 6 - 1/8" shank
- Equally assorted in four Cratex Grit Textures - C, M, F, XF



Part No.	Description
CR778	68 Piece Rubber Abrasive Kit Point

CRATEX SMALL WHEEL MANDRELS

- Maximum Safe Speed 25,000 Revolutions Per Minute with 1/2" overhang or less (exposed mandrel length). For each additional 1/4" of overhang the Maximum Safe Speed is decreased by at least 20%.
- Pack of 10



Part No.	Shank	For Hole	For Part
CR2	3/32"	1/16"	for Small Wheels
CR3	1/8"	1/16"	for Small Wheels
CR5	1/8"	1/8"	for Small Wheels
CR8	1/4"	1/8"	for Small Wheels

CRATEX POINT MANDRELS

- Mandrels No. 1 and No. 4 have a No. 3-48 thread and a hex nut flange
- Mandrel No. 6 has a No. 5-40 thread and a hex nut flange.
- Mandrel No. 9 has a No. 5 screw thread, and a fixed shoulder flange.
- Maximum Safe Speed 25,000 Revolutions Per Minute with 1/2" overhang or less (exposed mandrel length). For each additional 1/4" of overhang the Maximum Safe Speed is decreased by at least 20%.
- Pack of 10



Part No.	Shank	For Hole	For Part
CR1	3/32"	1/16"	for Points 4 / 6 / 8 / 10
CR4	1/8"	1/16"	for Points 4 / 6 / 8 / 10
CR6	1/8"	1/8"	for Points 11 / 12 / 14 / 15
CR9	1/4"	1/8"	for Points 11 / 12 / 14 / 15

49 PIECE RUBBER ABRASIVE KIT – SANDING

- Packed in a four compartment plastic box for easy selection

Contents:

- 21 Straight Wheels No. 74 - 7/8" dia. x 1/8" thick
- 12 Wheels No. 53 - 5/8" dia. x 3/32" thick
- 9 Tapered Edge Wheels No. 2 - 5/8" dia.
- 3 Bullet Points No. 8 - 1" length x 9/32" dia.
- 3 Wheel Mandrels No. 3 - 1/8" shank
- 1 Point Mandrel No. 4 - 1/8" shank



Part No.	Description
CR779	49 Piece Rubber Abrasive Kit Sanding

CRATEX CONE MANDREL

- Designed to fit Cratex Cone Mandrel No. 1341, 1/4" Shank. Best results are usually obtained at 30% to 80% of Maximum Safe Speed. Use a light work pressure.
- Maximum Safe Speed 25,000 Revolutions Per Minute with 1/2" overhang or less (exposed mandrel length). For each additional 1/4" of overhang the Maximum Safe Speed is decreased by at least 20%.
- Pack of 10



Part No.	Shank	For Hole	For Part
CR1341	1/4"	1/4"	for Cones

CRATEX CONE MANDREL

- Cratex Wheel Mandrel No. 1342 has a 1/4" Shank and is designed for 1/4" centre hole wheels up to 3" diameter by 1/2" thick or less.
- Maximum Safe Speeds based on 1/2" overhang and 5,500 Surface Feet Per minute are: 1-1/2" diameter 15,000; 2" diameter: 10,500; 2-1/2" diameter: 8,300; 3" diameter: 7,000
- The Maximum Safe Speeds listed above are for 1/2" overhang or less (exposed mandrel length). For each additional 1/4" of overhang the Maximum Safe Speed is decreased by at least 20%.
- Pack of 10



Part No.	Shank	For Hole	For Part
CR1342	1/4"	1/4"	for Small Wheels

MINI SURFACE CONDITIONING COMBI-DISC® INTERNAL THREAD

- Surface conditioning in smaller confined areas
- Ideal for cleaning of aircraft seat mounting rail/tracks



Part No.	Recommended RPM	Grit	OD mm	Pieces	Arbor Ref
265871	14 000 - 19 000	V. Fine	20 mm	50	SBH20M
268865	11 000 - 15 000	Coarse	25 mm	50	SBH25M
266564	11 000 - 15 000	Medium	25 mm	50	SBH25M
266571	11 000 - 15 000	V. Fine	25 mm	50	SBH25M

ABRASIVE COMBI DISC® – INTERNAL THREAD



Part No.	Description	Grit	Rec. RPM	Pieces	Arbor Ref
355718	CD 25 A	60	15 000 - 26 000	100	SBH25M
355725	CD 25 A	80	15 000 - 26 000	100	SBH25M
355732	CD 25 A	120	15 000 - 26 000	100	SBH25M

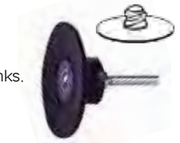
PFERD ARBORS



Part No.	Description	Suits
265871	Arbor with 6 mm Shank	20 mm Discs
266571	Arbor with 6 mm Shank	25 mm Discs

PFERD BACKING PADS

- Rubber disc holders with 1/4" steel shanks.
- Accepts TR fitment abrasives



Part No.	Size metric	Size imperial
RN2	50 mm	2"
RN3	75 mm	3"

QUICK-CHANGE BACKING PADS

- For use with 3M and Scotch-Brite Roloc discs (Surface Conditioning Combi Discs).
- Medium hardness backup pad supplied with spindle.

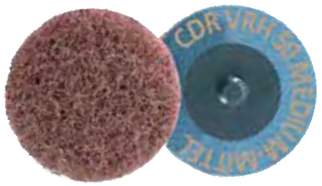


Fig A Fig B Fig C

Part No.	Fig	Size mm	Size Inch
H79-811	A	25 mm	1"
H79-812	B	50 mm	2"
H79-813	C	75 mm	3"

SURFACE CONDITIONING COMBI DISC® EXTERNAL THREAD TYPE

- Universally suitable for surface conditioning of metals, eg. removal of prefinishing marks or oxidation, or light deburring jobs.
- Fitted with external thread screw connection.
- Holders available in 50mm and 75mm sizes.



Part No.	Recommended RPM	Grit	OD mm	Colour	Pieces
596937	6 000 - 8 000	Coarse	50	Yel/Brown	50
596944	6 000 - 8 000	Medium	50	Red/Brown	50
596951	6 000 - 8 000	Fine	50	Blue	50
596968	4 000 - 5 000	Coarse	75	Yel/Brown	25
596975	4 000 - 5 000	Medium	75	Red/Brown	25
597354	4 000 - 5 000	Fine	75	Blue	25

SURFACE CONDITIONING COMBI DISC® EXTERNAL THREAD TYPE – WITH HOLES

- Superior non-woven product for longer lasting disc life
- Consistent distribution of grit throughout the material
- A fresh cutting surface is exposed as the fibre wears
- Grades Blue/Fine, Red/Medium, and Brown/Course



Part No.	Grit	Size	Mount	Hole Pattern	Pieces
800-32M003V	Course	50 mm			250
800-32M006V	Medium				250
800-32M009V	Fine				250
800-48M003V	Course	75 mm			250
800-48M006V	Medium				250
800-48M009V	Fine				250

SURFACE PREP KITS

Includes Dotco right angle grinder, 1 Clear Revolution Shroud, 2 feet of 1" vacuum hose, swivel fittings to connect to your vacuum system, and an assortment of abrasives, all this convenient packed in a deep bin professional organizer.



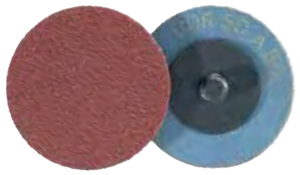




Qty	Grit	Type
10	24	Quick Change - Resin Bond
10	36	Quick Change - Resin Bond
10	60	Quick Change - Resin Bond
10	80	Quick Change - Resin Bond
10	120	Quick Change - Resin Bond
10	180	Quick Change - Resin Bond
10	240	Quick Change - Resin Bond
10	320	Quick Change - Resin Bond
10	Coarse	Quick Change - Non Woven
10	Medium	Quick Change - Non Woven
10	Fine	Quick Change - Non Woven

Part No.	Description
690-53212KIT-TR	2" Surface Prep Kit
690-54812KIT-TR	3" Surface Prep Kit

ABRASIVE COMBI DISC® EXTERNAL THREAD TYPE



Part No.	OD	Rec. RPM	Grit	Pieces
596517	50 mm	8 000 - 13 000	36	100
596524	50 mm	8 000 - 13 000	60	100
596531	50 mm	8 000 - 13 000	80	100
596548	50 mm	8 000 - 13 000	12	100
596555	50 mm	8 000 - 13 000	18	100
596562	50 mm	8 000 - 13 000	32	100

Part No.	OD	Rec. RPM	Grit	Pieces
596586	75 mm	5 000 - 9 000	36	50
596593	75 mm	5 000 - 9 000	60	50
596609	75 mm	5 000 - 9 000	80	50
596616	75 mm	5 000 - 9 000	12	50
596623	75 mm	5 000 - 9 000	18	50
596630	75 mm	5 000 - 9 000	32	50

SURFACE CONDITIONING COMBI DISC® EXTERNAL THREAD TYPE – WITH HOLES



- Superior non-woven product for longer lasting disc life
- Consistent distribution of grit throughout the material
- A fresh cutting surface is exposed as the fiber wears
- Grades Blue/Fine, Red/Medium, and Brown/Course



Part No.	Grit	Size	Mount	Hole Pattern	Pieces
800-32M036V	36	2"			250
800-32M060V	60				250
800-32M080V	80				250
800-32M120V	120				250
800-32F036V	36	2"			250
800-32F060V	60				250
800-32F080V	80				250
800-32F120V	120				250

Part No.	Grit	Size	Mount	Hole Pattern	Pieces
800-48M036V	36	3"			250
800-48M060V	60				250
800-48M080V	80				250
800-48M120V	120				250
800-48F036V	36	3"			250
800-48F060V	60				250
800-48F080V	80				250
800-48F120V	120				250

3M RADIAL BRISTLE DISCS T-A

The high concentration of Aluminum Oxide and Cubitron Abrasive Grain in T-A (Type Angled) Bristle Discs combined with their small 3" size aggressively cleans and deburrs, in tighter areas and can be used on most die grinders.

- Recommended tool speed: 12,000 RPM.
- Requires 3⁄8" mandrel



Part No.	Size	Grade	Color	Max RPM	Pieces
678-24279	3"	50	Green	25 000	10
678-24280	3"	80	Yellow	25 000	10
678-24281	3"	120	White	25 000	10

SCOTCH-BRITE RADIAL BRISTLE DISC 360 & SPA

Radial Bristle Discs are much less likely to damage or gouge the work surface than traditional abrasive. Scotch-Brite 360 Grit (Aluminum Oxide) and SPA (Special Plastic Abrasive) are so easy to control; the operator can remove paint one layer at a time. Other benefits include a lower surface temperature than competitive products, and a minimized work area. The flexible bristles conform to the part allowing for a uniform finish.

- Recommended tool speed: 12,000 RPM.
- Requires 3⁄8" mandrel



Part No.	Size	Grade	Color	Max RPM	Pieces
678-30098	3"	-	Cream	20 000	10

SCOTCH-BRITE SR RADIAL BRISTLE DISCS

Fast sealant removal without affecting underlying paint. These plastic abrasive particle-filled products remove 1⁄16 inch or less of sealants, silicones, RTVs, and adhesives from most surfaces. The unique construction removes the sealant but not the underlying paint or other coating. That means less time for rework.

- Recommended tool speed: 12,000 RPM.
- Requires 3⁄8" mandrel



Part No.	Size	Grade	Color	Max RPM	Pieces
678-33227	3"	360	Lime	25 000	10
678-33228	3"	SPA	Salmon	25 000	10

ZIRCONIA ALUMINIA ABRASIVE SPIRAL BANDS



40 Grit Part No.	50 Grit Part No.	60 Grit Part No.	OD x L	Pieces
---	322611	322628	13 x 25	25
322642	322659	322666	19 x 25	25
322680	322697	322703	25 x 25	25
322765	---	322789	38 x 25	25
322840	---	322864	51 x 25	10

ALUMINIUM OXIDE ABRASIVE SPIRAL BANDS



80 Grit Part No.	150 Grit Part No.	240 Grit Part No.	OD x L	Pieces
149010	149027	---	13 x 25	25
149140	149157	149164	19 x 25	25
149232	149249	149256	25 x 25	25
149393	149409	---	38 x 25	25
149539	149546	---	51 x 25	10

DRUM HOLDERS – 6 MM SHANK

Rubber Drum Holders are re-usable support for abrasive spiral bands. Slots allow the drum to expand during grinding. Close tolerance abrasive spiral bands remain firmly secured to the drum during grinding.



Part No.	OD x L	Max RPM	Min RPM
146804	13 x 25mm	44 000	30 000
146835	19 x 25mm	30 000	20 000
146866	25 x 25mm	22 900	16 000
146903	38 x 25mm	15 900	10 000
146941	51 x 25mm	11 200	7 500

FAN GRINDER – WITH 6 MM SHANK

Abrasive elements arranged radically around the tool axis in a fan type configuration. They adapt to the contours of the workpiece due to their flexibility. Flaps wear off uniformly.



60 Grit Part No.	80 Grit Part No.	120 Grit Part No.	OD x L	RPM	Pcs
---	292594	292617	20 x 10 mm	19 000	10
---	536926	536933	25 x 20 mm	15 000	10
154250	154274	154298	30 x 10 mm	12 000	10
292747	292754	292761	30 x 30 mm	12 000	10
154625	154632	154649	40 x 20 mm	9 600	10
155127	155134	155141	50 x 20 mm	7 000	10

ALUMINIUM OXIDE CUT-OFF WHEELS

Multi-purpose Cut-Off Wheels of aluminium oxide for steel, stainless steel (inox), cast iron and non ferrous metals.

* Recommended for use with Clayton 2" & 3" Cutoff Saws



Part No.	OD	Width	RPM	Arbor	Pcs
165621	30	1.1 mm	51 000	6 mm	50
165645	40	1.1 mm	38 000	6 mm	50
165669	50 *	1.1 mm	30 000	6 mm	50
165751	70	1.1 mm	21 000	6 mm	50
165812	76 *	1.1 mm	20 000	6 mm	50

STEEL DIAMOND COAT CUT-OFF WHEELS

- Hardened steel alloy disc
- Diamond coat metal bond 40 grit
- Continuous rim
- Recommended for use with Clayton 2" & 3" Cutoff Saws



Part No.	Mat.	RPM	Dia.	Kerf	Arbor	Pcs
250-CW32D04	Diamond	30K	50 mm	2 mm	1/4"	1
250-CW48D04	Diamond	30K	75 mm	2 mm	1/4"	1

ARBORS FOR CUT-OFF WHEELS

** Fits most Die Grinders



Part No.	Shank Size	Suits Arbor Hole
219119	6 mm	6mm
H80-625	1/4 in (6.35mm)	6mm & 3/8 in

METAL CUT-OFF WHEELS

- Made in USA
- Suits many brands of panel saws



Part No.	No of Teeth	Arbor Hole	Diameter
CW 5744	44	1/4"	2"
CW 5746	60	1/4"	2"
CW 5733	30	7/16"	1-3/4"
CW 5734	44	7/16"	1-3/4"
CW 5736	60	7/16"	1-3/4"
CW 5753	30	7/16"	2"
CW5754	44	7/16"	2"
CW 5756	60	7/16"	2"

Policaps

POLICAP SETS

All sets have various dimensions and grit sizes





Part No.	Contents	
355435	320 pcs of cylindrical & pointed Cones	10 pcs Cone Holders
355404	105 pcs of cylindrical Cones	5 pcs Cone Holders
355411	105 pcs of conical Cones	5 pcs Cone Holders
355428	105 pcs of pointed Cones	5 pcs Cone Holders

CYLINDRICAL CONE HOLDER



Part No.	OD x L	Shank OD	Max RPM	Pcs
147139	5 x 10 mm	3	95 000	5
147146	7 x 12 mm	3	65 000	5
147153	10 x 15 mm	3	45 000	5
147221	13 x 17 mm	6	35 000	5
147238	16 x 27 mm	6	30 000	5

CONICAL CONE HOLDER



Part No.	OD x L	Shank OD	Max RPM	Pcs
147160	5 x 11 mm	3	95 000	5
147177	7 x 13 mm	3	65 000	5
147184	10 x 15 mm	3	45 000	5
147245	13 x 17 mm	6	35 000	5
147252	16 x 26 mm	6	30 000	5

POINTED CONE HOLDER



Part No.	OD x L	Shank OD	Max RPM	Pcs
147191	5 x 11 mm	3	95 000	5
147207	7 x 13 mm	3	65 000	5
147214	10 x 15 mm	3	45 000	5
147269	13 x 17 mm	6	35 000	5
147276	16 x 26 mm	6	30 000	5

LONG CONICAL CONE HOLDER



Part No.	OD x L	Shank OD	Max RPM	Pcs
147283	5 x 15 mm	6	95 000	5
147290	11 x 15 mm	6	40 000	5
147306	16 x 32 mm	6	30 000	5
147313	21 x 40 mm	6	20 000	5

CYLINDRICAL ABRASIVE CONE ALUMINIUM OXIDE



60 Grit Part No.	80 Grit Part No.	150 Grit Part No.	280 Grit Part No.	Rec. RPM	Pcs
---	150788	150795	150801	40 000	50
150818	---	150825	150832	30 000	50
150849	---	150856	150863	20 000	50
150870	---	150887	150894	16 000	50
150900	---	150917	150924	12 000	50

CONICAL ABRASIVE CONE ALUMINIUM OXIDE



60 Grit Part No.	80 Grit Part No.	150 Grit Part No.	280 Grit Part No.	Rec. RPM	Pcs
---	150931	150948	150955	40 000	50
150962	---	150979	150986	30 000	50
150993	---	151006	151013	20 000	50
151020	---	151037	151044	16 000	50
151051	---	151068	151075	12 000	50

POINTED ABRASIVE CONE ALUMINIUM OXIDE



60 Grit Part No.	80 Grit Part No.	150 Grit Part No.	280 Grit Part No.	Rec. RPM	Pcs
---	151082	151099	151105	40 000	50
151112	---	151129	151136	30 000	50
151143	---	151150	151167	20 000	50
151174	---	151181	151198	16 000	50
151204	---	151211	151228	12 000	50

LONG CONICAL ABRASIVE CONE ALUMINIUM OXIDE



60 Grit Part No.	80 Grit Part No.	150 Grit Part No.	280 Grit Part No.	Rec. RPM	Pcs
---	151235	151242	151259	40 000	50
151266	---	151273	151280	20 000	50
151297	---	151303	151310	12 000	50
151327	---	151334	151341	9 500	50

Abrasive Brushes

PENCIL BRUSHES, MOUNTED

- These brushes are suitable for all light-duty brushing tasks.
- Ideal for deburring, cleaning and rust removal in bores, they also perform well in other hard-to-reach workpiece areas and cavities.
- The wires or filaments spread out (fill expands) as the brush rotates



Part No.	Brush OD	Brush Length	Pcs
MB 53277	10 mm	20 mm	10
MB 53253	15 mm	22 mm	10
MB 53222	20 mm	25 mm	10
MB 53192	30 mm	25 mm	10

TUBE BRUSHES STAINLESS STEEL

- Single stem tube brushes with fine stainless steel bristles for hand use have plated carbon steel wire handles with a loop on the end.
- For cleaning inside pipes, tubes and cylinders.
- More sizes/styles including nylon bristle available to order



Part No.	Description	OAL
SSB1875	Tube Cleaning Brush SS 3/16"	7"
SSB2500	Tube Cleaning Brush SS 1/4"	7"
SSB3125	Tube Cleaning Brush SS 5/16"	7"
SSB3750	Tube Cleaning Brush SS 3/8"	8"
SSB4375	Tube Cleaning Brush SS 7/16"	8"
SSB5000	Tube Cleaning Brush SS 1/2"	10"

TUBE BRUSHES NYLON

- Rolled wire handle for good hand-held control
- The bristles are cylindrically arrayed for internal brushing of tubes, apertures and difficult to reach internal surfaces (like a bottle brush).
- Suited for the removal of any build-up of contaminants and residues internally inside an aperture.



Part No.	Description	Size
NTB1/8	Tube Brush Nylon 1/8"	0.125 in
NTB5/32	Tube Brush Nylon 5/32"	0.156 in
NTB1/4	Tube Brush Nylon 1/4"	0.250 in
NTB5/16	Tube Brush Nylon 5/16"	0.312 in
NTB1/2	Tube Brush Nylon 1/2"	0.500 in
NTB3/4	Tube Brush Nylon 3/4"	0.750 in

RIVET HOLE/BONDING BRUSHES

- Fitted with stainless steel pilot
- Recommended speed 20 000RPM
- For removal of paint, rust or dirt from around rivet holes.



Part No.	Brush OD	Pilot Diam.	Pcs
RB6721-1/4	1/4"	3/32"	1
RB6741-1/4	1/4"	1/8"	1
RB6761-1/4	1/4"	5/32"	1
RB6721-3/8	3/8"	3/16"	1
RB6741-3/8	3/8"	1/8"	1
RB6761-3/8	3/8"	5/32"	1
RB6781-3/8	3/8"	3/16"	1
RB6801-3/8	3/8"	1/4"	1
RB6721-1/2	1/2"	3/32"	1
RB6741-1/2	1/2"	1/8"	1
RB6761-1/2	1/2"	5/32"	1
RB6781-1/2	1/2"	3/16"	1
RB6801-1/2	1/2"	1/4"	1

5 PIECE RIVET HOLE/BONDING BRUSH SET

- 1/2" diameter
- Contents: 3/32", 1/8", 5/32", 3/16" and 1/4" Pilot sizes



Part No.	Description
RB6700-05	5 Piece Bonding Brush Set

5 PIECE RIVET HOLE/BONDING BRUSH KIT

Set of 5 Bonding Brushes / Rivet Hole Brushes 1/2" diameter with stainless steel pilots for the removal of paint, rust or dirt from around rivet holes. Max 20,000 RPM recommended.laid out in custom foam in a water tight case with an opaque lid for added tool control

- Contents: 3/32", 1/8", 5/32", 3/16" and 1/4" Pilot sizes



Part No.	Description
RB6700F	5 Piece Bonding Brush kit in box

Files

HAND FILE

- PFERD Files ensure optimum cutting performance, renowned for almost 200 years
- All files sold individually, with fitted ergonomic handles



Bastard Part No.	2nd Cut Part No.	Smooth Part No.	Length	Fig
005637	005644	005651	150mm	
005668	005675	005682	200mm	
005699	005705	005712	250mm	
005729	005736	005743	300mm	

FLAT FILE, TAPERED



Bastard Part No.	2nd Cut Part No.	Smooth Part No.	Length	Fig
005842	005859	005866	150mm	
005873	005880	005897	200mm	
005903	005910	005927	250mm	
005934	005941	005958	300mm	

HALF ROUND FILE



Bastard Part No.	2nd Cut Part No.	Smooth Part No.	Length	Fig
006955	006962	006979	150mm	
006986	006993	007006	200mm	
007013	007020	007037	250mm	
007044	007051	007068	300mm	

THREE SQUARE FILE



Bastard Part No.	2nd Cut Part No.	Smooth Part No.	Length	Fig
006641	006658	006665	150mm	
006672	006689	006696	200mm	
006702	006719	006726	250mm	
006733	006740	---	300mm	

SQUARE FILE



Bastard Part No.	2nd Cut Part No.	Smooth Part No.	Length	Fig
006030	006047	006054	150mm	
006061	006078	006085	200mm	
006092	006108	006115	250mm	
006122	006139	---	300mm	

ROUND FILE



Bastard Part No.	2nd Cut Part No.	Smooth Part No.	Length	Fig
006467	006474	006481	150mm	
006498	006504	006511	200mm	
006528	006535	006542	250mm	
006559	006566	006573	300mm	

PFERD NEEDLE FILES

For working on small surfaces, sharping, refining and deburring or breakthrough and internal profiles. Standard length is 160mm, other sizes available to order.



Part No.	Cut	Cross-Section	Fig	Style	Pcs
237366	1	5.2 x 2.1mm		Crossing	12
237373	2	5.2 x 2.1mm		Crossing	12
237755	1	3.65mm		Three Square	12
237762	2	3.65mm		Three Square	12
238127	1	2.4mm		Square	12
238134	2	2.4mm		Square	12
137496	1	5.5 x 1.2mm		Flat Tapered	12
237502	2	5.5 x 1.2mm		Flat Tapered	12
383957	1	5.5 x 1.2mm		Hand	12
383971	2	5.5 x 1.2mm		Hand	12
238035	1	3.8 x 2.5mm		Crossing Oval	12
238042	2	3.8 x 2.5mm		Crossing Oval	12
238394	1	5.5 x 1.2mm		Flat Round	12
238400	2	5.5 x 1.2mm		Flat Round	12
383902	1	5.5 x 1.2mm		Hand Round	12
383926	2	5.5 x 1.2mm		Hand Round	12
238271	1	3.25mm		Round	12
238288	2	3.25mm		Round	12
237915	1	5.7 x 1.8mm		Half Round	12
237922	2	5.7 x 1.8mm		Half Round	12
384091	1	5.3 x 1.8mm		Barrette	12
237228	2	5.3 x 1.8mm		Barrette	12
237618	1	5.3 x 1.7mm		Knife	12
237625	2	5.3 x 1.7mm		Knife	12

NEEDLE FILE HANDLE

- Quick-mounting handles for needle files with 3–4.5 mm tang diameter



Part No.	Description
267783	Needle File Handle

PROTO® IGNITION POINT FILE

- Tungsten file for spark plugs, distributors, and other electrical contact points.
- Has chisel tip and smooth extended grip.



Part No.	Overall Length (in)	Weight (lbs)
J2302	5-1/4"	0.01

12 PIECE NEEDLE FILE SET

Swiss pattern needle file set in pouch

- Shapes: Warding (flat), square, crossing, round, oval, half-round, equalling (mill), knife, barrette, slitting, joint round edge, three square



Part No.	Description
S475	12 Piece Needle File Set

6 PIECE MINIATURE FILE SET 4 INCH

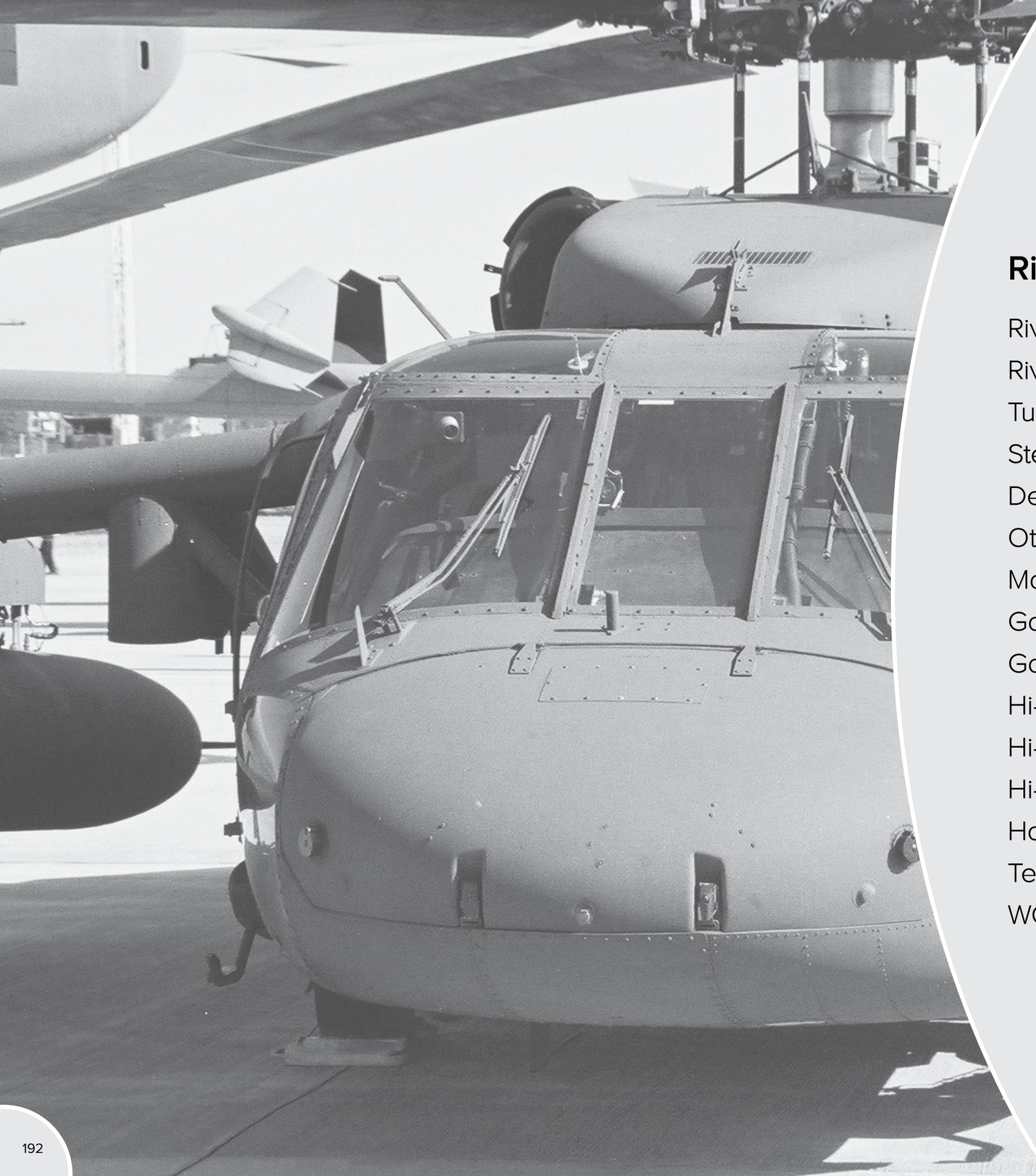
With ergo grip handles, 2nd Cut

Contents:

- Half Round, Square, Round, Triangular, Flat, Hand File



Part No.	Description
H79-042	6 Piece Miniature 4 In File Set



Riveters & Riveting

Riveting Hammers 194
Rivet Sets 198
Tungsten Bucking Bars 204
Steel Bucking Bars 206
Desoutter Rivet Squeezers 208
Other Rivet Squeezers 210
Manual Rivet Squeezers 212
Gage Bilt Riveters 214
Gage Bilt Power Tools 217
Hi-Lok® Tooling 221
Hi-Lok® Box Ratchets 224
Hi-Lok® Roller Ratchets 226
Hand Tools 234
Temporary Fasteners 236
WCI Cold Expansion Technology 240

Riveting Hammers

DESOUTTER RIVETING HAMMERS

For applications requiring the special "Alligator Jaws or C-Yokes"

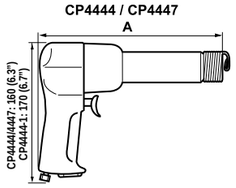


Part No.	Model	Ref	Air Frame Ref	Blow per Minute	Bore & Stroke	Energy per Blow		Chisel Shank		Rivet Capacity		Weight		Air Inlet	Hose Int. ∅	
					mm (in)	J	ft.lb	mm	in.	mm (in)	mm (in)	kg	lb	in	mm	in
Standard																
T022961	CP4444-RURAB	A	2X (200)	2580	12.7 x 50.8 (1/2 x 2)	4.0	2.9	10.2	0.401	3.2 (1/8)	2.4 (3/32)	1.0	2.2	1/4	10	3/8
T022962	CP4444-RUSAB	A	3X (300)	2160	12.7 x 76.2 (1/2 x 3)	6.1	4.5	10.2	0.401	4.8 (3/16)	4.0 (5/32)	1.1	2.3	1/4	10	3/8
T022963	CP4444-RUTAB	A	4X (240)	1740	12.7 x 101.6 (1/2 x 4)	8.1	6.0	10.2	0.401	6.4 (1/4)	4.8 (3/16)	1.3	2.7	1/4	10	3/8
T022965	CP4447-RUSAB	B	5XB (500)	1560	19.1 x 68.3 (3/4 x 2-11/18)	12.3	9.1	12.7	0.498	6.4 (1/4)	4.8 (3/16)	2.2	4.7	1/4	10	3/8
T022912	CP4447-RUTAB	B	7XB (700)	1140	19.1 x 98.4 (3/4 x 3-7/8)	17.8	13.1	12.7	0.498	7.9 (5/16)	6.4 (1/4)	2.3	5.1	1/4	10	3/8
T022964	CP4447-RUVAB	B	9XB (800)	900	19.1 x 147.6 (3/4 x 5-13/16)	26.6	19.6	12.7	0.498	9.5 (3/8)	7.9 (5/16)	2.7	9.0	1/4	10	3/8
Vibration reduced																
T025189	CP4450-2	C	2X (200)	2580	12.7 x 50.8 (1/2 x 2)	4.0	2.9	10.2	0.401	3.2 (1/8)	2.4 (3/32)	1.2	2.7	1/4	10	3/8
T025190	CP4450-3	C	3X (300)	2160	12.7 x 76.2 (1/2 x 3)	6.1	4.5	10.2	0.401	4.8 (3/16)	4.0 (5/32)	1.3	2.8	1/4	10	3/8
T025191	CP4450-4	C	4X (400)	1740	12.7 x 101.6 (1/2 x 4)	8.1	6.0	10.2	0.401	6.4 (1/4)	4.8 (3/16)	1.5	3.2	1/4	10	3/8
T025241	CP4475-3	D	5XB (500)	2000	19.1 x 76.2 (3/4 x 3)	13.7	10.1	12.7	0.498	6.4 (1/4)	4.8 (3/16")	1.8	3.9	1/4	10	3/8
T025242	CP4475-4	D	7XB (700)	1700	19.1 x 101.6 (3/4 x 4)	18.3	13.5	12.7	0.498	7.9 (5/16)	6.4 (1/4)	2.4	5.3	1/4	10	3/8
T025243	CP4475-6	D	9XB (800)	1250	19.1 x 152.4 (3/4 x 6)	27.5	20.3	12.7	0.498	9.5 (3/8)	7.9 (5/16)	2.8	6.2	1/4	10	3/8
2051467124	CP4450-S-2	E	2X	2580	12.7 x 50.8 (1/2 x 2)	4.0	2.9	10.2	0.401	3.2 (1/8)	2.4 (3/32)	1.25	2.8	1/4	10	3/8
2051467134	CP4450-S-3	E	3X	2160	12.7 x 76.2 (1/2 x 3)	6.1	4.5	10.2	0.401	4.8 (3/16)	4.0 (5/32)	1.35	3.0	1/4	10	3/8
2051467144	CP4450-S-4	E	4X	1740	12.7 x 101.6 (1/2 x 4)	8.1	6.0	10.2	0.401	6.4 (1/4)	4.8 (3/16)	1.45	3.2	1/4	10	3/8

* light: Aluminium 2017 / 2117 (DCJ-DXJ / D-AD)
** hard: Aluminium 7050 (DKJ / KE / E) (M) (T)

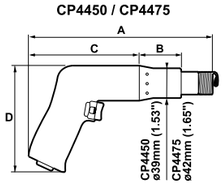
CP4444 / CP4447

Model	A	
	mm	in.
CP4444-1	111	4.4
CP4444-RURAB	170	6.7
CP4444-RUSAB	186	7.3
CP4444-RUTAB	211	8.3
CP4447-RUSAB	227	8.9
CP4447-RUTAB	252	9.9
CP4447-RUVAB	303	11.9



CP4450 / CP4475

Model	A		B		C		D	
	mm	in.	mm	in.	mm	in.	mm	in.
CP4450-2	213	8.4	32	1.26	102	4.0	138	5.4
CP4450-3	226	8.9	32	1.26	102	4.0	138	5.4
CP4450-4	251	9.9	60	2.36	102	4.0	138	5.4
CP4475-3	275	10.8	54	2.13	180	7.1	140	5.5
CP4475-4	300	11.8	79	3.11	180	7.1	140	5.5
CP4475-6	351	13.8	130	5.12	180	7.1	140	5.5



DESOUTTER STRAIGHT RIVET GUNS

- Desoutter in-line rivet gun with vibration reduced dampner fitted.
- Ideal for over structure applications



Part No.	Blows/Min	Capacity	Shank	OAL	Ref
CP4450-S-2	2,580	1/8" (al) - 3/32" (st)	.401	220mm	2x
CP4450-S-3	2,160	3/16" (al) - 5/32" (st)	.401	223mm	3x
CP4450-S-4	1,740	1/4" (al) - 3/16" (st)	.401	258mm	4x

HENCHMAN RIVET GUN

- Lower cost rivet guns with power and control to uniformly drive solid rivets
- With incorporated teasing trigger, allowing you to slowly begin riveting without damaging the skin.
- Fitted with a universal retaining spring



Part No.	Blows/Min	Capacity	Stroke	Weight	OAL
H-2X	2580	1/8"	2 1/4"	3.1 lbs	6 11/16"
H-3X	2160	3/16"	2 7/8"	3.2 lbs	7 5/16"
H-4X	1740	1/4"	3 1/16"	3.4 lbs	8 1/2"

"JIFFY STYLE" RIVET GUN

- Jiffy type rivet gun for close work in confined spaces
- Special short shank rivet sets for jiffy rivet guns, see our selection
- Sensitive teasing trigger
- Will handle some 3/16" rivets in shorter length



Part No.	Blows/Min	Capacity	Shank	Weight	OAL
T-1X	2,850	5/32" Rivet	.401	0.5kg	100mm

HENCHMAN STRAIGHT RIVET GUNS

- Ideal for areas which would be inaccessible with pistol shaped rivet guns
- Combined with the 90o attachment shown below, you can access extremely awkward spots



Part No.	Blows/Min	Capacity	Shank	OAL	Ref
H-3X-S	2100	3/16" Rivets	.401	220mm	3x
H-4X-S	1700	1/4" Rivets	.498	223mm	4x

TAYLOR RIVET GUNS

- Lower cost rivet guns with power and control to uniformly drive solid rivets
- Excellent teasing triggers for precise control
- Fitted with beehive style retaining springs



Part No.	Blows/Min	Capacity	Shank	Weight	OAL
T-2X	2600	1/8"	.401	1.0kg	170mm
T-3X	2100	3/16"	.401	1.1kg	186mm
T-4X	1700	1/4"	.401	1.3kg	211mm
T-5X	1800	1/4"	.498	2.2kg	227mm
T-7X	900	3/8"	.498	2.7kg	303mm
T-9X	1150	3/8"	.498	2.3kg	252mm

HENCHMAN RIVET GUN RETAINER SPRINGS



Beehive



Handi



Quick Change



Universal Retainer

Part No.	Description	Diameter	Ref
RG1001	Beehive retainer spring	1-3/32"	2x, 3x, 4x
RG1002	Beehive retainer spring	1-3/16"	5x, 7x, 9x
RG1003	Beehive retainer spring	1-5/32"	Jiffy model
RG1004	Handi retainer spring	1-3/32"	2x, 3x, 4x
RG1005	Handi retainer spring	1-3/16"	5x, 7x, 9x
RG1006	Quick Change spring	1-3/32"	2x, 3x, 4x
RG1007	Quick Change spring	1-3/16"	5x, 7x, 9x
RG1008	Quick Change spring	1-5/32"	Jiffy model
RG1009	Universal Retainer Spring	1-3/32"	2x - 7x

90° RIVET GUN ATTACHMENT

- An extremely versatile attachment fitting both CP and Taylor rivet guns
- Accepts all .401" rivet sets including the Jiffy type



Part No.	Description
RG 1151	90° Rivet Gun Attachment

RIVET GUN SHAFT REDUCER

- From Shank .401 to .498
- Hardened steel
- Open at both ends to allow maximum riveting power
- Increases the versatility of o .498 bore rivet gun



Part No.	Description
RS4013	Rivet Gun Shaft Reducer

ANTIVIBRATION RIVETERS GLOVES

- A-Grade leather
- Gel padded palm and wrist support.
- Fingerless gloves"
- Flexible neoprene breatable back
- Reinforced thumb crutch
- Velcrco strap fastener
- Manufactured to EN388 Level 2343 std



Part No.	Description	Size
GMG294-M	Anti Vibration Riveters Glove	Medium
GMG294-L	Anti Vibration Riveters Glove	Large
GMG294-XL	Anti Vibration Riveters Glove	X Large

EARMUFFS 26DB CLASS 5 BLUE

- Unique Elastex sweat reducing ear cushions
- Super low headband tension for extended use
- Replaceable cushioned headband
- Two-point suspension for simple height adjustment
- Non crack, non shrink, no PVC material
- Made in Germany



Part No.	Description
H540A	90° Rivet Gun Attachment

RIVET GUN KIT

- 3 x Rivet Gun (with a very sensitive teasing trigger and powder coat finish)
- Retaining Spring and Beehive Retaining Spring
- 4 each Cupped Rivet Sets, 3-1/2" Straight, .401 Shank (3/32", 1/8", 5/32", & 3/16")
- Flush Rivet Set with 1" Face (highly polished - excellent quality!)
- 2oz bottle of Air Tool Oil
- Fitted Storage Case
- Roll of Teflon Tape
- Brass Air Regulator
- Air Tool Fitting
- Fitted Storage Case



Part No.	Description
RGK3X	Rivet Gun Kit

RIVET GUN KIT WITH 2 BUCKING BARS

- 3 x Rivet Gun (with a very sensitive teasing trigger and powder coat finish)
- Retaining Spring and Beehive Retaining Spring
- 4 each Cupped Rivet Sets, 3-1/2" Straight, .401 Shank (3/32", 1/8", 5/32", & 3/16")
- Flush Rivet Set with 1" Face (highly polished - excellent quality!)
- 2 x Bucking Bars (BB1029 and BB1080)
- 2oz bottle of Air Tool Oil
- Roll of Teflon Tape
- Brass Air Regulator
- Air Tool Fitting
- Fitted Storage Case



Part No.	Description
RGK3X-1	Rivet Gun Kit

RIVET GUN KIT WITH 4 BUCKING BARS

- 3 x Rivet Gun (with a very sensitive teasing trigger and powder coat finish)
- Retaining Spring and Beehive Retaining Spring
- 4 each Cupped Rivet Sets, 3-1/2" Straight, .401 Shank (3/32", 1/8", 5/32", & 3/16")
- Flush Rivet Set with 1" Face (highly polished – excellent quality!)
- 4 x Bucking Bars (BB1029, BB1080, BB1082 and BB1147)
- 2oz bottle of Air Tool Oil
- Roll of Teflon Tape
- Brass Air Regulator
- Air Tool Fitting
- Fitted Storage Case



Part No.	Description
RGK3X-2	Rivet Gun Kit

Rivet Sets

RIVET TYPE CHART

Note: Generally all Rivet sets offered below suit AN470 Universal Rivets unless otherwise specified



AN 470 Universal	AN 430 Round	AN 435 Button	AN 442 Flat	AN 450 Semi-Tubular	AN 455 Brazier	AN 456 Mod. Brazier	AN 426 Countersunk	BACR 15FT Brilles Boeing

RIVET SETS – UNIVERSAL



Part No.	Rivet Size	Shank Size	OAL (in/mm)
RS4102-4703	3/32"	.401	2-1/2 / 64
RS4102-4704	1/8"	.401	2-1/2 / 64
RS4102-4705	5/32"	.401	2-1/2 / 64
RS4102-4706	3/16"	.401	2-1/2 / 64
RS4102-4708	1/4"	.401	2-1/2 / 64
RS4302-4703	3/32"	.401	3-1/2 / 90
RS4302-4704	1/8"	.401	3-1/2 / 90
RS4302-4705	5/32"	.401	3-1/2 / 90
RS4302-4706	3/16"	.401	3-1/2 / 90
RS4302-4708	1/4"	.401	3-1/2 / 90
RS4402-4703	3/32"	.401	5-1/2 / 140
RS4402-4704	1/8"	.401	5-1/2 / 140
RS4402-4705	5/32"	.401	5-1/2 / 140
RS4402-4706	3/16"	.401	5-1/2 / 140
RS4402-4708	1/4"	.401	5-1/2 / 140
RS4502-4703	3/32"	.401	7-1/2 / 190
RS4502-4704	1/8"	.401	7-1/2 / 190
RS4502-4705	5/32"	.401	7-1/2 / 190
RS4502-4706	3/16"	.401	7-1/2 / 190
RS4502-4708	1/4"	.401	7-1/2 / 190
RS4602-4703	3/32"	.401	- / 267
RS4602-4704	1/8"	.401	- / 267
RS4602-4705	5/32"	.401	- / 267
RS4602-4706	3/16"	.401	- / 267
RS4702-4703	3/32"	.401	- / 343
RS4702-4704	1/8"	.401	- / 343
RS4702-4705	5/32"	.401	- / 343
RS4702-4706	3/16"	.401	- / 343

UNIVERSAL MUSHROOM RIVET SET 3-1/2" SERIES



Part No.	Description
RS4302-4305	Set 8 Pcs: Straight (3/32, 1/8, 5/32, 3/16) Offset (3/32, 1/8, 5/32, 3/16)

RIVET SETS – 10° OFFSET



Part No.	Rivet Size	Shank Size	OAL (in/mm)
RS4305-4703	3/32"	.401	3-1/2 / 90
RS4305-4704	1/8"	.401	3-1/2 / 90
RS4305-4705	5/32"	.401	3-1/2 / 90
RS4305-4706	3/16"	.401	3-1/2 / 90
RS4305-4708	1/4"	.401	3-1/2 / 90
RS4405-4703	3/32"	.401	5-1/2 / 140
RS4405-4704	1/8"	.401	5-1/2 / 140
RS4405-4705	5/32"	.401	5-1/2 / 140
RS4405-4706	3/16"	.401	5-1/2 / 140
RS4405-4708	1/4"	.401	5-1/2 / 140
RS4505-4703	3/32"	.401	7-1/2 / 190
RS4505-4704	1/8"	.401	7-1/2 / 190
RS4505-4705	5/32"	.401	7-1/2 / 190
RS4505-4706	3/16"	.401	7-1/2 / 190
RS4505-4708	1/4"	.401	7-1/2 / 190
RS4605-4703	3/32"	.401	- / 267
RS4605-4704	1/8"	.401	- / 267
RS4605-4705	5/32"	.401	- / 267
RS4605-4706	3/16"	.401	- / 267
RS4705-4703	3/32"	.401	- / 343
RS4705-4704	1/8"	.401	- / 343
RS4705-4705	5/32"	.401	- / 343
RS4705-4706	3/16"	.401	- / 343

RIVET SETS – GOOSENECK



Part No.	Rivet Size	Shank Size	OAL (in/mm)
RS4503-4703	3/32"	.401	7-1/2 / 190
RS4503-4704	1/8"	.401	7-1/2 / 190
RS4503-4705	5/32"	.401	7-1/2 / 190
RS4503-4706	3/16"	.401	7-1/2 / 190
RS4503-4700	Set 4 Pcs (3/32, 1/8, 5/32, 3/16)		

RIVET SETS – DOUBLE OFFSET



Part No.	Rivet Size	Shank Size	OAL (in/mm)
RS4406-4703	3/32"	.401	5-1/2 / 140
RS4406-4704	1/8"	.401	5-1/2 / 140
RS4406-4705	5/32"	.401	5-1/2 / 140
RS4406-4706	3/16"	.401	5-1/2 / 140

FLUSH MUSHROOM RIVET SET – SHORT SERIES



Part No.	Dia (in/mm)	Shank Size	OAL (mm)
RS4004-4719	3 /4 / 19	.401	48
RS4004-4725	1 / 25	.401	48
RS4004-4732	1-1/4 / 32	.401	48

FLUSH MUSHROOM RIVET SETS 3/4"



Part No.	Dia (in/mm)	Shank Size	OAL (in/mm)
RS4108-4719	3/4 / 19	.401	2-1/2 / 64

FLUSH MUSHROOM RIVET SET 1"

Longer ones for reaching into areas where you need just a bit more length than a standard-length flush provides.



Part No.	Rivet Size	Shank Size	OAL (in/mm)
RS4108-4725	1 / 25	.401	2-1/2 / 64
RS4408-4725	1 / 25	.401	5-1/2 / 140
RS4508-4725	1 / 25	.401	7-1/2 / 190

FLUSH MUSHROOM RIVET SET 1-1/4"



Part No.	Dia (in/mm)	Shank Size	OAL (in/mm)
RS4208-4732	1-1/4 / 32	.401	3-1/2 / 90

FLUSH RIVET SET 2"



Part No.	Dia (in/mm)	Shank Size	OAL (in/mm)
RS4004-4751	2 / 51	.401	3 / 76

FLUSH MUSHROOM RIVET SET 3/4" – OFFSET 10°



Part No.	Dia (in/mm)	Shank Size	OAL (in/mm)
RS4209-4719	3/4 / 19	.401	3 / 75

FLUSH RIVET SET 1" – OFFSET 10°

Longer ones for reaching into areas where you need just a bit more length than a standard-length flush provides.



Part No.	Rivet Size	Shank Size	OAL (in/mm)
RS4309-4725	1 / 25	.401	3-1/2 / 90
RS4409-4725	1 / 25	.401	5-1/2 / 140
RS4509-4725	1 / 25	.401	7-1/2 / 190

FLUSH SET – SWIVEL

The swivel face of this rivet set allows for off-angle riveting of awkward to get-to fasteners.



Part No.	Dia (in/mm)	Shank Size	OAL (in/mm)
RS4207-4719	3/4 / 19	.401	3 / 76

FLUSH SET – SWIVEL

The swivel face of this rivet set allows for off-angle riveting of awkward
to get-to fasteners.



Part No.	Dia (in/mm)	Shank Size	OAL (in/mm)
RS4207-4732	1-1/4 / 32	.401	3 / 76

FLUSH RIVET SET – MUSHROOM WITH RUBBER GUARD

Rubber ring around the face to prevent damage to aircraft skin



Part No.	Dia (in/mm)	Shank Size	OAL (in/mm)
RS4210-4719	3/4 / 19	.401	2-3/8 / 60
RS4210-4725	1 / 25	.401	2-3/8 60
RS4210-4732	1-1/2 / 32	.401	2-3/8 / 60

FLUSH SET – NO-MAR, BRASS FACE

Brass face often used to install Hi-Loks and other fasteners without causing damage to the fastener's head (Brass face not replaceable)



Part No.	Dia (in/mm)	Shank Size	OAL (mm)
RS4201-4719	3/4" / 19	.401	79
RS4201-4725	1"/25mm	.401	3-1/8

FLUSH SET – NO-MAR, NYLON FACE

This nylon rivet set is designed to reduce potential damage (Nylon face not replaceable)



Part No.	Dia (in/mm)	Shank Size	OAL (in)
RS4202-4725	1"/25mm	.401	3-1/8

FLUSH SET – NO-MAR, ALUMINIUM FACE

This aluminium rivet set is designed to reduce potential damage (Aluminium face not replaceable)



Part No.	Dia (in/mm)	Shank Size	OAL (in)
RS4203-4725	1"/25mm	.401	3-1/8

FLUSH SET – NO-MAR SET OF 3

No-mar flush set of 3. Includes brass, nylon and aluminium face rivet sets.



Part No.	Dia (in/mm)	Shank Size	OAL (in)
RS4201-2300	1"/25mm	.401	3-1/8

RIVET SET – SUICIDE FLUSH



Part No.	Dia (in/mm)	Shank Size	OAL (in/mm)
RS4308-4713	13	.401	3-1/2 / 90

FLUSH "T" SET

Perfect for accessing tight awkward areas..



Part No.	Description	Shank Size	OAL
RS4804	Flush T Set	.401	5 3/4 / 145mm

RIVET SET – OFFSET FLUSH "J" SET

Flush face is at 60° and is ideal for reaching around obstacles intp limited access areas.



Part No.	Description	Shank Size	OAL (mm)
RS4812	Offset Flush J Set	.401	165

RIVET SET – C-SHAPE 60° FLUSH

Flush face is at 60° and is ideal for accessing hard to reach areas.



Part No.	Description	Shank Size	OAL (mm)
RS 4806	Flush "C" Rivet Set	.401	165

RIVET SET – C-SHAPE 90° WITH 3/16" HOLE

- "C" shape Rivet set accepting standard 3/16" shank Rivet Squeezer Sets
- Allows for installation of rivets in hard to access area
- Inside measurement of "C" is 75mm high x 34mm deep



Part No.	Description	Shank Size	OAL (mm)
RS4805	"C" Rivet Set	.401	159

FLAT CHISEL RIVET SET



Part No.	Description	Shank Size	OAL
RS4808	Chisel Rivet Set	.401"	140mm

RIVET SET – ELEPHANT LEG

- Unique Rivet set accepting standard 3/16" shank Rivet Squeezer Sets
- Offset foot on Rivet Set is 38mm long allowing for installation of rivets in hard to access areas



Part No.	Description	Shank Size	OAL (mm)
RS4807	Elephant Leg Rivet Set	.401	114

KNOCKOUT PUNCHES



Part No.	Shank Size	OAL	Rivet Size
RS4008-4703	.401	90mm	3/32"
RS4008-4704	.401	90mm	1/8"
RS4008-4705	.401	90mm	5/32"
RS4008-4706	.401	90mm	3/16"
RS4008-4707	.401	90mm	7/32
RS4008-4708	.401	90mm	1/4"
RS4008-4709	.401	90mm	5/16"
RS4008-4710	.401"	90mm	3/8"

EXTRA LONG KNOCKOUT PUNCHES



Part No.	Shank Size	OAL	Rivet Size
RS4009-4703	.401	90mm	3/32"
RS4009-4704	.401	90mm	1/8"
RS4009-4705	.401	90mm	5/32"
RS4009-4706	.401	90mm	3/16"
RS4009-4707	.401	90mm	7/32
RS4009-4708	.401	90mm	1/4"
RS4009-4709	.401	90mm	5/16"
RS4009-4710	.401	90mm	3/8"
RS4010-4706	.498	90mm	3/16"
RS4010-4708	.498	90mm	1/4"
RS4010-4709	.498	90mm	5/16"
RS4010-4710	.498	90mm	3/8"

OFFSET KNOCKOUT PUNCH – WITCHES FINGER



Part No.	Description	Diameter	OAL
RS4011-4704	Offset K/O Punch	5/32"	10"
RS4011-4705	Offset K/O Punch	1/8"	10"
RS4011-4706	Offset K/O Punch	3/16"	10"
RS4011-4708	Offset K/O Punch	1/4"	10"

SWIVEL DIMPLING TOOLS – FEMALE



Part No.	Shank Size	Style	OAL	Rivet Size
RS4317-4703	.401	Female	90mm	3/32"
RS4317-4704	.401	Female	90mm	1/8"
RS4317-4705	.401	Female	90mm	5/32"
RS4317-4706	.401	Female	90mm	3/16"

SWIVEL DIMPLING TOOLS – MALE



Part No.	Shank Size	Style	OAL	Rivet Size
RS4316-4703	.401	Male	90mm	3/32"
RS4316-4704	.401	Male	90mm	1/8"
RS4316-4705	.401	Male	90mm	5/32"
RS4316-4706	.401	Male	90mm	3/16"

JIFFY SHORT SHANK RIVET SETS



Part No.	Shank Size	OAL	Rivet Size
RS4004-4703	.401"	32mm	3/32"
RS4004-4704	.401"	32mm	1/8"
RS4004-4705	.401"	32mm	5/32"
RS4004-4706	.401"	32mm	3/16"
RS4004-4708	.401"	32mm	1/4"

JIFFY FLUSH RIVET SETS



Part No.	Style	Shank Size	OAL	Diameter
RS4006-4713	Straight	.401"	32mm	13mm
RS4007-4713	Offset	.401"	45mm	13mm

JIFFY OFFSET SHORT SHANK RIVET SETS



Part No.	Shank Size	OAL	Rivet Size
RS4005-4703	.401"	45mm	3/32"
RS4005-4704	.401"	45mm	1/8"
RS4005-4705	.401"	45mm	5/32"
RS4005-4706	.401"	45mm	3/16"
RS4005-4708	.401"	45mm	1/4"

HUCK/HI-LOK® COLLAR REMOVERS



Part No.	Shank Size	OAL	Rivet Size
RS4415-4704	.401"	140mm	1/8"
RS4415-4705	.401"	140mm	5/32"
RS4415-4706	.401"	140mm	3/16"
RS4415-4708	.401"	140mm	1/4"
RS4415-4709	.401"	140mm	5/16"
RS4415-4710	.401"	140mm	3/8"

RIVET SET EXTENDER

Extend any .401 shank by 200mm



Part No.	Description	Shank Size
RS4511-4700	Rivet Set Extender 8"	.401

NO-MAR BACK RIVET SHOOTER

Spring-loaded guard holds down skin while back-riveting.



Part No.	Shank Size	Diameter	OAL
RS1049	.401	3/8"	5 3/4"

SHANK SLEEVE ADAPTER

Shank adpter sleeve converts any .401" rivet set to a .498" shank where space is limited.



Part No.	Rivet Set Shank Size	Air Tool Shank
RS4013	.401	.498"

RIVET SETS – BAC MODIFIED UNIVERSAL (BACR 15FT)

Universal Cutaway Rivet Sets



Part No.	Rivet Size	Shank Size	OAL (in/mm)
RS4313-4703	3/32"	.401	3-1/2 / 90
RS4313-4704	1/8"	.401	3-1/2 / 90
RS4313-4705	5/32"	.401	3-1/2 / 90
RS4313-4706	3/16"	.401	3-1/2 / 90
RS4313-4708	1/4"	.401	3-1/2 / 90

PHENOLIC SCRAPER FOR RIVET GUN

- Suits standard .401 Rivet Guns
- Can be used as a hand hels Scraper
- Non conductive & noon-sparking



Part No.	Description
SC2002	Phenolic Rivet Gun Scraper

RIVET SET SHANK ADAPTERS



Part No.	Rivet Set Shank Size	Air Tool Shank Size	OAL
RS4011	.498	.401	95mm
RS4012	.401	.498	95mm

"OLD MAN" SCREW KNOCKER REMOVER TOOL

- Standard .401 shank to fit rivet gun for removing stubborn screws
- 3/8" Drive accepts sockets or 1/4 bit adapter available separately



Part No.	Description
RS4809	200mm Screw Knocker
RS4810	100 mm Screw Knocker
720138	3/8" Drive - 1/4" Bit Holder

RIVET SETS – BAC MODIFIED OFFSET (BAC 15FT)

Universal Cutaway Rivet Sets



Part No.	Rivet Size	Shank Size	OAL (in/mm)
RS4314-4703	3/32"	.401	3-1/2 / 90
RS4314-4704	1/8"	.401	3-1/2 / 90
RS4314-4705	5/32"	.401	3-1/2 / 90
RS4314-4706	3/16"	.401	3-1/2 / 90
RS4314-4708	1/4"	.401	3-1/2 / 90

RIVET TYPE CHART

Note: The Rivet sets shown below suit AN450 Semi Tubular Rivets



AN 470 Universal	AN 430 Round	AN 435 Button	AN 442 Flat	AN 450 Semi-Tubular	AN 455 Brazier	AN 456 Mod. Brazier	AN 426 Countersunk	BACR 15FT Brilles Boeing

TUBULAR RIVET SETS AN450

Select the required rivet set (first chart), then add the desired cupping (second chart). Example: 07-10-4504





.401 Shank Straight	.401 Shank Offset	Size	Rivet Type	Length
RS4710-4502	RS4720-4502	1/16"	AN450	3-1/2" / 89MM
RS4710-4503	RS4720-4503	3/32"	AN450	3-1/2" / 89MM
RS4710-4504	RS4720-4504	1/8"	AN450	3-1/2" / 89MM
RS4710-4505	RS4720-4505	5/32"	AN450	3-1/2" / 89MM
RS4710-4506	RS4720-4506	3/16"	AN450	3-1/2" / 89MM
RS4710-4508	RS4720-4508	1/4"	AN450	3-1/2" / 89MM
RS4710-4510	RS4720-4510	5/16"	AN450	3-1/2" / 89MM
RS4711-4502	RS4721-4502	1/16"	AN450	5-1/2" / 140MM
RS4711-4503	RS4721-4503	3/32"	AN450	5-1/2" / 140MM
RS4711-4504	RS4721-4504	1/8"	AN450	5-1/2" / 140MM
RS4711-4505	RS4721-4505	5/32"	AN450	5-1/2" / 140MM
RS4711-4506	RS4721-4506	3/16"	AN450	5-1/2" / 140MM
RS4711-4508	RS4721-4508	1/4"	AN450	5-1/2" / 140MM
RS4711-4510	RS4721-4510	5/16"	AN450	5-1/2" / 140MM
RS4712-4502	RS4722-4502	1/16"	AN450	7-1/2" / 191MM
RS4712-4503	RS4722-4503	3/32"	AN450	7-1/2" / 191MM
RS4712-4504	RS4722-4504	1/8"	AN450	7-1/2" / 191MM
RS4712-4505	RS4722-4505	5/32"	AN450	7-1/2" / 191MM
RS4712-4506	RS4722-4506	3/16"	AN450	7-1/2" / 191MM
RS4712-4508	RS4722-4508	1/4"	AN450	7-1/2" / 191MM
RS4712-4510	RS4722-4510	5/16"	AN450	7-1/2" / 191MM

RIVET TAPE

- Securely holds rivets in place until you are ready to install them
- The centre section is non-adhesive and rivets are clearly visible through this "centre window"
- A major time saver



Part No.	Description	Size
RT6851	Rivet Tape	19mm x 65.8m
RT6852	Rivet Tape	25mm x 65.8m

SHOP HEAD RIVET GAGE



Part No.	Description
GR1001	Rivet Gage Set

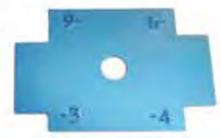
SNAP-SOC™ RIVET SET CAPS

- An inexpensive solution to rivet head damage
- Colour coded for rivet size
- Lasts for about 50-75 rivets before needing to be replaced



Part No.	Description	Rivet Size	Qty
SS4033	Snap-Soc™ Rivet Caps	3/32"	10
SS4018	Snap-Soc™ Rivet Caps	1/8"	10
SS4053	Snap-Soc™ Rivet Caps	5/32"	10
SS4031	Snap-Soc™ Rivet Caps	3/16"	10
SS4014	Snap-Soc™ Rivet Caps	1/4"	10

RIVET LENGTH GAGE



Part No.	Description
GR1002	Rivet Length Gage

Tungsten Bucking Bars

Tungsten Bucking bars have been found to be very useful in the application of a dolly, being very heavy for their size and very hard. It must be pointed that tungsten is actually a brittle material. Considering the price of tungsten bars, we feel we must warn our customers to handle these bars with some care. The fact that they are used in a rivet/hammering application, we cannot guarantee that the bar will not break if you dropped it or used it for any application other than setting of rivets

BUCKING BAR, TUNGSTEN



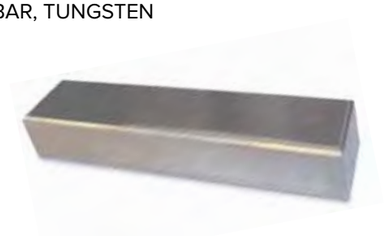
Part No.	Description	Size LxWxH	Weight
BB1205	Tungsten Bucking Bar	140 x 38 x 13mm	1.27kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
TSBB-02	Tungsten Bucking Bar	-	1.39kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
TSBB-01	Tungsten Bucking Bar	-	0.75kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1103	Tungsten Bucking Bar	64 x 38 x 19mm	0.75kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1100	Tungsten Bucking Bar	51 x 38 x 16mm	0.52kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1117	Tungsten Bucking Bar	70 x 51 x 19mm	1.15kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1102	Tungsten Bucking Bar	63 x 51 x 25mm	1.28kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1105	Tungsten Bucking Bar	64 x 32 x 25mm	0.73kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1119	Tungsten Bucking Bar	73 x 51 x 25mm	1.2kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1107	Tungsten Bucking Bar	51 x 32 x 25mm	0.60kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1106	Tungsten Bucking Bar	51 x 35 x 19mm	0.66kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1190	Tungsten Bucking Bar	102x51x25mm	1.39kg

BUCKING BAR, TUNGSTEN



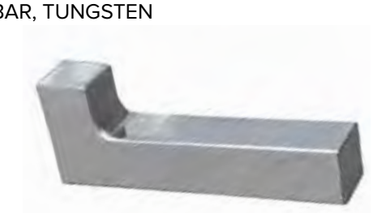
Part No.	Description	Size LxWxH	Weight
BB1109	Tungsten Bucking Bar	64 x 51 x 25mm	1.0kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1112	Tungsten Bucking Bar	152 x 38 x 19mm	1.27kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1252	Tungsten Bucking Bar	102x38x19mm	0.79kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1115	Tungsten Bucking Bar	111 x 38 x 25	0.92kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1118	Tungsten Bucking Bar	126 x 38 x 38mm	1.1kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1160	Tungsten Bucking Bar	101 x 80 x 19mm	0.91kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1113	Tungsten Bucking Bar	64 x 19 x 102mm	1.26kg

BUCKING BAR, TUNGSTEN



Part No.	Description	Size LxWxH	Weight
BB1108	Tungsten Bucking Bar	95 x 51 x 25mm	2.3kg

Steel Bucking Bars

BUCKING BAR, STEEL



Part No.	Description	Weight
BB1037	Bucking Bar	1 lbs / 0.45 kg

BUCKING BAR, STEEL



Part No.	Description	Weight
BB1750	Bucking Bar	1.25 lbs / 0.57 kg

BUCKING BAR, STEEL



Part No.	Description	Size LxWxH	Weight
BB1154	Bucking Bar	163 x 38 x 38mm	1.39kg

BUCKING BAR, STEEL



Part No.	Description	Size LxWxH	Weight
BB1074	Bucking Bar	76 x 40 x 33mm	0.55kg

BUCKING BAR, STEEL



Part No.	Description	Weight
BB1153	Bucking Bar	1.4 lbs / 0.64 kg

BUCKING BAR, STEEL



Part No.	Description	Weight
BB1150	Bucking Bar	1.2 lbs / 0.55 kg

BUCKING BAR, STEEL



Part No.	Description	Size LxWxH	Weight
BB1141	Bucking Bar	263 x 25 x 78mm	1.631kg

BUCKING BAR, STEEL



Part No.	Description	Weight
BB1149	Bucking Bar	2.2 lbs / 1.0 kg

BUCKING BAR, STEEL – T-SHAPE



Part No.	Description	Weight
BB1036	Bucking Bar T-Shape	1.5 lbs / 0.68 kg

BUCKING BAR, STEEL



Part No.	Description	Size LxWxH	Weight
BB1080	Bucking Bar	97 x 42 x 25mm	0.56kg

BUCKING BAR, STEEL – HEEL & TOE



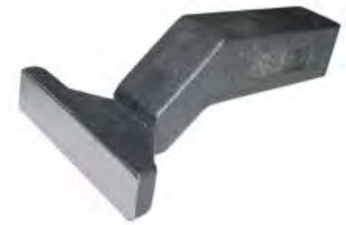
Part No.	Description	Size LxWxH	Weight
BB1029	Bucking Bar Heel & Toe	163 x 25 x 78mm	0.91kg

BUCKING BAR, STEEL



Part No.	Description	Size LxWxH	Weight
BB1078	Bucking Bar	109 x 51 x 26mm	1.071kg

BUCKING BAR, STEEL



Part No.	Description	Weight
BB1140	Bucking Bar	1.5 lbs / 0.68 kg

BUCKING BAR, STEEL



Part No.	Description	Weight
BB1161	Bucking Bar	1.1 llbs / 0.5 kg

BUCKING BAR, STEEL



Part No.	Description	Size LxWxH	Weight
BB1082	Bucking Bar	100 x 25 x 50mm	0.62kg

BUCKING BAR, STEEL



Part No.	Description	Size LxWxH	Weight
BB1147	Bucking Bar	135 x 27 x 29mm	0.68kg

Desoutter Rivet Squeezers

DESOUTTER RIVET SQUEEZERS

For applications requiring the special "Alligator Jaws or C-Yokes"


A


B


C


D


E



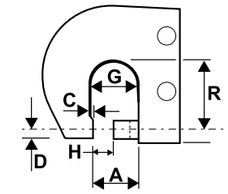
New available adjustable rivet set holders
for C-Yoke & Alligator tools.
Comes with 5mm rivet set shank.
Search for the "-5" tools in the list below.

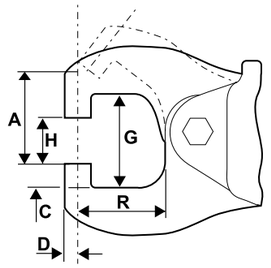
Part No.	Model	Ref	Capacity light		Capacity hard		Max Force (90 psi/ 6.2 bar)		Moving Plunger Max Travel		Moving Plunger Final Part of Stroke at max Force		Standard Yoke Dimensions Reach (R)		Standard Yoke Dimensions Closed Height (H)		Length		Weight	
			mm	in.	mm	in.	kN	lb	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	kg	lb
C-Yoke (single cylinder)																				
T012344	CP0214CELEL*	A	3.2	1/8	2.4	3/32	13.35	3,000	14.3	9/16	1.3	0.050	38.1	1-1/2	17.5	11/16	262	10.3	2.0	4.41
6151710160	CP0214CEREL-5	A	3.2	1/8	2.4	3/32	13.35	3,000	14.3	9/16	1.3	0.050	50	1,969	17/20	0,669/0,787	262	10.3	2.0	4.41
T018677	CP0214CENEL		Same power unit as above without yoke																	
T008955	CP0351CUDEL*	B	4.8	3/16	4.0	5/32	26.70	6,000	14.3	9/16	3.2	0.125	54	2-1/8	19.8	25/32	445	17.5	5.7	12.6
T007772	CP0351CUNEL		Same power unit as above without yoke																	
C-Yoke (tandem cylinder)																				
T013152	CP0214FALEL*	A	4.8	3/16	4.0	5/32	26.70	6,000	14.3	9/16	1.6	0.063	38.1	1-1/2	17.5	11/16	356	14	2.5	5.5
6151710150	CP0214FAREL-5	A	4.8	3/16	4.0	5/32	26.70	6,000	14.3	9/16	1.6	0.063	50	1,969	17/20	0,669/0,787	356	14	2.5	5.5
T022528	CP0214FAXEL*	A	4.8	3/16	4.0	5/32	26.70	6,000	14.3	9/16	1.6	0.063	50.8	2.5	17.5	11/16	366	14.4	2.6	5.7
T018430	CP0214FANEL		Same power unit as above without yoke																	
T023475	CP0214KETEL**	A	4.8	3/16	4.0	5/32	26.70	6,000	14.3	9/16	1.6	0.063	38.1	1-1/2	17.5	11/16	356	14	2.5	5.5
T012608	CP0351FUDEL*	B	6.4	1/4	5.6	7/32	53.40	12,000	14.3	9/16	3.2	0.125	54	2-1/8	19.8	25/32	552	21.7	6.9	15.2
Alligator (single cylinder)																				
T012343	CP0214ANBEL*	C	3.2	1/8	2.4	3/32	13.35	3,000	15.9	5/8	1.3	0.050	38.1	1-1/2	22.2	7/8	233	9.17	1.7	3.75
T018671	CP0214ANFEL*	C	2.4	3/32	2.4	3/32	9.79	2,200	22.2	7/8	2.4	0.094	57.1	2-1/4	22.2	7/8	254	10	1.9	4.18
T018672	CP0214ANGEL*	C	2.4	3/32	1.6	1/16	8.01	1,800	31.8	1-1/4	1.4	0.056	76.2	3	22.2	7/8	273	10.7	2.0	4.41
T019138	CP0214ANPEL		Same power unit as above without yoke																	
T007783	CP0351ASGEL*	D	4.0	5/32	3.2	1/8	23.14	5,200	15.9	5/8	3.2	0.125	73	2-7/8	22.2	7/8	495	19.5	7.1	15.6
T007773	CP0351ASKEL*	D	3.2	1/8	2.4	3/32	15.13	3,400	34.0	1-3/8	4.8	0.188	127	5	22.2	7/8	549	21.6	9.0	19.8
T009582	CP0351ASVEL*	D	3.2	1/8	2.4	3/32	13.35	3,000	42.9	1-11/16	1.6	0.063	232	9-1/8	19.1	3/4	654	25.7	11.9	26.2
Alligator (tandem cylinder)																				
T018164	CP0214ENGEL*	C	3.2	1/8	2.4	3/32	15.13	3,400	31.8	1-1/4	2.6	0.104	76.2	3	22.2	7/8	343	13.5	2.5	5.51
T018163	CP0214ENFEL*	C	4.0	5/32	3.2	1/8	19.14	4,300	22.2	7/8	2.4	0.094	57.1	2-1/4	22.2	7/8	324	12.8	2.4	5.28
6151710170	CP0214ENCEL-5	C	4.0	5/32	3.2	1/8	19.14	4,300	22.2	7/8	2.4	0.094	57.1	2-1/4	17.2/22.2	0.68/0.87	324	12.8	2.4	5.28
T018678	CP0214ENBEL*	C	4.8	3/16	4.0	5/32	26.70	6,000	15.9	5/8	1.6	0.063	38.1	1-1/2	22.2	7/8	303	11.9	2.2	4.85
T012603	CP0351ESKEL*	D	4.8	3/16	4.0	5/32	30.26	6,800	34.0	1-3/8	4.8	0.188	127	5	22.2	7/8	657	25.9	10.2	22.5
T012604	CP0351ESREL*	D	4.8	3/16	4.0	5/32	26.70	6,000	42.9	1-11/16	4.8	0.188	178	7	38.1	1-1/2	708	27.9	12.2	26.9
T012605	CP0351ESVEL*	D	4.8	3/16	4.0	5/32	26.70	6,000	42.9	1-11/16	1.6	0.063	232	9-1/8	19.1	3/4	762	30	13.2	29.1
T012602	CP0351ESGEL*	D	6.4	1/4	4.8	3/16	46.28	10,400	15.9	5/8	3.2	0.125	73	2-7/8	22.2	7/8	603	23.7	8.4	18.5
C-Yoke (pneumatic™)																				
T022512	CP0341CUDEL**	E	7.1	9/32	6.4	1/4	60.1	13,500	31.8	1-1/4	Full stroke									
T022493	CP0341CUNEL		Same power unit as above without yoke																	

* CR1 / ** CR2

Model	C-Yoke A mm	A in.	C mm	C in.	D mm	D in.	G mm	G in.	H mm	H in.	R mm	R in.
CP0214CELEL	32	1-1/4	-	-	5	3/16	32	1-1/4	17.5	11/16	38	1-1/2
CP0214FALEL	32	1-1/4	-	-	5	3/16	32	1-1/4	17.5	11/16	38	1-1/2
CP0214SETEL	32	1-1/4	-	-	6.4	1/4	32	1-1/4	17.5	11/16	38	1-1/2
CP0214KETEL	32	1-1/4	-	-	6.4	1/4	32	1-1/4	17.5	11/16	38	1-1/2
CP0351CUDEL	39	1-17/32	-	-	5.5	7/32	29	1-5/32	20	25/32	54	2-1/8
CP0351FUDEL	39	1-17/32	-	-	5.5	7/32	29	1-5/32	20	25/32	54	2-1/8
CP0341CUDEL	57	2-1/4	3	1/8	9	11/32	70	2-3/4	25	1	54	2-1/8
CP0214FAXEL	44	1-3/4	-	-	5	3/16	44	1-3/4	17.5	11/16	50.8	2.5
CP0214FAREL-5	36	1,417	-	-	8	0,313	36	1,417	17/20	0,669 /0,787	50	1,969
CP0214 CEREL-5	36	1,417	-	-	8	0,313	36	1,417	17/20	0,669 /0,787	50	1,969

Model	Alligator Jaw A mm	A in.	C mm	C in.	D mm	D in.	G mm	G in.	H mm	H in.	R mm	R in.
CP0214ANGEL	54	2-1/8	-	-	5.5	7/32	54	2-1/8	22	7/8	76	3
CP0214ENGEL	54	2-1/8	-	-	5.5	7/32	54	2-1/8	22	7/8	76	3
CP0214ANFEL	48	1-7/8	-	-	5.5	7/32	54	2-1/8	22	7/8	57	2-1/4
CP0214ENFEL	48	1-7/8	-	-	5.5	7/32	54	2-1/8	22	7/8	57	2-1/4
CP0214ENCEL-5	48	1-7/8	-	-	5.5	7/32	54	2-1/8	22	7/8	57	2-1/4
CP0214ANBEL	38	1-1/2	-	-	5.5	7/32	41	1-5/8	22	7/8	38	1-1/2
CP0214ENBEL	38	1-1/2	-	-	5.5	7/32	41	1-5/8	22	7/8	38	1-1/2
CP0351ASVEL	62	2-7/16	-	-	5.5	7/32	56	2-3/16	19	3/4	232	9-1/8
CP0351ESVEL	62	2-7/16	-	-	5.5	7/32	56	2-3/16	19	3/4	232	9-1/8
CP0351ESREL	81	3-3/16	-	-	5.5	7/32	51	2	38	1-1/2	178	7
CP0351ASKEL	57	2-1/4	-	-	5.5	7/32	41	1-5/8	22	7/8	127	5
CP0351ESKEL	57	2-1/4	-	-	5.5	7/32	41	1-5/8	22	7/8	127	5
CP0351ASGEL	38	1-1/2	-	-	5.5	7/32	41	1-5/8	22	7/8	73	2-7/8
CP0351ESGEL	38	1-1/2	-	-	5.5	7/32	41	1-5/8	22	7/8	73	2-7/8

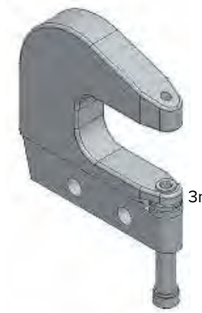




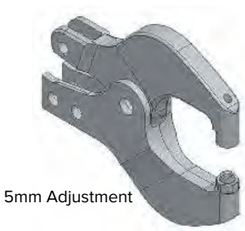
Jaw and Yoke Terminology:
(rivet sets are not in place in this illustration)

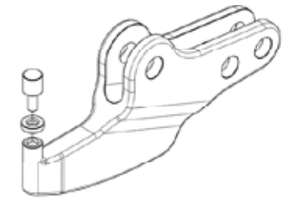
A Throat gap
C Anvil work clearance
D Lower offset
G Total yoke gap
H Closed height
R Reach

Type	Shank Dimensions for Rivet Sets (CR1/CR2) B mm	B in.	C* mm	C* in.	D mm	D in.	E mm	E in.	F mm	F in.	G mm	G in.
CR-1 (ø 4.8mm 3/16")	4.75-4.72	0.187-0.186	12.7	1/2	12.7	1/2	3.45-3.38	0.136-0.133	1.6	1/16	3.23-3.12	0.127-0.123
CR-2 (ø 6.4mm 1/4")	6.42-6.40	0.249-0.248	15.9	5/8	15.9	5/8	3.45-3.38	0.136-0.133	2.4	3/32	4.80-4.70	0.189-0.185


3mm Adjustment


5mm Shank
Rivet Set Holder


5mm Adjustment


CR-1 Rivet Set Shank:
Hardened Shim P083254 (0.4mm / 1/64")
Hardened Shim P083255 (0.8mm / 1/32")

Rivet Set Length Calculation

To develop maximum power, the riveter must drive (set) the rivet at the end of the riveter's stroke. For maximum power the combined length of the two rivet sets must be of the correct length.

A1+A2 = H-M-Z

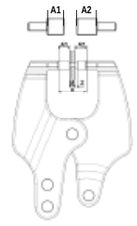
A1: Rivet set thickness (mobile jaw)

A2: Rivet set thickness (fix jaw)

H= Opening at the end of the riveting

M= Total thickness of material to be assembled

Z= height of finished rivet head (flush)



Two Flushed
Rivet Sets



Two Cupped
Rivet Sets
Z = 0



1 Flushed Rivet +
Cupped Rivet Set

Other Rivet Squeezers

GENERAL PNEUMATIC TOOLS – C YOKE RIVETER

- Powerful single cylinder rivet compression tool.
- Comes complete witha 1-1/2" reach jaw (base unit can easily be fitted with other size jaws for different applications).
- Easily squeezes up to 1/8" diameter rivets.
- Accepts industry standard .187(3/16") shank squeezer sets.
- Made in the USA!



Part No.	Cylinder	Reach	Capacity	Length
3000C-1-1/2	Single	38mm	1/8"	260mm
3000C-2	Single	51mm	1/8"	260mm
3000C-3	Single	76mm	1/8"	260mm

GENERAL PNEUMATIC TOOLS – ALLIGATOR YOKE RIVETER

- A lightweight single cylinder "alligator" type squeezer designed to easily install solid rivets in many applications.
- Comes complete with jaws.
- 3000 lbs of pressure to easily handle up to 1/8" diameter rivets.
- Made in the USA!



Part No.	Cylinder	Reach	Capacity	Length
3000A-1-1/2	Single	38mm	1/8"	235mm
3000A-2	Single	51mm	1/8"	235mm
3000A-3	Single	76mm	1/8"	235mm

GENERAL PNEUMATIC TOOLS – C YOKE RIVETER

- Features twin tandem cylinders for added power.
- 6000 lbs of total compressive force, this tool provides maximum power with minimal weight.
- Accepts industry standard .187 shank squeezer sets.
- Will easily squeeze up to 3/16" diameter rivets.
- Made in the USA!



Part No.	Cylinder	Reach	Capacity	Length
6000C-1-1/2	Tandem	38mm	3/16"	355mm
6000C-2	Tandem	51mm	3/16"	355mm
6000C-3	Tandem	76mm	3/16"	355mm

GENERAL PNEUMATIC TOOLS – ALLIGATOR YOKE RIVETER

- Twin tandem cylinder for twice the power of a standard single cylinder tool.
- The rivet capacity depends on the length of reach of the jaws – it is always best to choose the shortest jaws that will work for your application.
- 3/16" aluminum rivet capacity (5/32" steel)
- 6000 lbs of squeezing force.
- Uses industry standard 3/16" shank squeeze sets.
- Swivel air fitting included.
- Made in the USA!



Part No.	Cylinder	Reach	Capacity	Length
6000A-1-1/2	Tandem	38mm	3/16"	305mm
6000A-2	Tandem	51mm	3/16"	305mm
6000A-3	Tandem	76mm	3/16"	305mm

TAYLOR 3 PIECE PNEUMATIC SQUEEZER SET

- The squeezer develops a 3000lb of compression force
- Rated for 1/8" rivets
- Heat treated yokes prevent rust and provide long life
- Yokes interchangeable with CP style squeezers
- One year warranty

Contents:

- Taylor C type squeezer
- Z standard 3" reach yoke
- 2-1/2" "longer-on" yoke



Part No.	Description	Weight (Squeezer)	OAL (Squeezer)
T-3000C-2Y	3 Piece Pneumatic Squeezer Set	1.82kg	262mm

TAYLOR STANDARD C YOKE

- Excellent quality, precision machined from tool steel and perfectly heat treated.
- Black oxide finish to resist rusting
- Upper arm accepts industry standard 3/16" shank rivet squeezer dies
- Industry standard yoke hole pattern will work with all known brands of single cylinder "C" type pneumatic rivet squeezers



Part No.	Description	Reach	Gap
CY-3215	1 1/2" C Type Squeezer Yoke	1-1/2"	1-1/4"
CY-7530	3" C Type Squeezer Yoke	3"	1-1/4"

TAYLOR 2-1/2" YOKE "LONGER-ON" VERSION

- One of our most popular yokes - our "Longeron Yoke" gives you 2-1/2" of reach with more height clearance than standard yokes
- The upper arm has an extra 3/4" of clearance which gives you a total height of 2" to work with
- This yoke is perfect for working over obstructions such as longerons, angles, and stiffeners
- Excellent quality, precision machined from tool steel and perfectly heat treated
- Black oxide finish to resist rusting
- Upper arm accepts industry standard 3/16" shank rivet squeezer dies
- Industry standard yoke hole pattern will work with all known brands of single cylinder "C" type pneumatic rivet squeezers



Part No.	Description
CY-6325	2-1/2" Yoke "LongerOn" Version

FOOT CONTROL CONVERSION KIT

- Converts standard lever-operated compression riveters to foot-operation, freeing up both hands so that the item being riveted can be positioned easily.
- Conversion kit includes a foot control unit plus all required hardware to turn your pneumatic squeezer tool into a foot operated tool.



Part No.	Description
FC 1259	Foot Control Conversion Kit

ADJUSTABLE SET HOLDER

- Will fit any known brand of single cylinder C rivet squeezer
- Eliminates the need for use of shims or diferent squeeze sets
- Precisely adjustable, each full revolution raises or lowers the set holder .0312"



Part No.	Description
AS 1240	Adjustable Set Holder

Manual Rivet Squeezers

TATCO® SQUEEZER

- High quality stainless steel hand squeezer
- Yokes are simply interchanged by removal of three roll pins
- Made in the USA



Part No.	Description
THS1S	1 1/2" Rivet Squeezer
THS20	2" Rivet Squeezer
THS30	3" Rivet Squeezer
THS40	4" Rivet Squeezer

TATCO® YOKES



Part No.	Description	Size / Reach
THY10	Tatco Yoke	25mm
THY15	Tatco Yoke	38mm
THY20	Tatco Yoke	50mm
THY25	Tatco Yoke	63mm
THY30	Tatco Yoke	75mm
THY35	Tatco Yoke	89mm
THY40	Tatco Yoke	101mm
THY50	Tatco Yoke	127mm
THY60	Tatco Yoke	152mm
THY101	Tatco No-Hole Yoke	25mm
THY22	Tatco "Longer-On" Yoke	50mm

QUICK CHANGE YOKE PIN

- For use with stainless steel hand squeeze and economy hand squeeze.
- With pull rings
- Swap yokes quickly and easily when you need a different reach.



Part No.	Description	OAL
121-3/4	For Stainless Steel Hand Squeezer	3/4 inch

TATCO® SQUEEZER KIT

Consists of 1 x THS15 Squeezer, 1 x THY30 Yoke and 6 x squeezer sets (3/32", 1/8", 5/32", 3/16" and 2 x Flush)



Part No.	Description
THY500	Tatco Squeezer Kit

HENCHMAN HAND SQUEEZERS – STAINLESS STEEL

- Stainless steel
- Light weight and extremely durable
- Yokes are interchanged by removing three pins
- Adjustable set holder accepts dies and sets with 3/16" shank.



Part No.	Description	Yoke
H-16300	Hand Rivet Squeezer	1-1/2 inch
H-16306	Hand Rivet Squeezer	3 inch

HENCHMAN YOKES – STAINLESS STEEL



Part No.	Ref	Description	Size
H-16301	A	Yoke	1-1/2 inch
H-16302	B	Yoke	2 inch
H-16302+	C	Yoke	2 x 2 inch
H-16303	D	Yoke	3 inch
H-16304	E	Yoke	4 inch

8 PIECE DIMPLE DIE KIT

As listed in the table below



Part No.	Description
SD 2000	Dimple Die Kit Set of 8

DIMPLE DIE SETS

- 2 Piece set consisting of both male and female dies.
- Suitable for use in hand squeezers or pneumatic squeezers
- Highly polished faces with .187" shanks



Part No.	Rivet Size
SD1933	3/32" Die Set
SD1918	1/8" Die Set
SD1953	5/32" Die Set
SD1931	3/16" Die Set
SD1914	1/4" Die Set
SD1006	#6 Screw
SD1008	#8 Screw
SD1010	#10 Screw

DELUXE TATCO® SQUEEZER KIT

- Made in the USA

Contents:

- TATCO Rivet Squeezer
- 3 interchangeable yokes: 1-1/2", 2", & 3"
- Custom fitted box with precision cut foam for quick and easy tool box storage.
- 6 Squeezer Sets: 3/32", 1/8", 5/32" and 3/16" Cupped; 2 Flush.



Part No.	Description
THY600	Deluxe Tatco Squeezer Kit

HENCHMAN SQUEEZER KIT

Contents:

- Stainless Steel Hand Squeeze
- 2 interchangeable Yokes: 1-1/2 and 3 inch
- Flush Sets 1/2in: 1/8, 1/4, 3/8 and 1/2 inch
- Cupped Sets: 3/32, 1/8, 5/32, 3/16 inch
- Dimple Dies: 3/32, 1/8, 5/32, 3/16 inch
- 3 Quick Change Yoke Pins
- Supplied in a carrying case and two-coloured foam





Part No.	Description
H-76200	Henchman Squeezer Kit

FLUSH SQUEEZER SETS

AN 470 Universal



Part No.	Shank Size	Face Dia.	Body Length
SF 0903	.187"	3/8"	1/8"
SF 0906	.187"	3/8"	1/4"
SF 0909	.187"	3/8"	3/8"
SF 0913	.187"	3/8"	1/2"
SF 0916	.187"	3/8"	5/8"
SF 0919	.187"	3/8"	3/4"
SF 1303 *	.187"	1/2"	1/8"
SF 1306 *	.187"	1/2"	1/4"
SF 1309 *	.187"	1/2"	3/8"
SF 1313 *	.187"	1/2"	1/2"
SF 1316	.187"	1/2"	5/8"
SF 1319	.187"	1/2"	3/4"

19 PIECE SQUEEZER KIT IN BOX

Contents:

- 15 x Cupped Squeezer Sets
- 4 x Flush Rivet Sets
- in two-coloured Foam
- Including Laser Marking on top layer



Part No.	Description
SS 1000	19 Piece Squeezer Kit

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CUPPED SQUEEZER SETS

AN 470 Universal



Part No.	Rivet Size	Shank Size	Body Length
SC 0303	3/32"	.187"	1/8"
SC 0603 *	3/32"	.187"	1/4"
SC 0903 *	3/32"	.187"	3/8"
SC 1303 *	3/32"	.187"	1/2"
SC 1603	3/32"	.187"	5/8"
SC 1903	3/32"	.187"	3/4"
SC 0304	1/8"	.187"	1/8"
SC 0604 *	1/8"	.187"	1/4"
SC 0904 *	1/8"	.187"	3/8"
SC 1304 *	1/8"	.187"	1/2"
SC 1604	1/8"	.187"	5/8"
SC 1904	1/8"	.187"	3/4"
SC 0305	5/32"	.187"	1/8"
SC 0605 *	5/32"	.187"	1/4"
SC 0905 *	5/32"	.187"	3/8"
SC 1205 *	5/32"	.187"	1/2"
SC 1605	5/32"	.187"	5/8"
SC 1905	5/32"	.187"	3/4"
SC 0306	3/16"	.187"	1/8"
SC 0606 *	3/16"	.187"	1/4"
SC 0906 *	3/16"	.187"	3/8"
SC 1306 *	3/16"	.187"	1/2"
SC 1606	3/16"	.187"	5/8"
SC 1906	3/16"	.187"	3/4"
SC 0608 *	1/4"	.187"	1/4"
SC 0908 *	1/4"	.187"	3/8"
SC 1308 *	1/4"	.187"	1/2"
SC 1608	1/4"	.187"	5/8"
SC 1908	1/4"	.187"	3/4"

Gage Bilt Riveters

The GP704F series are pneumatic-hydraulic tools designed specifically for the efficient installation of a wide range of blind rivets. They can be operated in any position with one hand. They have a rated pull load of 3300 pounds with 90 psi air pressure at the air inlet.

- Aerospace Blind Rivets
- 'U' Type
- Cherrymax® Type
- All materials thru 3/16"

POWERMAX RIVETER FOR CHERRYMAX® FASTENERS

- Designed to install all 1/8", 5/32" & 3/16" CherryMax® style fasteners
- Pulling heads for the GP704 are interchangeable with CherryMax® tools



Part No.	Description
GB704	PowerMAX Riveter

AIR BLEEDER ASSEMBLY

Hydraulic systems of pneudraulic tools need to be kept free of air. The air bleeder quickly removes air from the system



Part No.	Description
GB704153	Air Bleeder Assy

STEM CATCHER BAGS

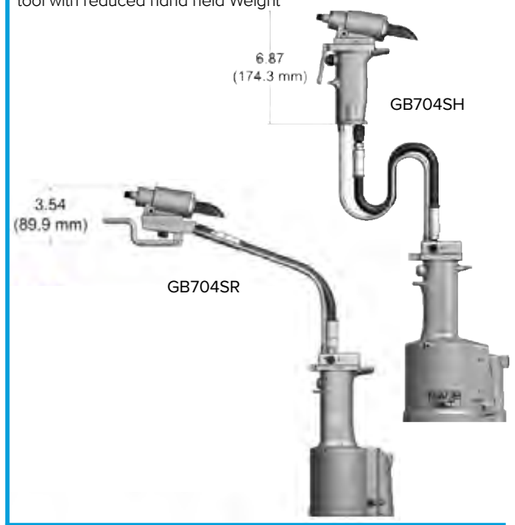
- Convenient accessory that helps eliminate FOD.
- Equipped with a heavy-duty zipper with a Velcro band that holds it securely in place to catch the spent rivet stems as they are ejected.
- See tool manual for part numbers.
- 704214 is equivalent to Cherry® 670A20



Part No.	Description
GB704214	Stem Catcher Bag Vinyl – rear-ejecting
GB756610	Stem Catcher Bag Cotton– rear-ejecting

POWERMAX SPLIT RIVETER FOR CHERRYMAX® FASTENERS

Unique "split" system providing the operator with an ergonomic tool with reduced hand held Weight



Part No.	Description
GB704SH	Split Riveter with 8 Foot Hose
GP704SR	Split Riveter with 3 Foot Hose
GP704SR-8	Split Riveter with 8 Foot Hose

GB704 BLIND RIVETING KIT

- Includes: 3 x Str., 1 x R/A, 1 x Offset Nose Pieces
- A complete tool kit for installing Huck and Cherry blind rivets per NAS9301-NAS9312, M7885, BACR15FP/FR and BACR15GF/GK. The kit contains a straight nose to install -4, –5 and –6 Diameter, bleeder bottle, pintail catcher bag and a grip selector gage, a right angle and an offset nose. All these items are stored in an easy access carrying case with a manual, data sheets, powermax tools manual and pocket card.



Part No.	Description
GB704RK-1	Deluxe Blind Rivet Kit

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NOSE ASSEMBLY SELECTION GUIDE FOR GB704

1) Installs 1/8", 5/32" and 3/16" diameters
2) Right Angle Nose Assemblies may require more than one pull
3) Front end ejecting Nose Assembly

Straight	Right Angle [3]	Offset	Dia.	Fastener
456MAX-701-17 [1]	456MAX-704-54RA [1]	456MAX-704-43OS [1]	1/8"	CHERRYMAX®, CHERRYMAX® 'AB', MBC® LOCK CREATOR BACR15FR/FP, BACR15GF/GK
456MAX-704-35 [1]			5/32"	
456MAX-749-35 [3 1]			3/16"	
3C-704A-16	3C-704-54RA	3C-704A-40OS	3/32"	Nut Plate Rivets MS20600 Series CCR244/264/274 MS/9SP/PT BACR15CC/CF/DA/DR
4C-704A-16	4C-704-54RA	4C-704A-40OS	1/8"	
5C-704A-16	5C-704-54RA	5C-704A-40OS	5/32"	
6C-704A-16	6C-704-54RA	6C-704A-40OS	3/16"	
3A-704A-16	3A-704-54RA	3A-704A-40OS	3/32"	'A' Code NAS1398A NAS1399A
4A-704A-16	4A-704-54RA	4A-704A-40OS	1/8"	
5A-704A-16	5A-704-54RA	5A-704A-40OS	5/32"	
6A-704A-16	6A-704-54RA	6A-704A-40OS	3/16"	
GS8-704-16	GS8-704A-54RA	GS8-704-40OS	8/32"	Ground Stud M83454 BACS53R[15]A1/2

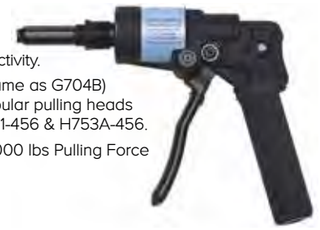
CHERRYMAX® & CHERRY® NUTPLATE HAND RIVETERS



Part No.	Description
GB27	CherryMAX® Hand Riveter 1/8"
GB29	Cherry® Nutplate Riveter 3/32" & 1/8"

CHERRYMAX® HAND RIVET GUN

- Exceptional power with low hand effort for increased productivity.
- Mounting system (same as G704B) compatible with popular pulling heads including H782, H781-456 & H753A-456.
- 3/4" Stroke, up to 6000 lbs Pulling Force



Part No.	Description
G800	CherryMAX® G800 Hand Rivet Gun

CHERRYMAX® HAND RIVET GUN KIT

Includes the G800 Hand Riveter, a straight pulling head, a right angle pulling head, an offset pulling head, an adapter assembly and a measuring and inspection gauge, all housed in a sturdy plastic carrying case.



Part No.	Description
G800CMR	CherryMAX® Hand Installation Tool

NOSE ASSEMBLIES / PULLING HEADS



Straight (Example)



Right Angle (Example)



Offset (Example)

Part No.	Description
see selection guides	Pulling Heads

PULLING HEAD EXTENSIONS



Part No.	Description	Length
704002	Pulling Head Extension	2"
704004	Pulling Head Extension	4"
704006	Pulling Head Extension	6"

CHERRYMAX® HAND INSTALLATION TOOL

- Installs 1/8", 5/32", 3/16" and 1/4" Cherrymax®, Allmax®, & Huckmax® rivets
- .565 (14.35 mm) minimum stroke and a rated pull load of 3,500 lbs. (15.57 kN)



Part No.	Description
GB456A	CherryMAX® Hand Installation Tool

NOSE ASSEMBLY SELECTION GUIDE FOR GB456A

1) Installs 1/8", 5/32" and 3/16" diameters
2) Right Angle Nose Aassemblies may require more than one pull
3) Front end ejecting Nose Assembly
4) Requires 704001 Adapter

Straight	Right Angle [3]	Offset	Dia.	Fastener
456MAX-701-17 [1]	456MAX-704-54RA [12]	456MAX-704-43OS [1]	1/8"	CHERRYMAX®, CHERRYMAX® 'AB', MBC® LOCK CREATOR BACR15FR/FP, BACR15GF/GK, NAS1900 S & U Series Blind Rivet with Drive Washer
456MAX-704-35 [1]			5/32"	
456MAX-749-35 [13]			3/16"	
3C-715B-43 [4]	3C-704-54RA [2]	3C-704A-40OS	3/32"	Nut Plate Rivets MS20600 Series CCR244/264/274 MS/9SP/PT BACR15CC/CF/DA/DR
4C-715B-43 [4]	4C-704-54RA [2]	4C-704A-40OS	1/8"	
5C-715B-43 [4]	5C-704-54RA [2]	5C-704A-40OS	5/32"	
6C-715B-43 [4]	6C-704-54RA [2]	6C-704A-40OS	3/16"	
3A-715B-43 [4]	3A-704-54RA [2]	3A-704A-40OS	3/32"	'A' Code NAS1398A NAS1399A
4A-715B-43 [4]	4A-704-54RA [2]	4A-704A-40OS	1/8"	
5A-715B-43 [4]	5A-704-54RA [2]	5A-704A-40OS	5/32"	
6A-715B-43 [4]	6A-704-54RA [2]	6A-704A-40OS	3/16"	
GS8-715B-43 [4]			8/32"	Ground Stud M83454 BACS53B1EA1/2
GS10-715B-43 [4]			10/32"	

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PNEUMATIC RIVETER



- Designed specifically for the most efficient installation of blind rivets. It will in-stall aluminum rivets through 5/32" diameter, and through 1/8" diameter rivets in any material. It weighs only 1.8 lbs. (0.82 kg) and can be operated in any position.
- 8.36" high, 740 (18.8 mm) stroke, generates a minimum of 700 lbs. (3.11 kN) pull load at 90 psi (6.2 bar). It operates on 90 to 100 psi (6.2-6.9 bar) of air pressure at the tool.
- Nose Assembly supplied separately

Part No.	Description
GB50	Pneumatic Rivet Installation Tool
GB50RK	Pneumatic Rivet Installation Kit

PNEUMATIC RIVETER



- Designed specifically for the most efficient installation of blind rivets. It will install aluminum rivets through 3/16" diameter, and through 1/8" diameter rivets in any material. It weighs only 2 1/2 lbs. (1.13 kg) and can be operated in any position.
- 8.36" high, 740 (18.8 mm) stroke and generates a minimum of 1000 lbs. (4.45 kN) of pull at 90 psi. (6.2 bar). It operates on 90 to 100 psi (6.2-6.9 bar) of air pressure at the tool.
- Nose Assembly supplied separately

Part No.	Description
GB51	Pneumatic Rivet Installation Tool
GB51RK	Pneumatic Rivet Installation Kit

PNEUMATIC RIVETER WITH COLLECTION BOTTLE



- Including a Collection Bottle for spent pin tails eliminating FOD
- Same stroke and load
- Nose Assembly supplied separately

Part No.	Description
GB54B	GB50 with Collection Bottle
GB55B	GB51 with Collection Bottle

STEM CATCHER BAGS



- Convenient accessory that helps eliminate FOD.
- Equipped with a heavy-duty zipper with a Velcro band that holds it securely in place to catch the spent rivet stems as they are ejected.

Part No.	Description
GB500610	Stem Catcher Bag Cotton – side-ejecting xx-51-46
GB715610	Stem Catcher Bag Cotton – side-ejecting xx-715-43

NOSE ASSEMBLY SELECTION GUIDE FOR GB50

Straight	Right Angle	Offset	Dia.	Fastener
3C-715B-43	3C-715A-54RA [4]	3C-715A-40OS	3/32"	Nut Plate Rivets MS20600 Series CCR244/264/274 MS/9SP/PT BACR15CC/CF/DA/DR
4C-715B-43	4C-715A-54RA [4]	4C-715A-40OS	1/8"	
5C-715B-43	5C-715A-54RA [4]	5C-715A-40OS	5/32"	
3A-715B-43	3A-715A-54RA [1]	3A-715A-40OS	3/32"	'A' Code NAS1398A NAS1399A NAS1738A NAS1739A
4A-715B-43	4A-715A-54RA [1]	4A-715A-40OS	1/8"	
5A-715B-43	5A-715A-54RA [1]	5A-715A-40OS	5/32"	
SMLS04-715B-43	SMLS04-715A-54RA [1]	SMLS04-715B-40OS	1/8"	Blind Rivet (Single Action) with or W/out Drive Washer NAS1900 S & U SERIES
SMLS05-715B-43	SMLS05-715A-54RA [1]	SMLS05-715B-40OS	5/32" [2]	
MBC04-715C-43			1/8"	MBC® NAS1715-1721
MBC05-715C-43			5/32"	
MBC06-715C-43			3/16"	
3N-715E-43	3N-715A-54RA [1]	3N-715-40OS	3/32"	Open End Nail Rivet
4N-715E-43	4N-715-54RA [1]	4N-715-40OS	1/8" [2]	
5N-715E-43	5N-715-54RA [1]	5N-715-40OS	5/32" [2]	
3N-715E-43	3N-715A-54RA [1]	3N-715-40OS	3/32"	Closed End Nail Rivet (Aluminium Mandrel)
4CEA-715E-43	4CEA-715-54RA [1]	4CEA-715-40OS	1/8"	
5CEA-715E-43	5CEA-715-54RA [1]	5CEA-715-40OS	5/32"	
3N-715E-43	3N-715A-54RA [1]	3N-715-40OS	3/32"	Closed End Nail Rivet (Steel Mandrel)
4CES-715E-43	4CES-715-54RA [1]	4CES-715-40OS	1/8"	
5CES-715E-43	5CES-715-54RA [1]	5CES-715-40OS	5/32"	
3C-715B-43	3C-715A-54RA [1]	3C-715A-40OS	3/32"	FASTACK® AF5075 AF5076 S149A020
4C-715B-43	4C-715A-54RA [1]	4C-715A-40OS	1/8"	
5C-715B-43	5C-715A-54RA [1]	5C-715A-40OS	5/32"	
3A-715B-43	3A-715A-54RA [1]	3A-715A-40OS	1/8"	SUPERTACK® AF5075 AF5076 S149A020
4A-715B-43	4A-715A-54RA [1]	4A-715A-40OS	5/32"	

NOSE ASSEMBLY SELECTION GUIDE FOR GB51

Straight	Right Angle	Offset	Dia.	Fastener
3C-715B-43	3C-715A-54RA [3]	3C-715A-40OS	3/32"	Nut Plate Rivets MS20600 Series CCR244/264/274 MS/9SP/PT BACR15CC/CF/DA/DR
4C-715B-43	4C-715A-54RA [3]	4C-715A-40OS	1/8"	
5C-715B-43	5C-715A-54RA [3]	5C-715A-40OS	5/32" [2]	
6C-715B-43	6C-715A-54RA [1]	6C-715A-40OS	3/16" [2]	
3A-715B-43	3A-715A-54RA [1]	3A-715A-40OS	3/32"	'A' Code NAS1398A NAS1399A NAS1740A NAS1739A
4A-715B-43	4A-715A-54RA [1]	4A-715A-40OS	1/8	
5A-715B-43	5A-715A-54RA [1]	5A-715A-40OS	5/32" [2]	
6A-715B-43	6A-715A-54RA [1]	6A-715A-40OS	3/16" [2]	
SMLS04-715B-43	SMLS04-715A-54RA [1]	SMLS04-715B-40OS	1/8"	Blind Rivet (Single Action) with or W/out Drive Washer NAS1900 S & U SERIES
SMLS05-715B-43	SMLS05-715A-54RA [1]	SMLS05-715B-40OS	5/32" [2]	
SMLS06-715B-43	SMLS06-715A-54RA [1]	SMLS06-715B-40OS	3/16" [2]	
456MAX-715-43	456MAX-715B-54RA [1]	456MAX-715B-40OS	1/8"	CHERRYMAX®, CHERRYMAX® 'AB', MBC® LOCK CREATOR BACR15FR/FP, BACR15GF/GK
MBC04-715C-43			1/8"	MBC® NAS1715-1721
MBC05-715C-43			5/32"	
MBC06-715C-43			3/16"	
3N-715E-43	3N-715A-54RA [1]	3N-715A-40OS	3/32"	Open End Nail Rivet
4N-715E-43	4N-715-54RA [1]	4N-715A-40OS	1/8" [2]	
5N-715E-43	5N-715-54RA [1]	5N-715A-40OS	5/32" [4]	
6N-715E-43	6N-715-54RA [1]	6N-715A-40OS	3/16" [2]	
3N-715E-43	3N-715A-54RA [1]	3N-715A-40OS	3/32"	Closed End Nail Rivet (Aluminium Mandrel)
4CEA-715E-43	4CEA-715-54RA [1]	4CEA-715-40OS	1/8"	
5CEA-715E-43	5CEA-715-54RA [1]	5CEA-715-40OS	5/32"	
6CEA-715E-43	6CEA-715-54RA [1]	6CEA-715-40OS	3/16"	
3N-715E-43	3N-715A-54RA [1]	3N-715-40OS	3/32"	Closed End Nail Rivet (Steel Mandrel)
4CES-715E-43	4CES-715-54RA [1]	4CES-715-40OS	1/8"	
5CES-715E-43	5CES-715-54RA [1]	5CES-715-40OS	5/32"	
3C-715B-43	3C-715A-54RA [1]	3C-715A-40OS	3/32"	FASTACK® AF5022 AF5055
4C-715B-43	4C-715A-54RA [1]	4C-715A-40OS	1/8"	
5C-715B-43	5C-715A-54RA [1]	5C-715A-40OS	5/32"	
3A-715B-43	3A-715A-54RA [1]	3A-715A-40OS	1/8"	SUPERTACK® AF5075 AF5076 S149A020
4A-715B-43	4A-715A-54RA [1]	4A-715A-40OS	5/32"	
5A-715B-43	5A-715A-54RA [1]	5A-715A-40OS	3/16"	

1) Right Angle Nose Assemblies may require more than one pull 2) Aluminium only 3) Self-plugging Aluminium only 4) Aluminium and Steel only

Note: The last 2 digits of the Nose Assembly represent the length the nose extends from the tool eg. -20 = 2.0 inches

GAGE BILT CORDLESS BLIND RIVETER



- Stroke: 20 mm
- 3/16"
- 12V
- Power: 1800 lbf
- Weight (Incl. battery): 2.8 lbs.
- Brushless Motor
- Tool-free Maintenance
- Charging time: < 30 mins

Contents:

- RivdomZERO battery riveter incl. 12 V/2.0 Ah battery (number depending on variant) with optical charge state indicator, 4x standard nosepiece in box, Rivdom-PLUS quick charger, mandrel container, belt clip, hanger and cover cap in L-Boxx with coloured sales sleeve.

Part No.	Description
GB101	Gage Bilt Cordless Riveter RivdomZero

GAGE BILT CORDLESS BLIND RIVETER



- Stroke: 1.181" (30 mm)
- 1/8"-1/4"
- 20V
- Rated Pull Load: 4,496 lbs. (20 kN)
- Sound Emissions: <65 / 3 LpA / K
- Vibrations: <2.5 / 1.5 ah / K m/s²
- Weight (Incl. battery): 4.4 lbs. (2 kg)
- Brushless Motor
- Tool-free Maintenance

Contents:

- RivdomTWO battery riveter incl. 20 V battery (number depending on variant) with optical charge state indicator, 4x standard nosepiece in box, Rivdom-PLUS quick charger, mandrel container and cover cap in L-Boxx with coloured sales sleeve.

Part No.	Description
GB108	Gage Bilt Cordless Riveter RivdomTwo

GAGE BILT CORDLESS LOCKBOLT RIVETER



- Stroke: 1.181" (30 mm)
- 5/32"-1/4"
- 20V
- Rated Pull Load: 5.395 lbs. (24 kN)
- Sound Emissions: <65 / 3 LpA / K
- Vibrations: <2.5 / 1.5 ah / K m/s²
- Weight (Incl. battery): 4.6 lbs. (2.1 kg)
- Brushless Motor
- Tool-free Maintenance

Contents:

- RivdomTWOSF battery riveter incl. 20 V battery (number depending on variant) with optical charge state indicator, 4x standard nosepiece in box, Rivdom-PLUS quick charger, mandrel container and cover cap in L-Boxx with coloured sales sleeve.

Part No.	Description
GB110A	Gage Bilt Cordless Riveter RivdomTwoSF

Tool Cross- Reference Chart to Gage Bilt

Tool #	Gage Bilt	Tool#	Gage Bilt
202	GBP752F	262B	GBP7262B
206-375	GBP206-375	2630	GBP2630
208-750	GBP208-750	G83	GBP730E
212	GBP713C	G84	GBP731
244	GBP731	G85	GBP745D
245	GBP745D	G200	GBP700
255	GBP745D	G703	GBP703E
585	GBP585	G704B	GBP704F
586	GBP586	G715	GBP715C
2013	GBP704F	G740	GBP740B
2015	GBP751D	G743A	GBP743C
2022	GBP743C	G744	GBP744A
2025	GBP722A	RV14GD	GBP715C
2480	GBP2480	RV30GD	GBP740A / 715
2580	GBP2581	RV50	GB50
256	GBP756	RV51	GB51
2620	GBP2620	PRG540	GBP743C

BLIND BOLT RIVETING KIT

- For installing 2000 series CHERRYLOCK® rivets conforming to NAS1738-39 & NAS1398-99, 1/8" thru 3/16"
- 1/4" Nose Assembly (8C) can be ordered separately
- In an easy access carrying case with manual and data sheet

Contents:

- GB784 tool, bleeder bottle
- Straight noses to install -4, -5 and -6 Diameters
- Stroke setting gage
- Bleeder bottle



Blind Rivet	Dia.	Nose Assembly
	1/8"	4C-681-25
	5/32"	5C-681-25
	3/16"	6C-681-25

Part No.	Description
GB784RK	Blind Rivet Kit with 3 Nose Pieces (Straight only)

BLIND BOLT RIVETING KIT

- For installing Huck and Cherry blind bolts 5/32" thru 3/16" per MS21140 & MS21141 (U or S) and MS90353 & MS90354 (U or S)
- In an easy access carrying case with manuals and data sheets.

GB752BBK Contents:

- Straight noses to install -5 and -6 Diameters
- Bleeder Bottle
- Pintail Catcher Bag
- Grip Selector Gage

GB752BBK-1 Contents:

- Right Angle Noses
- Offset Noses
- Stroke limiter

* Noses listed protrude 2 Inches from the tool. Longer noses are available.

** Required 752140 stroke limiter

For 4.5 Inches order SBxx-752B-45

For 8.0 Inches order SBxx-752B-80



Blind Rivet	Dia.	Nose Assembly		
		Straight	Right Angle	Offset
	5/32"	*SB05-752B -20	**SB05-751B -54RA	SB05-752A -43OS
	3/32"			
	3/16"	*SB06-752B -20	**SB06-751B -54RA	SB06-752A -43OS
	3/16"			

Part No.	Description
GB752BBK	Blind Bolt Kit 2 Nose Pieces (Straight only)
GB752BBK-1	Blind Bolt Kit 9 Nose Pieces (All listed above)

BLIND RIVET KITS

- For installing blind rivets per NAS1919 S & U and NAS1921 S & U
- In an easy access carrying case with manuals and data sheets

GB751BRK Contents:

- Straight noses to install -4, -5 and -6
- Bleeder Bottle
- Pintail Catcher Bag
- Grip Selector Gage

GB751BRK-1 Contents:

- Additional right angle noses
- Offset noses
- Stroke limiter.

* Noses listed protrude 2 Inches from the tool. Longer noses are available.

** Required 751153 stroke limiter

For 4.5 Inches order SMLSxx-752B-45

For 8.0 Inches order SMLSxx-752B-80



Blind Rivet	Dia.	Nose Assembly		
		Straight	Right Angle	Offset
	1/8"	*SMLS04-752B-20	**SMLS04-751B-54RA	SMLS04-752A-43OS
	5/32"	*SMLS05-752B-20	**SMLS05-751B-54RA	SMLS05-752A-43OS
	3/16"	*SMLS06-752B-20	**SMLS06-751B-54RA	SMLS06-752A-43OS

Part No.	Description
GB751BRK	Blind Rivet Kit with 3 Nose Pieces (Straight only)
GB751BRK-1	Blind Rivet Kit with 9 Nose Pieces (All listed above)

LOCKBOLT® RIVETING KIT

- For 5/32" thru 1/4" HUCK® (H)LGPL lockbolts.
- In an easy access carrying case with manuals and data sheets.

Contents:

- Set of straight noses to install -5, -6 and -8 Diameters
- Bleeder Bottle
- Grip Scale
- Pintail Catcher Bag



LGP05-2480-20
LGP05-204B-30OS

5/32" Ø



LGP06-2480-20
LGP06-204B-30OS

3/16" Ø



LGP08-730B-20
LGP08-204B-30OS

1/4" Ø

Rivet	Boing Rivet	Collar	Boeing Collar
LGPL2SC-V	BACB30VM	3SLC-C	BACC30BK
LGPL18SCV	BACB30XT	3SLC-C	BACC30BK
LGPL4SC-V	ABS0548	3SLC-C	ASNA2025
LGPL2SP-V	BACB30VN	3SLC-C	BACC30BK
LGPL4SP-V	ASNA2392	3SLC-C	ASNA2025
LGPL8SC-V	BACB30WD	SLFC-MV	BACC30BN
LGPL9SC-V	BACB30WB	SLFC-MV	BACC30BN
LGPL9SP-V	BACB30VY	SLFC-MV	BACC30BN

Part No.	Description
GB731LGPK	Rivet Kit for Huck® Lockbolts

BLIND BOLT RIVETING KITS

- For installing Huck® and Cherry® blind bolts per MS21140 & MS21141 (U or S) and MS90353 & MS90354 (U or S)
- In an easy access carrying case with manuals and data sheets.

GB713BBK Contents:

- Straight Noses to install -5, -6 & -8 Diameters, Bleeder Bottle, Pintail Catcher Bag, Grip Selector Gage.

GB713BBK-1 Contents:

- Right Angle and Offset Noses, Adapter, Stroke Limiters

* Noses listed protrude 2 Inches from the tool. Longer noses are available

** Required 722140 stroke limiter

For 4.5 Inches order SBxx-752B-45

For 8.0 Inches order SBxx-752B-80



Blind Rivet	Dia.	Nose Assembly			Fastener Type
		Straight	Right Angle	Offset	
	5/32"	*SB05-752C -20	**SB05-751C -54RA	SB05-752A -43OS	
	5/32"				
	3/16"	*SB06-752B -20	**SB06-751B -54RA	SB06-204D -27OS	MS90353S & U & MS90354S & U
	3/16"				MS21140S & U & MS211415 & U
					CR7000 Series
	1/4"	SB08-713-20 (requires 105 PSI for alloy steel)	SB08-713A -58RA	SB08-204D-27OS (requires 105 PSI for alloy steel)	BACB30YY, YU & YT
	1/4"				
	1/4"				

Part No.	Description
GB714BBK	Blind Bolt Kit 3 Nosepieces (Straight only)
GB714BBK-1	Blind Bolt Kit 9 Nosepieces

RIVETING KIT – NAS TENSION AND NAS SHEAR LOCKBOLTS®

- For 5/32" thru 1/4" NAS Tension and NAS Shear lockbolts
- In an easy access carrying case with manuals and data sheets

GB731NASK Contents:

- Straight Noses to install -5, -6 & -8 Diameters, Bleeder Bottle, Grip Scale Selector and Pintail Catcher Bag
- Nose pieces marked *

GB731NASK-1 Contents:

- Adapter and Offset Noses
- Nosepieces marked both* and **. The nosepieces marked ** require adapter 751204 which is supplied in the kit.

Self-releasing nose assemblies are available for pull-in applications. These are not included in the kit.

Straight noses are available 4.8in long from gun. Order NASXX-XXX-45.



Blind Rivet	Dia.	Fastener Type	Nose Assy
	5/32"	NAS7005, NAS7015, NAS7025, NAS7035GPL3SC-V05, GPL3SP-V05, GPL3SC-DT05, GPL3SP-DT05, GPL3SC-EU05, GPL3SP-EU05, GPL8TC-V05, GPL8TP-V05, GPL8TC-DT05, GPL8TPDT05, GPL8TC-EU05, GPL8TP-EU05	*NASS05-731-20 **NASS05-352A-20 NASS05-204B-30OS
	5/32"	NAS1465, NAS1475, NAS1525, NAS1535NAS6935, NAS6955, NAS6965	*NAST05-731-20 **NAST05-352A-20 NAST05-204B-30OS
	5/32"	NAS2005, NAS2105, NAS2115, NAS2125	
	3/16"	GPL3SC-V06, GPL3SP-V06, GPL3SC-DT06, GPL3SP-DT06, GPL3SC-EU06, GPL3SP-EU06, GPL8TC-V06, GPL8TP-V06, GPL8TC-DT06, GPL8TP-DT06, GPL8TC-EU06, GPL8TP-EU06	*NAS06-731-20 **NAS06-352B-20 NAS06-204B-30OS
	3/16"	NAS1436, NAS1446, NAS2406, NAS2506, NAS7006, NAS7016, NAS7026, NAS7036	
	3/16"	NAS1456, NAS1466, NAS1476, NAS1516, NAS1526, NAS5136, NAS6936, NAS6946, NAS6956, NAS6966	
	3/16"	NAS2006, NAS2106, NAS2116, NAS2126	
	1/4"	GPL3SC-V08, GPL3SP-V08, GPL3SC-DT08, GPL3SP-DT08, GPL3SC-EU08, GPL3SP-EU08, GPL8TC-V08, GPL8TP-V08, GPL8TC-DT08, GPL8TP-DT08, GPL8TC-EU08, GPL8TP-EU08	*NAS08-731-20 **NAS08-352-20 NAS08-204B-30OS
	1/4"	NAS1438, NAS1448, NAS2408, NAS2508, NAS7008, NAS7018, NAS7028, NAS7038	
	1/4"	NAS1458, NAS1468, NAS1478, NAS1518, NAS1528, NAS6938, NAS6948, NAS6958, NAS6968	
	1/4"	NAS2008, NAS2108, NAS2118, NAS2128	

Part No.	Description
GB731NASK	Rivet Kit for Lockbolts with 4 Nose Pieces
GB731NASK-1	Rivet Kit for Lockbolts with 8 Nose Pieces

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HI-LOK® is a registered trademark of the Hi-Shear and Fairchild Fasteners

HUCK® is a registered trademark of Alcoa

GAGE BILT SELECTION CHART – BLIND RIVETS

If you did not find what you were looking for, please call our sales team!

All tools will install a variety of fasteners. Refer to the tool flyer or manual for a list of noses and fasteners that the tool will install.

Most pneudraulic tools are available with Pistol Grip (SH) and In-line (SR) Split-Systems and/or vacuum collection systems.

"-" indicates the tool will install that fastener, but is not the most cost effective solution.

"X" indicates the tool is not recommended for that fastener.

*Recommended for High Production applications GB940 (Electric) or GB910 (Air) Power Unit required. Order (A) tool with Air Power Unit. Ie GB2480(A)

**GB204 and GB205 hydraulic installation tools are recommended for offset and closed access applications

Rivets	Pneumatic Tools		Pneudraulic Tools						Hydraulic Tools			
	GB50	GB51	GB751	GB722	GB714	GB745	GB756	GB874	*GB2480	*GB2581	**GB204	**GB205
CHERRYMAX® HUCKMAX® ALLMAX® NAS9301 12	x	1/8"	1/8"-3/16"	1/4"	-	-	-	-	1/8"-1/4"	-	-	x
UNIMATIC® BLIND RIVET NAS1919S & U NAS1921S & U	x	1/8"	5/32"-3/16"	1/4"	-	-	-	x	1/8"-1/4"	-	-	x
UNIMATIC BLIND BOLT MAXIBOLT® MS21140/1 S & U MS90353/4 S & U	x	x	1/8"-5/32"	1/8"-3/16"	1/8"-1/4"	-	1/8"-3/8"	x	5/32"-1/4"	5/16"-3/8"	-	-
CHERRYLOCK® NAS1398/99 NAS1738/39	x	x	x	x	x	x	-	1/8"-1/4"	x	x	x	x
"A" CODE CHERRYLOCK "A" NAS1398A NAS1399A	x	3/32"-1/8"	5/32"-3/16"	1/4"	x	-	-	x	3/32"-1/4"	-	-	x
NUTPLATE	3/32"-1/8"	3/32"-1/8"	-	-	x	x	-	x	3/32"-1/8"	-	x	x
FASTACK® AF5055 AF5075 S149A020	3/32"-5/32"	3/32"-5/32"	x	x	x	x	x	x	x	x	x	x
GROUND STUD BACS53B1EA1/2	x	x	-8-10	-	-	-	-	x	-8-10	-	-	x
MBC® NAS1719 - 21	x	1/8"	1/8"-3/16"	-	-	-	-	x	1/8"-3/16"	-	-	x
ASP® 2 ASP ASP FF ASP F ASP LC	x	x	13/64"	21/64"	-	-	-	x	13/64"-21/64"	-	13/64"-21/64"	x
UAB™ EN6122 & UAB130 EU EN6127 & UAB6127 EU EN6128 & UAB100 EU EN6129 & UABP EU MAXIBOLT® PLUS	x	x	3/16"-5/32"	3/16"-1/4"	-	x	-	x	1/8"-1/4"	x	1/8"-1/4"	x

GAGE BILT SELECTION CHART – LOCKBOLTS®

Rivets	Pneudraulic Tools			Hydraulic Tools			
	GB731	GB745	GB756	*GB2480	*GB2581	**GB204	**GB205
LGPL®, Lightweight, Groove, Proportioned, Lockbolt	5/32"-1/4"	5/32"-5/16"	5/16"-3/8"	5/32"-1/4"	5/16"-3/8"	5/32"-1/4"	5/16"-3/8"
GPL®, Groove, Proportioned, Lockbolt	5/32"-1/4"	5/32"-5/16"	5/16"-3/8"	5/32"-1/4"	5/16"-3/8"	5/32"-1/4"	5/16"-3/8"
MLGPL®, Metric, Lightweight, Groove, Proportioned, Lockbolt	4-5mm	6-8mm	8-10mm	4-5mm	8-10mm	-4-6	-8-10
MGPL®, Metric, Groove, Proportioned, Lockbolt	4-6mm	6-8mm	8-10mm	4-6mm	8-10mm	-4-6	-8-10
NAS TENSION	5/32"-1/4"	1/4"-5/16"	5/16"-3/8"	5/32"-1/4"	5/16"-3/8"	5/32"-1/4"	5/16"-3/8"
NAS SHEAR	5/32"-1/4"	1/4"-5/16"	5/16"-3/8"	5/32"-1/4"	5/16"-3/8"	5/32"-1/4"	5/16"-3/8"

Tool #	NAS9301-NAS9312	NAS1919 S & U NAS1921 S & U	MS21140/41 S & U MS90353/54 S & U	NAS 1398 1399 1738 1739	NAS1398A NAS1399A	Nut Plate	AF5055 AF 5075 S149A020	Ground Stud	NAS 1719 1720 1721 MBC	2ASP ASPFF ASPF ASPLC
GB50	x	x	x	x	x	3/32"-1/8"	3/32"-5/32"	x	x	x
GB51	1/8"	1/8"	X	X	3/32"-1/8"	3/32"-1/8"		X	3/32"-1/8"	X
GB751D	-	5/32"-3/16"	5/32"	X	5/32"-3/16"	-		-8	5/32"-3/16"	13-64"
GB704F	5/32"-3/16"	-	-	X	-	-		-	-	-
GB713D	-	1/4"	1/4"	X	1/4"	-		-	1/4"	21-64"
GB745D	-	-	5/16"	X	-	X		-	1/4"	-
GB752F	1/4"	-	3/16"	-	-	-		-10	-	17/64"
GB784B	X	X	X	1/8"-1/4"	X	X		X	X	X
GB746	-	-	5/32"-1/4"	X	-	-		-	-	-
GB2480B	1/8"-1/4"	1/8"-1/4"	5/32"-1/4"	X	3/32"-1/4"	3./32"-1/8"		-8 & -10	3/32"-1/4"	13/64"-21/64"
GB4801B	-	-	5/16"-3/8"	X	-	-		-	-	-
**GB204	-	-	-	X	-	X		-	-	-
**GB205	X	X	-	X	X	X		X	X	X
**GB7XX	-	-	-	X	-	-		-	-	-
**GB5XX	X	X	-	X	X	X		X	X	X

LOCKBOLT® is a registered trademark of Acument Intellectual Properties.

Hi-Lok® Tooling

HI-LOK® HAND REMOVAL TOOLS – HI-LOK® & HI-LITE® COLLAR REMOVAL TOOLS

Slips easily over any threaded collar (Hi-Lok®, Hi-Lite®, and Eddie-Bolt®) and quickly unscrews without cutting or prying. Particularly useful for round or damaged collars, the REM Series prevents metal shavings, broken pieces, and damage to skins or to the adjacent structure.



12° Offset Handle					
Part No.	Collar Dash	Dollar Ø	Width	Height	OAL
REM 100-56T	-5 & -6	.283 - .335	.56	.35	5.6"
REM 100-8T	-8	.407 - .422	.67	.35	6"
REM 100-10T	-10	.512 - .538	.79	.40	7"
REM 100-1012T	-10 & small -12	.512 - .538	.79	.40	7"
REM 100-12T	-12	.614 - .649	.90	.50	8"
REM 100-14T	-14	.707 - .775	1.165	.625	10"
REM 100-16T	-16	.809 - .880	1.260	.625	11"
REM 100-18T	-18	.861 - .935	1.365	.625	12"
REM 100-20T	-20	.985 - 1.005	1.435	.625	13"

Straight Handle					
Part No.	Collar Dash	Dollar Ø	Width	Height	OAL
REM 100-56TS	-5 & -6	.283 - .335	.56	.35	5.6"
REM 100-8TS	-8	.407 - .422	.67	.35	6"
REM 100-10TS	-10	.512 - .538	.79	.40	7"
REM 100-1012TS	-10 & small -12	.512 - .538	.79	.40	7"
REM 100-12TS	-12	.614 - .649	.90	.50	8"
REM 100-14ST	-14	.707 - .775	1.165	.625	10"
REM 100-16TS	-16	.809 - .880	1.260	.625	11"
REM 100-18TS	-18	.861 - .935	1.365	.625	12"
REM 100-20TS	-20	.985 - 1.005	1.435	.625	13"

EDDIE-BOLT® HAND REMOVAL TOOLS



12° Offset Handle					
Part No.	Collar Dash	Fastener Ø	Width	Height	OAL
REM 100-56E	-5	5/32"	.42	.35	5.6"
REM 100-56E	-6	3/16"	.42	.35	5.6"
REM 100-8E	-8	1/4"	.56	.35	5.6"
REM 100-10E	-10	5/16"	.67	.35	6"
REM 100-12E	-12	3/8"	.79	.40	7"

Straight Handle					
Part No.	Collar Dash	Fastener Ø	Width	Height	OAL
REM 100-56ES	-5	5/32"	.42	.35	5.6"
REM 100-56ES	-6	3/16"	.42	.35	5.6"
REM 100-8ES	-8	1/4"	.56	.35	5.6"
REM 100-10ES	-10	5/16"	.67	.35	6"
REM 100-12ES	-12	3/8"	.79	.40	7"

CLOSE QUARTER WRENCHES

The Close Quarter 12 Point Wrench Series allows easier fastening in tight access areas due to its extremely thin wall. Also known as Ratchet Wrenches Close Clearance, this ratchet wrench from Omega Technologies was developed for use in compact areas or space. The Close Quarter Ratchet Wrench is fashioned to attain a ratcheting action through limited relative movement between the handle and head portion of the tool. Close-clearance ratchet box wrenches have a thin-walled yet strong 12-point swivel head that ratchets at a 30° angle. Ideal for working between closely spaced fasteners and in confined areas. Handle ratchets to right or left – turn over to reverse ratcheting. Use for 6-point and 12-point fasteners.

Made of heat-treated forged steel with a black finish.



Part No.	Wrench Opening	OAL	Height	Width	Handle Diameter
OMCQ187D	3/16	4	3/16	5/16	7/16
OMCQ218D	7/32	4-1/8	7/32	5/16	7/16
OMCQ250D	1/4	4-1/4	7/32	3/8	7/16
OMCQ312D	5/16	5-3/8	5-16	7/16	1/2
OMCQ375D	3/8	6-1/8	1-1/32	9/16	5/8
OMCQ437D	7/16	6-3/8	3/8	5/8	1-1/6
OMCQ500D	1/2	6-5/8	1-1/16	3/4	1-1/16

HI-LOK®, HI-SHEAR®, HI-LITE® and EDDIE BOLT® are registered trademarks of the Hi-Shear and Fairchild Fasteners.
JO-BOLT® & VISU-LOK® are the registered trademarks of Monogram Aerospace Fasteners
CHERRYMAX® is a registered trademark of Textron Fasteners

SAVI-SOCKET COLLAR REMOVAL TOOLS

Savi-Socket is the newest innovation for removing Hi-Lok®, Hi-Lite®, Eddie-Bolt®, and HUCK threaded collar systems. It is the first socket to utilize a conical/tapered shape with helical teeth to remove collars or bolts. This design firmly draws the socket onto the collar, gripping and removing it with minimal effort and wear on the tool, without jamming the collar into the socket. The socket cannot be used to install or tighten collars after the hex is broken off. Experienced users are capable of removing collars 5-8 times faster than with traditional systems.

Manufactured in the USA of high-strength tool steel, the socket is then heat-treated for optimum durability and finished with a highly visible corrosion-resistant coating. It is suited for use on aluminum, steel, titanium, and all coated collars. As an anti-FOD measure, it incorporates a set screw for positive retention.



12 Piece Set: SAVI-568-HL 1/4" Square Drive



6 Piece Set: SAVI-1012 3/8" Square Drive



4 Piece Set: SAVI-56810EB Eddie Bolt® Sockets







SAVI-59

Part No.	Nominal Collar Size	Collar "Dash" No.	Square Drive	Top of Collar (mm)	Top of Collar (in)	Eddie-Bolt® SAVI-56810-EB Set 4 Pcs	Hi-Lok® Hi-Lite® SAVI-568-HL Set 12 Pcs	Hi-Lok® SAVI-568-RED Set 6 Pcs	Hi-Lok® SAVI-1012 Set 6 Pcs
SAVI-21	5/32"EB	5 EB	1/4"	5.5	0.21	21	-	-	-
SAVI-24	5/32, 3/16"EB	5 & 6 EB	1/4"	6.2	0.24	24	24	-	-
SAVI-25	5/32"	5	1/4"	6.5	0.25	-	25	25	-
SAVI-26	5/32 & 3/16	5, 6	1/4"	6.7	0.26	-	26	26	-
SAVI-27	5/32 & 3/16	5, 6	1/4"	7.0	0.27	-	27	-	-
SAVI-28	3/16"	6	1/4"	7.2	0.28	-	28	28	-
SAVI-29	3/16"	6	1/4"	7.5	0.29	-	29	29	-
SAVI-32	1/4", 1/4EB	8 & 8 EB	1/4"	8.2	0.32	32	32	-	-
SAVI-33	1/4"	8	1/4"	8.5	0.33	-	33	-	-
SAVI-34	1/4"	8	1/4"	8.7	0.34	-	34	-	-
SAVI-35	1/4"	8	1/4"	9.0	0.35	-	35	-	-
SAVI-36	1/4"	8	1/4"	9.2	0.36	-	36	36	-
SAVI-37	1/4"	8	1/4"	9.5	0.37	-	37	37	-
SAVI-39	5/16"EB	10 EB	1/4"	10.0	0.39	39	-	-	-
SAVI-43	5/16"	10	3/8"	11.0	0.43	-	-	-	43
SAVI-45	5/16	10	3/8	11.5	0.45	-	-	-	45
SAVI-47	5/16"	10	3/8"	12.0	0.47	-	-	-	-
SAVI-50	5/16"	10	3/8"	12.7	0.50	-	-	-	50
SAVI-51	3/8"	12	3/8"	13.0	0.51	-	-	-	51
SAVI-55	3/8"	12	3/8"	14.0	0.55	-	-	-	55
SAVI-56	3/8"	12	3/8"	14.3	0.56	-	-	-	56
SAVI-59	7/16"	14	3/8"	15.0	0.59	-	-	-	-
SAVI-63	7/16"	14	3/8"	16.0	0.63	-	-	-	-
SAVI-67	1/2"	16	1/2"	17.0	0.67	-	-	-	-
SAVI-69	1/2"	16	1/2"	17.5	0.69	-	-	-	-

HI-LOK® COLLAR REMOVAL SOCKET

- Hi-Lok® style collars can be removed using this three prong socket and a hand or air ratchet
- The prongs grab into the Hi-Lok® collar allowing you to back it off like a nut



Part No.	Description	Pin ∅	Fastener Size	Drive Size
HS 1331-1	Hi-Lok® Removal Sockets	-5	5/32"	1/4"
HS 1331-2	Hi-Lok® Removal Sockets	-6	3/16"	1/4"
HS 1331-3	Hi-Lok® Removal Sockets	-8	1/4"	1/4"
HS 1332-1	Hi-Lok® Removal Sockets	-5	5/32"	3/8"
HS 1332-2	Hi-Lok® Removal Sockets	-6	3/16"	3/8"
HS 1332-3	Hi-Lok® Removal Sockets	-8	1/4"	3/8"

HI-LOK®, HI-SHEAR® are registered trademarks of the Hi-Shear and Fairchild Fasteners.

OMAR SERIES COLLAR REMOVAL TOOL

The OMAR Series socket is a sure way to remove Hi-Lok®, Hi-Lite®, or similar aluminum collars. Its jaws ensure grip even on soft, damaged, or rounded collars. They are fully adjustable to any power hand tool with a reverse fnction and a 3/8" drive. A hex key set screw is included as an anti-FOD measure.

- Powerful Grip
- Tailored to Specific Sizes
- Suited to soft or damaged collars

* Sleeveless
** Removes similar collar types





OMAR100-6



OMAR100-6

OMAR100-8

Hi-Lok® Part No.	Hi-Lite® Part No.	Dash Size	A Diamater (in)	C Diameter (in)
OMAR 100-5	OMAR 102-5	-5	5/8	11/16
OMAR 100-6	OMAR 102-6	-6	5/8	11/16
OMAR 100-8	OMAR 102-8	-8	7/8	3/4
OMAR 100-10	OMAR 102-10	-10	3/4*	3/4
OMAR 100-12	OMAR 102-12	-12	1**	1

OMSK SERIES REMOVAL SOCKETS

The OMSK Series offers an efficient and convenient way to remove Hi-Lok® and Eddie-Bolt® collars. The patented 1/4" square drive collar removal sockets incorporate a tapered left-hand thread. When screwed counter-clockwise onto a collar, it draws it in until tight and unscrews the collar. This system is an excellent solution for steel and titanium as well as aluminum collars.

A hex key set screw is also included as an anti-FOD measure.

- Strong Grip
- Tailored to Sizes
- Replaces previous ATSK3581 Series sockets
- US Patent #5737981



OMSK3581-5/16

OMSK3581-1/4



OMSK Series

1/4" Part No.	3/8" Part No.	Dash Size	Collar Pin Dia.
OMSK3581-5/32	-	-5	5/32"
OMSK3581-3/16	-	-6	3/16"
OMSK3581-1/4	-	-8	1/4"
OMSK3581-5/16	OMSK3581A-5/16	-10	5/16"
OMSK3581-3/8	OMSK3581A-3/8	-12	3/8"
OMSK3581-7/16	OMSK3581A-7/16	-14	7/16"
	OMSK3581-1/2	-16	1/2"

ANTI-FOD HEX SOCKETS

Anti-FOD Sockets are manufactured to fit conventional square drives. They feature a generous through-hole to enable the use of hex keys when necessary for Hi-Lok®, Hi-Lite®, and Hi-Tigue® installations. A set screw is provided to positively retain the sockets onto the square drives as an anti-FOD measure.



ATHS437



Part No.	Hex Opening (6-point)	Square Drive Size	Nose Diameter	OAL
ATHS156	5/32	1/4	0.280	0.86
ATHS187	3/16	1/4	0.312	0.86
ATHS218	7/32	1/4	0.312	0.86
ATHS250	1/4	1/4	0.375	0.88
ATHS281	9/32	1/4	0.410	0.88
ATHS312	5/16	1/4	0.467	0.88
ATHS343	11/32	1/4	0.508	0.88
ATHS375	3/8	3/8	0.560	1.00
ATHS375A	3/8	1/4	0.560	0.88
ATHS437	7/16	3/8	0.640	1.00
ATHS437A	7/16	1/4	0.600	0.86
ATHS500	1/2	3/8	0.710	1.00

NORTHROP SIX-WING® TOOL

The Northrop version of the Six-Wing® tool incorporates a hex side for collar installation, and a spline side for removal.

This arrangement also prevents the re-use of removed collars.

Other sizes available on request



T201X37-2

Part No.	Collar Dash	OAL
T201X37-1	-1	5/32
T201X37-2	-2	3/16
T201X37-3	-3	1/4
T201X37-4	-4	5/16
T201X37-5	-5	3/8
T201X37-6	-6	7/16

REM400 COLLAR REMOVAL TOOL

The Patented REM400 Collar Removal Tool is a refinement of the original REM300. Designed for rapid removal of collars from Threaded Pins, it is suited for use with Aluminum, Steel and Titanium Collars.

The unique cam-driven jaw closes automatically when operated in the counter-clockwise direction, quickly gripping collars

and unscrewing them. The collars are retained in the jaws until the tool rotation is reversed (collars will not drop where they are not wanted). Simply switching the tool rotation to clock-wise, opens the jaws and allows the collar to fall freely.

US Patent # 6134992



REM400-56

Part No.	Description
REM400	Collar Removal Tool

SIX-WING® COLLAR REMOVAL TOOL

The Six-Wing® frangible collar is characterized by its six-faceted, semi-spline arrangement of wings around the collar base. These collars are used in high strength applications typical of fighter aircraft. Special tapered spline sockets were developed to remove these collars. When fitted into the flat box-ratchet handle, these sockets provide easy removal, while at the same time preventing re-installation or re-use of the removed collars. New collars must be used to insure proper torque.

Available as an individual socket or a complete ratchet tool assembly

Splined type collar removal tool in standard or extended versions.

Other sizes available on request.







Socket Part No.	Complete Tool Part No.	Pin Ø	Pin Size (in)	OAL (L)	Socket Height (S)	Socket Ø (D)
CAT18-15	CAT19-15	-5	5/32	4.25	0.50	0.43
CAT18-18	CAT19-18	-6	3/16	4.25	0.50	0.43
CAT18-25	CAT19-25	-8	1/4	4.25	0.60	0.54
CAT18-31	CAT19-31	-10	5/16	5.50	0.70	0.67
CAT18-37	CAT19-37	-12	3/8	5.50	0.72	0.77
CAT18-43	CAT19-43	-14	7/16	5.50	0.80	0.92

Standard Socket



CAT18-31

CAT18-15-1	CAT19-15-1	-5	5/32	4.25	1.00	0.43
CAT18-18-1	CAT19-18-1	-6	3/16	4.25	1.00	0.43
CAT18-25-1	CAT19-25-1	-8	1/4	4.25	1.00	0.54
CAT18-31-1	CAT19-31-1	-10	5/16	5.50	1.25	0.67
CAT18-37-1	CAT19-37-1	-12	3/8	5.50	1.25	0.77
CAT18-43-1	CAT19-43-1	-14	7/16	5.50	1.25	0.92

Extended Socket



CAT18-31-1

Hi-Lok® Box Ratchets

Perfect for installing Hi-Lok® fasteners, these box ratchets are made of high quality, heat-treated steel and finished with a nickel-chrome plating. Small size and variable shape make the box ratchet ideal for use in tight areas. Even without line of sight, the head fits easily onto a collar, while the shoulder ring prevents the collar from slipping though the socket. An optional collar ejector pin quickly discards the removed collar.

Durable, Perfect for tight areas, shoulder ring inside socket , optional collar ejector pin, straight or offset 20°.

FLAT BOX RATCHET WRENCHES WITH COLLAR STOP

- A ring inside hex socket positions the socket on the Hi-Lok® collar and prevents it dropping over collar.



Part No.	Hex 1	Hex 2	Radius 1	Radius 2	OAL
ATBR2125	7/32"	1/4"	19/64"	21/64"	4-1/2"
ATBR2528	1/4"	9/32"	19/64"	21/64"	4-1/2"
ATBR3134	5/16"	11/32"	19/64"	21/64"	4-1/2"
ATBR3137	5/16"	3/8"	25/64"	29/64"	5-1/2"
ATBR4350	7/16"	1/2"	25/64"	29/64"	5-1/2"

FLAT BOX RATCHET WRENCHES WITH COLLAR STOP AND EJECTOR BUTTONS

Straight box ratchet positions the wrench on the Hi-Lok®. An ejector easily dislodges the hex portion of Hi-Lok®.



Part No.	Hex 1	Hex 2	Radius 1	Radius 2	OAL
ATBR2125E	7/32"	1/4"	19/64"	21/64"	4.09"
ATBR2528E	1/4"	9/32"	19/64"	21/64"	4.09"
ATBR3134E	5/16"	11/32"	19/64"	21/64"	4.09"
ATBR3137E	5/16"	3/8"	25/64"	29/64"	5.21"
ATBR4350E	7/16"	1/2"	25/64"	29/64"	5.21"

OFFSET BOX RATCHET WRENCHES WITH COLLAR-STOP

- Offset box ratchet wrench has a ring inside the hex socket which positions the socket on the Hi-Lok® collar and prevents it dropping over collar.
- Offset 20°



Part No.	Hex 1	Hex 2	Radius 1	Radius 2	OAL
ATBRO2125	7/32"	1/4"	19/64"	21/64"	4.09"
ATBRO2528	1/4"	9/32"	19/64"	21/64"	4.09"
ATBRO3134	5/16"	11/32"	19/64"	21/64"	4.09"
ATBRO3137	5/16"	3/8"	25/64"	29/64"	5.21"
ATBRO4350	7/16"	1/2"	25/64"	29/64"	5.21"

OFFSET BOX RATCHET WRENCHES WITH COLLAR-STOP AND EJECTOR BUTTONS

- Offset box ratchet positions the wrench on the Hi-Lok®. An ejector easily dislodges the hex portion of Hi-Lok®.
- Offset 20°



Part No.	Hex 1	Hex 2	Radius 1	Radius 2	OAL
ATBRO2125E	7/32"	1/4"	19/64"	21/64"	4.09"
ATBRO2528E	1/4"	9/32"	19/64"	21/64"	4.09"
ATBRO3134E	5/16"	11/32"	19/64"	21/64"	4.09"
ATBRO3137E	5/16"	3/8"	25/64"	29/64"	5.21"
ATBRO4350E	7/16"	1/2"	25/64"	29/64"	5.21"

HI-LOK®, EDDIE BOLT® & HI-LITE® are registered trademarks of the Hi-Shear and Fairchild Fasteners.

Hi-Lok® Roller Ratchets®

Roller Ratchets® were developed in response to the need for very small ratchet wrenches for use in extremely tight areas where handle 'swing' was limited by obstructions, and by the need to have a ratchet that would engage with very little handle movement. The Roller Ratchet® satisfies both of these requirements, and this modular tool is now widely used in the aerospace community worldwide.

Continued research and development has improved the variety of tools available. With particular emphasis on strength, durability and quality whilst maintaining the functionality and cost-effectiveness of the entire line of tools.

The Roller Ratchet® functions as a hand ratchet, yet its size greatly increases its versatility by allowing it to be used in tighter areas. The incorporation of a special 'toothless' clutch eliminates all lost motion, allowing even the slightest movement to engage the tool. The modular platform allows for multiple configurations. A through-hole also makes the tool compatible with Hi-Lok®, Hi-Lite®, and Eddie Bolt® systems.

- Small design allows for use in tight areas
- Modular platform provides versatility
- Through-hole for use with Hi-Lok®, Hi-Lite®, and Eddie Bolt®
- Revolutionary clutch design
- Torque ratings from 150-600 lb-in.

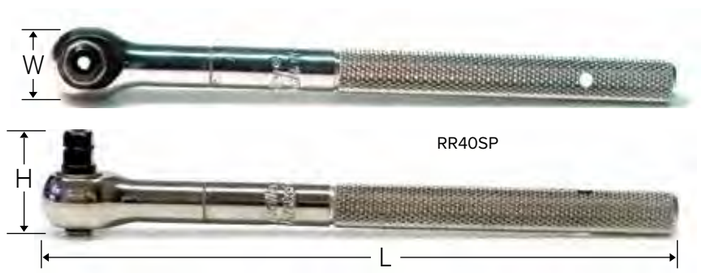


STANDARD ROLLER RATCHETS®

The standard Roller Ratchet® comes in a wide range of sizes and strengths. Its reversible spindle allows the tool to be used in any application for installation or removal.

- Roller Ratchet® with through-hole male 1/4" square Drive.
- Compression ring for socket retention.

*Furnished with reversible spindle



Part No.	Max Torque (lb/in)	Square Drive	Height (H)	Width (W)	Length (L)
RR40S-SP*	150	1/4	0.91	0.65	3.5
RR40SP*	150	1/4	0.91	0.65	5.5
RR80SP	200	1/4	1.37	0.60	6.25
RR130SP	250	1/4	0.92	0.87	7.2
RR250SP	400	3/8	1.21	1.00	7.9
RR400SP	600	3/8	1.21	1.31	8.7

DOUBLE ENDED ROLLER RATCHETS®

The Double-Ended Roller Ratchet® eliminates the need to reverse the spindle from installatior to removal, reducing the occurence of foreign object damage.

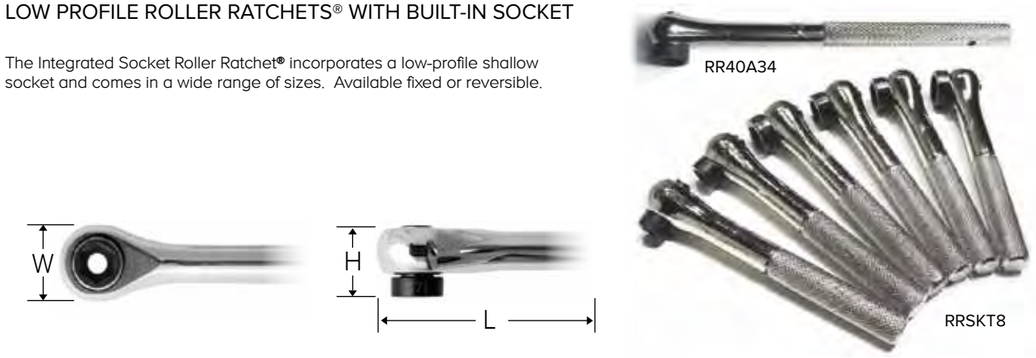


Part No.	Max Torque (lb/in)	Square Drive	Height (H)	Width (W)	Length (L)
RR2E40S-SP	150	1/4	0.91	0.65	4.5
RR2E40SP	150	1/4	0.91	0.65	6.5
RR2E80SP	200	1/4	1.37	0.60	6.7
RR2E130SP	250	1/4	0.92	0.87	6.6
RR2E250SP	400	3/8	1.21	1.00	8.9
RR2E400SP	600	3/8	1.21	1.31	8.9

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LOW PROFILE ROLLER RATCHETS® WITH BUILT-IN SOCKET

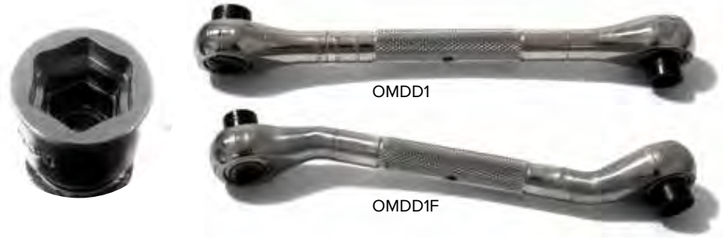
The Integrated Socket Roller Ratchet® incorporates a low-profile shallow socket and comes in a wide range of sizes. Available fixed or reversible.



150 lb-in Max Torque H = .76 L = 3.5	150 lb-in Max Torque H = .76 L = 5.5	200 lb-in Max Torque H = 1.23 L = 6.25	250 lb-in Max Torque H = .78 & 1.01 L = 7.25	400 lb-in Max Torque H = 1.16 L = 7.9	Socket Hex Opening
RR40A18S-SP	RR40A18SP	-	-	-	3/16
RR40A21S-SP	RR40A21SP	-	-	-	7/32
RR40A25S-SP	RR40A25SP	RR80A25SP	RR130A25SP	-	1/4
RR40A28S-SP	RR40A28SP	RR80A28SP	RR130A28SP	-	9/32
RR40A31S-SP	RR40A31SP	RR80A31SP	RR130A31SP	-	5/16
RR40A34S-SP	RR40A34SP	RR80A34SP	RR130A34SP	-	11/32
RR40A37S-SP	RR40A37SP	-	RR130A37SP	-	3/8
RR40A43S-SP	RR40A43SP	-	RR130A43SP	-	7/16
-	-	-	-	RR250A50SP	1/2

ROLLER RATCHETS® WITH STEPPED SOCKETS

The OMDD series Roller Ratchets® incorporate five integral sockets into a single wrench, allowing the installation of collar hex sizes 7/32, 1/4, 5/16, 11/32, and 3/8 inch. This one wrench covers most -5, -6, -8, -10, and -12 collars.



Part No.	Description	Version
OMDD1	Roller Ratchet® Stepped Socket	Straight
OMDD1F	Roller Ratchet® Stepped Socket	Offset

ROLLER RATCHET® BIT HOLDER

The Bit Holder Roller Ratchet® is fitted with a 1/4" bit holder, making it compatible with any hex insert screwdriver bit.

The RRQC-BH1/4 quick change replacement for the 1/4" square drive spindle accommodates multiple insert bits.



Part No.	Description
RRQC-BH1/4	Roller Ratchet® Bit Holder

ROLLER RATCHET® SPINDLE BIT HOLDER

The integrated spindle bit allows the wrench to accept the bit directly. The exclusion of the lengthier bit holder allows greater clearance, while still maintaining easy reversible capability.

Phillps no. 1 included.



Part No.	Description
RR40A-P1	Roller Ratchet® Spindle Bit Holder

Roller Ratchet® is a registered Trademark of Omega Technologies, Inc

HAND RATCHETS

Manufactured from high quality materials and nickel-plated for durability, these ratchets are available in a variety of sizes and are suitable for a wide range of installations, including Hi-Lok® systems.

This selection of hand ratchets provide a range of options to get the job done. A through-hole in the head of the ratchets make them compatible with with Hi-Lok® systems. By increasing the number of teeth in the head (up to 72, depending on size), the ratchet engages with less movement. Finally, an ergonomic thumb switch changes the direction of the ratchet, allowing it to be used for installation or removal.

- Versatility of use
- Durable
- Easily reversible
- Compatible with Hi-Lok® system
- Engages with minimal movement



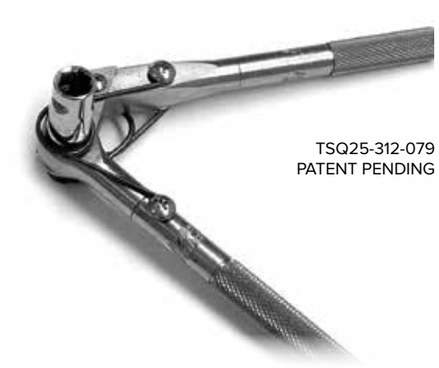
Part No.	Square Drive	Through Hole Ø	Head Width	Side to Center	Head Height	Overall Length	Weight (Lbs.)
ATHR-MINI	1/4"	0.11	0.92	0.46	0.40	4.60	0.20
ATHR250	1/4"	0.11	1.08	0.50	0.44	5.50	0.35
ATHR-TILT	1/4"	0.11	0.90	0.45	0.40	6.25	0.30
ATHR375	3/8"	0.21	1.40	0.70	0.60	7.85	0.85
ATHR500	1/2"	0.29	1.74	0.87	0.75	10.35	1.50

HAND RATCHET "TIGHT SQUEEZE"

The Tight Squeeze is one of the newest innovations. It is a full function hand tool for Hi-Lok® and Hi-Lite® fasteners. The tool's unique profile allows for one-handed operation in tight spots, blind areas, and around corners. The operation is identical to pneumatic installation tools, but is more affordable and versatile.

Interchangeable hex keys and sockets fit an entire range of pin/collar combinations. The incorporated toothless ratcheting system from the Roller Ratchet® allows the slightest movement to engage the tool. This elegant solution turns impossible jobs into routine work.





TSQ25-312-079
PATENT PENDING

Part No.	Socket Size	Socket Part No.	Hex Key Size	Hex Key Part No.
TSQ25-218-062	7/32	ATHS218	1/16	TSQ-062
TSQ25-250-062	1/4	ATHS250	1/16	TSQ-062
TSQ25-281-062	9/32	ATHS281	1/16	TSQ-062
TSQ25-312-062	5/16	ATHS312	1/16	TSQ-062
TSQ25-281-078	9/32	ATHS281	5/64	TSQ-078
TSQ25-312-078*	5/16	ATHS312	5/64	TSQ-078
TSQ25-343-078*	11/32	ATHS343	5/64	TSQ-078
TSQ25-437-078	7/16	ATHS437A	5/64	TSQ-078
TSQ25-312-094	5/16	ATHS312	3/32	TSQ-094
TSQ25-343-094	11/32	ATHS343	3/32	TSQ-094
TSQ25-437-094	7/16	ATHS437A	3/32	TSQ-094

HI-LOK® is a registered trademark of the Hi-Shear and Fairchild Fasteners.

*Most popular

3 PIECE HI-LOK® ROLLER RATCHET® ASSEMBLY SET FOR SMALL COLLARS

Contents:

- Roller Ratchet®
- Anti-FOD Socket
- Hex-key



If you did not find what you were looking for, please call our sales team!

Part No.	Square Drive Size	Socket Hex Width	Hex Key Width	Hi-Shear Ref
ATRR1	1/4"	3/16" (.187)	1/16" (.062)	HLH110-187-062
ATRR2	1/4"	7/32" (.218)	1/16" (.062)	HLH110-218-062
ATRR3	1/4"	1/4" (.250)	1/16" (.062)	HLH110-250-062
ATRR4	1/4"	9/32" (.281)	1/16" (.062)	HLH110-281-062
ATRR5	1/4"	5/16" (.312)	1/16" (.062)	HLH110-312-062
ATRR6	1/4"	11/32" (.343)	1/16" (.062)	HLH110-343-062
ATRR7	1/4"	7/32" (.218)	5/64" (.078)	HLH110-218-078
ATRR8	1/4"	1/4" (.250)	5/64" (.078)	HLH110-250-078
ATRR9	1/4"	9/32" (.281)	5/64" (.078)	HLH110-281-078
ATRR10	1/4"	5/16" (.312)	5/64" (.078)	HLH110-312-078
ATRR11	1/4"	11/32" (.343)	5/64" (.078)	HLH110-343-078
ATRR12	1/4"	3/8" (.375)	5/64" (.078)	HLH110-375-078
ATRR13	1/4"	5/16" (.312)	3/32" (.094)	HLH110-312-094
ATRR14	1/4"	11/32" (.343)	3/32" (.094)	HLH110-343-094
ATRR15	1/4"	3/8" (.375)	3/32" (.094)	HLH110-375-094
ATRR16	3/8"	7/16" (.437)	3/32" (.094)	HLH110-437-094
ATRR21	3/8"	1/2" (.500)	3/32" (.094)	HLH110-500-094
ATRR17	3/8"	3/8" (.375)	1/8" (.125)	HLH110-375-125
ATRR18	3/8"	7/16" (.437)	1/8" (.125)	HLH110-437-125
ATRR22	3/8"	1/2" (.500)	1/8" (.125)	HLH110-500-125
ATRR19	3/8"	7/16" (.437)	5/32" (.156)	HLH110-437-156
ATRR20	3/8"	1/2" (.500)	5/32" (.156)	HLH110-500-156

2 PIECE HI-LOK® INTEGRAL SOCKET ASSEMBLY SET FOR SMALL COLLARS

Contents:

- Lowest profile integral socket Roller Ratchet®
- Hex-key



Part No.	Square Drive Size	Socket Hex Width	Hex Key Width	Hi-Shear Ref
RR40A187-062	1/4"	3/16" (.187)	1/16" (.062)	HLH110-187-062
RR40A218-062	1/4"	7/32" (.218)	1/16" (.062)	HLH110-218-062
RR40A250-062	1/4"	1/4" (.250)	1/16" (.062)	HLH110-250-062
RR40A281-062	1/4"	9/32" (.281)	1/16" (.062)	HLH110-281-062
RR40A312-062	1/4"	5/16" (.312)	1/16" (.062)	HLH110-312-062
RR40A343-062	1/4"	11/32" (.343)	1/16" (.062)	HLH110-343-062
RR40A218-078	1/4"	7/32" (.218)	5/64" (.078)	HLH110-218-078
RR40A250-078	1/4"	1/4" (.250)	5/64" (.078)	HLH110-250-078
RR40A281-078	1/4"	9/32" (.281)	5/64" (.078)	HLH110-281-078
RR40A312-078	1/4"	5/16" (.312)	5/64" (.078)	HLH110-312-078
RR40A343-078	1/4"	11/32" (.343)	5/64" (.078)	HLH110-343-078
RR40A375-078	1/4"	3/8" (.375)	5/64" (.078)	HLH110-375-078
RR130A312-094	1/4"	5/16" (.312)	3/32" (.094)	HLH110-312-094
RR130A343-094	1/4"	11/32" (.343)	3/32" (.094)	HLH110-343-094
RR130A375-094	1/4"	3/8" (.375)	3/32" (.094)	HLH110-375-094
RR130A437-094	3/8"	7/16" (.437)	3/32" (.094)	HLH110-437-094
RR250A500-094	3/8"	1/2" (.500)	3/32" (.094)	HLH110-500-094
RR130A375-125	3/8"	3/8" (.375)	1/8" (.125)	HLH110-375-125
RR130A437-125	3/8"	7/16" (.437)	1/8" (.125)	HLH110-437-125
RR250A500-125	3/8"	1/2" (.500)	1/8" (.125)	HLH110-500-125
RR130A437-156	3/8"	7/16" (.437)	5/32" (.156)	HLH110-437-156
RR250A500-156	3/8"	1/2" (.500)	5/32" (.156)	HLH110-500-156

HI-LOK®, HI-LITE® & EDDIE-BOLT® are the registered trademarks of the Hi-Shear and Fairchild Fasteners.
ROLLER RATCHET® is the registered trademark of Omega Technologies Inc

3 PIECE HI-LOK® STANDARD RATCHET ASSEMBLY SET FOR SMALL COLLARS

- Hand tool assembly for the installation of the Hi-Lok® or Hi-Lite® fastening systems. The ATHA Series consists of a hand ratchet wrench (ATHR250) with a through hole, a socket, and a plastic handle Allen® wrench.
- The through hole in the ratchet allows for the insertion of an Allen® key. While any Allen® key style may be used in conjunction with the ratchet, a plastic handle or a "T" handle Allen® wrench with a replaceable blade is furnished. The socket is held to the square drive with a set screw., eliminating FOD.
- This entire assembly is completely interchangeable with the Hi-Shear equivalent

Contents:

- Standard Ratchet
- Anti-FOD Socket
- Hex-key







Part No.	Square Drive Size	Socket Hex Width	Hex Key Width	Hi-Shear Ref
ATHA1	1/4"	3/16" (.187)	1/16" (.062)	HLH110-187-062
ATHA2	1/4"	7/32" (.218)	1/16" (.062)	HLH110-218-062
ATHA3	1/4"	1/4" (.250)	1/16" (.062)	HLH110-250-062
ATHA4	1/4"	9/32" (.281)	1/16" (.062)	HLH110-281-062
ATHA5	1/4"	5/16" (.312)	1/16" (.062)	HLH110-312-062
ATHA6	1/4"	11/32" (.343)	1/16" (.062)	HLH110-343-062
ATHA7	1/4"	7/32" (.218)	5/64" (.078)	HLH110-218-078
ATHA8	1/4"	1/4" (.250)	5/64" (.078)	HLH110-250-078
ATHA9	1/4"	9/32" (.281)	5/64" (.078)	HLH110-281-078
ATHA10	1/4"	5/16" (.312)	5/64" (.078)	HLH110-312-078
ATHA11	1/4"	11/32" (.343)	5/64" (.078)	HLH110-343-078
ATHA12	1/4"	3/8" (.375)	5/64" (.078)	HLH110-375-078
ATHA13	1/4"	5/16" (.312)	3/32" (.094)	HLH110-312-094
ATHA14	1/4"	11/32" (.343)	3/32" (.094)	HLH110-343-094
ATHA15	1/4"	3/8" (.375)	3/32" (.094)	HLH110-375-094
ATHA16	3/8"	7/16" (.437)	3/32" (.094)	HLH110-437-094
ATHA21	3/8"	1/2" (.500)	3/32" (.094)	HLH110-500-094
ATHA17	3/8"	3/8" (.375)	1/8" (.125)	HLH110-375-125
ATHA18	3/8"	7/16" (.437)	1/8" (.125)	HLH110-437-125
ATHA22	3/8"	1/2" (.500)	1/8" (.125)	HLH110-500-125
ATHA19	3/8"	7/16" (.437)	5/32" (.156)	HLH110-437-156
ATHA20	3/8	1/2" (.500)	5/32" (.156)	HLH110-500-156

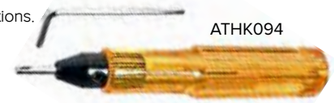
THROUGH-HOLE 1/4" DRIVE EXTENSIONS



Part No.	Description	Length
OMEX255-2HL	Through Hole Extension	2 in
OMEX255-4HL	Through Hole Extension	4 in

HAND-HELD HEX KEYS – PLASTIC HANDLE

For hand tool applications.



Part No.	Description	Hex Key Size
ATHK062	Hand-held Hex Key	1/16 / 0.062
ATHK079	Hand-held Hex Key	5/64 / 0.079
ATHK094	Hand-held Hex Key	3/32 / 0.094
ATHK125	Hand-held Hex Key	1/8 / 0.125

REPLACEMENT TIPS – HI-SHEAR® SUPER KEY



Part No.	Description	Hex Key Size
HLT140K062	Repl. Tip Hi-Shear Super Key	1/16 / 0.062
HLT140K078	Repl. Tip Hi-Shear Super Key	5/64 / 0.079
HLT140K094	Repl. Tip Hi-Shear Super Key	3/32 / 0.094
HLT140K125	Repl. Tip Hi-Shear Super Key	1/8 / 0.125
HLT140K156	Repl. Tip Hi-Shear Super Key	5/32 / 0.156
HLT140K187	Repl. Tip Hi-Shear Super Key	3/16 / 0.187

REPLACEMENT TIPS – HI-SHEAR® STANDARD



Part No.	Description	Hex Key Size
HLT140-062	Replacement Tip Hi-Shear®	1/16 / 0.062
HLT140-078	Replacement Tip Hi-Shear®	5/64 / 0.079
HLT140-094	Replacement Tip Hi-Shear®	3/32 / 0.094
HLT140-125	Replacement Tip Hi-Shear®	1/8 / 0.125
HLT140-156	Replacement Tip Hi-Shear®	5/32 / 0.156
HLT140-187	Replacement Tip Hi-Shear®	3/16 / 0.187

HI-LOK®, HI-LITE® & EDDIE-BOLT® are the registered trademarks of the Hi-Shear and Fairchild Fasteners.

REPLACEMENT TIPS – LOK-FAST® QRS®



Part No.	Description	Hex Key Size
QRK5	Replacement Tip Lok-Fast® QRS®	1/16 / 0.062
QRK6	Replacement Tip Lok-Fast® QRS®	5/64 / 0.079
QRK8	Replacement Tip Lok-Fast® QRS®	3/32 / 0.094
QRK10	Replacement Tip Lok-Fast® QRS®	1/8 / 0.125
QRK12	Replacement Tip Lok-Fast® QRS®	5/32 / 0.156

REPLACEMENT TIPS – VOI-SHAN KWIK-KEY®



Part No.	Description	Hex Key Size
KK101-06	Repl. Tip Voi-Shan KWIK-Key®	1/16 / 0.062
KK101-07	Repl. Tip Voi-Shan KWIK-Key®	5/64 / 0.079
KK101-09	Repl. Tip Voi-Shan KWIK-Key®	3/32 / 0.094

13 PIECE "LIBERATOR" RATCHET SET FOR HI LOK® INSTALLATION

- The Liberator system enables easy installation of frangible collar type fasteners in the most awkward and unusual situations
- The ratchet heads feature the unique ability to be "indexed" in position within 360° making this system extremely flexible

Contents:

- 2 x toothless "roller clutch" ratchet heads
- 2 x 1/4" Drive studs (fit any standard 1/4" Drive socket)
- Variety of straight and 90° handles





Part No.	Description
LIBK-13	13 Piece "Liberator" Ratchet Set

8 PIECE ROLLER RATCHET® SET

Contents:

- 2 x 1/4" square Drive reversible Roller Ratchets®
- Hi-Lok® Collar Removal Plier
- 6 Integral Socket, Hi-Lok® Installation Roller Ratchets®
- Rugged Case



Part No.	Description
RRSKT8	8 Piece Roller Ratchet® Set

HI-LOK® is a registered trademark of the Hi-Shear and Fairchild Fasteners. **Roller Ratchet®** is a registered Trademark of Omega Technologies, Inc

HAND INSTALLATION & REMOVAL KIT

- ATHR250 1/4" Sq Dr. Reversible Hand Ratchet, 72 Teeth, (5 degree arc between clicks) with Through Hole
- OMSK3581-5, OM3581-6, OM3581-8, OM3581-10 Hi-Lok® collar Removal Sockets for Dash 5, 6, 8, 10 Size Collars
- 9 Anti-FOD Sockets with set screws (5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16)
- 3 Handi-Hex Hex Keys with replaceable blades for all 5/32", 3/16", 1/4"(-5, -6, -8) Hi-Lok® Pins
- Rugged Case



Part No.	Description
OMHLKT1000	Hand Installation & Removal Kit

PNEUMATIC INSTALLATION & REMOVAL KIT

- AR250 1/4" Sq Dr. Reversible AIR- Ratchet, with Through Hole for Hex Keys
- OMSK3581-5, OM3581-6, OM3581-8, OM3581-10 Hi-Lok® collar Removal Sockets for Dash 5, 6, 8, 10 Size Collars
- 9 X Anti-FOD Sockets with set screws (5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16)
- 3 X Handi-Hex Hex Keys with replaceable blades for all 5/32", 3/16", 1/4" (-5, -6, -8) Hi-Lok Pins
- Rugged Case



Part No.	Description
OMHLKT2000	Pneumatic Installation & Removal Kit

STAHLWILLE 1/4" DRIVE 9 PIECE HI-LOK SOCKET SET 4008/27/1R

IN

German precision quality socket set in sturdy, stackable ABS plastic case

Contents:

- 5 sockets 12 point No 40aD: 7/32; 1/4; 5/16; 11/32; 3/8"
- 3 offset screwdrivers No 10759a: 1/16; 5/64; 3/32"
- 1 ratchet No 415SGH N



Part No.	Description	Weight (g)
96 01 63 03	9 Piece Hi-Lok Socket Set Imperial	556

HI-LOK® is a registered trademark of the Hi-Shear and Fairchild Fasteners.

HI-LOK® PIN PROTRUSION GAUGE SETS

Manufactured for use on all types of frangible and torque-control fasteners. These gauges determine if the correct length pin has been installed by determining if the pin's protrusion is between the allowable minimum and maximum limits shown on the gauge.



2-1522



2-1522-2, 2-1522-B-2



2-1522 HST-B

Dash Sizes	Nominal Pin Diameter		2-1522 Pin Protrusion Limits*		2-1522-B Pin Protrusion Limits**		2-1522 HST Pin Protrusion Limits*		2-1522 HST-B Pin Protrusion Limits**	
Decimal	Fraction	Decimal	Min	Max	Min	Max	Min	Max	Min	Max
-5	5/32"	0.1560	0.302	0.384	0.302	0.389	0.270	0.352	0.270	0.352
-6	3/16"	0.1875	0.315	0.397	0.315	0.402	0.280	0.362	0.280	0.362
-8	1/4"	0.2500	0.385	0.467	0.385	0.472	0.310	0.392	0.310	0.392
-10	5/16"	0.3125	0.490	0.572	0.490	0.577	0.370	0.452	0.370	0.452
-12	3/8"	0.3750	0.535	0.617	0.535	0.622	0.410	0.492	0.410	0.492
Dash Sizes	**Nominal Pin Diameter**		**2-1522-2 Pin Protrusion Limits***		**2-1522-B-2 Pin Protrusion Limits****		**2-1522 HST-2 Pin Protrusion Limits***		**2-1522 HST-B-2 Pin Protrusion Limits****	
-14	7/16"	0.4375	0.625	0.707	0.625	0.707	0.475	0.557	0.475	0.557
-16	1/2"	0.5000	0.675	0.757	0.675	0.757	0.515	0.597	0.515	0.597
-18	9/16"	0.5625	0.760	0.842	0.760	0.842	0.590	0.672	0.590	0.672
-20	5/8"	0.6250	0.815	0.897	0.815	0.897	0.650	0.732	0.630	0.712
-24	3/4"	0.750	1.040	1.122	1.040	1.122	HST = red print colour			

HI-SHEAR® GRIP GAGE

- Thicker side is used to measure the "grip-length" of Hi-Lok® and Hi-Lite® pins, Shear Lockbolts, structural screws, and bolts.
- Thinner side is used to measure the thickness of materials to be fastened, so choose the proper length pin.



Part No.	Description
CATGS1	Hi-Shear® Grip Gage

HI-SHEAR® GRIP GAGE SLIDE & ASSEMBLY



Part No.	Description
2-612	Hi-Shear® Grip Gage
2-615	Hi-Shear® Grip Gage Slide
2-651	Hi-Shear® Grip Gage and Slide Assembly

JO-BOLT® GRIP GAGE



Part No.	Description
LFVLG-1	Jo-Bolt® Grip Gage (Visu-Lok)

CHERRYMAX® GRIP GAGE



Part No.	Description
269C3	CherryMax® Grip Gage

HOLLOW CUTTER 1/4-28 – HI-SHEAR® OR HI-LOK® COLLARS

These tools are designed to cut away swaged or threaded collars from fasteners so the fastener pin can be easily removed. They are ideal for removing Hi-Shear® rivets.

The rotating cutter is applied to the collar until a sufficient amount of collar material has been removed. The pin is then easily removed with a punch. A microstop cage is typically used to prevent the cutter teeth from contacting and damaging the work surface.

Four flute design for strength and increased tool life



Larger sizes available on request

Part No.	Description	Body Ø (B)	Hole Ø (H)	Fastener Size
HC19018	Hollow Cutter 1/4-28	0.365	5/32"	1/4"
HC19532	Hollow Cutter 1/4-28	0.365	3/16"	1/4"
HC19316	Hollow Cutter 1/4-28	0.438	1/4"	1/4"
HC19014	Hollow Cutter 1/4-28	0.500	5/32"	3/8"
HC19516	Hollow Cutter 1/4-28	0.562	3/16"	3/8"

HI-LOK® and HI-LITE® are registered trademarks of the Hi-Shear and Fairchild Fasteners.

SPEED DRIVER HAND RIVNUT GUN

Rapid manual installation of Rivnuts, steel or aluminium



Part No.	Description	Thread Size
RN 6440	Speed Driver Rivnut Tool	4-40
RN 6632	Speed Driver Rivnut Tool	6-32
RN 6832	Speed Driver Rivnut Tool	8-32
RN 6103	Speed Driver Rivnut Tool	10-32
RN 6142	Speed Driver Rivnut Tool	1/4-28

REPLACEMENT MANDRELS – ECONOMY RIVNUT TOOL



Part No.	Description	Thread Size
RM 4440	Replacement Mandrel	4-40
RM 4632	Replacement Mandrel	6-32
RM 4832	Replacement Mandrel	8-32
RM 4103	Replacement Mandrel	10-32
RM 4142	Replacement Mandrel	1/4-28

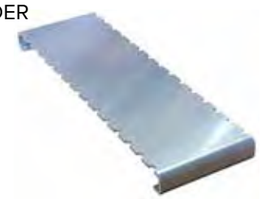
CAMLOC PLIER

Camloc plier designed for stud series 2600, 2700 and 4002



Part No.	Description
PC 0443	Camloc Plier

SIDE GRIP CLAMP HOLDER



Part No.	Description
GCH030	Side Grip Clamp Holder

TEMPORARY FASTENER HOLDER

for 25 fasteners



Part No.	Description	Size
TFH025332	Temporary Fastener Holder	3/32
TFH025018	Temporary Fastener Holder	1/8
TFH025532	Temporary Fastener Holder	5/32
TFH025316	Temporary Fastener Holder	3/16
TFH025014	Temporary Fastener Holder	1/4
TFH025516	Temporary Fastener Holder	5/16

REPLACEMENT MANDRELS – SPEEDRIVER RIVNUT TOOL



Part No.	Description	Thread Size
RM 6440	Replacement Mandrel	4-40
RM 6632	Replacement Mandrel	6-32
RM 6832	Replacement Mandrel	8-32
RM 6103	Replacement Mandrel	10-32
RM 6142	Replacement Mandrel	1/4-28

ECONOMY RIVNUT TOOL

Low cost method of installing Rivnuts – steel or aluminium



Part No.	Description	Thread Size
RN 4440	Economy Rivnut Tool	4-40
RN 4632	Economy Rivnut Tool	6-32
RN 4832	Economy Rivnut Tool	8-32
RN 4103	Economy Rivnut Tool	10-32
RN 4142	Economy Rivnut Tool	1/4-28

SIOUX™ RIVNUT GUN – PNEUMATIC



- Wrenchless head assembly makes it easy to change the size or style without the use of tools
- Grease fitting on the nose assembly allows lubrication to the thrust bearing for reduced wear and longer life
- Large thrust bearing for improved bearing life
- 3/4 in (20 mm) nose diameter for easy access into tight spaces

Part No.	Description	RPM	Thread Size
SCN12R632S	Sioux Rivnut Gun	1200	6-32
SCN12R832S	Sioux Rivnut Gun	1200	8-32
SCN12R1032S	Sioux Rivnut Gun	1200	10-32

CAMLOC SNAP RING TOOL

Use this tool to easily and quickly install snap rings on the back side of all Camloc 4002 series grommets



Part No.	Description
MS-T26	Camloc Snap Ring Tool

CLECO HOLDER

for 25 fasteners



Part No.	Description	Size
HCH025116	Cleco Holder	1/16
HCH025332	Cleco Holder	3/32
HCH025018	Cleco Holder	1/8
HCH025532	Cleco Holder	5/32
HCH025316	Cleco Holder	3/16
HCH025732	Cleco Holder	7/32
HCH025014	Cleco Holder	1/4

SIOUX™ is a registered trademark of Sioux Tools, Inc.

HI-LOK® PLIERS

- This variation of the ATI® model is equipped with a hardened, diamond-jaw pattern that allows the pliers to grip aluminum collars from any direction.
- Fasteners can be gripped at nearly every angle
- Special hardened steel jaws with diamond cut pattern for good grip



Part No.	Description
ZHP100	Hi-Lok Pliers

HI-LOK® PLIERS

More aggressive offset of about 60°. The jaw serrations are perpendicular to the collar seating surface when the handles are laid flat, but angle at 3 degrees if the flat part of the head is rested on the collar seating surface.



Part No.	Description
CRP2979	Hi-Lok® Pliers

SPRING TENSION CLAMP PLIER OPERATED STEEL

Provides 32kg clamping pressure



Part No.	Description	Reach
SC552	Tension Clamp	2"
SC553	Tension Clamp	3"

CLECO PLIERS

- Used for the installation of MM, M, ML, MHD type fasteners
- Compatible with all types of spring loaded fasteners



Part No.	Description
MP 0463	Cleco® Plier with Vinyl Grips on handles

COLLAR CLAW® COLLAR REMOVAL TOOL

- Fun, fast, low-fatigue and durable.
- Works on stripped bolt heads, rounded nuts, threaded studs and a host of other fasteners.
- For Use with any threaded collar: Hi-Lite, Hi-Lok: -5, -6, -8 Eddie Bolt: -5, -6, -8, -10 Threaded Huck: -5. -6, -8.



Part No.	Description
CRP568	Collar Claw® Collar Removal Tool

CHERRY® FLUSH NIPPER

Flush cutting plier for trimming Cherry® rivets



Part No.	Description
PC 0457	Cherry® Nipper

RIVET CUTTER HEAVY DUTY

- Allows aluminium rivets to be cut from 1/16" to 1/4" diameter.
- Rivets can be cut to the same length each time using the leaf spacers



Part No.	Description
RC 1002	Heavy Duty Rivet Cutter

SPRING TENSION CLAMP PLIER OPERATED ZINC

Provides 32kg clamping pressure



Part No.	Description	Capacity	Reach
SC542	Tension Clamp	11mm	50mm

HI-LOK® is a registered trademark of the Hi-Shear and Fairchild Fasteners. CHERRY® is a registered trademark of Textron Fasteners

Temporary Fasteners

A complete line of solutions for temporary fixturing and joining of panels, components and structures. For accurate clamping in structural or thin sheet metal applications and also composite material stack ups. Our range includes pneumatic, battery powered motors for fast installation and some specialized hand tools.

SPRING CLECO® – 'M' STANDARD BODY

- Colour coded for easy identification
- Plier operated, spring loaded fasteners
- Standard button plunger fasteners for precise holding of sheets



Part No.	Capacity	Drill Size	Colour
M 1/16	0 - 1/4"	1/16"	Black
M 3/32	0 - 1/4"	#40 (3/32)	Zinc
M 1/8	0 - 1/4"	#30(1/8)	Copper
M 5/32	0 - 1/4"	#21 (5/32)	Black
M 3/16	0 - 1/4"	#10 (3/16)	Brass
M 7/32	0 - 7/32"	#2 (7/32)	Zinc
M 1/4	0 - 5/16"	1/4"	Copper

SPRING CLECO® – 'MM' MINATURE BODY



Part No.	Capacity	Drill Size	Colour
MM 3/32	0 - 1/4"	#40	Zinc
MM 1/8	0 - 1/4"	#30	Copper
MM 5/32	0 - 1/4"	#20	Black
MM 3/16	0 - 1/4"	#10	Brass

SPRING CLECO® – 'MHD' HEAVY DUTY BODY



Part No.	Capacity	Drill Size	Colour
MHD 3/32	0 - 1/2"	#40	Zinc
MHD 1/8	0 - 1/2"	#30	Copper
MHD 5/32	0 - 1/2"	#20	Black
MHD 3/16	0 - 1/2"	#10	Brass
MHD 7/32	0 - 7/32"	#2	Zinc
MHD 1/4	0 - 1/2"	1/4"	Copper

SPRING CLECO® – 'ML' LONG GRIP



Part No.	Capacity	Drill Size	Colour
ML 3/32	1/4 - 1/2"	#40	Zinc
ML 1/8	1/4 - 1/2"	#30	Copper
ML 5/32	1/4 - 1/2"	#20	Black
ML 3/16	1/4 - 1/2"	#10	Brass

PNEMATIC CLECO TOOL

See our Cleco holders and Side Grip Holders on Page 234

- Quick installation or removal of spring type Cleco's
- Supplied with 1.5m hose



Part No.	Description
PCT-109	Pnematic Cleco Tool

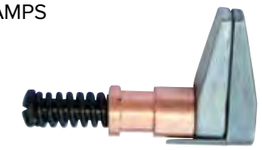
SPRING CLECO® NO-MAR CAPS

Easily slips over cleco to prevent damage to aircraft skin.



Part No.	Description	Size	Colour
KSCAP-3/32	Spring Cleco No-Mar Caps	3/32"	Grey
KSCAP-1/8	Spring Cleco No-Mar Caps	1/8"	Orange
KSCAP-5/32	Spring Cleco No-Mar Caps	5/32"	Black
KSCAP-3/16	Spring Cleco No-Mar Caps	3/16"	Blue
KSCAP-1/4	Spring Cleco No-Mar Caps	1/4"	Yellow

'EL' TYPE SIDE GRIP CLAMPS



Part No.	Capacity	Drill Size	Colour
EL 1/2-1/2	0 - 1/2"	1/2"	Copper
EL 3/4-1/2	0 - 3/4"	1/2"	Brass
EL 1/2-1	0 - 1/2"	1"	Copper
EL 3/4-1	0 - 3/4"	1"	Brass

HEX BODY TEMPORARY FASTENERS

The Hex-Nut temporary fastener series is designed to be operated with a pneumatic power tool and suited to high-production applications, providing consistent and high clamping force. Its 'Spin-Free' design allows nut to back completely off while still remaining intact with the body. This series fastener is suitable for use with all types of metallic and composite materials.



Part No.	Cross Ref.	Grip Range	Drill Size	Colour
KHNS-FW-3/32	HNXS-SF-3/32	0 - 5/16"	#40	Zinc
KHNS-FW-1/8	HNXS-SF-1/8	0 - 5/16"	#30	Copper
KHNS-FW-5/32	HNXS-SF-5/32	0 - 5/16"	#20	Black
KHNS-FW-3/16	HNXS-SF-3/16	0 - 5/16"	#10	Brass
KHNS-FW-1/4	HNXS-SF-1/4	0 - 5/16"	F	Copper
KHN-FW-3/32	HNX-SF-3/32	0 - 1/2"	#40	Zinc
KHN-FW-1/8	HNX-SF-1/8	0 - 1/2"	#30	Copper
KHN-FW-5/32	HNX-SF-5/32	0 - 1/2"	#20	Black
KHN-FW-3/16	HNX-SF-3/16	0 - 1/2"	#10	Brass
KHN-FW-7/32	HNX-SF-7/32	0 - 1/2"	#2	Zinc
KHN-FW-1/4	HNX-SF-1/4	0 - 1/2"	F	Copper
KHN-FW-5/16	HNX-SF-5/16	0 - 1/2"	O	Black
KHNL-FW-3/32	HNXL-SF-3/32	0 - 1"	#40	Zinc
KHNL-FW-1/8	HNXL-SF-1/8	0 - 1"	#30	Copper
KHNL-FW-5/32	HNXL-SF-5/32	0 - 1"	#20	Black
KHNL-FW-3/16	HNXL-SF-3/16	0 - 1"	#10	Brass
KHNL-FW-7/32	HNXL-SF-7/32	0 - 1"	#2	Zinc
KHNL-FW-1/4	HNXL-SF-1/4	0 - 1"	F	Copper
KHNL-FW-5/16	HNXL-SF-5/16	0 - 1"	O	Black
KHNK-FW-1/8	HNXK-SF-1/8	1.5 - 2.5"	#30	Copper
KHNK-FW-5/32	HNXK-SF-5/32	1.5 - 2.5"	#20	Black
KHNK-FW-3/16	HNXK-SF-3/16	1.5 - 2.5"	#10	Brass
KHNK-FW-1/4	HNXK-SF-1/4	1.5 - 2.5"	F	Copper
KHNK-FW-5/16	HNXK-SF-5/16	1.5 - 2.5"	O	Black
KHNEL-FW-3/32	HNXEL-SF-3/32	1/2 - 1.5"	#40	Zinc
KHNEL-FW-1/8	HNXEL-SF-1/8	1/2 - 1.5"	#30	Copper
KHNEL-FW-5/32	HNXEL-SF-5/32	1/2 - 1.5"	#20	Black
KHNEL-FW-3/16	HNXEL-SF-3/16	1/2 - 1.5"	#10	Brass
KHNEL-FW-7/32	HNXEL-SF-7/32	1/2 - 1.5"	#2	Zinc
KHNEL-FW-1/4	HNXEL-SF-1/4	1/2 - 1.5"	F	Copper
KHNEL-FW-5/16	HNXEL-SF-5/16	1/2 - 1.5"	O	Black

SIOUX™ HEX BODY TEMPORARY FASTENER RUNNER

- Designed for the installation of all HNX/HNXL and HNXEL Hex Body Temporary Fasteners (skin pins).
- Pistol grip with rapid reverse.



Part No.	RPM (no load)	Torque	OAL
SSR6P-25	2,500	55 in-lbs	235mm

SIOUX™ is a registered trademark of Sioux Tools, Inc.

NO-MAR SHEET METAL FASTENERS

- No pliers or installation tools are necessary
- Maximum gripping strength due to unique tip design
- "No-Mar" plastic bodies are colour coded for easy identification



Fig A



Fig B

Part No.	Capacity	Drill Size	Colour	Fig
SSL 3/32	0 - 1/4"	#40	Red	A
SSL 1/8	0 - 1/4"	#30	Yellow	A
SSL 5/32	0 - 1/4"	#20	Blue	A
SSL 3/16	0 - 1/4"	#10	Black	A
SEL 3/32	0 - 1/2"	#40	Red	B
SEL 1/8	0 - 1/2"	#30	Yellow	B
SEL 5/32	0 - 1/2"	#20	Blue	B
SEL 3/16	0 - 1/2"	#10	Black	B
SEL 1/4	0 - 1/2"	1/4"	White	B

MANUAL OPERATED TEMPORARY FASTENERS

- Easy to operate with wing nut for low production rate
- Manual controlled clamping force between 0-300lbs
- Metric range of wing nut version temporary fasteners available on application



Part No.	Cross Ref.	Grip Range	Drill Size	Colour
KWNS-FW-3/32	WNXS-SF-3/32	0 — 5/16"	#40	Zinc
KWNS-FW-1/8	WNXS-SF-1/8	0 — 5/16"	#30	Copper
KWNS-FW-5/32	WNXS-SF-5/32	0 — 5/16"	#20	Black
KWNS-FW-3/16	WNXS-SF-3/16	0 — 5/16"	#10	Brass
KWNS-FW-1/4	WNXS-SF-1/4	0 — 5/16"	F	Copper
KWN-FW-3/32	WNX-SF-3/32	0 — 1/2"	#40	Zinc
KWN-FW-1/8	WNX-SF-1/8	0 — 1/2"	#30	Copper
KWN-FW-5/32	WNX-SF-5/32	0 — 1/2"	#20	Black
KWN-FW-3/16	WNX-SF-3/16	0 — 1/2"	#10	Brass
KWN-FW-7/32	WNX-SF-7/32	0 — 1/2"	#2	Zinc
KWN-FW-1/4	WNX-SF-1/4	0 — 1/2"	F	Copper
KWN-FW-5/16	WNX-SF-5/16	0 — 1/2"	O	Black
KWNL-FW-3/32	WNXL-SF-3/32	0 — 1"	#40	Zinc
KWNL-FW-1/8	WNXL-SF-1/8	0 — 1"	#30	Copper
KWNL-FW-5/32	WNXL-SF-5/32	0 — 1"	#20	Black
KWNL-FW-3/16	WNXL-SF-3/16	0 — 1"	#10	Brass
KWNL-FW-7/32	WNXL-SF-7/32	0 — 1"	#2	Zinc
KWNL-FW-1/4	WNXL-SF-1/4	0 — 1"	F	Copper
KWNL-FW-5/16	WNXL-SF-5/16	0 — 1"	O	Black
KWNEL-FW-3/32	WNEXL-SF-3/32	1/2 — 1-1/2"	#40	Zinc
KWNEL-FW-1/8	WNEXL-SF-1/8	1/2 — 1-1/2"	#30	Copper
KWNEL-FW-5/32	WNEXL-SF-5/32	1/2 — 1-1/2"	#20	Black
KWNEL-FW-3/16	WNEXL-SF-3/16	1/2 — 1-1/2"	#10	Brass
KWNEL-FW7/32	WNEXL-SF-7/32	1/2 — 1-1/2"	#2	Zinc
KWNEL-FW-1/4	WNEXL-SF-1/4	1/2 — 1-1/2"	F	Copper
KWNEL-FW-5/16	WNEXL-SF-5/16	1/2 — 1-1/2"	O	Black
KWNK-FW-1/8	WNXK-SF-1/8	1-1/2 — 2-1/2"	#30	Copper
KWNK-FW-5/32	WNXK-SF-5/32	1-1/2 — 2-1/2"	#20	Black
KWNK-FW-3/16	WNXK-SF-3/16	1-1/2 — 2-1/2"	#10	Brass
KWNK-FW-7/32	WNXK-SF-7/32	1-1/2 — 2-1/2"	#2	Zinc
KWNK-FW-1/4	WNXK-SF-1/4	1-1/2 — 2-1/2"	F	Copper
KWNK-FW-5/16	WNXK-SF-5/16	1-1/2 — 2-1/2"	O	Black

TEMPORARY FASTENER INSTALLATION/REMOVAL TOOL

Install and remove wing nut or hex nut temporary fasteners. Can be used with any power tool with at least 1/4" chuck or a 1/4" hex female spindle.



Part No.	Description	OAL
H92-302	Temporary Fastener Quick Tool	95mm

NO-MAR CAPS – HEX BODY TEMPORARY FASTENER

Easily slips over Wing Nut or Hex Nut temporary fasteners to prevent damage to aircraft skin.



Part No.	Description	Size	Colour
KDCAP-3/32	No Mar Caps - Hex Body	3/32"	Grey
KDCAP-1/8	No Mar Caps - Hex Body	1/8"	Orange
KDCAP-5/32	No Mar Caps - Hex Body	5/32"	Black
KDCAP-3/16	No Mar Caps - Hex Body	3/16"	Blue
KDCAP-1/4	No Mar Caps - Hex Body	1/4"	Yellow

CYLINDRICAL BODY TEMPORARY FASTENERS

The Cylindrical Body (CBX) series is designed to eliminate tedious fastener/tool orientation problems that can result in reduced installation and removal time. The double-lead thread design enhances overall installation and removal efficiency while its large bearing area makes it a suitable choice for both composite and metallic surfaces.



CBX-BF-5/16

Standard (CBX) 0-1/2" Grip			
Part No.	Diameter	Drill Size	Colour
CBX-BF-3/32	3/32	#40	Silver
CBX-BF-1/8	1/8	#30	Copper
CBX-BF-5/32	5/32	#20	Black
CBX-BF-3/16	3/16	#10	Brass
CBX-BF-7/32	7/32	7/32	Silver
CBX-BF-1/4	1/4	1/4	Copper
CBX-BF-5/16	5/16	5/16	Black

Long (CBXL) 0-1" Grip			
Part No.	Diameter	Drill Size	Colour
CBXL-BF-3/32	3/32	#40	Silver
CBXL-BF-1/8	1/8	#30	Copper
CBXL-BF-5/32	5/32	#20	Black
CBXL-BF-3/16	3/16	#10	Brass
CBXL-BF-7/32	7/32	7/32	Silver
CBXL-BF-1/4	1/4	1/4	Copper
CBXL-BF-5/16	5/16	5/16	Black

Extra Long (CBXEL) 1/2-1 1/2" Grip			
Part No.	Diameter	Drill Size	Colour
CBXEL-BF-3/32	3/32	#40	Silver
CBXEL-BF-1/8	1/8	#30	Copper
CBXEL-BF-5/32	5/32	#20	Black
CBXEL-BF-3/16	3/16	#10	Brass
CBXEL-BF-1/4	1/4	1/4	Copper
CBXEL-BF-5/16	5/16	5/16	Black

Super Long (CBXK) 1 1/2-2 1/2" Grip			
Part No.	Diameter	Drill Size	Colour
CBXK-BF-1/8	1/8	#30	Copper
CBXK-BF-5/32	5/32	#20	Black
CBXK-BF-3/16	3/16	#10	Brass
CBXK-BF-1/4	1/4	1/4	Copper
CBXK-BF-5/16	5/16	5/16	Black

CYLINDRICAL TEMPORARY FASTENER RUNNER

- Suited for cylindrical Cleco fasteners 3/8" (CSX and CBX types)
- Pneumatic 1/8" BSP inlet



Part No.	RPM (no load)	Torque Nm	Torque in.lbs
SR-P1100-M3/8	1100	0.4 – 4.3	3.5 – 38.1
SR-P2300-M3/8	2300	0.4 - 2.1	3.5 - 18.6

CYLINDRICAL CLECO INSTALLATION/REMOVAL TOOL

Installation and removal by flipping tool over



Part No.	Description
H92-310	Cylindrical Cleco Hand Tool

CYLINDRICAL TEMPORARY FASTENER RUNNER

- E-Lit runner series Suited for cylindrical Cleco fasteners 3/8" (CSX and CBX types)



Part No.	RPM (no load)	Torque Nm	Torque in.lbs
ER-2.5-1550-P	500-1550	0.4-2.5	0.3-1.8
ER-6-1000-P	300-1000	0.8-6	0.6-4.4
ER-8-800-P	300-765	1.5-8	1.1-5.9
ER-12-600-P	250-570	3-12	2.2-8.8

THUMBWHEEL CYLINDRICAL BODY FASTENER TOOL

Installation and removal by flipping tool over



Part No.	Description
H92-320	Thumbwheel Cyindrical Tool

WCI – Cold Expansion Technology

Composite & Metal Anti-Fatigue Solutions

Westcoast Industries (WCI) now represented in Australia by Henchman Products, pioneered cold expansion technology over 40 years ago and has advanced this science to develop innovative solutions for bushing installations, fastener applications and aerospace fitting and hardware installations. FTI products can improve aircraft structural durability and reduce manufacturing and maintenance flow-time and costs. Our products may be installed in both metal and composite applications.Torque ratings from 150-600 lb-in.

FATIGUE LIFE ENHANCEMENT VIA COLDWORKING

Repeated stress due to cyclic loading can lead to failure in metal structures–especially at fastener and hole locations. While using thicker material may reduce fatigue, this carries the penalty of added weight and/or cost. In a one sided operation, coldworking involves pulling a tapered mandrel through a hole. The material preceding the major (largest) diameter is compressed into the surrounding hole (applied expansion). As the major diameter passes through the hole, the material behind the major diameter partially resumes its original configuration (retained expansion), thus creating a zone of residual compressive stress radially around the hole. This residual stress minimizes the effects of applied cyclic loading.

In addition to reducing the effect of cyclic loading; the zone of residual compressive stresses protects the hole from surface imperfections or material flaws. Coldworking is used extensively in new production, as well as rework of older structures, where it can retard the growth of undetected fatigue cracks.

Generally speaking, the fatigue life is extended several times.

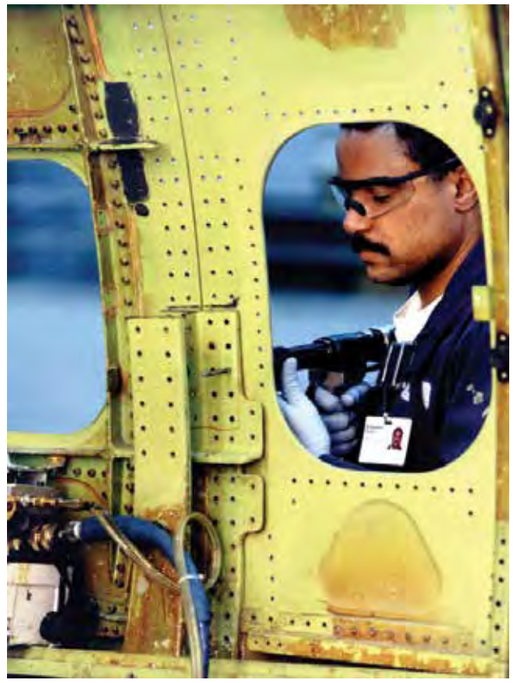


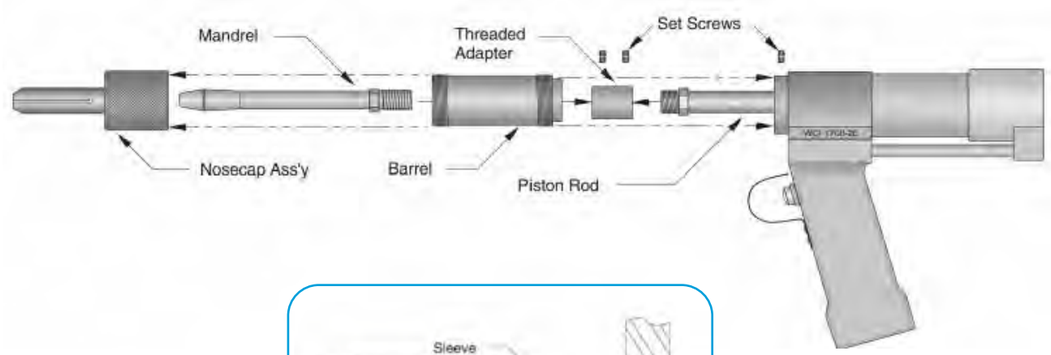
PROCESSES

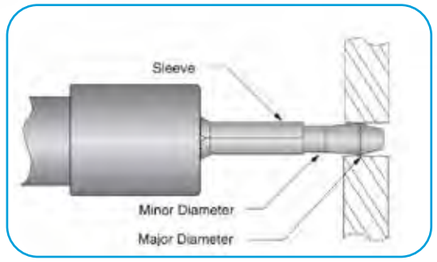
Coldworking can be divided into two broad categories, the split sleeve and the sleeveless, split mandrel process. Developed in the early 1970's, the split sleeve process uses an internally lubricated, axially split, disposable, sleeve that lubricates the mandrel during the coldwork process. Somewhat newer, the split mandrel sleeve-less process dispenses with the sleeve, and instead uses an automatically lubricated, longitudinally split, mandrel. This system is recognized as offering equal or superior fatigue life enhancement as compared to the split sleeve process, while accruing savings due to the elimination of the sleeve, as well significantly improving worker productivity. This is used mainly in OEM production environments.

Split sleeve coldworking is available in three different categories, depending upon the application:

- CB Process – Used in aluminium and mild steel, with hole sizes ranging from1/8" to 2 inches. The most widely used coldworking process, both for new .....production and rework applications.
- CA Process – For titanium and high-strength steels with a range from 1/8" to 45/64". Has a higher applied expansion than CB tooling, using high strength mandrels and cutting tools.
- CR Process – Special rework tooling for specific applications.







SERVICE BULLETINS AND TOOLKITS

With the most complete line of coldwork tooling available in the world, WCI maintains an extensive inventory of tooling and replacement parts, allowing us to quickly respond to customer needs. WCI is a leader in providing commercial Service Bulletin Kits to the world's airlines and maintenance bases for specific rework applications. These kits are packaged with all the coldwork tooling, including cutting tools, needed to accomplish each specific service bulletin, all packaged in a rugged container. WCI's large inventory allows most kits to be couriered quickly from stock. In addition to specific service bulletin kits, WCI also provides a number of standard Coldwork Overhaul and Repair Kits (CWORK), containing capital and expendable tooling needed to coldwork a range of hole sizes.

Kits are contained in mobile cabinets for the utmost in versatility. Custom kits, based upon a customer's unique and specific requirements, are also available, as well as complete customer training. Maximum fatigue life enhancement begins with the highest quality tooling obtainable.

WCI is proud of its reputation as a quality leader in the industry, starting at the initial design phase and continuing through production and inspection







Sealant Application & Removal

Sealant Sky Scrapers & Kits 244

Sealant Guns & Accessories..... 247

Sealant Sky Scrapers & Kits

SKYGRIP RUBBER HANDLES

Suits both the Boeing and Airbus type scrapers



Part No.	Description
310/1	SkyGrip Rubber Handles

AIRBUS APPROVED OEM SKYSCRAPER

- Ergonomical SkyGrip handle available



Part No.	Description
310/25/06	25mm x 6mm Airbus Approved Scraper

BOEING APPROVED OEM SKYSCRAPER

- Ergonomical SkyGrip handle available
- Resharpenable up to 40X



Part No.	Description
311/03/06	3mm x 6mm Boeing Scraper

AIRBUS APPROVED OEM SKYSCRAPER

- Ergonomical SkyGrip handle available
- Resharpenable up to 40X



Part No.	Description
310/03/06	3mm x 6mm Airbus Approved Scraper

BOEING APPROVED OEM SKYSCRAPER

- Ergonomical SkyGrip handle available
- Resharpenable up to 40X



Part No.	Description
311/12/06	12mm x 6mm Boeing Scraper

AIRBUS APPROVED OEM SKYSCRAPER

- Ergonomical SkyGrip handle available
- Resharpenable up to 40X



Part No.	Description
310/12/04	12mm x 4mm Airbus Approved Scraper

BOEING APPROVED OEM SKYSCRAPER

- Ergonomical SkyGrip handle available
- Resharpenable up to 40X



Part No.	Description
311/24/06	24mm x 6mm Boeing Scraper

AIRBUS APPROVED OEM SKYSCRAPER

- Ergonomical SkyGrip handle available
- Resharpenable up to 40X



Part No.	Description
310/24/04	24mm x 4mm Airbus Approved Scraper

BOEING APPROVED OEM SKYSCRAPER

- Ergonomical SkyGrip handle available
- Resharpenable up to 40X



Part No.	Description
311/38/06	38mm x 6mm Boeing Scraper

AIRBUS APPROVED OEM SKYSCRAPER

- Ergonomical SkyGrip handle available
- Resharpenable up to 40X



Part No.	Description
310/38/04	38mm x 4mm Airbus Approved Scraper

24 PIECE SCRAPER KIT

- Laid out in foam and sturdy case

Contents:

- Molded Plastic Case
- 4x Skygrip Handle
- 4x 38mm x 6mm Boeing Scraper
- 4x 24mm x 6mm Boeing Scraper
- 4x 12mm x 6mm Boeing Scraper
- 4x 3mm x 6mm Boeing Scraper
- 4x Seat Track Scraper



Part No.	Description
SR1151KIT	24 Piece Scraper Kit

19 PIECE SCRAPER KIT

- Laid out in foam and sturdy case

Contents:

- 4 x 310/1 skygrip rubber handle
- 2 x 311/14 14mm boeing scraper
- 3 x 311/25 25mm boeing scraper
- 2 x 311/37 37mm boeing scraper
- 2 x 310/14 14mm Airbus scraper
- 3 x 310/25 25mm Airbus scraper
- 2 x 310/37 37mm Airbus scraper
- 1 x 616/1 Skyedgit sharpener



Part No.	Description
HM-SRKIT19PC	19 Piece Scraper Kit

REVOLUTION SKYMILL

The SkyMill Revolution is a portable sharpening machine which has been specifically designed to sharpen at 32° being the optimum angle to keep a sharper edge longer.

- Handy pouch available as an option
- Can re-sharpen SkyScrapers up to 40 times
- Only compatible with the Revolutionary Skyscrapers!
- LED indictation for low charge



Part No.	Description
501/1	Revolution Skymill

PHENOLIC SCRAPER

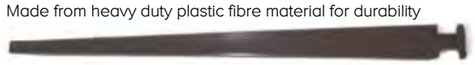
Durable general purpose scraper



Part No.	Description
SC1493	Phenolic Scraper

SEAT TRACK SCRAPER

- Specificall designed to fit inside seat tracks
- Made from heavy duty plastic fibre material for durability



Part No.	Description	OAL
SC2003	Seat Track Scraper	229mm

PLASTIC SCRAPER FOR RIVET GUN

- Suits standard .401 Rivet Guns
- Can be used as a hand hels Scraper
- Non conductive & noon-sparking



Part No.	Description
SC2002	Plastic Rivet Gun Scraper

SKYEDGIT SEALANT SCRAPER SHARPENER TOOL

- Pocket-sized hand-sharpener for fluted SkyScraper
- Easy and convenient to use
- Securable to workwear by zip wire clip
- Allows in-situ sharpening of fluted SkyScraper
- Indispensable when working in fuel tanks, on wings and in other poor access areas
- Customised shape and coated abrasive disc
- Dust collector included
- Developed for OEMs (Airbus, Boeing, Bombardier) and MROs



Part No.	Description
616/1	SkyEdgIt Sealant Scraper Pocket Sharpener Tool

NON-MARRING PLASTIC CHISEL SET

Tools made with high impact resistant nylon plastic composite and are designed to absorb hammer blows; They are solvent-resistant and you can resharpen the blades



Part No.	Description
45040	Non Marring 4 Pc Chisel Set

RAZOR BLADE SCRAPER

- For use with carbon steel razor blades
- Plastic blades availble (LIS52080)



Part No.	Description
LIS5200	Razor Blade Scraper

11 PIECE SEALANT REMOVAL KIT

- Laid out in foam, in sturdy case

Contents:

- Sioux 1AM1151 800RPM dill motor
- 5 of each 0 .4" and 0.83" sealant cutters



Part No.	Description
SR1151KIT	11 Piece Sealant Removal Kit

SEALANT CUTTERS

- Sealant cutters will easily slice through aircraft sealants without damaging the underlying structure
- Ideal for removing sealant fillets in the seams found in areas such as fuel tanks
- SR cutters have a hollow core facilitating the removal of sealant around the heads of aircraft fasteners
- For optimum performance, the correct operating speed is 800 - 1,000RPM (max 1,500 RPM)



Part No.	Description	Pcs
HSC-40-1	0.40" Diameter SR Cutter	1
HSC-40-5	0.40" Diameter SR Cutter	5
HSC-83-1	0.83" Diameter SR Cutter	1
HSC-83-5	0.83" Diameter SR Cutter	5

SEALANT ROLLER



Part No.	Description
SR1123	Sealant Roller

EPX ADHESIVE APPLICATOR

Precise Adhesive Dispensing made easy with the simple squeeze of the hand grip from the 3M™ Scotch-Weld™ EPX™ Plus II Applicator you can simultaneously meter, mix and dispense two-part structural adhesives with precision.

Included in the package are plungers designed to dispense 10:1, 1:1 and 2:1 ratio adhesive cartridges.



Part No.	Description
62-9170-9932-7	3M Scotch-Weld EPX Plus II Applicator w/Plungers

4 PIECE SEALANT SPATULA SET

- Stainless steel tools for smoothing and shaping sealant beads
- Each spatula is approx 7-1/2" long
- Vinyl pouch included



Part No.	Description
SK4000	4 Piece Sealant Spatula Kit

3 PIECE SEALANT SPATULA SET

Made of more chemically resistant Nylon plastic stored in a plastic carry case.

Tip Sizes 1/8 & 5/16; 3/8 & 3/16: 3/8 & 1/2 inch



Part No.	Description
H91-130	3 Piece Sealant Spatula Set

SKYSPATULA

- For the application and smoothing of adhesives and sealants
- To be used in conjunction with ELIXAIR® SkyScrapers

401-10



401-11



Part No.	Description
401-10	Skyspatula 9.5 in
401-11	Skyspatula 7 in

SKYSPREADER

Ideal for spreading sealants and adhesives, a good substitute to sprung steel



Part No.	Description
309-2	SkySpreader

MASTERBEAD DISPENSER GUN

Handheld silicone/adhesive dispensing gun designed specifically for aluminum-type adhesive tubes. Gun is able to get 99% of the adhesive material out of a tube in a consistent and uniform bead.



Part No.	Description
GTEMB1	GTE MasterBead Dispenser Gun

Sealant Guns & Accessories

DISPOSABLE PLASTIC CARTRIDGES

Plastic, polyethylene disposable cartridges for Semco® sealant guns.



Part No.	Description
SC1002	2.5oz Cartridge
SC1006	6.0oz Cartridge
SC1012	12oz Cartridge

DISPENSING NOZZLES

A wide range of nozzles are available to suit every requirement. The following are five popular nozzles. For other sizes, contact our office.



Part No.	Description
SN2011	2.5" Nozzle 1/16" Orifice
SN2018	2.5" Nozzle 1/8" Orifice
SN4011	4" Nozzle 1/16" Orifice
SN4018	4" Nozzle 1/8" Orifice
SN6018	8" Nozzle 1/8" Orifice

SEMCO MANUAL SEALANT GUN

This Semco® manual sealant gun is a high quality dispensing gun which accepts disposable cartridges or Semkit packages for dispensing sealants, adhesives, etc.



Part No.	Semco Ref	Description
SG4002	221824	Sealant Gun with 2.5oz retainer
SG4006	221830	Sealant Gun with 6.0oz retainer
SG4012	221836	Sealant Gun with 12oz retainer

SEMCO STRAIGHT SEALANT GUN

- This Semco® pneumatic sealant gun for easy, quiet application of sealants, adhesives, potting compounds, etc.
- Supplied standard with a 6 oz retainer and 5 ft air hose



Part No.	Semco Ref	Description
SG6002	250250B	Sealant Gun with 2.5oz retainer
SG6006	250060B	Sealant Gun with 6.0oz retainer
SG6012	250120B	Sealant Gun with 12oz retainer

REPLACEMENT RETAINER

Zinc plated replacement retainer for sealant guns.



Part No.	Semco Ref	Description
SG7002	226819	2.5oz Retainer
SG7006	226820	6.0oz Retainer
SG7012	226822	12oz Retainer

SEALANT MIXER

- Simple yet effective sealant mixer with 1/4" shank
- Fit in drill chuck and mix Semkit® sealant tubes



Part No.	Description
MX001	Sealant Mixer

PLUNGER

Plunger fits all cartridge Sizes.



Part No.	Description
SP1000	Plunger

SEMCO PISTOL GRIP AIR SEALANT GUN

- Pistol grip gun for easy, quiet application of sealants, adhesives, potting compounds, etc.
- Supplied standard with a 6 oz retainer and 5 ft air hose



Part No.	Semco Ref	Description
SG5002	250255	Sealant Gun with 2.5oz retainer
SG5006	250065	Sealant Gun with 6.0oz retainer
SG5012	250125	Sealant Gun with 12oz retainer

ECONOMY PISTOL GRIP AIR SEALANT GUN

Similar to the Semco SG5006, use this pneumatic pistol grip sealant gun to apply smooth, uniform material exactly where you want it. Comes with body, 10 ft. hose, and 6 oz. zinc-plated corrosion resistant retainer. Hanson-style air fitting on hose.



Part No.	Description
SG9006	Economy Sealant Gun with 6.0oz retainer



1/4 Inch Drive Sockets & Ratchets

Stahlwille Drive Tools 250
PROTO® Drive Tools 255
Stahlwille Sockets 258
PROTO® Sockets 262
Stahlwille Universal Sockets 266
PROTO® Universal Sockets 267
Stahlwille Bit Sockets 268
PROTO® Bit Sockets 269
Stahlwille Crowring Wrenches 270
Stahlwille Crowfoot Wrenches 271
PROTO® Crowfoot Wrenches 271
Stahlwille Sets 272
PROTO® Sets 275

Stahlwille 1/4” Drive Tools

STAHLWILLE 1/4” DRIVE REVERSIBLE RATCHET – FINE TOOTH
411

- 60 teeth
- with 2-component handle
- for use in confined spaces, re-engages after movement of 6°
- DIN 3122/ISO 3315
- Repair Kit Product No. 19 20 00 01



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
11 23 10 11	1/4	118	24	19.5	100

STAHLWILLE 1/4” DRIVE REVERSIBLE RATCHET
415

- 22 teeth
- with 2-component handle
- DIN 3122/ISO 3315
- Repair Kit Product No. 19 01 00 00



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
11 11 10 10	1/4	117	22	13	80

STAHLWILLE 1/4” DRIVE REVERSIBLE RATCHET – QUICKRELEASE
415QR

- 22 teeth
- with 2-component handle
- DIN 3122/ISO 3315
- registered design
- Repair Kit Product No. 19 01 10 20



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
111100 20	1/4	117	22	13	79

STAHLWILLE 1/4” DRIVE REVERSIBLE RATCHET – QUICKRELEASE FINE TOOTH
415QR N

- 80 teeth
- with 2-component handle
- for use in confined spaces, re-engages after movement of 4.5°
- construction without screws prevents foreign object damage
- Repair Kit Product No. 19 01 20 20



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
111110 20	1/4	117	22.6	10.7	79

STAHLWILLE 1/4” DRIVE REVERSIBLE RATCHET – QUICKRELEASE, FINE TOOTH
415SG-QR N

- 80 teeth
- with steel handle
- for use in confined spaces, re-engages after movement of 4.5°
- construction without screws prevents foreign object damage
- DIN 3122/ISO 3315
- registered design
- Repair Kit Product No. 19 01 20 20



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
111110 30	1/4	117	22.6	10.7	86

STAHLWILLE 1/4” DRIVE REVERSIBLE RATCHET – QUICKRELEASE, FINE TOOTH, SHORT
418QR

- 80 teeth, with steel handle
- for use in confined spaces, re-engages after movement of 4.5°
- construction without screws prevents foreign object damage
- DIN 3122/ISO 3315
- Repair Kit Product No. 19 01 20 20



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
111110 50	1/4	90	22.5	12.2	74

STAHLWILLE 1/4” DRIVE REVERSIBLE RATCHET – QUICKRELEASE, FINE TOOTH, LONG
415QRL N

- 80 teeth, with 2-component handle
- for use in confined spaces, re-engages after movement of 4.5°
- construction without screws prevents foreign object damage
- DIN 3122/ISO 3315
- Repair Kit Product No. 19 01 20 20



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
111110 40	1/4	153	22.6	10.7	94

STAHLWILLE 1/4” DRIVE REVERSIBLE BIT RATCHET
415B

- 22 teeth, with 2-component handle
- with inside hexagon 1/4” for bit screwdriver sockets 1/4”
- DIN 3126/ISO 1173 D 6.3
- internal hex drive with a collar-thrust spring (registered design)
- bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173)
- Repair Kit Product No. 19 01 00 11



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
1113 10 11	1/4	117	22	12	76

STAHLWILLE 1/4” DRIVE REVERSIBLE BIT RATCHET – FINE TOOTH
415SGB N

- 80 teeth, with steel handle
- inside hexagon 1/4” for bit screwdriver sockets 1/4”
- DIN 3126/ISO 1173 D 6.3
- internal hex drive with a collar-thrust spring
- bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173)
- for use in confined spaces, re-engages after movement of 4.5°
- construction without screws prevents foreign object damage
- Repair Kit Product No. 19 01 00 12



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
1113 20 20	1/4	117	22.6	10.7	85

STAHLWILLE 1/4” DRIVE BIT RATCHET – FINE TOOTH, MINI
418B

- 80 teeth, with steel handle
- inside hexagon 1/4” for bit screwdriver sockets 1/4”
- DIN 3126/ISO 1173 D 6.3
- internal hex drive with a collar-thrust spring
- bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173)
- for use in confined spaces, re-engages after movement of 4.5°
- construction without screws prevents foreign object damage



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
1113 30 30	1/4	90	22.5	11	70

STAHLWILLE 1/4” DRIVE FLEXIBLE-JOINT RATCHET – QUICKRELEASE, FINE TOOTH 416QR

- 80 teeth
- with 2-component handle
- handle may be raised or lowered by approx. 90°, lockable in four positions: straight, 30° up, 60° up, 30° down
- release the lock by pressing the button in the handle
- for use in confined spaces, re-engages after movement of 4.5°
- construction without screws prevents foreign object damage
- DIN 3122/ISO3315
- Repair Kit Product No. 19 01 20 20



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
11261010	1/4	170	22.5	12	170

STAHLWILLE 1/4” DRIVE HANDLE 400

DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Weight (g)
11050010	1/4	150	70

STAHLWILLE 1/4” SLIDING T-HANDLE 404

DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Weight (g)
11070000	1/4	116	38

STAHLWILLE 1/4” DRIVE HANDLE – QUICKRELEASE 400QR

DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Weight (g)
11051010	1/4	150	80

STAHLWILLE 1/4” SLIDING T-HANDLE – QUICKRELEASE 404QR

DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Weight (g)
11071000	1/4	116	50

STAHLWILLE 1/4” DRIVE HANDLE – DRALL 400 DRALL

- with 1/4” square drive in end of handle
- DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Weight (g)
11050011	1/4	150	105

STAHLWILLE 1/4” DRIVE HANDLE – FLEXIBLE SHAFT 401

- right hand rotation only
- maximum torque 5 N·m



Part No.	Drive Size	OAL (L) (mm)	Weight (g)
11053002	1/4	240	130

STAHLWILLE 1/4” SPEEDER BRACE – QUICKRELEASE 413QR

- for greater axial power transmission, detachable palm head
- working radius 70 mm
- detachable palm head



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
11100005	1/4	440	–	–	354

STAHLWILLE 1/4” DRIVE FLEXIBLE HANDLE 403

- DIN 3122/ISO 3315
- with 2-component handle



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
11061010	1/4	154.5	–	–	70

STAHLWILLE RATCHET REPAIR KITS

Part No	Ratchet #	Contents	Weight (g)
4110 / 19200001	No 411 / 11 23 10 11	1 pinion; 1 pawl; 1 switching disk; 1 spring; 3 screws	47
4150 / 19 01 00 00	No 415 / 11 11 10 10	1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws M 1.7 x 8; 1 cover plate	26
4150QR / 19011020	No 415QR / 11 11 00 20	1 pinion; 1 pawl; 2 levers with pin; 1 ball; 2 compression springs; 2 screws M 1.7 x 8; 2 cover plates	24
4150QR N / 19012020	No 415QR N / 11 11 10 20 415QRL N / 11 11 10 40 415SG-QR N / 11 11 10 30 416QR / 11 26 10 10 418QR / 11 11 10 50	1 pinion; 1 locking disc; 1 lever; 1 pin; 1 ball; 1 compression spring; 2 circlips; 1 cover plate	21
4150B / 19010011	No 415B / 11 13 10 11	1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws M 1.7 x 8; 1 cover plate	20
4151 / 19 01 00 12	No 415SGB N / 11 13 20 20	1 pinion; 1 locking disc; 1 lever; 1 pin; 1 ball; 1 compression spring; 2 circlips; 1 cover plate	22
4152 / 19010013	No 415SGH N / 11 11 00 10	1 pinion; 1 locking disc; 1 lever; 1 pin; 1 ball; 1 compression spring; 2 circlips; 1 cover plate	21

STAHLWILLE 1/4” DRIVE WOBBLE-DRIVE EXTENSIONS 405W

swivel angle 8° each side, max. torque 40 Nm



Part No.	Size	OAL (mm)	Depth (mm)	Weight (g)
11010011	2	54	11.6	28
11010016	4	100	11.6	45
11010012	6	150	11.6	55
11010020	10	254	11.6	110
11010024	14	356	11.6	155

STAHLWILLE 1/4” DRIVE EXTENSIONS QR 405QR

DIN 3123/ISO 3316



Part No.	Size	OAL (mm)	Depth (mm)	Weight (g)
11011001	2	54	11.6	28
11011006	4	102	11.6	49
11011002	6	150	11.6	65
11011013	13	330	11.6	145
11011005	14	356	11.6	150

STAHLWILLE 1/4” DRIVE EXTENSION FLEXIBLE 406

right hand rotation only, maximum torque 5 N·m



Part No.	OAL (L) (mm)	Depth (d) (mm)	Weight (g)
11040000	152	11.6	61

STAHLWILLE 1/4” DRIVE EXTENDING ADAPTOR 410

1/4” socket x 3/8” plug (6.3 x 10)



Part No.	OAL (L) (mm)	Depth (d) (mm)	Weight (g)
11030010	13	28	14

STAHLWILLE 1/4” DRIVE UNIVERSAL JOINT 407

DIN 3123/ISO 3316



Part No.	OAL (L) (mm)	Depth (d) (mm)	Weight (g)
11020000	37	12.8	23

STAHLWILLE 1/4” DRIVE STANDARD EXTENSIONS 405

DIN 3123/ISO 3316



Part No.	Size	OAL (mm)	Depth (mm)	Weight (g)
11010001	2	54	11.6	29
11010006	4	100	11.6	46
11010002	6	150	11.6	65
11010010	10	254	11.6	115
11010014	14	356	11.6	155

STAHLWILLE 1/4” DRIVE EXTENDING ADAPTOR 409

- 1/4” socket x 3/8” plug (6.3 x 10)
- DIN 3123/ISO 3316
- HPQ® high performance steel



Part No.	OAL (L) (mm)	Depth (d) (mm)	Weight (g)
11030002	25	12.8	18

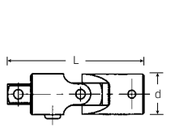
STAHLWILLE 1/4” DRIVE EXTENDING ADAPTOR 409M

- 1/4” socket x 1/2” plug (6.3 x 12.5)
- HPQ® high performance steel



Part No.	OAL (L) (mm)	Depth (d) (mm)	Weight (g)
11030003	28	16.5	36

STAHLWILLE 1/4” DRIVE UNIVERSAL JOINT – QUICKRELEASE 407QR





Part No.	OAL (L) (mm)	Depth (d) (mm)	Weight (g)
11021000	45	–	35

STAHLWILLE 1/4” DRIVE REVERSIBLE HI-LOK RATCHET – FINE TOOTH 415SGH N

- 80 teeth
- axially drilled pinion, locking facility for sockets
- for use on Hi-Lok bolts in the aerospace industry
- for use in confined spaces, re-engages after movement of 4.5°
- construction without screws prevents foreign object damage
- Repair Kit Product No. 19 01 00 13



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
11110010	1/4	117	22.6	10.7	88

STAHLWILLE 1/4” DRIVE HI-LOK OFFSET KEY DRIVERS 10759

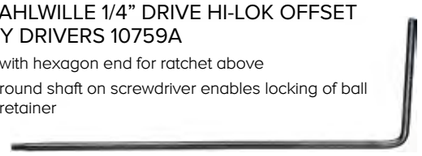
with lock-on facility as on ratchet above



Part No.	Size	Inner Dia. (mm)	Depth (d) (mm)	Weight (g)
43062002	1	2	50	5
43064002	2	2	100	8

STAHLWILLE 1/4” DRIVE HI-LOK OFFSET KEY DRIVERS 10759A

- with hexagon end for ratchet above
- round shaft on screwdriver enables locking of ball retainer



PartNo.	Size	InnerDia. (in)	Depth(d) (mm)	Weight(g)
43560004	1	1/16	50	5
43564004	2	1/16	100	8
43560005	1	5/64	50	5
43564005	2	5/64	100	8
43560006	1	3/32	50	5
43564006	2	3/32	100	8

STAHLWILLE 1/4” DRIVE HI-LOK EXTENSIONS 415H

with lock-on facility as on ratchet above



Part No.	Size	OAL (L) (mm)	Depth (d) (mm)	Weight (g)
11240011	2	54	13	34
11240012	4	102	13	49
11240013	6	152	13	66

1/4” SQUARE DRIVE FINGER DISC RATCHET

- ABS finger grip disc ratchet with 72 teeth
- Left/Right direction switch.



Part No.	Description	Diameter
H66-968	1/4” Square Drive Finger Disc Ratchet	50 mm

STAHLWILLE 1/4” DRIVE BIT HOLDER 412

- DIN 3126/ISO 1173 D 6.3
- internal hex drive with a collar-thrust spring
- bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173)
- HPQ® high performance steel



Part No.	OAL (L) (mm)	Depth (d) (mm)	Weight (g)
11180010	25	11.6	14

STAHLWILLE 1/4” DRIVE BIT HOLDER 412-1

- DIN 3126/ISO 1173 D 6.3
- outer size of handle, octagon 10 mm for use in tools with 10 mm internal hex drive or internal double hexagon (e.g. “FLEXI” double-ended flexi-joint spanners, T-handle universal joint spanners, box spanners, ratchet ring spanners etc.)
- internal hex drive with a collar-thrust spring
- bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173)
- HPQ® high performance steel



Part No.	Size	OAL (mm)	Depth (mm)	Weight (g)
11180020	10	20	11.6	11

STAHLWILLE 1/4” DRIVE LOCKING ADAPTOR 417/1

with hexagon key wrench
No 10760aCV 3/32”



Part No.	OAL (L) (mm)	Depth (d) (mm)	Weight (g)
96112701	42	13	23

1/4” DRIVE RATCHETOR

- 44 teeth
- Converts standard handles to ratcheting handles
- Koken brand Manufactured according to DIN/ISO standards.





Part No.	Description	Diameter (mm)	Length (mm)
KO2755	1/4” Drive Ratchetor	26	40

PROTO® 1/4” Drive Tools

PROTO® 1/4” DRIVE STANDARD LENGTH PREMIUM PEAR HEAD RATCHETS

ASME B107.500

- Small pear head design for access in tight, hard to reach work areas.
- 45-tooth gear provides balance between 8° articulation angle and high torque carrying capacity.
- Sealed design helps prevent debris from entering the ratchet mechanism reducing wear. Also, helps to keep lubrication contained within the components. Patent pending design.
- Low profile reversing lever design for quick, one-hand operation.
- Contoured, ergonomically-designed handle for comfort
- Knurled bands allow for increased grip and slip resistance.
- Double nickel chrome plated for enhanced corrosion protection or black oxide finish.
- Field repairable.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J4749XL	1/4”	Full Polish	6-11/16	0.25	J4749XLRK
J4749XLBL	1/4”	Black Oxide	6-11/16	0.25	J4749XLRK

PROTO® 1/4” DRIVE QUICK RELEASE PREMIUM PEAR HEAD RATCHET

ASME B107.500

- Small, pear head design for access in tight, hard to reach work areas.
- 45-tooth gear, 8° swing articulation.
- Full polished handle, easy to clean.
- Field repairable.
- Patented sealed head design helps prevent debris from entering the ratchet mechanism reducing wear. Also, helps to keep lubrication contained within the components.
- Low profile reversing lever design for quick, one-hand operation.
- Contoured, ergonomically-designed handle for comfort. Knurled bands allow for increased grip and slip resistance
- Double nickel chrome plated for enhanced corrosion protection meeting aerospace requirements.
- Low profile quick release button for access in restricted areas.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J4749XLQR	1/4”	Full Polish	6-11/16	0.25	J4749XLQRRK
J4749XLQRBL	1/4”	Black Oxide	6-11/16	0.25	J4749XLQRRK

PROTO® 1/4” DRIVE STANDARD LENGTH CLASSIC PEAR HEAD RATCHET

ASME B107.500

- 90 tooth count allows for 4 degree arc swing.
- Double nickel chrome plated for enhanced corrosion protection.
- Full polish finish for superior comfort and easy clean up.
- Contoured, ergonomically designed handle for comfort.
- Knurled bands allow for increased grip and slip resistance.
- Low profile reversing lever design for quick, one hand operation.
- Flex head versions available for added accessibility in tight spaces.
- Small, pear head design for access in tight, hard-to-reach work areas.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J4749HTC	1/4	Full Polish	5-7/32	0.26	J4749RK

PROTO® 1/4” DRIVE FLEX HEAD PRECISION 90 TOOTH PEAR HEAD RATCHET

ASME B107.500

- 90 tooth count allows for 4 degree arc swing.
- Full polish finish for superior comfort and easy clean up.
- Contoured, ergonomically designed handle for comfort.
- Small, pear head design for access in tight, hard-to-reach work areas.
- Knurled bands allow for increased grip and slip resistance.
- Low profile reversing lever design for quick, one hand operation.
- Double nickel chrome plated for enhanced corrosion protection.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J4750HTCF	1/4”	Full Polish	9	-	-

PROTO® 1/4” DRIVE AEROSPACE PREMIUM PEAR HEAD RATCHET

PREMIUM RATCHET

ASME B107.500

- Vertical hole drilled in drive plug, designed for installation of frangible collars on threaded pins.
- Robust 45-tooth gear pawl design provides 8° ratcheting angle while maximizing ultimate torque.
- Thin head design for access into tight work areas.
- Reversing lever designed for quick, one-hand operation.
- Full polish nickel chrome plated.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J4749XLHS	1/4"	Full Polish	5-45/64	0.25	J4749XLHSRK

PROTO® 1/4” DRIVE AEROSPACE CLASSIC PEAR HEAD RATCHET

ASME B107.500

- Vertical hole drilled in drive plug, designed for installation of frangible collars on threaded pins.
- Metal spring clip on drive plug for positive socket retention.
- 24-tooth gear provides 15° articulation angle.
- Thin head design for access into tight work areas.
- Reversing lever designed for quick, one-hand operation.
- Full polish double nickel chrome plated.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J4749HS	1/4	Full Polish	5	0.25	J4749RK

PROTO® 1/4” DRIVE STANDARD LENGTH ROUND HEAD RATCHET

ASME B107.500

- Round head ratchet mechanism allows for a compact head.
- 72-tooth = 5° swing arc.
- Small head design and tight swing arc allow for fastener access in tight areas.
- Full polish shaft with knurled grip for strong slip-resistant grip.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J4752F	1/4	Full Polish	4-1/2	0.26	J4752FRK

PROTO® 1/4” DRIVE FLEX-HEAD RATCHET

ASME B107.500

- Small head design and tight swing to allow access to fastener in a tight area.
- Full polish shaft with knurled grip allows for a strong slip-resistant grip.
- 180° flex.
- 72-tooth gear.
- 5° ratcheting angle.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J4757F	1/4	Full Polish	6-37/64	0.32	J4752FRK

PROTO® PEAR HEAD RATCHET REPAIR KITS



Part No	Drive Size	Ratchet #	Weight (lbs)
J4749XLRK	1/4	J4749XL	0.04
J4749XLHSRK	1/4	J4749XLHS	0.06
J4749RK	1/4	J4749	0.04
J4749HSRK	1/4	J4749HS	0.04

PROTO® ROUND HEAD RATCHET REPAIR KITS

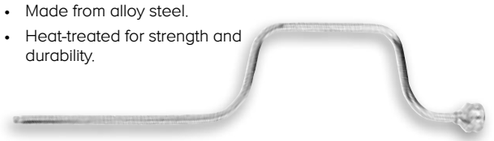


Part No	Drive Size	Ratchet #	Weight (lbs)
J4752FRK	1/4	J4749XL J4752FBL	0.10

PROTO® 1/4” DRIVE SPEED HANDLE

ASME B107.500

- Made from alloy steel.
- Heat-treated for strength and durability.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)
J4780G	1/4	Full Polish	15-1/2	0.52

PROTO® 1/4” DRIVE SLIDING T-HANDLE

ASME B107.500

- Made from alloy steel.
- Heat-treated for strength and durability.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)
J4785	1/4	Full Polish	4-1/2	0.08

PROTO® 1/4” DRIVE HINGE HANDLE

ASME B107.500



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)
J4766	1/4	Full Polish	5-3/4	0.22

PROTO® 1/4” DRIVE SOCKET DRIVER

ASME B107.500

1/4” square female drive in handle.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)
J4769	1/4	Full Polish	6	0.22

PROTO® 1/4” DRIVE FLEXIBLE DRIVER

Flexible shaft for bending around obstructions in low torque applications.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)
J4764	1/4	Chrome	6-3/4	0.19

PROTO® 1/4” DRIVE LOCKING EXTENSIONS

ASME B107.500

- One-piece extension design.
- Provides positive socket retention.
- Use where accidental socket disengagement may be a concern or safety hazard.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)
J4759L	1/4	Full Polish	2	0.07
J4761L	1/4	Full Polish	6	0.15
J4762L	1/4	Full Polish	10	0.25
J4763L	1/4	Full Polish	14-3/32	0.33

PROTO® 1/4” DRIVE STANDARD EXTENSIONS

ASME B107.500

Extensions help provide access to fasteners in areas that might otherwise be difficult to reach.



Part No.	Drive Size	OAL (in)	Weight (lbs)
J4759	1/4	2	0.05
J4760	1/4	3	0.08
J4761	1/4	6	0.15
J4762	1/4	10	0.24
J4763	1/4	14-3/32	0.30

PROTO® 1/4” DRIVE WOBBLE EXTENSIONS

ASME B107.500

- Provides up to 17° angle of operation.
- Socket can be pushed past the detent ball for straight driving.



Part No.	Drive Size	OAL (in)	Weight (lbs)
J4759W	1/4	2	0.06
J4760W	1/4	3	0.07
J4764W	1/4	4	0.10
J4761W	1/4	6	0.14
J4762W	1/4	10	0.20

PROTO® 1/4” DRIVE FLEXIBLE EXTENSION

ASME B107.500

Flexible shaft extensions help reach around obstructions in low torque applications.



Part No.	Drive Size	OAL (in)	Weight (lbs)
J4765	1/4	6-1/4	0.11

PROTO® DRIVE ADAPTERS

ASME B107.500

- Full Polish Finish.



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5255	3/8" F x 1/4" M	1	0.05
J5256	1/4" F x 3/8" M	1	0.04

PROTO® 1/4” DRIVE UNIVERSAL JOINT



Part No.	Drive Size	OAL (in)	Weight (lbs)
J4770A	1/4	1-11/32	0.04

1/4” DRIVE RATCHETOR

- 44 teeth
- Converts standard handles to ratcheting handles
- Koken brand Manufactured according to DIN/ISO standards.

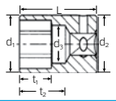


Part No.	Description	Diameter (mm)	Length (mm)
KO2755	1/4” Drive Ratchetor	26	40

Stahlwille 1/4” Sockets

STAHLWILLE 1/4” DRIVE SOCKETS – 12 POINT
40D

- DIN 3124/ISO 2725-1, E DIN EN 3709, ASME B 107.5M
- HPQ® high performance steel, chrome plated





ASME B107.5M

MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (g)
01030005	5	7.9	10.7	4	23	4.5	15	9
01030055	5.5	8.5	10.7	4.5	23	6	15	9
01030006	6	9.2	10.7	5	23	6	15	9
01030007	7	10.7	10.7	6	23	6.5	13.4	10
01030008	8	11.6	11.6	7	23	8	13.1	11
01030009	9	12.8	12.8	8	23	8	12.8	13
01030010	10	14.3	14.3	9	23	8	14.9	16
01030011	11	15.5	15.5	10	23	9	14.6	19
01030012	12	16.5	16.5	11	23	9.5	14.3	23
01030013	13	17.8	17.8	12	23	9.5	14	25
01030014	14	18.8	18.8	13	24	10	14.7	30

STAHLWILLE 1/4” DRIVE SOCKETS – 12 POINT
40AD

- ASME B 107.1, Fed. Spec. GGG-W-641, SAE AS 954-E (test loads)
- HPQ® high performance steel, chrome plated



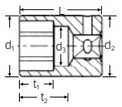
ASME B107.1

IN

Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (g)
01530010	5/32	6.7	10.7	3.2	23	3.5	15	7
01530012	3/16	7.6	10.7	4	23	4.5	15	7
01530014	7/32	8.6	10.7	5	23	6	15	9
01530016	1/4	9.4	10.7	5.5	23	6	15	8
01530018	9/32	10.7	10.7	6.6	23	6.5	13.2	8
01530020	5/16	11.6	11.6	7	23	8	13.1	11
01530022	11/32	12.7	12.7	8.1	23	8	13.3	13
01530024	3/8	13.7	13.7	8.3	23	8	13.3	16
01530028	7/16	15.8	15.8	10	23	9	14.6	21
01530032	1/2	17.3	17.3	11.5	23	9.5	14.1	26
01530034	9/16	18.8	18.8	13.1	24	10	14.7	30

STAHLWILLE 1/4” DRIVE SOCKETS – 6 POINT
40

- DIN 3124/ISO 2725-1, ASME B 107.5M, E DIN EN 3709 (test loads)
- HPQ® high performance steel, chrome plated





ASME B107.5M

MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (lbs)
01010003	3	5.6	10.7	2.5	23	2	15	7
01010032	3.2	5.6	10.7	2.5	23	2	15	8
01010035	3.5	6	10.7	2.5	23	2.5	15	8
01010004	4	6.7	10.7	3.2	23	3.5	15	9
01010045	4.5	7.3	10.7	3.7	23	4	15	9
01010005	5	7.9	10.7	4	23	4.5	15	8
01010055	5.5	8.5	10.7	4.5	23	6	15	9
01010006	6	9.2	10.7	5	23	6	15	9
01010007	7	10.7	10.7	6	23	6.5	13.4	10
01010008	8	11.6	11.6	7	23	8	13.1	11
01010009	9	12.8	12.8	8	23	8	12.8	14
01010010	10	14.3	14.3	9	23	8	14.9	17
01010011	11	15.5	15.5	10	23	9	14.6	19
01010012	12	16.5	16.5	11	23	9.5	14.3	24
01010013	13	17.8	17.8	12	23	9.5	14	26
01010014	14	18.8	18.8	13	24	10	14.7	30

STAHLWILLE 1/4” DRIVE SOCKETS – 6 POINT
40A

- ASME B 107.1, Fed. Spec. GGG-W-641, SAE AS 954-E (test loads)
- HPQ® high performance steel, chrome plated



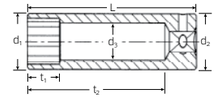
ASME B 107.1

IN

Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (g)
01410008	1/8	5.6	10.7	2.5	23	2	15	7
01410010	5/32	6.7	10.7	3.2	23	3.5	15	9
01410012	3/16	7.6	10.7	4	23	4.5	15	9
01410014	7/32	8.6	10.7	5	23	6	15	9
01410016	1/4	9.4	10.7	5.5	23	6	15	9
01410018	9/32	10.7	10.7	6.6	23	6.5	13.2	10
01410020	5/16	11.6	11.6	7	23	8	13.1	12
01410022	11/32	12.7	12.7	8.1	23	8	13.3	14
01410024	3/8	13.7	13.7	8.3	23	8	13.3	16
01410028	7/16	15.8	15.8	10	23	9	14.6	15
01410032	1/2	17.3	17.3	11.5	23	9.5	14.1	27
01410034	9/16	18.8	18.8	13.1	24	10	14.7	31

STAHLWILLE 1/4” DRIVE DEEP SOCKETS – 12 POINT
40DL

- E DIN EN 3710, E DIN EN 3709, DIN 3124/ISO 2725-1, ASME B 107.5M
- HPQ® high performance steel, chrome plated





ASME B107.5M

MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (lbs)
01240005	5	7.9	10.7	4	50	4.5	42	15
01240055	5.5	8.5	10.7	4.5	50	6	42	16
01240006	6	9.2	10.7	5	50	6	42	18
01240007	7	10.7	10.7	6	50	6.5	40.9	21
01240008	8	11.6	11.6	7	50	8	40.1	23
01240009	9	12.8	12.8	8	50	8	39.8	30
01240010	10	14.3	14.3	9	50	9	41.9	35
01240011	11	15.5	15.5	10	50	10.5	41.6	40
01240012	12	16.5	16.5	11	50	12	41.3	47
01240013	13	17.8	17.8	12	50	12	41	50
01240014	14	18.8	18.8	13	50	15	40.7	57

STAHLWILLE 1/4” DRIVE DEEP SOCKETS – 12 POINT
40ADL

- ASME B 107.1, Fed. Spec. GGG-W-641, SAE AS 954-E
- HPQ® high performance steel, chrome plated



ASME B107.1

IN

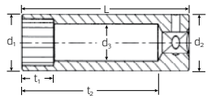
Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (lbs)
01640010	5/32	6.7	10.7	3.2	50	4.5	42	13
01640012	3/16	7.6	10.7	4	50	4.5	42	15
01640014	7/32	8.6	10.7	5	50	6	42	16
01640016	1/4	9.4	10.7	5.2	50	6	42	19
01640018	9/32	10.7	10.7	6.5	50	8	40.2	20
01640020	5/16	11.6	11.6	7	50	8	40.1	24
01640022	11/32	12.7	12.7	8.1	50	9	39.7	26
01640024	3/8	13.7	13.7	8.3	50	9	39.7	33
01640028	7/16	15.8	15.8	10	50	10.5	41.6	42
01640032	1/2	17.3	17.3	11.5	50	12	41.1	44
01640034	9/16	18.8	18.8	13.1	50	15	40.7	55

STAHLWILLE 1/4” DRIVE SEMI-DEEP SOCKETS – 12 POINT
40ADV

AS 954

IN

- SAE AS 954, S.B.A.C. AS 40605/40606
- HPQ® high performance steel, chrome plated





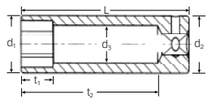
Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (lbs)
01650014	7/32	8.6	10.7	5	31.8	6	23.8	12
01650016	1/4	9.4	10.7	5.2	31.8	6	23.8	13
01650018	9/32	10.7	10.7	6.6	31.8	6.5	22	13
01650020	5/16	11.6	11.6	7	31.8	8	21.9	15

STAHLWILLE 1/4” DRIVE DEEP SOCKETS – 6 POINT
40L

ASME B107.5M

MM

- DIN 3124/ISO 2725-1, ASME B 107.5M, E DIN EN 3710, E DIN EN 3709 (test loads)
- HPQ® high performance steel, chrome plated

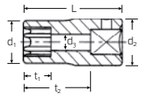




Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (lbs)
01020032	3.2	5.6	10.7	2.5	50	2	37.5	12
01020004	4	6.7	10.7	3.2	50	3.5	42	14
01020045	4.5	7.3	10.7	3.7	50	4	42	15
01020005	5	7.9	10.7	4	50	4.5	42	16
01020055	5.5	8.5	10.7	4.5	50	6	42	17
01020006	6	9.2	10.7	5	50	6	42	18
01020007	7	10.7	10.7	6	50	6.5	40.9	24
01020008	8	11.6	11.6	7	50	8	40.1	27
01020009	9	12.8	12.8	8	50	8	39.8	31
01020010	10	14.3	14.3	9	50	9	41.9	38
01020011	11	15.5	15.5	10	50	10.5	41.6	43
01020012	12	16.5	16.5	11	50	12	41.3	49
01020013	13	17.8	17.8	12	50	12	41	56

STAHLWILLE 1/4” DRIVE TORX SOCKETS
40TX

- for external TORX® screws
- HPQ® high performance steel, chrome plated



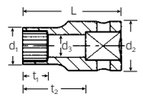


Part No.	Size	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (lbs)
01270004	E4	3.8	5.6	10.7	2	23	4.5	15	8
01270005	E5	4.7	6.7	10.7	2.8	23	5	15	7
01270006	E6	5.7	8	10.7	3.6	23	5.5	15	10
01270007	E7	6.2	9.6	10.7	3.8	23	6.5	15	10
01270008	E8	7.5	10.5	11.6	4.3	23	7	15	10
01270010	E10	9.4	12.7	12.7	5.6	23	9	15	17

STAHLWILLE 1/4” DRIVE SPLINE – 12 POINT
40ASP

MM

- for external spline-drive screws
- MS-33787, MIL-W-8982
- HPQ® high performance steel, chrome plated

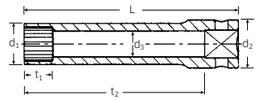




Part No.	Spline Size	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (lbs)
01011007	7	7/32	8.6	10.7	5	22.2	6	14.2	7
01011008	8	1/4	9.5	10.7	5.6	22.2	7	14.2	10
01011009	9	9/32	11.2	11.2	6.6	22.2	8	12.4	10
01011010	10	5/16	11.6	11.6	7.1	22.2	8	12.2	12
01011012	12	3/8	13.8	13.8	8.6	23	8.7	12.6	18
01011014	14	7/16	15.7	15.7	10.4	25	10.7	14.1	24

STAHLWILLE 1/4” DRIVE DEEP SPLINE – 12 POINT
40ALSP

- for external spline-drive screws
- long, extra deep bolt clearance
- MS-33787, MIL-W-8982
- HPQ® high performance steel, chrome plated





Part No.	Spline Size	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (lbs)
01021007	7	7/32	8.6	10.7	5	50.8	6	42.8	18
01021008	8	1/4	9.5	10.7	5.6	50.8	8	42.8	24
01021010	10	5/16	11.6	11.6	7.1	50.8	8	40.8	27

STAHLWILLE 1/4” CLIP STRIPS
40CL

- for socket retention
- supplied without sockets



Part No.	Size	OAL (mm)	Weight (g)
80400001	1	200	36
80400002	2	300	52

PROTO® 1/4” Sockets

PROTO® 1/4” DRIVE SOCKETS – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.110
AS4984A

IN

- PROTO® 12 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J4706T	3/16	5/16	7/16	13/64	5/16	7/8	0.02
J4707T	7/32	11/32	7/16	13/64	5/16	7/8	0.02
J4708T	1/4	3/8	7/16	7/32	5/16	7/8	0.02
J4709T	9/32	27/64	27/64	17/64	9/16	7/8	0.02
J4710T	5/16	15/32	15/32	19/64	9/16	7/8	0.02
J4711T	11/32	1/2	1/2	11/32	9/16	7/8	0.03
J4712T	3/8	35/64	35/64	23/64	17/32	7/8	0.04
J4714T	7/16	5/8	5/8	3/8	17/32	7/8	0.05
J4716T	1/2	11/16	11/16	23/64	17/32	7/8	0.05
J4718T	9/16	47/64	47/64	23/64	17/32	7/8	0.07

PROTO® 1/4” DRIVE SOCKETS – 6 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.110
AS4984A

IN

- PROTO® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J4704	1/8	1/4	5/32	15/32	11/32	7/8	0.02
J4705	5/32	17/64	31/64	11/64	11/32	7/8	0.03
J4706	3/16	5/16	31/64	13/64	11/32	7/8	0.03
J4707	7/32	11/32	31/64	13/64	11/32	7/8	0.02
J4708	1/4	11/32	31/64	7/32	11/32	7/8	0.02
J4709	9/32	27/64	31/64	1/4	11/32	7/8	0.02
J4710	5/16	31/64	31/64	19/64	9/16	7/8	0.03
J4711	11/32	33/64	33/64	11/32	17/32	7/8	0.03
J4712	3/8	9/16	11/32	17/32	17/32	7/8	0.03
J4714	7/16	5/8	5/8	23/64	17/32	7/8	0.05
J4716	1/2	11/16	11/16	23/64	17/32	7/8	0.06
J4718	9/16	47/64	47/64	23/64	9/16	7/8	0.07
J4720A	5/8	5/8	3/8	7/8	9/16	7/8	0.09

PROTO® 1/4” DRIVE SOCKETS – 8 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.110
AS4984A

IN

- PROTO® 8 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ featureas apply.



Part No.	Size (in)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J4708S	1/4	31/64	31/64	1/4	17/32	7/8	0.03
J4710S	5/16	9/16	9/16	1/4	17/32	7/8	0.05
J4712S	3/8	11/16	11/16	1/4	17/32	7/8	0.06

PROTO® 1/4” DRIVE METRIC SOCKETS – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.110
AS4984A

MM

- PROTO® 12 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J4704TM	4	5/16	15/32	11/64	1/2	7/8	0.02
J47045TM	4.5	5/16	15/32	11/64	1/2	7/8	0.02
J4705TM	5	5/16	15/32	11/64	1/2	7/8	0.03
J47055TM	5.5	21/64	15/32	11/64	1/2	7/8	0.02
J4706TM	6	3/8	15/32	7/32	1/2	7/8	0.02
J4707TM	7	27/64	15/32	1/4	9/16	7/8	0.04
J4708TM	8	15/32	15/32	19/64	35/64	7/8	0.03
J4709TM	9	33/64	33/64	23/64	35/64	7/8	0.03
J4710TM	10	37/64	37/64	23/64	35/64	7/8	0.04
J4711TM	11	5/8	5/8	23/64	35/64	7/8	0.05
J4712TM	12	21/32	21/32	23/64	35/64	7/8	0.05
J4713TM	13	11/16	11/16	23/64	35/64	7/8	0.05
J4714TM	14	3/4	3/4	23/64	9/16	7/8	0.06

PROTO® 1/4” DRIVE METRIC SOCKETS – 6 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.110
AS4984A

MM

- PROTO® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J4704M	4	17/64	15/32	11/64	13/32	7/8	0.01
J47045M	4.5	5/16	15/32	11/64	13/32	7/8	0.01
J4705M	5	5/16	15/32	11/64	13/32	7/8	0.02
J47055M	5.5	21/64	15/32	11/64	13/32	7/8	0.02
J4706M	6	3/8	15/32	7/32	13/32	7/8	0.02
J4707M	7	27/64	15/32	1/4	15/32	7/8	0.02
J4708M	8	15/32	15/32	19/64	35/64	7/8	0.04
J4709M	9	33/64	33/64	23/64	35/64	7/8	0.03
J4710M	10	37/64	37/64	23/64	35/64	7/8	0.04
J4711M	11	5/8	5/8	23/64	35/64	7/8	0.05
J4712M	12	21/32	21/32	23/64	35/64	7/8	0.05
J4713M	13	11/16	11/16	23/64	35/64	7/8	0.05
J4714M	14	3/4	3/4	23/64	9/16	7/8	0.06
J4715M	15	51/64	51/64	23/64	9/16	7/8	0.08
J4716M	16	7/8	7/8	3/8	9/16	7/8	0.09

PROTO® 1/4” DRIVE DEEP SOCKETS – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.110
AS4984A

IN

- PROTO® 12 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J4706LT	3/16	5/16	27/64	9/32	1-5/32	2	0.05
J4707LT	7/32	11/32	27/64	3/8	1-5/32	2	0.05
J4708LT	1/4	3/8	27/64	3/8	1-5/32	2	0.05
J4709LT	9/32	27/64	27/64	3/8	1-5/32	2	0.05
J4710LT	5/16	29/64	29/64	3/8	1-5/32	2	0.06
J4711LT	11/32	1/2	1/2	5/8	1-5/32	2	0.07
J4712LT	3/8	35/64	35/64	5/8	1-5/32	2	0.07
J4714LT	7/16	39/64	39/64	5/8	1-5/32	2	0.10
J4716LT	1/2	11/16	11/16	5/8	1-5/32	2	0.12
J4718LT	9/16	3/4	3/4	5/8	1-5/32	2	0.13

PROTO® 1/4” DRIVE DEEP SOCKETS – 6 POINT



TORQUEPLUS FASTENING SYSTEM

ASME B107.110
AS4984A

IN

- PROTO® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J4706L	3/16	5/16	15/32	9/32	1-21/32	2	0.05
J4707L	7/32	11/32	15/32	3/8	1-21/32	2	0.05
J4708L	1/4	25/64	15/32	3/8	1-1/2	2	0.05
J4709L	9/32	7/16	15/32	3/8	1-1/2	2	0.05
J4710L	5/16	15/32	15/32	3/8	1-1/2	2	0.06
J4711L	11/32	1/2	1/2	5/8	1-1/2	2	0.06
J4712L	3/8	9/16	9/16	5/8	1-27/64	2	0.08
J4714L	7/16	37/64	39/64	5/8	1-27/64	2	0.09
J4716L	1/2	11/16	11/16	5/8	1-27/64	2	0.13
J4718L	9/16	3/4	3/4	5/8	1-27/64	2	0.14

PROTO® 1/4” DRIVE METRIC DEEP SOCKETS – 12 POINT



TORQUEPLUS FASTENING SYSTEM

ASME B107.110
AS955

MM

- PROTO® 12 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.

Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J4705LTM	5	5/16	29/64	9/32	49/64	1-63/64	0.05
J47055LTM	5.5	11/32	29/64	9/32	49/64	1-63/64	0.05
J4706LTM	6	3/8	29/64	3/8	49/64	1-63/64	0.05
J4707LTM	7	27/64	29/64	3/8	49/64	1-63/64	0.07
J4708LTM	8	29/64	29/64	3/8	49/64	1-63/64	0.06
J4709LTM	9	1/2	1/2	5/8	1-7/16	1-63/64	0.06
J4710LTM	10	9/16	9/16	5/8	1-7/16	1-63/64	0.08
J4711LTM	11	39/64	39/64	5/8	1-7/16	1-63/64	0.09
J4712LTM	12	21/32	21/32	5/8	1-7/16	1-63/64	0.10
J4713LTM	13	11/16	11/16	5/8	1-7/16	1-63/64	0.11
J4714LTM	14	49/64	49/64	5/8	1-7/16	1-63/64	0.13
J4715LTM	15	27/32	27/32	5/8	1-7/16	1-63/64	0.20

PROTO® 1/4” DRIVE METRIC DEEP SOCKETS – 6 POINT



TORQUEPLUS FASTENING SYSTEM

ASME B107.110
AS4984A

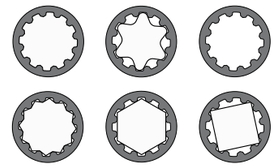
MM

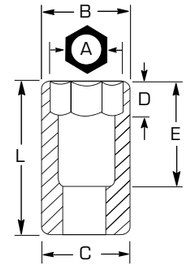
- PROTO® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.

Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J4704LM	4	9/32	29/64	13/64	55/64	1-63/64	0.04
J4705LM	5	5/16	29/64	9/32	55/64	1-63/64	0.04
J47055LM	5.5	11/32	29/64	9/32	55/64	1-63/64	0.04
J4706LM	6	3/8	29/64	3/8	55/64	1-63/64	0.04
J4707LM	7	27/64	29/64	3/8	55/64	1-63/64	0.04
J4708LM	8	29/64	29/64	13/32	1-5/32	1-63/64	0.06
J4709LM	9	1/2	1/2	39/64	1-5/32	1-63/64	0.06
J4710LM	10	9/16	9/16	5/8	1-27/64	1-63/64	0.07
J4711LM	11	39/64	39/64	5/8	1-27/64	1-63/64	0.09
J4712LM	12	21/32	21/32	5/8	1-27/64	1-63/64	0.11
J4713LM	13	11/16	11/16	5/8	1-27/64	1-63/64	0.15
J4714LM	14	49/64	49/64	5/8	1-27/64	1-63/64	0.15
J4715LM	15	53/64	53/64	5/8	1-27/64	2	0.20

Spline Sockets – Features & Benefits

- High strength in a compact profile.
- Standard depth and deep sockets are available in the three smaller drive sizes 1/4”, 3/8”, and 1/2”.
- Can be used on spline fasteners, as well as on 4, 6, 8 or 12 point fasteners.





PROTO® 1/4” DRIVE SOCKETS – SPLINE

ASME B107.500

IN



- PROTO® Spline tools are designed to service high tensile strength fasteners used widely on military and commercial aircraft and in heavy machinery applications where vibration is prevalent. They are also used in automotive and industrial areas where high performance torque needs to be achieved.
- Spline sockets help tighten high strength bolts to high torque loads. They help lower the force required to turn standard fasteners by allowing the torque load to be moved away from the corners to help prevent fastener rounding. They also turn fasteners with damaged corners.
- Spline sockets on spline fasteners help deliver twice the torque of 12 Point wrenches on double box fasteners, and more torque than hex wrenches on hex fasteners.
- Spline helps reduce foreign object debris (FOD) by having a precise fit between the fastening tool and its fastener.

Part No.	Size (in) (A)	Spline Size	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J4706SPL	3/16	#6	5/16	7/16	3/16	9/16	59/64	0.02
J4707SPL	7/32	#7	11/32	7/16	13/64	9/16	59/64	0.02
J4708SPL	1/4	#8	3/8	7/16	1/4	9/16	59/64	0.02
J4709SPL	9/32	#9	7/16	7/16	9/32	9/16	59/64	0.02
J4710SPL	5/16	#10	29/64	29/64	5/16	9/16	59/64	0.03
J4712SPL	3/8	#12	35/64	35/64	11/32	9/16	59/64	0.04
J4714SPL	7/16	#14	5/8	5/8	27/64	11/16	1-1/32	0.05

PROTO® 1/4” DRIVE DEEP SOCKETS – SPLINE

ASME B107.500

IN



- PROTO® Spline tools are designed to service high tensile strength fasteners used widely on military and commercial aircraft and in heavy machinery applications where vibration is prevalent. They are also used in automotive and industrial areas where high performance torque needs to be achieved.
- Spline sockets help tighten high strength bolts to high torque loads. They help lower the force required to turn standard fasteners by allowing the torque load to be moved away from the corners to help prevent fastener rounding. They also turn fasteners with damaged corners.
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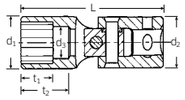
Part No.	Size (in) (A)	Spline Size	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J4706DPL	3/16	#6	5/16	7/16	3/16	1-21/32	2	0.03
J4707DPL	7/32	#7	11/32	7/16	13/64	1-21/32	2	0.04
J4708DPL	1/4	#8	3/8	7/16	1/4	1-21/32	2	0.04
J4709DPL	9/32	#9	7/16	7/16	9/32	1-21/32	2	0.05
J4710DPL	5/16	#10	29/64	29/64	5/16	1-21/32	2	0.06
J4712DPL	3/8	#12	35/64	35/64	11/32	1-21/32	2	0.08
J4714DPL	7/16	#14	5/8	5/8	27/64	1-21/32	2	0.09

Stahlwille 1/4” Universal Sockets

STAHLWILLE 1/4” DRIVE UNIVERSAL SOCKETS UNIFLEX – 12 POINT
402

HPQ® high performance steel, chrome plated

MM





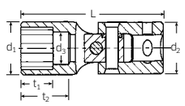
Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	(mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (lbs)
01140006	6	9.2	12.7	5	32	5.5	10	16
01140007	7	10.4	12.7	6	33.5	6	11.5	16
01140008	8	11.6	12.7	6.7	35	8	13	17
01140009	9	13	12.7	8	36	8	12	20
01140010	10	14.2	12.7	9	38	12	14	21

STAHLWILLE 1/4” DRIVE UNIVERSAL SOCKETS UNIFLEX – 12 POINT
402A

- HPQ® high performance steel, chrome plated

ASME B 107.1
AS 954

IN



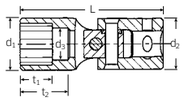


Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	(mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (lbs)
01540014	7/32	8.6	12.7	4.8	32	5.5	10	17
01540016	1/4	9.6	12.7	5.2	32	5.5	10	16
01540018	9/32	11	12.7	6.4	32	6.5	10	19
01540020	5/16	11.6	12.7	6.7	35	8	13	17
01540022	11/32	12.7	12.7	8	35	7.5	11.5	19
01540024	3/8	13.6	12.7	9	38	8.6	13.1	20
01540028	7/16	15.7	12.7	10.5	39.5	10.7	15	23
01540032	1/2	17.3	12.7	12	41.5	11.1	16.5	27

STAHLWILLE 1/4” DRIVE UNIVERSAL SOCKETS UNIFLEX SHORT – 12 POINT
402AK

HPQ® high performance steel, chrome plated

IN



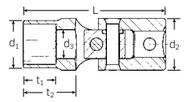


Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	(mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (lbs)
01541024	3/8	13.6	12.7	6.7	34	9.1	12.0	19
01541034	9/16	19	12.7	13.1	37.5	10.3	11.8	25

STAHLWILLE 1/4” DRIVE UNIVERSAL SOCKETS UNIFLEX SHORT – 12 POINT SPLINE
402ASP

- for external spline-drive screws
- MS-33787, MIL-W-8982
- HPQ® high performance steel, chrome plated

MM





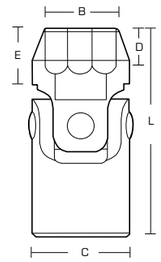
Part No.	Spline Size	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	(mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (lbs)
01542016	8	1/4	9.5	12.7	5.6	32	6.4	9.8	16
01542020	10	5/16	11.6	12.7	7.1	35	8	13	18

PROTO® 1/4” Universal Sockets

PROTO® 1/4” DRIVE UNIVERSAL SOCKETS – 12 POINT

- PROTO® Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.





TORQUEPLUS FASTENING SYSTEM

ASME B107.110
AS954E S3.8.1

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Part No.	Size (in)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J4770TA	7/32	11/32	1/2	9/32	3/8	1-1/4	0.05
J4771TA	1/4	3/8	1/2	9/32	3/8	1-1/4	0.05
J4777TA	9/32	7/16	1/2	9/32	3/8	1-1/4	0.06
J4772TA	5/16	15/32	1/2	9/32	3/8	1-1/4	0.04
J4778TA	11/32	1/2	1/2	9/32	3/8	1-1/4	0.05
J4773TA	3/8	9/16	1/2	9/32	3/8	1-1/4	0.04
J4774TA	7/16	5/8	1/2	9/32	3/8	1-1/4	0.05
J4775TA	1/2	11/16	1/2	9/32	3/8	1-1/4	0.05
J4776TA	9/16	3/4	1/2	23/64	29/64	1-21/64	0.07

PROTO® 1/4” DRIVE METRIC UNIVERSAL SOCKETS – 6 POINT

- PROTO® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



TORQUEPLUS FASTENING SYSTEM

ASME B107.110

MM

Part No.	Size (mm)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J4805AM	5	5/16	31/64	9/32	11/32	1-1/4	0.03
J48055AM	5.5	21/64	31/64	9/32	11/32	1-1/4	0.04
J4806AM	6	11/32	31/64	9/32	11/32	1-1/4	0.04
J4807AM	7	13/32	31/64	9/32	11/32	1-1/4	0.04
J4808AM	8	29/64	31/64	9/32	11/32	1-1/4	0.03
J4809AM	9	1/2	31/64	9/32	11/32	1-1/4	0.04
J4810AM	10	35/64	31/64	9/32	11/32	1-1/4	0.04
J4811AM	11	19/32	31/64	9/32	11/32	1-1/4	0.05
J4812AM	12	21/32	31/64	9/32	11/32	1-1/4	0.04
J4813AM	13	45/64	31/64	19/64	11/32	1-1/4	0.05
J4814AM	14	47/64	31/64	23/64	27/64	1-21/64	0.05
J4815AM	15	51/64	31/64	23/64	27/64	1-21/64	0.05

PROTO® 1/4” DRIVE UNIVERSAL SOCKETS – 6 POINT

- PROTO® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



TORQUEPLUS FASTENING SYSTEM

ASME B107.110
AS4984A

IN

Part No.	Size (in)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J4771A	1/4	3/8	1/2	9/32	11/32	1-1/4	0.04
J4772A	5/16	15/32	1/2	9/32	11/32	1-1/4	0.04
J4773A	3/8	9/16	1/2	9/32	11/32	1-1/4	0.05
J4774A	7/16	5/8	1/2	9/32	3/8	1-1/4	0.04

Stahlwille 1/4” Bit Sockets

STAHLWILLE 1/4” DRIVE SLOTTED SCREWDRIVER BIT SOCKETS 41K

MM

- blades to DIN 5264
- Chrome Alloy Steel, chrome plated



Part No.	Size (mm)	OAL (L1) (mm)	Dia. (d) (mm)	Weight (g)
01280006	0.6 x 3.5	28	11.6	10
01280008	0.8 x 4	28	11.6	10
01280010	1 x 5.5	28	11.6	11
01280012	1.2 x 8	28	11.6	12

STAHLWILLE 1/4” DRIVE POZIDRIV SCREWDRIVER BIT SOCKETS 44K

Chrome Alloy Steel, chrome plated



Part No.	Size	OAL (L1) (mm)	Dia. (d) (mm)	Weight (g)
01300001	PZ1	28	11.6	10
01300002	PZ2	28	11.6	11

STAHLWILLE 1/4” DRIVE HEX BIT SOCKETS 44PZ

IN

- DIN 7422
- Chrome Alloy Steel, chrome plated



Part No.	Size (in)	OAL (L1) (mm)	Dia. (d) (mm)	Weight (g)
01450004	1/16	55	10.7	11
01450005	5/64	55	10.7	12
01450006	3/32	55	10.7	14
01450007	7/64	55	10.7	17
01450008	1/8	55	10.7	12
01450009	9/64	55	10.7	13
01450010	5/32	55	10.7	14
01450012	3/16	55	10.7	17
01450014	7/32	55	10.7	19
01450016	1/4	55	11.6	24

STAHLWILLE 1/4” DRIVE HEX BIT SOCKETS SHORT 44A

MM

Chrome Alloy Steel, chrome plated



Part No.	Size (mm)	OAL (L1) (mm)	Dia. (d) (mm)	Weight (g)
01120003	3	28	11.6	10
01120004	4	28	11.6	10
01120005	5	28	11.6	10
01120006	6	28	11.6	10
01120008	8	28	11.6	15

STAHLWILLE 1/4” DRIVE PHILLIPS® SCREWDRIVER BIT SOCKETS 44P

MM

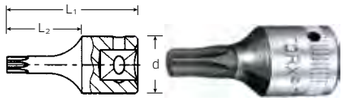
- tips to DIN 5260
- Chrome Alloy Steel, chrome plated



Part No.	Size	OAL (L1) (mm)	Dia. (d) (mm)	Weight (g)
01290001	PH1	28	11.6	12
01290002	PH2	28	11.6	11
01290003	PH3	28	11.6	12
01290004	PH4	28	11.6	14

STAHLWILLE 1/4” DRIVE TORX® BIT SOCKETS 44KTX

Chrome Alloy Steel, chrome plated



Part No.	Size	Tip (mm)	OAL (L1) (mm)	Weight (g)
01350008	T8	2.3	28	10
01350009	T9	2.5	28	10
01350010	T10	2.7	28	10
01350015	T15	3.3	28	10
01350020	T20	3.8	28	11
01350025	T25	4.4	28	11
01350027	T27	5.0	28	11
01350030	T30	5.5	28	12
01350040	T40	6.6	28	12

STAHLWILLE 1/4” DRIVE SECURITY TORX® BIT SOCKETS 44KTXB

- TORX® tamper resistant
- Chrome Alloy Steel, chrome plated

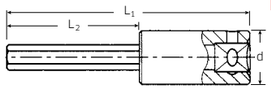


Part No.	Size	Tip (mm)	OAL (L1) (mm)	Weight (g)
01351008	T8	2.3	28	10
01351009	T9	2.5	28	10
01351010	T10	2.7	28	10
01351015	T15	3.3	28	10
01351020	T20	3.8	28	10
01351025	T25	4.4	28	11
01351027	T27	5.0	28	10
01351030	T30	5.5	28	11
01351040	T40	6.6	28	10

STAHLWILLE 1/4” DRIVE METRIC HEX BIT SOCKETS 44

MM

- DIN 7422
- Chrome Alloy Steel, chrome plated



Part No.	Size (mm)	OAL (L1) (mm)	Dia. (d) (mm)	Weight (g)
01050003	3	55	10.7	20
01050004	4	55	10.7	20
01050005	5	55	10.7	25
01050006	6	55	11.6	30

Torx® is a trademark of Acument Intellectual Properties, LLC

PROTO® 1/4” Bit Sockets

PROTO® 1/4” DRIVE PHILLIPS® SCREWDRIVER BIT SOCKETS



Part No.	Tip W. (in)	Tip Thick. (in)	OAL (in)	Weight (lbs)
J4737	#1	-	1-13/64	0.04
J4738	#2	-	1-13/64	0.05

PROTO® 1/4” DRIVE BALL END HEX BIT SOCKETS

IN



Part No.	Size (in)	OAL (in)	Weight (lbs)
J47701/4B	1/4	1-1/2	0.05
J47701/8B	1/8	1-1/2	0.05
J47703/16B	3/16	1-1/2	0.05
J47703/32B	3/32	1-1/2	0.05
J47705/32B	5/32	1-1/2	0.05
J47707/32B	7/32	1-1/2	0.05
J47707/64B	7/64	1-1/2	0.05
J47709/64B	9/64	1-1/2	0.05

PROTO® 1/4” DRIVE METRIC HEX BIT SOCKETS

MM



Part No.	Size (mm)	Bit Length (in)	OAL (in)	Weight (lbs)
J4770-2M	2	1	1-7/8	0.04
J4770-2.5M	2.5	1	1-7/8	0.05
J4770-3M	3	1	1-7/8	0.05
J4770-4M	4	1	1-7/8	0.05
J4770-5M	5	1	1-7/8	0.05
J4770-6M	6	1	1-7/8	0.05

WIHA BIT SOCKET WITH RETAINING RING

- Female square drive to female hex
- DIN 3126, ISO 1173, style D 6.3



Part No.	⬡	▢	⟷
720114	1/4	1/4	25

PROTO® POWER BIT HOLDER 1/4”

- Not for use on impact applications.



Part No.	Drive	Hex	OAL (in)	Weight (lbs)
J6925	1/4	1/4	1	0.04

Torx® is a trademark of Acument Intellectual Properties, LLC

PROTO® 1/4” DRIVE SLOTTED SCREWDRIVER BIT SOCKETS

IN



Part No.	Tip W. (in)	Tip Thick. (in)	OAL (in)	Weight (lbs)
J4743	1/4	3/64	1-13/64	0.05
J4744	3/16	1/32	1-53/64	0.05
J4745	1/4	3/64	1-53/64	0.06

PROTO® 1/4” DRIVE TORX® BIT SOCKETS



Part No.	Size (in)	Bit Length (in)	OAL (in)	Weight (lbs)
J4739-10W	T10	5/8	1-1/2	0.06
J4739-15W	T15	5/8	1-1/2	0.05
J4739-20W	T20	5/8	1-1/2	0.05
J4739-25W	T25	5/8	1-1/2	0.05
J4739-27W	T27	5/8	1-1/2	0.06
J4739-30W	T30	7/8	1-3/4	0.05

PROTO® 1/4” DRIVE HEX BIT SOCKETS

IN



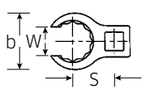
Part No.	Size (in)	Bit Length (in)	OAL (in)	Weight (lbs)
J47701/16	1/16	1	1-7/8	0.05
J47705/64	5/64	1	1-7/8	0.05
J47703/32	3/32	1	1-7/8	0.05
J47707/64	7/64	1	1-7/8	0.06
J47701/8	1/8	1	1-7/8	0.05
J47709/64	9/64	1	1-7/8	0.05
J47705/32	5/32	1	1-7/8	0.05
J47703/16	3/16	1	1-7/8	0.05
J47707/32	7/32	1	1-7/8	0.05
J47701/4	1/4	1	1-7/8	0.06
J47705/16	5/16	1	1-7/8	0.06

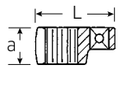
Stahlwille 1/4” Crowring Wrenches

STAHLWILLE 1/4” DRIVE CROWRING SPANNERS 440

- Chrome Alloy Steel, chrome plated

MM





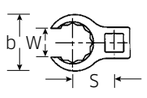


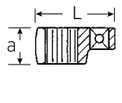
Part No.	Size (mm)	OAL (mm) (L)	Outside Dia. (mm) (b)	Inside Dia. (mm) (W)	Weight (g)
0119 00 08	8	23.8	12.7	6.3	11
0119 00 09	9	28.5	18.2	6.7	21
0119 00 10	10	28.4	18.2	7.1	16
0119 00 11	11	28	18.2	8.6	17
0119 00 12	12	30.8	20.6	9	20
0119 00 13	13	32	22.2	10	30
0119 00 14	14	31.7	22.2	11.1	20

STAHLWILLE 1/4” DRIVE CROWRING SPANNERS 440A

- Chrome Alloy Steel, chrome plated

IN



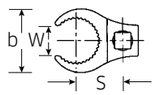


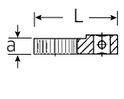


Part No.	Size (in)	OAL (mm) (L)	Outside Dia. (mm) (b)	Inside Dia. (mm) (W)	Weight (g)
0149 00 24	3/8	28.4	18.2	7.1	16
0149 00 28	7/16	28	18.2	8.6	14
0149 00 32	1/2	30.5	20.6	10	19
0149 00 34	9/16	31.7	22.2	11.1	23

STAHLWILLE 1/4” DRIVE CROWRING SPANNERS – THIN 440S MJ

- HPQ® high performance steel, chrome plated
- supersedes No 440 MJ
- EN 4108
- for pipe unions with straight cylindrical involute toothing







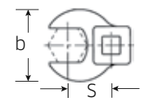
Part No.	Threaded Nut	Dia. (mm)	OAL (mm)	Inside Dia. (mm) (W)	Weight (g)
01211010	MJ10	DN04	31.9	6.5	54
01211014	MJ14	DN06	36.5	8.5	29

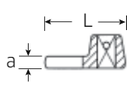
Stahlwille 1/4” Crowfoot Wrenches

STAHLWILLE 1/4” DRIVE CROWRING SPANNERS 540

- Chrome Alloy Steel, chrome plated

MM





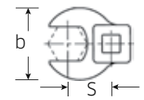


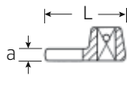
Part No.	Size (mm)	OAL (mm) (L)	Outside Dia. (mm) (b)	Inside Dia. (in)	Weight (g)
0120 00 08	8	25.5	19.8	1/4	19
0120 00 09	9	25.5	19.8	1/4	21
0120 00 10	10	25.5	19.8	1/4	20

STAHLWILLE 1/4” DRIVE CROWRING SPANNERS 540A

- Chrome Alloy Steel, chrome plated

IN







Part No.	Size (in)	OAL (mm) (L)	Outside Dia. (mm) (b)	Inside Dia. (in)	Weight (g)
0150 00 24	3/8	25.5	19.8	1/4	17

PROTO® 1/4” Crowfoot Wrenches

PROTO® 1/4” DRIVE CROWFOOT WRENCHES

ASME B107.21

IN

- Crowfoot wrenches are used in hard to reach, restricted access situations where a standard wrench or ratchet cannot reach.
- Anti-Slip Design Open End (ASD).
- The arched surfaces are designed to spread the contact forces over greater area and they keep the loads off the corners of the fastener which helps prevent fastener rounding.
- Broad size range ensures the right tool for the application will be available.
- Typically used in lower torque applications.
- Full Polish finish provides corrosion resistance and easy to clean surfaces.



Part No.	Size (in)	OAL (in)	Weight (lbs)
J4708CF	1/4	15/16	0.02
J4710CF	5/16	1	0.03
J4712CF	3/8	1-1/16	0.03
J4714CF	7/16	1-5/32	0.04
J4716CF	1/2	1-3/16	0.05
J4718CF	9/16	1-9/32	0.05

PROTO® 1/4” DRIVE CROWFOOT WRENCHES

ASME B107.21

MM

- Crowfoot wrenches are used in hard to reach, restricted access situations where a standard wrench or ratchet cannot reach.
- Anti-Slip Design Open End (ASD).
- The arched surfaces are designed to spread the contact forces over a greater area and they keep the loads off the corners of the fastener which helps prevent fastener rounding.
- Broad size range ensures the right tool for the application will be available.
- Typically used in lower torque applications.
- Full Polish finish provides corrosion resistance and easy to clean surfaces.



Part No.	Size (mm)	OAL (in)	Weight (lbs)
J4707MCF	7	15/16	0.02
J4708MCF	8	31/32	0.02
J4710MCF	10	1-1/16	0.03
J4711MCF	11	1-1/8	0.04
J4712MCF	12	1-5/32	0.04
J4713MCF	13	1-3/16	0.05
J4714MCF	14	1-1/4	0.05

Stahlwille 1/4” Drive Sets

STAHLWILLE 1/4” DRIVE 10 PIECE SOCKET SET WITH CLIP STRIP 40AD/10CL

IN

Contents:

- 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16 inch



Part No.	Description	Weight (g)
96015310	10 Piece Socket Set with Clip Strip Imp.	200

STAHLWILLE 1/4” DRIVE 10 PIECE DEEP SOCKET SET WITH CLIP STRIP 40ADL/10CL

IN

Contents:

- 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16 inch



Part No.	Description	Weight (g)
96016410	10 Pc Deep Socket Set w Clip Strip Imp.	350

STAHLWILLE 1/4” DRIVE 5 PIECE UNIVERSAL SOCKET SET 402A/5

IN

Contents:

- 1/4, 5/16, 3/8, 7/16, 1/2 inch



Part No.	Description	Weight (g)
96015401	5 Piece Universal Socket Set Imperial	101

STAHLWILLE 1/4” DRIVE 7 PIECE DEEP SOCKET SET 40ADL/7

IN

Contents:

- 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16 inch



Part No.	Description	Weight (g)
96016401	7 Piece Deep Socket Set Imperial	241

STAHLWILLE 5 PIECE ADAPTOR SET 5513

Contents:

- 1/4” socket x 3/8” plug
- 3/8” socket x 1/4” plug
- 3/8” socket x 1/2” plug
- 1/2” socket x 3/8” plug
- 1/2” socket x 3/4” plug

Part No.	Description	Weight (g)
96121003	5 Piece Adaptor Set	648

STAHLWILLE 3 PIECE EXTENDING ADAPTOR SET 409M/432M/514M/3

Contents:

- 1/4” x 3/8”, 3/8” x 1/2”, 1/2” x 3/4” inch

Part No.	Description	Weight (g)
96121002	3 Piece Extending Adaptor Set	120

STAHLWILLE 1/4” DRIVE 7 PIECE WRENCH SET 415QR N/7

- in sturdy, stackable ABS plastic case

Contents:

- 1 ratchet No 415QR N
- 3 extensions: No 405QR/2 (54 mm), No 405QR/4 (102 mm), No 405QR/6 (150 mm)
- 1 universal joint No 407QR
- 1 drive handle No 400QR
- 1 T-handle No 404QR



Part No.	Description	Weight (g)
96014010	7 Piece Wrench Set	758

STAHLWILLE 1/4” DRIVE 29 PIECE RATCHETING BIT HOLDER SET 4008/27/1R

MM

- in sturdy, stackable ABS plastic case

Contents:

- 1 ratcheting bit holder No 4008-1
- 3 bits Philips No 1221-1223: PH1; PH2; PH3
- 3 bits Pozidriv No PZ1221-PZ1223: PZ1; PZ2; PZ3
- 6 bits Torx No 1440-1446: T10; T15; T20; T25; T30; T40
- 3 bits Hex No 1301-1303: 4 mm; 5 mm; 6 mm
- 3 bits Flat No 1163: 0.6 x 4.5; 1165: 0.8 x 5.5; 1166/1: 1.2 x 6.5 mm
- 1 square drive extension No 3115/1 with 1/4” outer hex. and outer square drives for attaching 1/4”
- 9 sockets No 40, 1/4”: 4; 5; 5.5; 6; 7; 8; 10; 11; 13mm



Part No.	Description	Weight (g)
96182203	29 Pc Ratcheting Bit Holder Set Metric	955

STAHLWILLE 1/4” DRIVE 13 PIECE SOCKET SET – 6 POINT 40/9/4

MM

- in sturdy, stackable ABS plastic case

Contents:

- 9 sockets 6 point No 40: 4; 5; 5.5; 6; 7; 8; 10; 11; 13mm
- 1 ratchet No 415
- 2 extensions No 405/2 (54mm), No 405/6 (150mm)
- 1 universal joint No 407



PartNo.	Description	Weight(g)
96011119	13 PieceSocketSet6PointMetric	696

STAHLWILLE 1/4” DRIVE 19 PIECE SOCKET SET – 6 POINT 40/13/6

MM

- in sturdy, stackable ABS plastic case

Contents:

- 13 sockets 6 point No 40: 3.5; 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13mm
- 1 ratchet No 415
- 2 extensions No 405/2 (54mm), No 405/6 (150mm)
- 1 universal joint No 407
- 1 drive handle No 400
- 1 T-handle No 404



Part No.	Description	Weight (g)
96011124	19 Piece Socket Set 6 Point Metric	850

STAHLWILLE 1/4” DRIVE 29 PIECE SOCKET SET 40/23/6

MM

- in sturdy, stackable ABS plastic case

Contents:

- 11 sockets 6 point No 40: 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14mm
- 3 screwdriver sockets Flat No 41K: 0.6x3.5; 1.0x5.5; 1.2x8mm
- 5 INHEX sockets No 44K: 3; 4; 5; 6; 8mm
- 4 screwdriver sockets Phill
- 1 ratchet No 415
- 2 extensions No 405/2 (54
- 1 universal joint No 407
- 1 drive handle No 400
- 1 T-handle No 404



Part No.	Description	Weight (g)
96011136	29 Piece Socket Set Hex Metric	998

STAHLWILLE 1/4” DRIVE 30 PIECE SOCKET SET 40/23/7

MM

- in sturdy, stackable ABS plastic case

Contents:

- 12 sockets 6 point No 40: 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13mm
- 4 INHEX sockets No 44: 3; 4; 5; 6mm
- 3 bits Phillips 1221: PH1; 1222: PH2; 1223: PH3
- 4 bits Flat 1162: 0.6x3.5mm, 1164: 0.8x4mm; 1166: 1x5.5mm; 1168: 1.6x8mm
- 2 extensions No 405/2 (54mm), No 405/6 (150mm)
- 1 ratchet No 415
- 1 universal joint No 407
- 1 drive handle No 400
- 1 T-handle No 404
- 1 bit-holder No 412



Part No.	Description	Weight (g)
96011134	30 Piece Socket Set Hex Metric	1138

STAHLWILLE 1/4” DRIVE 13 PIECE SOCKET SET – 6 POINT 40A/9/4

IN

- in sturdy, stackable ABS plastic case

Contents:

- 9 sockets 6 point No 40a: 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2”
- 1 ratchet No 415
- 2 extensions No 405/2 (54 mm), No 405/6 (150mm)
- 1 universal joint No 407



Part No.	Description	Weight (g)
96015107	13 Piece Socket Set 6 Point Imperial	702

STAHLWILLE 1/4” DRIVE 19 PIECE SOCKET SET – QUICKRELEASE 40AD/12/7QR

IN

- in sturdy, stackable ABS plastic case

Contents:

- 1 socket 6 point No 40a: 1/8”
- 11 sockets 12 point No 40aD: 5/32; 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16”
- 1 ratchet No 415SG-QR
- 3 extensions No 405QR/2 (2x) (54mm), No 405QR/6 (150mm)
- 1 universal joint No 407QR
- 1 drive handle No 400QR
- 1 bit-holder No 412



Part No.	Description	Weight (g)
96 01 52 08	19 Piece Socket Set Quickrelease Imperial	872

STAHLWILLE 1/4” DRIVE 37 PIECE SOCKET SET – QUICKRELEASE 40AD/30/7QR

IN

- in sturdy, stackable ABS plastic case

Contents:

- 1 socket 6 point No 40a: size 1/8”
- 11 sockets 12 point No 40aD: 5/32; 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16”
- 11 sockets 12 point, deep No 40aDL: 5/32; 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16”
- 7 UNIFLEX sockets 12 point No 402a: 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2”
- 1 ratchet No 415SG-QR
- 3 extensions No 405/2QR (2x) (54mm), No 405/6QR (150mm)
- 1 universal joint No 407QR
- 1 drive handle No 400QR
- 1 bit-holder No 412



Part No.	Description	Weight (g)
96 01 52 05	37 Piece Socket Set Quickrelease Imperial	1920

STAHLWILLE 1/4” DRIVE 24 PIECE SOCKET SET – QR 40/20/4QR SCI

MM

- in softcase with foam inlay

Contents:

- 10 sockets 6 point No 40: 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13mm
- 2 bits Phillips 1221: PH1; 1222: PH2
- 3 bits Hex 1301: 4 mm; 1302: 5 mm; 1303: 6mm
- 5 bits Torx® 1414: T10; 1415: T15; 1416: T20; 1417: T25; 1419: T30
- 1 ratchet No 415QR N
- 2 extensions No 405QR/2 (54mm), No 405QR/6 (150mm)
- 1 bit-holder No 412



Part No.	Description	Weight (g)
96010127	24 Pc Socket Set QR Torx® Metric	605

STAHLWILLE 1/4” DRIVE 36 PIECE SOCKET SET – TORX® 88TX

MM

- in sturdy, stackable ABS plastic case

Contents:

- 10 sockets 6 point No 40: sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13mm
- 6 sockets for external TORX® screws No 40TX: sizes E4; E5; E6; E7; E8; E10
- 5 INHEX sockets No 44K: sizes 3; 4; 5; 6; 8mm
- 9 screwdriver sockets for internal TORX® screws No 44KTX: sizes T8; T9; T10; T15; T20; T25; T27; T30; T40
- 1 ratchet No 415
- 2 extensions No 405/2 (54mm), No 405/6 (150mm)
- 1 universal joint No 407
- 1 drive handle No 400
- 1 T-handle No 404



Part No.	Description	Weight (g)
98819801	36 Piece Socket Set Torx® Metric	1190

STAHLWILLE 1/4” DRIVE 33 PIECE SOCKET SET – 6 POINT 40MA/25/8

- in sturdy, stackable ABS plastic case

Contents:

- 25 sockets 6 point:
  - No 40: 3.2; 3.5; 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14mm
  - No 40a: 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16”
- 1 ratchet No 415
- 2 extensions No 405/2 (54mm), No 405/6 (150mm)
- 1 extension, flexible No 406 (152mm)
- 1 universal joint No 407
- 1 drive handle No 400
- 1 flexible handle No 403
- 1 T-handle No 404



Part No.	Description	Weight (g)
96011162	33 Pc Socket Set 6 Point Imperial Metric	1316

STAHLWILLE 1/4” DRIVE 33 PIECE SOCKET SET – 6 POINT QR 40MA/25/8QR

- in sturdy, stackable ABS plastic case

Contents:

- 25 sockets 6 point:
  - No 40: 3.2; 3.5; 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14mm
  - No 40a: 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16”
- 1 ratchet No 415QR N
- 2 extensions No 405QR/2 (54mm), No 405QR/6 (150mm)
- 1 extension, flexible No 406 (152mm)
- 1 universal joint No 407QR
- 1 drive handle No 400QR
- 1 flexible handle No 403
- 1 T-handle No 404QR



Part No.	Description	Weight (g)
96010107	33 Pc Socket Set 6 Point QR Imp. Metric	1324

STAHLWILLE 1/4” & 3/8” DRIVE 48 PIECE SOCKET SET 40/45/36/12

MM

- in sturdy, stackable ABS plastic case

Contents:

- 12 sockets 12 point No 45: 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22mm
- 8 sockets 6 point No 40: 4; 4.5; 5; 5.5; 6; 7; 8; 9mm
- 1 socket 12 point, long, with rubber insert No 4600: 16mm - 5/8”
- 3 bits Phillips 1221: PH1; 1222: PH2; 1223: PH3
- 1 bit Pozidriv PZ1222: PZ2
- 6 bits Flat 1160: 0.5x3mm; 1162: 0.6x3.5mm; 1164: 0.8x4mm; 1166: 1.0x5.5mm; 1166/1: 1.2x6.5mm; 1168: 1.6x8mm
- 5 bits Hex 1300: 3mm; 1301: 4mm; 1302: 5mm; 1303: 6mm; 1304: 8mm
- 2 ratchets No 415, No 435
- 3 extensions No 427/3 (76mm), No 405/6 (150mm), No 427/10 (240mm)
- 2 universal joints No 407, No 428
- 1 drive handle No 400
- 1 T-handle No 425
- 2 bit-holder No 412, No 44
- 1 reducing adaptor No 431



Part No.	Description	Weight (g)
96012047	48 Piece Socket Set 1/4 & 3/8” Hex Metric	2712

STAHLWILLE 1/4” & 1/2” DRIVE 38 PIECE SOCKET SET 40/52/27/11

MM

- in sturdy, stackable ABS plastic case

Contents:

- 9 sockets 6 point No 40: 4; 5; 5.5; 6; 7; 8; 9; 10; 11mm
- 10 sockets 6 point No 52: 13; 16; 17; 18; 19; 21; 22; 24; 27; 30mm
- 3 INHEX sockets No 44: 3; 4; 5mm
- 5 INHEX sockets No 54: 6; 8; 10; 12; 14mm
- 2 ratchets No 415, No 512
- 4 extensions No 405/2 (54 mm), No 509/5 (130mm), No 405/6 (150 mm), No 509/10 (255mm)
- 2 universal joints No 407, No 510
- 1 drive handle No 400
- 2 T-handles No 404, No 506



Part No.	Description	Weight (g)
96011160	38 Piece Socket Set 1/4 & 1/2” Hex Metric	4915

STAHLWILLE 1/4” & 1/2” DRIVE 63 PIECE SOCKET SET – 6 POINT TORX® 86TX

MM

- in sturdy, stackable ABS plastic case

Contents:

- 9 sockets 6 point No 40: 4; 5; 5.5; 6; 7; 8; 9; 10; 11mm
- 10 sockets 6 point No 52: 13; 16; 17; 18; 19; 21; 22; 24; 27; 30mm
- 5 sockets for external TORX® screws No 40TX: sizes E4; E5; E6; E7; E8
- 7 sockets for external TORX® screws No 50TX: sizes E10; E12; E14; E16; E18; E20; E24
- 3 INHEX sockets No 44: 3; 4; 5mm
- 5 INHEX sockets No 54: 6; 8; 10; 12; 14mm
- 6 screwdriver sockets for internal TORX® screws No 44KTX: sizes T8; T9; T10; T15; T20; T25
- 7 screwdriver sockets for internal TORX® screws No 54TX: sizes T27; T30; T40; T45; T50; T55; T60
- 2 ratchets No 415, No 512
- 4 extensions No 405/2 (54mm), No 509/5 (130mm), No 405/6 (150mm), No 509/10 (255mm)
- 2 universal joints No 407,
- 1 drive handle No 400
- 2 T-handles No 404, No 506



Part No.	Description	Weight (g)
96013702	63 Piece Socket Set 6 point TORX® Metric	6500

STAHLWILLE 1/4”, 3/8” & 1/2” DRIVE 35 PIECE SOCKET SET – TORX® 89TX

- in sturdy, stackable ABS plastic case

Contents:

- 3 sockets for external TORX® screws No 40TX: sizes E4; E5; E6
- 2 screwdriver sockets for internal TORX® screws No 44KTX: sizes T8; T9
- 4 sockets for external TORX® screws No 45TX: sizes E7; E8; E10; E12
- 5 screwdriver sockets for internal TORX® screws No 49TX: sizes T10; T15; T20; T25; T27
- 6 sockets for external TORX® screws No 50TX: sizes E11; E14; E16; E18; E20; E24
- 6 screwdriver sockets for internal TORX® screws No 54TX: sizes T30; T40; T45; T50; T55; T60
- 7 bits TORX® 1440: T10; 1441: T15; 1442: T20; 1443: T25; 1444: T27; 1445: T30; 1446: T40
- 1 bit-holder No 442
- 1 TORX® controller: sizes E6; E7; E8; E10; E12; E14; E16; T10; T15; T20; T25; T27; T30; T40; T45; T47; T50; T55; T60



Part No.	Description	Weight (g)
98811908	35 Piece Socket Set TORX®	2420

PROTO® 1/4” Drive Sets

PROTO® 1/4” DRIVE 10 PIECE SOCKET SET 12 POINT

ASME B107.1
AS954E S3.8.1

IN

Contents:

- 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16 inch



Part No.	Description	Weight (lbs)
J47104	10 Piece Socket Set 12 Point Imperial	0.42

PROTO® 1/4” DRIVE 11 PIECE SOCKET SET 12 POINT

ASME B107.5M
AS954E S3.8.1

MM

Contents:

- 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm



Part No.	Description	Weight (lbs)
J47201	11 Piece Socket Set 12 Point Metric	0.56

PROTO® 1/4” DRIVE 10 PIECE SOCKET SET 12 POINT DEEP

ASME B107.1
AS954E S3.8.1

IN

Contents:

- 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16 inch



Part No.	Description	Weight (lbs)
J47100	10 Piece Deep Socket Set 12 Point Imperial	0.79

PROTO® 1/4” DRIVE 11 PIECE SOCKET SET 12 POINT DEEP

ASME B107.5M
AS954E S3.8.1

MM

Contents:

- 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm



Part No.	Description	Weight (lbs)
J47203	11 Piece Deep Socket Set 12 Point Metric	1.03

PROTO® 1/4” DRIVE 10 PIECE SOCKET SET 6 POINT

ASME B107.5

IN

Contents:

- 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16 inch



Part No.	Description	Weight (lbs)
J47106	10 Piece Socket Set 6 Point Imperial	0.48

PROTO® 1/4” DRIVE 12 PIECE SOCKET SET 6 POINT

ASME B107.5M

MM

Contents:

- 4, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm



Part No.	Description	Weight (lbs)
J47200	12 Piece Socket Set 6 Point Metric	0.58

PROTO® 1/4” DRIVE 10 PIECE SOCKET SET 6 POINT DEEP

ASME B107.5

IN

Contents:

- 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16 inch



Part No.	Description	Weight (lbs)
J47102	10 Piece Deep Socket Set 6 Point Imperial	0.87

PROTO® 1/4” DRIVE 11 PIECE SOCKET SET 6 POINT DEEP

ASME B107.5M

MM

Contents:

- 4, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm



Part No.	Description	Weight (lbs)
J47202	11 Piece Deep Socket Set 6 Point Metric	1.10

PROTO® 1/4” DRIVE 9 PIECE UNIVERSAL SOCKET SET 12 POINT

ASME B107.1
AS954E S3.8.1

IN

Contents:

- 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 9/32, 11/32 inch



Part No.	Description	Weight (lbs)
J47107	9 Pc Universal Socket Set 12 Point Imperial	0.47

PROTO® 1/4” DRIVE 12 PIECE UNIVERSAL SOCKET SET 6 POINT

ASME B107.5M

MM

Contents:

- 5.5, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 mm



Part No.	Description	Weight (lbs)
J47205	12 Pc Uni. Socket Set 6 Point Metric	0.47

PROTO® 1/4” DRIVE 5 PIECE UNIVERSALSOCKET SET 12 POINT

ASME B107.1
AS954E S3.8.1

IN

Contents:

- 1/4, 5/16, 3/8, 7/16, 1/2 inch



Part No.	Description	Weight (lbs)
J47105	5 Pc Universal Socket Set 12 Point Imperial	0.32

PROTO® 1/4” DRIVE 7 PIECE CROWFOOT WRENCH SET

MM

Contents:

- 7, 8, 10, 11, 12, 13, 14 mm



Part No.	Description	Weight (lbs)
J47000MCF	7 Piece Crowfoot Wrench Set Metric	0.47

PROTO® 1/4” DRIVE 6 PIECE CROWFOOT WRENCH SET

IN

Contents:

- 1/4, 5/16, 3/8, 7/16, 1/2, 9/16 inch



Part No.	Description	Weight (lbs)
J47000CF	6 Piece Crowfoot Wrench Set Imperial	0.41

PROTO® 1/4” DRIVE 8 PIECE CROWFOOT WRENCH SET WITH LOCKING EXTENSIONS

Contents:

- Crowfeet: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16 inch
- Extensions: 6 inch and 12 inch



Part No.	Description	Weight (lbs)
J47000CF	8 Piece Crowfoot Set incl. lock. Extensions	0.41

PROTO® 1/4” DRIVE 6 PIECE HEX BIT SET

MM

Contents:

- 2, 2.5, 3, 4, 5, 6 mm



Part No.	Description	Weight (lbs)
J4770-6	6 Piece Hex Bit Set Metric	0.41

PROTO® 1/4” DRIVE 11 PIECE HEX BIT SET

IN

Contents:

- 1/16, 5/64, 7/64, 3/32, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16 inch



Part No.	Description	Weight (lbs)
J4770-11	11 Piece Hex Bit Set Imperial	0.64

PROTO® 1/4” DRIVE 8 PIECE HEX BIT BALL END SOCKET SET

IN

Contents:

- 1/4, 1/8, 3/16, 3/32, 5/32, 7/32, 7/64, 9/64 inch



Part No.	Description	Weight (lbs)
J4770-8B	8 Pc Hex Bit Ball End Socket Set Imperial	0.49

PROTO® 1/4” DRIVE 6 PIECE TORX® BIT SET

Contents:

- T10, T15, T20, T25, T27, T30



Part No.	Description	Weight (lbs)
J4739C	6 Piece Torx® Bit Set	0.38

Torx® is a trademark of Acument Intellectual Properties, LLC

PROTO® 1/4” DRIVE 15 PIECE COMBINATION SOCKET SET – 12 POINT

PREMIUM RATCHET

IN

- In blow molded case

Contents:

- Sockets: 3/16, 7/32, 1/4, 9/32,
- 5/16, 11/32, 3/8, 7/16, 1/2, 9/16”
- Premium Ratchet
- 2”, 4” & 6” extension bar
- Universal Joint



Part No.	Description	Weight (lbs)
J47110XL	15 Pcs Premium Socket Set 12 PT Imperial	1.7

PROTO® 1/4” DRIVE 25 PIECE COMBINATION SOCKET SET – 12 POINT

IN

- In blow molded case

Contents:

- Pear Head Ratchet
- Socket Driver
- 2 and 6 Inch Extensions
- Universal Joint
- Sockets: 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16 inch, each size in standard and deep



Part No.	Description	Weight (lbs)
J47118XL	25 Pc Pear Comb. Socket Set 12 Pt Imp	1.55

PROTO® 1/4” DRIVE 25 PIECE COMBINATION SOCKET SET – 12 POINT

IN

- In blow molded case

Contents:

- Premium Ratchet
- Socket Driver
- 2 and 6 Inch Extensions
- Universal Joint
- Sockets: 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16 inch, each size in standard and deep



Part No.	Description	Weight (lbs)
J47118	25 Pc Premium Comb. Socket Set 12 Pt Imp	3.99



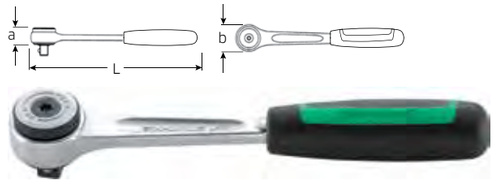
3/8 Inch Drive Sockets & Ratchets

Stahlwille Drive Tools 280
PROTO® Drive Tools 284
Stahlwille Sockets 288
PROTO® Sockets 292
Stahlwille Universal Sockets 297
PROTO® Universal Sockets 298
Stahlwille Bit Sockets 300
PROTO® Bit Sockets 301
Stahlwille Crowfoot Wrenches 303
PROTO® Crowfoot Wrenches 306
Torque Adapters 308
Stahlwille Sets 309
PROTO® Sets 312

Stahlwille 3/8” Drive Tools

STAHLWILLE 3/8” DRIVE REVERSIBLE RATCHET – FINE TOOTH 422

- 60 teeth
- with 2-component handle
- for use in confined spaces, re-engages after movement of 6°
- DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
12 23 10 11	3/8	194	32	24	236

STAHLWILLE 3/8” DRIVE REVERSIBLE RATCHET 435

- 30 teeth
- with 2-component handle
- DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
12 11 10 10	3/8	193	29	18	235

STAHLWILLE 3/8” DRIVE REVERSIBLE RATCHET – QUICKRELEASE 435QR

- 30 teeth
- with 2-component handle
- DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
12 11 10 20	3/8	193	29	18	244

STAHLWILLE 3/8” DRIVE REVERSIBLE RATCHET – QUICKRELEASE, FINE TOOTH 435QR N

- 80 teeth
- with 2-component handle
- for use in confined spaces, re-engages after movement of 4.5°
- construction without screws prevents foreign object damage
- DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
12 11 10 20	3/8	193	30	15	235

STAHLWILLE 3/8” DRIVE REVERSIBLE RATCHET – QUICKRELEASE, FINE TOOTH 435SG-QR N

- 80 teeth
- with steel handle
- for use in confined spaces, re-engages after movement of 4.5°
- construction without screws prevents foreign object damage
- DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
12 11 10 30	3/8	193	30	15	272

STAHLWILLE 3/8” DRIVE REVERSIBLE RATCHET – QUICKRELEASE, FINE TOOTH, FLEXIBLE JOINT 452QR

- 80 teeth
- with 2-component handle
- handle may be raised or lowered by approx. 90°, lockable in following positions: straight, 30° up, 60° up, 30° down
- release the lock by pressing the button in the handle
- for use in confined spaces, re-engages after movement of 4.5°
- construction without screws prevents foreign object damage
- DIN 3122/ISO3315



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
12 26 10 10	3/8	300	28.2	14.5	350

STAHLWILLE 3/8” DRIVE FLEXIBLE HANDLE 424

- DIN 3122/ISO 3315
- with 2-component handle



Part No.	Drive Size	OAL (L) (mm)	Weight (g)
12 06 10 10	3/8	253.5	222

STAHLWILLE 3/8” DRIVE SLIDING T-HANDLE QUICKRELEASE 425

DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Weight (g)
12 07 00 00	3/8	165	130

STAHLWILLE 3/8” DRIVE LOCKING ADAPTOR 433/1

with hexagon key wrench No 10760aCV 1/8”



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
96 12 27 01	3/8	52	18	57

STAHLWILLE 3/8” DRIVE SLIDING T-HANDLE QUICKRELEASE 425QR



Part No.	Drive Size	OAL (L) (mm)	Weight (g)
12 07 10 00	3/8	165	148

STAHLWILLE 3/8” DRIVE RATCHET ADAPTOR 445

- reversible
- 20 teeth



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
12 14 00 00	3/8	43	30	135

STAHLWILLE 3/8” DRIVE SPEEDER BRACE 421

- working radius 85 mm
- DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Weight (g)
12 10 00 10	3/8	386.5	385

STAHLWILLE 3/8” DRIVE SPEEDER BRACE QUICKRELEASE 453QR

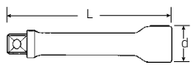
- with steel handle
- for greater axial power transmission, detachable palm head
- working radius 85 mm
- DIN 3122/ISO 3315
- with QuickRelease safety lock



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
12 10 00 05	3/8	408	–	–	650

STAHLWILLE 3/8” DRIVE EXTENSIONS 427

DIN 3123/ISO 3316





Part No	Drive Size	Size	OAL (L) mm	Dia (mm)	Weight (g)
12 01 00 05	3/8	1.5	38	17	36
12 01 00 01	3/8	3	76	17	69
12 01 00 06	3/8	5	125	17	104
12 01 00 02	3/8	6	160	17	127
12 01 00 03	3/8	10	240	17	188
12 01 00 04	3/8	18	455	17	345

STAHLWILLE 3/8” DRIVE EXTENSIONS – QUICKRELEASE 427QR

DIN 3123/ISO 3316



Part No	Drive Size	Size	OAL (L) mm	Dia (mm)	Weight (g)
12 01 10 01	3/8	3	76	17	66
12 01 10 02	3/8	6	160	17	127
12 01 10 03	3/8	10	240	17	185

STAHLWILLE 3/8” DRIVE OFFSET EXTENSION 1225

Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
12 25 00 01	3/8	150	17	128

STAHLWILLE 3/8” DRIVE UNIVERSAL JOINT 428

DIN 3123/ISO 3316



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
12 02 00 00	3/8	46	18.8	55

STAHLWILLE 3/8” DRIVE REDUCING ADAPTOR 431

- 3/8” socket x 1/4” plug (10 x 6.3)
- maximum torque 62 N·m
- DIN 3123/ISO 3316
- HPQ® high performance steel



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
12 03 00 01	3/8	28	17.2	26

STAHLWILLE 3/8” WOBBLE DRIVE EXTENSIONS 427W

- swivel angle 15° each side
- max. torque 80 N·m





Part No	Drive Size	Size	OAL (L) mm	Dia (mm)	Weight (g)
12 01 00 07	3/8	3	76	17	67
12 01 00 08	3/8	5	125	17	104
12 01 00 09	3/8	6	160	17	127

STAHLWILLE 3/8” DRIVE FLEXIBLE EXTENSION 434

- right hand rotation only
- maximum torque 7 N·m



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
12 04 00 00	3/8	194	14	109

STAHLWILLE 3/8” DRIVE SPECIAL EXTENSION 13220

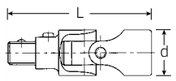
- for removing boroscope plugs
- with boroscope plug locking
- external hexagon 16 mm



Part No.	Drive Size	OAL (mm)	Weight (g)
12 27 00 20	3/8	355	330

STAHLWILLE 3/8” DRIVE UNIVERSAL JOINT – QUICKRELEASE 428QR

DIN 3123/ISO 3316





Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
12 02 10 00	3/8	60	19	66

STAHLWILLE 3/8” DRIVE EXTENDING ADAPTOR 432

- 3/8” socket x 1/2” plug (10 x 12.5)
- DIN 3123/ISO 3316
- HPQ® high performance steel



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
12 03 00 03	3/8	31	17.2	36

STAHLWILLE 3/8” DRIVE EXTENDING ADAPTOR 432M

3/8” socket x 1/2” plug (10 x 12.5)



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
12 03 00 10	3/8	16	32	22

STAHLWILLE 3/8” DRIVE BIT HOLDER 443

- 5/16” inside hexagon
- DIN 3126/ISO 1173 D 8
- internal hex drive with a collar-thrust spring
- bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173)



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
12 18 00 30	3/8	32	16.5	39

STAHLWILLE 3/8” DRIVE BIT HOLDER 442

- 1/4” inside hexagon
- DIN 3126/ISO 1173 D 6.3
- internal hex drive with a collar-thrust spring
- bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173)



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
12 18 00 26	3/8	32	16.5	30

STAHLWILLE 3/8” DRIVE RATCHET REPAIR KITS

Part No	Ratchet #	Contents	Weight (g)
7350/5 / 59 25 10 05	No 422 / 12 23 10 11	1 pinion; 1 pawl; 1 switching disk; 1 spring; 3 screws	85
4350 / 19 02 00 00	No 435 / 12 11 10 10	1 pinion, 1 pawl, 1 lever with pin, 1 ball, 2 compression springs, 2 screws	50
4350QR / 19 02 00 20	No 435QR / 19 02 00 20	1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws	51
4350QR N / 19 02 10 20	No 435QR N / 12 11 10 20 435SG-QR N / 12 11 10 30 452QR / 12 26 10 10	1 pinion; 1 locking disc; 1 lever; 1 pin; 1 ball; 1 compression spring; 2 circlips; 1 cover plate	48

PROTO® 3/8” Drive Tools

PROTO® 3/8” DRIVE STANDARD LENGTH PREMIUM PEAR HEAD RATCHETS

PREMIUM RATCHET

ASME B107.500

- Small pear head design for access in tight, hard to reach work areas.
- 45-tooth gear provides balance between 8° articulation angle and high torque carrying capacity.
- Sealed design helps prevent debris from entering the ratchet mechanism reducing wear. Also, helps to keep lubrication contained within the components. Patent pending design.
- Low profile reversing lever design for quick, one-hand operation.
- Contoured, ergonomically-designed handle for comfort. Knurled bands allow for increased grip and slip resistance.
- Double nickel chrome plated for enhanced corrosion protection or Black oxide finish.
- Field repairable.



Part No.	Drive Size (in)	Finish	OAL (in)	Weight (lbs)	Repair Kit
J47118XL	3/8	Full Polish	8-1/2	0.86	J5249XLRK

PROTO® 3/8” DRIVE AEROSPACE PREMIUM PEAR HEAD RATCHET

PREMIUM RATCHET

ASME B107.500

- Vertical hole drilled in drive plug, designed for installation of frangible collars on threaded pins.
- Unique 45-tooth gear pawl design provides 8° ratcheting angle while maximizing ultimate torque.
- Thin head design for access into tight work areas.
- Reversing lever designed for quick, one-hand operation.
- Full polish nickel chrome plated.



Part No.	Drive Size (in)	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5249XLHS	3/8	Full Polish	8-1/2	0.86	J5249XLHSRK

PROTO® 3/8” DRIVE QUICK RELEASE PREMIUM PEAR HEAD RATCHET

PREMIUM RATCHET

ASME B107.10

- Small, pear head design for access in tight, hard to reach work areas.
- 45-tooth gear, 8° swing articulation.
- Low profile quick release button for access in restricted areas.
- Low profile reversing lever design for quick, one-hand operation.
- Patented sealed head design helps prevent debris from entering the ratchet mechanism reducing wear. Also, helps to keep lubrication contained within the components.
- Contoured, ergonomically-designed handle for comfort. Knurled bands allow for increased grip and slip resistance.
- Full polished handle, easy to clean.
- Double nickel chrome plated for enhanced corrosion protection meeting aerospace requirements.
- Field repairable.



Part No.	Drive Size (in)	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5249XLQR	3/8	Full Polish	8-1/2	0.86	J5249XLQRRK

PROTO® 3/8” DRIVE LONG HANDLE PREMIUM PEAR HEAD RATCHETS

PREMIUM RATCHET

ASME B107.10

- Small pear head design for access in tight, hard to reach work areas.
- 45-tooth gear provides balance between 8° articulation angle and high torque carrying capacity.
- Sealed design helps prevent debris from entering the ratchet mechanism reducing wear. Also, helps to keep lubrication contained within the components. Patent pending design.
- Low profile reversing lever design for quick, one-hand operation.
- Contoured, ergonomically-designed handle for comfort. Knurled bands allow for increased grip and slip resistance.
- Double nickel chrome plated for enhanced corrosion protection or Black oxide finish.
- Field repairable.



Part No.	Drive Size (in)	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5250XL	3/8	Full Polish	11	1.03	J5249XLRK

PROTO® 3/8” DRIVE STANDARD PRECISION 90 PEAR HEAD RATCHET

ASME B107.10M

- 90 tooth count allows for 4 degree arc swing.
- Double nickel chrome plated for enhanced corrosion protection.
- Small, pear head design for access in tight, hard-to-reach work areas.
- Full polish finish for superior comfort and easy clean up.
- Contoured, ergonomically designed handle for comfort.
- Low profile reversing lever design for quick, one hand operation.
- Knurled bands allow for increased grip and slip resistance.



Part No.	Drive Size (in)	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5249HTC	3/8	Full Polish	7-11/16	0.61	-

PROTO® 3/8” DRIVE FLEX HEAD PRECISION 90 PEAR HEAD RATCHETS

ASME B107.110

- 90 tooth count allows for 4 degree arc swing.
- Double nickel chrome plated for enhanced corrosion protection.
- Small, pear head design for access in tight, hard-to-reach work areas.
- Full polish finish for superior comfort and easy clean up.
- Contoured, ergonomically designed handle for comfort.
- Low profile reversing lever design for quick, one hand operation.
- Knurled bands allow for increased grip and slip resistance.



Part No.	Drive Size (in)	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5249HTCF	3/8	Full Polish	7-11/16	-	-
J5250HTCF	3/8	Full Polish	12-11/16	-	-

PROTO® 3/8” DRIVE STUBBY CLASSIC PEAR HEAD RATCHET

ASME B107.500

- Robust 24-tooth design with 15° arc swing.
- Alloy steel drive gear for strength and durability.
- Low profile head for access in constricted areas.
- Reversing lever design for quick, one-hand operation.
- Knurled slip-resistant grip.



Part No.	Drive Size (in)	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5248S	3/8	Full Polish	5	0.28	J5249RK

PROTO® 3/8” DRIVE LONG HANDLE CLASSIC PEAR HEAD RATCHETS

ASME B107.500

- Robust 24-tooth design with 15° arc swing.
- Alloy steel drive gear for strength and durability.
- Low profile head for access in constricted areas.
- Reversing lever design for quick, one-hand operation.
- Knurled slip-resistant grip.



Part No.	Drive Size (in)	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5250	3/8	Full Polish	11	0.89	J5249RK

PROTO® 3/8” DRIVE AEROSPACE CLASSIC PEAR HEAD RATCHET

- Vertical hole drilled in drive plug, designed for installation of frangible collars on threaded pins.
- Metal spring clip on drive plug for positive socket retention.
- Unique 24-tooth gear pawl design provides 15° ratcheting angle while maximizing ultimate torque.
- Thin head design for access into tight work areas.
- Reversing lever designed for quick, one-hand operation.



Part No.	Drive Size (in)	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5249HS	3/8	Full Polish	7	0.62	J5249HSRK

PROTO® 3/8” DRIVE STANDARD LENGTH ROUND HEAD RATCHET

ASME B107.500

- Small head design and tight swing arc allows fastener to access tight areas.
- Full polished shaft with knurled grip for slip-resistant and strong grip.
- 5° ratcheting angle.



Part No.	Drive Size (in)	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5252F	3/8	Full Polish	7-3/8	0.57	J5252FRK

PROTO® 3/8” DRIVE FLEX-HEAD RATCHET

ASME B107.500

- Small head design and tight swing to allow access to fastener in a tight area.
- Full polish shaft with knurled grip allows for a strong slip-resistant grip. 180° flex.
- 180° flex.
- 72-tooth gear.
- 5° ratcheting angle.



Part No.	Drive Size (in)	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5257F	3/8	Full Polish	8-1/2	0.86	J5252FRK

PROTO® 3/8” DRIVE FEMALE DRIVE RATCHET

ASME B107.500

- Robust 24-tooth design with 15° arc swing.
- Alloy steel drive gear for strength and durability.
- Low profile head for access in constricted areas.
- Reversing lever design for quick, one-hand operation.
- Knurled slip-resistant grip.
- Made of heat-treated alloy steel.



Part No.	Drive Size (in)	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5249FW	3/8	Full Polish	7	0.56	J5249FWRK

PROTO® 3/8” DRIVE FLEXIBLE DRIVER

ASME B107.500

Made of heat-treated alloy steel.



Part No.	Drive Size (in)	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5267	3/8	-	9	0.35	-

PROTO® 3/8” DRIVE SPEED HANDLE

ASME B107.500

- Made from alloy steel.
- Heat-treated for strength and durability.



Part No.	Drive Size (in)	OAL (in)	Weight (lbs)	Repair Kit
J5280G	3/8	17-1/2	0.86	-

PROTO® 3/8” DRIVE RATCHET ADAPTORS

Converts standard handles to ratcheting handles.



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5247	3/8	2-1/6	0.34

PROTO® 3/8” DRIVE SPINNER RATCHET

- Made from alloy steel.
- Heat-treated for strength and durability.
- Fits on the drive end of the ratchet for quickly running down the fastener before final tightening with the ratchet.



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5251	3/8	1-1/2	0.56

PROTO® 3/8” DRIVE SLIDING T-HANDLE

ASME B107.500

- Made from alloy steel.
- Heat-treated for strength and durability.



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5285	3/8	8	0.41

PROTO® 3/8” DRIVE ADAPTORS

ASME B107.500



Part No	Drive Size	OAL (in)	Weight (lbs)
J5256	1/4" F x 3/8" M	1	0.04
J5253	3/8" F x 1/2" M	1-7/16	0.11
J5255	3/8" F x 1/4" M	1	0.05
J5254	1/2" F x 3/8" M	1-3/8	0.13

PROTO® 3/8” DRIVE LOCKING ADAPTER

- Includes hex key for easy locking into drive tool.
- Knurl locking ring.
- Black Oxide finish



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5260-02BLS	3/8	2-1/8	0.12

STAHLWILLE 3/8” DRIVE EXTENSIONS

ASME B107.500

- Made from alloy steel, full polish
- Heat-treated for strength and durability.



Part No	Drive Size	OAL (in)	Weight (lbs)
J5259	3/8	1-3/4	0.11
J5260	3/8	3	0.16
J5260-06	3/8	6	0.31
J5261	3/8	8	0.40
J5262	3/8	12	0.61
J5263	3/8	17-3/16	0.94

PROTO® 3/8” DRIVE LOCKING EXTENSIONS

ASME B107.500

- One-piece extension design
- Provides positive socket retention.
- Use where accidental socket disengagement may be a concern or safety hazard.



Part No	Drive Size	OAL (in)	Weight (lbs)
J5260-03L	3/8	3	0.21
J5260-06L	3/8	6	0.37
J5261L	3/8	8	0.49
J5262L	3/8	12	0.71

PROTO® 3/8” DRIVE HINGE HANDLES

ASME B107.500

- Made of heat-treated alloy steel
- Head flexes 90° from horizontal.



Part No	Drive Size	OAL (in)	Weight (lbs)
J5265	3/8	8-1/2	0.58
J5265BL	3/8	8-1/2	0.58
J5266	3/8	12	0.80

PROTO® 3/8” DRIVE UNIVERSAL JOINT

ASME B107.500



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5270A	3/8	1-7/8	0.13

PROTO® 3/8” DRIVE FLEXIBLE EXTENSION

ASME B107.500

- Made of heat-treated alloy steel.
- Black oxide finish



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5268	3/8	8	0.25

STAHLWILLE 3/8” DRIVE WOBBLE EXTENSIONS

ASME B107.500

- Provides up to a 17° angle of operation.
- Made from alloy steel.
- Heat-treated for strength and durability.
- Rigid wobble extension.



Part No	Drive Size	OAL (in)	Weight (lbs)
J5259W	3/8	1-3/4	0.11
J5260W	3/8	3	0.17
J5260-06W	3/8	6	0.29
J5261W	3/8	8	0.42
J5262W	3/8	12	0.65
J5263W	3/8	17-3/16	0.92

PROTO® PEAR HEAD RATCHET REPAIR KITS

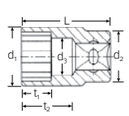


Part No	Drive Size	OAL (in)	Weight (lbs)
J5249XLRK	3/8	J5249XL	0.13
J5249FWRK	3/8	J5249FW	0.13
J5249HSRK	3/8	J5249HS	0.15
J5249XLHSRK	3/8	J5249XLHS	0.15

Stahlwille 3/8” Drive Sockets

STAHLWILLE 3/8” DRIVE SOCKETS – 12 POINT 45

- DIN 3124/ISO 2725-1, E DIN EN 3709
- HPQ® high performance steel, chrome plated





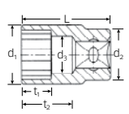
ASME B107.5M

MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
02 010007	7	10.5	16.5	6	24	6	12.5	19
02 010008	8	11.7	16.5	7	25	7	13.5	19
02 010009	9	13	16.5	8	25	7	13.5	19
02 010010	10	14.3	16.5	9	27	8.5	15.5	20
02 010011	11	15.6	16.5	10	27	8.5	13.7	21
02 010012	12	16.9	17.5	11	28	9.5	14.4	24
02 010013	13	18	17.5	12	30	11.5	16.1	30
02 010014	14	19.4	17.5	13	30	11.5	15.8	28
02 010015	15	20.6	19	14	31	12.5	19.2	40
02 010016	16	21.7	19	15	31	13.5	18.9	33
02 010017	17	23	19	16	31	12.5	18.6	44
02 010018	18	24.2	19	17	32	13.5	19.3	39
02 010019	19	25.2	19	18	32	13.5	19	39
02 010020	20	26.2	20	19	34	15.5	20.7	51
02 010021	21	27.7	21	20	34	15.5	20.5	53
02 010022	22	28.7	21	21	35	17	21.2	61
02 010024	24	31.5	24	21	35	18	21.2	92

STAHLWILLE 3/8” DRIVE SOCKETS – 12 POINT 45A

- Fed. Spec. GGG-W-641, SAE AS 954-E (test loads)
- HPQ® high performance steel, chrome plated





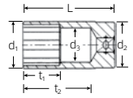
ASME B1071.
AS 954-E

IN

Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
02 410016	1/4	9.7	16.5	5.2	24	6	12.5	18
02 410020	5/16	11.7	16.5	7	25	7	13.5	19
02 410022	11/32	12.5	16.5	8.1	25	7	13.5	19
02 410024	3/8	13.7	16.5	8.4	27	8.5	15.5	20
02 410028	7/16	15.7	16.5	10	28	9.5	15.1	20
02 410032	1/2	18	17.5	11.5	30	11.5	16.5	24
02 410034	9/16	20.2	19	13.1	31	12.7	16.8	28
02 410035	19/32	20.6	19	14	31	13	19.2	36
02 410036	5/8	21.7	19	15	31	13.5	18.9	31
02 410038	11/16	23.4	19	16.3	32	14.7	19.5	34
02 410040	3/4	25.2	19	18	32	15.9	19	41
02 410042	13/16	27.2	20.5	19.4	34	16.5	20.5	52
02 410044	7/8	28.7	22	21	35	18	21	59
02 410046	15/16	31.5	24	22.6	35	18.5	20.7	95
02 410048	1	33	25.5	24.2	35	18.5	20.2	97

STAHLWILLE 3/8” DRIVE DEEP SOCKETS – 12 POINT 46

- DIN 3124/ISO 2725-1, E DIN EN 3710, E DIN EN 3709
- HPQ® high performance steel, chrome plated
- 1) with rubber insert for spark plugs





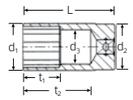
ASME B107.5M

MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
02 020008	8	11.7	16.5	7	54	9	42.5	36
02 020010	10	14.3	16.5	9	54	20	42.5	41
02 020011	11	15.6	16.5	10	54	20	40.7	51
02 020012	12	16.9	17.5	11	54	20	40.4	57
02 020013	13	18	17.5	12	54	20	40.1	61
02 020014	14	19.4	17.5	13	60	25	45.8	75
02 020015	15	20.6	19	14	60	25	48.2	85
02 020016	16	21.7	19.5	15	60	25	47.9	81
02 020017	17	23	21	16	65	30	52.6	97
02 020018	18	24.2	22	17	65	30	52.3	121
02 020019	19	25.2	23	18	65	30	52	112
02 020208	20.8-13/16 [1]	27.2	25	-	65	18	-	151
02 020021	21	27.7	25.5	20	65	30	51.5	137
02 020022	22	28.7	26.5	21	65	30	51.2	178

STAHLWILLE 3/8” DRIVE DEEP SOCKETS – 12 POINT 46A

- Fed. Spec. GGG-W-641
- HPQ® high performance steel, chrome plated





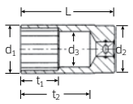
ASME B107.1
AS 954-E

IN

Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
02 420016	1/4	9.7	16.5	5.2	54	9	42.5	33
02 420020	5/16	11.7	16.5	7	54	9	42.5	35
02 420022	11/32	12.5	16.5	8.1	54	9	42.5	186
02 420024	3/8	13.7	16.5	8.4	54	20	42.5	45
02 420028	7/16	15.7	16.5	10	54	20	40.7	53
02 420032	1/2	18	17.5	11.5	54	20	40.2	64
02 420034	9/16	20.2	19	13.1	60	25	45.8	80
02 420035	19/32	20.6	19	14	60	25	48.2	84
02 420036	5/8	21.7	19.5	15	60	25	47.9	81
02 420038	11/16	23.4	21.5	16.3	65	30	52.5	114
02 420040	3/4	25.2	23	18	65	30	52	137
02 420042	13/16	27.2	25	19.4	65	30	51.6	130
02 420044	7/8	28.7	26.5	21	65	30	51.2	184
02 420046	15/16	31.5	29	22.6	65	30	50.7	195
02 420048	1	33	31	24.2	65	30	50.2	205

STAHLWILLE 3/8” DRIVE MEDIUM LENGTH SOCKETS – 12 POINT 460A

- S.B.A.C. AS 40610/40611
- HPQ® high performance steel, chrome plated





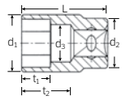
ASME B107.1
AS 954-E

IN

Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
02 620016	1/4	9.9	16.5	5.2	32	7	20.5	21
02 620020	5/16	11.5	16.5	7	32	8.5	20.5	22
02 620024	3/8	13.7	16.5	8.5	38	9	26.5	29
02 620028	7/16	15.7	16.5	10	38	11	24.5	33
02 620032	1/2	17.5	17.8	11.5	44	12	30	44

STAHLWILLE 3/8” DRIVE SOCKETS – 6 POINT
456

- DIN 3124/ISO 2725-1, E DIN EN 3709 (test loads)
- HPQ® high performance steel, chrome plated





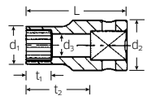
ASME B107.5M

MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
02110007	7	10.5	16.5	6	24	6	12.5	19
02110008	8	11.7	16.5	7	25	7	13.5	19
02110009	9	13	16.5	8	25	7	13.5	20
02110010	10	14.3	16.5	9	27	8.5	15.5	20
02110011	11	15.6	16.5	10	27	8.5	13.7	21
02110012	12	16.9	17.5	11	28	9.5	14.4	24
02110013	13	18	17.5	12	30	11.5	16.1	25
02110014	14	19.4	17.5	13	30	11.5	15.8	29
02110015	15	20.6	19	14	31	12.5	19.2	30
02110016	16	21.7	19	15	31	13.5	18.9	34
02110017	17	23	19	16	31	12.5	18.6	45
02110018	18	24.2	19	17	32	13.5	19.3	42
02110019	19	25.2	19.6	18	32	13.5	19	43
02110020	20	26.2	20.5	19	34	15.5	20.7	53
02110021	21	27.7	21.8	20	34	15.5	20.5	59
02110022	22	28.7	21	21	35	17	21.2	59

STAHLWILLE 3/8” DRIVE SOCKETS – SPLINE
45ASP

- MS-33787, MIL-W-8982
- HPQ® high performance steel, chrome plated

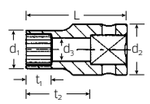




Part No.	Size	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
02011012	12	3/8	13.7	16.5	8.6	26.5	9	15	24
02011014	14	7/16	16	17.3	10.4	28	11	14.5	37
02011016	16	1/2	18	18.3	12.2	28	11.5	14	28

STAHLWILLE 3/8” DRIVE SOCKET – SPLINE
45APSP

- MS-33787, MIL-W-8982
- for disassembling jet engines, series CFM 56
- HPQ® high performance steel, gunmetal finish

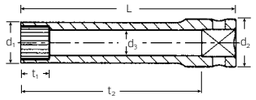




Part No.	Size	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
22410028	14	7/16	18.8	18.8	10.4	28	11	14.5	36

STAHLWILLE 3/8” DRIVE DEEP SOCKETS – SPLINE
46ASP

- bolt clearance
- MS-33787, MIL-W-8982
- HPQ® high performance steel, chrome plated

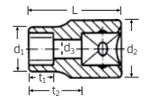




Part No.	Size	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
02021012	12	3/8	13.7	16.5	8.6	54	42.5	52	
02021014	14	7/16	16	17.3	10.4	54	42.5	63	

STAHLWILLE 3/8” DRIVE SOCKETS – TORX®
45TX

HPQ® high performance steel, chrome plated

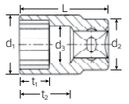




Part No.	Size	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
02270005	E5	4.7	7	16.5	2.8	28	5	16.5	23
02270006	E6	5.7	8	16.5	3.6	28	5.5	16.5	23
02270007	E7	6.2	9	16.5	3.8	28	6.5	16.5	24
02270008	E8	7.5	10.5	16.5	4.3	28	7	16.5	22
02270010	E10	9.4	13	16.5	5.6	28	8	16.5	27
02270012	E12	11.1	14.9	16.5	7.2	28	9.5	16.5	30
02270014	E14	12.9	16.5	17.3	8	28	10	16.5	34

STAHLWILLE 3/8” DRIVE SOCKET
45AP

- Fed. Spec. GGG-W-641
- for disassembling jet engines, series CFM 56
- HPQ® high performance steel, gunmetal finish





ASME B107.1
AS 954-E

IN

Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
02430020	5/16	11.9	16.5	8.1	25	7	13.5	19

STAHLWILLE 3/8” DRIVE CLIP STRIPS
45CL

supplied without sockets

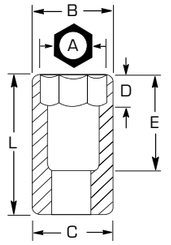


Part No.	Size	OAL (mm) (L)	Weight (g)
80450001	1	200	40
80450002	2	300	58

PROTO® 3/8” Drive Sockets

PROTO® 3/8” DRIVE SOCKETS – 12 POINT

- PROTO® 12 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.





TORQUEPLUS FASTENING SYSTEM

ASME B107.1
AS954E S3.8.1

IN

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5208	1/4	25/64	43/64	23/64	21/32	1-3/32	0.05
J5209	9/32	27/64	43/64	21/32	21/32	1-3/32	0.05
J5210	5/16	15/32	43/64	23/64	21/32	1-3/32	0.05
J5211	11/32	1/2	43/64	23/64	21/32	1-3/32	0.05
J5212	3/8	35/64	43/64	23/64	21/32	1-3/32	0.06
J5214	7/16	41/64	43/64	23/64	21/32	1-3/32	0.06
J5216	1/2	47/64	47/64	23/64	21/64	1-1/8	0.08
J5217	17/32	49/64	49/64	23/64	11/16	1-1/8	0.08
J5218	9/16	13/16	13/16	1/2	11/16	1-1/8	0.09
J5219	19/32	33/64	27/32	1/2	11/16	1-1/8	0.09
J5220	5/8	7/8	7/8	33/64	11/16	1-1/8	0.10
J5222	11/16	61/64	61/64	17/32	11/16	1-1/8	0.13
J5224	3/4	1-1/32	1-1/32	39/64	3/4	1-3/16	0.15
J5225	25/32	1-1/16	1-1/16	39/64	3/4	1-3/16	0.16
J5226	13/16	1-3/32	1-3/32	39/64	3/4	1-3/16	0.17
J5228	7/8	1-3/16	1-3/16	41/64	7/8	1-5/16	0.24
J5230	15/16	1-1/4	1-1/4	49/64	7/8	1-5/16	0.25
J5232	1	1-5/16	1-5/16	13/16	59/64	1-3/8	0.27

PROTO® 3/8” DRIVE METRIC SOCKETS – 12 POINT

- PROTO® 12 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



TORQUEPLUS FASTENING SYSTEM

ASME B107.5M
AS954E S3.8.1

MM

Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5206M	6	25/64	43/64	1/4	45/64	1-3/32	0.05
J5207M	7	27/64	43/64	1/4	45/64	1-3/32	0.05
J5208M	8	15/32	43/64	1/4	45/64	1-3/32	0.06
J5209M	9	33/64	43/64	9/32	45/64	1-3/32	0.05
J5210M	10	19/32	43/64	5/16	45/64	1-3/32	0.06
J5211M	11	41/64	43/64	21/64	45/64	1-3/32	0.07
J5212M	12	45/64	45/64	9/32	1/2	1-1/8	0.05
J5213M	13	47/64	47/64	9/32	1/2	1-1/8	0.07
J5214M	14	25/32	25/32	15/32	7/16	1-1/8	0.08
J5215M	15	27/32	27/32	17/32	7/16	1-1/8	0.10
J5216M	16	55/64	55/64	17/32	7/16	1-1/8	0.10
J5217M	17	15/16	15/16	17/32	7/16	1-1/8	0.12
J5218M	18	61/64	61/64	17/32	1/2	1-3/16	0.12
J5219M	19	1	1	17/32	1/2	1-3/16	0.14
J5220M	20	1-3/32	1-3/32	5/8	1/2	1-3/16	0.17
J5221M	21	1-3/32	1-3/32	9/16	41/64	1-9/32	0.18
J5222M	22	1-11/64	1-11/64	43/64	5/8	1-5/16	0.22
J5223M	23	1-3/16	1-3/16	47/64	5/8	1-5/16	0.21
J5224M	24	1-1/4	1-1/4	49/64	37/64	1-5/16	0.23
J5225M	25	1-21/64	1-21/64	49/64	5/8	1-3/8	0.29
J5226M	26	1-21/64	1-21/64	49/64	59/64	1-3/8	0.26

PROTO® 3/8” DRIVE SOCKETS – 6 POINT

- PROTO® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



TORQUEPLUS FASTENING SYSTEM

ASME B107.1

IN

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5206H	3/16	5/16	43/64	23/64	21/32	1-3/32	0.07
J5208H	1/4	13/32	43/64	23/64	21/32	1-3/32	0.05
J5209H	9/32	27/64	43/64	23/64	21/32	1-3/32	0.05
J5210H	5/16	15/32	43/64	23/64	21/32	1-3/32	0.06
J5211H	11/32	1/2	43/64	23/64	21/32	1-3/32	0.06
J5212H	3/8	9/16	43/64	23/64	21/32	1-3/32	0.07
J5214H	7/16	41/64	43/64	23/64	21/32	1-3/32	0.06
J5216H	1/2	47/64	47/64	23/64	11/16	1-1/8	0.08
J5218H	9/16	13/16	13/16	1/2	11/16	1-1/8	0.09
J5220H	5/8	7/8	7/8	33/64	11/16	1-1/8	0.11
J5222H	11/16	61/64	61/64	17/32	11/16	1-1/8	0.13
J5224H	3/4	1-1/64	1-1/64	39/64	3/4	1-3/16	0.15
J5226H	13/16	1-3/32	1-3/32	39/64	3/4	1-3/16	0.18
J5228H	7/8	1-3/16	1-3/16	43/64	7/8	1-5/16	0.24
J5230H	15/16	1-1/4	1-1/4	49/64	7/8	1-5/16	0.26
J5232H	1	1-5/16	1-5/16	13/16	59/64	1-3/8	0.27

PROTO® 3/8” DRIVE METRIC SOCKETS – 6 POINT

- PROTO® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



TORQUEPLUS FASTENING SYSTEM

ASME B107.5M

MM

Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J52055MH	5.5	23/64	43/64	1/4	21/32	1-3/32	0.04
J5206MH	6	25/64	43/64	1/4	39/64	1-3/32	0.04
J5207MH	7	27/64	43/64	1/4	39/64	1-3/32	0.05
J5208MH	8	15/32	43/64	1/4	39/64	1-3/32	0.04
J5209MH	9	33/64	43/64	9/32	39/64	1-3/32	0.04
J5210MH	10	19/32	43/64	9/32	1-3/32	1-3/32	0.04
J5211MH	11	41/64	43/64	9/32	39/64	1-3/32	0.04
J5212MH	12	45/64	45/64	9/32	11/16	1-1/8	0.05
J5213MH	13	47/64	47/64	9/32	11/16	1-1/8	0.08
J5214MH	14	25/32	25/32	15/32	11/16	1-1/8	0.08
J5215MH	15	27/32	27/32	17/32	11/16	1-1/8	0.09
J5216MH	16	55/64	55/64	17/32	11/16	1-1/8	0.09
J5217MH	17	15/16	15/16	17/32	11/16	1-1/8	0.13
J5218MH	18	61/64	61/64	17/32	3/4	1-3/16	0.13
J5219MH	19	1	1	17/32	3/4	1-3/16	0.14
J5220MH	20	1-3/32	1-3/32	5/8	3/4	1-3/16	0.16
J5221MH	21	1-3/32	1-3/32	5/8	51/64	1-15/64	0.18
J5222MH	22	1-11/64	1-11/64	43/64	57/64	1-5/16	0.24
J5223MH	23	1-3/16	1-3/16	57/64	57/64	1-5/16	0.23
J5224MH	24	1-1/4	1-1/4	49/64	57/64	1-5/16	0.26
J5225MH	25	9/64	1-21/64	49/64	15/16	1-3/8	0.32
J5226MH	26	1-21/64	1-21/64	49/64	15/16	1-3/8	0.30

PROTO® 3/8” DRIVE SOCKETS – 8 POINT

For square fasteners.



ASME B107.1

IN

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5208S	1/4	35/34	5/8	1/4	39/64	1-5/64	0.04
J5210S	5/16	9/16	5/8	1/4	39/64	1-5/64	0.05
J5212S	3/8	11/16	11/16	1/4	39/64	1-5/64	0.07
J5214S	7/16	3/4	3/4	17/64	39/64	1-5/64	0.08
J5216S	1/2	7/8	7/8	5/16	21/32	1-1/8	0.12

PROTO® 3/8” DRIVE DEEP SOCKETS – 12 POINT

- PROTO® 12 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



TORQUEPLUS FASTENING SYSTEM

ASME B107.1
AS954E S3.8.1

IN

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5008	1/4	13/32	21/32	5/16	1-11/16	2-1/8	0.10
J5010	5/16	15/32	21/32	13/32	1-11/16	2-1/8	0.10
J5011	11/32	1/2	21/32	25/64	1-11/16	2-1/8	0.09
J5012	3/8	35/64	21/32	13/32	1-11/16	2-1/8	0.10
J5014	7/16	21/32	21/32	7/16	1-11/16	2-1/8	0.12
J5016	1/2	23/32	23/32	33/64	1-11/16	2-1/8	0.14
J5018	9/16	51/64	51/64	19/32	1-11/16	2-1/8	0.18
J5020	5/8	7/8	7/8	43/64	2-5/16	2-3/4	0.24
J5022	11/16	15/16	15/16	43/64	2-5/16	2-3/4	0.30
J5024	3/4	1-1/64	1-1/64	43/64	2-5/16	2-3/4	0.33
J5026	13/16	1-5/64	1-5/64	43/64	2-5/16	2-3/4	0.36
J5028	7/8	1-15/64	1-15/64	1-3/16	2-5/16	2-3/4	0.43
J5030	15/16	1-15/64	1-15/64	1-3/16	2-5/16	2-3/4	0.46
J5032	1	1-5/16	1-5/16	1-3/16	2-5/16	2-3/4	0.54

PROTO® 3/8” DRIVE METRIC DEEP SOCKETS – 12 POINT

- PROTO® 12 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



TORQUEPLUS FASTENING SYSTEM

ASME B107.5M
AS954E S3.8.1

MM

Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5006M	6	25/64	21/32	5/16	1-13/16	2-1/8	0.11
J5007M	7	25/64	21/32	25/64	1-47/64	2-1/8	0.09
J5008M	8	15/32	21/32	25/64	1-47/64	2-1/8	0.10
J5009M	9	33/64	21/32	25/64	1-47/64	2-1/8	0.11
J5010M	10	37/64	21/32	25/64	1-47/64	2-1/8	0.12
J5011M	11	21/32	7/16	1-11/16	1-47/64	2-1/8	0.13
J5012M	12	45/64	45/64	33/64	1-39/64	2-1/8	0.13
J5013M	13	23/32	23/32	33/64	1-39/64	2-1/8	0.13
J5014M	14	25/32	25/32	19/32	1-17/32	2-1/8	0.15
J5015M	15	55/64	55/64	21/32	2-7/64	2-3/4	0.15
J5016M	16	55/64	55/64	21/32	2-7/64	2-3/4	0.24
J5017M	17	15/16	15/16	21/32	2-7/64	2-3/4	0.27
J5018M	18	15/16	15/16	21/32	2-7/64	2-3/4	0.28
J5019M	19	1-1/64	1-1/64	11/16	2-1/16	2-3/4	0.30
J5020M	20	1-5/64	1-5/64	11/16	2-1/16	2-3/4	0.33
J5021M	21	1-5/64	1-5/64	11/16	2-1/16	2-3/4	0.34
J5022M	22	1-11/64	1-11/64	11/16	2-1/16	2-3/4	0.45
J5023M	23	1-7/32	1-11/64	1-3/16	1-37/64	2-3/4	0.54
J5026M	26	1-5/64	1-5/64	43/64	2-5/16	2-3/4	0.28

PROTO® 3/8” DRIVE DEEP SOCKETS – 6 POINT

- PROTO® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



TORQUEPLUS FASTENING SYSTEM

ASME B107.1

IN

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5008H	1/4	25/64	41/64	21/64	1-11/16	2-1/8	0.12
J5010H	5/16	11/32	41/64	11/32	1-11/16	2-1/8	0.10
J5011H	11/32	1/2	41/64	21/32	1-11/16	2-1/8	0.10
J5012H	3/8	9/16	41/64	11/32	1-11/16	2-1/8	0.11
J5014H	7/16	41/64	41/64	7/16	1-11/16	2-1/8	0.12
J5016H	1/2	23/32	23/32	33/64	1-11/16	2-1/8	0.14
J5018H	9/16	51/64	51/64	19/32	1-11/16	2-1/8	0.17
J5020H	5/8	7/8	7/8	21/32	1-11/16	2-3/4	0.25
J5022H	11/16	61/64	61/64	21/32	1-23/32	2-3/4	0.29
J5024H	3/4	1-1/64	1-1/64	11/16	1-23/32	2-3/4	0.32
J5026H	13/16	1-5/64	1-5/64	11/16	2-5/64	2-3/4	0.35
J5028H	7/8	1-11/64	1-11/64	11/16	2-5/64	2-3/4	0.40
J5030H	15/16	1-15/64	1-15/64	1-3/16	2-5/64	2-3/4	0.52
J5032H	1	1-21/64	1-21/64	1-3/16	2-5/64	2-3/4	0.58

PROTO® 3/8” DRIVE METRIC DEEP SOCKETS – 6 POINT

- PROTO® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



TORQUEPLUS FASTENING SYSTEM

ASME B107.5M

MM

Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5006MH	6	25/64	21/32	5/16	1-11/16	2-1/8	0.10
J5007MH	7	27/64	21/32	5/16	1-11/16	2-1/8	0.09
J5008MH	8	15/32	21/32	5/16	1-15/16	2-1/8	0.10
J5009MH	9	33/64	21/32	25/64	1-11/16	2-1/8	0.10
J5010MH	10	37/64	21/32	25/64	1-11/16	2-1/8	0.11
J5011MH	11	21/32	21/32	7/16	1-11/16	2-1/8	0.12
J5012MH	12	45/64	45/64	33/64	1-1/2	2-1/8	0.14
J5013MH	13	23/32	23/32	33/64	1-1/2	2-1/8	0.15
J5014MH	14	25/32	25/32	19/32	1-1/2	2-1/8	0.16
J5015MH	15	55/64	55/64	21/32	2-5/16	2-3/4	0.24
J5016MH	16	55/64	55/64	21/32	2-5/16	2-3/4	0.24
J5017MH	17	15/16	15/16	21/32	2-5/16	2-3/4	0.28
J5018MH	18	15/16	15/16	21/32	2-5/16	2-3/4	0.28
J5019MH	19	1-1/64	1-1/64	11/16	2-5/16	2-3/4	0.33
J5020MH	20	1-5/64	1-5/64	11/16	2-5/16	2-3/4	0.35
J5021MH	21	1-5/64	1-5/64	11/16	2-5/16	2-3/4	0.35
J5022MH	22	1-11/64	1-11/64	11/16	2-5/16	2-3/4	0.46
J5023MH	23	1-15/64	1-15/64	1-3/16	2-5/16	2-3/4	0.55
J5024MH	24	1-9/32	1-9/32	1-3/16	2-5/16	2-3/4	0.56
J5025MH	25	1-9/32	1-9/32	1-3/16	2-5/16	2-3/4	0.56
J5026MH	26	1-9/32	1-9/32	1-3/16	2-5/16	2-3/4	0.65

PROTO® 3/8” DRIVE SPARK PLUG SOCKETS – 6 POINT

With rubber insert.



IN

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5020-50	5/8	3/16				2-1/2	0.21
J5026HPA	13/16	19/64				2-3/4	0.35

PROTO® 3/8” DRIVE SUPER SHORT SOCKETS – 6 POINT

TORQUEPLUS FASTENING SYSTEM

IN

- PROTO® 6 Point Sockets can be used on stubborn hex bolts or bolts made from softer materials.
- TorquePlus™ features apply.
- Contact stresses are dispersed over a larger area.
- Risk of rounding the fastener is reduced.
- Enables users to turn worn, rounded fasteners.



Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5206HS	3/16	5/8				3/4	0.04
J5208HS	1/4	5/8				13/16	0.03
J5210HS	5/16	5/8				3/4	0.03
J5212HS	3/8	5/8				3/4	0.04
J5214HS	7/16	3/4				7/8	0.04
J5216HS	1/2	3/4				7/8	0.05
J5218HS	9/16	3/4				7/8	0.17
J5220HS	5/8	7/8				15/16	0.09
J5222HS	11/16	15/16				15/16	0.09
J5224HS	3/4	15/16				15/16	0.11

PROTO® 3/8” DRIVE SOCKETS – SPLINE

- PROTO® Spline tools are designed to service high tensile strength fasteners used widely on military and commercial aircraft and in heavy machinery applications where vibration is prevalent. They are also used in automotive and industrial areas where high performance torque needs to be achieved.
- Spline sockets help tighten high-strength bolts to high torque loads. They help lower the force required to turn standard fasteners by allowing the torque load to be moved away from the corners to help prevent fastener rounding. They also turn fasteners with damaged corners.
- Spline sockets on spline fasteners help deliver twice the torque of 12 point wrenches on double-box fasteners, and more torque than hex wrenches on hex fasteners.
- Spline helps reduce foreign object debris (FOD) by having a precise fit between the fastening tool and its fastener.



Part No.	Size (in) (A)	Spline Size	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5212SPL	3/8	#12	9/16	21/32	3/8	11/16	1	0.06
J5214SPL	7/16	#14	5/8	11/16	7/16	3/4	1-1/16	0.06
J5216SPL	1/2	#16	3/4	23/32	7/16	3/4	1-1/16	0.07
J5218SPL	9/16	#18	13/16	13/16	15/32	3/4	1-1/16	0.01
J5220SPL	5/8	#20	7/8	7/8	17/32	7/8	1-3/16	0.13

PROTO® 3/8” DRIVE DEEP SOCKETS – SPLINE

- PROTO® Spline tools are designed to service high tensile strength fasteners used widely on military and commercial aircraft and in heavy machinery applications where vibration is prevalent. They are also used in automotive and industrial areas where high performance torque needs to be achieved.
- Spline sockets help tighten high-strength bolts to high torque loads. They help lower the force required to turn standard fasteners by allowing the torque load to be moved away from the corners to help prevent fastener rounding. They also turn fasteners with damaged corners.
- Spline sockets on spline fasteners help deliver twice the torque of 12 point wrenches on double-box fasteners, and more torque than hex wrenches on hex fasteners.
- Spline helps reduce foreign object debris (FOD) by having a precise fit between the fastening tool and its fastener.



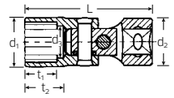
Part No.	Size (in) (A)	Spline Size	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5012DPL	3/8	#12	9/16	21/32	3/8	1-5/8	2-1/8	0.08
J5014DPL	7/16	#14	5/8	11/16	7/16	1-5/8	2-1/8	0.10
J5016DPL	1/2	#16	3/4	23/32	7/16	1-5/8	2-1/8	0.12
J5018DPL	9/16	#18	13/16	13/16	15/32	1-7/8	2-3/8	0.19
J5020DPL	5/8	#22	7/8	7/8	17/32	1-7/8	2-3/8	0.22

Stahlwille 3/8” Universal Sockets

STAHLWILLE 3/8” DRIVE UNIVERSAL SOCKETS – 12 POINT
47

MM

HPQ® high performance steel, chrome plated





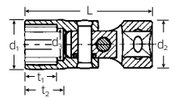
Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (g)
02040010	10	14.3	17.5	9	45.5	7	12	51
02040011	11	15.6	17.5	10	47.5	11	14	55
02040012	12	16.9	17.5	11	48	11	14.5	54
02040013	13	18.3	17.5	12	48	12	14.5	53
02040014	14	19.4	17.5	13	48.5	13	14.5	55
02040015	15	20.6	17.5	14	48.5	13	14.5	56
02040016	16	21.8	17.5	15	51.5	14	17	58
02040017	17	23	17.5	16	53.5	15	18.5	65
02040018	18	24.2	17.5	17	54.5	16	18.5	61
02040019	19	25.5	17.5	18	57	16	21	68

STAHLWILLE 3/8” DRIVE UNIVERSAL SOCKETS – 12 POINT
47A

AS 954-E

IN

HPQ® high performance steel, chrome plated

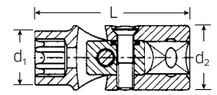




Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	OAL (mm) (L)	Weight (g)
02440020	5/16	11.7	17.5	7	45.5	7	12.5	50
02440024	3/8	13.7	17.5	8.5	45.5	7	12	50
02440028	7/16	15.8	17.5	10	47.5	11	14	50
02440032	1/2	18.3	17.5	11.5	47.5	11.5	14	57
02440034	9/16	19.7	17.5	13.1	48.5	13	14.5	55
02440036	5/8	21.6	17.5	15	51.5	14	17	59
02440038	11/16	23.5	17.5	16.3	53.5	16	18.5	58
02440040	3/4	25.5	17.5	18	57	16	21	67

STAHLWILLE 3/8” DRIVE UNIVERSAL SOCKETS – TORX®
47TX

Chrome Alloy Steel, chrome plated





Part No.	Size	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	OAL (mm) (L)	Weight (lbs)
02070008	E8	7.5	11.5	19	43	56
02070010	E10	9.4	13.8	19	44	61
02070012	E12	11.1	16	19	46	66
02070014	E14	12.9	17.8	19	48	75

PROTO® 3/8” Universal Sockets

PROTO® 3/8” DRIVE UNIVERSAL SOCKETS – 12 POINT



- PROTO® 12 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.

TORQUEPLUS FASTENING SYSTEM

ASME B107.1
AS954E S3.8.1

IN

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5272A	5/16	15/32	23/32	5/16	27/64	1-3/4	0.10
J5273A	3/8	35/64	23/32	11/32"	27/64	1-3/4	0.11
J5274A	7/16	41/64	23/32	3/8	27/64	1-3/4	0.11
J5275A	1/2	23/32	23/32	11/32	33/64	1-3/4	0.11
J5276A	9/16	25/32	25/32	3/8	17/32	1-27/32	0.15
J5277A	5/8	7/8	7/8	3/8	39/64	1-27/32	0.17
J5278A	11/16	31/32	7/8	7/16	5/8	1-7/8	0.19
J5279A	3/4	1	7/8	7/16	43/64	1-7/8	0.23
J5280A	13/16	1-3/32	25/32	13/32	9/16	1-7/8	0.27
J5281A	7/8	1-3/16	25/32	17/32	5/8	1-61/64	0.31
J5282A	15/16	1-1/4	25/32	17/32	5/8	1-61/64	0.35
J5283A	1	1-11/32	25/32	9/16	45/64	2	0.39

PROTO® 3/8” DRIVE UNIVERSAL SOCKETS – 6 POINT



- PROTO® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.

TORQUEPLUS FASTENING SYSTEM

ASME B107.1

IN

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5272HA	5/16	15/37	23/32	5/16	27/64	1-3/4	0.10
J5273HA	3/8	35/64	23/32	5/16	27/64	1-3/4	0.11
J5274HA	7/16	41/64	23/32	3/8	27/64	1-3/4	0.10
J5275HA	1/2	23/32	23/32	11/32	33/64	1-3/4	0.10
J5276HA	9/16	25/32	23/32	3/8	17/32	1-27/32	0.11
J5277HA	5/8	7/8	23/32	3/8	39/64	1-27/32	0.15
J5278HA	11/16	31/32	23/32	7/16	5/8	1-7/8	0.15
J5279HA	3/4	1	23/32	7/16	43/64	1-7/8	0.14

PROTO® 3/8” DRIVE DEEP UNIVERSAL SOCKETS – 6 POINT



- Universal sockets permit turning at an angle up to 65° where obstructions may prevent a straight application.
- PROTO® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.

IN

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5274LHA	7/16	5/8	23/32	11/32	1-1/8	1-3/8	0.16
J5275LHA	1/2	23/32	23/32	3/4	1-1/8	1-3/8	0.16
J5276LHA	9/16	25/32	23/32	3/4	1-31/32	2-3/8	0.18
J5277LHA	5/8	7/8	23/32	3/4	1-31/32	2-3/8	0.19

PROTO® 3/8” DRIVE METRIC UNIVERSAL SOCKETS – 12 POINT



- PROTO® 12 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.

TORQUEPLUS FASTENING SYSTEM

ASME B107.5M

MM

Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5272AM	9	33/64	23/32	5/16	25/64	1-3/4	0.10
J5273AM	10	35/64	23/32	11/32	25/64	1-3/4	0.10
J5274AM	11	19/32	23/32	11/32	25/64	1-3/4	0.12
J5275AM	12	21/32	23/32	11/32	1/2	1-3/4	0.10
J5276AM	13	23/32	23/32	11/32	1/2	1-3/4	0.11
J5277AM	14	25/32	23/32	3/8	33/64	1-7/8	0.13
J5278AM	15	13/16	23/32	3/8	41/64	1-7/8	0.12
J5279AM	16	55/64	23/32	13/32	33/64	1-57/64	0.12
J5280AM	17	15/16	23/32	7/16	33/64	1-57/64	0.15
J5281AM	18	63/64	23/32	7/16	33/64	1-57/64	0.16
J5282AM	19	63/64	23/32	15/32	17/32	1-59/64	0.15

PROTO® 3/8” DRIVE METRIC UNIVERSAL SOCKETS – 6 POINT



- PROTO® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.

TORQUEPLUS FASTENING SYSTEM

ASME B107.5M

MM

Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5270HAM	7	27/64	23/32	5/16	7/16	1-49/64	0.11
J5271HAM	8	29/64	23/32	5/16	7/16	1-49/64	0.04
J5273HAM	10	35/64	23/32	11/32	7/16	1-49/64	0.11
J5274HAM	11	19/32	23/32	11/32	7/16	1-49/64	0.11
J5275HAM	12	21/32	23/32	11/32	7/16	1-49/64	0.10
J5276HAM	13	23/32	23/32	11/32	7/16	1-49/64	0.10
J5277HAM	14	25/32	23/32	3/8	31/64	1-7/8	0.11
J5278HAM	15	51/64	23/32	3/8	31/64	1-7/8	0.12
J5279HAM	16	55/64	23/32	13/32	33/64	1-57/64	0.15
J5280HAM	17	15/16	23/32	13/32	33/64	1-57/64	0.15
J5281HAM	18	63/64	23/32	7/16	33/64	1-57/64	0.15
J5282HAM	19	1-1/64	23/32	15/32	17/32	1-59/64	0.16

PROTO® 3/8” DRIVE UNIVERSAL SPARK PLUG SOCKETS – 6 POINT



With rubber insert.

IN

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5020-70A	5/8	27/32	23/32	5/16	3-19/64	0.26	0.11
J5026-50A	13/16	1-1/16	23/32	5/16	3-3/8	0.34	0.16

Stahlwille 3/8” Bit Sockets

STAHLWILLE 3/8” DRIVE HEX BIT SOCKETS 49A

IN

- DIN 7422
- Chrome Alloy Steel, chrome plated



Part No.	Size (in)	Bit Length (mm)	OAL (mm)	Weight (g)
02450008	1/8	20	52	39
02450009	9/64	20	52	40
02450010	5/32	20	52	40
02450012	3/16	20	52	44
02450014	7/32	20	52	46
02450016	1/4	20	52	48
02450020	5/16	20	52	55
02450024	3/8	20	52	61

STAHLWILLE 3/8” DRIVE LONG HEX BIT SOCKETS 2049

MM

- DIN 7422
- Chrome Alloy Steel, chrome plated



Part No.	Size (mm)	Bit Length (mm)	OAL (mm)	Weight (g)
02151004	4	68	100	45
02151005	5	68	100	50
02151006	6	68	100	50
02151208	8	88	120	85
02151210	10	88	120	106

STAHLWILLE 3/8” DRIVE TORX® SCREWDRIVER SOCKETS 49TX

Chrome Alloy Steel, chrome plated



Part No.	Size	Bit Length (mm)	OAL (mm)	Weight (g)
02100009	T9	17	49	45
02100010	T10	17	49	45
02100015	T15	17	49	45
02100020	T20	17	49	46
02100025	T25	17	49	46
02100027	T27	17	49	46
02100030	T30	17	49	47
02100040	T40	17	49	48
02100045	T45	17	49	49

STAHLWILLE 3/8” DRIVE HEX BIT SOCKETS 49

MM

- DIN 7422
- Chrome Alloy Steel, chrome plated



Part No.	Size (mm)	Bit Length (mm)	OAL (mm)	Weight (g)
02050003	3	20	52	38
02050004	4	20	52	40
02050005	5	20	52	44
02050006	6	20	52	46
02050007	7	20	52	51
02050008	8	20	52	55
02050010	10	20	52	62

STAHLWILLE 3/8” DRIVE SPECIAL HEX BIT SOCKETS 1049/3049

MM

- DIN 7422
- Chrome Alloy Steel, chrome plated



Part No.	Size (mm)	Bit Length (mm)	OAL (mm)	Weight (g)
02151007	7	68	100	66
02152408	8	6.5	24	28
02151009	9	25	57	62

STAHLWILLE 3/8” DRIVE LONG TRI-SQUARE SCREWDRIVER SOCKETS 3049X

- DIN 2324
- Chrome Alloy Steel, chrome plated



Part No.	Size	Bit Length (mm)	OAL (mm)	Weight (g)
02261206	M6	88	120	72
02261208	M8	88	120	80
02261210	M10	88	120	106

STAHLWILLE 3/8” DRIVE TRI-SQUARE SCREWDRIVER SOCKETS 49X

- DIN 2324
- Chrome Alloy Steel, chrome plated



Part No.	Size	Bit Length (mm)	OAL (mm)	Weight (g)
02060005	M5	20	52	45
02060006	M6	20	52	47
02060008	M8	20	52	56
02060010	M10	20	52	63

PROTO® 3/8” Bit Sockets

PROTO® 3/8” DRIVE HEX BIT SOCKETS

IN

- Made using a heat-treated alloy for wear-resistance which helps minimize distortion for a long life.
- Hex opening holds the bit lallowing the bit holder to take the torque load.



Part No.	Size (in)	Bit Length (in)	OAL (in)	Weight (lbs)
J49901/8	1/8	1-5/8	2-23/32	0.12
J49905/32	5/32	1-5/8	2-23/32	0.12
J49903/16	3/16	1-5/8	2-23/32	0.12
J49907/32	7/32	1-5/8	2-23/32	0.12
J49901/4	1/4	1-5/8	2-23/32	0.12
J49905/16	5/16	1-5/8	2-23/32	0.13
J49903/8	3/8	1-5/8	2-23/32	0.15

PROTO® 3/8” DRIVE SHORT HEX BIT SOCKETS

IN

- Made using a heat-treated alloy for wear-resistance which helps minimize distortion for a long life.
- Hex opening holds the bit lallowing the bit holder to take the torque load.



Part No.	Size (in)	Bit Length (in)	OAL (in)	Weight (lbs)
J49901/8ST	1/8	3/4	1-13/16	0.10
J49905/32ST	5/32	3/4	1-13/16	0.11
J49903/16ST	3/16	3/4	1-13/16	0.10
J49907/32ST	7/32	3/4	1-13/16	0.10
J49901/4ST	1/4	3/4	1-13/16	0.11
J49905/16ST	5/16	3/4	1-13/16	0.11
J49903/8ST	3/8	3/4	1-13/16	0.12

PROTO® 3/8” DRIVE EXTRA-LONG HEX BIT SOCKETS

IN

Made using a heat-treated alloy for wear-resistance which helps minimize distortion for a long life.



Part No.	Size (in)	Bit Length (in)	OAL (in)	Weight (lbs)
J49901/8XL	1/8	5	6-3/32	0.08
J49905/32XL	5/32	5	6-3/32	0.12
J49903/16XL	3/16	5	6-3/32	0.12
J49907/32XL	7/32	5	6-3/32	0.13
J49901/4XL	1/4	5	6-3/32	0.17
J49905/16XL	5/16	5	6-3/32	0.21
J49903/8XL	3/8	5	6-3/32	0.26

PROTO® 3/8” DRIVE METRIC HEX BIT SOCKETS

MM

- Made using a heat-treated alloy for wear-resistance which helps minimize distortion for a long life.
- Hex opening holds the bit lallowing the bit holder to take the torque load.



Part No.	Size (mm)	Bit Length (in)	OAL (in)	Weight (lbs)
J4990-4M	4	1-5/8	2-23/32	0.12
J4990-5M	5	1-5/8	2-23/32	0.12
J4990-6M	6	1-5/8	2-23/32	0.12
J4990-7M	7	1-5/8	2-23/32	0.12
J4990-8M	8	1-5/8	2-23/32	0.13
J4990-9M	9	1-5/8	2-23/32	0.15
J4990-10M	10	1-5/8	2-23/32	0.16

PROTO® 3/8” DRIVE METRIC SHORT HEX BIT SOCKETS

MM

- Made of alloy steel. Polished chrome finish.
- Made using a heat-treated alloy for wear-resistance which helps minimize distortion for a long life.
- Hex opening holds the bit allowing the bit holder to take the torque load.



Part No.	Size (mm)	Bit Length (in)	OAL (in)	Weight (lbs)
J4990-4MST	4	11/16	1-25/32	0.08
J4990-5MST	5	11/16	1-25/32	0.10
J4990-6MST	6	11/16	1-25/32	0.10
J4990-7MST	7	11/16	1-25/32	0.11
J4990-8MST	8	11/16	1-25/32	0.10
J4990-9MST	9	11/16	1-25/32	0.11
J4990-10MST	10	11/16	1-25/32	0.12

PROTO® 3/8” DRIVE BALL END EXTRA-LONG HEX BIT SOCKETS

IN

- Ball style head to turn a hex fastener at different angles in hard to reach places.
- Made of alloy steel.
- Polished chrome finish socket.



Part No.	Size (in)	Bit Length (in)	OAL (in)	Weight (lbs)
J4904BD	1/8	5	6-3/32	0.19
J4905BD	5/32	5	6-3/32	0.17
J4906BD	3/16	5	6-3/32	0.17
J4907BD	7/32	5	6-3/32	0.16
J4908BD	1/4	5	6-3/32	0.17
J4910BD	5/16	5	6-3/32	0.22
J4912BD	3/8	5	6-3/32	0.28

PROTO® 3/8” DRIVE METRIC EXTRA-LONG HEX BIT SOCKETS

MM

Made using a heat-treated alloy for wear-resistance which helps minimize distortion for a long life.



Part No.	Size (mm)	Bit Length (in)	OAL (in)	Weight (lbs)
J4990-4MXL	4	13/64	6-3/32	0.10
J4990-5MXL	5	13/64	6-3/32	0.17
J4990-6MXL	6	13/64	6-3/32	0.17
J4990-7MXL	7	13/64	6-3/32	0.17
J4990-8MXL	8	13/64	6-3/32	0.21
J4990-10MXL	10	13/64	6-3/32	0.28

PROTO® 3/8” DRIVE TORX® SCREWDRIVER BIT OCKETS



Part No.	Torx® Size	Bit Length (in)	OAL (in)	Weight (lbs)
J5239-10W	T10	5/8	1-23/32	0.10
J5239-15W	T15	5/8	1-23/32	0.10
J5239-20W	T20	5/8	1-23/32	0.10
J5239-25W	T25	5/8	1-23/32	0.10
J5239-27W	T27	5/8	1-23/32	0.10
J5239-30W	T30	7/8	1-23/32	0.12
J5239-40W	T40	7/8	1-23/32	0.11
J5239-45W	T45	7/8	1-23/32	0.12
J5239-50W	T50	7/8	1-23/32	0.12
J5239-55W	T55	7/8	1-23/32	0.13

PROTO® 3/8” DRIVE SLOTTED SCREWDRIVER BIT SOCKETS



Part No.	Tip Size	Tip Width (in)	OAL (in)	Weight (lbs)
J5246	1/4	1/32	1-13/16	0.01
J5240A	5/16	3/64	3	0.13

PROTO® 3/8” DRIVE PHILLIPS® SCREWDRIVER BIT SOCKETS

- Two piece design allows replacement of worn bits.
- Bit holders have a hex opening to hold the bit allowing the bit holder to take the full load of torque.



Part No.	Tip Size	Bit Length (in)	OAL (in)	Weight (lbs)
J5241	#2	-	1-31/32	0.11
J5242	#3	-	1-31/32	0.12
J5243	#4	-	1-31/32	0.12

PROTO® 3/8” DRIVE DRAG LINK SOCKET

IN

- Made of heat-treated alloy steel.
- Ball detent.



Part No.	Size (in)	Tip Width (in)	OAL (in)	Weight (lbs)
J5244	11/16	1/8	1-1/8	0.06

WIHA 1/4” BIT SOCKET WITH RETAINING RING

- Female square drive to female hex
- DIN 3126, ISO 1173, style D 6.3



Part No.	Drive	Hex	Weight (g)
720138	1/4	3/8	30

PROTO® POWER BIT HOLDER

- Not for use on impact applications.



Part No.	Drive	Hex	OAL (in)	Weight (lbs)
J6931	3/8	1/4	1-3/4	0.07
J6930	3/8	5/16	1-5/16	0.07

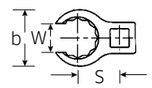
Torx® is a trademark of Acument Intellectual Properties, LLC
Phillips® is a trademark of Phillips Screw Company

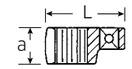
Stahlwille 3/8” Crowfoot Wrenches

STAHLWILLE 3/8” DRIVE CROWRING SPANNERS 440

MM

- Chrome Alloy Steel, chrome plated





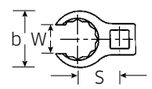


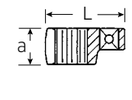
Part No.	Size (mm)	OAL (mm) (L)	Outside Dia. (mm) (b)	Inside Dia. (mm) (W)	Weight (g)
02190015	15	36.5	24.6	11.9	34
02190016	16	36.1	24.6	13	27
02190017	17	39.2	27.3	14	40
02190018	18	40.8	29	14.8	45
02190019	19	40.5	29	15.8	40
02190020	20	42.9	31.3	15.8	54
02190021	21	42.8	31.3	16.2	45
02190022	22	45.3	33.5	17	57
02190023	23	47.5	35.7	17.5	71
02190024	24	47.3	35.7	18	57
02190025	25	49.3	37.7	19	80
02190026	26	49.3	37.7	19	63
02190027	27	52.8	40	20	100

STAHLWILLE 3/8” DRIVE CROWRING SPANNERS 440A

IN

- Chrome Alloy Steel, chrome plated



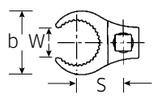


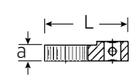


Part No.	Size (in)	OAL (mm) (L)	Outside Dia. (mm) (b)	Inside Dia. (mm) (W)	Weight (g)
02490036	5/8	36.5	24.6	11.9	33
02490038	11/16	39.2	27.3	14	36
02490040	3/4	40.9	29	14.2	44
02490042	13/16	42.9	31.3	15.8	51
02490044	7/8	45.2	33.5	17.5	62
02490046	15/16	47.2	35.7	18.3	63
02490048	1	49.3	37.7	19	71
02490050	1 1/16	52.8	40	20	84

STAHLWILLE 3/8” DRIVE CROWRING SPANNERS 440S MJ

- HPQ® high performance steel, chrome plated
- Supersedes No 440 MJ
- EN 4108
- For pipe unions with straight cylindrical involute toothing







Part No.	Size		OAL (mm) (L)	Outside Dia. (mm) (b)	Inside Dia. (mm) (W)	Weight (g)
02211016	MJ16	DN08	43.8	31	10.5	46
02211018	MJ18	DN10	45.2	33	13	47
02211020	MJ20	DN12	46.2	35	15	49
02211022	MJ22	DN14	48.4	37	17.5	54
02211024	MJ24	DN16	49.5	39	19.7	56
02211027	MJ27	DN18	54.4	44	21.5	70
02211030	MJ30	DN20	60.8	50	23.7	93

STAHLWILLE 3/8” DRIVE CROWFOOT SPANNERS
540

- Chrome Alloy Steel, chrome plated





MM

Part No.	Size (mm)	OAL (in) (L)	Outside Dia. (mm) (b)	Thickness (mm) (a)	Nut Depth (mm) (S)	Weight (g)
02200011	11	32	22.2	6.3	17.4	36
02200012	12	34.3	25.4	6.3	18.2	37
02200013	13	34.3	25.4	6.3	17.8	36
02200014	14	37.7	30	6.3	20.8	46
02200015	15	37.7	30	6.3	20.4	45
02200016	16	37.7	30	6.3	19.9	45
02200017	17	42.5	38	6.3	23.8	62
02200018	18	42.5	38	6.3	22.9	61
02200019	19	42.5	38	6.3	22.4	64
02200020	20	42.4	38	6.3	25	55
02200021	21	44.5	41	6.3	23.6	59
02200022	22	44.5	41	6.3	24.2	64
02200023	23	44.5	41	6.3	25.8	64
02200024	24	44.4	41	6.3	26.3	60
02200025	25	47	45	8	26.4	75
02200026	26	47	45	8	27.6	80
02200027	27	47	45	8	27.6	76
02200028	28	50	50	8	29.2	78
02200030	30	50	50	8	29.3	84
02200032	32	53	57	8	30.5	95
02200034	34	54.5	60	8	31.6	107
02200036	36	56.5	62	8	32.8	100
02200040	40	63	70	8	37.6	130
02200041	41	63	70	8	37.2	130
02200042	42	63	70	8	37.7	125
02200046	46	72	82	8	43.1	191
02200050	50	75	88	8	45.4	217

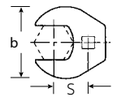
STAHLWILLE 3/8” DRIVE CROWFOOT SPANNERS
540A

IN

Part No.	Size (in)	OAL (in) (L)	Outside Dia. (mm) (b)	Thickness (mm) (a)	Nut Depth (mm) (S)	Weight (g)
02500028	7/16	32	22.2	6.3	17.2	34
02500032	1/2	34.3	25.4	6.3	18.1	37
02500034	9/16	37.7	30	6.3	20.9	40
02500036	5/8	37.7	30	6.3	20.4	44
02500038	11/16	42.5	38	6.3	24.1	62
02500040	3/4	42.5	38	6.3	24	66
02500042	13/16	42.3	38	6.3	24	59
02500044	7/8	44.5	41	6.3	25.8	65
02500048	1	47	45	8	26.7	78
02500050	1 1/16	47	45	8	27.2	78
02500052	1 1/8	50	50	8	28.5	84
02500054	1 3/16	50	50	8	29.2	83
02500056	1 1/4	53	57	8	30.3	101
02500058	1 5/16	53	57	8	31.2	101
02500060	1 3/8	54.5	60	8	32.3	105
02500062	1 7/16	56.5	62	8	33.1	107
02500064	1 1/2	58	65	8	34.5	118
02500065	1 9/16	59.5	68	8	35.7	126
02500066	1 5/8	63	70	8	37.3	140
02500067	1 11/16	63	70	8	37.7	126
02500068	1 3/4	68	76	8	40.4	161
02500070	1 7/8	72	82	8	42	205
02500072	2	75	88	8	44.8	214
02500074	2 1/8	75.6	91	10	46	265
02500076	2 1/4	80.5	96	10	49.5	297

STAHLWILLE 3/8” DRIVE CROWFOOT SPANNERS – HEAVY-DUTY
540A HD

- for particularly high loadings, e.g. stainless steel screw fittings
- full use of jaws in conjunction with standard ratchets
- chrome plated
- supplied without ratchet
- Caution! Modified settings on torque wrench (refer to note on page 201)





IN

Part No.	Size (in)	OAL (in) (L)	Outside Dia. (mm) (b)	Thickness (mm) (a)	Nut Depth (mm) (S)	Weight (g)
02501024	3/8	39	26	11	24	56
02501028	7/16	40	26	11	25	56
02501032	1/2	42	30	11	25.8	64
02501034	9/16	43.4	32	11	26.8	52
02501036	5/8	45	34.8	11	27.7	58
02501038	11/16	47.2	38	11	28.6	69
02501040	3/4	49	41	11	29.6	94
02501042	13/16	51	46.4	11	30.5	113
02501044	7/8	52	48	11	31.3	99
02501046	15/16	54	51.2	11	32.3	129
02501048	1	56	53.4	11	33.2	133
02501050	1 1/16	57	53.8	11	34.1	124
02501052	1 1/8	59	53.8	11	35	128
02501054	1 3/16	60	56	11	35.9	144
02501058	1 5/16	63	56	11	27.9	156
02501056	1 1/4	62	60	11	36.8	153
02501060	1 3/8	65	62	11	38.7	178
02501062	1 7/16	66.5	66	11	39.6	172

Bahco 3/8” Adjustable Crowfoot

BAHCO 3/8” SQUARE DRIVE CROWFOOT ADJUSTABLE WRENCH

- Adjustable opening up to 29 mm and 1-1/8”
- Chrome plated bright finishing provides high quality surface
- High performance alloy steel
- Laser branded scale in metric and imperial
- Standards: ISO 1174 and DIN 3120



Part No.	Adjustable Size	Drive size	Body Thickness	Body Width
1950MZ	0 to29mm / 0 to 1-1/8”	3/8”	14.5mm / 9/16”	65mm / 2-9/16

PROTO® 3/8” Crowfoot Wrenches

PROTO® 3/8” DRIVE FLARE NUT CROWFOOT WRENCHES – 12 POINT

ASME B107.21

IN



- Designed for speed and safety.
- Special heat-treated alloy steel helps increase strength and durability.
- 12 point box end allows for fine indexing, helping to improve speed and access.
- Fits 4, 6 and 12 point fasteners.
- Full Polish finish provides corrosion resistance and easy to clean surfaces.
- Locking hole helps hold crowfoot in place during use.
- Use with a locking extension to help prevent tool loss in awkward locations.

Part No.	Size (in)	Weight (lbs)
J4920FL	5/8	0.09
J4922FL	11/16	0.10
J4924FL	3/4	0.12
J4926FL	13/16	0.12
J4928FL	7/8	0.16
J4930FL	15/16	0.17
J4932FL	1	0.18
J4934FL	1-1/16	0.20

PROTO® 3/8” DRIVE CROWFOOT WRENCHES

ASME B107.21

IN



- Crowfoot wrenches are used in hard to reach, restricted access situations where a standard wrench or ratchet cannot reach.
- Anti-Slip Design Open End (ASD).
- The arched surfaces are designed to spread the contact forces over a greater area and they keep the loads off the corners of the fastener which helps prevent fastener rounding.
- Broad size range ensures the right tool for the application will be available.
- Typically used in lower torque applications.
- Full Polish finish provides corrosion resistance and easy to clean surfaces.
- Locking hole on 3/8” drive crowfoot wrenches available on fractional openings 1” and larger.

Part No.	Size (in)	OAL (in)	Weight (lbs)
J4912CF	3/8	1-13/64	0.06
J4914CF	7/16	1-3/16	0.06
J4916CF	1/2	1-5/16	0.07
J4918CF	9/16	1-9/32	0.07
J4920CF	5/8	1-1/2	0.09
J4922CF	11/16	1-31/64	0.09
J4924CF	3/4	1-41/64	0.11
J4926CF	13/16	1-5/8	0.11
J4928CF	7/8	1-19/32	0.12
J4930CF	15/16	1-5/8	0.13
J4932CF	1	1-49/64	0.13
J4934CF	1-1/16	2-3/16	0.24
J4936CF	1-1/8	2-7/32	0.24
J4938CF	1-3/16	2-9/32	0.24
J4940CF	1-1/4	2-5/32	0.21
J4942CF	1-5/16	2-1/2	0.25
J4944CF	1-3/8	2-1/2	0.29
J4946CF	1-7/16	2-5/8	0.29
J4948CF	1-1/2	2-11/16	0.33
J4950CF	1-9/16	2-3/4	0.34
J4952CF	1-5/8	2-13/16	0.38
J4954CF	1-11/16	2-15/16	0.36

Part No.	Size (in)	OAL (in)	Weight (lbs)
J4956CF	1-3/4	2-15/16	0.39
J4958CF	1-13/16	3-1/16	0.40
J4960CF	1-7/8	3-1/8	0.45
J4962CF	1-15/16	3-1/4	0.49
J4964CF	2	3-3/8	0.73
J4966CF	2-1/16	3-7/16	0.71
J4968CF	2-1/8	3-7/16	0.74
J4970CF	2-3/16	3-5/8	0.78
J4972CF	2-1/4	3-11/16	0.89
J4974CF	2-5/16	3-3/4	0.90
J4976CF	2-3/8	3-15/16	1.01
J4978CF	2-7/16	4-1/4	1.03
J4980CF	2-1/2	4-1/4	1.10
J4982CF	2-9/16	4-5/16	1.11
J4984CF	2-5/8	4-1/2	1.27
J4986CF	2-11/16	4-9/16	1.34
J4988CF	2-3/4	4-11/16	1.37
J4990CF	2-13/16	4-13/16	1.38
J4992CF	2-7/8	4-15/16	1.52
J4994CF	2-15/16	4-15/16	1.58
J4996CF	3	5	1.55

PROTO® 3/8” DRIVE METRIC CROWFOOT WRENCHES

ASME B107.21

MM



- Crowfoot wrenches are used in hard to reach, restricted access situations where a standard wrench or ratchet cannot reach.
- Anti-Slip Design Open End (ASD).
- The arched surfaces are designed to spread the contact forces over a greater area and they keep the loads off the corners of the fastener which helps prevent fastener rounding.
- Broad size range ensures the right tool for the application will be available.
- Typically used in lower torque applications.
- Full Polish finish provides corrosion resistance and easy to clean surfaces.
- Locking hole feature helps keep the crowfoot wrench engaged on the extension during use reducing downtime due to detachment of crowfoot in awkward spaces.
- Use with locking extensions to reach into spaces too small for a mechanic’s arm or where the fastener is out of site.
- Locking hole on 3/8” drive crowfoot wrenches available on fractional openings 1” and larger.

Part No.	Size (mm)	OAL (in)	Weight (lbs)
J4909MCF	9	1-5/6	0.05
J4910MCF	10	1-11/32	0.05
J4911MCF	11	1-3/8	0.07
J4912MCF	12	1-15/32	0.07
J4913MCF	13	1-1/2	0.06
J4914MCF	14	1-1/2	0.07
J4915MCF	15	1-5/8	0.10
J4916MCF	16	1-21/32	0.09

Part No.	Size (mm)	OAL (in)	Weight (lbs)
J4917MCF	17	1-23/32	0.10
J4918MCF	18	1-15/16	0.13
J4919MCF	19	1-15/16	0.13
J4920MCF	20	2-1/16	0.13
J4921MCF	21	2-3/32	0.14
J4922MCF	22	2-7/32	0.15
J4923MCF	23	2-11/32	0.19
J4924MCF	24	2-13/32	0.19

PROTO® 3/8” DRIVE FLARE NUT CROWFOOT WRENCHES – 6 POINT

IN



- Flare Nut Crowfoot wrenches are used in hard to reach or restricted access situations where a standard flare nut wrench cannot reach.
- The flare nut slot opening is used to slide over hydraulic lines or other hoses which allows for easy access to hex connectors at ends.
- Typically used in low torque applications.
- Full polish finish provides corrosion resistance and easy to clean surfaces.
- Locking hole feature helps keep the crowfoot engaged on the extension during use, helping to reduce downtime and improve working efficiency.
- Use with locking extensions to reach into small spaces where the fastener is out of sight.

Part No.	Size (in)	OAL (in)	Weight (lbs)
J4912HFL	3/8	1-13/16	0.07
J4914HFL	7/16	1-1/2	0.08
J4916HFL	1/2	1-5/8	0.10
J4918HFL	9/16	1-5/8	0.11

Part No.	Size (in)	OAL (in)	Weight (lbs)
J4920HFL	5/8	1-3/4	0.13
J4922HFL	11/16	1-13/16	0.13
J4924HFL	3/4	1-15/16	0.16
J4926HFL	13/16	2	0.18

PROTO® 3/8” DRIVE METRIC FLARE NUT CROWFOOT WRENCHES – 6 POINT

MM



- Flare Nut Crowfoot wrenches are used in hard to reach or restricted access situations where a standard flare nut wrench cannot reach.
- The flare nut slot opening is used to slide over hydraulic lines or other hoses which allows for easy access to hex connectors at ends.
- Typically used in low torque applications.
- Full polish finish provides corrosion resistance and easy to clean surfaces.
- Locking hole feature helps keep the crowfoot engaged on the extension during use, helping to reduce downtime and improve working efficiency.
- Use with locking extensions to reach into small spaces where the fastener is out of sight.

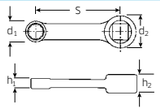
Part No.	Size (mm)	OAL (in)	Weight (lbs)
J4909MHFL	9	1-5/16	0.07
J4910MHFL	10	1-3/8	0.07
J4911MHFL	11	1-1/2	0.08
J4912MHFL	12	1-1/2	0.08
J4913MHFL	13	1-9/16	0.09

Part No.	Size (mm)	OAL (in)	Weight (lbs)
J4914MHFL	14	1-5/8	0.11
J4915MHFL	15	1-11/16	0.11
J4916MHFL	16	1-3/4	0.12
J4917MHFL	17	1-3/4	0.13
J4918MHFL	18	1-13/16	0.14

3/8” Drive Torque Adapters

STAHLWILLE 3/8” DRIVE ADAPTORS 447

- HPQ® high performance steel, gunmetal finish



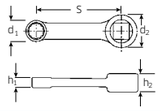


MM

Part No.	Size (mm)	Dia xx End (mm) (d1)	Dia yy End (mm) (d2)	Height xx End (mm) (h1)	Height yy End (mm) (h2)	Length (mm) (S)	Weight (g)
02181007	7	11.5	19	6	11	50.8	30
02181008	8	12.4	19	6	11	50.8	30
02181009	9	14	19	8	11	50.8	40
02181010	10	15.6	19	8	11	50.8	40
02181013	13	19.3	19	9.2	11	50.8	55

STAHLWILLE 3/8” DRIVE ADAPTORS 447A

- HPQ® high performance steel, gunmetal finish





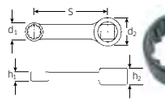
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IN

Part No.	Size (in)	Dia xx End (mm) (d1)	Dia yy End (mm) (d2)	Height xx End (mm) (h1)	Height yy End (mm) (h2)	Length (mm) (S)	Weight (g)
02470016	1/4	10.4	19	6	11	50.8	27
02470020	5/16	12.4	19	6	11	50.8	29
02470024	3/8	14.9	19	8	11	50.8	41
02470028	7/16	17	19	8	11	50.8	40
02470032	1/2	19	19	9.2	11	50.8	56

STAHLWILLE 3/8” DRIVE ADAPTORS – SPLINE 447ASP

- MS-33787, MIL-W-8982
- HPQ® high performance steel, gunmetal finish





Part No.	Size (in)		Dia xx End (mm) (d1)	Dia yy End (mm) (d2)	Height xx End (mm) (h1)	Height yy End (mm) (h2)	Length (mm) (S)	Weight (g)
02480014	7	7/32	9.4	19	6	11	50.8	28
02480016	8	1/4	10.4	19	6	11	50.8	27
02480018	9	9/32	11.5	19	6	11	50.8	29
02480020	10	5/16	12.4	19	6	11	50.8	29
02480024	12	3/8	14.9	19	8	11	50.8	38
02480028	14	7/16	17	19	9.2	11	50.8	39
02480032	16	1/2	19	19	9.2	11	50.8	59
02480034	18	9/16	21	19	9.2	11	50.8	55
02480036	20	5/8	23	19	12	11	50.8	74

PROTO® 3/8” DRIVE TORQUE ADAPTERS – 12 POINT

AS954E S3.8.1

IN

- Designed for easy torque calibrations.
- Adapters measure 2” from the centre of the square drive to the centre of the adapter opening.
- Special heat-treated alloy steel helps to increase strength and durability.
- Box end wall thickness provides strength yet allowing ample room for easy access
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.



Part No.	Size (in)	Drive Size (in)	Head Width (in) (B)	Head Depth (in) (C)	OAL (in) (L)	Weight (lbs)
J5112	3/8	3/8	9/16	17/64	2-11/16	0.08
J5114	7/16	3/8	21/32	19/64	2-47/64	0.10
J5116	1/2	3/8	47/64	21/64	2-25/32	0.10
J5118	9/16	3/8	13/16	23/64	2-13/16	0.12
J5120	5/8	3/8	29/32	25/64	2-55/64	0.12
J5122	11/16	3/8	1	27/64	2-29/32	0.12
J5124	3/4	3/8	1-5/64	29/64	2-61/64	0.12
J5126	13/16	3/8	1-11/64	31/64	2-63/64	0.14
J5128	7/8	3/8	1-17/64	33/64	3-1/32	0.16

Stahlwille 3/8” Drive Sets

STAHLWILLE 3/8” DRIVE TORX® SOCKET SET IN CARTON 45TX/7



Part No.	Contents	Weight (g)
96022702	E5; E6; E7; E8; E10; E12; E14	219

STAHLWILLE 3/8” DRIVE TORX® SCREWDRIVER SOCKET SET IN CARTON 49TX/8



Part No.	Contents	Weight (g)
96021001	T9; T10; T15; T20; T25; T27; T30; T40	456

STAHLWILLE 3/8” DRIVE 6 PIECE REVERSIBLE RATCHET SET – QUICKRELEASE 435QR N/6

- in sturdy, stackable ABS plastic case

Contents:

- 1 ratchet No 435QR N
- 3 extensions No 427QR/3 (76mm), No 427QR/6 (160mm), No 427QR/10 (240mm)
- 1 universal joint No 428QR
- 1 T-handle No 425QR



Part No.	Description	Weight (g)
96024010	6 Piece Reversible Ratchet Set	1375

STAHLWILLE 3/8” DRIVE 5 PIECE ADAPTOR SET 5513

Contents:

- No 409, 1/4” socket x 3/8” plug
- No 431, 3/8” socket x 1/4” plug
- No 432, 3/8” socket x 1/2” plug
- No 513, 1/2” socket x 3/8” plug
- No 514, 1/2” socket x 3/4” plug



Part No.	Description	Weight (g)
96121003	5 Piece Adaptor Set	648

STAHLWILLE 3 PIECE EXTENDING ADAPTOR SET 409M/432M/514M/3

Contents:

- 1/4” socket x 3/8” plug
- 3/8” socket x 1/2” plug
- 1/2” socket x 3/4” plug



Part No.	Description	Weight (g)
96121002	3 Piece Extending Adaptor Set	120

STAHLWILLE 3/8” DRIVE 15 PIECE SOCKET SET – 12 POINT 45/11/4

MM

- in sturdy, stackable ABS plastic case

Contents:

- 11 sockets 12 point No 45: 8; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19mm
- 1 ratchet No 435
- 2 extensions No 427/3 (76mm), No 427/10 (240mm)
- 1 universal joint No 428



Part No.	Description	Weight (g)
96021109	15 Piece Socket Set Metric	1444

STAHLWILLE 3/8” DRIVE 15 PIECE SOCKET SET – 6 POINT 456/11/4

MM

- in sturdy, stackable ABS plastic case

Contents:

- 11 sockets 6 point No 456: 8; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19mm
- 1 ratchet No 435
- 2 extensions No 427/3 (76 mm), No 427/10 (240mm)
- 1 universal joint No 428



Part No.	Description	Weight (g)
96022133	5 Piece Socket Set Metric	1458

STAHLWILLE 3/8” DRIVE 19 PIECE SOCKET SET – 12 POINT 45/14/5I

MM

in sturdy, stackable ABS plastic case

Contents:

- 14 sockets 12 point No 45: 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22mm
- 1 ratchet No 435
- 2 extensions No 427/3 (76 mm), No 427/10 (240mm)
- 1 T-handle No 425
- 1 universal joint No 428



Part No.	Description	Weight (g)
96024132	19 Piece Socket Set Metric	1678

STAHLWILLE 3/8” DRIVE 19 PIECE SOCKET SET – 6 POINT 456/14/5I

MM

- in sturdy, stackable ABS plastic case

Contents:

- 14 sockets 6 point No 456: 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22mm
- 1 ratchet No 435
- 2 extensions No 427/3 (76 mm), No 427/10 (240mm)
- 1 T-handle No 425
- 1 universal joint No 428



Part No.	Description	Weight (g)
96023132	19 Piece Socket Set 6 Point Metric	1758

STAHLWILLE 3/8” DRIVE 18 PIECE SOCKET SET – 12 POINT 45/13/5

MM

- in sturdy, stackable ABS plastic case

Contents:

- 12 sockets 12 point No 45: 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19mm
- 1 socket 12 point, long, with rubber insert No 4600: 16mm - 5/8”
- 1 ratchet No 435
- 2 extensions No 427/3 (76mm), No 427/10 (240mm)
- 1 T-handle No 425
- 1 universal joint No 428



Part No.	Description	Weight (g)
96021234	18 Piece Socket Set 12 Point Metric	1678

STAHLWILLE 3/8” DRIVE 24 PIECE SOCKET SET – 12 POINT 45/49/19/5

MM

- in sturdy, stackable ABS plastic case

Contents:

- 11 sockets 12 point No 45: 8; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19mm
- 1 socket 12 point, long, with rubber insert No 4600: 16mm - 5/8”
- 7 INHEX sockets No 49: 3; 4; 5; 6; 7; 8; 10mm
- 1 ratchet No 435
- 2 extensions No 427/3 (76mm), No 427/10 (240mm)
- 1 T-handle No 425
- 1 universal joint No 428



Part No.	Description	Weight (g)
96021223	24 Piece Socket Set 12 Point Hex Metric	2428

STAHLWILLE 3/8” DRIVE 19 PIECE SOCKET SET – 12 POINT QR 45/14/5IQR

MM

- in sturdy, stackable ABS plastic case

Contents:

- 14 sockets 12 point No 45: 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22mm
- 1 ratchet No 435QR N
- 2 extensions No 427QR/3 (76mm), No 427QR/10 (240mm)
- 1 T-handle No 425QR
- 1 universal joint No 428QR



Part No.	Description	Weight (g)
96021180	19 Piece Socket Set 12 Point QR Metric	1738

STAHLWILLE 3/8” DRIVE 33 PIECE SOCKET SET – 12 POINT 45MA/28/5

- in sturdy, stackable ABS plastic case

Contents:

- 28 sockets 12 point:
  - No 45: 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22mm
  - No 45a: 1/4; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4; 13/16; 7/8”
- 1 ratchet No 435
- 2 extensions No 427/3 (76mm), No 427/10 (240mm)
- 1 T-handle No 425
- 1 universal joint No 428



Part No.	Description	Weight (g)
96021122	33 Piece Socket Set 12 Point Met Imp	2660

STAHLWILLE 3/8” DRIVE 44 PIECE SOCKET SET – 12 POINT 89

MM

- in sturdy, stackable ABS plastic case

Contents:

- 15 sockets 12 Point No 45: 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22mm
- 2 sockets 12 Point, long, with rubber insert No 4600: 16mm - 5/8”, No 46: 20.8mm - 13/16”
- 7 INHEX sockets No 49: 3; 4; 5; 6; 7; 8; 10mm
- 15 combination spanners No 13: 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22mm
- 1 ratchet No 435
- 2 extensions No 427/3 (76mm), No 427/10 (240mm)
- 1 T-handle No 425
- 1 universal joint No 428



Part No.	Description	Weight (g)
96023128	44 Piece Socket Set 12 Point Hex Metric	4712

STAHLWILLE 48 PIECE SOCKET SET 1/4” & 3/8” DRIVE 40/45/36/12

MM

- in sturdy, stackable ABS plastic case

Contents:

- 12 sockets 12 point No 45: 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22mm
- 8 sockets 6 point No 40: 4; 4.5; 5; 5.5; 6; 7; 8; 9mm
- 1 socket 12 point, long, with rubber insert No 4600: 16mm - 5/8”
- 3 bits Phillips 1221: PH1; 1222: PH2; 1223: PH3
- 1 bit Pozidriv PZ1222: PZ2
- 6 bits Flat 1160: 0.5 x 3mm; 1162: 0.6 x 3.5mm; 1164: 0.8 x 4mm; 1166: 1.0 x 5.5mm; 1166/1: 1.2 x 6.5mm; 1168: 1.6 x 8mm
- 5 bits Hex 1300: 3mm; 1301: 4mm; 1302: 5mm; 1303: 6mm; 1304: 8mm
- 2 ratchets No 415, No 435
- 3 extensions No 427/3 (76mm), No 405/6 (150mm), No 427/10 (240mm)
- 2 universal joints No 407, No 428
- 1 drive handle No 400
- 1 T-handle No 425
- 2 bit-holder No 412, No 442
- 1 reducing adaptor No 431



Part No.	Description	Weight (g)
96012047	48 Piece Socket Set 1/4 & 3/8 Hex Metric	2712

STAHLWILLE 3/8” DRIVE 50 PIECE SOCKET SET – 12 POINT 45/41/9

MM

- in sturdy sheet steel case

Contents:

- 11 sockets 12 point No 45: 8; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19mm
- 9 sockets 12 point, long, No 46: 10; 11; 12; 13; 14; 15; 17; 18; 19mm
- 2 sockets 12 point, long, with rubber insert No 4600: size 16mm - 5/8”; No 46: size 20.8mm - 13/16”
- 10 UNIFLEX sockets 12 point No 47: sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19mm
- 5 INHEX sockets No 49: size 4; 5; 6; 8; 10mm
- 4 bits Phillips 1231: PH1; 1232: PH2; 1233: PH3; 1234: PH4
- 1 ratchet No 435
- 2 extensions No 427/3 (76mm), No 427/10 (240mm)
- 1 flexible handle No 424
- 1 T-handle No 425
- 1 universal joint No 428
- 1 flexible extension No 434
- 1 bit-holder No 443



Part No.	Description	Weight (g)
96020108	50 Piece Socket Set 12 Point Hex Metric	6521

STAHLWILLE 3/8” DRIVE 20 PIECE SOCKET SET – TORX® 45TX/49TX15/5

- in sturdy, stackable ABS plastic case

Contents:

- 7 sockets for external TORX® screws No 45TX: sizes E5; E6; E7; E8; E10; E12; E14
- 8 screwdriver sockets for internal TORX® screws No 49TX: sizes T9; T10; T15; T20; T25; T27; T30; T40
- 1 ratchet No 435
- 2 extensions No 427/5 (125 mm), No 427/10 (240 mm)
- 1 universal joint No 428
- 1 T-handle No 425



Part No.	Description	Weight (g)
96023703	20 Piece Socket Set TORX®	2222

STAHLWILLE 3/8” DRIVE 17 PIECE SOCKET SET – 12 POINT 45A12/5

IN

- in sturdy, stackable ABS plastic case

Contents:

- 11 sockets 12 point No 45a: 1/4; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4; 13/16”
- 1 socket 12 point, long, with rubber insert No 4600: size 16mm - 5/8”
- 1 ratchet No 435
- 2 extensions No 427/3 (76mm), No 427/10 (240mm)
- 1 T-handle No 425
- 1 universal joint No 428



Part No.	Description	Weight (g)
96025204	17 Piece Socket Set 12 Point Imperial	1652

STAHLWILLE 3/8” DRIVE 22 PIECE SOCKET SET 12 POINT QUICKRELEASE 45A/14/8QR

IN

- in sturdy, stackable ABS plastic case

Contents:

- 14 sockets 12 point No 45a: 1/4; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4; 13/16; 7/8; 15/16; 1”
- 1 ratchet No 435SG-QR
- 3 extensions No 427/3QR (76mm), No 427/6QR (160mm), No 427/10QR (240mm)
- 1 universal joint No 428QR
- 2 bit-holders No 442, No 443



Part No.	Description	Weight (g)
96025206	22 Piece Socket Set 12 Point QR Imperial	3272

STAHLWILLE 3/8” DRIVE 30 PIECE SOCKET SET 12 POINT QUICKRELEASE 45A/22/8QR

IN

- in sturdy, stackable ABS plastic case

Contents:

- 14 sockets 12 point No 45a: 1/4; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4; 13/16; 7/8; 15/16; 1”
- 8 UNIFLEX sockets 12 point No 47a: 5/16; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4”
- 1 ratchet No 435SG-QR
- 3 extensions No 427/3QR (76mm), No 427/6QR (160mm), No 427/10QR (240mm)
- 1 universal joint No 428QR
- 2 bit-holders No 442, No 443
- 1 speeder brace No 453



Part No.	Description	Weight (g)
96025207	30 Piece Socket Set 12 Point QR Imperial	3685

STAHLWILLE 3/8” DRIVE 46 PIECE SOCKET SET 12 POINT 45A/33/13

IN

- in sturdy sheet steel case

Contents:

- 10 sockets 12 point No 45a: 1/4; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4”
- 2 sockets 12 point, long, with rubber insert No 4600: 16mm - 5/8”, No 46: 20.8mm - 13/16”
- 7 sockets 12 point, long No 46a: 3/8; 7/16; 1/2; 9/16; 11/16; 3/4; 7/8”
- 7 UNIFLEX sockets 12 point No 47a: 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4”
- 3 INHEX sockets No 49a: 1/8; 5/32; 3/16”
- 4 bits Phillips 1231: PH1; 1232: PH2; 1233: PH3; 1234: PH4
- 2 ratchets No 415, No 435
- 1 ratchet adaptor No 445
- 3 extensions No 427/3 (76mm), No 427/6 (160mm), No 427/10 (240mm)
- 1 flexible extension No 434 (194mm)
- 1 extending adaptor No 409
- 1 speeder brace No 421
- 1 flexible handle No 424
- 1 T-handle No 425
- 1 universal joint No 428
- 1 bit-holder No 443



Part No.	Description	Weight (g)
96024113	46 Piece Socket Set 12 Point Hex Imperial	6540

PROTO® 3/8” Drive Sets

PROTO® 3/8” DRIVE 10 PIECE SOCKET SET – 12 POINT

ASME B107.1
AS954E S3.8.1

IN

Contents:

- Accessories: 9 Inch Socket Bar with 10 Socket Clips.
- Sockets: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 inch



Part No.	Description	Weight (lbs)
J47107	10 Piece Socket Set 12 Point Imperial	1.30

PROTO® 3/8” DRIVE 13 PIECE SOCKET SET – 6 POINT

ASME B107.1

IN

Contents:

- Accessories: 13 Inch Socket Bar with 13 Socket Clips.
- Sockets: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 inch



Part No.	Description	Weight (lbs)
J52126	13 Piece Socket Set 6 Point Imperial	2.10

PROTO® 3/8” DRIVE 10 PIECE SUPER SHORT SOCKET SET – 6 POINT

IN

Contents:

- Accessories: 9 Inch Socket Bar with 10 Socket Clips.
- Sockets: 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 inch



Part No.	Description	Weight (lbs)
J52123	10 Piece Super Short Socket Set Imperial	0.82

PROTO® 3/8” DRIVE 13 PIECE SOCKET SET – 12 POINT

ASME B107.1
AS954E S3.8.1

IN

Contents:

- Accessories: 13 Inch Socket Bar with 13 Socket Clips.
- Sockets: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 inch



Part No.	Description	Weight (lbs)
J52124	13 Piece Socket Set 12 Point Imperial	1.96

PROTO® 3/8” DRIVE 10 PIECE SOCKET SET – 6 POINT

ASME B107.1

IN

Contents:

- Accessories: 9 Inch Socket Bar with 10 Socket Clips.
- Sockets: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 inch



Part No.	Description	Weight (lbs)
J52122	10 Piece Socket Set Imperial	1.34

PROTO® 3/8” DRIVE 21 PIECE SOCKET SET – 12 POINT

MM

Contents:

- Accessories: 9 and 11 Inch Socket Bars, and 21 Socket Clips.
- Sockets: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 mm



Part No.	Description	Weight (lbs)
J52215	21 Piece Socket Set Metric	2.98

PROTO® 3/8” DRIVE 12 PIECE SOCKET SET – 6 POINT

MM

Contents:

- Accessories: 13 Inch Socket Bar with 12 Socket Clips.
- Sockets: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
J52212	2 Piece Socket Set Metric	2.98

PROTO® 3/8” DRIVE 12 PIECE SOCKET SET – 12 POINT

ASME B107.5M
AS954E S3.8.1

MM

Contents:

- Accessories: 13 Inch Socket Bar with 12 Socket Clips.
- Sockets: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
J52216	12 Piece Socket Set Metric	1.32

PROTO® 3/8” DRIVE 21 PIECE SOCKET SET – 6 POINT

ASME B107.5M

MM

Contents:

- Accessories: 9 and 11 Inch Socket Bars with 21 Socket Clips.
- Sockets: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 mm



Part No.	Description	Weight (lbs)
J52211	21 Piece Socket Set Metric	3.36

PROTO® 3/8” DRIVE 13 PIECE DEEP SOCKET SET – 6 POINT

ASME B107.1

IN

Contents:

- Accessories: 13 Inch Socket Bar with 13 Socket Clips.
- 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 inch



Part No.	Description	Weight (lbs)
J52114	13 Piece Deep Socket Set Imperial	3.73

PROTO® 3/8” DRIVE 10 PIECE DEEP SOCKET SET – 6 POINT

ASME B107.1

IN

Contents:

- Accessories: 9 Inch Socket Bar with 10 Socket Clips.
- Sockets: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 inch



Part No.	Description	Weight (lbs)
J52111	10 Piece Deep Socket Set Imperial	2.51

PROTO® 3/8” DRIVE 18 PIECE DEEP SOCKET SET – 6 POINT

ASME B107.5M

MM

Contents:

- Accessories: 17 Inch Socket Bar with 18 Socket Clips.
- Sockets: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 mm



Part No.	Description	Weight (lbs)
J52211	18 Piece Deep Socket Set Metric	4.78

PROTO® 3/8” DRIVE 13 PIECE DEEP SOCKET SET – 12 POINT

ASME B107.1
AS954E S3.8.1

IN

Contents:

- Accessories: 13 Inch Socket Bar with 13 Socket Clips.
- Sockets: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 inch
-



Part No.	Description	Weight (lbs)
J52112	13 Piece Deep Socket Set Imperial	3.64

PROTO® 3/8” DRIVE 10 PIECE DEEP SOCKET SET – 12 POINT

ASME B107.1
AS954E S3.8.1

IN

Contents:

- Accessories: 9 Inch Socket Bar with 10 Socket Clips.
- Sockets: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 inch



Part No.	Description	Weight (lbs)
J52107	10 Piece Deep Socket Set Imperial	2.43

PROTO® 3/8” DRIVE 18 PIECE DEEP SOCKET SET – 12 POINT

ASME B107.5M
AS954E S3.8.1

MM

Contents:

- Accessories: 17 Inch Socket Bar with 18 Socket Clips.
- Sockets: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 mm



Part No.	Description	Weight (lbs)
J52207	18 Piece Deep Socket Set Metric	4.55

PROTO® 3/8” DRIVE 12 PIECE DEEP SOCKET SET – 12 POINT

ASME B107.5M
AS954E S3.8.1

MM

Contents:

- Accessories: 13 Inch Socket Bar with 12 Socket Clips.
- Sockets: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
J52209	2 Piece Deep Socket Set Metric	2.52

PROTO® 3/8” DRIVE 12 PIECE DEEP SOCKET SET – 6 POINT

ASME B107.5M

MM

Contents:

- Accessories: 13 Inch Socket Bar with 12 Socket Clips.
- Sockets: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
J52205	12 Piece Deep Socket Set Metric	2.62

PROTO® 3/8” DRIVE 7 PIECE UNIVERSAL SOCKET SET – 12 POINT

ASME B107.1
AS954E S3.8.1

IN

Contents:

- Accessories: 6-1/4 Inch Socket Bar with 7 Socket Clips.
- Sockets: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4
-



Part No.	Description	Weight (lbs)
J52102	7 Piece Universal Socket Set Imperial	0.94

PROTO® 3/8” DRIVE 7 PIECE UNIVERSAL SOCKET SET – 6 POINT

ASME B107.1

IN

Contents:

- Accessories: 6-1/4 Inch Socket Bar with 7 Socket Clips.
- Sockets: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 inch



Part No.	Description	Weight (lbs)
J52100	7 Piece Universal Socket Set Imperial	0.97

PROTO® 3/8” DRIVE 7 PIECE UNIVERSALSOCKET SET – 12 POINT

ASME B107.5M

MM

Contents:

- Accessories: 6-1/4 Inch Socket Bar with 7 Socket Clips.
- Sockets: 9, 10, 11, 12, 13, 14, 15 mm



Part No.	Description	Weight (lbs)
J52200	7 Piece Universal Socket Set Metric	0.92

PROTO® 3/8” & 1/2” DRIVE 10 PIECE HEX BIT SET

IN

Contents:

- Blow-Molded Case
- 3/8” Drive: 1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 inch
- 1/2” Drive: 1/2, 9/16, 5/8 inch



Part No.	Description	Weight (lbs)
J4900A	10 Piece Hex Bit Set Imperial	3.15

PROTO® 3/8” DRIVE 10 PIECE UNIVERSAL SOCKET SET – 6 PT

ASME B107.5M

MM

Contents:

- Accessories: 9 Inch Socket Bar with 10 Socket Clips.
- Sockets: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
J52201	10 Piece Universal Socket Set Metric	1.36

PROTO® 3/8” & 1/2” DRIVE 10 PIECE HEX BIT SET

MM

Contents:

- Blow-Molded Case.
- 3/8” Drive: 4, 5, 6, 7, 8, 9, 10 mm
- 1/2” Drive: 12, 14, 17 mm



Part No.	Description	Weight (lbs)
J52210H	10 Piece Hex Bit Set Metric	3.11

PROTO® 3/8” DRIVE 7 PIECE HEX BIT SET – SHORT

IN

Contents:

- Accessories: 6-1/4 Inch Socket Bar with 7 Socket Clips.
- Bits: 1/4, 1/8, 3/16, 3/8, 5/16, 5/32, 7/32 inch

Part No.	Description	Weight (lbs)
J4990-7ST	7 Piece Short Hex Bit Set Imperial	0.84

PROTO® 3/8” DRIVE 7 PIECE SHORT HEX BIT SET

MM

Contents:

- Accessories: 6-1/4 Inch Socket Bar with 7 Socket Clips.
- Bits: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
J4990-MST	7 Piece Short Hex Bit Set Mteric	0.83

PROTO® 3/8” & 1/2” DRIVE 10 PIECE STANDARD HEX BIT SET

IN

Contents:

- Accessories: 9 Inch Socket Bar with 10 Socket Clips.
- Bits:
- 3/8”Drive: 1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 inch
- 1/2”Drive: 1/2, 9/16, 5/8 inch
-



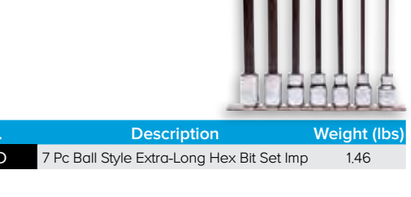
Part No.	Description	Weight (lbs)
J4900AC	10 Piece Standard Hex Bit Set Imperial	2.91

PROTO® 3/8” DRIVE 7 PIECE STANDARD HEX BIT SET

IN

Contents:

- Accessories: 6-1/4 Inch Socket Bar with 7 Socket Clips.
- Bits: 1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 inch



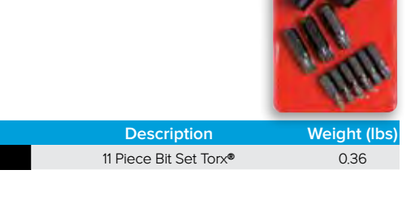
Part No.	Description	Weight (lbs)
J4900-7C	7 Piece Standard Hex Bit Set Imperial	0.99

PROTO® 3/8” DRIVE 7 PIECE HEX BIT SET

MM

Contents:

- Accessories: 6-1/4 Inch Socket Bar with 7 Socket Clips.
- Bits: 4, 5, 6, 7, 8, 9, 10 mm



Part No.	Description	Weight (lbs)
J4990-SMA	7 Piece Hex Bit Set Metric	1.04

PROTO® 3/8” DRIVE 7 PIECE HEX BIT SET – EXTRA-LONG

IN

Contents:

- Accessories: 6-1/4 Inch Socket Bar with 7 Socket Clips.
- Bits: 1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 inch



Part No.	Description	Weight (lbs)
J4990-7XL	7 Piece Extra-Long Hex Bit Set Imperial	1.21

PROTO® 3/8” DRIVE 6 PIECE HEX BIT SET – EXTRA-LONG

MM

Contents:

- Accessories: 6-1/4 Inch Socket Bar with 6 Socket Clips
- Bits 4, 5, 6, 7, 8, 10 mm



Part No.	Description	Weight (lbs)
J4990-SMXL	6 Piece Extra-Long Hex Bit Set Metric	1.23

PROTO® 3/8” DRIVE 7 PIECE BALL STYLE HEX BIT SET – EXTRA-LONG

IN

Contents:

- Accessories: 6-1/4 Inch Socket Bar with 7 Socket Clips
- Bits: 1/8, 5/32, 3/16, 7/32, 1/4, 3/8 inch
-

Part No.	Description	Weight (lbs)
J4900BD	7 Pc Ball Style Extra-Long Hex Bit Set Imp	1.46

PROTO® 1/4” & 3/8” DRIVE 11 PIECE TORX® BIT SET

Contents:

- 2 Bit Holders
- Pouch
- Bits: T10, T15, T20, T25, T27, T30, T40, T45, T50



Part No.	Description	Weight (lbs)
J5239P	11 Piece Bit Set Torx®	0.36

PROTO® 3/8” DRIVE 6 PIECE TORX® BIT SET

Contents:

- Accessories: 6-1/4 Inch Socket Bar with 6 Socket Clips.
- T15, T20, T25, T27, T30, T40



Part No.	Description	Weight (lbs)
J5238C	6 Piece Torx® Bit Set	0.78

PROTO® 3/8” DRIVE 8 PIECE TORX® BIT SET

Contents:

- Accessories: 9 Inch Socket Bar with 8 Socket Clips.
- T15, T20, T25, T27, T30, T40, T45, T50
-



Part No.	Description	Weight (lbs)
J5239C	8 Piece Torx® Bit Set	1.04

PROTO® DRIVE 6 PIECE ADAPTER SET

ASME B107.500
ASME B107.2

Contents:

- Accessories: 6-1/4” Socket Bar, 6 Socket Clips, Drive Size 1/4, 3/8, 1/2, and 3/4 Inch, Full Polish/Black Oxide Finish.
- Stand.: 3/8Fx1/4”M, 1/4Fx3/8”M, 3/8Fx1/2”M.
- Imp: 1/2Fx3/8”M, 1/2Fx3/4”M, 3/4Fx1/2”M.



Part No.	Description	Weight (lbs)
J52100	6 Piece Adapter Set	1.33

PROTO® 3/8” DRIVE 9 PC TORQUE ADAPTER SOCKET SET – 12 POINT

AS954E S3.8.1

IN

Contents:

- Accessories: Steel Holder
- 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 inch



Part No.	Description	Weight (lbs)
J5100	9 Piece Torque Adapter Socket Set	1.32

PROTO® 3/8” DRIVE 8 PC CROWFOOT FLARE NUT WRENCH SET

ASME B107.21

IN

Contents:

- 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16
- Supplied on: 9 Inch Socket Bar with 10 Socket Clips.





Part No.	Description	Weight (lbs)
J4900FL	8 Pc Crowfoot Flare Nut Wrench Set Imp	0.80

PROTO® 3/8” DRIVE 13 PIECE HAND IMPACT DRIVER SET

- Designed to loosen hard to turn bolts and nuts.
- Hand impact driver has heavy-duty spring for added torque.
- Popular interchangeable bits are packaged in plastic blow-molded box for easy storage.

Contents:

- 3/8” Driver 5-1/2”
- 1/4” Bits: PH1, PH2, PH3, SL3./16”, SL9/32”
- 5/16” Bits: PH1, PH2, PH3, SL3/16”, SL9/32
- 3/8” Bit Holders: 5/16”, 1/4” inch



Part No.	Description	Weight (lbs)
J7099A	13 Piece Hand Impact Driver Set	2.31

PROTO® 3/8” DRIVE 9 PIECE CROWFOOT WRENCH SET

ASME B107.21

IN

- Full Polish Chrome Finish.

Contents:

- Accessories: 13 Inch Socket Bar with 9 Socket Clips.
- 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 inch



Part No.	Description	Weight (lbs)
J49004CF	9 Piece Crowfoot Wrench Set Imperial	0.83

PROTO® 3/8” DRIVE 15 PIECE CROWFOOT WRENCH SET

ASME B107.21

IN

- Full Polish Chrome Finish.

Contents:

- Accessories: Socket Clips and Bar.
- 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4



Part No.	Description	Weight (lbs)
J49003CF	15 Piece Crowfoot Wrench Set Imperial	2.07

PROTO® 3/8” DRIVE 53 PIECE CROWFOOT WRENCH SET

ASME B107.21
ASME B107.500

IN

- Full Polish Chrome Finish.

Contents:

- Accessories: Drive Locking Extensions: 3/8” Drive Locking Extensions: 6, 12” L.
- 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 1-15/16, 2, 2-1/16, 2-1/8, 2-3/16, 2-1/4, 2-5/16, 2-3/8, 2-7/16, 2-1/2, 2-9/16, 2-5/8, 2-11/16, 2-3/4, 2-13/16, 2-7/8, 2-15/16, 3
- Flare: 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 3/8 inch



Part No.	Description	Weight (lbs)
J49000CFL	53 Piece Crowfoot Wrench Set Imperial	26.14

PROTO® 3/8” DRIVE 43 PIECE CROWFOOT WRENCH SET

ASME B107.21

IN

- Full Polish Chrome Finish.

Contents:

- 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 1-15/16, 2, 2-1/16, 2-1/8, 2-3/16, 2-1/4, 2-5/16, 2-3/8, 2-7/16, 2-1/2, 2-9/16, 2-5/8, 2-11/16, 2-3/4, 2-13/16, 2-7/8, 2-15/16, 3 inch



Part No.	Description	Weight (lbs)
J49001CF	43 Piece Crowfoot Wrench Set Imperial	23.92

PROTO® 3/8” DRIVE 27 PIECE CROWFOOT WRENCH SET

ASME B107.21

IN

- Full Polish Chrome Finish.

Contents:

- 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 1-15/16, 2
-



Part No.	Description	Weight (lbs)
J49002CF	27 Piece Crowfoot Wrench Set Imperial	6.74

PROTO® 3/8” DRIVE 16 PIECE CROWFOOT WRENCH SET

ASME B107.21

MM

- Anti-Slip Design open end (ASD).
- Typically used in lower torque applications.
- Full polish finish provides corrosion resistance and easy to clean surfaces.

Contents:

- 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 mm



Part No.	Description	Weight (lbs)
J49000-MCF	16 Piece Crowfoot Wrench Set Metric	2.59

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PROTO® 3/8” DRIVE 12 PIECE SOCKET SET – 12 POINT

ASME B107.1
AS954E S3.8.1

IN

- Grainger #: 5C866

Contents:

- Sockets: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 inch
- Accessories: Pear Head Ratchet, 3 and 6 Inch Extensions and Blow-Molded Case.



Part No.	Description	Weight (lbs)
J52130	12 Piece Socket Set Imperial	3.70

PROTO® 3/8” DRIVE 22 PIECE SOCKET SET – 12 POINT

PREMIUM RATCHET

ASME B107.1
AS954E S3.8.1

IN

Contents:

- Accessories: Premium Ratchet, 3 and 6 Inch Extensions, Universal Joint and Blow-Molded Case.
- Standard: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 inch
- Deep: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 inch



Part No.	Description	Weight (lbs)
J52136XL	22 Piece Socket Set Imperial	6.60

PROTO® 3/8” DRIVE 58 PC COMBI-NATION SOCKET SET – 12 POINT

ASME B107.1
AS954E S3.8.1

IN

Contents:

- Accessories: Pear Head Ratchet and Adapter, 3, 6, and 12 Inch Extensions, Universal Joint, Hinge, Speed, Sliding T-Handle, and Metal Box.
- Standard: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 inch.
- Deep: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 inch.
- Universal: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 inch.
- 8 Point Standard: 1/4, 5/16, 3/8, 7/16, 1/2 inch.
- Hex: 1/8, 1/4, 5/32, 3/16, 5/16, 7/32, 3/8 inch.
- Phillips®: #2, 3, 4 and 1/4 Slotted.



Part No.	Description	Weight (lbs)
J52140	58 Piece Combination Socket Set Imperial	22.67

PROTO® 3/8” DRIVE 58 PC COMBI-NATION SOCKET SET – 12 POINT

ASME B107.5M

IN

Contents:

- Accessories: Pear Head Ratchet and Adapter, 3, 6, and 12 Inch Extensions, Hinge, Speed, and Sliding T-Handle, Universal Joint.
- Standard: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 inch.
- Deep: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 inch.
- Universal: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 inch.
- 8 Point Standard: 1/4, 5/16, 3/8, 7/16, 1/2 inch.
- Hex: 1/8, 1/4, 5/32, 3/16, 5/16, 7/32, 3/8 inch.
- Phillips® Bits #2, #3, #4, and 1/4 Slotted.



Part No.	Description	Weight (lbs)
J52142	58 Piece Combination Socket Set Imperial	12.10

PROTO® 3/8” DRIVE 16 PIECE SOCKET SET – 12 POINT

ASME B107.5M
AS954E S3.8.1

MM

Contents:

- Accessories: Pear Head Ratchet, 6 Inch Extension and Blow-Molded Case.
- Sockets: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
J52218	16 Piece Socket Set Metric	4.07

PROTO® 3/8” DRIVE 20 PIECE SOCKET SET – 12 POINT

ASME B107.5M
AS954E S3.8.1

PREMIUM RATCHET

MM

Contents:

- Accessories: Premium Ratchet, 3 and 12 Inch Extensions, Hinge handle, Universal Joint, Speed Handle and Blow-Molded Case.
- Sockets: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
J52224XL	20 Piece Socket Set Metric	8.39

PROTO® 3/8” DRIVE 57 PIECE SOCKET SET – 12 POINT

ASME B107.5M
AS954E S3.8.1

MM

Contents:

- Accessories: Pear Head Ratchet and Adapter, 3, 6, and 12 Inch Extensions, Universal Joint, Hinge, Speed, Sliding T-Handle
- Standard: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 mm
- Deep: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm
- Universal: 9, 10, 11, 12, 13, 14, 15 mm
- Hex: 4, 5, 6, 7, 8, 10 mm
- Bits: #2, #3, #4 Phillips®, and 1/4”Slotted.



Part No.	Description	Weight (lbs)
J52228	57 Piece Socket Set Metric	10.76

PROTO® 3/8” DRIVE 57 PIECE SOCKET SET – 12 POINT

ASME B107.5M
AS954E S3.8.1

MM

Contents:

- Accessories: Pear Head Ratchet and Adapter, 3, 6, and 12 Inch Extensions, Universal Joint, Hinge, Speed, Sliding T-Handle and Metal Box.
- Standard: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 mm
- Deep: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm
- Universal: 9, 10, 11, 12, 13, 14, 15 mm
- Hex: 4, 5, 6, 7, 8, 10 mm
- Bits: #2, #3, #4 Phillips®, and 1/4”Slotted.



Part No.	Description	Weight (lbs)
J52226	57 Piece Socket Set Metric	22.50



1/2 Inch Drive Sockets & Ratchets

Stahlwille 1/2" Drive Tools 322
PROTO® 1/2" Drive Tools 326
Stahlwille 1/2" Drive Sockets 330
PROTO® 1/2" Drive Sockets 334
Stahlwille 1/2" Drive Universal Sockets 339
PROTO® 1/2" Drive Universal Sockets 339
Stahlwille 1/2" Drive Bit Sockets 340
PROTO® 1/2" Drive Bit Sockets 342
Stahlwille 1/2" Drive Crowfoot Wrenches 343
PROTO® 1/2" Drive Crowfoot Wrenches 344
Stahlwille 1/2" Drive Sets 346
PROTO® 1/2" Drive Sets..... 350

Stahlwille 1/2" Drive Tools

STAHLWILLE 1/2" DRIVE REVERSIBLE RATCHET – FINE TOOTH QUICKRELEASE STEEL
512SG-QR N

- 80 teeth
- with steel handle
- for use in confined spaces, re-engages after movement of 4.5°
- construction without screws prevents foreign object damage
- DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
13111030	1/2"	265.5	41	22.5	654

STAHLWILLE 1/2" DRIVE REVERSIBLE RATCHET
512

- 36 teeth
- with 2-component handle
- DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
13111010	1/2"	265.5	41	22.5	600

STAHLWILLE 1/2" DRIVE REVERSIBLE RATCHET
512G

- 36 teeth
- with 2-component handle
- DIN 3122/ISO 3315
- encapsulated housing minimises the ingress of dirt



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
13111110	1/2"	265.5	41	22.5	613

STAHLWILLE 1/2" DRIVE REVERSIBLE RATCHET – FINE TOOTH QUICKRELEASE
512QR N

- 80 teeth
- with 2-component handle
- for use in confined spaces, re-engages after movement of 4.5°
- DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
13111120	1/2"	265.5	41	23	572

STAHLWILLE 1/2" DRIVE REVERSIBLE RATCHET – FINE TOOTH
515

- 60 teeth
- with 2-component handle
- for use in confined spaces, re-engages after movement of 6°
- DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
13231011	1/2"	265	40	26.2	515

STAHLWILLE 1/2" DRIVE REVERSIBLE RATCHET – FINE TOOTH QUICKRELEASE
517QR

- 80 teeth
- handle may be raised or lowered by approx. 90°, lockable in following positions: straight, 30° up, 60° up, 30° down
- release the lock by pressing the button in the handle
- for use in confined spaces, re-engages after movement of 4.5°
- construction without screws prevents foreign object damage
- with 2-component handle
- DIN 3122/ISO3315



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
13261010	1/2"	416	41	22	920

STAHLWILLE 1/2" DRIVE REVERSIBLE RATCHET – LONG
532

- 36 teeth
- with 2-component handle



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
13121010	1/2"	380	41	22.5	821

STAHLWILLE 1/2" DRIVE REVERSIBLE RATCHET – LONG
532G

- 36 teeth
- with 2-component handle
- encapsulated housing minimises the ingress of dirt



Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
13121110	1/2"	380	41	22.5	815

STAHLWILLE 1/2" DRIVE FLEXIBLE HANDLE
504

- DIN 3122/ISO 3315
- with 2-component handle



Part No.	Drive Size	Size	OAL (L) (mm)	Weight (g)
13061015	1/2"	15	397	735
13061018	1/2"	18	469	831
13061024	1/2"	24	610	1051

STAHLWILLE 1/2" DRIVE SPEEDER BRACE
501

- working radius 105mm
- DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Weight (g)
13100010	1/2"	456	620

STAHLWILLE 1/2" DRIVE SPEEDER BRACE QUICKRELEASE 501QR

- with detachable steel handle
- for greater axial power transmission, detachable palm head
- working radius 105mm
- DIN 3122/ISO 3315



Part No.	Drive Size	OAL (L) (mm)	Weight (g)
13100005	1/2"	456	872

STAHLWILLE 1/2" DRIVE RATCHET ADAPTER 522

- reversible
- 20 teeth



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
13140000	1/2"	67.5	40	316

STAHLWILLE 1/2" DRIVE BIT HOLDER 543

- 5/16" inside hexagon with a collar-thrust spring
- DIN 3126/ISO 1173 D 8
- bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173)



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
13180010	1/2"	38	22	65

STAHLWILLE 1/2" DRIVE SLIDING T-HANDLE 506

DIN 3122/ISO 3315



Part No.	Drive Size	OAL (mm)	Weight (g)
13070000	1/2"	300	436

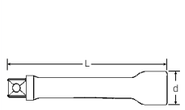
STAHLWILLE 1/2" DRIVE SLIDING T-HANDLE QUICKRELEASE 506QR



Part No.	Drive Size	OAL (mm)	Weight (g)
13071000	1/2"	300	470

STAHLWILLE 1/2" DRIVE EXTENSIONS 509

DIN 3123/ISO 3316





Part No	Drive Size	Size	OAL (L) (mm)	Dia (mm)	Weight (g)
13010001	1/2"	2	52	23	88
13010004	1/2"	3	75	23.2	120
13010002	1/2"	5	130	23.2	191
13010003	1/2"	10	255	23.2	341

STAHLWILLE 1/2" DRIVE WOBBLE EXTENSIONS 509W

- swivel angle 15° each side
- maximum torque 200 N·m





Part No	Drive Size	Size	OAL (L) (mm)	Dia (mm)	Weight (g)
13010005	1/2"	2	52	23	80
13010006	1/2"	3	75	23.2	120
13010007	1/2"	5	130	23.2	191
13010008	1/2"	10	255	23.2	341

STAHLWILLE 1/2" DRIVE EXTENSIONS QUICKRELEASE 509QR

DIN 3123/ISO 3316





Part No	Drive Size	Size	OAL (L) (mm)	Dia (mm)	Weight (g)
13011001	1/2"	2	52	23	90
13011004	1/2"	3	75	23	123
13011002	1/2"	5	130	23	187
13011003	1/2"	10	255	23	341

STAHLWILLE 1/2" DRIVE SPECIAL EXTENSION 3505



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
13210001	1/2"	120	23.2	186

STAHLWILLE 1/2" DRIVE UNIVERSAL JOINT 510

DIN 3123/ISO 3316



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
13020000	1/2"	71	25	146

STAHLWILLE 1/2" DRIVE UNIVERSAL JOINT QUICKRELEASE 510QR

DIN 3123/ISO 3316



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
13021000	1/2"	80	25	155

STAHLWILLE 1/2" DRIVE REDUCING ADAPTER 513

- 1/2" socket x 3/8" plug (12.5 x 10)
- maximum torque 202 N·m
- DIN 3123/ISO 3316
- HPQ® high performance steel



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
13030002	1/2"	35	22.7	60

STAHLWILLE 1/2" EXTENDING ADAPTER 514

- 1/2" socket x 3/4" plug (12.5 x 20)
- DIN 3123/ISO 3316
- HPQ® high performance steel



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
13030005	1/2"	44	25	110

STAHLWILLE 1/2" DRIVE EXTENDING ADAPTER 7789-1

- 1/2" socket x 1" plug (12.5 x 25)
- HPQ® high performance steel



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
58522089	1/2"	35	36.5	175

STAHLWILLE 1/2" DRIVE EXTENDING ADAPTER 514M

1/2" socket x 3/4" plug (12.5 x 20)



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
13030010	1/2"	22	38	40

STAHLWILLE 1/2" DRIVE RATCHET REPAIR KITS

Part No	Ratchet #	Contents		Weight (g)
5120+7210/15 / 19040000	No 512 / 13111010 No 532 / 13121010	1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws		127
5120G / 19040030	No 512G / 13111110 No 532G / 13121110	1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws		120
5120QR N80 / 19042020	No 512QR N / 13111120 No 512SG-QR N / 13111030 No 517QR / 13261010	1 pinion; 1 locking disc; 1 lever; 1 pin; 1 ball; 1 compression spring; 2 circlips; 1 cover plate		120
5120QR N / 19040040	No 512QR N / 13111120	1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws (design with screws)		140
5120QR / 19040020	No 512 / 13111010 512SG-QR / 13111120	1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws		118
7350/20 / 59251020	No 515 / 13231011	1 pinion; 1 pawl; 1 switching disk; 1 spring; 3 screws		140
5040N / 96190801	No 504 / 13061015, 13061018, 13061024	1 universal joint, 1 screw, 1 spring washer (for version with black, manganese-phosphated Torx® screw)		80
5040 / 96190800	No 504 / 13061015, 13061018, 13061024	1 universal joint, 1 screw, 1 spring washer (for version with chrome plated Philips-head screw)		75

PROTO® 1/2" Drive Tools

PROTO® 1/2" DRIVE PREMIUM PEAR HEAD RATCHETS

ASME B107.500

- Small pear head design for access in tight, hard to reach work areas.
- 45-tooth gear provides balance between 8° articulation angle and high torque carrying capacity.
- Sealed design helps prevent debris from entering the ratchet mechanism reducing wear. Also, helps to keep lubrication contained within the components. Patent pending design.
- Low profile reversing lever design for quick, one-hand operation.
- Contoured, ergonomically-designed handle for comfort. Knurled bands allow for increased grip and slip resistance.
- Double nickel chrome plated for enhanced corrosion protection or black oxide finish.
- Field repairable.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5449XL	1/2"	Full Polish	10-1/2	1.72	J5449XLRK
J5449XLBL	1/2"	Black Oxide	10-1/2	1.72	J5449XLRK

PROTO® 1/2" DRIVE PREMIUM PEAR HEAD RATCHETS – QUICKRELEASE

ASME B107.500

- Small, pear head design for access in tight, hard to reach work areas.
- 45-tooth gear, 8° swing articulation.
- Low profile quick release button for access in restricted areas.
- Low profile reversing lever design for quick, one-hand operation.
- Patented sealed head design helps prevent debris from entering the ratchet mechanism reducing wear. Also, helps to keep lubrication contained within the components.
- Contoured, ergonomically-designed handle for comfort. Knurled bands allow for increased grip and slip resistance.
- Full polished handle, easy to clean.
- Double nickel chrome plated for enhanced corrosion protection meeting aerospace requirements.
- Also available in black oxide finish.
- Field repairable.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5449XLQR	1/2"	Full Polish	10-1/2	1.72	J5449XLQRRK
J5449XLQRBL	1/2"	Black Oxide	10-1/2	1.72	J5449XLQRRK

PROTO® 1/2" DRIVE PREMIUM PEAR HEAD RATCHETS – LONG

ASME B107.500

- Small pear head design for access in tight, hard to reach work areas.
- 45-tooth gear provides balance between 8° articulation angle and high torque carrying capacity.
- Sealed design helps prevent debris from entering the ratchet mechanism reducing wear. Also, helps to keep lubrication contained within the components. Patent pending design.
- Low profile reversing lever design for quick, one-hand operation.
- Contoured, ergonomically-designed handle for comfort. Knurled bands allow for increased grip and slip resistance.
- Double nickel chrome plated for enhanced corrosion protection or black oxide finish.
- Field repairable.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5450XL	1/2"	Full Polish	15	2.18	J5449XLRK
J5450XLBL	1/2"	Black Oxide	15	2.18	J5449XLRK
J5450XLQR	1/2"	Full Polish Quickrelease	15	2.18	J5449XLQRRK
J5450XLQRBL	1/2"	Black Oxide Quickrelease	15	2.18	J5449XLQRRK

PROTO® 1/2" DRIVE CLASSIC PEAR HEAD RATCHET – OVERSIZED LEVER

ASME B107.500

- Oversized reverse lever for easy reversing while wearing work gloves.
- Reversing lever designed for quick one-hand operation.
- Ideal ratchet for lineman operations.
- Unique 24-tooth gear design provides 15° ratcheting angle while maximizing ultimate torque.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5449UT	1/2"	Full Polish	10	1.50	J5449UTRK

PROTO® 1/2" DRIVE CLASSIC PEAR HEAD RATCHETS

ASME B107.500

- Robust 24-tooth design with 15° arc swing.
- Alloy steel drive gear for strength and durability.
- Low profile head for access in constricted areas.
- Reversing lever design for quick, one-hand operation.
- Knurled slip-resistant grip.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5449	1/2"	Full Polish	10	1.57	J5449RK
J5449BL	1/2	Black Oxide	10	1.74	J5449RK

PROTO® 1/2" DRIVE CLASSIC PEAR HEAD RATCHETS – LONG

ASME B107.500

- Robust 24-tooth design with 15° arc swing.
- Alloy steel drive gear for strength and durability.
- Low profile head for access in constricted areas.
- Reversing lever design for quick, one-hand operation.
- Knurled slip-resistant grip.
- Field repairable.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5450	1/2"	Full Polish	16	2.03	J5449RK
J5450BL	1/2"	Black Oxide	16	2.03	J5449RK

PROTO® 1/2" DRIVE FEMALE DRIVE RATCHET – LONG

ASME B107.500

- Robust 24-tooth design with 15° arc swing.
- Alloy steel drive gear for strength and durability.
- Low profile head for access in constricted areas.
- Reversing lever design for quick, one-hand operation.
- Knurled slip-resistant grip.
- Made of heat-treated alloy steel.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5450FW	1/2"	Full Polish	16	1.82	J545OFWRK

PROTO® 1/2" DRIVE ROUND HEAD RATCHETS

ASME B107.500

- Small head design and tight swing allow fastener to access tight areas.
- Full polish or black oxide finish with knurled grip for strong slip-resistant grip.
- 5° ratcheting angle.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5452F	1/2"	Full Polish	9-3/8	1.12	J5452FRK
J5452FBL	1/2"	Black Oxide	9-3/8	1.12	J5452FRK

PROTO® 1/2" DRIVE ROUND HEAD RATCHET – LONG

- Round head ratchet mechanism allows for a compact head.
- 72-tooth = 5° swing arc.
- Small head design and tight swing arc allow for fastener access in tight areas.
- Full polish shaft with knurled grip for strong slip-resistant grip.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5454F	1/2"	Full Polish	15	1.65	J5452FRK

PROTO® 1/2" DRIVE FLEX HEAD PEAR HEAD RATCHET – FINE TOOTH

ASME B107.500

- 90 tooth count allows for 4 degree arc swing.
- Small, pear head design for access in tight, hard-to-reach work areas.
- Full polish finish for superior comfort and easy clean up.
- Contoured, ergonomically designed handle for comfort.
- Low profile reversing lever design for quick, one hand operation.
- Knurled bands allow for increased grip and slip resistance.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5450HTCF	1/2"	Full Polish	17-11/16	-	-

PROTO® 1/2" DRIVE FLEX HEAD ROUND HEAD RATCHET

ASME B107.500

- 180° flex.
- 72-tooth gear.
- 5° ratcheting angle.
- Small head design and tight swing arc allow fastener to access tight area.
- Full polish shaft with knurled grip allows for a strong slip-resistant grip.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5457F	1/2"	Full Polish	17-3/32	1.53	J5452FRK

PROTO® 1/2" DRIVE HINGE HANDLE

ASME B107.500

- Head Flexes 90° from horizontal.
- Made of heat-treated alloy steel



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5466	1/2"	Full Polish	10-7/8	1.14	-
J5467	1/2"	Full Polish	15-3/4	1.52	-
J5468	1/2"	Full Polish	18-5/8	1.69	-
J5468BL	1/2"	Black Oxide	18-5/8	1.69	-
J5469	1/2"	Full Polish	24	2.68	-

PROTO® 1/2" DRIVE SLIDING T-HANDLE

ASME B107.500

DIN 3122/ISO 3315



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)
J5485	1/2"	Full Polish	12-15/16	1.11

PROTO® 1/2" DRIVE EXTENSIONS

ASME B107.500

- Made from alloy steel.
- Heat-treated for strength and durability.
- Rigid extension.



Part No	Drive Size	Finish	OAL (in)	Weight (lbs)
J5460	1/2"	Full Polish	2-1/2	0.24
J5460B	1/2"	Black Oxide	2-1/2	0.24
J5461	1/2"	Full Polish	5	0.44
J5461B	1/2"	Black Oxide	5	0.44
J5463	1/2"	Full Polish	10	0.89
J5463B	1/2"	Black Oxide	10	0.89
J5464	1/2"	Full Polish	20	1.87
J5465	1/2"	Full Polish	36	3.41

PROTO® 1/2" DRIVE SPEED HANDLE

ASME B107.500

- Made from alloy steel.
- Heat-treated for strength and durability.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)
J5480G	1/2"	Full Polish	18-5/16	1.55

PROTO® 1/2" DRIVE WOBBLE EXTENSIONS

ASME B107.500

- Provides up to a 17° angle of operation.
- Made from alloy steel.
- Heat-treated for strength and durability.
- Rigid extension.





Part No	Drive Size	Finish	OAL (in)	Weight (lbs)
J5460W	1/2"	Full Polish	2-1/2	0.24
J5461W	1/2"	Full Polish	5	0.44
J5463W	1/2"	Full Polish	10	0.89
J5464W	1/2"	Full Polish	20	1.90

PROTO® 1/2" DRIVE RATCHETOR

ASME B107.500

Converts standard handles to ratcheting handles.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)
J5447	1/2"	Full Polish	2-21/32	0.86

PROTO® 1/2" DRIVE LOCKING ADAPTER

- Includes hex key for easy locking onto drive tool.
- Knurl locking ring.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)
J5460-02BLS	1/2"	Black Oxide	3	0.36

PROTO® PEAR HEAD RATCHET REPAIR KITS



Part No	Drive Size	Ratchet #	Weight (lbs)
J5449RK	1/2"	J5449	0.38
J5449UTRK	1/2"	J5449UT	0.38
J5449XLRK	1/2"	J5449XL	0.23
J5449-14RK	1/2"	J5449-14BL	0.37
J5450FWRK	1/2"	J5450FW	0.26

PROTO® POUND HEAD RATCHET REPAIR KITS



Part No.	Drive Size	Ratchet #	Weight (lbs)
J5452FRK	1/2"	J5452F J5452FBL J5454F J5457F	0.30

PROTO® ADAPTERS

ASME B107.500



Part No	Drive Size	Finish	OAL (in)	Weight (lbs)
J5253	3/8" F x 1/2" M	Full Polish	1-7/16	0.11
J5254	1/2" F x 3/8" M	Full Polish	1-3/8	0.13
J5653	1/2" F x 3/4" M	Full Polish	1-11/16	0.24
J5453	3/4" F x 1/2" M	Full Polish	1-7/8	0.39

PROTO® 1/2" DRIVE LOCKING EXTENSIONS

ASME B107.500

- Push button locking mechanism.
- Over-molded protection cap prevents dust and debris from jamming mechanism.



Part No	Drive Size	Finish	OAL (in)	Weight (lbs)
J5460-03L	1/2"	Full Polish	3	0.40
J5461L	1/2"	Full Polish	5	0.55
J5463L	1/2"	Full Polish	10	1.04

PROTO® 1/2" DRIVE UNIVERSAL JOINT

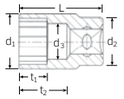


Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)
J5470A	1/2"	Full Polish	2-3/4	0.30

Stahlwille 1/2" Drive Sockets

STAHLWILLE 1/2" DRIVE SOCKETS – 12 POINT 50

- DIN 3124/ISO 2725-1, E DIN EN 3709
- HPQ® high performance steel, chrome plated





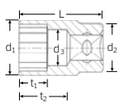
ASME B 107.5 M

MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
03010008	8	13	22	7	38	9	22	56
03010009	9	13.7	22	8	38	9	22	57
03010010	10	14.5	22	9	38	9	22	50
03010011	11	15.8	22	10	38	9.5	22	50
03010012	12	17	22	11	38	13	22	58
03010013	13	18.3	22	12	38	13	22	50
03010014	14	19.9	22.7	13	38	13	20.5	60
03010015	15	21.2	22.7	14	38	13.5	20.2	62
03010016	16	22.4	23.7	15	38	13.5	19.6	63
03010017	17	24	23.7	15.2	38	15	19.6	66
03010018	18	24.7	23.7	17	38	15.5	19.1	71
03010019	19	26.2	25	18	38	16	21.7	78
03010020	20	27.2	25	19	42	15	25.5	89
03010021	21	28.7	26	20	42	16	25.2	100
03010022	22	29.7	26	21	42	16.5	24.9	113
03010023	23	30.7	26	20	42	18	25.4	114
03010024	24	32	26	21	42	18.5	24.9	117
03010025	25	33.2	25	22	42	18.5	24.6	119
03010026	26	34.4	25	23	42	18.5	24.3	122
03010027	27	36.2	26	24	45	19.5	27	150
03010028	28	37.4	27	25	45	19.5	26.7	158
03010030	30	39.7	28	27	45	20.5	26.1	171
03010031	31	42.2	28	28	47	22	27.9	215
03010032	32	42.2	28	29	47	22	27.6	189
03010034	34	45	28	31	47	22	27	210
03010036	36	48	31	34	52	24	30.9	286

STAHLWILLE 1/2" DRIVE SOCKETS – 12 POINT 50A

- Fed. Spec. GGG-W-641
- HPQ® high performance steel, chrome plated





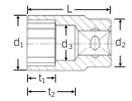
ASME B 107.1,
AS 954-E

IN

Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
03410024	3/8	14.3	22	8.3	38	9	22	51
03410028	7/16	16.3	22	9.9	38	9	22	52
03410032	1/2	18.3	22	11.5	38	13	22	53
03410034	9/16	20.3	22.7	13.1	38	13	20.2	58
03410035	19/32	21.3	22.7	13.5	38	13.5	20.1	61
03410036	5/8	22.4	23.7	15	38	13.5	19.6	65
03410038	11/16	24.2	23.7	16.5	38	15.5	19.2	68
03410040	3/4	26.2	25	18	38	16	21.7	78
03410041	25/32	27	25	18.6	41	16	24.6	90
03410042	13/16	28.2	25	19.4	41	16.5	24.3	95
03410044	7/8	29.7	26	21	42	18	24.9	111
03410046	15/16	32	26	22.6	42	18.5	24.4	121
03410048	1	33.7	27	24.2	42	18.5	24	135
03410050	1-1/16	36.2	26	25.8	45	19.5	26.5	155
03410052	1-1/8	38.1	28	27.4	45	20	26	167
03410054	1-3/16	39	28	28	45	20.5	25.9	178
03410056	1-1/4	40	28	30.5	45	21	25.1	196
03410058	1-5/16	41.8	28	32.1	47	22	26.7	170
03410060	1-3/8	46	28	33.7	50	23	29.2	232
03410062	1-7/16	49.4	31	34	54	26	33.1	320
03410064	1-1/2	51	31	35	54	26	32.8	325

STAHLWILLE 1/2" DRIVE SOCKETS – 6 POINT 52

- DIN 3124/ISO 2725-1, E DIN EN 3709 (test loads)
- HPQ® high performance steel, chrome plated





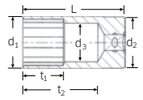
ASME B107.5M

MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
03030008	8	13	22	7	38	9	22	56
03030009	9	13.7	22	8	38	9	22	56
03030010	10	14.5	22	9	38	9	22	51
03030011	11	15.8	22	10	38	9.5	22	58
03030012	12	17	22	11	38	13	22	52
03030013	13	18.3	22	12	38	13	22	51
03030014	14	19.9	22.7	13	38	13	20.5	59
03030015	15	21.2	22.7	14	38	13.5	20.2	60
03030016	16	22.4	23.7	15	38	13.5	19.6	65
03030017	17	24	23.7	15.2	38	15	19.6	70
03030018	18	24.7	23.7	17	38	15.5	19.1	73
03030019	19	26.2	25	18	38	16	21.7	80
03030020	20	27.2	25	19	42	15	25.5	95
03030021	21	28.7	26	20	42	16	25.2	110
03030022	22	29.7	26	21	42	16.5	24.9	115
03030023	23	30.7	26	20	42	18	25.4	119
03030024	24	32	26	21	42	18.5	24.9	125
03030025	25	33.2	26	22	42	18.5	24.6	128
03030026	26	34.4	25	23	42	18.5	24.3	132
03030027	27	36.2	26	24	45	19.5	27	161
03030028	28	37.4	27	25	45	19.5	26.7	166
03030030	30	39.7	28	27	45	20.5	26.1	186
03030032	32	42.2	28	29	47	22	27.6	200
03030034	34	45	28	31	47	22	27	235
03030036	36	48	31	34	52	24	30.9	305

STAHLWILLE 1/2" DRIVE DEEP SOCKETS – 6 POINT 51S

- DIN 3124/ISO 2725-1, E DIN EN 3710, E DIN EN 3709 (test loads)
- HPQ® high performance steel, chrome plated





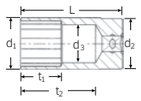
ASME B 107.1
AS 954-E

MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
03240017	17	24	23.7	16	83	35	64.3	157
03240019	19	26.2	25	18	83	35	66.7	190
03240208	20.8-13/16	27.7	26	20	83	22	66.2	196
03240022	22	29.7	27.5	21	83	35	65.9	210

STAHLWILLE 1/2" DRIVE DEEP SOCKETS – 12 POINT
51

- DIN 3124/ISO 2725-1, E DIN EN 3710, E DIN EN 3709
- HPQ® high performance steel, chrome plated
- [1] with rubber insert for spark plugs





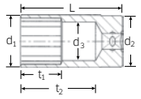
ASME B 107.5 M

MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
03020010	10	14.5	22	9	83	19	67	90
03020013	13	18.3	22	12	83	35	67	122
03020014	14	19.9	22.7	13	83	35	65.2	129
03020015	15	21.2	22.7	14	83	35	64.9	125
03020016	16	22.4	23.7	15	83	35	64.6	145
03020216	16-5/8 [1]	22.4	23.7	15.4	83	19	64.5	137
03020017	17	24	23.7	16	83	35	64.3	145
03020018	18	24.7	23.7	17	83	35	64.1	170
03020019	19	26.2	25	18	83	35	66.7	165
03020208	20.8-13/16 [1]	27.7	26	20	83	22	66.2	194
03020021	21	28.7	26.5	20	83	35	66.2	231
03020022	22	29.7	27.5	21	83	35	65.5	200
03020024	24	32	30	21	83	35	66.1	251
03020026	26	34.4	32.5	23	83	35	65.3	334
03020027	27	36.2	34	27	83	20	60	280
03020030	30	39.7	37.5	30.2	83	35	65	341
03020032	32	42.4	40	29	83	35	63.9	435

STAHLWILLE 1/2" DRIVE DEEP SOCKETS – 12 POINT
51A

- Fed. Spec. GGG-W-641\
- HPQ® high performance steel, chrome plated





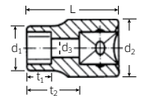
ASME B 107.1, AS 954-E

IN

Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
03420024	3/8	14.3	22	8.3	83	19	67	93
03420028	7/16	16.3	22	9.9	83	19	67	102
03420032	1/2	18.3	22	11.5	83	35	67	122
03420034	9/16	20.3	22.7	13.1	83	35	65.2	131
03420036	5/8	22.4	23.7	15	83	35	64.6	135
03420038	11/16	24.2	23.7	16.5	83	35	64.2	158
03420040	3/4	26.2	25	18	83	35	66.7	188
03420042	13/16	27.7	26	19.5	83	35	66.3	170
03420044	7/8	29.7	27.5	21	83	35	65.9	200
03420046	15/16	32	30	22.6	83	35	65.7	281
03420048	1	33.7	32	24.2	83	35	65	260
03420050	1-1/16	36.2	34	25.8	83	35	64.5	359
03420052	1-1/8	38.1	36	27.4	83	35	64	300
03420054	1-3/16	39	37	28	83	35	63.9	377
03420056	1-1/4	40	38	30.5	83	35	63.1	340
03420058	1-5/16	41.8	40	32.1	83	35	62.7	375
03420060	1-3/8	46	44	33.7	83	35	62.2	506
03420062	1-7/16	49.4	47	34	83	35	62.1	635
03420064	1-1/2	51	49	35	83	35	61.8	675

STAHLWILLE 1/2" DRIVE SOCKETS – TORX®
51TX

- HPQ® high performance steel, chrome plated

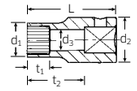




Part No.	Size	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
03270010	E10	9.4	13	22	5.6	38	9.5	22	55
03270011	E11	10.1	14	22	6	38	9.5	22	55
03270012	E12	11.1	14.9	22	7.2	38	9.5	22	60
03270014	E14	12.9	16.7	22	8	38	11	22	56
03270016	E16	14.7	19	22	9.3	38	12.5	22	60
03270018	E18	16.6	21	26.5	10.4	38	13.5	22	92
03270020	E20	18.4	23.5	26.5	12	38	15	22	98
03270024	E24	22.1	27.8	26	14.1	41.2	17.5	23.6	123

STAHLWILLE 1/2" DRIVE SOCKETS – SPLINE
50APSP

- MS-33787
- HPQ® high performance steel, gunmetal finish

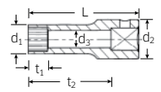




Part No.	Spline Size	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
03012024	12	3/8	15.5	22	8.6	38	9.5	22	55
03012028	14	7/16	18	23.7	10.4	38	11	22	65
03012034	18	9/16	22	23.7	13.5	38	12	20	71

STAHLWILLE 1/2" DRIVE DEEP SOCKET – SPLINE
50APLSP

- bolt clearance
- MS-33787
- HPQ® high performance steel, gunmetal finish

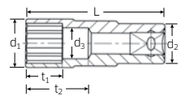




Part No.	Spline Size	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
03013028	14	7/16	18	23.7	10.4	50	11	34	83

STAHLWILLE 1/2" DRIVE DEEP SOCKET
51AP

- bolt clearance
- for the brakes on A320/A321
- HPQ® high performance steel, gunmetal finish





IN

Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
03421041	25/32	28	23	17.9	80	21	36	182

STAHLWILLE 1/2" DRIVE CLIP STRIPS
50CL

supplied without sockets



Part No.	Size	OAL (mm) (L)	Weight (g)
80500001	1	200	54
80500002	2	300	73

PROTO® 1/2" Drive Sockets

PROTO® 1/2" DRIVE SOCKETS – 12 POINT



TORQUEPLUS FASTENING SYSTEM

IN

- Ideal for use on stubborn, damaged or soft material fasteners
- TorquePlus™ features apply.

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5408T	1/4	1/4	23/32	23/64	23/32	1-34/64	0.11
J5410	5/16	17/32	55/64	23/64	23/32	1-34/64	0.11
J5412	3/8	9/16	55/64	23/64	7/8	1-31/64	0.11
J5414	7/16	43/64	55/64	23/64	7/8	1-31/64	0.11
J5416	1/2	47/64	55/64	23/64	7/8	1-31/64	0.11
J5417	17/32	7/8	55/64	23/64	23/32	1-31/64	0.12
J5418	9/16	13/16	55/64	23/64	51/64	1-1/2	0.13
J5419	19/32	7/8	55/64	9/16	21/32	1-1/2	0.13
J5420	5/8	7/8	7/8	9/16	21/32	1-1/2	0.14
J5421	21/32"	61/64	61/64	9/16	21/32	1-1/2	0.15
J5422	11/16	61/64	61/64	9/16	21/32	1-1/2	0.15
J5424	3/4	1-1/32	1-1/64	11/16	21/32	1-1/2	0.15
J5425	25/32	1-1/16	1-5/64	11/16	21/32	1-1/2	0.20
J5426	13/16	1-3/32	1-5/64	11/16	21/32	1-1/2	0.23
J5428	7/8	1-11/64	1-3/16	11/16	45/64	1-9/16	0.26
J5429	29/32	1-3/16	1-3/16	13/16	45/64	1-9/16	0.30
J5430	15/16	1-1/4	1-1/4	13/16	45/64	1-9/16	0.33
J5431	31/32	1-9/32	1-9/32	13/16	45/64	1-9/16	0.35
J5432	1	1-21/64	1-5/16	27/32	45/64	1-9/16	0.38
J5434	1-1/16	1-13/32	1-25/64	13/16	25/32	1-5/8	0.42
J5436	1-1/8	1-31/64	1-31/64	15/16	29/32	1-3/4	0.47
J5438	1-3/16	1-9/16	1-17/32	59/64	29/32	1-3/4	0.59
J5440	1-1/4	1-39/64	1-37/64	1	7/8	1-3/4	0.66
J5442	1-5/16	1-21/32	1-41/64	27/32	1-19/64	1-55/64	0.69
J5444	1-3/8	1-25/32	1-5/8	25/32	1-19/64	2	0.79
J5446	1-7/16	1-59/64	1-5/8	27/32	1-19/64	2-1/8	0.98
J5448	1-1/2	1-63/64	1-5/8	27/32	1-19/64	2-1/4	1.12

PROTO® 1/2" DRIVE SOCKETS – 12 POINT



TORQUEPLUS FASTENING SYSTEM

MM

- Ideal for use on stubborn, damaged or soft material fasteners
- TorquePlus™ features apply.

Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5408M	8	35/64	55/64	23/64	25/32	1-19/64	0.11
J5409M	9	19/32	55/64	23/64	25/32	1-31/64	0.11
J5410M	10	39/64	55/64	23/64	55/64	1-31/64	0.11
J5411M	11	45/64	55/64	23/64	55/64	1-31/64	0.11
J5412M	12	47/64	55/64	23/64	55/64	1-31/64	0.11
J5413M	13	3/4	55/64	23/64	55/64	1-31/64	0.12
J5414M	14	13/16	55/64	23/64	7/8	1-1/2	0.13
J5415M	15	55/64	55/64	37/64	7/8	1-1/2	0.13
J5416M	16	7/8	7/8	37/64	7/8	1-1/2	0.13
J5417M	17	61/64	61/64	37/64	7/8	1-1/2	0.14
J5418M	18	61/64	61/64	37/64	7/8	1-1/2	0.17
J5419M	19	1-1/32	1-1/32	11/16	27/32	1-1/2	0.19
J5420M	20	1-3/32	1-3/32	11/16	27/32	1-1/2	0.22
J5421M	21	1-3/32	1-3/32	11/16	27/32	1-1/2	0.24
J5422M	22	1-11/64	1-11/64	11/16	27/32	1-17/32	0.26
J5423M	23	1-13/64	1-13/64	25/32	59/64	1-17/32	0.27
J5424M	24	1-1/4	1-1/4	53/64	59/64	1-17/32	0.28
J5425M	25	1-9/32	1-9/32	53/64	59/64	1-17/32	0.30
J5426M	26	1-21/64	1-21/64	55/64	63/64	1-39/64	0.33

... CONTINUED

Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5427M	27	1-13/32	1-13/32	15/16	1-3/64	1-43/64	0.39
J5428M	28	1-31/64	1-31/64	63/64	1-5/32	1-25/32	0.48
J5429M	29	1-31/64	1-31/64	63/64	1-5/32	1-25/32	0.62
J5430M	30	1-9/16	1-17/32	63/64	1-5/32	1-25/32	0.63
J5431M	31	1-39/64	1-39/64	1-1/16	1-5/32	1-25/32	0.63
J5432M	32	1-39/64	1-39/64	1-1/8	1-7/32	1-27/32	0.63
J5434M	34	1-49/64	1-49/64	1	1-35/64	1-27/32	0.63
J5436M	36	1-31/32	1-31/32	1-3/8	1-39/64	2-15/64	1.04
J5438M	38	2-1/32	2-1/32	1-3/8	1-39/64	2-1/4	1.04

PROTO® 1/2" DRIVE SOCKETS – 6 POINT



TORQUEPLUS FASTENING SYSTEM

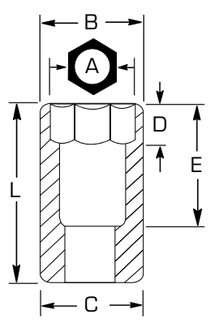
IN

- Ideal for use on stubborn, damaged or soft material fasteners
- TorquePlus™ features apply.

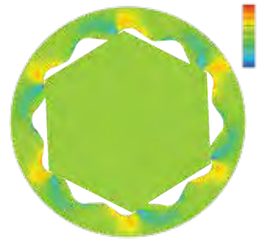
Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5408H	1/4	1/4	55/64	23/64	23/64	1-31/64	0.11
J5410H	5/16	17/32	55/64	23/64	25/32	1-31/64	0.11
J5412H	3/8	9/16	55/64	23/64	7/8	1-31/64	0.11
J5414H	7/16	43/64	55/64	23/64	7/8	1-31/64	0.11
J5416H	1/2	47/64	55/64	23/64	7/8	1-31/64	0.11
J5418H	9/16	13/16	55/64	23/64	53/64	1-1/2	0.13
J5419H	19/32	7/8	7/8	33/64	25/32	1-1/2	0.14
J5420H	5/8	7/8	7/8	9/16	21/32	1-1/2	0.14
J5421H	1-1/2	29/32	29/32	37/64	25/32	1-1/2	0.15
J5422H	11/16	61/64	61/64	9/16	21/32	1-1/2	0.15
J5424H	3/4	1-1/32	1-1/32	11/16	21/32	1-1/2	0.15
J5425H	1-1/2	1-1/16	1-1/16	11/16	25/32	1-1/2	0.19
J5426H	13/16	1-3/32	1-3/32	11/16	21/32	1-1/2	0.18
J5428H	7/8	1-11/64	1-11/64	11/16	45/64	1-9/16	0.26
J5430H	15/16	1-1/4	1-1/4	13/16	45/64	1-9/16	0.33
J5431H	1-9/16	1-9/32	1-9/32	13/16	27/32	1-9/16	0.31
J5432H	1	1-21/64	1-21/64	53/64	45/64	1-9/16	0.38
J5434H	1-1/16	1-13/32	1-13/32	13/16	25/32	1-41/64	0.42
J5436H	1-1/8	1-31/64	1-31/64	59/64	25/32	1-3/4	0.47
J5438H	1-3/16	1-9/16	1-9/16	59/64	25/32	1-3/4	0.59
J5440H	1-1/4	1-39/64	1-39/64	1	57/64	1-55/64	0.66
J5442H	1-15/16	1-21/32	1-21/32	27/32	49/64	1-3/4	0.69
J5444H	1-3/8	1-25/32	1-21/32	27/32	1-11/64	2-1/8	0.79
J5446H	1-7/16	1-59/64	1-21/32	27/32	1-11/64	2-1/8	0.98
J5448H	1-1/2	1-63/64	1-21/32	27/32	1-11/64	2-1/4	0.96
J5450H	1-9/16	2-1/32	1-5/8	1	1-9/32	2-1/4	1.12

TorquePlus – Features & Benefits

- High performance drive configuration allows for quick and easy socket engagement to the fastener flats, not the corners.
- Employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage.
- The internal design minimizes fastener rounding, helps to extend fastener life, and allows the user to more easily turn worn, rounded, or rusted fasteners.



TORQUEPLUS FASTENING SYSTEM



PROTO® 1/2" DRIVE SOCKETS – 6 POINT

TORQUEPLUS FASTENING SYSTEM

MM

- Ideal for use on stubborn, damaged or soft material fasteners
- TorquePlus™ features apply.



Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5408MH	8	35/64	55/64	23/64	25/32	1-19/64	0.11
J5409MH	9	19/32	55/64	23/64	25/32	1-31/64	0.11
J5410MH	10	39/64	55/64	23/64	55/64	1-31/64	0.11
J5411MH	11	45/64	55/64	23/64	55/64	1-31/64	0.11
J5412MH	12	47/64	55/64	23/64	55/64	1-31/64	0.11
J5413MH	13	3/4	55/64	23/64	55/64	1-31/64	0.12
J5414MH	14	13/16	55/64	15/16	7/8	1-1/2	0.12
J5415MH	15	7/8	7/8	37/64	7/8	1-1/2	0.13
J5416MH	16	61/64	61/64	37/64	7/8	1-1/2	0.13
J5417MH	17	61/64	61/64	37/64	7/8	1-1/2	0.14
J5418MH	18	63/64	63/64	37/64	7/8	1-1/2	0.17
J5419MH	19	1-1/32	1-1/32	11/16	27/32	1-1/2	0.19
J5420MH	20	1-3/32	1-3/32	11/16	27/32	1-1/2	0.22
J5421MH	21	1-3/32	1-3/32	11/16	27/32	1-1/2	0.24
J5422MH	22	1-11/64	1-11/64	11/16	27/32	3-1/4	0.26
J5423MH	23	1-13/64	1-13/64	25/32	59/64	3-1/4	0.27
J5424MH	24	1-1/4	1-1/4	53/64	59/64	3-1/4	0.28
J5425MH	25	1-9/32	1-9/32	53/64	59/64	3-1/4	0.30
J5426MH	26	1-21/64	1-21/64	55/64	63/64	3-1/4	0.33
J5427MH	27	1-13/32	1-13/32	15/16	1-3/64	3-1/4	0.39
J5428MH	28	1-31/64	1-31/64	63/64	1-5/32	3-1/4	0.48
J5429MH	29	1-31/64	1-31/64	63/64	1-5/32	3-1/4	0.62
J5430MH	30	1-9/16	1-17/32	63/64	1-5/32	3-1/4	0.63
J5431MH	31	1-39/64	1-39/64	1-1/16	1-5/32	3-1/4	0.63
J5432MH	32	1-39/64	1-39/64	1-1/8	1-7/32	1-27/32	0.63
J5434MH	34	1-49/64	1-49/64	1	1-35/64	1-27/32	0.63
J5436MH	36	1-31/32	1-31/32	1-3/8	1-39/64	2-1/4	1.04

PROTO® 1/2" DRIVE DEEP SOCKETS – 6 POINT

TORQUEPLUS FASTENING SYSTEM

IN

- Ideal for use on stubborn, damaged or soft material fasteners
- TorquePlus™ features apply.



Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5312H	3/8	9/16	7/8	1/4	2-39/64	3-1/4	0.30
J5314H	7/16	9/16	7/8	23/64	2-39/64	3-1/4	0.30
J5316H	1/2	47/64	55/64	25/32	2-39/64	3-1/4	0.31
J5318H	9/16	13/16	27/32	7/8	2-39/64	3-1/4	0.31
J5320H	5/8	7/8	7/8	1-3/16	2-39/64	3-1/4	0.31
J5322H	11/16	31/32	31/32	1-3/16	2-39/64	3-1/4	0.33
J5324H	3/4	1-3/64	1-3/64	1-3/16	2-39/64	3-1/4	0.40
J5326H	13/16	1-1/8	1-1/8	1-3/16	2-39/64	3-1/4	0.43
J5328H	7/8	1-11/64	1-11/64	1-3/16	2-39/64	3-1/4	0.54
J5330H	15/16	1-1/4	1-1/4	1-3/16	2-39/64	3-1/4	0.65
J5332H	1	1-21/64	1-21/64	1-3/16	2-39/64	3-1/4	0.71
J5334H	1-1/16	1-7/16	1-7/16	1-3/16	2-1/4	3-1/4	0.72
J5336H	1-1/8	1-1/2	1-1/2	1	2-1/4	3-1/4	0.74
J5338H	1-3/16	1-35/64	1-35/64	1-3/32	2-1/4	3-1/4	0.85
J5340H	1-1/4	1-19/32	1-19/32	1-3/16	2-1/4	3-1/4	1.02
J5342H	1-5/16	1-7/8	1-5/8	27/32	2-19/64	3-1/2	1.06
J5344H	1-3/8	1-7/8	1-5/8	29/32	2-1/4	3-1/2	1.23
J5346H	1-7/16	2-1/16	1-5/8	61/64	2-1/4	3-1/2	1.27
J5348H	1-1/2	2	1-5/8	1	2-1/4	3-1/2	1.58

PROTO® 1/2" DRIVE DEEP SOCKETS – 12 POINT

TORQUEPLUS FASTENING SYSTEM

IN

- Ideal for use on stubborn, damaged or soft material fasteners
- TorquePlus™ features apply.



Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5312	3/8	9/16	7/8	1/4	2-39/64	3-1/4	0.28
J5314	7/16	9/16	7/8	23/64	2-39/64	3-1/4	0.28
J5316	1/2	47/64	55/64	25/32	2-39/64	3-1/4	0.29
J5318	9/16	13/16	27/32	15/16	2-39/64	3-1/4	0.29
J5320	5/8	7/8	7/8	1-7/32	2-39/64	3-1/4	0.30
J5322	11/16	31/32	31/32	1-7/32	2-39/64	3-1/4	0.42
J5324	3/4	1-3/64	1-3/64	1-7/32	2-39/64	3-1/4	0.42
J5326	13/16	1-3/32	1-3/32	1-7/32	2-39/64	3-1/4	0.52
J5328	7/8	1-11/64	1-11/64	1-7/32	2-39/64	3-1/4	0.58
J5330	15/16	1-1/4	1-1/4	1-7/32	2-39/64	3-1/4	0.67
J5332	1	1-21/64	1-21/64	1-7/32	2-29/64	3-1/4	0.67
J5334	1-1/16	1-13/32	1-13/32	1-9/32	2-29/64	3-1/4	0.75
J5336	1-1/8	1-1/2	1-1/2	1-5/32	2-29/64	3-1/4	0.83
J5340	1-1/4	1-9/16	1-9/16	1-13/32	2-29/64	3-1/4	1.06
J5338	1-3/16	1-35/64	1-35/64	1-7/64	2-1/4	3-1/4	0.83
J5342	1-5/16	1-7/8	1-5/8	27/32	2-1/4	3-1/2	1.06
J5344	1-3/8	1-7/8	1-5/8	61/64	2-1/4	3-1/2	1.23
J5346	1-7/16	2-1/16	1-5/8	61/64	2-1/4	3-1/2	1.27
J5348	1-1/2	2-1/16	1-5/8	1	2-1/4	3-1/2	1.58

PROTO® 1/2" DRIVE DEEP SOCKETS – 12 POINT

TORQUEPLUS FASTENING SYSTEM

MM

- Ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5308M	8	35/64	55/64	23/64	25/32	1-19/64	0.11
J5309M	9	19/32	55/64	23/64	25/32	1-31/64	0.11
J5310M	10	39/64	55/64	23/64	55/64	1-31/64	0.11
J5311M	11	45/64	55/64	23/64	55/64	1-31/64	0.11
J5312M	12	47/64	55/64	23/64	55/64	1-31/64	0.11
J5313M	13	3/4	55/64	23/64	55/64	1-31/64	0.12
J5314M	14	13/16	55/64	15/16	7/8	1-1/2	0.12
J5315M	15	7/8	7/8	37/64	7/8	1-1/2	0.13
J5316M	16	61/64	61/64	37/64	7/8	1-1/2	0.13
J5317M	17	61/64	61/64	37/64	7/8	1-1/2	0.14
J5318M	18	63/64	63/64	37/64	7/8	1-1/2	0.17
J5319M	19	1-1/32	1-1/32	11/16	27/32	1-1/2	0.19
J5320M	20	1-3/32	1-3/32	11/16	27/32	1-1/2	0.22
J5321M	21	1-3/32	1-3/32	11/16	27/32	1-1/2	0.24
J5322M	22	1-11/64	1-11/64	11/16	27/32	3-1/4	0.26
J5323M	23	1-13/64	1-13/64	25/32	59/64	3-1/4	0.27
J5324M	24	1-1/4	1-1/4	53/64	59/64	3-1/4	0.28
J5325M	25	1-9/32	1-9/32	53/64	59/64	3-1/4	0.30
J5326M	26	1-21/64	1-21/64	55/64	63/64	3-1/4	0.33
J5327M	27	1-13/32	1-13/32	15/16	1-3/64	3-1/4	0.39
J5328M	28	1-31/64	1-31/64	63/64	1-5/32	3-1/4	0.48
J5329M	29	1-31/64	1-31/64	63/64	1-5/32	3-1/4	0.62
J5330M	30	1-9/16	1-17/32	63/64	1-5/32	3-1/4	0.63
J5331M	31	1-39/64	1-39/64	1-1/16	1-5/32	3-1/4	0.63
J5432M	32	1-39/64	1-39/64	1-1/8	1-7/32	1-27/32	0.63
J5434M	34	1-49/64	1-49/64	1	1-35/64	1-27/32	0.63
J5436M	36	1-31/32	1-31/32	1-3/8	1-39/64	2-15/64	1.04
J5438M	38	2-1/32	2-1/32	1-3/8	1-39/64	2-1/4	1.04

PROTO® 1/2" DRIVE SOCKETS – 8 POINT



ASME B107.500

IN

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5412S	3/8	45/64	55/64	1/4	1-1/64	1-7/16	0.11
J5414S	7/16	51/64	51/64	5/16	1-1/8	1-7/16	0.11
J5416S	1/2	59/64	59/64	11/32	1-3/32	1-7/16	0.11
J5418S	9/16	1	1	3/8	1-1/64	1-1/2	0.13
J5420S	5/8	1-5/64	1-5/64	37/64	1-3/32	1-1/2	0.14
J5422S	11/16	1-11/64	1-11/64	13/32	1-1/64	1-1/2	0.15
J5424S	3/4	1-15/64	1-15/64	29/64	1-1/16	1-1/2	0.18
J5426S	13/16	1-23/64	1-23/64	27/32	1-5/32	1-5/8	0.23
J5428S	7/8	1-1/2	1-1/2	27/32	1-1/8	1-5/8	0.51
J5432S	1	1-11/16	1-11/16	3/4	11/16	1-3/4	0.80

PROTO® 1/2" DRIVE SPARK PLUG SOCKETS – 6 POINT

- With rubber insert.
- Ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



ASME B107.500

IN

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5320-50	5/8	-	-	-	-	2-1/2	0.23
J5326HPA	13/16	-	-	-	-	2-47/64	0.35

PROTO® 1/2" DRIVE SOCKETS – SPLINE

- High strength in a compact profile.
- Standard depth and deep sockets are available in the three smaller drive sizes – 1/4", 3/8", and 1/2".
- Can be used on spline fasteners, as well as on 4, 6, 8 or 12 point fasteners.



Part No.	Size (in) (A)	Spline Size	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clear-ance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5416SPL	1/2	#16	7/8	7/8	31/64	13/16	1-7/16	0.11
J5418SPL	9/16	#18	7/8	7/8	31/64	13/16	1-7/16	0.11
J5420SPL	5/8	#20	7/8	7/8	17/32	1-1/16	1-9/16	0.14
J5422SPL	11/16	#22	61/64	61/64	17/32	1-1/16	1-9/16	0.17
J5424SPL	3/4	#24	1-3/64	1-3/64	17/32	1-1/16	1-9/16	0.20
J5426SPL	13/16	#26	1-1/8	1-1/8	17/32	1-1/16	1-9/16	0.23
J5428SPL	7/8	#28	1-3/16	1-3/16	17/32	1-1/16	1-9/16	0.24
J5430SPL	15/16	#30	1-5/16	1-5/16	17/32	1-1/16	1-9/16	0.30

PROTO® 1/2" DRIVE DEEP SOCKETS – SPLINE

- High strength in a compact profile.
- Standard depth and deep sockets are available in the three smaller drive sizes – 1/4", 3/8", and 1/2".
- Can be used on spline fasteners, as well as on 4, 6, 8 or 12 point fasteners.

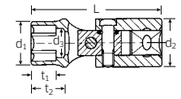


Part No.	Size (in) (A)	Spline Size	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clear-ance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5316DPL	1/2	#16	7/8	7/8	31/64	2-7/8	3-3/8	0.24
J5318DPL	9/16	#18	7/8	7/8	31/64	2-7/8	3-3/8	0.28
J5320DPL	5/8	#20	7/8	7/8	33/64	2-7/8	3-3/8	0.32
J5322DPL	11/16	#22	61/64	61/64	17/32	2-7/8	3-3/8	0.29
J5324DPL	3/4	#24	1-3/64	1-3/64	17/32	2-7/8	3-3/8	0.33
J5326DPL	13/16	#26	1-1/8	1-1/8	17/32	2-7/8	3-3/8	0.37
J5328DPL	7/8	#28	1-3/16	1-3/16	17/32	2-7/8	3-3/8	0.41
J5330DPL	15/16	#30	1-5/16	1-5/16	17/32	2-7/8	3-3/8	0.48

Stahlwille 1/2" Universal Sockets

STAHLWILLE 1/2" DRIVE UNIVERSAL SOCKETS – 12 POINT 53

HPQ® high performance steel, chrome plated





MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	Bolt Clearance Dia. (mm) (D3)	OAL (mm) (L)	Bolt Clearance Depth (mm) (T2)	Weight (g)
03040010	10	14.7	25	9	70	20	136
03040013	13	18.4	25	12	70	20	140
03040016	16	22.4	25	15	69	17	141
03040017	17	23.5	25	16	70	18	141
03040018	18	25	25	17	70	18	145
03040019	19	26.3	25	18	70	17.5	148

PROTO® 1/2" Universal Sockets

PROTO® 1/2" DRIVE UNIVERSAL SOCKETS – 12 POINT

- Ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



IN

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5475A	1/2	23/32	15/16	3/8	29/64	2-15/32	0.25
J5476A	9/16	13/16	15/16	13/32	1/2	2-21/32	0.26
J5477A	5/8	15/16	15/16	29/64	1/2	2-21/32	0.27

PROTO® 1/2" DRIVE METRIC UNIVERSAL SOCKETS – 6 POINT

- Universal sockets permit turning at an angle up to 65° where obstructions may prevent a straight application.
- Ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- TorquePlus™ features apply.



MM

Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5484HAM	21	1-3/16	1	1/2	1/2	2-9/16	0.37
J5485HAM	22	1-1/4	1	1/2	1/2	2-9/16	0.38
J5487HAM	24	1-3/16	1	9/16	9/16	2-9/16	0.39

Stahlwille 1/2" Drive Bit Sockets

STAHLWILLE 1/2" DRIVE HEX BIT SOCKETS 54

MM

- DIN 7422
- Chrome Alloy Steel, chrome plated



Part No.	Size (mm)	Bit Length (mm)	OAL (mm)	Weight (g)
03050004	4	60	22	68
03050005	5	60	22	68
03050006	6	60	22	71
03050007	7	60	22	75
03050008	8	60	22	70
03050010	10	60	22	97
03050012	12	60	20	122
03050014	14	60	20	135
03050017	17	60	20	186
03050019	19	60	20	242

STAHLWILLE 1/2" DRIVE HEX BIT SOCKETS 54A

IN

- DIN 7422
- Chrome Alloy Steel, chrome plated



Part No.	Size (in)	Bit Length (mm)	OAL (mm)	Weight (g)
03450014	7/32	60	22	70
03450016	1/4	60	22	75
03450020	5/16	60	22	81
03450024	3/8	60	22	90
03450028	7/16	60	22	103
03450032	1/2	60	20	125
03450034	9/16	60	20	137
03450036	5/8	60	20	169
03450040	3/4	60	20	244

STAHLWILLE 1/2" DRIVE LONG HEX BIT SOCKETS 1054/2054

MM

- DIN 7422
- Chrome Alloy Steel, chrome plated

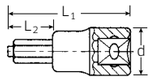


Part No.	No.	Size (mm)	Bit L. (mm)	OAL (mm)	Weight (g)
03151205	2054/5	5	120	82	80
03151206	2054/6	6	120	82	84
03151207	2054/7	7	120	82	96
03151208	1054/8K	8	120	82	104
03151410	1054/10	10	140	102	150
03151412	1054/12	12	140	100	200
03151414	2054/14	14	140	100	231

STAHLWILLE 1/2" DRIVE HEX BIT SOCKETS – WITH GUIDE PIN 1054/3054

MM

Chrome Alloy Steel, chrome plated





Part No.	Size (mm)	Bit Length (mm)	OAL (mm)	Weight (g)
03070005	5	60	22	65
03070006	6	60	22	71
03070008	8	60	22	80
03070010	10	60	22	95
03070012	12	60	20	120
03070014	14	60	20	131

STAHLWILLE 1/2" DRIVE SPECIAL HEX BIT SOCKETS 54IC

MM

- DIN 7422
- Chrome Alloy Steel, chrome plated

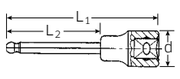


Part No.	No.	Size (mm)	Bit L. (mm)	OAL (mm)	Weight (g)
03151805	1054/5	5	180	20	118
03150706	1054/6	6	70	32	72
03151006	3054/6	6	100	62	80
03152206	1054/6L	6	220	182	108
03151007	1054/7	7	100	62	87
03150808	3054/8	8	80	42	88
03151408	1054/8	8	140	102	114
03150713	1054/13	13	70	25	130

STAHLWILLE 1/2" DRIVE HEX BIT SOCKETS – BALLPOINT 54KK

MM

- swivel angle up to 25° each side
- Chrome Alloy Steel, chrome plated





Part No.	Size (mm)	Bit L. (mm)	OAL (mm)	Weight (g)
03280005	5	100	62	75
03280006	6	100	62	80
03280007	7	100	62	85
03280008	8	100	62	95
03280010	10	100	62	120

STAHLWILLE 1/2" DRIVE LONG HEX BIT SOCKETS – BALLPOINT 1054KK

MM

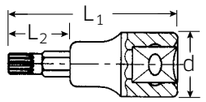
- swivel angle up to 25° each side
- special lengths
- Chrome Alloy Steel, chrome plated



Part No.	Size (mm)	Bit L. (mm)	OAL (mm)	Weight (g)
03310005	5	238	200	145
03310008	8	238	200	154

STAHLWILLE 1/2" DRIVE TRI-SQUARE SCREWDRIVER SOCKETS 54X

- DIN 2324
- Chrome Alloy Steel, chrome plated

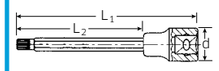




Part No.	Size	Bit L. (mm)	OAL (mm)	Weight (g)
03060005	M5	60	22	67
03060006	M6	60	22	74
03060008	M8	60	22	79
03060010	M10	60	22	94
03060012	M12	60	20	120
03060014	M14	60	20	128
03060016	M16	60	20	174

STAHLWILLE 1/2" DRIVE LONG TRI-SQUARE SCREWDRIVER SOCKETS 3054X

- DIN 2324
- Chrome Alloy Steel, chrome plated





Part No.	Size	Bit L. (mm)	OAL (mm)	Weight (g)
03261408	M8	140	102	109
03261410	M10	140	102	142
03261412	M12	140	102	160
03261414	M14	140	100	225

STAHLWILLE 1/2" DRIVE SPECIAL TRI-SQUARE SCREWDRIVER SOCKETS 1054X/2054X

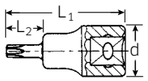
- DIN 2324
- Chrome Alloy Steel, chrome plated



Part No.	No.	Size	Bit L. (mm)	OAL (mm)	Weight (g)
03160808	1054X	M8	80	42	86
03161208	2054X	M8	120	82	104
03161110	2054X	M10	110	72	130
03161112	2054X	M12	110	70	168

STAHLWILLE 1/2" DRIVE TORX® SCREWDRIVER SOCKETS 54TX

Chrome Alloy Steel, chrome plated





Part No.	Size	Size (mm)	Bit L. (mm)	OAL (mm)	Weight (g)
03100020	T20	3.8	55	17	71
03100025	T25	4.4	55	17	71
03100027	T27	5	55	17	72
03100030	T30	5.5	55	17	72
03100040	T40	6.6	55	17	75
03100045	T45	7.8	55	17	74
03100050	T50	8.8	55	17	87
03100055	T55	11.2	58	18	110
03100060	T60	13.2	58	18	113
03100070	T70	15.5	60	20	155

STAHLWILLE 1/2" DRIVE TORX® SCREWDRIVER SOCKETS 1054TX/2054TX

Chrome Alloy Steel, chrome plated



Part No.	No.	Size	Bit L. (mm)	OAL (mm)	Weight (g)
03131230	1054TX	T30	120	82	99
03131440	2054TX	T40	140	102	110
03131445	2054TX	T45	140	102	111
03131450	1054TX	T50	140	102	140
03131455	1054TX	T55	140	102	159
03131460	1054TX	T60	140	100	221

STAHLWILLE 1/2" DRIVE LONG TORX® SCREWDRIVER SOCKETS 1054TX

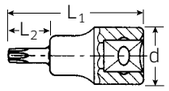
- DIN 2324
- Chrome Alloy Steel, chrome plated



Part No.	Size	Size (mm)	Bit L. (mm)	OAL (mm)	Weight (g)
03131240	T40	6.6	120	82	100
03131245	T45	7.8	120	82	100
03131070	T70	15.5	107	67	201

STAHLWILLE 1/2" DRIVE TORX® SCREWDRIVER SOCKETS 54TXB

- with hollow security point (Torx® TAMPER RESISTANT)
- Chrome Alloy Steel, chrome plated





Part No.	Size	Size (mm)	Bit L. (mm)	OAL (mm)	Weight (g)
03110020	T20	3.8	55	17	70
03110025	T25	4.4	55	17	65
03110027	T27	5	55	17	71
03110030	T30	5.5	55	17	71
03110040	T40	6.6	55	17	71
03110045	T45	7.8	55	17	72
03110050	T50	8.8	55	17	86
03110055	T55	11.2	58	18	111
03110060	T60	13.2	58	18	113

STAHLWILLE 1/2" DRIVE BIT HOLDER 5/16" 543

- 5/16" inside hexagon with a collar-thrust spring
- DIN 3126/ISO 1173 D 8
- bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173)



Part No.	Drive Size	OAL (mm)	Dia (mm)	Weight (g)
13180010	1/2"	38	22	65

PROTO® 1/2" Drive Bit Sockets

PROTO® 1/2" DRIVE HEX BIT SOCKETS

IN

- With a hex opening to hold the bit allowing the bit holder to take the full load of torque.
- Made of heat-treated alloy steel.
- Polished chrome finsh.



Part No.	Size (in)	Bit Length (in)	OAL (in)	Weight (lbs)
J54411/4	1/4	1-3/4	3-1/4	0.19
J54415/16	5/16	1-3/4	3-1/4	0.22
J54413/8	3/8	1-3/4	3-1/4	0.25
J54417/16	7/16	1-3/4	3-1/4	0.28
J54411/2	1/2	1-7/8	3-5/8	0.46
J54419/16	9/16	1-7/8	3-5/8	0.50
J54415/8	5/8	2	4	0.85
J54413/4	3/4	2	4	0.92

PROTO® 1/2" DRIVE HEX BIT SOCKETS

MM

- With a hex opening to hold the bit allowing the bit holder to take the full load of torque.
- Made of heat-treated alloy steel.
- Polished chrome finsh.



Part No.	Size (in)	Bit Length (in)	OAL (in)	Weight (lbs)
J5441-6M	6	1-3/4	3-1/4	0.20
J5441-8M	8	1-3/4	3-1/4	0.22
J5441-10M	10	1-3/4	3-1/4	0.26
J5441-12M	12	1-3/4	3-1/4	0.29
J5441-13M	13	1-7/8	3-41/64	0.46
J5441-14M	14	1-7/8	3-41/64	0.50
J5441-15M	15	1-7/8	3-41/64	0.50
J5441-17M	17	2	4	0.87
J5441-18M	18	2	4	0.90
J5441-19M	19	2	4	0.94

PROTO® 1/2" DRIVE PHILLIPS® SCREWDRIVER BIT SOCKETS

- With a hex opening to hold the bit allowing the bit holder to take the full load of torque.
- Made of heat-treated alloy steel.
- Polished chrome finsh.



Part No.	Tip Size	Tip Width (in)	OAL (in)	Weight (lbs)
J5402	#2	2-5/32	2-5/32	0.19
J5403	#3	2-5/32	2-5/32	0.18
J5404	#4	2-5/32	2-5/32	0.19

PROTO® 1/2" DRIVE EXTRA-LONG HEX BIT SOCKETS

IN

- With a hex opening to hold the bit allowing the bit holder to take the full load of torque.
- Made of heat-treated alloy steel.
- Polished chrome finsh.



Part No.	Size (in)	Bit Length (in)	OAL (in)	Weight (lbs)
J54411/4XL	1/4	3-1/8	4-5/8	0.20
J54415/16XL	5/16	4-1/8	5-5/8	0.29
J54413/8XL	3/8	4-1/8	5-5/8	0.42
J54411/2XL	1/2	5-3/8	7-1/8	0.60
J54419/16XL	9/16	5-3/8	7-1/8	0.77
J54415/8XL	5/8	5-3/16	7-3/16	0.86

PROTO® 1/2" DRIVE EXTRA-LONG HEX BIT SOCKETS

MM

- With a hex opening to hold the bit allowing the bit holder to take the full load of torque.
- Made of heat-treated alloy steel.
- Polished chrome finsh.



Part No.	Size (in)	Bit Length (in)	OAL (in)	Weight (lbs)
J5441-12MXL	12	5-5/8	7-1/8	0.50
J5441-14MXL	14	5-3/8	7-1/8	0.75
J5441-17MXL	17	5-1/8	7-1/8	1.20

PROTO® 1/2" DRIVE SLOTTED SCREWDRIVER BIT SOCKETS

- Made of heat-treated alloy steel.
- Ball detent.



Part No.	Tip W. (in)	Tip Thick. (in)	OAL (in)	Weight (lbs)
J5407A	7/16	3/64	3-5/32	0.20
J5408A	1/2	5/64	3-5/32	0.22
J5409A	5/8	3/32	3-5/32	0.27

PROTO® 1/2" DRIVE DRAG LINK SOCKETS



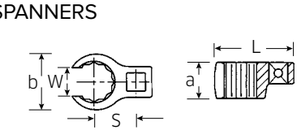
Part No.	Size (in)	Tip Thick. (in)	OAL (in)	Weight (lbs)
J5444A	3/4	0.115	1-5/8	0.14
J5446A	15/16	0 .154	1-5/8	0.17

Stahlwille 1/2" Crowfoot Wrenches

STAHLWILLE 1/2" DRIVE CROWRING SPANNERS 440

MM

- Chrome Alloy Steel, chrome plated
- Caution! Modified settings on torque wrench (refer to note on page 201)

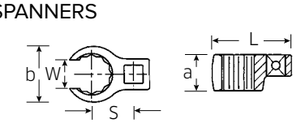


Part No.	Size (mm)	OAL (mm) (L)	Outside Dia. (mm) (b)	Inside Dia. (mm) (W)	Weight (g)
03190028	28	56.8	42.1	21	120
03190030	30	63	48	22	155
03190032	32	62.5	48	24	145
03190034	34	64.2	50	27	146
03190036	36	66.5	51.9	27	150
03190038	38	68.1	53.9	28.6	147
03190040	40	71.8	57.9	31	160
03190041	41	71.8	57.9	31	169
03190042	42	71	57.9	33.2	189
03190046	46	77.7	64.2	34.1	215
03190050	50	83.2	70.5	39.7	295

STAHLWILLE 1/2" DRIVE CROWRING SPANNERS 440A

IN

- Chrome Alloy Steel, chrome plated
- Caution! Modified settings on torque wrench (refer to note on page 201)



Part No.	Size (in)	OAL (mm) (L)	Outside Dia. (mm) (b)	Inside Dia. (mm) (W)	Weight (g)
03490052	1 1/8	56.8	42.1	21	110
03490056	1 1/4	62.5	48	23.8	137
03490058	1 5/16	62.3	48	24.6	130
03490060	1 3/8	64.2	50	27	138
03490062	1 7/16	66.5	51.9	27	143
03490064	1 1/2	68.1	53.9	28.6	152
03490065	1 9/16	70.1	55.9	29.4	172
03490066	1 5/8	71.8	57.9	31	169
03490068	1 3/4	75.6	62	33.2	199
03490069	1 13/16	77.7	64.2	34.1	229
03490072	2	83.2	70.5	39.7	277
03490076	2 1/4	91.2	78.7	42.8	337
03490077	2 5/16	93.3	80.9	43.6	309
03490078	2 3/8	95.2	83	46	385

STAHLWILLE 3/8" DRIVE CROWFOOT SPANNERS – HEAVY-DUTY 540A HD

IN

- for particularly high loadings, e.g. stainless steel screw fittings
- full use of jaws in conjunction with standard ratchets
- chrome plated
- supplied without ratchet
- Caution! Modified settings on torque wrench (refer to note on page 201)

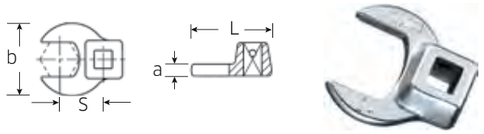


Part No.	Size (in)	OAL (in) (L)	Outside Dia. (mm) (b)	Thickness (mm) (a)	Nut Depth (mm) (S)	Weight (g)
03501064	1 1/2	76	70	16	45	310
03501069	1 13/16	85	84	16	49.6	400
03501072	2	89	90	16	52.3	451
03501074	2 1/8	91.5	92.8	16	54.2	460
03501075	2 3/16	93	96	16	55.1	480
03501076	2 1/4	95	99	16	56	500

STAHLWILLE 1/2" DRIVE CROWFOOT SPANNERS 540A

IN

- Chrome Alloy Steel, chrome plated
- Caution! Modified settings on torque wrench (refer to note on page 201)



Part No.	Size (in)	OAL (in) (L)	Outside Dia. (mm) (b)	Thickness (mm) (a)	Nut Depth (mm) (S)	Weight (g)
03 50 00 78	2 3/8	81.5	96	8	54.3	214

PROTO® 1/2" Crowfoot Wrenches

PROTO® 1/2" DRIVE FLARE NUT CROWFOOT WRENCHES

IN



- Designed for speed and safety.
- Special heat-treated alloy steel helps increase strength and durability.
- 12 Point Box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Full Polish finish provides corrosion resistance and easy to clean surfaces.

Part No.	Size (in)	OAL (in)	Weight (lbs)
J5336FL	1-1/8	2-13/16	0.19
J5338FL	1-3/16	2-7/8	0.19
J5340FL	1-1/4	3	0.19
J5342FL	1-5/16	3-1/16	0.19
J5344FL	1-3/8	3-5/16	0.25
J5346FL	1-7/16	3-3/8	0.25
J5348FL	1-1/2	3-7/16	0.25
J5350FL	1-9/16	3-9/16	0.31

Part No.	Size (in)	OAL (in)	Weight (lbs)
J5352FL	1-5/8	3-3/4	0.31
J5354FL	1-11/16	3-13/16	0.31
J5356FL	1-3/4	3-7/8	0.38
J5358FL	1-13/16	4	0.38
J5360FL	1-7/8	4-1/4	0.45
J5362FL	1-15/16	4-5/16	0.50
J5364FL	2	4-7/16	0.50

PROTO® 1/2" DRIVE CROWFOOT WRENCHES

ASME B107.500

IN



- Crowfoot wrenches are used in hard to reach, restricted access situations where a standard wrench or ratchet cannot reach.
- Anti-Slip Design Open End (ASD).
- The arched surfaces are designed to spread the contact forces over a greater area and they keep the loads off the corners of the fastener which helps prevent fastener rounding.
- Broad size range ensures the right tool for the application will be available.
- Typically used in lower torque applications.
- Full Polish finish provides corrosion resistance and easy to clean surfaces.
- Locking hole feature helps keep the crowfoot wrench engaged on the extension during use reducing downtime due to detachment of crowfoot in awkward spaces.
- Use with locking extensions to reach into spaces too small for a mechanic's arm or where the fastener is out of site.

Part No.	Size (in)	OAL (in)	Weight (lbs)
J5330CF	15/16	2-13/16	0.47
J5332CF	1	2-13/16	0.46
J5334CF	1-1/16	2-7/8	0.51
J5336CF	1-1/8	3	0.54
J5338CF	1-3/16	3	0.58
J5340CF	1-1/4	3-5/16	0.66
J5342CF	1-5/16	3-5/16	0.66
J5344CF	1-3/8	3-3/8	0.72
J5346CF	1-7/16	3-3/8	0.75
J5348CF	1-1/2	3-7/16	0.77
J5350CF	1-9/16	3-1/2	0.80

Part No.	Size (in)	OAL (in)	Weight (lbs)
J5352CF	1-5/8	3-1/2	0.83
J5354CF	1-11/16	3-13/16	0.95
J5356CF	1-3/4	3-13/16	0.98
J5358CF	1-13/16	3-7/8	1.01
J5360CF	1-7/8	3-7/8	1.05
J5364CF	2	3-15/16	1.10
J5368CF	2-1/8	4-1/16	1.09
J5372CF	2-1/4	4-3/8	1.27
J5376CF	2-3/8	4-7/16	1.29
J5378CF	2-7/16	4-7/16	1.28
J5380CF	2-1/2	4-1/2	1.25

PROTO® 1/2" DRIVE FULL POLISH CROWFOOT WRENCHES

ASME B107.500

MM



- Crowfoot wrenches are used in hard to reach, restricted access situations where a standard wrench or ratchet cannot reach.
- Anti-Slip Design Open End (ASD).
- The arched surfaces are designed to spread the contact forces over a greater area and they keep the loads off the corners of the fastener which helps prevent fastener rounding.
- Broad size range ensures the right tool for the application will be available.
- Typically used in lower torque applications.
- Full Polish finish provides corrosion resistance and easy to clean surfaces.
- Locking hole feature helps keep the crowfoot wrench engaged on the extension during use reducing downtime due to detachment of crowfoot in awkward spaces.
- Use with locking extensions to reach into spaces too small for a mechanic's arm or where the fastener is out of site.

Part No.	Size (mm)	OAL (in)	Weight (lbs)
J5320MCF	20	2-19/32	0.43
J5321MCF	21	2-37/64	0.43
J5322MCF	22	2-13/16	0.45
J5323MCF	23	2-13/16	0.47
J5324MCF	24	2-51/64	0.47
J5325MCF	25	2-27/32	0.48
J5326MCF	26	2-29/32	0.49
J5327MCF	27	2-29/32	0.51
J5328MCF	28	3	0.54

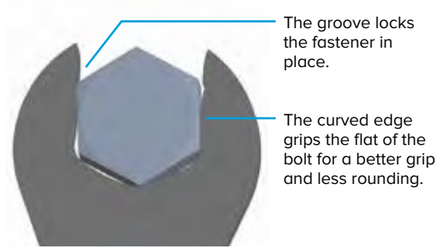
Part No.	Size (mm)	OAL (in)	Weight (lbs)
J5329MCF	29	3-1/32	0.58
J5330MCF	30	3-1/32	0.66
J5332MCF	32	3-19/64	0.66
J5335MCF	35	3-23/64	0.72
J5336MCF	36	3-13/32	0.75
J5338MCF	38	3-7/16	0.77
J5341MCF	41	3-1/2	0.83
J5342MCF	42	3-51/64	0.95
J5346MCF	46	3-55/64	1.01

Wrenches with Anti-Slip Design (ASD) – Features & Benefits

The Anti-Slip Design consists of two features:

- A notch to lock the fastener in place.
- A curve for greater contact area against the fastener.

An ASD Wrench does not apply load to the corners of the fastener, so it helps to prevent rounding. Because of the greater surface contact, the wrench can also successfully apply greater torque without slipping.



Stahlwille 1/2" Drive Sets

STAHLWILLE 1/2" DRIVE 17 PIECE SOCKET SET ES 52/17

MM

- In 175 x 350 x 47mm inlay

Contents:

- 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 27, 30, 32 mm



Part No.	Description	Weight (g)
96838112	17 Piece Socket Set Metric	1760

STAHLWILLE 1/2" DRIVE 8 PIECE LONG SOCKET SET 51/8

MM

- in softcase with foam inlay

Contents:

- 13, 17, 19, 22, 24, 27, 30, 32 mm



Part No.	Description	Weight (g)
96030212	8 Piece Long Socket Set Metric	2378

STAHLWILLE 1/2" DRIVE 7 PIECE RATCHET DRIVE SET QUICKRELEASE 512QR N/7

- in sturdy, stackable ABS plastic case

Contents:

- 1 ratchet No 512QR N
- 4 extensions No 509QR/2 (52 mm), No 509QR/3 (75 mm), No 509QR/5 (130 mm), No 509QR/10 (255 mm)
- 1 universal joint No 510QR
- 1 T-handle No 506QR



Part No.	Description	Weight (g)
96034010	7 Piece Wrench Set Quickrelease	2990

STAHLWILLE 1/2" DRIVE 6 PIECE RATCHET DRIVE SET ES 1/2"-512/6

- In 175 x 350 x 35mm inlay

Contents:

- 1 T-handle No 506
- 3 extensions No 509/2 (52mm), No 509/5 (130mm), No 509/10 (255mm)
- 1 universal joint No 510
- 1 ratchet No 512



Part No.	Description	Weight (g)
96838113	6 Piece Ratchet Set	1915

STAHLWILLE 1/2" DRIVE 5 PIECE ADAPTER SET 5513

- in sturdy, stackable ABS plastic case

Contents:

- No 409, 1/4" socket x 3/8" plug
- No 431, 3/8" socket x 1/4" plug
- No 432, 3/8" socket x 1/2" plug
- No 513, 1/2" socket x 3/8" plug
- No 514, 1/2" socket x 3/4" plug



Part No.	Description	Weight (g)
96121003	5 Piece Set of Adapters	648

STAHLWILLE 3 PIECE SET OF EXTENDING ADAPTERS 409M/432M/514M/3

Contents:

- 1/4" socket x 3/8" plug
- 3/8" socket x 1/2" plug
- 1/2" socket x 3/4" plug



Part No.	Description	Weight (g)
96031501	3 Piece Set of Extending Adapters	3370

STAHLWILLE 1/2" DRIVE 12 PIECE SOCKET SET – 6 POINT 52/9/3

MM

- in sturdy, stackable ABS plastic case

Contents:

- 9 sockets 6 point No 52: 10; 13; 16; 17; 18; 19; 21; 22; 24mm
- 1 ratchet No 512
- 2 extensions No 509/5 (130mm), No 509/10 (255mm)



Part No.	Description	Weight (g)
96031343	12 Piece Socket Set 6 Point Metric	2878

STAHLWILLE 1/2" DRIVE 15 PIECE SOCKET SET – 12 POINT 50/12/3

MM

- in sturdy, stackable ABS plastic case

Contents:

- 12 sockets 12 point No 50: 10; 13; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32mm
- 1 ratchet No 512
- 2 extensions No 509/5 (130mm), No 509/10 (255mm)



Part No.	Description	Weight (g)
96031435	15 Piece Socket Set 12 Point Metric	3300

STAHLWILLE 1/2" DRIVE 15 PIECE SOCKET SET – 6 POINT 52/12/3

MM

- in sturdy, stackable ABS plastic case

Contents:

- 12 sockets 6 point No 52: 10; 13; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32mm
- 1 ratchet No 512
- 2 extensions No 509/5 (130mm), No 509/10 (255mm)



Part No.	Description	Weight (g)
96031436	15 Piece Socket Set 6 Point Metric	3412

STAHLWILLE 1/2" DRIVE 28 PIECE SOCKET SET – 6 POINT 52/22/6

MM

- in sturdy, stackable ABS plastic case

Contents:

- 22 sockets 6 point No 52: 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 26; 27; 28; 30; 32mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75mm), No 509/5 (130mm), No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Part No.	Description	Weight (g)
96031409	28 Piece Socket Set 6 Point Metric	5138

STAHLWILLE 1/2" DRIVE 31 PIECE SOCKET SET 6 POINT 52/54/25/6

MM

- in sturdy, stackable ABS plastic case

Contents:

- 17 sockets 6 point No 52: 8; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32mm
- 8 INHEX sockets No 54: 4; 5; 6; 7; 8; 10; 12; 14mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75mm), No 509/5 (130mm), No 509/10 (255mm)
- 1 T-handle No 506
- 1 universal joint No 510



Part No.	Description	Weight (g)
96031239	31 Piece Socket Set Hex Metric	5306

STAHLWILLE 1/2" DRIVE 31 PIECE SOCKET SET QUICKRELEASE 50/54/25/6QR

MM

- in sturdy, stackable ABS plastic case

Contents:

- 17 sockets 12 point No 50: 8; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32mm
- 8 INHEX sockets No 54: 4; 5; 6; 7; 8; 10; 12; 14mm
- 1 ratchet No 512QR N
- 3 extensions No 509QR/3 (75mm), No 509QR/5 (130mm), No 509QR/10 (255mm)
- 1 T-handle No 506QR
- 1 universal joint No 510QR



Part No.	Description	Weight (g)
96031440	31 Piece Socket Set QR Hex Metric	5270

STAHLWILLE 1/2" DRIVE 22 PIECE SOCKET SET – 6 POINT 52/16/6

MM

- in sturdy, stackable ABS plastic case

Contents:

- 16 sockets 6 point No 52: 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75mm), No 509/5 (130mm), No 509/10 (255mm)
- 1 T-handle No 506
- 1 universal joint No 510



Part No.	Description	Weight (g)
96031448	22 Piece Socket Set 6 Point Metric	4586

STAHLWILLE 1/2" DRIVE 28 PIECE SOCKET SET – 12 POINT 50/22/6

MM

- in sturdy, stackable ABS plastic case

Contents:

- 22 sockets 12 point No 50: 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 26; 27; 28; 30; 32mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75mm), No 509/5 (130mm), No 509/10 (255mm)
- 1 T-handle No 506
- 1 universal joint No 510



Part No.	Description	Weight (g)
96031407	28 Piece Socket Set 12 Point Metric	5076

STAHLWILLE 1/2" DRIVE 31 PIECE SOCKET SET 50/54/25/6

MM

- in sturdy, stackable ABS plastic case

Contents:

- 17 sockets 12 point No 50: 8; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32mm
- 8 INHEX sockets No 54: 4; 5; 6; 7; 8; 10; 12; 14mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75mm), No 509/5 (130mm), No 509/10 (255mm)
- 1 T-handle No 506
- 1 universal joint No 510



Part No.	Description	Weight (g)
96031439	31 Piece Socket Set Hex Metric	5270

STAHLWILLE 1/2" DRIVE 22 PIECE SOCKET SET – 12 POINT 50/16/6

MM

- in sturdy, stackable ABS plastic case

Contents:

- 16 sockets with 12 point No 50: 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32 mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75mm), No 509/5 (130mm), No 509/10 (255mm)
- 1 T-handle No 506
- 1 universal joint No 510



Part No.	Description	Weight (g)
96031447	22 Piece Socket Set 12 Point Metric	4502

STAHLWILLE 1/2" DRIVE 38 PIECE SOCKET SET 6 POINT 40/52/27/11

MM

- in sturdy, stackable ABS plastic case

Contents:

- 9 sockets 6 point No 40: 4; 5; 5.5; 6; 7; 8; 9; 10; 11mm
- 10 sockets 6 point No 52: 13; 16; 17; 18; 19; 21; 22; 24; 27; 30mm
- 3 INHEX sockets No 44: 3; 4; 5mm
- 5 INHEX sockets No 54: 6; 8; 10; 12; 14mm
- 2 ratchets No 415, No 512
- 4 extensions No 405/2 (54mm), No 509/5 (130mm), No 405/6 (150mm), No 509/10 (255mm)
- 2 universal joints No 407, No 510
- 1 drive handle No 400
- 2 T-handles No 404, No 506



Part No.	Description	Weight (g)
96031448	38 Piece Socket Set 6 Point Hex Metric	4915

STAHLWILLE 1/2" DRIVE 47 PIECE SOCKET SET 12 POINT 87

MM

- in sturdy, stackable ABS plastic case

Contents:

- 19 sockets 12 point No 50: 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32; 34mm
- 13 combination spanners No 13: 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24mm
- 2 sockets, long, with rubber insert No 51: 16mm - 5/8"; 20.8mm - 13/16"
- 7 INHEX sockets No 54: 4; 5; 6; 7; 8; 10; 12mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75mm), No 509/5 (130mm), No 509/10 (255mm)
- 1 T-handle No 506
- 1 universal joint No 510



Part No.	Description	Weight (g)
96031101	47 Piece Socket Set Hex Metric	7520

STAHLWILLE 1/2" DRIVE 45 PIECE SOCKET SET 12 POINT QUICKRELEASE 50MA/39/6QR

MM
IN

- in sturdy, sheet steel case

Contents:

- 39 sockets 12 point
  - No 50: 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28; 30; 32; 34 mm
  - No 50a: 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1; 1 1/16; 1 1/8; 1 3/16; 1 1/4"
- 1 ratchet No 512QR N
- 3 extensions No 509QR/3 (75mm), No 509QR/5 (130mm), No 509QR/10 (255mm)
- 1 T-handle No 506QR
- 1 universal joint No 510QR



Part No.	Description	Weight (g)
96030107	45 Piece Socket Set 12 Point QR Met Imp	8890

STAHLWILLE 1/2" DRIVE 31 PIECE SOCKET SET 6 POINT QUICKRELEASE 52/54/25/6QR

MM

- in sturdy, stackable ABS plastic case

Contents:

- 17 sockets 6 point No 52: 8; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32mm
- 8 INHEX sockets No 54: 4; 5; 6; 7; 8; 10; 12; 14mm
- 1 ratchet No 512QR N
- 3 extensions No 509QR/3 (75mm), No 509QR/5 (130mm), No 509QR/10 (255mm)
- 1 T-handle No 506QR
- 1 universal joint No 510QR



Part No.	Description	Weight (g)
96031240	31 Piece Socket Set QR Hex Metric	5306

STAHLWILLE 1/2" DRIVE 47 PIECE SOCKET SET 6 POINT 876

MM

- in sturdy, stackable ABS plastic case

Contents:

- 19 sockets 6 point No 52: 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32; 34mm
- 13 combination spanners No 13: 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24mm
- 2 sockets, long, with rubber insert No 51: 16mm - 5/8"; 20.8mm - 13/16"
- 7 INHEX sockets No 54: 4; 5; 6; 7; 8; 10; 12mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75mm), No 509/5 (130mm), No 509/10 (255mm)
- 1 T-handle No 506
- 1 universal joint No 510



Part No.	Description	Weight (g)
96032301	47 Piece Socket Set Hex Metric	7600

STAHLWILLE 1/2" DRIVE 45 PIECE SOCKET SET 12 POINT 50MA/39/6N

MM
IN

- in sturdy, sheet steel case

Contents:

- 39 sockets 12 point:
  - No 50: 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28; 30; 32; 34mm
  - No 50a: 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1; 1 1/16; 1 1/8; 1 3/16; 1 1/4"
- 1 ratchet No 512
- 3 extensions No 509/3 (75mm), No 509/5 (130mm), No 509/10 (255mm)
- 1 T-handle No 506
- 1 universal joint No 510



Part No.	Description	Weight (g)
96030140	45 Pc Socket Set 12 Point Metric Imperial	9020

STAHLWILLE 1/2" DRIVE 23 PIECE SOCKET SET 12 POINT 50A/17/6

IN

- in sturdy, stackable ABS plastic case

Contents:

- 17 sockets 12 point No 50a: 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1; 1 1/16; 1 1/8; 1 3/16; 1 1/4"
- 1 ratchet No 512
- 3 extensions No 509/2 (52 mm), No 509/5 (130mm), No 509/10 (255mm)
- 1 T-handle No 506
- 1 universal joint No 510



Part No.	Description	Weight (g)
96035125	23 Piece Socket Set 12 Point Imperial	4640

STAHLWILLE 1/2" DRIVE 12 PIECE SOCKET SET – INHEX 54/8/4

MM

- in sturdy, stackable ABS plastic case

Contents:

- 8 INHEX sockets No 54: 4; 5; 6; 8; 10; 12; 14; 17mm
- 1 ratchet No 512
- 2 extensions No 509/5 (130mm), No 509/10 (255mm)
- 1 T-handle No 506



Part No.	Description	Weight (g)
96031501	12 Piece Socket Set Inhex	3370

STAHLWILLE 1/2" DRIVE 12 PIECE INHEX SOCKET SET 54/12

MM

- in sturdy, stackable ABS plastic case

Contents:

- 10 sockets No 54: 4; 5; 6; 7; 8; 10; 12; 14; 17; 19mm
- 1 socket No 3054/8, 8mm
- 1 socket No 1054/10, 10mm



Part No.	Description	Weight (g)
96031503	12 Piece Socket Set Inhex	1894

STAHLWILLE 1/2" DRIVE 9 PIECE TAMPER PROOF TORX® SCREWDR. SOCKET SET 54TXB/9

- in carton

Contents:

- T20, T25, T27, T30, T40, T45, T50, T55, T60



Part No.	Description	Weight (g)
96031007	9 Pc Tamper Proof Torx® Socket Set	810

STAHLWILLE 1/2" DRIVE 40 PIECE SOCKET SET 12 POINT 87A

IN

- in sturdy, stackable ABS plastic case

Contents:

- 15 sockets 12 point No 50a: 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4; 13/16; 7/8; 15/16; 1; 1 1/16; 1 1/8; 1 3/16; 1 1/4"
- 2 sockets, long, with rubber insert No 51: 16mm - 5/8"; 20.8mm - 13/16"
- 5 INHEX sockets No 54a: 7/32; 1/4; 5/16; 3/8; 1/2 "
- 12 combination spanners No 13a: 1/4; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4; 13/16; 7/8"
- 1 ratchet No 512
- 3 extensions No 509/2 (52mm), No 509/5 (130mm), No 509/10 (255mm)
- 1 T-handle No 506
- 1 universal joint No 510



Part No.	Description	Weight (g)
96035101	40 Piece Socket Set 12 Point Hex Imperial	6700

STAHLWILLE 1/2" DRIVE 10 PIECE INHEX SOCKET SET 54/10

MM

- in sturdy, stackable ABS plastic case

Contents:

- 4, 5, 6, 7, 8, 10, 12, 14, 17, 19 mm



Part No.	Description	Weight (g)
96031508	10 Piece Socket Set Inhex	1525

STAHLWILLE 1/2" DRIVE 8 PIECE TORX® SOCKET SET 50TX/8

- in sturdy, stackable ABS plastic case

Contents:

- E10, E11, E12, E14, E16, E18, E20, E24



Part No.	Description	Weight (g)
96033704	8 Piece Socket Set Torx®	980

STAHLWILLE 1/2" DRIVE 5 PIECE INHEX SOCKET SET ES 54KK/

MM

In 175 x 175 x 30mm inlay

Contents:

- 5 sockets No 54KK: 5; 6; 7; 8; 10mm



Part No.	Description	Weight (g)
96838165	5 Piece Socket Set Inhex	505

PROTO® 1/2" Drive Sets

PROTO® 1/2" DRIVE 19 PIECE SOCKET SET 12 POINT

IN

Contents:

- Accessories: 17 Inch Socket Bar with 19 Socket Clips
- Sockets: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2 inch



Part No.	Description	Weight (lbs)
J54113	19 Piece Socket Set 12 Point Imperial	7.25

PROTO® 1/2" DRIVE 19 PIECE SOCKET SET 6 POINT

IN

Contents:

- Accessories: 17 Inch Socket Bar with 19 Socket Clips
- Sockets: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2 inch



Part No.	Description	Weight (lbs)
J54109	19 Piece Socket Set 6 Point Imperial	7.58

PROTO® 1/2" DRIVE 15 PIECE SOCKET SET 12 POINT

IN

Contents:

- Accessories: 17 Inch Socket Bar with 15 Socket Clips
- Sockets: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4 inch



Part No.	Description	Weight (lbs)
J54114	15 Piece Socket Set 12 Point Imperial	4.26

PROTO® 1/2" DRIVE 15 PIECE SOCKET SET 6 POINT

IN

Contents:

- Accessories: 17 Inch Socket Bar with 15 Socket Clips
- Sockets: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4 inch



Part No.	Description	Weight (lbs)
J54110	15 Piece Socket Set 6 Point Imperial	4.45

PROTO® 1/2" DRIVE 15 PIECE SOCKET SET – 12 POINT

MM

Contents:

- Accessories: 17 Inch Socket Bar with 15 Socket Clips
- Sockets: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24mm



Part No.	Description	Weight (lbs)
J54206	15 Piece Socket Set 12 Point Metric	3.08

PROTO® 1/2" DRIVE 15 PIECE SOCKET SET – 6 POINT

MM

Contents:

- Accessories: 17 Inch Socket Bar with 15 Socket Clips
- Sockets: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 mm



Part No.	Description	Weight (lbs)
J54205	15 Piece Socket Set 6 Point Metric	3.30

PROTO® 1/2" DRIVE 24 PIECE SOCKET SET – 12 POINT

MM

Contents:

- Accessories: (2) 17 Inch Socket Bars with 24 Socket Clips
- Sockets: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 36mm



Part No.	Description	Weight (lbs)
J54211	24 Piece Socket Set 12 Point Metric	7.69

PROTO® 1/2" DRIVE 23 PIECE SOCKET SET – 6 POINT

MM

Contents:

- Accessories: 13 and 17 Inch Socket Bars with 23 Socket Clips
- Sockets: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32mm



Part No.	Description	Weight (lbs)
J54209	23 Piece Socket Set 6 Point Metric	6.97

PROTO® 1/2" DRIVE 11 PIECE DEEP SOCKET SET 12 POINT

IN

Contents:

- Accessories: 17 Inch Socket Bar and Socket Clips
- Sockets: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8 inch



Part No.	Description	Weight (lbs)
J54104	11 Pc Deep Socket Set 12 Point Imperial	5.68

PROTO® 1/2" DRIVE 15 PIECE DEEP SOCKET SET 12 POINT

IN

Contents:

- Accessories: 17 Inch Socket Bar with 15 Socket Clips.
- Sockets: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4 inch



Part No.	Description	Weight (lbs)
J54107	15 Pc Deep Socket Set 12 Point Imperial	7.95

PROTO® 1/2" DRIVE 19 PIECE DEEP SOCKET SET 6 POINT

IN

Contents:

- Accessories: 17 Inch Socket Bar with 19 Socket Clips
- Sockets: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2 inch



Part No.	Description	Weight (lbs)
J54101	19 Piece Deep Socket Set 6 Point Imperial	14.18

PROTO® 1/2" DRIVE 23 PIECE DEEP SOCKET SET – 12 POINT

MM

Contents:

- Accessories: 13 and 17 Inch Socket Bars with 23 Socket Clips
- Sockets: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32mm



Part No.	Description	Weight (lbs)
J54201	23 Piece Deep Socket Set 12 Point Metric	8.95

PROTO® 1/2" DRIVE 15 PIECE DEEP SOCKET SET – 12 POINT

MM

Contents:

- Accessories: 17 Inch Socket Bar with 15 Socket Clips
- Sockets: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24mm



Part No.	Description	Weight (lbs)
J54207	15 Piece Deep Socket Set 12 Point Metric	6.04

PROTO® 1/2" DRIVE 15 PIECE DEEP SOCKET SET 6 POINT

IN

Contents:

- Accessories: 17 Inch Socket Bar with 15 Socket Clips
- Sockets: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4 inch



Part No.	Description	Weight (lbs)
J54103	15 Piece Deep Socket Set 6 Point Imperial	8.18

PROTO® 1/2" DRIVE 19 PIECE DEEP SOCKET SET – 12 POINT

MM

Contents:

- Accessories: 17 Inch Socket Bar with 19 Socket Clips.
- Sockets: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2 inch



Part No.	Description	Weight (lbs)
J54105	19 Piece Deep Socket Set 12 Point Metric	14.00

PROTO® 1/2" DRIVE 7 PIECE HEX BIT SET

IN

Contents:

- Accessories: 9 Inch Socket Bar with 7 Socket Clips.
- Bits: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8 inch



Part No.	Description	Weight (lbs)
J5441-7	7 Piece Hex Bit Set Imperial	2.93

PROTO® 1/2" DRIVE 6 PIECE EXTRA-LONG HEX BIT SET

IN

Contents:

- Accessories: 9 Inch Socket Bar with 6 Socket Clips.
- Bits: 5/16, 3/8, 1/2, 9/16, 5/8 inch



Part No.	Description	Weight (lbs)
J5441-6XL	6 Piece Extra-Long Hex Bit Set Imperial	3.59

PROTO® 1/2" DRIVE 15 PIECE CROWFOOT FLARE NUT WRENCH SET

IN

Contents:

- Accessories: Socket Clips and Bar, Full Polish Finish.
- Crowfeet: 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 1-15/16, 2 inch



Part No.	Description	Weight (lbs)
J53000CFFN	15 Piece Crowfoot Flare Nut Wrench Set	5.86

PROTO® 1/2" DRIVE 22 PIECE CROWFOOT WRENCH SET

IN

Crowfoot Open End: 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 2, 2-1/8, 2-3/8, 2-7/16, 2-1/2 inch



Part No.	Description	Weight (lbs)
J53000CF	22 Piece Crowfoot Wrench Set	16.35

PROTO® 1/2" DRIVE 10 PIECE HEX BIT SET

MM

Contents:

- Accessories: 13 Inch Socket Bar, 10 Socket Clips.
- Bits: 6, 8, 10, 12, 13, 14, 15, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
J5441-MA	10 Piece Hex Bit Set Metric	5.40

PROTO® 1/2" DRIVE 6 PIECE HEX BIT SET

MM

Contents:

- Accessories: 9 Inch Socket Bar with 6 Socket Clips.
- Bits: 6, 8, 10, 12, 14, 17 mm



Part No.	Description	Weight (lbs)
J5441-SM	6 Piece Hex Bit Set Metric	2.55

PROTO® 1/2" DRIVE 39 PIECE FLARE NUT CROWFOOT WRENCH SET

IN

- Accessories: 5 and 10 Inch Locking Extensions.
- Crowfoot Open End: 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 2, 2-1/8, 2-1/4, 2-3/8, 2-7/16, 2-1/2 Inch.
- Flare Nut Crowfoot: 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/8, 1-1/2, 1-9/16, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 1-15/16, 2 inch



Part No.	Description	Weight (lbs)
J53000CFLFN	39 Piece Flare Nut Crowfoot Wrench Set	23.80

PROTO® 1/2" DRIVE 15 PIECE CROWFOOT WRENCH SET

IN

- Accessories: Socket Clips and Bar, Full Polish Finish.
- Crowfoot Open End: 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 2 inch



Part No.	Description	Weight (lbs)
J53001CF	15 Piece Crowfoot Wrench Set	9.88

PROTO® 1/2" DRIVE 65 PIECE COMBINATION SOCKET SET – 8 AND 12 POINT

IN

- 8 Point Standard: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 1 inch
- 12 Point Standard: 3/8, 7/16, 1/2, 9/16, 19/32, 5/8, 11/16, 3/4, 25/32, 13/16, 7/8, 29/32, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2 inch
- 12 Point Deep: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4 inch
- 12 Point Universal: 1/2, 9/16, 5/8 inch
- Bit Sockets: Hex 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, and 5/8 inch.
- Accessories: 1/2 Inch Drive Drag Link, Heavy-Duty Ratchet, Ratchet Adapter, Long Handle Ratchet, 2-1/2, 5, and 10 Inch Extensions, 18-5/8 Inch Hinge Handle, Universal Joint, 18 Inch Speed Handle and Sliding T-Handle



Part No.	Description	Weight (lbs)
J54132	65 Pc Combination Socket Set 8/12 Pt Imp	27.52

PROTO® 1/2" DRIVE 12 PIECE SOCKET SET – 12 POINT

PREMIUM RATCHET

IN

- 12 Point Standard: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 Inch.
- Accessories: Premium Ratchet, 5 Inch Extension, and Blow-Molded Case.



Part No.	Description	Weight (lbs)
J54116XL	12 Pc Premium Socket Set 12 Pt Imperial	6.22

PROTO® 1/2" DRIVE 16 PIECE SOCKET SET – 12 POINT

PREMIUM RATCHET

MM

- 12 Point Standard: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 mm.
- Accessories: Premium Ratchet, 5 Inch Extension, and Blow-Molded Case.



Part No.	Description	Weight (lbs)
J54208XL	16 Pc Premium Socket Set 12 Pt Metric	7.52

PROTO® 1/2" DRIVE 54 PIECE METRIC SOCKET SET – 12 POINT

MM

- 12 Point Standard:10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 36 mm
- 12 Point Deep: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26 mm
- Bit Sockets: Hex 6, 8, 10, 12, 14, 17 mm
- Accessories: Standard and Long Handle Ratchets, 2-1/2, 5, and 10 Inch Extensions, 18-5/8 Inch Hinge Handle, Universal Joint, 18 Inch Speed Handle, Sliding T-Handle



Part No.	Description	Weight (lbs)
J54218	54 Piece Socket Set 12 Point Metric	25.75

PROTO® 1/2" DRIVE 12 PIECE SOCKET SET 12 POINT

IN

- 12 Point Standard: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 Inch.
- Accessories: Classic Ratchet, 5 Inch Extension, and Blow-Molded Case.



Part No.	Description	Weight (lbs)
J54116	12 Piece Socket Set 12 Point Imperial	5.88

PROTO® 1/2" DRIVE 16 PIECE SOCKET SET – 12 POINT

MM

- 12 Point Standard: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 mm.
- Accessories: Classic Ratchet, 5 Inch Extension, and Blow-Molded Case.



Part No.	Description	Weight (lbs)
J54208	16 Piece Socket Set 12 Point Metric	7.32

PROTO® 1/2" DRIVE 16 PIECE SOCKET SET – 12 POINT

PREMIUM RATCHET

IN

- 12 Point Standard: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4,13/16, 7/8, 15/16, 1 Inch.
- Accessories: Premium Ratchet, 5 and 10 Inch Extensions, Universal Joint, Hinge Handle, Speed Handle, and Blow-Molded Case.



Part No.	Description	Weight (lbs)
J54118XL	16 Pc Premium Socket Set 12 Pt Imperial	14.11

PROTO® 1/2" DRIVE 16 PIECE SOCKET SET 12 POINT

IN

- 12 Point Standard: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4,13/16, 7/8, 15/16, 1 Inch.
- Accessories: Classic Ratchet, 5 and 10 Inch Extensions, Universal Joint, Hinge Handle, Speed Handle, and Blow-Molded Case.



Part No.	Description	Weight (lbs)
J54118	16 Piece Socket Set 12 Point Imperial	13.48

PROTO® 1/2" DRIVE 18 PIECE SOCKET SET – 6 POINT

PREMIUM RATCHET

IN

- 6 Point Standard: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4 Inch.
- Accessories: Premium Ratchet, 5 Inch Extension, Hinge Handle, and Blow-Molded Case.



Part No.	Description	Weight (lbs)
J54122XL	18 Pc Premium Socket Set 6 Pt Imperial	12.02

PROTO® 1/2" DRIVE 18 PIECE SOCKET SET 6 POINT

IN

- 6 Point Standard: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4 Inch.
- Accessories: Classic Ratchet, 5 Inch Extension, Hinge Handle, and Blow-Molded Case.



Part No.	Description	Weight (lbs)
J54122	18 Piece Socket Set 6 Point Imperial	12.04

PROTO® 1/2" DRIVE 18 PIECE SOCKET SET – 12 POINT

PREMIUM RATCHET

IN

- 12 Point Standard: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4 Inch.
- Accessories: Premium Ratchet, 5 Inch Extension, Hinge Handle, and Blow-Molded Case.



Part No.	Description	Weight (lbs)
J54120XL	18 Pc Premium Socket Set 12 Pt Imperial	11.77

PROTO® 1/2" DRIVE 18 PIECE SOCKET SET 12 POINT

IN

- 12 Point Standard: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4 Inch.
- Accessories: Classic Ratchet, 5 Inch Extension, Hinge Handle, and Blow-Molded Case.



Part No.	Description	Weight (lbs)
J54120	18 Piece Socket Set 12 Point Imperial	11.80

PROTO® 1/2" DRIVE 29 PIECE SOCKET SET – 12 POINT

PREMIUM RATCHET

MM

- 12 Point Standard: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 36 mm
- Accessories: Premium Ratchet, 2.5, 5 and 10 Inch Extensions, Universal Joint, Hinge Handle, and Blow-Molded Case



Part No.	Description	Weight (lbs)
J54212XL	29 Pc Premium Socket Set 12 Pt Metric	18.48

PROTO® 1/2" DRIVE 29 PIECE SOCKET SET 12 POINT

MM

- 12 Point Standard: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 36 mm
- Accessories: Classic Ratchet, 2.5, 5 and 10 Inch Extensions, Universal Joint, Hinge Handle, and Blow-Molded Case



Part No.	Description	Weight (lbs)
J54212X	29 Piece Socket Set 12 Point Metric	18.41

PROTO® 1/2" DRIVE 30 PIECE SOCKET SET – 12 POINT

PREMIUM RATCHET

IN

- 12 Point Standard: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4 Inch
- 12 Point Deep: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4 Inch
- Accessories: Premium Ratchet, 5 and 10 Inch Extensions, Hinge Handle, and Blow-Molded Case



Part No.	Description	Weight (lbs)
J54126XL	30 Pc Premium Socket Set 12 Pt Imperial	20.28

PROTO® 1/2" DRIVE 30 PIECE SOCKET SET 12 POINT

IN

- 12 Point Standard: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4 Inch
- 12 Point Deep: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4 Inch
- Accessories: Pear Head Ratchet, 5 and 10 Inch Extensions, 15-3/4 Inch Hinge Handle, and Blow-Molded Case.



Part No.	Description	Weight (lbs)
J54126	30 Piece Socket Set 12 Point Imperial	19.90

PROTO® 1/2" DRIVE 31 PIECE SOCKET SET – 12 POINT

PREMIUM RATCHET

MM

- 12 Point Standard: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 mm
- 12 Point Deep: 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 mm
- Accessories: Premium Ratchet, 5 and 10 Inch Extensions, Hinge Handle, and Blow-Molded Case



Part No.	Description	Weight (lbs)
J54214XL	31 Pc Premium Socket Set 12 Pt Metric	18.48

PROTO® 1/2" DRIVE 31 PIECE SOCKET SET – 12 POINT

MM

- 12 Point Standard: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 mm
- 12 Point Deep: 16, 17, 18, 19, 20, 21, 22, 24, 25, 26 mm
- Accessories: Pear Head Ratchet, 5 and 10 Inch Extensions, 15-3/4 Inch Hinge Handle, and Blow-Molded Case



Part No.	Description	Weight (lbs)
J54214	31 Piece Socket Set 12 Point Metric	18.41

PROTO® 1/2" DRIVE 26 PIECE SOCKET SET 12 POINT

IN

- 12 Point Standard: 3/8, 7/16, 1/2, 9/16, 19/32, 5/8, 21/32, 11/16, 3/4, 25/32, 13/16, 7/8, 15/16, 31/32, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4 Inch.
- Accessories: Pear Head Ratchet, 2-1/2, 5, and 10 Inch Extensions, Hinge Handle, Universal Joint, Speed Handle, and Metal Box.



Part No.	Description	Weight (lbs)
J54124	26 Piece Socket Set 12 Point Imperial	17.69

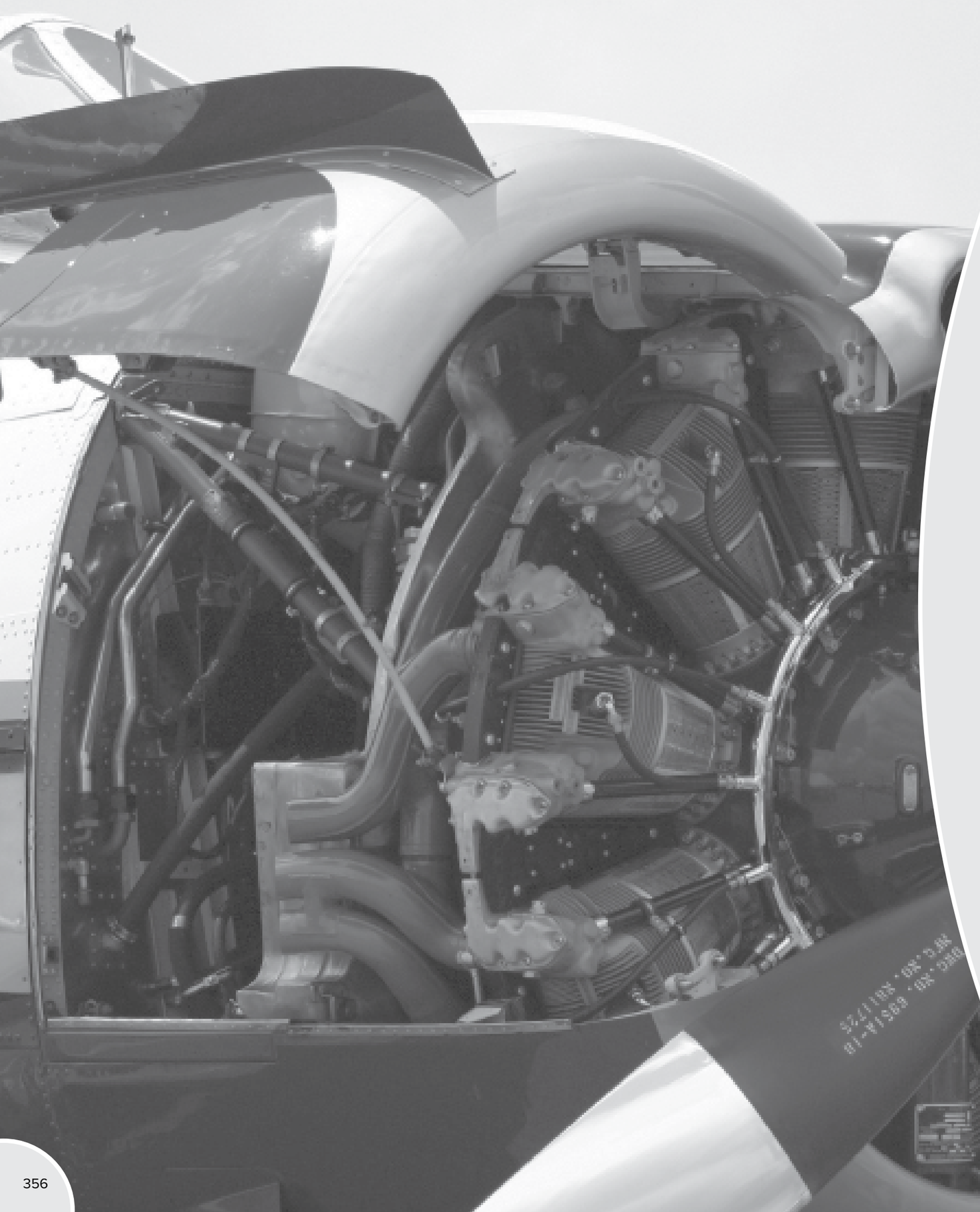
PROTO® 1/2" DRIVE 27 PIECE SOCKET SET 12 POINT

IN

- 12 Point Standard: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4, 5/8 Inch Spark Plug
- Accessories: Combination Wrenches 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, and 3/4 Inch. 9-1/2 Inch Tongue and Groove Pliers, Pear Head Ratchet, 5 and 10 Inch Extensions, 15-3/4 Inch Hinge Handle, Universal Joint, and Metal Box



Part No.	Description	Weight (lbs)
J54128	27 Piece Socket Set 12 Point Imperial	19.09



Large Series Sockets

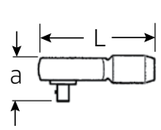
Stahlwille 3/4” Drive Tools 358
PROTO® 3/4” Drive Tools 359
Stahlwille 3/4” Drive Sockets 360
PROTO® 3/4” Drive Sockets 362
Stahlwille 3/4” Drive Sets 364
PROTO® 3/4” Drive Sets 365

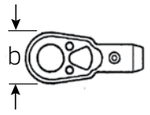
Stahlwille 1” Drive Tools 366
PROTO® 1” Drive Tools 367
Stahlwille 1” Drive Sockets 368
PROTO® 1” Drive Sockets 369
Stahlwille 1” Drive Sets 370
PROTO® 1” Drive Sets 371

Stahlwille 3/4" Drive Tools

STAHLWILLE 3/4" DRIVE REVERSIBLE RATCHET – QUICKRELEASE 522

- 36 teeth
- for use with bar handle No 558







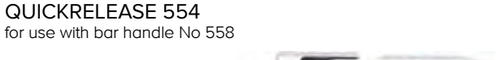
Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
15 11 00 00	3/4"	165	70	55	1670

STAHLWILLE 3/4" DRIVE 7 PIECE SPARE PARTS SET 5520

Contents: 1 pinion, 1 pawl, 1 lever, 1 ball, 1 compression spring, 2 screws

Part No.	Description	Weight (g)
19 05 00 00	7 Piece Spare Parts Set for No 15 11 00 00	536

STAHLWILLE 3/4" DRIVE BAR HANDLE 558



Part No.	Drive Size	OAL (mm)	Weight (g)
15 17 00 00	3/4"	510	1259

STAHLWILLE 3/4" DRIVE FLEXIBLE HEAD QUICKRELEASE 554

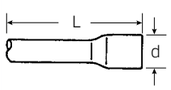
for use with bar handle No 558



Part No.	Drive Size	OAL (mm)	Weight (g)
15 06 00 00	3/4"	132	795

STAHLWILLE 3/4" DRIVE EXTENSIONS 559

DIN 3123/ISO 3316





Part No.	Drive Size	Size	OAL (mm)	Weight (g)
15 01 00 03	3/4"	4	95	369
15 01 00 01	3/4"	8	200	705
15 01 00 02	3/4"	16	400	1255

STAHLWILLE 3/4" DRIVE REDUCING ADAPTER 568

- 3/4" socket x 1/2" plug (20 x 12.5)
- maximum torque 512 N·m
- DIN 3123/ISO 3316
- HPQ® high performance steel



Part No.	Drive Size	OAL (mm)	Weight (g)
15 03 00 03	3/4"	55	203

STAHLWILLE 3/4" DRIVE RATCHET ADAPTER 563

- reversible
- 44 teeth



Part No.	Drive Size	OAL (mm)	Weight (g)
15 14 00 00	3/4"	105.5	1257

STAHLWILLE 3/4" DRIVE SLIDING HEAD 556

can be used as a T-handle in combination with bar handle No 558



Part No.	Drive Size	OAL (mm)	Weight (g)
15 07 00 00	3/4"	61.5	318

STAHLWILLE 3/4" DRIVE UNIVERSAL JOINT 561

DIN 3123/ISO 3316



Part No.	Drive Size	OAL (mm)	Weight (g)
15 02 00 00	3/4"	109	566

STAHLWILLE 3/4" DRIVE EXTENDING ADAPTER 569

- 3/4" inside x 1" plug (20 x 25)
- DIN 3123/ISO 3316
- HPQ® high performance steel



Part No.	Drive Size	OAL (mm)	Weight (g)
15 03 00 06	3/4"	61	315

PROTO® 3/4" Drive Tools

PROTO® 3/4" DRIVE STANDARD LENGTH CLASSIC PEAR HEAD RATCHETS

ASME B107.500

- Robust 24-tooth gear/floating pawl design provides 15° ratcheting angle while maximizing ultimate torque.
- Thin head design for access into tight work areas.
- Reversing lever designed for quick, one-hand operation.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5649	3/4	Satin	20	6.00	J5649RK

PROTO® 3/4" DRIVE FEMALE DRIVE RATCHET

ASME B107.500

- Robust 24-tooth gear design provides 15° ratcheting angle while maximizing torque.
- Thin head design for access into tight work spaces.
- Reversing lever designed for quick, one-hand operation.
- Satin finish.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5649FW	3/4"	Satin	20	5.62	J5649FWRK

PROTO® 3/4" DRIVE STANDARD EXTENSIONS

ASME B107.500



Part No.	Drive Size	Size	OAL (in)	Weight (lbs)
J5660	3/4"	4	0.88	0.88
J5661	3/4"	8	1.80	1.80
J5663	3/4"	16	2.36	2.36

PROTO® 3/4" DRIVE ELL HANDLE



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5686	3/4"	16	3.96

PROTO® 3/4" DRIVE UNIVERSAL JOINT



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5670	3/4"	4	1.03

PROTO® DRIVE ADAPTERS

ASME B107.500



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5653	1/2" F x 3/4" M	1-11/16	0.24
J5453	3/4" F x 1/2" M	1-7/8	0.39
J5853	3/4" F x 1" M	2-1/2	0.82
J5854	1" F x 3/4" M	2-7/8	1.27

PROTO® 3/4" DRIVE PEAR HEAD RATCHET REPAIR KITS



Part No.	Drive Size	Ratchet	Weight (lbs)
J5649FWRK	3/4"	J5649FW	1.00
J5649RK	3/4"	J5649	1.00

PROTO® 3/4" DRIVE RATCHET ADAPTERS

ASME B107.500

- Converts standard handles to ratcheting handles.
- Made from alloy steel.
- Heat-treated for strength and durability.
- Chrome plated., full polish
- Male/Female.



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5647	3/4"	3-3/4	2.38

PROTO® 3/4" DRIVE HINGE HANDLE

ASME B107.500

The head can flex plus or minus 90° from horizontal.



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5668	3/4"	20	4.32

PROTO® 3/4" DRIVE SLIDING T-HANDLE

ASME B107.500

- Made from alloy steel.
- Heat-treated for strength and durability.

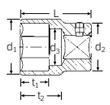


Part No.	Drive Size	OAL (in)	Weight (lbs)
J5685	3/4"	20	2.95

Stahlwille 3/4" Drive Sockets

STAHLWILLE 3/4" DRIVE SOCKETS – 6 POINT 55

- DIN 3124/ISO 2725-1
- AS-drive and HPQ® high performance steel up to 38mm, chrome plated





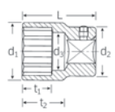
ASME B107.5M

MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	(mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clear-ance Depth (mm) (T2)	Weight (g)
05 01 00 19	19	28.5	34.7	17	50	16	26	183
05 01 00 21	21	31	34.7	18	50	16	26	190
05 01 00 22	22	32	34.7	19	51	17	25.2	199
05 01 00 24	24	34	34.7	21	51	18.5	24.6	200
05 01 00 27	27	38.5	38	24	54	20	26.8	263
05 01 00 30	30	42	38	27	58	21	33.6	313
05 01 00 32	32	44.5	38	29	58	22	33	326
05 01 00 33	33	46	40	30	60	22	34.7	372
05 01 00 34	34	47	40	31	60	24	34.4	363
05 01 00 36	36	49.5	40	33	60	24	33.9	386
05 01 00 38	38	52	40	35	64	30	37.3	429
05 01 00 41	41	55.5	40	33	67	30	37.5	510
05 01 00 46	46	61	40	33	73	34	43.5	600
05 01 00 50	50	66	40	33	80	34	48.5	769
05 01 00 55	55	72	45	33	80	36	49.5	970
05 01 00 60	60	78	45	33	80	40	50.5	1025

STAHLWILLE 3/4" DRIVE SOCKETS – 12 POINT 55A

AS-drive and HPQ® high performance steel up to 1 1/2", chrome plated





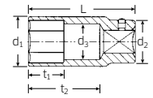
ASME B1071. AS 954-E

IN

Part No.	Size (in)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	(mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clear-ance Depth (mm) (T2)	Weight (g)
05 410 040	3/4	28.5	34.7	18.6	50	26	16	176
05 410 042	13/16	31	34.7	19.4	51	25.1	16.5	190
05 410 044	7/8	33	34.7	21	51	24.5	18	240
05 410 046	15/16	34	34.7	22.5	51	24.2	18.5	248
05 410 048	1	37	38	24	52	24.8	20	251
05 410 050	1 1/16	38.5	38	26	54	26.2	20	265
05 410 052	1 1/8	41	38	27.5	57	32.5	20	297
05 410 056	1 1/4	44.5	38	30.5	58	32.6	22	339
05 410 058	1 5/16	46.5	40	32.1	59	33.1	24	348
05 410 060	1 3/8	48.5	40	33.7	59	32.7	24	375
05 410 062	1 7/16	50	40	35.3	60	33.2	27	395
05 410 064	1 1/2	52	40.5	36.8	64	36.8	30	415
05 410 066	1 5/8	56	40	33	67	37.5	30	469
05 410 067	1 11/16	58	40	33	70	40.5	32	524
05 410 068	1 3/4	59.5	40	33	70	40.5	32	524
05 410 069	1 13/16	61.5	40	33	73	43.5	34	605
05 410 070	1 7/8	63.5	40	33	76	45	34	660
05 410 072	2	67	40	33	80	48.5	34	757

STAHLWILLE 3/4" DRIVE DEEP SOCKETS – 6 POINT 56

- DIN 3124/ISO 2725-1
- AS-drive and HPQ® high performance steel up to 36 mm, chrome plated





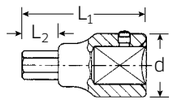
ASME B107.5M

MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	(mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clear-ance Depth (mm) (T2)	Weight (g)
05 02 00 22	22	32	34.7	19	90	64.2	40	374
05 02 00 24	24	34	34.7	21	90	63.6	40	341
05 02 00 27	27	38.5	38	24	90	62.8	40	443
05 02 00 30	30	42	38	27	90	65.6	40	477
05 02 00 32	32	44.5	38	29	90	65	40	526
05 02 00 34	34	47	40	31	90	64.4	40	562
05 02 00 36	36	49.5	40	33	90	63.9	40	570
05 02 00 41	41	55.5	40	38	90	58.5	40	714

STAHLWILLE 3/4" DRIVE HEX BIT SOCKETS 59

- DIN 7422
- Chrome Alloy Steel, chrome plated

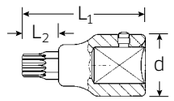




Part No.	Size (mm)	Bit L. (mm)	OAL (mm)	Weight (g)
05 05 00 14	14	80	25	272
05 05 00 17	17	80	25	311
05 05 00 19	19	80	25	346
05 05 00 22	22	80	25	510

STAHLWILLE 3/4" DRIVE TRI-SQUARE SCREWDRIVER SOCKETS 59X

Chrome Alloy Steel, chrome plated

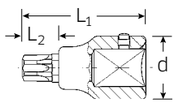




Part No.	Size	Bit L. (mm)	OAL (mm)	Weight (g)
05 06 00 14	M14	90	35	281
05 06 00 16	M16	80	25	302
05 06 00 18	M18	100	45	375

STAHLWILLE 3/4" DRIVE TORX® SCREWDRIVER SOCKETS 59TX

Chrome Alloy Steel, chrome plated





Part No.	Size	Size (mm)	Bit L. (mm)	OAL (mm)	Weight (g)
05 10 00 60	T60	13.2	80	25	260
05 10 00 70	T70	15.5	80	25	285
05 10 00 80	T80	17.6	80	25	300
05 10 00 90	T90	19.9	80	25	331
05 10 0100	T100	22.1	80	25	474

PROTO® 3/4" Drive Sockets

PROTO® 3/4" DRIVE SOCKETS – 12 POINT

TORQUEPLUS FASTENING SYSTEM

IN

- Ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- Ball detent design.
- Made of heat-treated alloy steel.
- Side locking hole.



Part No.	Size (in)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5524	3/4	1-5/16	1-5/16	19/32	1-1/16	2	0.35
J5526	13/16	1-5/16	1-5/16	21/32	1-1/16	2	0.36
J5528	7/8	1-5/16	1-5/16	45/64	1-1/16	2	0.46
J5530	15/16	1-7/16	1-7/16	3/4	1-1/16	2	0.51
J5532	1	1-1/2	1-1/2	3/4	1-1/16	2	0.56
J5534	1-1/16	1-37/64	1-37/64	3/4	1-1/16	2	0.61
J5536	1-1/8	1-37/64	1-15/32	25/32	1	2-7/32	0.72
J5538	1-3/16	1-37/64	1-15/32	25/32	1	2-7/32	0.61
J5540	1-1/4	1-13/16	1-19/32	13/16	1-5/32	2-15/64	0.87
J5542	1-5/16	1-7/8	1-19/32	27/32	1-5/32	2-9/32	0.89
J5544	1-3/8	1-7/8	1-5/8	29/32	1-5/32	2-9/32	0.84
J5546	1-7/16	2-3/64	1-5/8	61/64	1-1/4	2-13/32	1.07
J5548	1-1/2	2-3/64	1-5/8	1	1-1/4	2-13/32	0.94
J5550	1-9/16	2-3/16	1-23/32	1-3/64	1-15/16	2-5/8	0.97
J5552	1-5/8	2-15/64	1-3/4	1-7/64	1-15/16	2-5/8	1.03
J5554	1-11/16	2-3/8	1-3/4	1-5/32	1-15/32	2-3/4	1.14
J5556	1-3/4	2-3/8	1-3/4	1-13/64	1-15/32	2-3/4	1.30
J5558	1-13/16	2-9/16	1-3/4	1-1/4	1-39/64	2-29/32	1.41
J5560	1-7/8	2-9/16	1-3/4	1-19/64	1-39/64	2-31/32	1.55
J5564	2	2-47/64	2	1-3/4	1-3/4	3-7/64	1.59
J5566	2-1/16	2-49/64	2-1/32	1-3/4	1-3/4	3-5/32	1.60
J5568	2-1/8	2-61/64	2-3/32	1-13/16	1-13/16	3-9/32	1.64
J5570	2-3/16	2-61/64	2-3/32	1-13/16	2-5/32	3-9/32	1.90
J5572	2-1/4	3-17/64	2-3/32	1-61/64	2-3/16	3-13/32	1.91
J5576	2-3/8	3-17/64	2-29/64	2-1/8	2-3/16	3-43/64	2.28

PROTO® 3/4" DRIVE DEEP SOCKETS – 6 POINT

TORQUEPLUS FASTENING SYSTEM

IN

- Ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- Made from alloy steel.
- Heat-treated for strength and durability.
- Hand use only,
- Ball detent design.



Part No.	Size (in)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5528HL	7/8	1-3/8	1-3/8	9/16	2-9/16	3-1/2	0.91
J5530HL	15/16	1-7/16	1-7/16	9/16	2-9/16	3-1/2	0.80
J5532HL	1	1-1/2	1-1/2	5/8	2-9/16	3-1/2	1.11
J5534HL	1-1/16	1-9/16	1-7/16	11/16	2-9/16	3-1/2	0.97
J5536HL	1-1/8	1-19/32	1-1/2	25/32	2-3/8	3-1/2	1.12
J5540HL	1-1/4	1-13/16	1-21/32	13/16	2-11/32	3-1/2	1.28
J5542HL	1-5/16	1-55/64	1-21/32	27/32	2-19/64	3-1/2	1.32
J5544HL	1-3/8	1-55/64	1-21/32	29/32	2-9/32	3-1/2	1.64
J5546HL	1-7/16	2-1/16	1-21/32	61/64	2-1/4	3-1/2	1.65
J5548HL	1-1/2	2-1/16	1-1/32	1	2-1/4	3-1/2	1.65
J5552HL	1-5/8	2-1/4	1-3/4	1-7/64	2-13/64	3-1/2	1.52

PROTO® 3/4" DRIVE SOCKETS – 12 POINT

TORQUEPLUS FASTENING SYSTEM

MM

- Ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- Ball detent design.



Part No.	Size (mm)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5519M	19	1-1/8	1-19/64	9/16	1-5/16	2	0.36
J5520M	20	1-3/16	1-19/64	9/16	1-5/16	2	0.37
J5521M	21	1-17/64	1-19/64	9/16	1-5/16	2	0.40
J5522M	22	1-5/16	1-19/64	9/16	1-5/16	2	0.41
J5523M	23	1-13/32	1-13/32	9/16	1-5/16	2	0.52
J5524M	24	1-7/16	1-7/16	9/16	1-5/16	2	0.41
J5525M	25	1-31/64	1-31/64	5/8	1-5/16	2	0.60
J5526M	26	1-1/2	1-1/2	5/8	1-5/16	2	0.59
J5527M	27	1-35/64	1-35/64	11/16	1-5/16	2	0.62
J5528M	28	1-19/32	1-31/64	3/4	1-5/16	2-7/32	0.64
J5529M	29	1-19/32	1-31/64	49/64	1-5/16	2-7/32	0.65
J5530M	30	1-19/32	1-31/64	49/64	1-5/16	2-7/32	0.63
J5531M	31	1-47/64	1-47/64	13/16	1-5/16	2-7/32	0.72
J5532M	32	1-25/32	1-31/64	13/16	1-5/16	2-7/32	0.78
J5535M	35	1-55/64	1-19/32	1-5/32	1-5/16	2-9/32	0.87
J5536M	36	2-3/64	1-19/32	1-15/64	1-5/16	2-13/32	1.09
J5538M	38	2-3/64	1-19/32	1-15/64	1-5/16	2-13/32	1.04
J5541M	41	2-15/64	1-23/32	1-9/32	1-5/16	2-39/64	1.06
J5542M	42	2-23/64	1-23/32	1-15/32	1-5/16	2-23/32	1.06
J5546M	46	2-37/64	1-25/32	1-39/64	1-5/16	2-31/32	1.45
J5550M	50	2-49/64	2-1/32	1-47/64	1-5/16	3-5/32	2.39
J5554M	54	2-15/16	2-3/32	1-3/8	1-5/16	3-9/32	1.97
J5555M	55	2-15/16	2-3/32	1-13/16	1-5/16	3-9/32	2.64
J5558M	58	3-9/64	2-3/32	1-61/64	1-5/16	3-13/32	2.99
J5560M	60	3-17/64	2-17/32	2-1/8	1-5/16	3-21/32	2.27

PROTO® 3/4" DRIVE SOCKETS – SPLINE

- Designed to service high tensile strength fasteners used widely on military and commercial aircraft and in heavy machinery applications where vibration is prevalent. They are also used in automotive and industrial areas where high performance torque needs to be achieved.
- Spline sockets help tighten high strength bolts to high torque loads. They help lower the force required to turn standard fasteners by allowing the torque load to be moved away from the corners to help prevent fastener rounding. They also turn fasteners with damaged corners.
- Spline sockets on spline fasteners help deliver twice the torque of 12 pt. wrenches on double box fasteners, and more torque than hex wrenches on hex fasteners.
- Spline helps reduce foreign object debris (FOD) by having a precise fit between the fastening tool and its fastener.

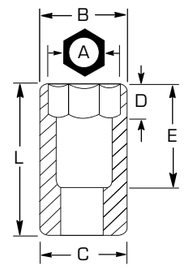


Part No.	Size (in)	Spline Size	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5528SPL	7/8	#28	1-5/16	1-3/8	3/4	11/16	1-11/16	0.33
J5530SPL	15/16	#30	1-3/8	1-3/8	3/4	3/4	1-7/8	0.36
J5532SPL	1	#32	1-7/16	1-7/16	13/16	1-1/8	1-15/16	0.45
J5534SPL	1-1/16	#34	1-1/2	1-1/2	7/8	1-3/32	1-31/32	0.53

TorquePlus – Features & Benefits

TORQUEPLUS FASTENING SYSTEM

- High performance drive configuration allows for quick and easy socket engagement to the fastener flats, not the corners.
- Employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage.
- The internal design minimizes fastener rounding, helps to extend fastener life, and allows the user to more easily turn worn, rounded, or rusted fasteners.



Stahlwille 3/4" Drive Sets

STAHLWILLE 3/4" DRIVE 16 PIECE SOCKET SET – 6 POINT 55/10/6

MM

- in sturdy sheet steel case

Contents:

- 10 sockets 6 point No 55: 22; 24; 27; 30; 32; 34; 36; 41; 46; 50mm
- 1 ratchet No 552
- 2 extensions No 559/8 (200mm), No 559/16 (400mm)
- 1 flexible head No 554
- 1 sliding head for T-handle No 556
- 1 bar handle No 558



Part No.	Description	Weight (g)
96 05 0104	16 Piece Metric Socket Set 6 Point	13965

STAHLWILLE 3/4" DRIVE 15 PIECE SOCKET SET – 6 POINT 55/9/6N

MM

- in sturdy sheet steel case

Contents:

- 9 sockets with hexagon No 55: 32; 34; 36; 38; 41; 46; 50; 55; 60mm
- 1 ratchet No 552
- 2 extensions No 559/8 (200mm), No 559/16 (400mm)
- 1 flexible head No 554
- 1 sliding head for T-handle No 556
- 1 bar handle No 558



Part No.	Description	Weight (g)
96 05 0103	15 Piece Metric Socket Set 6 Point	15731

STAHLWILLE 3/4" DRIVE 15 PIECE SOCKET SET – 12 POINT 55A/10/5

IN

- in sturdy sheet steel case

Contents:

- 10 sockets 12 point No 55a: 1 1/16; 1 1/8; 1 1/4; 1 3/8; 1 7/16; 1 1/2; 1 5/8; 1 3/4; 1 13/16; 1 7/8"
- 1 ratchet No 552
- 2 extensions No 559/8 (200mm), No 559/16 (400mm)
- 1 sliding head for T-handle No 556
- 1 bar handle No 558



Part No.	Description	Weight (g)
96 05 4101	15 Piece Socket Set 12 Point	12620

STAHLWILLE 3/4" DRIVE 22 PIECE SOCKET SET – 12 POINT 55A/16A/6

IN

- in sturdy sheet steel case

Contents:

- 16 sockets 12 point No 55a: 7/8; 15/16; 1; 1 1/16; 1 1/8; 1 1/4; 1 5/16; 1 3/8; 1 7/16; 1 1/2; 1 5/8; 1 11/16; 1 3/4; 1 13/16; 1 7/8; 2"
- 1 ratchet No 552
- 2 extensions No 559/8 (200mm), No 559/16 (400mm)
- 1 flexible head No 554
- 1 sliding head for T-handle No 556
- 1 bar handle No 558



Part No.	Description	Weight (g)
96 05 4103	22 Piece Socket Set 12 Point	16750

STAHLWILLE 3/4" DRIVE 10 PIECE SOCKET SET – 12 POINT ES 55/6/4

IN

- in 530 x 350 x 90mm inlay

Contents:

- 6 sockets 6 point No 55: 34; 36; 41; 46; 50; 55mm
- 1 ratchet No 552
- 1 sliding head for T-handle No 556
- 1 bar handle No 558
- 1 extension No 559/8 (200mm)



Part No.	Description	Weight (g)
96 83 8174	10 Piece Metric Socket Set 12 Point	7875

PROTO® 3/4" Drive Sets

PROTO® 3/4" DRIVE 20 PIECE SOCKET SET 12 POINT

IN

- 12 Point Standard: 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8, 1-3/4, 1-13/16, 1-7/8, 2 Inch.
- Accessories: Pear Head Ratchet, 8 and 16 Inch Extensions, 20 Inch Hinge Handle, Sliding T-Handle, and Metal Box.



Part No.	Description	Weight (lbs)
J55102	20 Piece Socket Set 12 Point	57.12

PROTO® 1/2" DRIVE 28 PIECE SOCKET SET – 12 POINT

MM

- 12 Point Standard: 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 35, 36, 38, 41, 42, 46, 50, 54, 55, 58, 60 mm.
- Accessories: Pear Head Ratchet, 4 and 8 Inch Extensions, 20 Inch Hinge Handle, Universal Joint, Sliding T-Handle, and Metal Box.



Part No.	Description	Weight (lbs)
J55202	28 Piece Metric Socket Set 12 Point	67.48

PROTO® 3/4" DRIVE 29 PIECE SOCKET SET 12 POINT

IN

- 12 Point Standard: 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 2, 2-1/8, 2-3/16, 2-1/4, 2-3/8 Inch.
- Accessories: Pear Head Ratchet, 4, 8, and 16 Inch Extensions, 20 Inch Hinge Handle, Universal Joint, Sliding T-Handle, and Metal Box.



Part No.	Description	Weight (lbs)
J55104	29 Piece Socket Set 12 Point	69.40

PROTO® 3/4" DRIVE 42 PIECE COMBINATION SOCKET SET – 12 AND 6 POINT

IN

- 6 Point Deep: 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8 Inch.
- 12 Point Standard: 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 2, 2-1/8, 2-3/16, 2-1/4, 2-3/8 Inch.
- Accessories: Pear Head Ratchet, 4, 8, and 16 Inch Extensions, Hinge Handle, Universal Joint, Sliding T-Handle, and Metal Box.

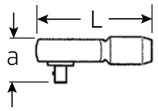


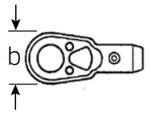
Part No.	Description	Weight (lbs)
J55106	42 Piece Combi. Socket Set 12/6 Point	92.35

Stahlwille 1" Drive Tools

STAHLWILLE 1" DRIVE REVERSIBLE RATCHET – QUICKRELEASE 882

- 36 teeth
- for use with bar handle No 888







Part No.	Drive Size	OAL (L) (mm)	Head Width (b) (mm)	Head Height (a) (mm)	Weight (g)
16 11 00 00	1"	185	70	60	1984

STAHLWILLE 1" DRIVE BAR HANDLE 888



Part No.	Drive Size	OAL (mm)	Weight (g)
16 17 00 00	1"	700	3337

STAHLWILLE 1" DRIVE REDUCING ADAPTER 866

- 1" socket x 3/4" plug (25 x 20)
- maximum torque 1412 N·m
- DIN 3123/ISO 3316
- HPQ® high performance steel



Part No.	Drive Size	OAL (mm)	Weight (g)
16 03 00 05	1"	70	347

STAHLWILLE 1" DRIVE FLEXIBLE HEAD QUICKRELEASE 884

for use with bar handle No 888



Part No.	Drive Size	OAL (mm)	Weight (g)
16 06 00 00	1"	195	1848

STAHLWILLE 1" DRIVE SLIDING HEAD 886

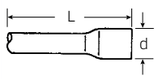
can be used as a T-handle in combination with bar handle No 888



Part No.	Drive Size	OAL (mm)	Weight (g)
16 07 00 00	1"	80	616

STAHLWILLE 1" DRIVE EXTENSIONS 859

DIN 3123/ISO 3316





Part No.	Drive Size	Size	OAL (mm)	Weight (g)
16 01 00 01	1"	8	200	1004
16 01 00 02	1"	16	410	1794

STAHLWILLE 1" DRIVE 7 PIECE SPARE PARTS SET 8820

Contents: 1 pinion, 1 pawl, 1 lever, 1 ball, 1 compression spring, 2 screws

Part No.	Description	Weight (g)
19 07 00 00	7 Piece Spare Parts Set for No 16 11 00 00	609

PROTO® 1" Drive Tools

PROTO® 1" DRIVE STANDARD LENGTH CLASSIC PEAR HEAD RATCHET – MALE/FEMALE

ASME B107.500

- An extra safety factor is provided through the use of a spring-loaded pellet in each male drive plug that snaps into a hole in the drive end of the socket and acts as a retaining pin. The socket stays locked on until the pellet is depressed and the socket is removed.
- Robust 24-tooth gear design provides 15° ratcheting angle while maximizing ultimate torque.
- Thin head design for access into tight work areas.
- Reversing lever designed for quick, one-hand operation.



Part No.	Drive Size	Finish	OAL (in)	Weight (lbs)	Repair Kit
J5849	1"	Full Polish	26	13.02	J5849RK

PROTO® 1" DRIVE MALE PLUG

- Replacement square drive for J5849.
- J5849 male ratchet easily converts to a female ratchet by removing the male plug.



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5852	1"	2-19/32	0.72

PROTO® 1" DRIVE HINGE HANDLE

ASME B107.500



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5868	1"	27	7.56

PROTO® 1" DRIVE BAR HANDLE AND SLIDING DRIVE PLUG

ASME B107.500

- Made from alloy steel.
- Heat-treated for strength and durability.



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5884	1"	28-1/2	6.30
J5885	1"	3	1.20

PROTO® 1" DRIVE STANDARD EXTENSIONS

ASME B107.500



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5861	1"	8	2.88
J5863	1"	17	4.87

PROTO® 1" DRIVE ADAPTERS

ASME B107.500

- Made from alloy steel.
- Heat-treated for strength and durability.



Part No.	Drive Size	OAL (in)	Weight (lbs)
J5853	1"	2-1/2	0.82
J5854	1"	2-7/8	1.27

PROTO® 1" DRIVE SLIDING T-HANDLE

ASME B107.500

- Made from alloy steel.
- Heat-treated for strength and durability.

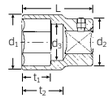


Part No.	Drive Size	OAL (in)	Weight (lbs)
J5886	1"	28-1/2	6.30

Stahlwille 1" Drive Sockets

STAHLWILLE 1" DRIVE SOCKETS – 6 POINT 60

- DIN 3124/ISO 2725-1
- Chrome-Alloy-Steel, chrome plated



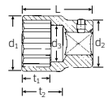


MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	(mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
06 010065	65	87	60	58	105	40	68.5	1917
06 010070	70	94	60	63	110	42	72.5	2210
06 010075	75	101	60	68	115	45	78.5	2525
06 010080	80	108	60	73	120	48	83.5	2865

STAHLWILLE 1" DRIVE SOCKETS – 12 POINT 60

- DIN 3124/ISO 2725-1
- AS-drive and HPQ® high performance steel up to 36mm, chrome plated



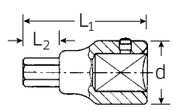


MM

Part No.	Size (mm)	Nut End Outside Dia. (mm) (D1)	Drive End Outside Dia. (mm) (D2)	(mm) (D3)	OAL (mm) (L)	Nut Depth (mm) (T1)	Bolt Clearance Depth (mm) (T2)	Weight (g)
06 010030	30	42.5	43	27	65	20	33.1	371
06 010032	32	45	43	29	67	24	34.6	374
06 010034	34	47	43	31	67	24	34	398
06 010036	36	49.5	48	33	67	24	33.4	493
06 010041	41	55.5	48	36	70	30	37.5	530
06 010046	46	61	49	40	75	32	43.5	622
06 010050	50	66	48	43	80	34	47.5	707
06 010055	55	72	48	49	85	36	49.5	920
06 010060	60	78	48	53	90	40	56.5	992

STAHLWILLE 3/4" DRIVE HEX BIT SOCKETS 64

- DIN 7422
- Chrome Alloy Steel, chrome plated





MM

Part No.	Size (mm)	Bit Length (mm)	OAL (L) (mm)	Weight (g)
06 050014	14	85	25	390
06 050017	17	85	25	417
06 050019	19	85	25	445
06 050022	22	90	25	661
06 050024	24	90	25	719
06 050027	27	90	25	827

PROTO® 1" Drive Sockets

Read about the benefits of TorquePlus™ on page 363

PROTO® 1" DRIVE SOCKETS – 12 POINT

TorquePlus™ features apply.



IN

Part No.	Size (in) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5734	1-1/16	1-41/64	1-29/32	3/4	1	2-7/16	0.96
J5736	1-1/8	1-41/64	1-29/32	3/4	1	2-7/16	0.91
J5738	1-3/16	1-45/64	1-29/32	7/8	1-1/8	2-7/16	0.91
J5740	1-1/4	1-29/32	1-29/32	7/8	1-1/8	2-1/2	0.82
J5742	1-5/16	2-1/32	2-1/32	7/8	1-5/32	2-21/32	1.39
J5744	1-3/8	2-1/32	2-1/32	1	1-1/4	2-21/32	0.90
J5746	1-7/16	2-1/4	2-1/32	1	1-19/64	2-3/4	0.92
J5748	1-1/2	2-1/4	2-1/32	1	1-19/64	2-3/4	1.53
J5752	1-5/8	2-3/8	2-5/32	1	1-7/8	3-1/4	1.18
J5754	1-11/16	2-3/8	2-5/32	1	1-7/8	3-1/4	1.89
J5756	1-3/4	2-3/8	2-5/32	1	1-25/32	3-1/4	2.07
J5758	1-13/16	2-1/2	2-5/32	1-1/8	1-7/8	3-5/16	2.03
J5760	1-7/8	2-11/16	2-13/32	1-1/4	1-61/64	3-5/16	2.10
J5764	2	2-11/16	2-13/32	1-3/8	1-61/64	3-7/16	2.37
J5766	2-1/16	2-11/16	2-13/32	1-3/8	1-61/64	3-1/2	2.69
J5768	2-1/8	2-15/16	2-13/32	1-3/8	2-1/16	3-5/8	2.96
J5770	2-3/16	3-5/64	2-13/32	1-3/8	2-5/32	3-3/4	3.03
J5772	2-1/4	3-5/64	2-13/32	1-1/2	2-1/4	3-13/16	3.23
J5774	2-5/16	3-1/4	2-13/32	1-14/16	2-1/8	3-17/64	3.08
J5776	2-3/8	3-17/64	2-13/32	1-1/2	2-11/32	4	3.08
J5778	2-7/16	3-17/64	2-13/32	1-11/16	2-11/32	3-13/32	3.20
J5780	2-1/2	3-37/64	2-21/32	1-5/8	2-27/64	4-1/8	3.33
J5782	2-9/16	3-37/64	2-21/32	1-5/8	2-27/64	4-1/8	3.22
J5784	2-5/8	3-37/64	2-21/32	2-3/8	2-3/8	4-1/8	3.70
J5788	2-3/4	1-13/16	2-21/32	1-3/4	2-21/32	4-7/16	4.82
J5794	2-15/16	4-9/64	3-5/32	1-7/8	2-27/32	4-11/16	5.05
J5796	3	4-9/64	3-5/32	1-53/64	3-1/32	4-11/16	5.61
J5800	3-1/8	4-3/8	3-5/32	2	3-1/32	4-15/16	5.95
J5812	3-1/2	4-11/16	3-5/32	2-1/4	3-1/8	5-1/8	9.11

PROTO® 1" DRIVE SOCKETS – 12 POINT

TorquePlus™ features apply.



MM

Part No.	Size (mm) (A)	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clearance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5736MT	36	2	1-3/4	1-1/16	1-3/8	2-1/2	0.98
J5741MT	41	2-1/4	1-3/4	1-1/4	1-9/16	2-11/16	1.20
J5746MT	46	2-9/16	1-15/16	1-3/8	1-11/16	2-14/16	1.81
J5750MT	50	2-3/4	2-1/4	1-9/16	1-7/8	3	2.38
J5754MT	54	2-15/16	2-1/4	1-9/16	1-7/8	2-1/16	2.63
J5755MT	55	3	2-5/16	1-13/16	2-1/8	3-1/4	2.79
J5760MT	60	3-1/4	2-1/4	1-7/8	2-3/16	3-5/16	3.22
J5763MT	63	3-3/8	2-1/4	2	2-5/16	3-7/16	3.28
J5765MT	65	3-3/8	2-1/4	2-1/16	2-3/8	3-1/2	3.27
J5774MT	74	3-15/16	2-11/16	2-1/4	2-9/16	3-7/8	5.28
J5775MT	75	3-15/16	2-11/16	2-1/4	2-9/16	3-7/8	5.10
J5777MT	77	4	2-11/16	2-1/4	2-7/8	4-3/16	5.10
J5780MT	80	4-3/16	2-11/16	2-1/4	2-7/8	4-3/16	5.82

PROTO® 1" DRIVE SOCKETS – SPLINE

TORQUEPLUS FASTENING SYSTEM

IN

- Designed to service high tensile strength fasteners used widely on military and commercial aircraft and in heavy machinery applications where vibration is prevalent. They are also used in automotive and industrial areas where high performance torque needs to be achieved.
- Spline sockets help tighten high-strength bolts to high torque loads. They help lower the force required to turn standard fasteners by allowing the torque load to be moved away from the corners to help prevent fastener rounding. They also turn fasteners with damaged corners.
- Spline sockets on spline fasteners help deliver twice the torque of 12 point wrenches on double-box fasteners, and more torque than hex wrenches on hex fasteners.
- Spline helps reduce foreign object debris (FOD) by having a precise fit between the fastening tool and its fastener.



Part No.	Size (in)	Spline Size	Nut End Outside Dia. (in) (B)	Drive End Outside Dia. (in) (C)	Nut Depth (in) (D)	Bolt Clear-ance Depth (in) (E)	OAL (in) (L)	Weight (lbs)
J5732SPL	1	#32	1-1/2	1-7/8	7/8	1-1/4	2-7/16	0.82
J5734SPL	1-1/16	#34	1-1/2	1-7/8	7/8	1-1/4	2-1/2	0.91
J5738SPL	1-3/16	#38	1-11/16	2	1-3/16	1-5/8	2-3/4	1.09
J5740SPL	1-1/4	#40	1-11/15	2	1-3/16	1-5/8	2-3/4	1.18
J5742SPL	1-5/16	#42	1-7/8	2	1-3/16	1-3/4	2-7/8	1.27
J5744SPL	1-3/8	#44	2	2	1-3/16	1-3/4	3	1.37
J5746SPL	1-7/16	#46	2	2	1-1/4	1-15/16	3	1.46

Stahlwille 1" Drive Sets

STAHLWILLE 1" DRIVE 12 PIECE SOCKET SET – 12 POINT 60/6/6/882

MM

- in sturdy sheet steel case

Contents:

- 6 sockets 12 point No 60: 36; 41; 46; 50; 55; 60mm
- 1 ratchet No 882
- 2 extensions No 859/8 (200mm), No 859/16 (410mm)
- 1 flexible head No 884
- 1 sliding head for T-handle No 886
- 1 bar handle No 888



Part No.	Description	Weight (g)
96 06 01 01	12 Piece Socket Set 12 Point Metric	19720

STAHLWILLE 1" DRIVE 14 PIECE SOCKET SET – 12 POINT 60/8/6/882

MM

- in sturdy sheet steel case

Contents:

- 4 sockets 20 point No 60: 46; 50; 55; 60mm
- 4 sockets 6 point No 60: 65; 70; 75; 80mm
- 1 ratchet No 882
- 2 extensions No 859/8 (200mm), No 859/16 (410mm)
- 1 flexible head No 884
- 1 sliding head for T-handle No 886
- 1 bar handle No 888



Part No.	Description	Weight (g)
96 06 01 03	14 Piece Socket Set 12 Point Metric	30000

PROTO® 1" Drive Sets

PROTO® 1" DRIVE 17 PIECE SOCKET SET 12 POINT

IN

- 12 Point Standard: 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 2 Inch.
- Accessories: Pear Head Ratchet, 8 Inch Extension, 27 Inch Hinge Handle, and Metal Box.



Part No.	Description	Weight (lbs)
J57100	17 Piece Socket Set 12 Point	65.50

PROTO® 1" DRIVE 22 PIECE SOCKET SET 12 POINT

IN

- 12 Point Standard: 1-1/2, 1-5/8, 1-13/16, 1-7/8, 2, 2-3/16, 2-1/4, 2-3/8, 2-1/2, 2-9/16, 2-5/8, 2-3/4, 2-15/16, 3, 3-1/8, 3-1/2 Inch.
- Accessories: Male/Female Ratchet, 8 and 17 Inch Extensions, 27 Inch Hinge Handle, 28-1/2 Inch Sliding T-Handle, Sliding Plug, and Metal Box.



Part No.	Description	Weight (lbs)
J57102	22 Piece Socket Set 12 Point	129.50

PROTO® 1" DRIVE 29 PIECE SOCKET SET 12 POINT

IN

- 12 Point Standard: 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8, 1-13/16, 1-7/8, 2, 2-3/16", 2-1/4", 2-3/8", 2-1/2", 2-9/16", 2-5/8", 2-3/4", 2-15/16", 3", 3-1/8", 3-1/2" Inch.
- Accessories: Pear Head Ratchet, 8 and 17 Inch Extensions, 1" x 27-3/8, 2x 3/8" x 7-7/8" Inch Hinge Handles, 3" Sliding Drive Plug and Metal Box.



Part No.	Description	Weight (lbs)
J57104	29 Piece Socket Set 12 Point	135.50



Spanners & Wrenches

Combination Spanners & Sets 374
Ring-Ring Spanners & Sets 389
Open-End Spanners & Sets 399
Flexhead Wrenches & Sets 407
Flarenut Spanners & Sets 409
Combination Ratchet Wrenches & Sets 413
Ring Ratchet Wrenches & Sets 432
Service Wrenches 442
Single-end Spanners 443
Adjustable Wrenches & Sets 445
Hook Wrenches 446
Box Spanner Sets 447
GearWrench Tap & Die 448
L-Keys & Sets 450

Stahlwille Combination Spanners

Stahlwille Spanners

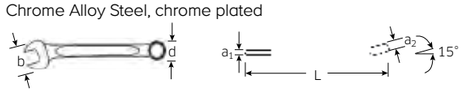
- Lighter: The thumb groove along the spanner handle is similar to the principle of an H-beam in construction, extreme load-bearing capacity and maximum flexural strength is achieved with lower weight.
- Slimmer: Extremely thin-walled rings facilitate work in confined spaces. The ring ends are higher than standard nuts, preventing the spanner seizing on the nut.
- Stronger: When force is applied to a spanner, the greatest force acts on the area between the jaw and the shank, which is why Stahlwille spanners are reinforced at this point.
- More accurate: Tight manufacturing tolerances and reproducible dimensional accuracy ensures that STAHLWILLE spanners are more precisely consistent-compared to any other manufacturer.



STAHLWILLE COMBINATION SPANNERS OPEN BOX 13A

IN

Chrome Alloy Steel, chrome plated



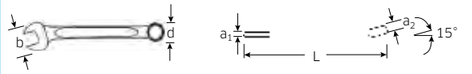


Part No.	Size (in)	OAL (mm) (L)	Outside Head Width (mm) (b)	Outside Head Width (mm) (d)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Weight (g)
40481212	3/16	95	14	9.8	3	3.2	10
40481313	13/64	95	14	9.8	3	3.2	10
40481414	7/32	95	14	9.8	3	3.2	10
40481515	15/64	95	14	9.8	3	3.2	10
40481616	1/4	105	15.5	10.2	3.6	6	14
40481818	9/32	110	17	11.3	3.9	6	15
40482020	5/16	115	18	12.4	4.2	7	20
40482222	11/32	120	21	13.4	4.5	7	26
40482424	3/8	125	23	14.3	4.8	7	32
40482828	7/16	135	26	16.4	4.8	8	41
40483232	1/2	160	30	18.8	5.3	8.5	57
40483434	9/16	165	32	20.6	5.3	8.5	70
40483535	19/32	170	35	21.9	5.3	8.5	74
40483636	5/8	180	37	23.2	5.8	10	88
40483838	11/16	200	40	25.3	6.7	11.5	116
40484040	3/4	230	42	27.5	6.7	11.5	144
40484141	25/32	235	45	29	7	13	175
40484242	13/16	260	47	30	7.3	13	204
40484444	7/8	260	49	31.8	7.3	13	217
40484646	15/16	280	53	34.9	7.8	14	255
40484848	1	300	55	37.2	8.4	14.5	286
40485050	1 1/16	300	60	39.2	8.4	14.5	327
40485252	1 1/8	330	64	41.4	8.9	16	380
40485454	1 3/16	332	66	43.2	8.9	16.5	398
40485656	1 1/4	360	70	45.8	9.4	16.5	504
40485858	1 5/16	450	74	47	9.6	17	617
40486060	1 3/8	460	80	49.3	10	18	796
40486262	1 7/16	461	80	51.4	10	18	760
40486464	1 1/2	480	87	53.6	11	19	950
40486666	1 5/8	480	88	58	11	19	1021
40486969	1 13/16	500	94.5	65.3	13	20	1343
40487070	1 7/8	530	103	68.4	14	21	1640
40487272	2	530	103	74	14	21	1700

STAHLWILLE COMBINATION SPANNERS – PREMIUM 130A

IN

- Fed Spec. GGG-W-636 E
- HPQ high performance steel, chrome plated



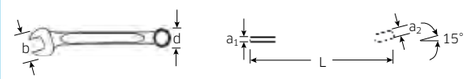


Part No.	Size (in)	OAL (mm) (L)	Outside Head Width (mm) (b)	Outside Head Width (mm) (d)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Weight (g)
40571616	1/4	105	14.2	9.8	3.6	6	15
40571818	9/32	110	15.5	10.9	4.1	6	16
40572020	5/16	115	17	12	4.5	7	20
40572222	11/32	120	19	13.1	4.9	7	25
40572424	3/8	125	20.5	14.1	5.2	7	32
40572828	7/16	135	23	16.2	6	8	42
40573232	1/2	150	27	18.2	6.5	8.5	61
40573434	9/16	165	30.5	20.6	7	8.5	78

STAHLWILLE COMBINATION SPANNERS OPEN BOX 13

MM

- DIN 3113 Form A/ISO 7738 Form A
- Chrome Alloy Steel, chrome plated



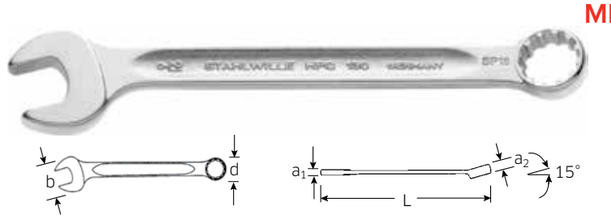


Part No.	Size (mm)	OAL (mm) (L)	Outside Head Width (mm) (b)	Outside Head Width (mm) (d)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Weight (g)
40085500	5.5	100	14.8	9.2	3.5	5.8	15
40080606	6	105	15.5	9.9	3.6	6	15
40080707	7	110	15.5	9.9	3.9	6	10
40080808	8	115	18	12.4	4.2	7	21
40080909	9	120	21	13.4	4.5	7	27
40081010	10	125	23	14.8	4.8	7	35
40081111	11	135	26	16.4	4.8	8	43
40081212	12	140	28	17.8	5.3	8.5	46
40081313	13	160	30	19.1	5.3	8.5	57
40081414	14	165	32	20.6	5.3	8.5	68
40081515	15	170	35	21.9	5.3	8.5	80
40081616	16	180	37	23.2	5.8	10	89
40081717	17	190	38	24.6	5.8	10	100
40081818	18	200	40	26	6.7	11.5	126
40081919	19	230	42	27.5	6.7	11.5	140
40082020	20	230	45	29	7	13	176
40082121	21	260	47	30.3	7.3	13	216
40082222	22	260	49	31.8	7.3	13	220
40082323	23	280	53	33.5	7.8	14	251
40082424	24	280	53	34.9	7.8	14	254
40082525	25	300	55	36.3	8.4	14.5	281
40082626	26	300	57.5	37.8	8.4	14.5	325
40082727	27	300	60	39.2	8.4	14.5	335
40082828	28	320	62	40.6	8.4	14.5	368
40082929	29	330	64	41.9	8.9	16	385
40083030	30	330	66	43.2	8.9	16	404
40083232	32	360	70	45.8	9.4	16.5	484
40083434	34	450	75	48	9.4	17	683
40083636	36	460	80	50.8	10	18	780
40083838	38	480	87	53.6	11	19	915
40084141	41	480	88	57.8	11	19	1020
40084646	46	500	94.5	65.2	13	20	1330
40085050	50	530	103	73	14	21	1600
40085555	55	560	114	81	15	22	2065
40086060	60	590	125	89.8	16	24	2725

STAHLWILLE COMBINATION SPANNERS – SPLINE
130ASP

MM

- Fed Spec. GGG-W-636 E
- HPQ high performance steel, chrome plated

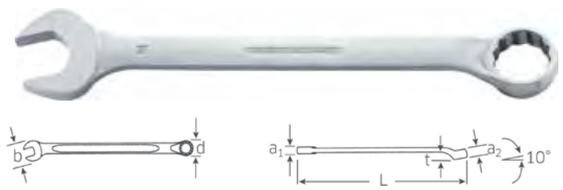


Part No.	Spline Size (mm)	Size (mm)	OAL (mm) (L)	Outside Head Width (mm) (b)	Outside Head Width (mm) (d)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Weight (g)
40 58 16 16	8	1/4	105	14.2	10	3.6	5.6	13
40 58 20 20	10	5/16	115	17	12.2	4.5	6.4	21
40 58 24 24	12	3/8	125	20.5	14.8	5.2	7	31
40 58 28 28	14	7/16	135	23	16.5	6	8	43
40 58 32 32	16	1/2	150	27	18.7	6.5	8.5	59
40 58 34 34	18	9/16	165	30.5	20.8	7	8.5	84

STAHLWILLE COMBINATION SPANNERS
4014

MM

Chrome-Vanadium, chrome plated

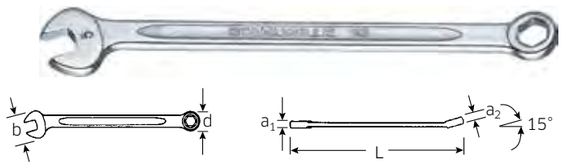


Part No.	Size (mm)	OAL (mm) (L)	Outside Head Width (mm) (b)	Outside Head Width (mm) (d)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Offset (mm) (t)	Weight (g)
40 14 65 65	65	710	133	98	22	33	49.5	4500
40 14 70 70	70	760	143	105	24	35	53.5	5500
40 14 75 75	75	810	153	110	26	38	57.5	6500
40 14 80 80	80	860	163	119	28	41	63.5	8000

STAHLWILLE COMBINATION SPANNERS – SMALL
16

MM

- ISO 3318
- Chrome Alloy Steel, chrome plated

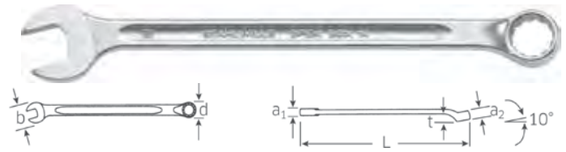


Part No.	Size (mm)	OAL (mm) (L)	Outside Head Width (mm) (b)	Outside Head Width (mm) (d)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Weight (g)
40 09 32 32	3.2	75	10	6.6	3	3.2	6
40 09 35 35	3.5	75	10	6.6	3	3.2	6
40 09 40 40	4	85	12.5	7.8	3	3.2	9
40 09 45 45	4.5	85	12.5	7.8	3	3.2	8
40 09 50 50	5	95	14	9.8	3	3.2	11

STAHLWILLE COMBINATION SPANNERS OPEN BOX – LONG
14

MM

- DIN 3110 Form A/ISO 7738 Form A
- Chrome alloy steel, chrome plated



Part No.	Size (mm)	OAL (mm) (L)	Outside Head Width (mm) (b)	Outside Head Width (mm) (d)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Offset (mm) (t)	Weight (g)
40 10 06 06	6	125	14	9.5	4.5	6	7	18
40 10 07 07	7	135	16	10.8	5	7	8	25
40 10 08 08	8	145	17.5	12.1	5	7	8	28
40 10 09 09	9	155	19	13.3	5.5	8	9	34
40 10 10 10	10	165	21	14.6	5.5	8	9	43
40 10 11 11	11	180	23.5	15.9	6	9	10	55
40 10 12 12	12	180	25.5	17.3	6	9	10	61
40 10 13 13	13	195	27.5	18.6	6.5	10	11	85
40 10 14 14	14	210	29.5	20.1	6.5	10	11	88
40 10 15 15	15	215	31	21.4	7	11	13	109
40 10 16 16	16	230	33	22.7	7	11	14	108
40 10 17 17	17	240	35	24.1	7.5	12	15	155
40 10 18 18	18	255	37	25.5	7.5	12	16	151
40 10 19 19	19	265	39.5	27	8	13	18	190
40 10 20 20	20	280	41.5	28.5	8	13	19	219
40 10 21 21	21	280	43	29.8	8.5	13	19	244
40 10 22 22	22	300	45	31.3	8.5	14	20	268
40 10 24 24	24	330	50	34.3	9.5	14	22	363
40 10 27 27	27	385	56	38.6	10.5	16	24	502
40 10 30 30	30	415	63	42.6	12	18	26	645
40 10 32 32	32	430	67	45.2	12	18	27	666
40 10 34 34	34	460	72	48	13	18	27	900
40 10 36 36	36	480	74	50.8	13	19	28	951
40 10 41 41	41	560	84	57.8	14	20	32	1322

PROTO® Combination Spanners

PROTO® Anti-Slip Design (ASD) Wrenches

The Anti-slip open end incorporates the patented PROTO® Anti-Slip Design (ASD) which features a locking groove that engages the fastener while the wrench is being turned, helping to prevent the wrench from slipping off the fastener.

The arched surface of the PROTO® Anti-Slip design spreads the force over a 400% larger contact area to help prolong the life of the fastener.

- Helps increase productivity and efficiency
- Less risk of knuckle injury from wrench slippage
- Increased torque applied to the fastener
- No ribs or serrations to damage fasteners
- Fewer rounded fasteners



PROTO® FULL POLISH COMBINATION WRENCHES – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100
AS954

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 12 point box end TorquePlus™ allows for fine indexing, helping to improve speed and access. Fits 4, 6, and 12 point fasteners.
- Anti-Slip Design (ASD) open end.
- Fractional sizes 11/32" and smaller do not have the ASD feature.



Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (E)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1208-T500	1/4	19/64	39/64	3/16	27/64	15/64	4-7/8	0.04
J1209-T500	9/32	23/64	41/64	3/16	29/64	7/32	5-5/32	0.06
J1210-T500	5/16	3/8	45/64	3/16	33/64	17/64	5-3/8	0.08
J1211-T500	11/32	13/32	25/32	3/16	17/32	7/32	5-5/8	0.08
J1212-T500	3/8	13/32	13/16	3/16	39/64	5/16	6	0.10
J1214-T500	7/16	17/32	15/16	15/64	43/64	21/64	7	0.14
J1216-T500	1/2	39/64	1-5/64	1/4	49/64	11/32	8	0.20
J1218-T500	9/16	11/16	1-3/16	9/32	27/32	23/64	8-7/8	0.27
J1220-T500	5/8	3/4	1-21/64	19/64	15/16	13/32	9-1/2	0.35
J1222-T500	11/16	13/16	1-29/64	5/16	1-1/64	7/16	10-1/4	0.38
J1224-T500	3/4	57/64	1-37/64	11/32	1-3/32	15/32	11	0.52
J1226-T500	13/16	31/32	1-11/16	23/64	1-11/64	1/2	11-7/8	0.54
J1228-T500	7/8	1-1/16	1-13/16	3/8	1-1/4	33/64	12-1/2	0.65
J1230-T500	15/16	1-1/8	1-29/32	13/32	1-27/64	37/64	13-1/4	0.74
J1232-T500	1	1-13/64	2-1/64	13/32	1-13/32	37/64	14	0.95
J1234-T500	1-1/16	1-9/32	2-9/64	29/64	1-31/64	39/64	15-1/4	1.13
J1236-T500	1-1/8	1-23/64	2-17/64	15/32	1-21/32	41/64	15-7/8	1.38
J1238-T500	1-3/16	1-23/64	2-25/64	3/4	1-21/32	21/32	15-7/8	1.54
J1240-T500	1-1/4	1-1/2	2-33/64	23/32	1-3/4	45/64	16-7/8	1.89
J1242-T500	1-5/16	1-37/64	2-41/64	17/32	1-27/32	47/64	17-5/8	2.15
J1246-T500	1-7/16	1-47/64	2-57/64	13/16	2-3/64	51/64	19-3/8	2.67
J1248-T500	1-1/2	1-51/64	3-1/64	27/32	2-1/8	53/64	20-1/4	3.18
J1250-T500	1-1/16	1-59/64	3	53/64	2-1/8	53/64	21	1.13
J1252-T500	1-1/8	1-63/64	3-25/64	21/32	2-13/32	29/32	23	1.38

PROTO® LARGE SERIES WRENCHES – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100
AS954

IN

- TorquePlus™ 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Satin finish provides corrosion resistance and a slip-resistant grip.
- Anti-Slip Design (ASD) open end.
- Fractional sizes 11/32" and smaller and sizes 1-5/16" and larger do not have the ASD feature.



Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (E)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1254	1-11/16	1-63/64	3-25/64	21/32	2-13/32	29/32	23	4.74
J1256	1-3/4	2-11/64	3-41/64	45/64	2-39/64	31/32	25	5.64
J1258	1-13/16	2-11/64	3-41/64	45/64	2-39/64	31/32	25	5.64
J1260	1-7/8	2-25/64	4-1/64	49/64	2-57/64	1-1/16	28	7.46
J1264	2	2-25/64	4-1/64	49/64	2-57/64	11/16	28	7.35
J1266	2-1/16	2-45/64	4-33/64	27/32	3-1/4	13/16	29-1/2	9.88
J1268	2-1/8	2-45/64	4-33/64	27/32	3-1/4	13/16	29-1/2	9.74
J1270	2-3/16	2-45/64	4-33/64	27/32	3-1/4	1-3/16	29-1/2	9.45
J1272	2-1/4	2-45/64	4-33/64	27/32	3-1/4	1-3/16	29-1/2	8.25
J1276	2-3/8	2-55/64	5	31/32	3-5/8	1-5/16	31-1/2	13.12
J1280	2-1/2	3	5	31/32	3-5/8	1-5/16	31-1/2	12.49
J1282	2-9/16	2-1/2	4-1/2	1	3-5/8	1-1/2	29-3/4	13
J1284	2-9/16	2-5/8	4-3/4	1	3-3/4	1-11/16	29-3/4	13
J1288	2-3/4	2-9/16	4-3/4	1	3-3/4	1-11/16	29-3/4	13

PROTO® FULL POLISH COMBINATION WRENCHES – 6 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100
AS954

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 6 point box end allows for large wrench to fastener contact area which helps prevent rounding of the fastener.
- Anti-Slip Design (ASD) open end. Fractional sizes 11/32" and smaller do not have the ASD feature.
- Box ends incorporate the TorquePlus™ system.

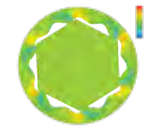


Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (E)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1208H-T500	1/4	19/64	39/64	5/32	27/64	15/64	4-59/64	0.04
J1210H-T500	5/16	3/8	45/64	13/64	33/64	17/64	5-7/16	0.08
J1211H-T500	11/32	13/32	25/32	21/32	17/32	7/32	5-43/64	0.08
J1212H-T500	3/8	13/32	13/16	1/4	39/64	5/16	5-29/32	0.10
J1214H-T500	7/16	17/32	15/16	17/64	43/64	21/64	6-29/32	0.14
J1216H-T500	1/2	39/64	1-5/64	21/64	49/64	11/32	7-29/32	0.20
J1218H-T500	9/16	11/16	1-3/16	11/32	27/32	23/64	8-13/16	0.27
J1220H-T500	5/8	3/4	1-21/64	25/64	15/16	13/32	9-35/64	0.35
J1222H-T500	11/16	13/16	1-29/64	27/64	1-1/64	7/16	10-19/64	0.38
J1224H-T500	3/4	57/64	1-37/64	31/64	1-3/32	15/32	11-3/64	0.52
J1226H-T500	13/16	31/32	1-11/16	33/64	1-11/64	1/2	11-13/16	0.54
J1228H-T500	7/8	1-1/16	1-13/16	35/64	1-1/4	33/64	12-35/64	0.65
J1230H-T500	15/16	1-1/8	1-29/32	39/64	1-27/64	37/64	13-5/16	0.74
J1232H-T500	1	1-13/64	2-1/64	21/32	1-13/32	37/64	14-1/16	0.95
J1234H-T500	1-1/16	1-9/32	2-9/64	45/64	1-31/64	39/64	15-1/4	1.13
J1236H-T500	1-1/8	1-23/64	2-17/64	3/4	1-21/32	41/64	15-7/8	1.38
J1238H-T500	1-3/16	1-23/64	2-25/64	3/4	1-21/32	21/32	15-7/8	1.54
J1240H-T500	1-1/4	1-1/2	2-33/64	53/64	1-3/4	45/64	16-59/64	1.89

TorquePlus – Features & Benefits

TORQUEPLUS FASTENING SYSTEM

- Design allows for direct engagement to the fastener flats, not the corners.
- Employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage.
- The internal design minimizes fastener rounding, helps to extend fastener life, and allows the user to more easily turn worn, rounded, or rusted fasteners.

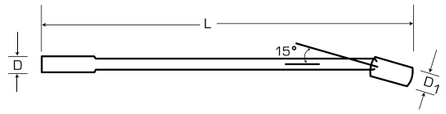


PROTO® FULL POLISH COMBINATION WRENCHES – 12 POINT

ASME B107.100

MM

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Anti-Slip Design (ASD) open end.
- Metric sizes 9 mm and smaller do not have ASD feature.
- Box ends incorporate the TorquePlus™ system.





Part No.	Size (mm)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (E)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1207M-T500	7	5/16	19/32	11/64	13/32	15/64	5-5/32	0.04
J1208M-T500	8	25/64	11/16	3/16	1/2	17/64	5-13/32	0.07
J1209M-T500	9	13/32	3/4	3/16	35/64	17/64	5-21/32	0.08
J1210M-T500	10	31/64	7/8	7/32	21/32	5/16	5-29/32	0.13
J1211M-T500	11	33/64	59/64	15/64	11/16	21/64	6-29/32	0.14
J1212M-T500	12	9/16	1	1/4	47/64	11/32	7-45/64	0.17
J1213M-T500	13	39/64	1-1/32	1/4	25/32	11/32	7-29/32	0.18
J1214M-T500	14	11/16	1-3/16	9/32	55/64	23/64	8-13/16	0.22
J1215M-T500	15	3/4	1-1/4	19/64	7/8	23/64	9-5/32	0.25
J1216M-T500	16	3/4	1-21/64	5/16	15/16	13/32	9-35/64	0.26
J1217M-T500	17	53/64	1-25/64	21/64	1-1/32	7/16	10-9/32	0.38
J1218M-T500	18	55/64	1-33/64	11/32	1-1/16	29/64	10-11/16	0.41
J1219M-T500	19	29/32	1-37/64	11/32	1-7/64	15/32	11-1/32	0.46
J1220M-T500	20	63/64	1-11/16	23/64	1-3/16	31/64	11-27/64	0.55
J1221M-T500	21	63/64	1-11/16	23/64	1-3/16	31/64	11-13/16	0.54
J1222M-T500	22	1-3/64	1-25/32	3/8	1-17/64	1/2	12-17/32	0.62
J1224M-T500	24	1-1/8	1-57/64	13/32	1-11/32	35/64	13-5/16	0.77

PROTO® FULL POLISH COMBINATION WRENCHES – 6 POINT

ASME B107.100

MM

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 6 point box end allows for fine indexing, helping to improve speed and access.
- Anti-Slip Design (ASD) open end.
- Metric sizes 9 mm and smaller do not have ASD feature.



Part No.	Size (mm)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (E)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1206MH-T500	6	19/64	35/64	5/32	25/64	5/32	4-59/64	0.04
J1207MH-T500	7	5/16	19/32	3/16	13/32	15/64	5-11/64	0.04
J1208MH-T500	8	25/64	11/16	13/64	1/2	17/64	5-7/16	0.07
J1209MH-T500	9	13/32	3/4	7/32	35/64	17/64	5-43/64	0.08
J1210MH-T500	10	31/64	7/8	1/4	21/32	5/16	5-29/32	0.13
J1211MH-T500	11	33/64	59/64	17/64	11/16	21/64	6-29/32	0.14
J1212MH-T500	12	9/16	1	19/64	47/64	11/32	7-23/32	0.17
J1213MH-T500	13	39/64	1-1/32	21/64	25/32	11/32	7-29/32	0.18
J1214MH-T500	14	11/16	1-3/16	11/32	55/64	23/64	8-13/16	0.22
J1215MH-T500	15	3/4	1-1/4	3/8	7/8	23/64	9-9/64	0.25
J1216MH-T500	16	3/4	1-21/64	25/64	15/16	13/32	9-35/64	0.26
J1217MH-T500	17	53/64	1-25/64	27/64	1-1/32	7/16	10-19/64	0.38
J1218MH-T500	18	55/64	1-33/64	29/64	1-1/16	29/64	10-11/16	0.41
J1219MH-T500	19	29/32	1-37/64	31/64	1-7/64	15/32	11-3/64	0.46

PROTO® FULL POLISH COMBINATION WRENCHES – 12 POINT SHORT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100
AS954

IN

- 12 point box end allows for ne indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- For greater corrosion-resistance.
- The box end is chamfered for easy application to the fastener.
- 15° angled offset helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- Box ends incorporate the TorquePlus™ system.



Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1208ES	1/4	19/64	19/32	11/64	7/16	3/16	3-1/4	0.03
J1209ES	9/32	19/64	41/64	3/16	29/64	7/32	3-3/8	0.04
J1210ES	5/16	3/8	47/64	1/4	33/64	15/64	3-1/2	0.04
J1211ES	11/32	13/32	13/16	13/64	9/16	1/4	3-5/8	0.05
J1212ES	3/8	7/16	7/8	7/32	39/64	9/32	3-3/4	0.07
J1214ES	7/16	31/64	63/64	5/16	43/64	19/64	3-15/16	0.08
J1216ES	1/2	37/64	1-7/64	3/8	51/64	23/64	4-5/16	0.12
J1218ES	9/16	43/64	1-1/4	19/64	57/64	3/8	4-1/2	0.15
J1220ES	5/8	47/64	1-23/64	7/16	63/64	27/64	4-7/8	0.20
J1222ES	11/16	13/16	1-31/64	15/32	1-3/64	29/64	5-1/16	0.23
J1224ES	3/4	57/64	1-5/8	1/2	1-1/8	31/64	5-7/16	0.29
J1226ES	13/16	61/64	1-45/64	23/64	1-13/64	33/64	7-45/64	0.44
J1228ES	7/8	1-3/64	1-27/32	23/64	1-17/64	35/64	8	0.52
J1230ES	15/16	1-3/32	2	4	1-11/32	35/64	8-19/64	0.63
J1232ES	1	1-13/64	2-3/32	7/16	1-29/64	5/8	8-13/32	0.73
J1234ES	1-1/16	1-17/64	2-13/64	15/32	1-19/32	41/64	6-19/32	0.86
J1236ES	1-1/8	1-21/64	2-19/64	1/2	1-5/8	23/32	8-29/32	0.98
J1238ES	1-3/16	1-11/32	2-19/64	1/2	1-5/8	23/32	8-29/32	1.00
J1240ES	1-1/4	1-1/2	2-19/32	1/2	1-51/64	23/32	9-45/64	1.30

PROTO® FULL POLISH COMBINATION WRENCHES – 12 POINT SHORT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100

MM

- 12 point box end allows for ne indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- For greater corrosion-resistance.
- The box end is chamfered for easy application to the fastener.
- 15° angled offset helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- Box ends incorporate the TorquePlus™ system.



Part No.	Size (mm)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1206MES	6	19/64	19/32	11/64	7/16	3/16	3-1/4	0.03
J1207MES	7	19/64	41/64	3/16	29/64	7/32	3-3/8	0.04
J1208MES	8	3/8	47/64	1/4	33/64	15/64	3-1/2	0.04
J1209MES	9	13/32	13/16	13/64	9/16	1/4	3-5/8	0.05
J1210MES	10	7/16	7/8	7/32	39/64	9/32	3-3/4	0.07
J1211MES	11	31/64	63/64	5/16	43/64	19/64	3-15/16	0.08
J1212MES	12	17/32	1-1/16	11/32	47/64	21/64	4-1/8	0.10
J1213MES	13	37/64	1-7/64	3/8	51/64	23/64	4-5/16	0.12
J1214MES	14	43/64	1-1/4	19/64	57/64	3/8	4-1/2	0.15
J1215MES	15	45/64	1-5/16	13/32	29/32	25/64	4-11/16	0.17
J1216MES	16	47/64	1-23/64	7/16	63/64	27/64	4-7/8	0.20
J1217MES	17	13/16	1-31/64	15/32	1-3/64	29/64	5-1/16	0.23
J1218MES	18	27/32	1-35/64	11/32	1-5/64	15/32	5-1/4	0.27
J1219MES	19	57/64	1-5/8	1/2	1-1/8	31/64	5-7/16	0.29
J1220MES	20	15/16	1-41/64	11/32	1-5/64	15/32	5-1/4	0.27
J1221MES	21	61/64	1-45/64	23/64	1-13/64	33/64	7-45/64	0.44
J1222MES	22	1-3/64	1-27/32	23/64	1-17/64	35/64	8	0.52
J1223MES	23	1-3/32	2	4	1-11/32	35/64	8-19/64	0.63
J1224MES	24	1-3/32	2	4	1-11/32	35/64	8-19/64	0.63
J1225MES	25	1-13/64	2-3/32	7/16	1-29/64	5/8	8-13/32	0.73
J1227MES	27	1-17/64	2-13/64	15/32	1-19/32	41/64	6-19/32	0.86
J1230MES	30	1-5/16	2-19/64	1/2	1-5/8	23/32	8-29/32	0.94
J1232MES	32	1-31/64	2-19/32	35/64	1-51/64	23/32	9-45/64	1.30

PROTO® SATIN COMBINATION WRENCHES – 6 POINT SHORT

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 6 point box end allows for large wrench to fastener contact area which helps prevent rounding of the fastener.
- Compact shank design and short length for access in confined spaces.
- 15° angled offset box end helps keep shank clear of obstructions.
- Standard open end.



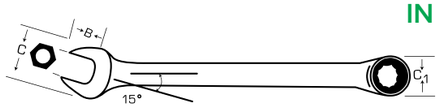
Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1204EFS	1/8	11/64	11/32	1/8	9/32	1/8	2-49/64	0.01
J1205EFS	5/32	13/64	13/32	1/8	19/64	1/8	2-57/64	0.01
J1206EFS	3/16	15/64	15/32	1/8	11/32	5/32	3-1/4	0.02
J1207EFS	7/32	1/4	1/8	1/8	3/8	5/32	3-1/8	0.02
J1208EFS	1/4	19/64	9/16	5/32	27/64	3/16	3-17/64	0.03
J1209EFS	9/32	21/64	5/8	5/32	7/16	3/16	3-7/16	0.04
J1210EFS	5/16	3/8	11/16	5/32	1/2	1/4	4-1/8	0.04
J1211EFS	11/32	25/64	47/64	3/16	17/32	1/4	4-7/16	0.05
J1212EFS	3/8	7/16	53/64	3/16	37/64	1/4	4-5/8	0.07
J1214EFS	7/16	33/64	7/8	7/32	5/8	9/32	5-1/16	0.12
J1216EFS	1/2	19/32	1	7/32	3/4	5/16	5-1/4	0.16
J1218EFS	9/16	43/64	1-1/8	1/4	51/64	11/32	5-7/8	0.16
J1220EFS	5/8	47/64	1-17/64	9/32	57/64	3/8	6-3/16	0.17

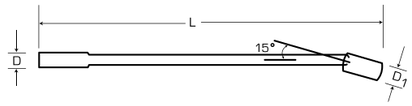
PROTO® FULL POLISH COMBINATION WRENCHES – SPLINE

ASME B107.100

IN

- Designed to service high tensile strength fasteners used widely on military and commercial aircraft and in heavy machinery applications where vibration is prevalent. They are also used in automotive and industrial areas where high performance torque needs to be achieved.
- Spline fasteners help tighten high strength bolts to high torque loads.
- They help lower the force required to turn standard fasteners by allowing the torque load to be moved away from the corners, helping prevent fastener rounding. They also turn fasteners with damaged corners.
- Spline helps reduce foreign object debris (FOD) by having a precise fit between the fastening tool and its fastener.
- Full polish finish provides corrosion resistance and an easy to clean surface.
- Anti-Slip Design (ASD) open end.
- Fractional sizes 11/32" and smaller do not have the ASD feature.

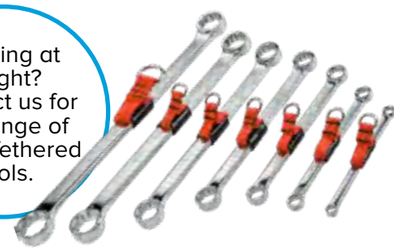






Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1208SPL	1/4	17/64	35/64	5/32	25/64	11/64	4-29/32	0.06
J1209SPL	9/32	19/64	39/64	11/64	7/16	11/64	5-5/32	0.07
J1210SPL	5/16	21/64	11/16	11/64	31/64	3/16	5-27/64	0.08
J1211SPL	11/32	23/64	25/32	3/16	35/64	7/32	5-21/32	0.09
J1212SPL	3/8	13/32	27/32	13/64	37/64	15/64	5-59/62	0.10
J1214SPL	7/16	15/32	15/16	7/32	43/64	17/64	6-29/32	0.14
J1216SPL	1/2	17/32	1-5/64	1/4	47/64	5/16	7-29/32	0.20
J1218SPL	9/16	19/32	1-13/64	9/32	13/16	11/32	8-53/64	0.26
J1220SPL	5/8	43/64	1-21/64	19/64	57/64	3/8	9-35/64	0.34
J1222SPL	11/16	47/64	1-7/16	5/16	63/64	13/32	10-19/64	0.42
J1224SPL	3/4	51/64	1-37/64	11/32	1-5/64	15/32	11-3/64	0.50
J1226SPL	13/16	55/64	1-23/32	23/64	1-3/16	33/64	11-53/64	0.59
J1228SPL	7/8	15/16	1-27/32	3/8	1-1/4	17/32	12-17/32	0.73
J1230SPL	15/16	1	1-31/32	25/64	1-23/64	37/64	13-5/16	0.90
J1232SPL	1	1-1/16	2-3/32	27/64	1-29/64	37/64	14-1/16	1.10

Working at height? Contact us for our range of Proto Tethered Tools.



PROTO® BLACK OXIDE COMBINATION WRENCHES – 12 POINT SHORT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100
AS954G

IN

- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Non-reflective black oxide finish for use where non-plated products are required.
- The box end is countersunk for easy application to the fastener.
- 15° angled offset helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- Box ends incorporate the TorquePlus™ system.



Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1208ESB	1/4	19/64	19/32	11/64	7/16	3/16	3-1/4	0.03
J1209ESB	9/32	19/64	41/64	3/16	29/64	7/32	3-3/8	0.04
J1210ESB	5/16	3/8	47/64	1/4	33/64	15/64	3-1/2	0.04
J1211ESB	11/32	13/32	13/16	13/64	9/16	1/4	3-5/8	0.05
J1212ESB	3/8	7/16	7/8	7/32	39/64	9/32	3-3/4	0.07
J1214ESB	7/16	31/64	63/64	5/16	43/64	19/64	3-15/16	0.08
J1216ESB	1/2	37/64	1-7/64	3/8	51/64	23/64	4-5/16	0.12
J1218ESB	9/16	43/64	1-1/4	19/64	57/64	3/8	4-1/2	0.15
J1220ESB	5/8	47/64	1-23/64	7/16	63/64	27/64	4-7/8	0.20
J1222ESB	11/16	13/16	1-31/64	15/32	1-3/64	29/64	5-1/16	0.23
J1224ESB	3/4	57/64	1-5/8	1/2	1-1/8	31/64	5-7/16	0.29

PROTO® BLACK OXIDE COMBINATION WRENCHES – 12 POINT SHORT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100

MM

- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Non-reflective black oxide finish for use where non-plated products are required.
- The box end is countersunk for easy application to the fastener.
- 15° angled offset helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- Box ends incorporate the TorquePlus™ system.



Part No.	Size (mm)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1206MESB	6	19/64	19/32	11/64	7/16	3/16	3-1/4	0.03
J1207MESB	7	19/64	41/64	3/16	29/64	7/32	3-3/8	0.04
J1208MESB	8	3/8	47/64	1/4	33/64	15/64	3-1/2	0.04
J1209MESB	9	13/32	13/16	13/64	9/16	1/4	3-5/8	0.05
J1210MESB	10	7/16	7/8	7/32	39/64	9/32	3-3/4	0.07
J1211MESB	11	31/64	63/64	5/16	43/64	19/64	3-15/16	0.08
J1212MESB	12	17/32	1-1/16	11/32	47/64	21/64	4-1/8	0.10
J1213MESB	13	37/64	1-7/64	3/8	51/64	23/64	4-5/16	0.12
J1214MESB	14	43/64	1-1/4	19/64	57/64	3/8	4-1/2	0.15
J1215MESB	15	45/64	1-5/16	13/32	29/32	25/64	4-11/16	0.17
J1216MESB	16	47/64	1-23/64	7/16	63/64	27/64	4-7/8	0.20
J1217MESB	17	13/16	1-31/64	15/32	1-3/64	29/64	5-1/16	0.23
J1218MESB	18	27/32	1-35/64	11/32	1-5/64	15/32	5-1/4	0.27
J1219MESB	19	57/64	1-5/8	1/2	1-1/8	31/64	5-7/16	0.29

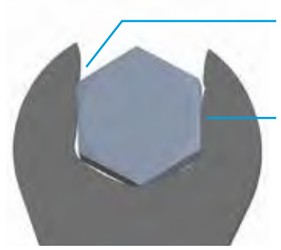
Wrenches with Anti-Slip Design (ASD) – Features & Benefits

The Anti-Slip Design consists of two features:

- A notch to lock the fastener in place.
- A curve for greater contact area against the fastener.

An ASD Wrench does not apply load to the corners of the fastener, so it helps to prevent rounding.

Because of the greater surface contact, the wrench can also successfully apply greater torque without slipping.



Stahlwille Combi. Spanner Sets

STAHLWILLE 10 PIECE COMBINATION SPANNER SET ES 13/10

MM

- in 175 x 350 x 40mm molded plastic inlay

Contents:

- 6, 7, 8, 9, 10, 11, 12, 13, 14, 15mm



Part No.	Description	Weight (g)
96 83 81 27	10 Piece Combi Spanner Set Metric	525

STAHLWILLE 5 PIECE COMBINATION SPANNER SET ES 13/5

MM

- in 530 x 350 x 30mm molded plastic inlay

Contents:

- 27, 28, 29, 30, 32mm



Part No.	Description	Weight (g)
96 83 81 04	5 Piece Combination Spanner Set	2280

STAHLWILLE COMBINATION SPANNER SETS 13A/8, 13A/10KT, 13A/20

IN

- in carton box



Part No.	Contents (in)	Weight (g)
96 40 48 03	7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8	900
96 40 48 12	1/4, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	750
96 40 48 04	1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 19/32, 5/8, 11/16, 3/4, 25/32, 13/16, 7/8, 15/16, 1, 1 1/16, 1 1/8, 1 1/4	3180

STAHLWILLE LONG COMBINATION SPANNER SETS 14/6, 14/9, 14/15N

MM

- in carton box



Part No.	Contents (mm)	Weight (g)
96 40 10 08	10, 13, 17, 19, 22, 24	1175
96 40 10 09	10, 11, 13, 17, 19, 22, 24, 27, 30	2395
96 40 10 10	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 24, 27, 30	3135

STAHLWILLE 8 PIECE COMBINATION SPANNER SET ES 13/8

MM

- in 175 x 350 x 54mm molded plastic inlay

Contents:

- 16, 17, 18, 19, 20, 21, 22, 24mm



Part No.	Description	Weight (g)
96 83 81 28	8 Piece Combi Spanner Set Metric	1440

STAHLWILLE COMBINATION SPANNER SETS 13/10KT, 13/16, 13/26

MM

- in carton box



Part No.	Contents (mm)	Weight (g)
96 40 08 08	8, 9, 10, 11, 12, 13, 14, 15, 17, 19	746
96 40 08 16	7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 24	1620
96 40 08 05	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32	4705

STAHLWILLE COMBINATION SPANNER SETS 13/6, 13/9, 13/11, 13/15, 13/17

MM

- in extremely tough textile rollup wallet with Velcro fastener



Part No.	Contents (mm)	Weight (g)
96 40 08 13	7, 8, 10, 13, 17, 19	650
96 40 08 01	9, 10, 11, 12, 13, 14, 17, 19, 22	758
96 40 08 02	8, 9, 10, 11, 12, 13, 14, 15, 17, 19, 22	915
96 40 08 03	6, 7, 8, 9, 10, 11, 12, 13, 17, 19, 22, 24, 27, 30, 32	2236
96 40 08 04	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22	1480

STAHLWILLE LONG COMBINATION SPANNER SETS 14/11, 14/15, 14/17

MM

- in extremely tough textile rollup wallet with Velcro fastener (except 96 40 10 07 has plastic wallet)



Part No.	Contents (mm)	Weight (g)
96 40 10 06	8, 9, 10, 11, 12, 13, 14, 15, 17, 19, 22	1137
96 40 10 04	6, 7, 8, 9, 10, 11, 12, 13, 17, 19, 22, 24, 27, 30, 32	3370
96 40 10 05	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22	1874
96 40 10 07	8, 9, 10, 11, 12, 13, 14, 15, 17, 19	1235

STAHLWILLE 5 PIECE MINI COMBINATION SPANNER SET 16/5

MM

- in extremely tough textile rollup wallet with Velcro fastener

Contents:

- 3.2, 3.5, 4, 4.5, 5mm



Part No.	Description	Weight (g)
96 40 09 02	5 Piece Mini Combi Spanner Set Metric	46

PROTO® Combination Spanner Sets

PROTO® 7 PIECE COMBINATION WRENCH SET – 12 POINT ASD

ASME B107.100

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6, and 12 point fasteners.
- Anti-Slip Design (ASD) open end.
- Box ends incorporate the TorquePlus™ system.
- Contents: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 inch



Part No.	Description	Weight (lbs)
J1200H-T500	7 Piece Combination ASD Wrench Set 12 Point Imperial	2.02

PROTO® 9 PIECE COMBINATION WRENCH SET – 12 POINT ASD

ASME B107.100

MM

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Anti-Slip Design (ASD) open end. Metric sizes 9 mm and smaller do not have ASD feature.
- Box ends incorporate the TorquePlus™ system.
- Contents: 7, 8, 9, 10, 11, 12, 13, 14, 15mm



Part No.	Description	Weight (lbs)
J1200HM-T500	9 Piece Combination Wrench Set 12 Point Metric	1.62

PROTO® 15 PIECE COMBINATION WRENCH SET – 12 POINT ASD

ASME B107.100

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6, and 12 point fasteners.
- Anti-Slip Design (ASD) open end. Fractional sizes 11/32" and smaller do not have the ASD feature.
- Box ends incorporate the TorquePlus™ system.
- Contents: Standard: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 Deep: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 inch



Part No.	Description	Weight (lbs)
J1200F-T500	15 Piece Combination ASD Wrench Set – 12 Point Imperial	9.76

PROTO® 17 PIECE COMBINATION WRENCH SET – 12 POINT ASD

ASME B107.100

MM

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Anti-Slip Design (ASD) open end. Metric sizes 9 mm and smaller do not have ASD feature.
- Box ends incorporate the TorquePlus™ system.
- Contents: 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24mm



Part No.	Description	Weight (lbs)
J1200RM-T500	17 Piece Combination Wrench Set 12 Point Metric	6.92

PROTO® 7 PIECE COMBINATION WRENCH SET – 12 POINT ASD

TORQUEPLUS FASTENING SYSTEM

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Anti-Slip Design (ASD) open end.
- Box ends incorporate the TorquePlus™ system.
- Contents: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 inch



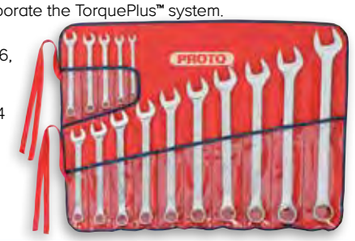
Part No.	Description	Weight (lbs)
J1200HASD	7 Piece Combi ASD Wrench Set 12 Point Imperial	2.40

PROTO® 15 PIECE COMBINATION WRENCH SET – 12 POINT ASD

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Anti-Slip Design (ASD) open end. Fractional sizes 11/32" and smaller do not have the ASD feature.
- Box ends incorporate the TorquePlus™ system.
- Contents: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4 inch



Part No.	Description	Weight (lbs)
J1200FASD	15 Piece Combi ASD Wrench Set 12 Point Imperial	9.75

PROTO® 16 PIECE COMBINATION WRENCH SET – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- 15° angled offset box end helps keep shank clear of obstructions.
- The box end is countersunk for easy application to the fastener.
- Box ends incorporate the TorquePlus™ system.
- Contents: 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 2, 2-1/16, 2-1/8, 2-3/16, 2-1/4, 2-3/8, 2-1/2 inch



Part No.	Description	Weight (lbs)
J1200F-HD	16 Piece Combination Wrench Set 12 Point Imperial	113.5

PROTO® 31 PIECE COMBINATION ASD WRENCH SET – 12 POINT

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Anti-Slip Design (ASD) open end. Fractional sizes 11/32" and smaller and 1-15/16" and larger do not have the ASD feature.
- Box ends incorporate the TorquePlus™ system.
- Contents: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4, 1-5/16, 1-3/8 inch



Part No.	Description	Weight (lbs)
J1200-90ASD	31 Piece Combination ASD Wrench Set 12 Point Imperial	124

PROTO® 8 PIECE SHORT COMBINATION WRENCH SET – 6 POINT

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 6 point box end allows for large wrench to fastener contact area which helps prevent rounding of the fastener.
- Compact shank design and short length for access in confined spaces.
- 15° angled offset box end helps keep shank clear of obstructions.
- Standard open end.
- Contents: 1/8, 5/32, 3/16, 1/4, 9/32, 5/16, 11/32, 3/8 inch



Part No.	Description	Weight (lbs)
J1200EF	8 Piece Short Combination Wrench Set 6 Point Imperial	0.35

PROTO® 26 PIECE COMBINATION ASD WRENCH SET – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Anti-Slip Design (ASD) open end. Fractional sizes 11/32" and smaller and sizes 1-5/16" and larger do not have the ASD feature.
- Box ends incorporate the TorquePlus™ system.
- Contents: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 2 inch



Part No.	Description	Weight (lbs)
J1200-80ASD	26 Piece Combination ASD Wrench Set 12 Point Imperial	57.42

PROTO® 10 PIECE COMBINATION ASD WRENCH SET – 6 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 6 point box end allows for large wrench to fastener contact area which helps prevent rounding of the fastener.
- Anti-Slip Design (ASD) open end.
- Box ends incorporate the TorquePlus™ system.
- Contents: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 inch



Part No.	Description	Weight (lbs)
J1200GHASD	10 Piece Combination ASD Wrench Set 6 Point Imperial	4.88

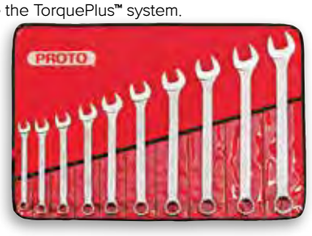
PROTO® 10 PIECE COMBINATION ASD WRENCH SET – 6 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Anti-Slip Design (ASD) open end.
- Box ends incorporate the TorquePlus™ system.
- Contents: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 inch



Part No.	Description	Weight (lbs)
J1200GASD	10 Piece Combination ASD Wrench Set 6 Point Imperial	4.88

PROTO® 15 PIECE COMBINATION ASD WRENCH SET – 12 POINT

ASME B107.100 | TORQUEPLUS FASTENING SYSTEM | MM

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Anti-Slip Design (ASD) open end. Metric sizes 9 mm and smaller do not have ASD feature.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21mm



Part No.	Description	Weight (lbs)
J1200F-MASD	15 Piece Combination ASD Wrench Set 12 Point Metric	4.25

PROTO® 10 PIECE COMBINATION ASD WRENCH SET – 6 POINT

ASME B107.100 | TORQUEPLUS FASTENING SYSTEM | MM

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 6 point box end allows for large wrench to fastener contact area which helps prevent rounding of the fastener.
- Anti-Slip Design (ASD) open end.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm

Part No.	Description	Weight (lbs)
J1200MHASD	10 Piece Combination ASD Wrench Set 6 Point Metric	3.46

PROTO® 10 PIECE COMBINATION ASD WRENCH SET – 12 POINT

ASME B107.100 | TORQUEPLUS FASTENING SYSTEM | MM

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Anti-Slip Design (ASD) open end.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm



Part No.	Description	Weight (lbs)
J1200K-MASD	10 Piece Combination ASD Wrench Set 12 Point Metric	2.71

PROTO® 18 PIECE COMBINATION ASD WRENCH SET – 12 POINT

ASME B107.100 | TORQUEPLUS FASTENING SYSTEM | MM

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Anti-Slip Design (ASD) open end. Metric sizes 9 mm and smaller do not have ASD feature.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24mm



Part No.	Description	Weight (lbs)
J1200R-MASD	18 Piece Combination ASD Wrench Set 12 Point Metric	8.1

PROTO® 9 PIECE COMBINATION ASD WRENCH SET – 12 POINT

ASME B107.100 | TORQUEPLUS FASTENING SYSTEM | MM

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Anti-Slip Design (ASD) open end. Metric sizes 9 mm and smaller do not have ASD feature.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 7, 8, 9, 10, 11, 12, 13, 14, 15mm



Part No.	Description	Weight (lbs)
J1200H-MASD	9 Piece Combination ASD Wrench Set 12 Point Metric	1.43

10 PIECE COMBINATION WRENCH SET MINI

IN

- Forged from Alloy Steel, fully polished, heat treated
- Comes in vinyl pouch

Contents:

- 6 Point: 5/32, 3/16 in
- 12 Point: 7/32, 15/64, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16 inch



Part No.	Description
TE5593	10 Piece Combi Wrench Set Mini Imperial

10 PIECE COMBINATION WRENCH SET MINI

MM

- Forged from Alloy Steel, fully polished, heat treated
- Comes in vinyl pouch

Contents:

- 6 Point: 4, 4.5mm
- 12 Point: 5, 5.5, 6, 7, 8, 9, 10, 11 mm



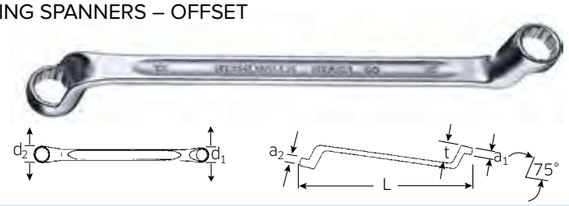
Part No.	Description
TE5594	10 Piece Combi Wrench Set Mini Metric

Stahlwille Ring/Ring Spanners

STAHLWILLE DOUBLE ENDED RING SPANNERS – OFFSET 20

StahlwilleSTABIL® | MM

- DIN 838/ISO 10104
- Chrome Alloy Steel, chrome plated

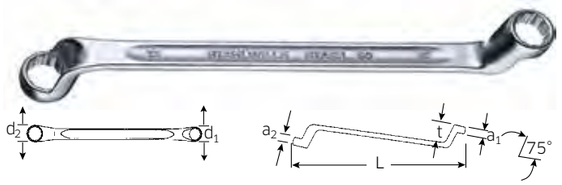


Part No.	Size (mm)	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Offset (t) (mm)	Weight (g)
4104 06 07	6 x 7	165	10.5	11.8	6	7	18	46
4104 08 09	8 x 9	180	13.1	14.5	7	8	20	62
4104 08 10	8 x 10	180	13.1	15.8	7	9	21	61
4104 10 11	10 x 11	200	15.8	17.2	9	9	23	93
4104 10 13	10 x 13	220	15.8	20	9	10	25	122
4104 12 13	12 x 13	220	18.6	20	9	10	25	126
4104 13 17	13 x 17	245	20	25.3	10	12	27	169
4104 14 15	14 x 15	245	21.3	22.6	10	12	27	163
4104 16 17	16 x 17	255	23.9	25.3	11	12	27	181
4104 17 19	17 x 19	270	25.3	28	12	13	29	220
4104 18 19	18 x 19	275	26.6	28	12	13	29	220
4104 18 21	18 x 21	300	26.6	30.7	12	13	31	279
4104 19 22	19 x 22	300	28	32.1	13	14	31	315
4104 20 22	20 x 22	300	29.4	32.1	13	14	31	317
4104 21 23	21 x 23	315	30.7	33.4	13	14	31	312
4104 21 24	21 x 24	330	30.7	34.7	13	14	34	384
4104 22 24	22 x 24	330	32.1	34.7	14	14	34	368
4104 24 26	24 x 26	330	34.7	37.3	14	15	34	427
4104 24 27	24 x 27	330	34.7	38.6	14	15	34	447
4104 25 28	25 x 28	350	36	40	14	15	34	414
4104 27 30	27 x 30	360	38.3	42.6	15	15	37	595
4104 27 32	27 x 32	360	39.3	47.2	15	16	37	596
4104 30 32	30 x 32	365	42.6	45.4	15	16	37	640
4104 30 34	30 x 34	365	42.6	48	15	16	37	660
4104 36 41	36 x 41	440	53	60	17	18	40	1015
4104 46 50	46 x 50	535	65.2	73	19	20	45	1709

STAHLWILLE DOUBLE ENDED RING SPANNERS – OFFSET 20A

Chrome Alloy Steel, chrome plated

StahlwilleSTABIL® | IN

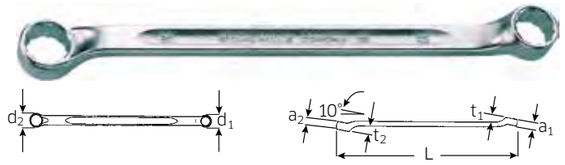


Part No.	Size (in)	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Offset (t) (mm)	Weight (g)
4144 16 20	1/4 x 5/16	180	11.8	13.1	7	7	20	55
4144 24 28	3/8 x 7/16	200	15.8	17.2	9	9	23	88
4144 32 34	1/2 x 9/16	220	20	21.3	9	10	25	120
4144 34 36	9/16 x 5/8	245	21.3	25.3	10	12	27	168
4144 35 38	19/32 x 11/16	255	23.9	25.3	11	12	27	175
4144 36 40	5/8 x 3/4	270	23.9	28	12	13	29	235
4144 38 42	11/16 x 13/16	300	25.3	30.7	12	13	31	280
4144 40 44	3/4 x 7/8	300	28	32.1	13	14	31	299
4144 4142	25/32 x 13/16	300	29.4	32.1	13	14	31	333
4144 44 46	7/8 x 15/16	330	32.1	34.7	14	14	34	363
4144 46 48	15/16 x 1	330	34.7	37.3	14	15	34	419
4144 52 58	1 1/8 x 1 5/16	365	42.6	45.4	15	16	37	581

STAHLWILLE DOUBLE ENDED RING SPANNERS – SHALLOW OFFSET, CORONA
23

MM

- DIN 897/ISO 10104
- Chrome Alloy Steel, chrome plated

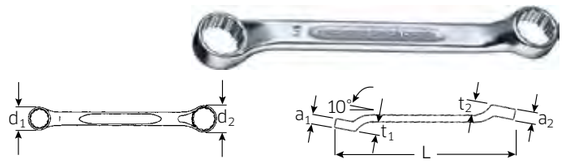


Part No.	Size (mm)	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Offset (t1) (mm)	Offset (t2) (mm)	Weight (g)
41070607	6 x 7	170	9.5	10.8	6	7	7	8	41
41070809	8 x 9	179	12.1	13.3	7	8	8	9	49
41071011	10 x 11	188	14.6	15.9	8.5	9.5	9	10	66
41071213	12 x 13	203	17.3	18.6	9.5	10.5	10	11	78
41071415	14 x 15	219	20.1	21.4	10.5	11.5	11	13	109
41071617	16 x 17	248	22.7	24.1	11.5	12.5	14	15	144
41071719	17 x 19	250	24.1	27	12.5	13.5	15	18	162
41071819	18 x 19	251	25.5	27	12.5	13.5	16	18	157
41072022	20 x 22	280	28.5	31.3	13.5	14.5	19	20	223
41072123	21 x 23	328	29.8	32.9	13.5	14.5	19	22	281
41072427	24 x 27	376	34.3	38.6	14.5	16	22	24	426
41073032	30 x 32	429	42.6	45.2	18	18	26	27	608

STAHLWILLE DOUBLE ENDED RING SPANNERS – SHALLOW OFFSET, SHORT
180A

IN

- Fed. Spec. GGG-W-636 E
- S.B.A.C. Techn. Spec. T.S. 48 up to 1/2"
- HPQ® high performance steel, chrome plated

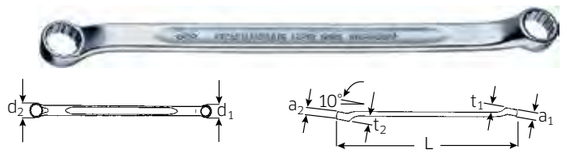


Part No.	Size (in)	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Offset (t1) (mm)	Offset (t2) (mm)	Weight (g)
41601620	1/4 x 5/16	107	10.2	11.8	7	8	7.2	7.4	26
41602428	3/8 x 7/16	122	14.6	16.7	6.7	7.8	9	10	42
41603234	1/2 x 9/16	141	18.5	20.7	8.7	9.5	11	12	62
41603436	9/16 x 5/8	148	20.7	22.6	9.5	10.5	11.5	12.5	90

STAHLWILLE DOUBLE ENDED RING SPANNERS – SHALLOW OFFSET
230A

IN

- SAE AS 954 (dimensions and test loads)
- Fed. Spec. GGG-W-636E
- S.B.A.C. Techn. Spec. T.S. 48 up to 1/2"
- HPQ® high performance steel, chrome plated



Part No.	Size (in)	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Offset (t1) (mm)	Offset (t2) (mm)	Weight (g)
41611620	1/4 x 5/16	180	10.2	11.9	5.2	6	7.9	8.8	45
41612022	5/16 x 11/32	195	11.9	13.5	7	8	8	9	45
41612024	5/16 x 3/8	195	11.9	14.6	6	7.9	10.8	12.4	54
41612428	3/8 x 7/16	215	14.6	16.7	7.9	8.7	11.4	11.7	74
41612832	7/16 x 1/2	225	16.7	19.5	8.7	9.1	11.9	12.6	105
41613234	1/2 x 9/16	235	19.5	20.7	9.1	9.5	12.2	12.9	110
41613436	9/16 x 5/8	245	20.7	22.6	9.5	11.5	13.8	13.9	122
41613640	5/8 x 3/4	274	22.6	27.5	11.1	12	14.8	15.8	160
41613840	11/16 x 3/4	275	25.4	27.5	11.1	12	15.2	15.8	190
41614244	13/16 x 7/8	301	29.5	31.7	13.5	14.5	19	20	260
41614648	15/16 x 1	340	34.1	36.5	14.5	15	22	23	375
41614850	1 x 1 1/16	368	36.5	38.6	15	16	23	24	460
41615256	1 1/8 x 1 1/4	403	40.8	45	16	18	25	27	620

STAHLWILLE DOUBLE ENDED RING SPANNERS – EXTRA LONG
220

MM

- 15° angled
- HPQ® high performance steel, chrome plated



Part No.	Size (mm)	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Weight (g)
41035507	5.5 x 7	185	8.8	11	5.3	5.8	28
41030608	6 x 8	205	9.8	12.1	5.6	6	34
41030911	9 x 11	250	14.2	16.7	8	8.7	80
41031011	10 x 11	250	15.5	16.7	8	8.7	80
41031214	12 x 14	290	18.3	20.7	9.5	9.5	162
41031314	13 x 14	290	18.7	20.7	9.5	9.5	160
41031719	17 x 19	365	25	27.5	11	12	296
41031819	18 x 19	365	25.5	27.5	11	12	295
41031922	19 x 22	408	27.5	31.5	13	14.3	520
41032022	20 x 22	409	28.5	31.5	13	14.3	515

STAHLWILLE DOUBLE ENDED RING SPANNERS – EXTRA LONG
220A

IN

- 15° angled
- SAE AS 954-E (test loads)
- HPQ® high performance steel, chrome plated

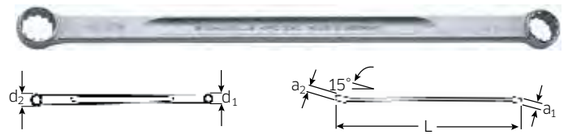


Part No.	Size (in)	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Weight (g)
41431416	7/32 x 1/4	184	9	9.9	5.3	5.8	29
41431620	1/4 x 5/16	205	9.9	12.2	5.6	6	33
41432428	3/8 x 7/16	250	14	16	8	8.7	79
41433234	1/2 x 9/16	290	18.5	21	9.5	9.5	160
41433640	5/8 x 3/4	363	22.6	27	11	12	298
41433840	11/16 x 3/4	365	25	27	11	12	291

STAHLWILLE DOUBLE ENDED RING SPANNERS – EXTRA LONG SPLINE
220ASP

MM

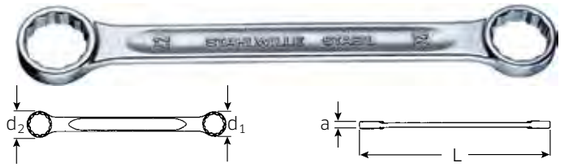
- 15° angled
- MS-33787, MIL-W-8982
- HPQ® high performance steel, chrome plated



Part No.	Spline Size (mm)	Size (in)	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Weight (g)
41160709	7 x 9	7/32 x 9/32	185	9.4	11.5	5.3	5.8	28
41160810	8 x 10	1/4 x 5/16	205	10.4	12.4	5.6	6	33
41161214	12 x 14	3/8 x 7/16	250	14.9	17	8	8.7	79
41161618	16 x 18	1/2 x 9/16	290	19	21	9.5	9.5	161
41161820	18 x 20	9/16 x 5/8	315	21	23	10	11	205
41162224	22 x 24	11/16 x 3/4	365	25	27.5	11	12	310
41162630	26 x 30	13/16 x 15/16	410	29.5	34	13	14.3	496
41162832	28 x 32	7/8 x 1	430	32	36.5	13.5	15	582

STAHLWILLE DOUBLE ENDED RING SPANNERS – STRAIGHT
21

- DIN 837/ISO 10103
- Chrome Alloy Steel, chrome plated



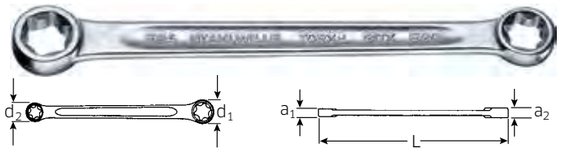
StahlwilleSTABIL®

MM

Part No.	Size (mm)	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a)	Weight (g)
41050607	6 x 7	100	9.6	11	4.5	14
41050809	8 x 9	115	12.5	14	5.5	19
41050810	8 x 10	115	12.5	15.4	6	18
41051011	10 x 11	150	15.4	16.6	6	30
41051213	12 x 13	170	18.2	19.5	6.5	42
41051317	13 x 17	165	19.5	25	8	57
41051415	14 x 15	170	21	22.5	7.5	55
41051617	16 x 17	185	23.8	25	8	68
41051719	17 x 19	185	25	27.6	8	78
41051819	18 x 19	210	26.3	27.6	9	84
41051821	18 x 21	210	26.3	30.5	9	107
41051922	19 x 22	210	27.6	32.4	9	109
41052022	20 x 22	210	29	32.4	9	109
41052124	21 x 24	235	30.5	34.7	10	128
41052427	24 x 27	290	34.7	38.5	11	225
41052732	27 x 32	320	38.5	45.5	12	283
41053032	30 x 32	325	43	45.5	12	289
41053034	30 x 34	325	43	48.5	12	307

STAHLWILLE DOUBLE ENDED RING SPANNERS – TORX®
21TX

Chrome Alloy Steel, chrome plated

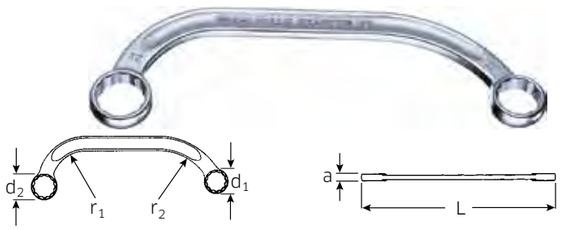


Part No.	Size	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Weight (g)
41250608	E6 x E8	115.5	9.6	11.6	4.5	5.5	17
41251012	E10 x E12	149.5	13.7	15.7	6.5	7.5	33
41251418	E14 x E18	185	17.8	22.5	8	9.5	71
41252024	E20 x E24	227	24.7	29.2	10.5	12.5	129

STAHLWILLE DOUBLE ENDED RING SPANNERS – OBSTRUCTION BOX (HALF MOON)
27

- ISO 3318
- Chrome Alloy Steel, chrome plated

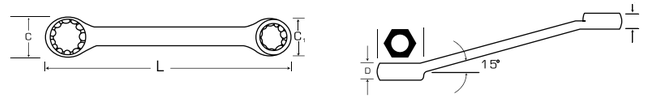
MM



Part No.	Size (mm)	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a)	Radius (mm) (r1)	Radius (mm) (r2)	Weight (g)
41091012	10 x 12	150	16.5	19.5	6.5	35	60	53
41091113	11 x 13	150	16.5	19.5	6.5	35	60	50
41091416	14 x 16	179	21	24.5	7.5	36	64	91
41091417	14 x 17	179	21	24.5	7.5	36	64	89
41091517	15 x 17	184	22.5	25	7.5	38	66	96
41091618	16 x 18	200	25.3	27.5	8.5	47	68	130
41091922	19 x 22	225	28	32	9	48	67	164

PROTO® Ring/Ring Spanners

Read about the benefits of TorquePlus™ on page 379



PROTO® RING/RING WRENCHES – OFFSET – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100
AS954E S3.8.1

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Offset box end allows access to recessed fasteners and keeps hands clear of obstructions.
- Box ends incorporate the TorquePlus™ system.



Part No.	Size (in)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (E)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1012-500	3/8 x 7/16	21/32	5/16	37/64	19/64	7-3/4	0.11
J1016A *	1/2 x 9/16	53/64	23/64	3/4	11/32	8-7/8	0.20
J1018-500	9/16 x 5/8	59/64	13/32	53/64	23/64	9-1/2	0.27
J1022-500	11/16 x 3/4	1-3/32	15/32	1-1/64	29/64	11-3/16	0.40
J1026-500	13/16 x 7/8	1-1/4	33/64	1-11/64	31/64	12-11/16	0.67
J1030-500	15/16 x 1	1-13/32	37/64	1-21/64	35/64	14-3/8	0.88
J1034-500	1-1/16 x 1-1/8	1-9/16	41/64	1-31/64	41/64	16-3/4	1.15

* J1016A Satin finish only

PROTO® RING/RING WRENCHES – OFFSET – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100
AS954E S3.8.1

MM

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Offset box end allows access to recessed fasteners and keeps hands clear of obstructions.
- Box ends incorporate the TorquePlus™ system.



Part No.	Size (mm)	Outside Head Width (in) (C)	Outside Head Width (in) (E)	OAL (in) (L)	Weight (lbs)
J1050M	6 x 7	29/64	13/32	5-49/64	0.09
J1051M	8 x 9	35/64	31/64	6-49/64	0.11
J1053M	10 x 11	21/32	39/64	7-31/32	0.19
J1057M	12 x 13	3/4	45/64	8-55/64	0.28
J1058M	12 x 14	13/16	45/64	9-1/16	0.42
J1061M	14 x 15	7/8	13/16	9-45/64	0.39
J1064M	16 x 18	1-1/32	29/32	10-11/16	0.45
J1065M	17 x 19	1-5/64	63/64	11-23/64	0.59
J1068M	19 x 21	1-3/16	1-5/64	12-15/32	0.70
J1069M	19 x 22	1-17/64	1-5/64	12-15/32	0.70
J1072M	21 x 24	1-11/32	1-3/16	13-25/64	0.99
J1073M	22 x 24	1-11/32	1-17/64	13-45/64	0.94
J1077M	27 x 30	1-43/64	1-33/64	15-59/64	1.42
J1079M	30 x 32	1-25/32	1-43/64	17-13/64	1.76

PROTO® RING/RING WRENCHES – DEEP OFFSET – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100
AS954E S3.8.1

IN

- Full polish wrenches meet and exceed stringent aerospace specification AS4984A.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- 60° deep offset helps improve access to deeply recessed fasteners.
- Offset handle helps keep knuckles clear of obstruction to help save time.
- Box ends incorporate the TorquePlus™ system.



Part No.	Size (in)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (E)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J8180-T500	3/8 x 7/16	39/64	5/16	45/64	11/32	7-3/4	0.19
J8181-T500	1/2 x 9/16	51/64	23/64	57/64	23/64	9	0.32
J8182-T500	5/8 x 11/16	31/32	13/32	1-1/32	7/16	10-1/4	0.44
J8183-T500	11/16 x 13/16	1-3/16	1/2	1-1/4	1/2	11-1/2	0.54
J8184-T500	3/4 x 7/8	1-1/8	1/2	1-1/4	17/32	12-3/4	0.74
J8185-T500	15/16 x 1	1-11/32	5/8	1-13/32	5/8	14	1.10

PROTO® RING/RING WRENCHES – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100
AS954E S3.8.1

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Box ends incorporate the TorquePlus™ system.



Part No.	Size (in)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (E)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J111012L	5/16 x 3/8	37/64	21/64	37/64	21/64	8-27/32	0.16
J111416L	7/16 x 1/2	21/32	23/64	3/4	3/8	10-45/64	0.29
J111618L	1/2 x 9/16	3/4	3/8	53/64	13/32	11-35/64	0.4
J111820L	9/16 x 5/8	53/64	13/32	29/32	15/32	12-31/64	0.56
J112224L	11/16 x 3/4	1	1/2	1-3/32	17/32	14-11/32	0.53
J1139	3/4 x 7/8	1-1/4	33/64	1-1/8	33/64	13-1/8	0.65
J112630L	13/16 x 7/8	1-11/64	35/64	1-23/64	37/64	16-3/32	1.22
J1175	15/16 x 1	1-15/32	37/64	1-25/64	35/64	15-1/8	0.90
J113436L	1-1/16 x 1-1/8	1-37/64	5/8	1-1/2	19/32	17-1/2	1.54

PROTO® RING/RING WRENCHES LARGE SIZES – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100
AS954E S3.8.1

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Box ends incorporate the TorquePlus™ system.

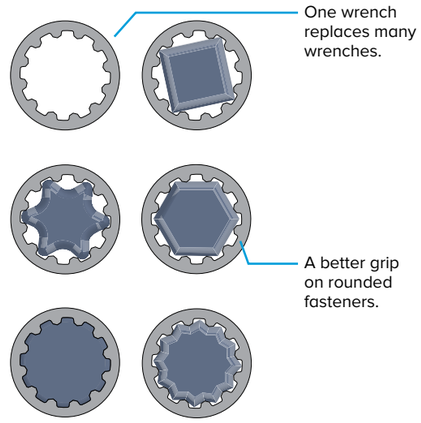


Part No.	Size (in)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (E)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1151	1-1/16 x 1-1/4	1-3/4	45/64	1-1/2	5/8	18-1/4	1.82
J1155	1-1/4 x 1-5/16	1-7/8	47/64	1-3/4	3/4	19-1/4	1.97
J1160	1-1/4 x 1-3/8	1-15/16	3/4	1-3/4	3/4	20-1/4	2.22
J1162	1-7/16 x 1-1/2	2-1/8	13/16	2-3/64	51/64	22-1/4	2.98
J1164	1-5/8 x 1-11/16	2-3/8	29/32	2-13/32	29/32	24-1/2	3.74

Spline Wrenches – Features & Benefits

Spline End Wrenches are versitle tools that handle several types of fasteners better than conventional wrenches.

- One Spline End wrench can replace many because the innovative spline end can grab and turn several types of fasteners.
- The contact points for spline end sockets are always away from the corners of the fastener. This design, by its nature, reduces the problem of rounding.
- The same grip also turns previously-rounded fasteners better, because the splines grip the head along the flat edge.



PROTO® RING/RING WRENCHES – SPLINE

IN

- Proto® Spline Tools are designed to service high tensile strength fasteners used widely on military and commercial aircraft and in heavy machinery applications where vibration is prevalent. They are also used in automotive and industrial areas where high performance torque needs to be achieved.
- Spline fasteners help tighten high strength bolts to high torque loads.
- They help lower the force required to turn standard fasteners by allowing the torque load to be moved away from the corners, helping prevent fastener rounding. They also turn fasteners with damaged corners.
- Spline helps reduce foreign object debris (FOD) by having a precise fit between the fastening tool and its fastener.
- Full polish finish provides corrosion resistance and an easy to clean surface.

Part No.	Size (in)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1118SPL	1/4 x 5/16	31/64	15/64	25/64	15/64	7-1/4	0.12
J1122SPL	3/8 x 7/16	43/64	23/64	37/64	21/64	8-1/4	0.18
J1126SPL	1/2 x 9/16	53/64	25/64	3/4	23/64	9-3/16	0.34
J1130SPL	9/16 x 5/8	59/64	29/64	53/64	25/64	9-3/4	0.4
J1135SPL	11/16 x 3/4	1-5/64	33/64	63/64	1/2	11	0.75
J1142SPL	13/16 x 15/16	1-23/64	37/64	1-5/32	17/32	12-3/4	1.03

PROTO® 4 PIECE RATCHETING WRENCH ADAPTER SET

MM

- Full polish finish provides corrosion resistance and easy clean surfaces.
- Converts ratcheting wrench into super-thin ratchets or ratcheting bit drivers.
- Inserts into box end with a stable locking and release mechanism.
- Easy to read markings.

Contents

- 10 mm Ratcheting Wrench to 1/4" Drive Bit Adapter
- 10 mm Ratcheting Wrench to 1/4" Drive Adapter
- 13 mm Ratcheting Wrench to 3/8" Drive Adapter
- 19 mm Ratcheting Wrench to 1/2" Drive Adapter



Part No.	Description	Weight (lbs)
JHAM4S	4 Piece Ratcheting Wrench Adapter Set Metric	0.22

PROTO® RING/RING WRENCHES – SHORT – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100
AS954E S3.8.1

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Box ends incorporate the TorquePlus™ system.



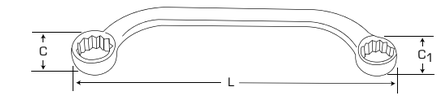
Part No.	Size (in)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (E)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1120	5/16 x 3/8	33/64	17/64	37/64	19/64	4-1/4	0.07
J1122	3/8 x 7/16	37/64	19/64	43/64	21/64	4-5/8	0.09
J1126	1/2 x 9/16	43/64	11/32	55/64	23/64	5-3/8	0.12
J1131	5/8 x 3/4	1-27/32	13/32	1-3/32	15/32	6-1/8	0.25

PROTO® RING/RING WRENCHES – OBSTRUCTION BOX (HALF MOON) – 12 POINT

ASME B107.100
AS954E S3.8.1

IN

- Satin chrome finish provides corrosion resistance and a slip-resistant grip.
- Made of forged steel then heat-treated.
- Curved half-moon shape helps improve access to hidden, difficult to reach locations.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Box ends incorporate the TorquePlus™ system.





Part No.	Size (in)	Outside Head Width (in) (C)	Outside Head Width (in) (C1)	OAL (in) (L)	Weight (lbs)
J1725	7/16 x 1/2	5/8	5/8	5-3/4	0.17
J1730	9/16 x 5/8	25/32	25/32	6-5/8	0.23
J1731	5/8 x 3/4	27/32	27/32	7-1/4	0.39

Stahlwille Ring/Ring Spanner Sets

STAHLWILLE DOUBLE ENDED RING SPANNER SETS 20/7N, 20/8, 20/9, 20/10, 20/12

StahlwilleSTABIL®

MM

- in carton



Part No.	Contents (mm)	Weight (g)
96410408	6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19	930
96410405	6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22	1220
96410409	6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 21 x 24	1615
96410407	6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 24 x 27, 30 x 32	2331
96410406	6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 21 x 23, 24 x 27, 25 x 28, 30 x 32	3137

STAHLWILLE DOUBLE ENDED RING SPANNER SETS 20A/6, 20A/10

StahlwilleSTABIL®

IN

- in carton



Part No.	Contents (in)	Weight (g)
96414402	1/4 x 5/16, 3/8 x 7/16, 1/2 x 9/16, 5/8 x 3/4, 11/16 x 13/16, 7/8 x 15/16	1200
96414405	1/4 x 5/16, 3/8 x 7/16, 1/2 x 9/16, 9/16 x 5/8, 19/32 x 11/16, 5/8 x 3/4, 11/16 x 13/16, 3/4 x 7/8, 25/32 x 13/16, 7/8 x 15/16	2200

STAHLWILLE 8 PIECE DOUBLE ENDED RING SPANNER SET ES20/8

MM

- in 175 x 350 x 30mm molded plastic inlay

Contents:

- 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22 mm



Part No.	Description	Weight (g)
96838167	8 Pc Double End Ring Spanner Set Metric	1266

STAHLWILLE 10 PIECE DOUBLE ENDED RING SPANNER SET ES20/10

MM

- in 530 x 350 x 44mm molded plastic inlay

Contents:

- 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 24 x 27; 30 x 32 mm



Part No.	Description	Weight (g)
96838107	10 Pc Double End Ring Spanner Set Metric	2620

STAHLWILLE 8 PIECE DOUBLE ENDED RING SPANNER SET – CORONA 23/8

MM

- in carton

Contents:

- 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22 mm



Part No.	Description	Weight (g)
96410704	8 Piece Double End Ring Spanner Set Corona Metric	870

STAHLWILLE DOUBLE ENDED RING STRAIGHT SPANNER SETS 21/7, 21/10

StahlwilleSTABIL®

MM

- in carton



Part No.	Contents (mm)	Weight (g)
96410503	8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22	397
96410501	6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 24 x 27, 30 x 32	943

PROTO® Ring/Ring Spanner Sets

PROTO® 6 PIECE DEEP OFFSET RING-RING WRENCH SET – 12 POINT

ASME B107.100

TORQUEPLUS FASTENING SYSTEM

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- 60° deep offset helps improve access to deeply recessed fasteners.
- Offset handle helps keep knuckles clear of obstruction to help save time.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16, 11/16 x 13/16, 3/4 x 7/8, 15/16 x 1 inch



Part No.	Description	Weight (lbs)
J8100C	6 Piece Deep Offset Ring-Ring Wrench Set 12 Point Imperial	3.33

PROTO® 7 PIECE OFFSET RING-RING WRENCH SET – 12 POINT

ASME B107.100

TORQUEPLUS FASTENING SYSTEM

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Offset box end allows access to recessed fasteners and keeps hands clear of obstructions.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 3/8 x 7/16, 1/2 x 9/16, 9/16 x 5/8, 11/16 x 3/4, 13/16 x 7/8, 15/16 x 1, 1-1/16 x 1-1/8 inch



Part No.	Description	Weight (lbs)
J1000G-500	7 Piece Offset Ring-Ring Wrench Set 12 Point Imperial	3.84

PROTO® 11 PIECE RING-RING WRENCH SET – 12 POINT

ASME B107.100

TORQUEPLUS FASTENING SYSTEM

MM

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Offset box end allows access to recessed fasteners and keeps hands clear of obstructions.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 18, 17 x 19, 21 x 24, 22 x 24, 27 x 30, 30 x 32mm



Part No.	Description	Weight (lbs)
J1100S-M	11 Pc Ring-Ring Wrench Set 12 Point Metric	7.40

PROTO® 7 PIECE RING-RING WRENCH SET – 12 POINT

ASME B107.100

TORQUEPLUS FASTENING SYSTEM

MM

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Offset box end allows access to recessed fasteners and keeps hands clear of obstructions.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 18, 17 x 19mm



Part No.	Description	Weight (lbs)
J1100D-M	6 Piece Deep Offset Ring-Ring Wrench Set 12 Point Metric	2.04

PROTO® 5 PIECE RING-RING WRENCH SET – 12 POINT

ASME B107.100

TORQUEPLUS FASTENING SYSTEM

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 5/16 x 3/8, 7/16 x 1/2, 9/16 x 5/8, 11/16 x 3/4, 13/16 x 7/8 inch



Part No.	Description	Weight (lbs)
J1100G	5 Pc Ring-Ring Wrench Set 12 Point Imp	2.20

PROTO® 7 PIECE RING-RING WRENCH SET – 12 POINT

ASME B107.100

TORQUEPLUS FASTENING SYSTEM

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 5/16 x 3/8, 7/16 x 1/2, 9/16 x 5/8, 11/16 x 3/4, 13/16 x 7/8, 15/16 x 1, 1-1/16 x 1-1/8 inch



Part No.	Description	Weight (lbs)
J1100R	7 Pc Ring-Ring Wrench Set 12 Point Imp	2.71

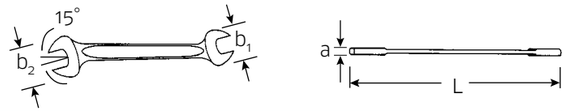
Stahlwille Open End Spanners

STAHLWILLE DOUBLE OPEN ENDED SPANNERS 10

MM

- DIN 3110, ISO 10102
- Chrome Alloy Steel, chrome plated



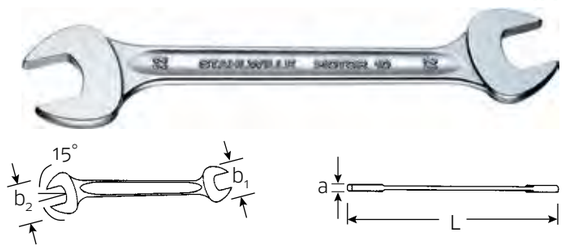


Part No.	Size (mm)	OAL (mm) (L)	Outside Head Width (mm) (b1)	Outside Head Width (mm) (b2)	Head Thickness (mm) (a)	Weight (g)
40030405	4 x 5	100	12.5	14	3.4	11
40035507	5.5 x 7	120	14.8	17	3.7	17
40030607	6 x 7	120	15.5	17	3.7	17
40030708	7 x 8	140	17	18	4.0	25
40030809	8 x 9	140	18	21	4.0	27
40030810	8 x 10	140	18	23	4.5	33
40031011	10 x 11	155	23	26	4.8	47
40031012	10 x 12	170	23	28	5.3	51
40031013	10 x 13	171	23	30	5.3	57
40031113	11 x 13	170	26	30	5.3	55
40031213	12 x 13	170	28	30	5.3	75
40031214	12 x 14	170	28	32	5.3	63
40031314	13 x 14	190	30	32	5.3	70
40031315	13 x 15	190	30	35	5.3	73
40031317	13 x 17	205	30	38	5.8	92
40031415	14 x 15	190	32	35	5.3	81
40031417	14 x 17	205	32	38	5.8	99
40031617	16 x 17	205	36	38	5.8	100
40031618	16 x 18	220	36	40	6.7	125
40031719	17 x 19	220	38	42	6.7	131
40031819	18 x 19	220	40	42.5	6.7	147
40031821	18 x 21	235	40	47	7.3	170
40031922	19 x 22	235	42	49	7.3	179
40032022	20 x 22	235	45	49	7.3	185
40032123	21 x 23	250	47	51	7.8	225
40032124	21 x 24	250	47	53	7.8	215
40032224	22 x 24	250	49	53	7.8	225
40032426	24 x 26	270	53	57.5	8.3	293
40032427	24 x 27	280	53	60	8.3	299
40032528	25 x 28	285	55	62	8.3	309
40032730	27 x 30	300	60	66	9.4	412
40032732	27 x 32	300	60	70	9.4	418
40033032	30 x 32	300	66	70	9.4	450
40033034	30 x 34	300	66	75	9.4	480
40033236	32 x 36	325	70	80	10	546
40033436	34 x 36	325	75	80	10	619
40033641	36 x 41	375	80	88	11	800
40034146	41 x 46	425	88	94.5	12	980

STAHLWILLE DOUBLE OPEN ENDED SPANNERS
10A

Chrome alloy steel, chrome plated

IN

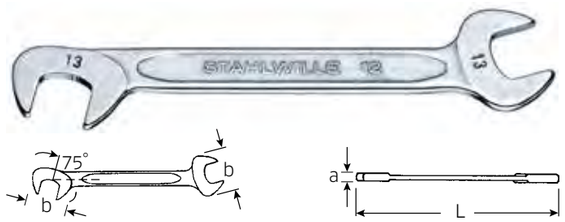


Part No.	Size (in)	OAL (mm) (L)	Outside Head Width (mm) (b1)	Outside Head Width (mm) (b2)	Head Thickness (mm) (a)	Weight (g)
40431620	1/4 x 5/16	140	16	18	4	21
40432024	5/16 x 3/8	140	18	23	4.5	34
40432428	3/8 x 7/16	155	23	26	4.8	48
40432832	7/16 x 1/2	170	26	30	5.3	58
40433234	1/2 x 9/16	190	30	32	5.3	73
40433436	9/16 x 5/8	205	32	36	5.8	96
40433538	19/32 x 11/16	205	35	40	5.8	105
40433638	5/8 x 11/16	205	36	40	5.8	101
40433640	5/8 x 3/4	220	36	42	6.7	135
40433840	11/16 x 3/4	220	40	42	6.7	135
40433842	11/16 x 13/16	235	40	47	7.3	167
40434044	3/8 x 7/8	235	42	49	7.3	177
40434142	25/32 x 13/16	235	45	47	7.3	190
40434446	7/8 x 15/16	250	49	53	7.8	235
40434648	15/16 x 1	270	53	55	8.3	270
40435258	1 1/8 x 1 5/16	300	64	75	9.4	502

STAHLWILLE SHORT DOUBLE OPEN ENDED SPANNERS – ELECTRIC
12

Chrome alloy steel, chrome plated

MM

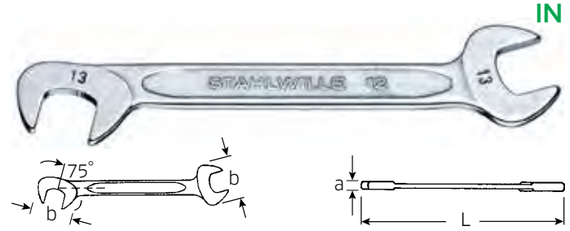


Part No.	Size (mm)	OAL (mm) (L)	Outside Head Width (mm) (b)	Head Thickness (mm) (a)	Weight (g)
40063232	3.2	70	10.5	2	5
40063535	3.5	70	10.5	2	5
40060404	4	70	10.5	2	5
40064545	4.5	70	10.5	2	5
40060505	5	78	12.6	2	7
40065555	5.5	78	12.6	2	7
40060606	6	78	12.6	2	6
40060707	7	91	14.7	2	9
40060808	8	96	16.8	3	16
40060909	9	103	18.9	3	19
40061010	10	105	21	3	22
40061111	11	116	24.2	3	27
40061212	12	116	24.2	3	27
40061313	13	131	28.3	3	37
40061414	14	131	28.3	3	36

STAHLWILLE SHORT DOUBLE OPEN ENDED SPANNERS – ELECTRIC
12A

Chrome alloy steel, chrome plated

IN



Part No.	Size (in)	OAL (mm) (L)	Outside Head Width (mm) (b)	Head Thickness (mm) (a)	Weight (g)
40461010	5/32	70	10.5	2	5
40461212	3/16	70	10.5	2	5
40461313	13/64	78	12.6	2	7
40461414	7/32	78	12.6	2	6
40461515	15/64	78	12.6	2	6
40461616	1/4	91	14.7	2	9
40461818	9/32	91	14.7	2	9
40462020	5/16	96	16.8	3	16
40462222	11/32	103	18.9	3	19
40462424	3/8	105	21	3	22
40462828	7/16	116	24.2	3	28
40463232	1/2	131	28.3	3	37
40463434	9/16	131	28.3	3	36

PROTO® Open End Spanners

PROTO® OPEN END WRENCHES

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 15° angle heads.
- Special heat-treated alloy steel permits slim shanks for strength and durability.
- Standard open end configuration.



Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Throat Depth (in) (B1)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J3016	3/16 x 1/4	17/64	1/2	5/32	1/4	7/16	5/32	3-7/8	0.04
J3018	1/4 x 5/16	3/8	21/32	3/16	19/64	35/64	5/32	4-31/64	0.07
J3020	5/16 x 3/8	7/16	25/32	13/64	3/8	41/64	13/64	5-1/8	0.09
J3021	3/8 x 7/16	23/64	29/32	7/22	7/16	25/32	7/32	5-3/4	0.12
J3025	7/16 x 1/2	19/32	1-1/32	1/4	29/32	29/32	1/4	6-3/8	0.19
J3026	1/2 x 9/16	43/64	1-3/16	17/64	19/32	1-1/32	17/64	7	0.23
J3030	9/16 x 5/8	3/4	1-17/64	9/32	11/16	1-5/32	9/32	7-5/8	0.28
J3031	5/8 x 3/4	29/32	1-37/64	5/16	47/64	1-5/32	5/16	8-9/16	0.39
J3034	5/8 x 11/16	53/64	1-13/32"	5/16	3/4	1-9/32	5/16	8-1/4	0.35
J3035	11/16 x 3/4	29/32	1-37/64	21/64	53/64	1-13/32	21/64	8-7/8	0.47
J3037	11/16 x 25/32	57/64	1-37/64	21/64	53/64	1-13/32	21/64	8-7/8	0.46
J3039	3/4 x 7/8	1-1/16	1-25/32	11/32	29/32	1-37/64	11/32	9-1/2	0.6
J3040	13/16 x 7/8	1-3/64	1-25/32	23/64	63/64	1-21/32	23/64	10-1/8	0.62
J3045	15/16 x 1	1-13/64	2-1/64	13/32	1-1/8	1-29/32	13/32	11-1/2	0.92
J3050	1-1/16 x 1-1/8	1-23/64	2-17/64	29/64	1-9/32	2-5/32	29/64	12-5/8	1.24
J3051	1-1/16 x 1-1/4	1-31/64	2-33/64	15/32	1-9/32	2-5/32	15/32	13-9/16	1.47
J3055	1-1/4 x 1-5/16	1-9/16	2-21/32	33/64	1-31/64	2-33/64	33/64	14-1/2	1.87
J3060	1-3/8 x 1-7/16	1-23/32	2-57/64	35/64	1-41/64	2-23/32	35/64	15-3/4	2.59
J3070	1-1/2 x 1-5/8	1-15/16	3-17/64	39/64	1-25/32	2-61/64	39/64	17	3.31
J3075	1-11/16 x 1-13/16	2-3/16	3-41/64	45/64	2	3-25/64	45/64	18-1/2	4.71
J3080	1-7/8 x 2	2-3/8	4-1/32	49/64	2-11/64	3-41/64	45/64	20	6.38

PROTO® OPEN END WRENCHES

ASME B107.100

MM

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 15° angle heads.
- Special heat-treated alloy steel permits slim shanks for strength and durability.
- Standard open end configuration.



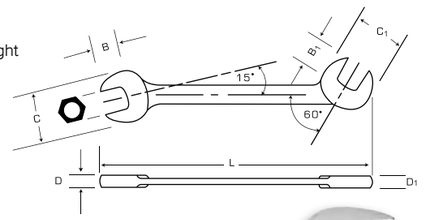
Part No.	Size (mm)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Throat Depth (in) (B1)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J30607	6 x 7	3/8	41/64	11/64	19/64	1/2	11/64	4-1/2	0.06
J30809	8 x 9	7/16	25/32	3/16	3/8	21/32	3/16	5-1/8	0.09
J31011	10 x 11	17/32	29/32	7/32	29/64	25/32	7/32	5-3/4	0.13
J31213	12 x 13	19/32	1-1/32	1/4	17/32	29/32	1/4	6-3/8	0.17
J31415	14 x 15	3/4	1-9/32	9/32	11/16	1-9/64	9/32	7-19/32	0.3
J31617	16 x 17	57/64	1-13/32	19/64	3/4	1-9/32	19/64	8-15/64	0.33
J31819	18 x 19	29/32	1-37/64	21/64	53/64	1-13/32	21/64	8-55/64	0.48
J32022	20 x 22	1-3/64	1-13/16	11/32	29/32	1-37/64	11/32	9-31/64	0.58
J32123	21 x 23	1-3/64	1-25/32	23/64	63/64	1-21/32	23/64	10-1/8	0.61
J32426	24 x 26	1-13/64	2-1/64	13/32	1-1/8	1-29/32	13/32	11-3/8	0.88

PROTO® FULL POLISH OPEN END WRENCHES – ANGLE

ASME B107.100

IN

- Full polish finish provides corrosion and easy to clean surfaces.
- Double nickel strike for rust resistance and prolonged life.
- 15° and 60° angle heads combined with the same size opening on both ends allow wrench to be used in four different turning angles for greater access in tight work areas.



Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Throat Depth (in) (B1)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J3112	3/8	13/32	3/4	13/64	13/32	3/4	13/64	4-3/4	0.06
J3114	7/16	15/32	7/8	13/64	15/32	7/8	13/64	5	0.08
J3116	1/2	35/64	1	15/64	35/64	1	15/64	5-1/4	0.10
J3118	9/16	39/64	1-7/64	15/64	39/64	1-7/64	15/64	5-5/8	0.14
J3120	5/8	21/32	1-7/32	17/64	21/32	1-7/32	17/64	6	0.17
J3122	11/16	23/32	1-21/64	17/64	23/32	1-21/64	17/64	6-1/2	0.21
J3124	3/4	25/32	1-7/16	9/32	25/32	1-7/16	9/32	7	0.26
J3126	13/16	27/32	1-9/16	19/64	27/32	1-9/16	19/64	7-1/2	0.50
J3128	7/8	57/64	1-21/32	5/16	57/64	1-21/32	5/16	8	0.61
J3130	15/16	31/32	1-25/32	21/64	31/32	1-25/32	21/64	8-3/4	0.71
J3132	1	1-1/32	1-59/64	11/32	1-1/32	1-59/64	11/32	9-1/2	0.88
J3134	1-1/16	1-1/16	2-1/64	23/64	1-1/16	2-1/64	23/64	10-1/4	1.04
J3136	1-1/8	1-1/8	2-1/8	3/8	1-1/8	2-1/8	3/8	11	1.20
J3140	1-1/4	1-1/4	2-11/32	13/32	1-1/4	2-11/32	13/32	12-1/4	1.47
J3142	1-5/16	1-5/16	2-29/64	27/64	1-5/16	2-29/64	27/64	13-1/8	1.87
J3144	1-3/8	1-13/32	2-37/64	7/16	1-13/32	2-37/64	7/16	13-3/4	2.17
J3146	1-7/16	1-13/32	2-5/8	29/64	1-13/32	2-5/8	29/64	14	2.48
J3148	1-1/2	1-31/64	2-3/4	15/32	1-31/64	2-3/4	15/32	14-1/2	2.77
J3152	1-5/8	1-43/64	3-1/64	1/2	1-43/64	3-1/64	1/2	15	3.07
J3156	1-3/4	1-31/32	3-31/64	33/64	1-31/32	3-31/64	33/64	17	3.81
J3158	1-13/16	1-63/64	3-31/64	33/64	1-63/64	3-31/64	33/64	18-3/8	4.56
J3160	1-7/8	2-7/32	3-29/32	21/32	2-7/32	3-29/32	21/32	19-3/4	5.24
J3164	2	2-9/32	3-29/32	21/32	29/32	3-29/32	21/32	21-1/4	5.92

PROTO® OPEN END WRENCHES – ANGLE

ASME B107.100

MM

- Full polish finish provides corrosion and easy to clean surfaces.
- 15° and 60° angle heads allow wrench to be used in four different turning angles for greater access in tight work areas.



Part No.	Size (mm)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Throat Depth (in) (B1)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J3109M	9	13/32	49/64	13/64	13/32	49/64	13/64	4-3/4	0.06
J3110M	10	7/16	13/16	13/64	7/16	13/16	13/64	4-7/8	0.07
J3111M	11	15/32	7/8	7/32	15/32	7/8	7/32	5	0.08
J3112M	12	1/2	59/64	15/64	1/2	59/64	15/64	5-1/4	0.10
J3113M	13	17/32	63/64	15/64	17/32	63/64	15/64	5-1/2	0.13
J3114M	14	39/64	1-7/64	1/4	39/64	1-7/64	1/4	5-5/8	0.14
J3115M	15	5/8	1-5/32	17/64	5/8	1-5/32	17/64	5-15/16	0.16
J3116M	16	21/32	1-7/32	17/64	21/32	1-7/32	17/64	6-1/8	0.19
J3117M	17	47/64	1-11/32	9/32	47/64	1-11/32	9/32	6-1/2	0.21
J3118M	18	23/32	1-11/32	9/32	23/32	1-11/32	9/32	6-3/4	0.24

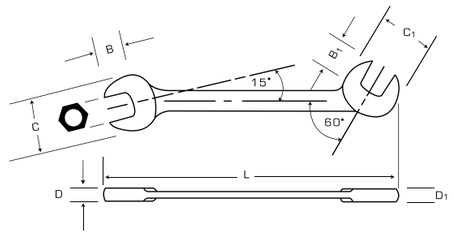
PROTO® OPEN END WRENCHES – ANGLE – SHORT

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 15° and 75° angle heads allow wrench to be used in four different turning angles for greater access in tight work spaces.
- Compact shank design and short length for access in confined spaces.
- Standard open end configuration.





Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Throat Depth (in) (B1)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J3314	7/32	11/64	1/2	7/64	11/64	1/2	7/64	3	0.03
J3315	15/64	11/64	1/2	7/64	11/64	1/2	7/64	3	0.03
J3316	1/4	11/64	1/2	7/64	11/64	1/2	7/64	3	0.03
J3318	9/32	3/16	19/32	5/32	3/16	19/32	5/32	3-1/2	0.04
J3320	5/16	3/16	19/32	5/32	3/16	19/32	5/32	3-1/2	0.04
J3322	11/32	1/4	3/4	5/32	1/4	3/4	5/32	3-3/4	0.05
J3324	3/8	1/4	3/4	5/32	1/4	3/4	5/32	3-3/4	0.05
J3328	7/16	11/32	1	11/64	11/32	1	11/64	4-7/16	0.08
J3332	1/2	11/32	1	11/64	11/32	1	11/64	4-7/16	0.08
J3336	9/16	13/32	1-5/32	3/16	13/32	1-5/32	3/16	5-3/4	0.10
J3340	5/8	13/32	1-5/32	3/16	13/32	1-5/32	3/16	5-3/4	0.10

PROTO® OPEN END WRENCHES – EXTRA THIN

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- Ultra-thin profile and long handle produce improved access to hard-to-reach fasteners.
- Use when high leverage or distance from a hot assembly is required.
- Opening is designed to cover tappets, screws and lock nuts without excessive overhang which improves access.



Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Throat Depth (in) (B1)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J3425	7/16 x 1/2	19/32	1-3/32	11/64	33/64	1-1/64	11/64	10	0.16
J3426	1/2 x 9/16	43/64	1-13/64	11/64	19/32	1-9/64	11/64	10	0.16
J3430	9/16 x 5/8	47/64	1-21/64	11/64	43/64	1-1/4	11/64	10	0.21
J3435	11/16 x 3/4	57/64	1-7/16	13/64	13/16	1-11/32	13/64	10	0.26
J3440	13/16 x 7/8	1-1/32	1-49/64	13/64	31/32	1-11/16	13/64	10	0.33

PROTO® IGNITION WRENCHES

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 15° and 60° angle heads
- Standard open end configuration.



Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Throat Depth (in) (B1)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J3210	13/64 x 15/64	15/64	1/2	7/64	15/64	1/2	7/64	3	0.02
J3211	15/64 x 13/64	15/64	1/2	7/64	15/64	1/2	7/64	3	0.02
J3215	7/32 x 1/4	15/64	1/2	7/64	15/64	1/2	7/64	3	0.02
J3216	1/4 x 7/32	15/64	1/2	7/64	15/64	1/2	7/64	3	0.02
J3220	9/32 x 5/16	5/16	19/32	5/32	5/16	19/32	5/32	3-1/2	0.03
J3221	5/16 x 9/32	5/16	19/32	5/32	5/16	19/32	5/32	3-1/2	0.03
J3225	11/32 x 3/8	3/8	3/4	5/32	3/8	47/64	5/32	3-3/4	0.05
J3226	3/8 x 11/32	3/8	3/4	5/32	3/8	3/4	5/32	3-3/4	0.05

Stahlwille Open End Spanner Sets

STAHLWILLE OPEN END SPANNER SETS 10/5, 10/8, 10/10, 10/12

MM

in extremely tough textile rollup wallet with Velcro fastener



Part No.	Contents (mm)	Weight (g)
96400304	8 x 9, 10 x 11, 12 x 13, 14 x 15, 17 x 19	490
96400305	6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22	745
96400307	6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 24 x 27, 30 x 32	1540
96400306	6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 21 x 23, 24 x 27, 25 x 28, 30 x 32	2125

STAHLWILLE OPEN END SPANNER SETS ELECTRIC 10/5, 10/8, 10/10, 10/12

MM

in extremely tough textile rollup wallet with Velcro fastener



Part No.	Contents (mm)	Weight (g)
96400653	4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11	161
96400651	3.2, 3.5, 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14	296

STAHLWILLE OPEN END SPANNER SETS 10A/7, 10A/11

IN

in extremely tough textile rollup wallet with Velcro fastener



Part No.	Contents (in)	Weight (g)
96404306	1/4 x 5/16 , 3/8 x 7/16 , 1/2 x 9/16 , 5/8 x 3/4 , 11/16 x 13/16 , 7/8 x 15/16 , 1 1/8 x 1 5/16	1242
96404307	1/4 x 5/16 , 3/8 x 7/16 , 1/2 x 9/16 , 9/16 x 5/8 , 19/32 x 11/16 , 5/8 x 3/4 , 11/16 x 13/16 , 3/4 x 7/8 , 25/32 x 13/16 , 7/8 x 15/16 , 1 1/8 x 1 5/16	2100

STAHLWILLE 13 PIECE OPEN END SPANNER SETS ELECTRIC 10/5, 10/8, 10/10, 10/12

IN

- in extremely tough textile rollup wallet with Velcro fastener

Contents:

- 5/32, 3/16, 13/64, 7/32, 15/64, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16 inch



Part No.	Description	Weight (g)
96404654	13 Piece Open End Spanner Set Imperial	320

PROTO® Open End Spanner Sets

PROTO® 5 PIECE OPEN END SPANNER SET

ASME B107.100

MM

- Satin finish provides corrosion resistance and a slip-resistant grip.
- Special heat-treated alloy steel permits slim shanks for strength and durability.
- 15° angled heads.

Contents:

- 10 x 11, 12 x 13, 14 x 15, 18 x 19, 21 x 23mm



Part No.	Description	Weight (lbs)
J30000P-M	5 Piece Open End Wrench Set Metric	1.92

PROTO® 11 PIECE OPEN END SPANNER SET – ANGLE

ASME B107.100

MM

- Full polish finish finish
  15° and 60° angle heads allow wrench to be used in four different turning angles for greater access in tight areas.

Contents:

- 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm



Part No.	Description	Weight (lbs)
J3100M	11 Pc Angle Open End Spanner Set Metric	1.79

PROTO® 6 PIECE OPEN END SPANNER SET

ASME B107.100

MM

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 15° angle heads.
- Special heat-treated alloy steel permits slim shanks for strength and durability.

Contents:

- 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19mm



Part No.	Description	Weight (lbs)
J30000R	6 Piece Open End Spanner Set Metric	1.66

PROTO® 10 PIECE OPEN END SPANNER SET

ASME B107.100

MM

- Satin finish provides corrosion resistance and slip-resistant grip.
- 15° angle heads.
- Special heat-treated alloy steel permits slim shanks for strength and durability.

Contents:

- 6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 21 x 23, 24 x 26mm



Part No.	Description	Weight (lbs)
J30000A	10 Piece Open End Spanner Set Metric	3.93

PROTO® 14 PIECE OPEN END SPANNER SET – ANGLE

ASME B107.100

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- Double nickel strike for rust resistance and prolonged life.
- 15° and 60° angle heads.

Contents:

- 5/16 x 3/8, 7/16 x 1/2, 9/16 x 5/8, 11/16 x 3/4, 13/16 x 7/8 inch



Part No.	Description	Weight (lbs)
J3100B	14 Piece Angle Open end Wrench Set Imp	5.58

PROTO® 5 PIECE OPEN END SPANNER SET

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 15° angle heads.
- Special heat-treated alloy steel permits slim shanks for strength and durability.

Contents:

- 3/8 x 7/16, 1/2 x 9/16, 9/16 x 5/8, 11/16 x 3/4, 13/16 x 7/8 inch



Part No.	Description	Weight (lbs)
J3000N	5 Piece Open End Spanner Set Imperial	1.66

PROTO® 10 PIECE OPEN END SPANNER SET

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 15° angle heads.
- Special heat-treated alloy steel permits slim shanks for strength and durability.

Contents:

- 1/4 x 5/16, 5/16 x 3/8, 7/16 x 1/2, 1/2 x 9/16, 9/16 x 5/8, 5/8 x 3/4, 11/16 x 3/4, 13/16 x 7/8, 15/16 x 1, 1-1/16 x 1-1/8 inch



Part No.	Description	Weight (lbs)
J3000H	10 Piece Open End Spanner Set Imperial	4.82

PROTO® 9 PIECE OPEN END SPANNER SET – ANGLE – SHORT

ASME B107.100

IN

- 15° and 75° angle heads allow wrench to be used in four different turning angles for greater access in tight work spaces.
- Compact shank design and short length for access in confined spaces.

Contents:

- 7/32, 15/64, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2 inch

Part No.	Description	Weight (lbs)
J3300A	9 Pc Short Angle Open End Spanner Set Imp	0.46

PROTO® 7 PIECE OPEN END SPANNER SET – ANGLE

ASME B107.100

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 15° and 60° angle heads allow wrench to be used in four different turning angles for greater access in tight work areas.

Contents:

- 1/4 x 5/16, 5/16 x 3/8, 7/16 x 1/2, 1/2 x 9/16, 9/16 x 5/8, 5/8 x 3/4, 11/16 x 3/4, 13/16 x 7/8, 15/16 x 1, 1-1/16 x 1-1/8 inch



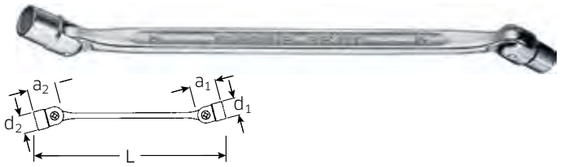
Part No.	Description	Weight (lbs)
J3100A	7 Pc Angle Open End Spanner Set Imp	1.02

Stahlwille Flex Head Wrenches & Sets

STAHLWILLE DOUBLE ENDED FLEX HEAD WRENCHES – 6 POINT 29

chrome alloy steel, chrome-plated

MM



Part No.	Size (mm)	OAL (in) (L)	Head Diameter (in) (d1)	Head Diameter (in) (d2)	Head Thickness (in) (a1)	Head Thickness (in) (a2)	Weight (g)
43 01 06 07	6 x 7	180	9.5	11	23	23	51

STAHLWILLE DOUBLE ENDED FLEX HEAD WRENCHES – 12 POINT 29

chrome alloy steel, chrome-plated

MM



Part No.	Size (mm)	OAL (in) (L)	Head Diameter (in) (d1)	Head Diameter (in) (d2)	Head Thickness (in) (a1)	Head Thickness (in) (a2)	Weight (g)
43 01 08 09	8 x 9	201	26	27.5	11.9	13.4	81
43 01 10 11	10 x 11	202	30.5	32	14.7	15.9	102
43 01 10 13	10 x 13	230.5	30	33.5	14.7	18.4	137
43 01 12 13	12 x 13	228	33	33.5	17.2	18.4	153
43 01 14 15	14 x 15	227	35	37	19.7	20.9	197
43 01 16 17	16 x 17	247	38.5	39	22.2	23.7	234
43 01 16 18	16 x 18	249	38.5	40	22.2	24.7	267
43 01 17 19	17 x 19	250	39	41	23.7	26.3	277
43 01 18 19	18 x 19	246.5	40	41	24.7	26.3	294
43 01 20 22	20 x 22	287.5	45.5	48	27.3	29.8	430
43 01 21 23	21 x 23	286.5	46.5	50	28.6	31.1	447
43 01 24 27	24 x 27	349.5	50.5	60.5	32.4	36.1	716

STAHLWILLE DOUBLE ENDED FLEX HEAD SPANNERS – 12 POINT 29A

chrome alloy steel, chrome-plated

IN



Part No.	Size (in)	OAL (in) (L)	Head Diameter (in) (d1)	Head Diameter (in) (d2)	Head Thickness (in) (a1)	Head Thickness (in) (a2)	Weight (g)
43 41 24 28	3/8 x 7/16	202	14	16	30.5	32	98
43 41 32 34	1/2 x 9/16	227	18.1	20	35	37	195
43 41 36 38	5/8 x 11/16	249.5	22.1	24	39	40	269

STAHLWILLE 7 PIECE DOUBLE ENDED FLEX HEAD SPANNER SET 29/7

MM

- packed in carton

Contents:

- 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22 mm



Part No.	Description	Weight (g)
96 43 01 01	7 Piece Double Ended Flexi Head Spanner Set Metric	1503

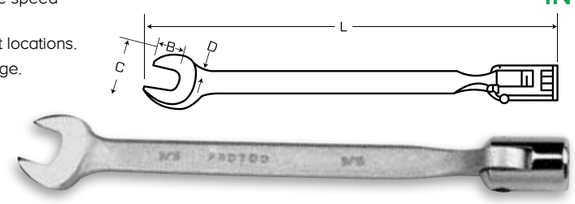
PROTO® Flex Head Wrenches & Sets

PROTO® SATIN COMBINATION FLEX HEAD WRENCHES – 12 POINT

TORQUEPLUS FASTENING SYSTEM

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Use the swiveling box end to break or cinch bolts in difficult locations.
- Heat-treated alloy steels produce a shank with high leverage.
- Box ends incorporate the TorquePlus™ system.



Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	OAL (in) (L)	Weight (lbs)
J1270-12	3/8	27/64	55/64	15/64	6	0.14
J1270-14	7/16	1/2	1	1/4	6-7/8	0.20
J1270-16	1/2	37/64	1-3/32	9/32	7-3/4	0.25
J1270-18	9/16	21/32	1-15/64	5/16	8-5/8	0.36
J1270-20	5/8	23/32	1-23/32	21/64	9-1/2	0.46
J1270-22	11/16	51/64	1-1/2	11/32	10-3/8	0.58
J1270-24	3/4	7/8	1-41/64	23/64	11-1/4	0.46

PROTO® 7 PIECE FLEX HEAD WRENCH SET – 12 POINT

TORQUEPLUS FASTENING SYSTEM

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Use the swiveling box end to break or cinch bolts in difficult locations.
- Heat-treated alloy steels produce a shank with high leverage.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 inch



Part No.	Description	Weight (lbs)
J1270A	7 Pc Flex Head Wrench Set 12 Point Imp	2.91

PROTO® 4 PIECE FLEX HEAD SPANNER SET – 12 POINT

TORQUEPLUS FASTENING SYSTEM

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Use the swiveling box end to break or cinch bolts in difficult locations.
- Heat-treated alloy steels produce a shank with high leverage.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 7/16, 1/2, 9/16, 5/8 inch



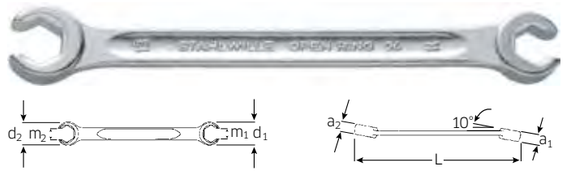
Part No.	Description	Weight (lbs)
J1270B	4 Pc Flex Head Wrench Set 12 Point Imp	0.88

Stahlwille Flare Nut Spanners

STAHLWILLE DOUBLE-ENDED FLARE NUT SPANNERS ANGLED – 6 POINT 24

MM

- Din 3118/ISO 3318
- Chrome alloy Steel, chrome plated



Part No.	Size (mm)	OAL (in) (L)	Outside Diameter (mm) (d1)	Outside Diameter (mm) (d2)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Opening (mm) (m1)	Opening (mm) (m2)	Weight (lbs)
41080810	8 x 10	145	17.5	19.5	7	8.5	6.3	7.1	39
41080911	9 x 11	155	18.5	21.5	8.5	9	6.7	8.6	54
41081011	10 x 11	155	19.5	21.5	8.5	9	7.1	8.6	55
41081012	10 x 12	160	19.5	22.5	8.5	9.5	7.1	9	59
41081113	11 x 13	170	21.5	24	9	10	8.6	10	80
41081214	12 x 14	180	24	26	9.5	10.5	9	11	89

STAHLWILLE DOUBLE-ENDED FLARE NUT SPANNERS ANGLED – 6 POINT 24A

IN

- Din 3118/ISO 3318
- Chrome alloy Steel, chrome plated

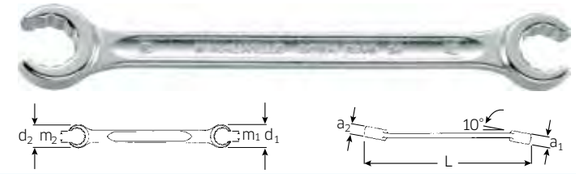


Part No.	Size (in)	OAL (in) (L)	Outside Diameter (mm) (d1)	Outside Diameter (mm) (d2)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Opening (mm) (m1)	Opening (mm) (m2)	Weight (lbs)
41481620	1/4 x 5/16	105	16.5	18	5.5	7	3.7	5	32
41482024	5/16 x 3/8	145	17.5	19.5	7	8.5	6.3	7.1	39
41482428	3/8 x 7/16	155	19.5	21.5	8.5	9	7.1	8.6	57
41483234	1/2 x 9/16	180	24	26	9.5	10.5	9.5	11	87

STAHLWILLE DOUBLE-ENDED FLARE NUT SPANNERS ANGLED – 12 POINT 24

MM

- Din 3118/ISO 3318
- Chrome alloy Steel, chrome plated



Part No.	Size (mm)	OAL (in) (L)	Outside Diameter (mm) (d1)	Outside Diameter (mm) (d2)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Opening (mm) (m1)	Opening (mm) (m2)	Weight (lbs)
41081417	14 x 17	200	26	30	10.5	12	11	14	115
41081619	16 x 19	220	29	33	12	13	13	15.8	155
41081719	17 x 19	220	30	33	12	13	14	15.8	150
41081922	19 x 22	230	33	37	13	15	15.8	17	192
41082224	22 x 24	245	37	40.5	15	16	17	18	251
41082427	24 x 27	270	40.5	44.5	16	17.5	18	20	310
41082736	27 x 36	300	42	54	16	19	20	27	414
41083032	30 x 32	300	48.5	50.5	20	22	22	24	455

STAHLWILLE DOUBLE-ENDED FLARE NUT SPANNERS ANGLED – 12 POINT 24A

IN

- Din 3118/ISO 3318
- Chrome alloy Steel, chrome plated



Part No.	Size (in)	OAL (in) (L)	Outside Diameter (mm) (d1)	Outside Diameter (mm) (d2)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Opening (mm) (m1)	Opening (mm) (m2)	Weight (lbs)
41483640	5/8 x 3/4	218	29	33	12	13	12.7	15.8	148
41484048	3/4 x 1	232	33	40.2	13	16	15.8	19	199

PROTO® Flare Nut Spanners

PROTO® SATIN COMBINATION FLARE NUT WRENCHES – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point flare nut box end allows for fine indexing, helping to improve speed and access.
- Fits 4, 6 and 12 point fasteners.
- Flare nut box end incorporates the TorquePlus™ system.



Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Throat Depth (in) (B1)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J3751T	3/8	7/16	25/32	11/32	19/64	51/64	3/8	5-11/16	0.13
J3752T	1/2	33/64	7/8	3/8	23/64	29/32	13/32	6-1/32	0.18
J3753T	7/16	19/32	31/32	3/8	25/64	1-1/32	13/32	6-7/16	0.19
J3754T	9/16	43/64	1-3/64	7/16	29/64	1-3/64	15/32	6-15/16	0.25
J3755T	5/8	47/64	1-3/32	7/16	33/64	1-19/64	15/32	7-5/8	0.32
J3756T	11/16	51/64	1-3/16	1/2	9/16	1-13/32	17/32	8-11/16	0.42
J3757T	3/4	57/64	1-7/32	1/2	9/16	1-9/16	17/32	9-3/16	0.46

PROTO® SATIN COMBINATION FLARE NUT WRENCHES – 6 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- Flare nut box end incorporates the TorquePlus™ system.



Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Throat Depth (in) (B1)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J3751	3/8	7/16	25/32	11/32	19/64	51/64	23/65	5-11/16	0.12
J3752	7/16	33/64	7/8	3/8	23/64	59/64	13/32	6-1/32	0.16
J3753	1/2	19/32	31/32	3/8	25/64	1-1/32	13/32	6-7/16	0.21
J3754	9/16	43/64	1-3/64	7/16	26/64	1-11/64	15/32	6-15/16	0.34
J3755	5/8	47/64	1-3/32	7/16	33/64	1-9/64	15/32	7-5/8	0.45
J3756	11/16	51/64	1-3/16	1/2	9/16	1-13/32	17/32	8-11/16	0.45
J3757	3/4	57/64	1-7/32	1/2	9/16	1-9/16	17/32	9-3/16	0.49

PROTO® SATIN DOUBLE END FLARE NUT WRENCHES – 12 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point flare nut box end allows for fine indexing, helping to improve speed and access.
- Fits 4, 6 and 12 point fasteners.
- Flare nut box ends incorporate the TorquePlus™ system.



Part No.	Size (in)	Mouth Width (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Mouth Width (in) (B1)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J3764T	3/8 x 7/16	19/64	51/64	11/32	23/64	57/64	3/8	6-1/4	0.18
J3768T	1/2 x 9/16	25/64	31/32	3/8	13/32	1-1/16	7/16	7-1/2	0.27
J3772T	5/8 x 11/16	33/64	1-7/64	7/16	37/64	1-13/64	31/64	8-3/4	0.38

PROTO® SATIN DOUBLE END FLARE NUT WRENCHES – 6 POINT

TORQUEPLUS FASTENING SYSTEM

ASME B107.100

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- Flare nut box ends incorporate the TorquePlus™ system.



Part No.	Size (in)	Mouth Width (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Mouth Width (in) (B1)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J3764	3/8 x 7/16	19/64	51/64	11/32	23/64	57/64	3/8	6-1/4	0.18
J3768	1/2 x 9/16	25/64	31/32	3/8	13/32	1-3/64	7/16	7-1/2	0.27
J3772	5/8 x 11/16	33/64	1-7/64	7/16	37/64	1-13/64	31/64	8-3/4	0.38

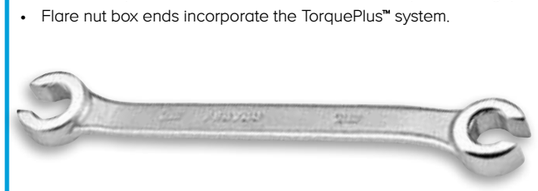
PROTO® SATIN DOUBLE END FLARE NUT WRENCHES – 6 POINT

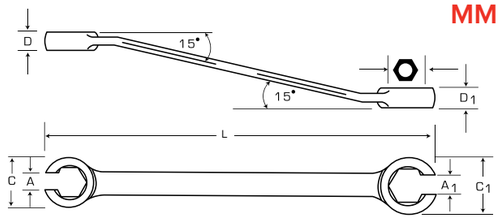
TORQUEPLUS FASTENING SYSTEM

ASME B107.100

MM

- Satin finish provides corrosion resistance and a slip-resistant grip.
- Flare nut box ends incorporate the TorquePlus™ system.





Part No.	Size (mm)	Mouth Width (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Mouth Width (in) (B1)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J3707M	7 x 8	7/32	43/64	19/64	15/64	3/4	21/64	5-11/16	0.12
J3709M	9 x 11	9/32	13/16	23/64	11/32	29/32	25/64	6-5/16	0.17
J3710M	10 x 12	9/32	55/64	25/64	11/32	61/64	25/64	6-15/16	0.22
J3713M	13 x 14	3/8	1-1/64	25/64	7/16	1-3/32	29/64	7-9/16	0.26
J3715M	15 x 17	7/16	1-7/64	29/64	1/2	1-3/16	31/64	7-63/64	0.37
J3716M	16 x 18	1/2	1-9/64	29/64	37/64	1-15/64	33/64	8-13/16	0.39
J3719M	19 x 21	37/64	1-9/32	35/64	5/8	1-3/8	37/64	9-3/8	0.6

PROTO® SATIN DOUBLE END FLARE NUT WRENCHES – 12 POINT

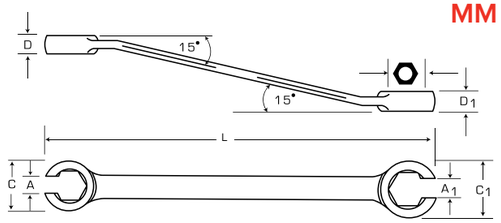
TORQUEPLUS FASTENING SYSTEM

ASME B107.100

MM

- Satin finish provides corrosion resistance and a slip-resistant grip.
- Flare nut box ends incorporate the TorquePlus™ system.
- 12 point flare nut box end allows for fine indexing, helping to improve speed and access.
- Fits 4, 6 and 12 point fasteners.





Part No.	Size (mm)	Mouth Width (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Mouth Width (in) (B1)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J3707MT	7 x 8	7/32	43/64	19/64	15/64	3/4	21/64	5-11/16	0.11
J3709MT	9 x 11	9/32	13/16	23/64	11/32	29/32	25/64	6-5/16	0.16
J3710MT	10 x 12	9/32	55/64	25/64	11/32	61/64	25/64	6-15/16	0.21
J3713MT	13 x 14	3/8	1-1/64	25/64	7/16	1-3/32	29/64	7-9/16	0.24
J3715MT	15 x 17	7/16	1-7/64	29/64	1/2	1-3/16	31/64	7-63/64	0.33
J3716MT	16 x 18	1/2	1-9/64	29/64	37/64	1-15/64	33/64	8-13/16	0.36
J3719MT	19 x 21	37/64	1-9/32	35/64	5/8	1-3/8	37/64	9-7/16	0.39

Stahlwille Flare Nut Spanner Sets

STAHLWILLE 7 PIECE FLARE NUT SPANNER SET ES 24/7

MM

- in 175 x 350 x 30mm molded plastic inlay

Contents:

- 8 x 10, 10 x 11, 11 x 13, 12 x 14, 14 x 17, 17 x 19, 19 x 22 mm



Part No.	Description	Weight (g)
96838171	7 Piece Flare Nut Spanner Set Metric	860

PROTO® Flare Nut Spanner Sets

PROTO® 7 PIECE COMBINATION FLARE NUT WRENCH SET – 6 POINT

ASME B107.100

TORQUEPLUS FASTENING SYSTEM

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- Flare nut box end incorporates the TorquePlus™ system

Contents:

- 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 inch



Part No.	Description	Weight (lbs)
J3700A	7 Pc Combi. Flare Nut Wrench Set 6pt	2.24

PROTO® 7 PIECE COMBINATION FLARE NUT WRENCH SET – 12 PT

ASME B107.100

TORQUEPLUS FASTENING SYSTEM

IN

- Satin finish provides corrosion resistance and slip-resistant grip.
- 12 point flare nut box end allows for fine indexing, helping to improve speed and access.
- Fits 4, 6 and 12 point fasteners.
- Flare nut box end incorporates the TorquePlus™ system.

Contents:

- 3/8, 1/2, 7/16, 9/16, 5/8, 11/16, 3/4 inch



Part No.	Description	Weight (lbs)
J3700AT	7 Pc Combi. Flare Nut Wrench Set 12pt	2.24

PROTO® 3 PC DOUBLE END FLARE NUT WRENCH SET – 6 POINT

ASME B107.100

TORQUEPLUS FASTENING SYSTEM

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- Flare nut box ends incorporate the TorquePlus™ system.

Contents:

- 3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16 inch



Part No.	Description	Weight (lbs)
J3760	3 Pc Double End Flare Nut Wrench Set 6pt	0.97

PROTO® 3 PC DOUBLE END FLARE NUT WRENCH SET – 12 POINT

ASME B107.100

TORQUEPLUS FASTENING SYSTEM

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point flare nut box end allows for fine indexing, helping to improve speed and access.
- Fits 4, 6 and 12 point fasteners.
- Flare nut box ends incorporate the TorquePlus™ system.

Contents:

- 3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16 inch



Part No.	Description	Weight (lbs)
J3760T	3 Pc Double End Flare Nut Wrench Set	0.97

PROTO® 5 PIECE DOUBLE END FLARE NUT WRENCH SET – 6 PT

ASME B107.100

TORQUEPLUS FASTENING SYSTEM

MM

- Satin finish provides corrosion resistance and a slip-resistant grip.
- Flare nut box ends incorporate the TorquePlus™ system.

Contents:

- 7 x 8, 9 x 11, 10 x 12, 13 x 14, 15 x 17mm



Part No.	Description	Weight (lbs)
J3700M	5 Pc Metric Dbl End Flare Nut Wrench Set	1.29

PROTO® 5 PIECE DOUBLE END FLARE NUT WRENCH SET – 12 PT

ASME B107.100

TORQUEPLUS FASTENING SYSTEM

MM

- Satin finish provides corrosion resistance and a slip-resistant grip.
- 12 point flare nut box end allows for fine indexing, helping to improve speed and access.
- Fits 4, 6 and 12 point fasteners.
- Flare nut ends incorporate the TorquePlus™ system.

Contents:

- 7 x 8, 9 x 11, 10 x 12, 13 x 14, 15 x 17mm



Part No.	Description	Weight (lbs)
J3700MT	5 Pc Metric Dbl End Flare Nut Wrench Set	1.29

Read about the benefits of TorquePlus™ on page 379

Stahlwille Ratcheting Wrenches

STAHLWILLE RATCHET WRENCHES FASTRATCH 240

IN

- specially suitable for union nuts
- using a single wrench, it is possible to tighten/loosen both metric and imperial nuts and bolts
- made of hardened and tempered stainless steel

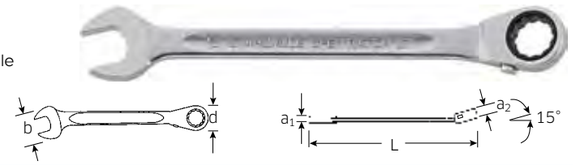


Part No.	Size (mm / in)	OAL (in) (L)	Outside Head Width (mm) (b)	Head Thickness (mm) (a)	Weight (g)
4110 08 08	8 / 5/16	121.4	16	4	60
4110 10 10	10 / 3/8	133.3	20	4	70
4110 1111	11 / 7/16	140.4	23	5	103
4110 12 12	12 / 15/32	146.3	25	5	100
4110 13 13	13 / 1/2	168.4	26.8	6	154
4110 14 14	14 / 9/16	174.6	29.6	6	180
4110 16 16	16 / 5/8	191.3	32.8	7	270
4110 17 17	17 / 21/32	201.7	34.3	7	292
4110 18 18	18 / 11/16	212.8	36.2	7	310
4110 19 19	19 / 3/4	238.5	38.5	7	367

STAHLWILLE COMBINATION REVERSIBLE RATCHETING SPANNERS – 12 POINT 17

MM

- 72 teeth
- for work in confined spaces, tight ratchet angle of only 5°
- ring end offset by 15°
- Chrome Alloy Steel, chrome plated



Part No.	Size (mm)	OAL (in) (L)	Outside Head Width (mm) (b)	Ratchet Head Width (mm) (d)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Weight (g)
4117 08 08	8	144	17.0	18.0	4.7	7.4	38
4117 09 09	9	150	18.8	19.5	5.3	7.4	49
4117 10 10	10	158	21.7	21.0	5.7	8.4	60
4117 1111	11	165	23.0	22.0	6.1	8.4	68
4117 12 12	12	173	25.2	23.5	6.4	8.4	84
4117 13 13	13	182	26.5	25.0	6.6	8.4	89
4117 14 14	14	190	29.5	26.5	7.3	8.4	110
4117 15 15	15	202	31.3	28.0	7.5	8.4	128
4117 16 16	16	215	33.4	29.0	7.7	10.0	153
4117 17 17	17	229	36.3	30.5	7.9	10.0	195
4117 18 18	18	240	38.0	32.0	8.4	11.5	198
4117 19 19	19	252	39.0	34.0	8.7	11.5	224

PROTO® Ratcheting Wrenches

PROTO® FULL POLISH COMBINATION REVERSIBLE RATCHETING WRENCHES – 12 POINT

TORQUEPLUS FASTENING SYSTEM

MM

- 12 point box end allows for fine indexing, helping to improve speed and access.
- 12 point box end fits 4, 6 and 12 point fasteners.
- Full polish finish provides corrosion resistance and easy to clean surfaces.
- The box end is countersunk for easy application to the fastener.
- 15° angled offset helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- 72 tooth ratcheting mechanism rotates fast with only 5 degrees of swing.
- The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve speed.
- Box ends incorporate the TorquePlus™ system.



Part No.	Size (mm)	Outside Head Width 1 (in)	Head Thickness 1 (in)	Outside Head Width 2 (in)	Head Thickness 2 (in)	OAL (in)	Weight (lbs)
JSCVM06T	6	9/16	1/8	35/64	1/8	5	0.06
JSCVM07T	7	11/16	1/8	21/32	1/8	5-1/2	0.07
JSCVM08T	8	11/16	1/8	21/32	1/8	5-1/2	0.07
JSCVM09T	9	3/4	1/8	23/32	1/8	5-15/16	0.09
JSCVM10T	10	13/16	1/8	25/32	1/8	6-1/4	0.11
JSCVM11T	11	15/16	1/8	55/64	1/8	6-9/16	0.14
JSCVM12T	12	1	3/16	57/64	3/16	6-3/4	0.17
JSCVM13T	13	1-11/16	3/16	31/32	3/16	7	0.20
JSCVM14T	14	1-1/8	3/16	1-1/16	3/16	7-1/2	0.24
JSCVM15T	15	1-1/4	3/16	1-7/64	3/16	7-7/8	0.28
JSCVM16T	16	1-5/16	3/16	1-3/16	3/16	8-3/16	0.33
JSCVM17T	17	1-3/8	3/16	1-1/4	3/16	8-7/8	0.39
JSCVM18T	18	1-1/2	3/16	1-9/32	3/16	9-5/16	0.43
JSCVM19T	19	1-9/16	1/4	1-21/64	1/4	9-3/4	0.50
JSCVM21T	21	1-13/16	1/4	1-37/64	1/4	11-7/16	0.76
JSCVM22T	22	1-13/16	1/4	1-37/64	1/4	11-7/16	0.76
JSCVM24T	24	2-1/16	1/4	1-13/16	1/4	12-3/4	1.06
JSCVM27T	27	2-1/4	5/16	2-1/16	5/16	14-1/8	1.42
JSCVM30T	30	2-5/16	5/16	2-19/64	5/16	15-7/8	1.89
JSCVM32T	32	2-1/2	5/16	2-29/64	5/16	16-3/4	2.32
JSCVM34T	34	2-1/2	3/8	2-29/64	3/8	18-1/8	2.65
JSCVM36T	36	2-13/16	3/8	2-39/64	3/8	19-5/16	3.09

PROTO® FULL POLISH COMBINATION REVERSIBLE RATCHETING WRENCHES – 12 POINT

IN

Part No.	Size (in)	Outside Head Width 1 (in)	Head Thickness 1 (in)	Outside Head Width 2 (in)	Head Thickness 2 (in)	OAL (in)	Weight (lbs)
JSCV07T	7/32	9/16	1/8	35/64	1/8	5	0.06
JSCV08T	1/4	9/16	1/8	35/64	1/8	5	0.06
JSCV09T	9/32	11/16	1/8	21/32	1/8	5-1/2	0.07
JSCV10T	5/16	11/16	1/8	21/32	1/8	5-1/2	0.07
JSCV11T	11/32	3/4	1/8	23/32	1/8	5-15/16	0.09
JSCV12T	3/8	13/16	1/8	25/32	1/8	6-1/4	0.11
JSCV14T	7/16	15/16	1/8	55/64	1/8	6-1/2	0.14
JSCV16T	1/2	1-1/6	3/16	31/32	3/16	7	0.20
JSCV18T	9/16	1-1/8	3/16	1-1/16	3/16	7-1/2	0.22
JSCV20T	5/8	1-5/16	3/16	1-3/16	3/16	8-3/16	0.33
JSCV22T	11/16	1-3/8	3/16	1-1/4	3/16	8-7/8	0.37
JSCV24T	3/4	1-9/16	1/4	1-21/64	1/4	9-3/4	0.48
JSCV26T	13/16	1-13/16	1/4	1-37/64	1/4	11-7/16	0.77
JSCV28T	7/8	1-13/16	1/4	1-37/64	1/4	11-7/16	0.73
JSCV30T	15/16	2-1/16	1/4	1-13/16	1/4	12-3/4	1.02
JSCV32T	1	2-1/16	1/4	1-13/16	1/4	12-3/4	1.00
JSCV34T	1-1/16	2-1/4	5/16	2-1/6	5/16	14-1/8	1.45
JSCV36T	1-1/8	2-5/16	5/16	2-19/64	5/16	15-7/8	1.96
JSCV40T	1-1/4	2-1/2	5/16	2-29/64	5/16	16-3/4	2.30
JSCV48T	1-1/2	2-13/16	3/8	2-39/64	3/8	19-5/16	3.09

PROTO® FULL POLISH COMBINATION NON-REVERSIBLE RATCHETING WRENCHES 12 POINT

TORQUEPLUS FASTENING SYSTEM

MM

- 12 point box end allows for fine indexing, helping to improve speed and access.
- 12 point box end fits 4, 6 and 12 point fasteners.
- The wrench self aligns with the fastener.
- Full polish finish provides corrosion resistance and easy to clean surfaces.
- The box end is countersunk for easy application to the fastener.
- 15° angled offset helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- Box ends incorporate the TorquePlus™ system.
- 72 tooth ratcheting mechanism rotates fast with only 5 degrees of swing.



Part No.	Size (mm)	Outside Head Width 1 (in)	Head Thickness 1 (in)	Outside Head Width 2 (in)	Head Thickness 2 (in)	OAL (in)	Weight (lbs)
JSCRM08T	8	11/16	1/8	21/32	1/8	5-1/2	0.06
JSCRM09T	9	3/4	1/8	23/32	1/8	5-15/16	0.08
JSCRM10T	10	13/16	1/8	25/32	1/8	6-1/4	0.10
JSCRM11T	11	15/16	1/8	55/64	1/8	6-9/16	0.13
JSCRM12T	12	1	3/16	57/64	3/16	6-3/4	0.16
JSCRM13T	13	1-11/16	3/16	31/32	3/16	7	0.18
JSCRM14T	14	1-1/8	3/16	1-1/16	3/16	7-1/2	0.22
JSCRM15T	15	1-1/4	3/16	1-7/64	3/16	7-7/8	0.25
JSCRM16T	16	1-5/16	3/16	1-3/16	3/16	8-3/16	0.32
JSCRM17T	17	1-3/8	3/16	1-1/4	3/16	8-7/8	0.38
JSCRM18T	18	1-1/2	3/16	1-9/32	3/16	9-5/16	0.46
JSCRM19T	19	1-9/16	1/4	1-21/64	1/4	9-3/4	0.47

PROTO® FULL POLISH COMBINATION NON-REVERSIBLE RATCHETING WRENCHES 12 POINT

TORQUEPLUS FASTENING SYSTEM

IN

- 12 point box end allows for fine indexing, helping to improve speed and access.
- 12 point box end fits 4, 6 and 12 point fasteners.
- The wrench self aligns with the fastener.
- Full polish finish provides corrosion resistance and easy to clean surfaces.
- The box end is countersunk for easy application to the fastener.
- 15° angled offset helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- Box ends incorporate the TorquePlus™ system.
- 72 tooth ratcheting mechanism rotates fast with only 5 degrees of swing.



Part No.	Size (in)	Outside Head Width 1 (in)	Head Thickness 1 (in)	Outside Head Width 2 (in)	Head Thickness 2 (in)	OAL (in)	Weight (lbs)
JSCR08T	1/4	9/16	1/8	35/64	1/8	5	0.06
JSCR10T	5/16	11/16	1/8	21/32	1/8	5-1/2	0.07
JSCR11T	11/32	3/4	1/8	23/32	1/8	5-15/16	0.09
JSCR12T	3/8	13/16	1/8	25/32	1/8	6-1/4	0.11
JSCR14T	7/16	15/16	1/8	55/64	1/8	6-1/2	0.14
JSCR16T	1/2	1-1/6	3/16	31/32	3/16	7	0.20
JSCR18T	9/16	1-1/8	3/16	1-1/16	3/16	7-1/2	0.22
JSCR20T	5/8	1-5/16	3/16	1-3/16	3/16	8-3/16	0.33
JSCR22T	11/16	1-3/8	3/16	1-1/4	3/16	8-7/8	0.37
JSCR24T	3/4	1-9/16	1/4	1-21/64	1/4	9-3/4	0.48
JSCR26T	13/16	1-13/16	1/4	1-37/64	1/4	11-7/16	0.77
JSCR28T	7/8	1-13/16	1/4	1-37/64	1/4	11-7/16	0.73
JSCR30T	15/16	2-1/16	1/4	1-13/16	1/4	12-3/4	1.02
JSCR32T	1	2-1/16	1/4	1-13/16	1/4	12-3/4	1.00

Please contact us for our range of Proto Tethered Tools.

PROTO® FULL POLISH COMBINATION REVERSIBLE RATCHETING WRENCHES – SPLINE

MM

- Anti-Slip Design (ASD) open end.
- Smooth transition from head to shank.
- Industrial strength I-Beam shank provides broad bearing surface helping improve comfort and helping reduce hand fatigue.
- Protected switch lever helps prevent accidental reversal.
- Compact ratcheting head improves access.
- 72-teeth provide 5° ratcheting.

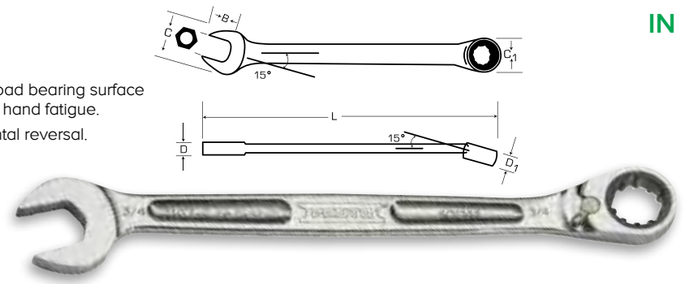


Part No.	Size (mm)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
JSCVM06A	6	5/16	35/64	5/32	35/64	1/4	4-59/64	0.05
JSCVM07A	7	5/16	39/64	11/64	43/64	1/4	5-5/32	0.07
JSCVM08A	8	25/64	11/16	11/64	43/64	1/4	5-27/64	0.08
JSCVM09A	9	13/32	25/32	3/16	3/4	17/64	5-43/64	0.10
JSCVM10A	10	29/64	27/32	13/64	25/32	9/32	5-29/32	0.12
JSCVM11A	11	1/2	15/16	7/32	55/64	19/64	6-29/32	0.16
JSCVM12A	12	35/64	1-1/64	15/64	29/32	21/64	7-23/32	0.20
JSCVM13A	13	39/64	1-5/64	1/4	1	11/32	7-29/32	0.24
JSCVM14A	14	11/16	1-13/64	9/32	1-5/64	23/64	8-49/64	0.30
JSCVM15A	15	23/32	1-17/64	9/32	1-7/64	3/8	9-9/64	0.34
JSCVM16A	16	3/4	1-21/64	19/64	1-3/16	25/64	9-33/64	0.40
JSCVM17A	17	53/64	1-7/16	5/16	1-1/4	13/32	10-17/64	0.49
JSCVM18A	18	55/64	1-33/64	21/64	1-9/32	27/64	10-11/16	0.55
JSCVM19A	19	29/32	1-37/64	11/32	1-21/64	7/16	11-3/64	0.60
JSCVM21A	21	31/32	1-23/32	23/64	1-37/64	33/64	11-13/16	0.80
JSCVM22A	22	1-3/64	1-7/8	3/8	1-37/64	33/64	12-35/64	0.86
JSCVM24A	24	1-1/8	1-31/32	25/64	1-53/64	37/64	13-5/16	1.09
JSCVM27A	27	1-9/32	2-7/32	15/32	2-3/64	39/64	14-15/16	1.44
JSCVM30A	30	1-23/64	2-11/32	1/2	2-9/32	43/64	15-7/8	1.85
JSCVM32A	32	1-1/2	2-19/32	35/64	2-15/32	11/16	16-59/64	2.29

PROTO® FULL POLISH COMBINATION REVERSIBLE RATCHETING WRENCHES – SPLINE

IN

- Anti-Slip Design (ASD) open end.
- Smooth transition from head to shank.
- Industrial strength I-Beam shank provides broad bearing surface helping improve comfort and helping reduce hand fatigue.
- Protected switch lever helps prevent accidental reversal.
- Compact ratcheting head improves access.
- 72-teeth provide 5° ratcheting.



Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	Outside Head Width (in) (C1)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
JSCV08A	1/4	5/16	35/64	5/32	35/64	1/4	4-59/64	0.05
JSCV09A	9/32	5/16	39/64	11/64	43/64	1/4	5-5/32	0.07
JSCV10A	5/16	25/64	11/16	11/64	43/64	1/4	5-27/64	0.08
JSCV11A	11/32	13/32	25/32	3/16	3/4	17/64	5-43/64	0.10
JSCV12A	3/8	29/64	27/32	13/64	25/32	9/32	5-29/32	0.12
JSCV14A	7/16	1/2	15/16	7/32	55/64	19/64	6-29/32	0.16
JSCV16A	1/2	39/64	1-5/64	1/4	1	11/32	7-29/32	0.24
JSCV18A	9/16	11/16	1-13/64	9/32	1-5/64	23/64	8-49/64	0.30
JSCV20A	5/8	3/4	1-21/64	19/64	1-3/16	25/64	9-33/64	0.40
JSCV22A	11/16	53/64	1-7/16	5/16	1-1/4	13/32	10-17/64	0.49
JSCV24A	3/4	29/32	1-37/64	11/32	1-21/64	7/16	11-3/64	0.60
JSCV26A	13/16	31/32	1-23/32	23/64	1-37/64	33/64	11-13/16	0.80
JSCV28A	7/8	1-3/64	1-7/8	3/8	1-37/64	33/64	12-35/64	0.86
JSCV30A	15/16	1-1/8	1-31/32	25/64	1-53/64	37/64	13-5/16	1.09
JSCV32A	1	1-13/64	2-3/32	27/64	1-53/64	37/64	14-1/16	1.17
JSCV34A	1-1/16	1-9/32	2-7/32	15/32	2-3/64	39/64	14-15/16	1.44
JSCV36A	1-1/8	1-23/64	2-11/32	1/2	2-9/32	43/64	15-7/8	1.85
JSCV40A	1-1/4	1-1/2	2-19/32	35/64	2-15/32	11/16	16-59/64	2.29

PROTO® BLACK CHROME COMBINATION NON-REVERSIBLE RATCHETING WRENCHES SPLINE

MM

- Spline wrenches can be used on metric 4, 6, 12 point, spline and Torx® fasteners.
- Box end is countersunk for easy application to the fastener.
- Spline design was created for use with specialty spline bolts which are used when weight and size of bolt heads must be minimized.
- Spline design enables the wrench to contact conventional fasteners away from the corners, which applies force over a larger area, reducing risk of fastener scoring and helps prevent rounding of the corners and other fasteners damage that could lead to Foreign Object Damage (FOD).
- The high contact surface area which is away from fastener points enables turning of highly rounded fasteners.
- Anti-Slip Design (ASD) open end.
- Black chrome finish is corrosion resistant and visually distinctive.



Part No.	Size (mm)	Outside Head Width 1 (in)	Head Thickness 1 (in)	Outside Head Width 2 (in)	Head Thickness 2 (in)	OAL (in)	Weight (lbs)
JSCRM08	8	11/16	1/8	21/32	1/8	5-1/2	0.06
JSCRM09	9	3/4	1/8	23/32	1/8	5-15/16	0.08
JSCRM10	10	13/16	1/8	25/32	1/8	6-1/4	0.10
JSCRM11	11	15/16	1/8	55/64	1/8	6-9/16	0.13
JSCRM12	12	1	3/16	57/64	3/16	6-3/4	0.16
JSCRM13	13	1-11/16	3/16	31/32	3/16	7	0.18
JSCRM14	14	1-1/8	3/16	1-1/16	3/16	7-1/2	0.22
JSCRM15	15	1-1/4	3/16	1-7/64	3/16	7-7/8	0.25
JSCRM16	16	1-5/16	3/16	1-3/16	3/16	8-3/16	0.32
JSCRM17	17	1-3/8	3/16	1-1/4	3/16	8-7/8	0.38
JSCRM18	18	1-1/2	3/16	1-9/32	3/16	9-5/16	0.46
JSCRM19	19	1-9/16	1/4	1-21/64	1/4	9-3/4	0.47

PROTO® BLACK CHROME COMBINATION NON-REVERSIBLE RATCHETING WRENCHES SPLINE

IN

- Spline wrenches can be used on metric 4, 6, 12 point, spline and Torx® fasteners.
- Box end is countersunk for easy application to the fastener.
- Spline design was created for use with specialty spline bolts which are used when weight and size of bolt heads must be minimized.
- Spline design enables the wrench to contact conventional fasteners away from the corners, which applies force over a larger area, reducing risk of fastener scoring and helps prevent rounding of the corners and other fasteners damage that could lead to Foreign Object Damage (FOD).
- The high contact surface area which is away from fastener points enables turning of highly rounded fasteners.
- Anti-Slip Design (ASD) open end.
- Black chrome finish is corrosion resistant and visually distinctive.



Part No.	Size (in)	Outside Head Width 1 (in)	Head Thickness 1 (in)	Outside Head Width 2 (in)	Head Thickness 2 (in)	OAL (in)	Weight (lbs)
JSCR08	1/4	9/16	1/8	35/64	1/8	5	0.06
JSCR10	5/16	11/16	1/8	21/32	1/8	5-1/2	0.07
JSCR11	11/32	3/4	1/8	23/32	1/8	5-15/16	0.09
JSCR12	3/8	13/16	1/8	25/32	1/8	6-1/4	0.11
JSCR14	7/16	15/16	1/8	55/64	1/8	6-1/2	0.14
JSCR16	1/2	1-1/6	3/16	31/32	3/16	7	0.20
JSCR18	9/16	1-1/8	3/16	1-1/16	3/16	7-1/2	0.22
JSCR20	5/8	1-5/16	3/16	1-3/16	3/16	8-3/16	0.33
JSCR22	11/16	1-3/8	3/16	1-1/4	3/16	8-7/8	0.37
JSCR24	3/4	1-9/16	1/4	1-21/64	1/4	9-3/4	0.48
JSCR26	13/16	1-13/16	1/4	1-37/64	1/4	11-7/16	0.77
JSCR28	7/8	1-13/16	1/4	1-37/64	1/4	11-7/16	0.73
JSCR30	15/16	2-1/16	1/4	1-13/16	1/4	12-3/4	1.02
JSCR32	1	2-1/16	1/4	1-13/16	1/4	12-3/4	1.00

PROTO® BLACK CHROME COMBINATION REVERSIBLE RATCHETING WRENCHES SPLINE

MM

- Spline wrenches can be used on metric 4, 6, 12 point, spline and Torx® fasteners.
- The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve speed.
- 15° angled offset box end helps keep shank clear of obstructions.
- Chrome-vanadium box ends and switch levers provide high strength and durability.
- Box end is countersunk for easy application to the fastener.
- Spline design was created for use with specialty spline bolts which are used when weight and size of bolt heads must be minimized.
- Spline design enables the wrench to contact conventional fasteners away from the corners, which applies force over a larger area, reducing risk of fastener scoring and helps prevent rounding of the corners and other fasteners damage that could lead to Foreign Object Damage (FOD).
- The high contact surface area which is away from fastener points enables turning of highly rounded fasteners.
- Anti-Slip Design (ASD) open end.
- Black chrome finish is corrosion resistant and visually distinctive.



Part No.	Size (mm)	Outside Head Width 1 (in)	Head Thickness 1 (in)	Outside Head Width 2 (in)	Head Thickness 2 (in)	OAL (in)	Weight (lbs)
JSCVM06	6	9/16	1/8	35/64	1/8	5	0.06
JSCVM07	7	11/16	1/8	21/32	1/8	5-1/2	0.07
JSCVM08	8	11/16	1/8	21/32	1/8	5-1/2	0.07
JSCVM09	9	3/4	1/8	23/32	1/8	5-15/16	0.09
JSCVM10	10	13/16	1/8	25/32	1/8	6-1/4	0.11
JSCVM11	11	15/16	1/8	55/64	1/8	6-9/16	0.14
JSCVM12	12	1	3/16	57/64	3/16	6-3/4	0.17
JSCVM13	13	1-11/16	3/16	31/32	3/16	7	0.20
JSCVM14	14	1-1/8	3/16	1-1/16	3/16	7-1/2	0.24
JSCVM15	15	1-1/4	3/16	1-7/64	3/16	7-7/8	0.28
JSCVM16	16	1-5/16	3/16	1-3/16	3/16	8-3/16	0.33
JSCVM17	17	1-3/8	3/16	1-1/4	3/16	8-7/8	0.39
JSCVM18	18	1-1/2	3/16	1-9/32	3/16	9-5/16	0.43
JSCVM19	19	1-9/16	1/4	1-21/64	1/4	9-3/4	0.50
JSCVM21	21	1-13/16	1/4	1-37/64	1/4	11-7/16	0.76
JSCVM22	22	1-13/16	1/4	1-37/64	1/4	11-7/16	0.76
JSCVM24	24	2-1/16	1/4	1-13/16	1/4	12-3/4	1.06
JSCVM27	27	2-1/4	5/16	2-1/16	5/16	14-1/8	1.42
JSCVM30	30	2-5/16	5/16	2-19/64	5/16	15-7/8	1.89
JSCVM32	32	2-1/2	5/16	2-29/64	5/16	16-3/4	2.32
JSCVM34	34	2-1/2	3/8	2-29/64	3/8	18-1/8	2.65
JSCVM36	36	2-13/16	3/8	2-39/64	3/8	19-5/16	3.09

PROTO® BLACK CHROME COMBINATION REVERSIBLE RATCHETING WRENCHES SPLINE

IN



Part No.	Size (in)	Outside Head Width 1 (in)	Head Thickness 1 (in)	Outside Head Width 2 (in)	Head Thickness 2 (in)	OAL (in)	Weight (lbs)
JSCV07	7/32	9/16	1/8	35/64	1/8	5	0.06
JSCV08	1/4	9/16	1/8	35/64	1/8	5	0.06
JSCV09	9/32	11/16	1/8	21/32	1/8	5-1/2	0.07
JSCV10	5/16	11/16	1/8	21/32	1/8	5-1/2	0.07
JSCV11	11/32	3/4	1/8	23/32	1/8	5-15/16	0.09
JSCV12	3/8	13/16	1/8	25/32	1/8	6-1/4	0.11
JSCV14	7/16	15/16	1/8	55/64	1/8	6-1/2	0.14
JSCV16	1/2	1-1/6	3/16	31/32	3/16	7	0.20
JSCV18	9/16	1-1/8	3/16	1-1/16	3/16	7-1/2	0.22
JSCV20	5/8	1-5/16	3/16	1-3/16	3/16	8-3/16	0.33
JSCV24	3/4	1-9/16	1/4	1-21/64	1/4	9-3/4	0.48
JSCV26	13/16	1-13/16	1/4	1-37/64	1/4	11-7/16	0.77
JSCV28	7/8	1-13/16	1/4	1-37/64	1/4	11-7/16	0.73
JSCV30	15/16	2-1/16	1/4	1-13/16	1/4	12-3/4	1.02
JSCV32	1	2-1/16	1/4	1-13/16	1/4	12-3/4	1.00
JSCV40	1-1/4	2-1/2	5/16	2-29/64	5/16	16-3/4	2.30
JSCV48	1-1/2	2-13/16	3/8	2-39/64	3/8	19-5/16	3.09

PROTO® BLACK CHROME STUBBY COMBINATION REVERSIBLE RATCHETING WRENCHES SPLINE

MM

- The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve efficiency.
- 15° angled offset helps keep shank clear of obstructions.
- Box end is chamfered for easy application to the fastener.
- Spline design enables the wrench to contact conventional fasteners away from the corners, which applies force over a larger area, reducing risk of fastener scoring and helps prevent rounding of the corners and other fasteners damage that could lead to Foreign Object Damage (FOD).
- Anti-Slip Design (ASD) open end.
- Black chrome finish is corrosion-resistant and visually distinctive.
- Compact size allows you to work in tight spots.
- The 72 tooth gear allows for 5° arc swing during use.
- Spline wrenches can be used on 4, 6, 12 point, spline and Torx® fasteners.



Part No.	Size (mm)	Outside Head Width 1 (in)	Head Thickness 1 (in)	Outside Head Width 2 (in)	Head Thickness 2 (in)	OAL (in)	Weight (lbs)
JSCVM06S	6	37/64	9/64	9/16	1/4	3-1/2	0.06
JSCVM08S	8	41/64	9/32	21/32	17/64	3-1/2	0.08
JSCVM09S	9	23/32	9/32	47/64	17/64	3-3/4	0.09
JSCVM10S	10	16/16	3/16	54/64	9/32	3-3/4	0.10
JSCVM11S	11	29/32	5/16	55/64	19/64	4	0.14
JSCVM12S	12	31/32	11/32	39/32	21/64	4-1/4	0.15
JSCVM13S	13	1-1/16	7/32	63/64	11/32	4-1/4	0.18
JSCVM14S	14	1-9/64	3/8	1-3/32	23/64	4-1/2	0.21
JSCVM15S	15	1-7/32	1/4	1-3/32	3/8	4-11/16	0.24
JSCVM16S	16	1-5/16	13/32	1-5/32	25/64	4-7/8	0.33
JSCVM17S	17	1-13/32	15/64	1-1/4	13/32	5	0.38
JSCVM18S	18	1-7/16	5/16	1-1/4	7/16	5-5/32	0.41
JSCVM19S	19	1-9/16	5/16	1-5/16	7/16	5-1/2	0.47

PROTO® BLACK CHROME STUBBY COMBINATION REVERSIBLE RATCHETING WRENCHES SPLINE

IN

- The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve efficiency.
- 15° angled offset helps keep shank clear of obstructions.
- Box end is chamfered for easy application to the fastener.
- Spline design enables the wrench to contact conventional fasteners away from the corners, which applies force over a larger area, reducing risk of fastener scoring and helps prevent rounding of the corners and other fasteners damage that could lead to Foreign Object Damage (FOD).
- Anti-Slip Design (ASD) open end.
- Black chrome finish is corrosion-resistant and visually distinctive.
- Compact size allows you to work in tight spots.
- The 72 tooth gear allows for 5° arc swing during use.
- Spline wrenches can be used on 4, 6, 12 point, spline and Torx® fasteners.



Part No.	Size (in)	Outside Head Width 1 (in)	Head Thickness 1 (in)	Outside Head Width 2 (in)	Head Thickness 2 (in)	OAL (in)	Weight (lbs)
JSCV08S	1/4	37/64	9/64	9/16	1/4	3-1/8	0.06
JSCV10S	5/16	41/64	5/32	21/32	1/4	3-1/2	0.08
JSCV12S	3/8	13/16	11/64	25/32	9/32	3-3/4	0.11
JSCV14S	7/16	29/32	5/16	55/64	19/64	4	0.12
JSCV16S	1/2	1-1/16	7/32	63/64	11/32	4-1/4	0.16
JSCV18S	9/16	1-9/64	3/8	1-1/32	23/64	4-1/2	0.18
JSCV20S	5/8	1-5/16	13/32	1-11/64	25/64	4-7/8	0.24
JSCV22S	11/16	1-13/32	17/64	1-15/64	13/32	5	0.27
JSCV24S	3/4	1-9/16	5/16	1-5/16	7/16	5-1/2	0.36

PROTO® BLACK CHROME LOCKING FLEX-HEAD COMBINATION RATCHETING WRENCHES SPLINE

MM

- 15° angled offset helps keep shank clear of obstructions.
- Chrome-vanadium box ends and switch levers provide high strength and durability.
- Box end is countersunk for easy application to the fastener.
- Spline design was created for use with specialty spline bolts which are used when weight and size of bolt heads must be minimized.
- Spline design enables the wrench to contact conventional fasteners away from the corners, which applies force over a larger area, reducing risk of fastener scoring and helps prevent rounding of the corners and other fasteners damage that could lead to Foreign Object Damage (FOD).
- The high contact surface area which is away from fastener points enables turning of highly rounded fastener.
- Anti-Slip Design (ASD) open end.
- Black chrome finish is corrosion resistant and visually distinctive.
- 72 tooth ratcheting mechanism rotates fast with only 5 degrees of swing.
- Spline wrenches can be used on 4, 6, 12 point, spline and Torx® fasteners.



Part No.	Size (mm)	Outside Head Width 1 (in)	Head Thickness 1 (in)	Outside Head Width 2 (in)	Head Thickness 2 (in)	OAL (in)	Weight (lbs)
JSCVM08F	8	41/64	9/32	21/32	17/64	5	0.13
JSCVM09F	9	47/64	3/32	21/32	9/32	5-13/64	0.16
JSCVM10F	10	13/16	13/64	51/64	9/32	5-3/8	0.16
JSCVM11F	11	57/64	13/64	55/64	5/16	5-1/2	0.17
JSCVM12F	12	63/64	11/32	57/64	21/64	5-25/32	0.19
JSCVM13F	13	1-1/16	15/64	1	11/32	6	0.19
JSCVM14F	14	1-9/64	3/8	1-3/64	23/64	6-1/2	0.21
JSCVM15F	15	1-3/16	1/4	1-3/32	3/8	6-3/4	0.25
JSCVM16F	16	1-21/64	13/32	1-11/64	25/64	7	0.30
JSCVM17F	17	1-25/64	19/64	1-1/4	13/32	7-1/2	0.33
JSCVM18F	18	1-15/32	7/16	1-9/32	27/64	8	0.36
JSCVM19F	19	1-35/64	11/32	1-21/64	7/16	8-1/2	0.45

PROTO® BLACK CHROME LOCKING FLEX-HEAD COMBINATION RATCHETING WRENCHES SPLINE

IN

- Fractional spline wrenches can be used on fractional 4, 6, 12 point, spline and Torx® fasteners.
- The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve speed.
- 15° angled offset box end helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- Black chrome finish is corrosion resistant and visually distinctive.



Part No.	Size (in)	Outside Head Width 1 (in)	Head Thickness 1 (in)	Outside Head Width 2 (in)	Head Thickness 2 (in)	OAL (in)	Weight (lbs)
JSCV10F	5/16	19/32	9/32	41/64	17/64	5	0.16
JSCV12F	3/8	13/16	13/64	7/8	9/32	5-3/8	0.17
JSCV14F	7/16	57/64	13/64	27/32	5/16	5-9/16	0.19
JSCV16F	1/2	1-1/16	1-15/64	1-3/32	11/32	6	0.20
JSCV18F	9/16	1-9/64	3/8	1-1/16	23/64	6-1/4	0.29
JSCV20F	5/8	1-5/16	13/32	1-3/16	25/64	7	0.33
JSCV22F	11/16	1-25/64	19/64	13/32	1-7/32	7-1/2	0.46
JSCV24F	3/4	1-35/64	11/32	1-21/64	7/16	8-1/2	0.57

PROTO® 4 PIECE RATCHETING WRENCH ADAPTER SET

- Full polish finish provides corrosion resistance and easy clean surfaces.
- Converts ratcheting wrench into super-thin ratchets or ratcheting bit drivers.
- Inserts into box end with a stable locking and release mechanism.

Contents:

- 3/8" Ratcheting Wrench to 1/4" Drive Bit Adapter
- 3/8" Ratcheting Wrench to 1/4" Drive Adapter
- 1/2" Ratcheting Wrench to 3/8" Drive Adapter
- 3/4" Ratcheting Wrench to 1/2" Drive Adapter



Part No.	Description	Weight (lbs)
JHA4S	4 Pc Ratcheting Wrench Adapter Set Imp	0.21

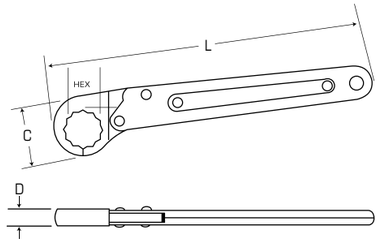
PROTO® RATCHETING FLARE NUT WRENCHES – 12 POINT

TORQUEPLUS FASTENING SYSTEM

IN

- Black oxide finish.
- Non-reflective black oxide finish for use where non-plated products are required.
- 12 Point flare nut box end allows for fine indexing, helping to improve speed and access.
- Pivoting head allows user to place the wrench over the connected pipes to reach the fastener.





Part No.	Size (in)	Outside Head Width (in) (C)	Head Thickness (in) (D)	OAL (in) (L)	Weight (lbs)
J3812	3/8	1	9/32	5-7/16	0.17
J3814	7/16	1	9/32	5-7/16	0.17
J3816	1/2	1	9/32	5-7/16	0.17
J3818	9/16	1-5/16	3/8	7-1/4	0.31
J3820	5/8	1-5/16	3/8	7-1/4	0.31
J3822	11/16	1-5/16	3/8	7-1/4	0.31
J3824	3/4	1-5/16	3/8	7-1/4	0.31
J3826	13/16	1-11/16	7/16	9-3/8	0.58
J3828	7/8	1-11/16	7/16	9-3/8	0.58
J3830	15/16	1-11/16	1/2	9-3/8	0.58
J3832	1	1-11/16	1/2	9-3/8	0.58

GearWrench Combi. Wrenches

GEARWRENCH RATCHETING COMBINATION SPANNERS — IN

- Productivity: Ratcheting Box-End needs as little as 5° to move fastener vs. 30° for standard box end wrenches.
- Compact reversing lever: No need to remove from fastener to change direction
- Access: 15° offset provides additional knuckle clearance
- Strength: Surface Drive® reduces fastener rounding

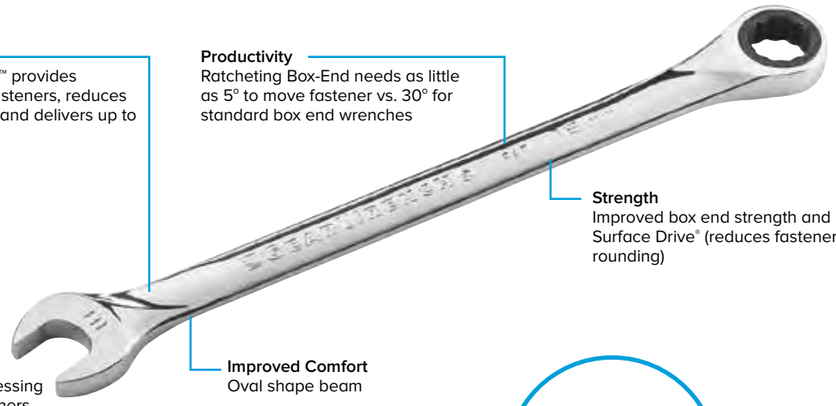


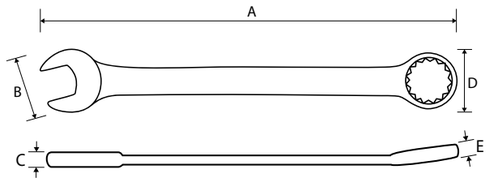
Part No.	Size	A	B	C	D	E
GW 9008	1/4	4.921	4.921	0.181	0.610	0.256
GW 9010	5/16	5.508	5.508	0.193	0.625	0.256
GW 9011	11/32	5.882	5.882	0.205	0.689	0.272
GW 9012	3/8	6.256	6.256	0.220	0.750	0.287
GW 9014	7/16	6.508	6.508	0.236	0.811	0.303
GW 9016	1/2	7.008	7.008	0.264	0.930	0.339
GW 9018	9/16	7.504	7.504	0.280	1.020	0.354
GW 9020	5/8	8.201	8.201	0.303	1.130	0.390
GW 9022	11/16	8.878	8.878	0.319	1.201	0.406
GW 9024	3/4	9.764	9.764	0.358	1.278	0.441
GW 9026	13/16	11.476	11.476	0.378	1.536	0.512
GW 9028	7/8	11.476	11.476	0.378	1.536	0.512
GW 9030	15/16	13.116	13.116	0.417	1.791	0.571
GW 9032	1	13.116	13.116	0.417	1.791	0.571
GW 9034	1-1/16	14.142	14.142	0.441	1.929	0.610
GW 9036	1-1/8	15.846	15.846	0.480	2.152	0.669
GW 9038	1-1/4	16.764	16.764	0.496	2.283	0.689

GEARWRENCH RATCHETING COMBINATION SPANNERS — MM



Part No.	Size	A	B	C	D	E
GW 9105	5.5	4.921	0.450	0.181	0.610	0.235
GW 9106	6	4.921	0.494	0.181	0.610	0.256
GW 9107	7	5.236	0.575	0.181	0.610	0.256
GW 9108	8	5.508	0.658	0.193	0.625	0.256
GW 9109	9	5.882	0.741	0.205	0.689	0.272
GW 9110	10	6.256	0.882	0.220	0.750	0.287
GW 9111	11	6.508	0.905	0.236	0.811	0.303
GW 9112	12	6.756	0.988	0.240	0.855	0.323
GW 9113	13	7.008	1.069	0.264	0.930	0.339
GW 9114	14	7.504	1.152	0.280	1.020	0.354
GW 9115	15	7.854	1.233	0.291	1.070	0.370
GW 9116	16	8.201	1.316	0.303	1.130	0.390
GW 9117	17	8.878	1.399	0.319	1.201	0.406
GW 9118	18	9.315	1.480	0.335	1.239	0.421
GW 9119	19	9.764	1.563	0.358	1.278	0.441
GW 9120	20	11.476	1.810	0.378	1.536	0.512
GW 9121	21	11.476	1.810	0.378	1.536	0.512
GW 9122	22	11.476	1.810	0.378	1.536	0.512
GW 9124	24	13.116	2.057	0.417	1.791	0.571
GW 9125	25	13.116	2.057	0.417	1.791	0.571
GW 9127	27	14.142	2.221	0.441	1.929	0.610
GW 9130	30	15.846	2.468	0.480	2.152	0.669
GW 9132	32	16.764	2.583	0.496	2.283	0.689
GW 9134	34	18.110	2.743	0.528	2.362	0.689





All measurements in inches unless otherwise specified.

In case you did not find what you were looking for, please contact us!

GEARWRENCH STANDARD REVERSIBLE RATCHETING COMBI SPANNERS — IN



Part No.	Size	A	B	C	D	E
GW 9525	5/16	5.508	0.709	0.197	0.667	0.256
GW 9521	11/32	5.882	0.787	0.205	0.689	0.283
GW 9526	3/8	6.256	0.906	0.224	0.778	0.303
GW 9527	7/16	6.508	0.984	0.248	0.850	0.323
GW 9528	1/2	7.008	1.102	0.276	0.970	0.339
GW 9529	9/16	7.504	1.260	0.295	1.035	0.370
GW 9530	5/8	8.201	1.387	0.315	1.183	0.406
GW 9531	11/16	8.878	1.496	0.354	1.252	0.421
GW 9532	3/4	9.764	1.654	0.374	1.341	0.441
GW 9534	13/16	11.476	1.810	0.378	1.536	0.512
GW 9538	7/8	11.476	1.810	0.378	1.536	0.512
GW 9539	15/16	13.116	2.057	0.417	1.791	0.571
GW 9540	1	13.116	2.057	0.417	1.791	0.571

GEARWRENCH XL RATCHETING COMBINATION SPANNERS — IN



Part No.	Size	A	B	C	D	E
GW 85108	1/4	5.315	0.571	0.181	0.610	0.256
GW 85110	5/16	5.906	0.709	0.197	0.650	0.256
GW 85112	3/8	7.087	0.906	0.227	0.778	0.287
GW 85114	7/16	7.677	0.984	0.248	0.854	0.303
GW 85116	1/2	8.661	1.102	0.276	0.984	0.339
GW 85118	9/16	9.252	1.260	0.295	1.035	0.370
GW 85120	5/8	10.236	1.378	0.315	1.201	0.406
GW 85122	11/16	10.827	1.496	0.354	1.240	0.421
GW 85124	3/4	12.008	1.654	0.374	1.339	0.441
GW 85126	13/16	12.508	1.772	0.402	1.536	0.512
GW 85128	7/8	13.000	1.870	0.417	1.536	0.512
GW 85130	15/16	14.000	2.008	0.441	1.754	0.571
GW 85132	1	14.500	2.087	0.457	1.754	0.571

GEARWRENCH GEARRATCHET™ STUBBY RATCHETING COMBINATION SPANNERS — IN



Part No.	Size	A	B	C	D	E
GW 9500	3/8	3.701	0.822	0.220	0.750	0.287
GW 9501	7/16	4.016	0.905	0.236	0.811	0.303
GW 9502	1/2	4.213	1.069	0.264	0.930	0.339
GW 9503	9/16	4.488	1.152	0.280	1.020	0.354
GW 9504	5/8	4.803	1.316	0.303	1.130	0.390
GW 9505	11/16	4.961	1.399	0.319	1.201	0.406
GW 9506	3/4	5.433	1.563	0.358	1.278	0.441

GEARWRENCH STANDARD REVERSIBLE RATCHETING COMBI SPANNERS — MM



Part No.	Size	A	B	C	D	E
GW 9608	8	5.508	0.709	0.197	0.667	0.256
GW 9609	9	5.882	0.787	0.205	0.689	0.283
GW 9610	10	6.256	0.906	0.224	0.778	0.303
GW 9611	11	6.508	0.984	0.248	0.850	0.323
GW 9612	12	6.756	1.063	0.264	0.906	0.339
GW 9613	13	7.008	1.102	0.276	0.970	0.339
GW 9614	14	7.504	1.260	0.295	1.035	0.370
GW 9615	15	7.854	1.299	0.315	1.118	0.390
GW 9616	16	8.201	1.378	0.315	1.183	0.406
GW 9617	17	8.878	1.496	0.354	1.252	0.421
GW 9618	18	9.315	1.535	0.354	1.307	0.441
GW 9619	19	9.764	1.654	0.374	1.341	0.441
GW 9621	21	11.476	1.810	0.378	1.536	0.512
GW 9622	22	11.476	1.810	0.378	1.536	0.512
GW 9624	24	13.116	2.057	0.417	1.791	0.571
GW 9625	25	13.116	2.057	0.417	1.791	0.571

GEARWRENCH XL RATCHETING COMBINATION SPANNERS — MM



Part No.	Size	A	B	C	D	E
GW 85008	8	5.906	0.709	0.197	0.650	0.256
GW 85009	9	6.496	0.787	0.205	0.170	0.272
GW 85010	10	7.087	0.906	0.224	0.778	0.287
GW 85011	11	7.677	0.984	0.248	0.854	0.303
GW 85012	12	8.150	1.063	0.264	0.906	0.323
GW 85013	13	4.661	1.102	0.276	0.984	0.339
GW 85014	14	9.252	1.260	0.295	1.035	0.370
GW 85015	15	9.843	1.299	0.315	1.130	0.390
GW 85016	16	10.263	1.378	0.315	1.201	0.406
GW 85017	17	10.827	1.496	0.354	1.240	0.421
GW 85018	18	11.417	1.516	0.354	1.280	0.441
GW 85019	19	12.008	1.654	0.374	1.339	0.441
GW 85020	20	12.508	1.693	0.389	1.536	0.512
GW 85021	21	12.508	1.772	0.402	1.536	0.512
GW 85022	22	13.000	1.870	0.417	1.536	0.512
GW 85024	24	14.000	2.008	0.441	1.754	0.571

GEARWRENCH GEARRATCHET™ STUBBY RATCHETING COMBINATION SPANNERS — MM



Part No.	Size	A	B	C	D	E
GW 9510	10	3.701	0.822	0.220	0.750	0.287
GW 9511	11	4.016	0.905	0.236	0.811	0.303
GW 9512	12	4.134	0.988	0.240	0.855	0.323
GW 9513	13	4.213	1.069	0.264	0.930	0.339
GW 9514	14	4.488	1.152	0.280	1.020	0.354
GW 9515	15	4.646	1.233	0.291	1.070	0.370
GW 9516	16	4.803	1.316	0.303	1.130	0.390
GW 9517	17	4.961	1.399	0.319	1.201	0.406
GW 9518	18	5.118	1.480	0.335	1.239	0.421
GW 9519	19	5.433	1.563	0.358	1.278	0.441

GEARWRENCH XL X-BEAM™ COMBI. RATCHETING SPANNERS — IN



Part No.	Size	A	B	C	D	E
GW 85850	5/16	5.933	.782	.209	.669	.317
GW 85851	11/32	6.524	.807	.217	.72	.333
GW 85852	3/8	7.106	.925	.236	.798	.354
GW 85854	7/16	7.697	1.004	.26	.874	.37
GW 85856	1/2	8.681	1.122	.287	1.004	.406
GW 85858	9/16	9.272	1.28	.307	1.055	.421
GW 85860	5/8	10.256	1.398	.327	1.22	.469
GW 85862	11/16	10.846	1.516	.366	1.26	.484
GW 85864	3/4	12.035	1.673	.386	1.358	.52

GEARWRENCH XL X-BEAM™ COMBI. RATCHETING SPANNERS — MM



Part No.	Size	A	B	C	D	E
GW 85808	8	5.933	.782	.209	.669	.317
GW 85809	9	6.524	.807	.217	.72	.333
GW 85810	10	7.106	.925	.236	.798	.354
GW 85811	11	7.697	1.004	.26	.874	.37
GW 85812	12	8.169	1.083	.276	.925	.39
GW 85813	13	8.681	1.122	.287	1.004	.406
GW 85814	14	9.272	1.28	.307	1.055	.421
GW 85815	15	9.862	1.319	.327	1.15	.449
GW 85816	16	10.256	1.398	.327	1.22	.469
GW 85817	17	10.846	1.516	.366	1.26	.484
GW 85818	18	11.437	1.535	.366	1.299	.5
GW 85819	19	12.035	1.673	.386	1.358	.52

Productivity
Ratcheting Box-End needs as little as 5° to move fastener vs. 30° for standard box end wrenches

Productivity
One finger operated lever with options of "locking" or "not locking" positions



Access
13 locking positions with flexible head

Access
15% longer than current Flex Head Ratcheting Wrench, to access hard to reach fasteners

Stronger
Surface Drive Plus™ provides stronger grip on fasteners, reduces fastener rounding and delivers up to 25% more torque

GEARWRENCH XL LOCKING FLEX HEAD COMBINATION SPANNERS — IN



Part No.	Size	A	B	C	D	E
GW 85710	5/16	5.75	0.65	0.20	0.62	0.26
GW 85712	3/8	6.73	0.81	0.24	0.75	0.29
GW 85714	7/16	7.20	0.89	0.26	0.81	0.30
GW 85716	1/2	8.15	1.05	0.28	0.93	0.34
GW 85718	9/16	8.62	1.14	0.30	1.02	0.35
GW 85720	5/8	9.53	1.29	0.33	1.13	0.39
GW 85722	11/16	9.99	1.38	0.34	1.20	0.41
GW 85724	3/4	11.02	1.55	0.38	1.28	0.44

GEARWRENCH XL LOCKING FLEX HEAD COMBINATION SPANNERS — MM



Part No.	Size	A	B	C	D	E
GW 85608	8	5.75	0.65	0.20	0.62	0.26
GW 85609	9	6.26	0.73	0.21	0.70	0.27
GW 85610	10	6.73	0.81	0.24	0.75	0.29
GW 85611	11	7.20	0.89	0.26	0.81	0.30
GW 85612	12	7.68	0.97	0.27	0.86	0.32
GW 85613	13	8.15	1.05	0.28	0.93	0.34
GW 85614	14	8.62	1.14	0.30	1.02	0.35
GW 85615	15	9.09	1.21	0.31	1.07	0.37
GW 85616	16	9.53	1.29	0.33	1.13	0.39
GW 85617	17	9.99	1.38	0.34	1.20	0.41
GW 85618	18	10.51	1.46	0.36	1.24	0.42
GW 85619	19	11.02	1.55	0.38	1.28	0.44

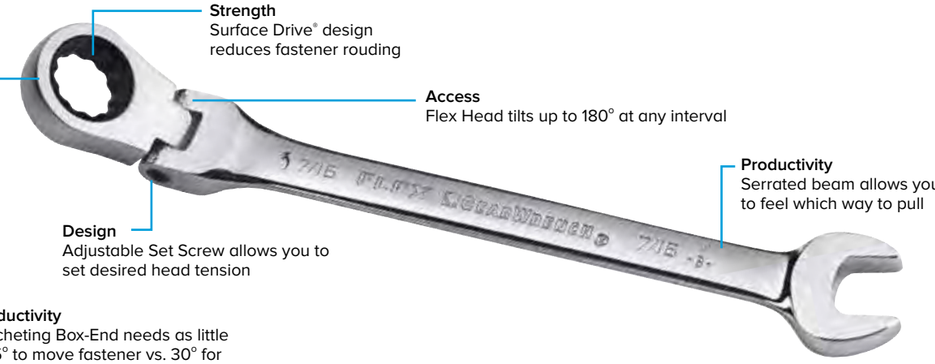
Strength
Surface Drive® design reduces fastener rouding

Access
Flex Head tilts up to 180° at any interval

Productivity
Serrated beam allows you to feel which way to pull

Design
Adjustable Set Screw allows you to set desired head tension

Productivity
Ratcheting Box-End needs as little as 5° to move fastener vs. 30° for standard box end wrenches



GEARWRENCH FLEX HEAD STANDARD COMBINATION SPANNERS — IN



Part No.	Size	A	B	C	D	E
GW 9705	5/16	5.512	0.658	0.193	0.630	0.256
GW 9704	11/32	5.866	0.741	0.205	0.689	0.272
GW 9706	3/8	6.220	0.822	0.220	0.748	0.287
GW 9707	7/16	6.496	0.905	0.236	0.807	0.303
GW 9708	1/2	7.008	1.069	0.264	0.854	0.339
GW 9709	9/16	7.480	1.152	0.280	0.929	0.354
GW 9710	5/8	8.189	1.316	0.303	1.118	0.390
GW 9711	11/16	8.858	1.480	0.335	1.201	0.421
GW 9712	3/4	9.764	1.563	0.358	1.280	0.441
GW 9713	13/16	11.457	1.810	0.378	1.535	0.512
GW 9714	7/8	11.457	1.810	0.378	1.535	0.512
GW 9715	15/16	13.110	2.057	0.417	1.791	0.571
GW 9716	1	13.110	2.057	0.417	1.791	0.571

GEARWRENCH FLEX HEAD STANDARD COMBINATION SPANNERS — MM



Part No.	Size	A	B	C	D	E
GW 9908	8	5.512	0.658	0.193	0.630	0.256
GW 9909	9	5.866	0.741	0.205	0.689	0.272
GW 9910	10	6.220	0.822	0.220	0.748	0.287
GW 9911	11	6.496	0.905	0.236	0.807	0.303
GW 9912	12	6.732	0.988	0.252	0.854	0.323
GW 9913	13	7.008	1.069	0.264	0.929	0.339
GW 9914	14	7.480	1.152	0.280	1.020	0.354
GW 9915	15	7.835	1.233	0.291	1.051	0.370
GW 9916	16	8.189	1.316	0.303	1.118	0.390
GW 9917	17	8.858	1.480	0.335	1.201	0.421
GW 9918	18	9.764	1.563	0.358	1.280	0.441
GW 9919	19	11.457	1.810	0.378	1.535	0.512
GW 9921	21	11.457	1.810	0.378	1.535	0.512
GW 9924	24	13.110	2.057	0.417	1.791	0.571
GW 9925	25	13.110	2.057	0.417	1.791	0.571

GEARWRENCH FLEX HEAD STUBBY COMBINATION SPANNERS — IN



Part No.	Size	A	B	C	D	E
GW 9571	3/8	3.701	0.822	0.220	0.748	0.287
GW 9572	7/16	4.016	0.905	0.236	0.811	0.303
GW 9573	1/2	4.213	1.069	0.264	0.929	0.339
GW 9574	9/16	4.488	1.152	0.280	1.020	0.354
GW 9575	5/8	4.803	1.316	0.303	1.130	0.390
GW 9576	11/16	4.961	1.399	0.319	1.201	0.406
GW 9577	3/4	5.433	1.563	0.358	1.280	0.441

GEARWRENCH FLEX HEAD STUBBY COMBINATION SPANNERS — MM



Part No.	Size	A	B	C	D	E
GW 9551	10	3.701	0.822	0.220	0.748	0.287
GW 9552	11	4.016	0.905	0.236	0.811	0.303
GW 9553	12	4.134	0.988	0.252	0.854	0.323
GW 9554	13	4.213	1.069	0.264	0.929	0.339
GW 9555	14	4.488	1.152	0.280	1.020	0.354
GW 9556	15	4.656	1.233	0.291	1.071	0.370
GW 9557	16	4.803	1.316	0.303	1.130	0.390
GW 9558	17	4.961	1.399	0.319	1.201	0.406
GW 9559	18	5.118	1.480	0.335	1.240	0.421
GW 9560	19	5.433	1.563	0.358	1.280	0.441

Stahlwille Ratchet Wrench Sets

STAHLWILLE COMBI. RATCHETING SPANNERS – OPEN-RATCH SETS 240

MM

Rollup wallet made of extremely tough textile with velcro fastener



Part No.	Contents (mm)	Weight (g)
96 411 003	8, 10, 11, 14	510
96 411 005	10, 11, 14, 17, 19	1122
96 411 006	8, 10, 13, 14, 17, 19	1230

STAHLWILLE COMBI. RATCHETING SPANNERS – OPEN-RATCH SETS 17

MM

Rollup wallet made of extremely tough textile with velcro fastener



Part No.	Contents (mm)	Weight (g)
96 411 705	8, 10, 13, 17, 19	732
96 411 712	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19	1745

PROTO® Ratchet Wrench Sets

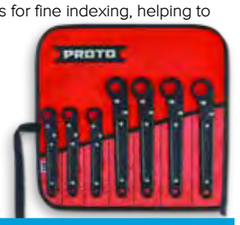
PROTO® 7 PIECE RATCHETING FLARE NUT WRENCH SET – 12 POINT

IN

- Black oxide finish.
- Non-reflective black oxide finish for use where non-plated products are required.
- 12 Point flare nut box end allows for fine indexing, helping to improve speed and access.
- Pivoting head allows user to place the wrench over the connected pipes to reach the fastener.

Contents:

- 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 inch



Part No.	Description	Weight (lbs)
J3800A	7 Pc Ratcheting Flare Nut Wrench Set Imp	1.93

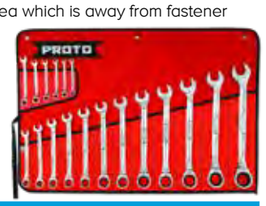
PROTO® 18 PIECE REVERSIBLE RATCHETING COMBINATION WRENCH SET – SPLINE

IN

- Full polish finish resists chipping and rust.
- Box end is countersunk for easy application to the fastener.
- Spline design was created for use with specialty spline bolts which are used when weight and size of bolt heads must be minimized.
- The high contact surface area which is away from fastener points enables turning of highly rounded fasteners.

Contents:

- 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4 inch



Part No.	Description	Weight (lbs)
JSCV-18SA	18 Pc Rev. Ratch. Combi Wrench Set Spline	13.541

PROTO® 10 PIECE RATCHETING FLARE NUT WRENCH SET – 12 POINT

MM

- Black oxide finish.
- Non-reflective black oxide finish for use where non-plated products are required.
- 12 Point flare nut box end allows for fine indexing, helping to improve speed and access.
- Pivoting head allows user to place the wrench over the connected pipes to reach the fastener.

Contents:

- 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
J3800M	10 Pc Ratcheting Flare Nut Wrench Set Met	2.77

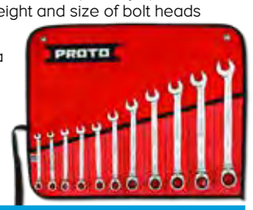
PROTO® 11 PIECE REVERSIBLE RATCHETING COMBI. WRENCH SET – SPLINE

MM

- Full polish finish resists chipping and rust.
- Box end is countersunk for easy application to the fastener.
- Spline design was created for use with specialty spline bolts which are used when weight and size of bolt heads must be minimized.
- The high contact surface area which is away from fastener points enables turning of highly rounded fasteners.

Contents:

- 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 inch



Part No.	Description	Weight (lbs)
JSCV-11SA	11 Pc Rev. Ratch. Combi Wrench Set Met	3.07

PROTO® 20 PIECE COMBI. REVERSIBLE RATCHETING WRENCH SET – SPLINE

MM

- Full polish finish resists chipping and rust.
- Box end is countersunk for easy application to the fastener.
- Spline design was created for use with specialty spline bolts which are used when weight and size of bolt heads must be minimized.
- The high contact surface area which is away from fastener points enables turning of highly rounded fasteners

Contents:

- 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 24, 27, 30, 32 mm



Part No.	Description	Weight (lbs)
JSCVM-20SA	20 Pc. Combi. Rev. Ratch. Wrench Set Met	13.74

PROTO® 14 PIECE COMBI. REVERSIBLE RATCHETING WRENCH SET – SPLINE

MM

- Full polish finish resists chipping and rust.
- Box end is countersunk for easy application to the fastener.
- Spline design was created for use with specialty spline bolts which are used when weight and size of bolt heads must be minimized.
- The high contact surface area which is away from fastener points enables turning of highly rounded fasteners

Contents:

- 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
JSCVM-14SA	14 Pc Combi. Rev. Ratch. Wrench Set Met	4.48

PROTO® 20 PIECE REV. RATCHETING COMBI. WRENCH SET – 12 POINT

TORQUEPLUS FASTENING SYSTEM

IN

- 12 point box end fits 4, 6 and 12 point fasteners.
- The box end is countersunk for easy application to the fastener.
- 15° angled offset helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- 72 tooth ratcheting mechanism rotates fast with only 5 degrees of swing.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4, 1-1/2 inch

Part No.	Description	Weight (lbs)
JSCVT-20S	20 Pc Rev. Ratch. Combi Wrench Set 12 Pt	16.2

PROTO® 9 PIECE REV. RATCHETING COMBI. WRENCH SET – 12 POINT

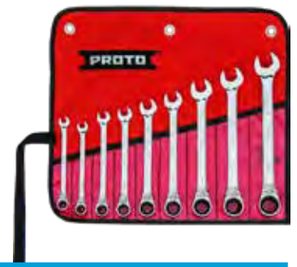
TORQUEPLUS FASTENING SYSTEM

IN

- 12 point box end fits 4, 6 and 12 point fasteners.
- The box end is countersunk for easy application to the fastener.
- 15° angled offset helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- 72 tooth ratcheting mechanism rotates fast with only 5 degrees of swing.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 9/32, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 inch



Part No.	Description	Weight (lbs)
JSCVT-9S	9 Pc Rev. Ratch. Combi. Wrench Set 12 Pt	1.90

PROTO® 20 PIECE REV. RATCHETING COMBI. WRENCH SET – SPLINE

IN

- Black chrome finish is corrosion resistant and visually distinctive.
- Fractional spline wrenches can be used on fractional 4, 6, 12 point, spline and Torx® fasteners.
- The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve speed.
- 15° angled offset box end helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.

Contents:

- 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4, 1-1/2 inch

Part No.	Description	Weight (lbs)
JSCV-20S	20 Pc Rev. Ratch. Combi Wrench Spline	16.2

PROTO® 9 PIECE REV. RATCHETING COMBI. WRENCH SET – SPLINE

IN

- Black chrome finish is corrosion resistant and visually distinctive.
- Fractional spline wrenches can be used on fractional 4, 6, 12 point, spline fasteners and Torx® fasteners.
- The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve speed.
- 15° angled offset box end helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.

Contents:

- 9/32, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 inch



Part No.	Description	Weight (lbs)
JSCV-9S	9 Pc Rev. Ratch. Combi. Wrench Set Spline	1.90

PROTO® 22 PIECE REV. RATCHETING COMBI. WRENCH SET – 12 POINT

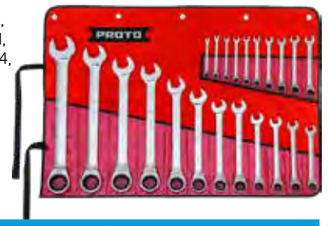
TORQUEPLUS FASTENING SYSTEM

MM

- 12 point box end fits 4, 6 and 12 point fasteners.
- The box end is countersunk for easy application to the fastener.
- 15° angled offset helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- 72 tooth ratcheting mechanism rotates fast with only 5 degrees of swing.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 24, 27, 30, 32, 34, 36 mm



Part No.	Description	Weight (lbs)
JSCVMT-22S	22 Pc Ratch. Combi. Wrench Set 12 Pt Met	17.10

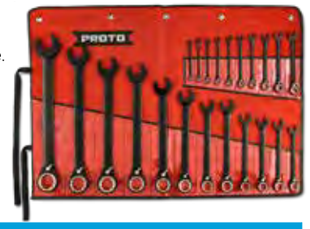
PROTO® 22 PIECE REV. RATCHETING COMBINATION WRENCH SET – SPLINE

MM

- Can be used on metric 4, 6, 12 point, spline and Torx® fasteners.
- The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve speed.
- 15° angled offset box end helps keep shank clear of obstructions.
- Box end is countersunk for easy application to the fastener.
- The high contact surface area which is away from fastener points enables turning of highly rounded fasteners.
- Anti-Slip Design (ASD) open end.
- Black chrome finish is corrosion resistant and visually distinctive.

Contents:

- 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 24, 27, 30, 32, 34, 36 mm



Part No.	Description	Weight (lbs)
JSCVM-22S	22 Pc Ratch. Combi. Wrench Spline Met	17.10

PROTO® 13 PIECE REV. RATCHETING COMBI. WRENCH SET – 12 POINT

TORQUEPLUS FASTENING SYSTEM

MM

- 12 point box end fits 4, 6 and 12 point fasteners.
- The box end is countersunk for easy application to the fastener.
- 15° angled offset helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- 72 tooth ratcheting mechanism rotates fast with only 5 degrees of swing.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
JSCVMT-13S	13 Pc Ratch. Combi. Wrench Set 12 Pt Met	3.02

PROTO® 13 PIECE REV. RATCHETING COMBINATION WRENCH SET – SPLINE

MM

- Can be used on metric 4, 6, 12 point, spline and Torx® fasteners.
- The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve speed.
- 15° angled offset box end helps keep shank clear of obstructions.
- Box end is countersunk for easy application to the fastener.
- The high contact surface area which is away from fastener points enables turning of highly rounded fasteners.
- Anti-Slip Design (ASD) open end.
- Black chrome finish is corrosion resistant and visually distinctive.

Contents:

- 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
JSCVM-13S	13 Pc Ratch. Combi. Wrench Spline Met	3.02

PROTO® 8 PIECE REV. RATCHETING COMBI. WRENCH SET – 12 POINT

TORQUEPLUS FASTENING SYSTEM

MM

- 12 point box end fits 4, 6 and 12 point fasteners.
- The box end is countersunk for easy application to the fastener.
- 15° angled offset helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- 72 tooth ratcheting mechanism rotates fast with only 5 degrees of swing.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 8, 10, 12, 13, 14, 15, 17, 18 mm



Part No.	Description	Weight (lbs)
JSCVMT-8S	8 Pc Ratch. Combi. Wrench Set 12 Pt Met	2.15

PROTO® 14 PIECE RATCHETING COMBI. WRENCH SET – 12 POINT

TORQUEPLUS FASTENING SYSTEM

IN

- 12 point box end allows for fine indexing, helping to improve speed and access.
- Fits 4, 6 and 12 point fasteners.
- Box end is countersunk for easy application to the fastener.
- Box ends incorporate the TorquePlus™ system.

Contents:

- 1/4, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 inch



Part No.	Description	Weight (lbs)
JSCRT-14S	14 Pc Ratcheting Combi. Wrench Set 12 Pt	6.36

PROTO® 9 PIECE RATCHETING COMBI. WRENCH SET – SPLINE

IN

- Black chrome finish is corrosion resistant and visually distinctive.
- Non-reversing ratcheting wrenches can be flipped over to turn the fastener in the opposite direction.
- Spline design helps prevent rounding of corners and other fastener damage that could lead to Foreign Object Damage (FOD).
- The high contact surface area which is away from fastener points enables turning of highly rounded fasteners.
- Anti-Slip Design (ASD) open end.
- Fractional spline wrenches can be used on fractional 4, 6, 12 point, spline and Torx® fasteners.

Contents:

- 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 inch



Part No.	Description	Weight (lbs)
JSCR-9S	9 Pc Ratch. Combi. Wrench Set Spline Imp	2.71

PROTO® 7 PIECE RATCHETING COMBI. WRENCH SET – 12 POINT

TORQUEPLUS FASTENING SYSTEM

MM

- 12 point box end allows for fine indexing, helping to improve speed and access.
- 12 point box end fits 4, 6 and 12 point fasteners.
- The wrench self aligns with the fastener.
- Full polish finish provides corrosion resistance and easy to clean surfaces.
- The box end is countersunk for easy application to the fastener.
- 15° angled offset helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- Box ends incorporate the TorquePlus™ system.
- 72 tooth ratcheting mechanism rotates fast with only 5 degrees of swing.

Contents:

- 10, 12, 13, 14, 15, 16, 18 mm



Part No.	Description	Weight (lbs)
JSCRMT-7S	7 Pc Ratch. Combi. Wrench Set 12 Pt Met	1.94

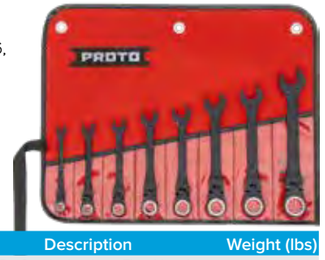
PROTO® 8 PIECE COMBI. LOCKING FLEX-HEAD RATCHETING WRENCH SET – SPLINE

IN

- 15° angled offset helps keep shank clear of obstructions.
- Chrome-vanadium box ends and switch levers provide high strength and durability.
- Box end is countersunk for easy application to the fastener.
- Anti-Slip Design (ASD) open end.
- Black chrome finish is corrosion resistant and visually distinctive.
- 72 tooth ratcheting mechanism rotates fast with only 5 degrees of swing.
- Spline wrenches can be used on 4, 6, 12 point, spline and Torx® fasteners.

Contents:

- 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 inch



Part No.	Description	Weight (lbs)
JSCVF-8S	8 Pc Combi. Locking Flex-Head Ratcheting Wrench Set Spline Imperial	2.30

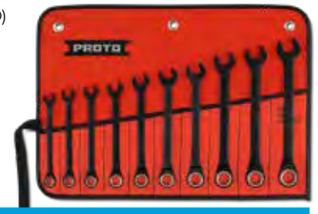
PROTO® 10 PIECE RATCHETING COMBI. WRENCH SET – SPLINE

MM

- Metric Spline wrenches can be used on metric 4, 6, 12 point, spline and Torx® fasteners.
- The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve speed.
- Chrome-vanadium box ends and switch levers provide high strength and durability.
- Box end is countersunk for easy application to the fastener.
- The high contact surface area which is away from fastener points enables turning of highly rounded fasteners.
- Anti-Slip Design (ASD) open end.
- Black chrome finish is corrosion resistant and visually distinctive.

Contents:

- 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
JSCRM-10S	10 Pc Ratch. Combi. Wrench Spline Met	1.94

PROTO® 12 PIECE RATCHETING COMBI. WRENCH SET – 12 POINT

TORQUEPLUS FASTENING SYSTEM

MM

- 12 point box end allows for fine indexing, helping to improve speed and access.
- 12 point box end fits 4, 6 and 12 point fasteners.
- The wrench self aligns with the fastener.
- Full polish finish provides corrosion resistance and easy to clean surfaces.
- The box end is countersunk for easy application to the fastener.
- 15° angled offset helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.
- Box ends incorporate the TorquePlus™ system.
- 72 tooth ratcheting mechanism rotates fast with only 5 degrees of swing.

Contents:

- 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm



Part No.	Description	Weight (lbs)
JSCRMT-12S	12 Pc Ratch. Combi. Wrench Set 12 Pt Met	3.22

PROTO® 9 PIECE STUBBY REV. RATCH. COMBI. WRENCH SET – SPLINE

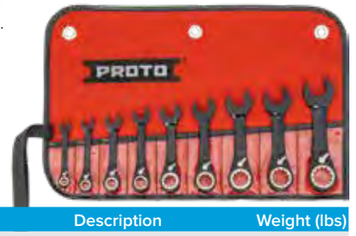
TORQUEPLUS FASTENING SYSTEM

IN

- Black chrome finish is corrosion resistant and visually distinctive.
- Fractional spline wrenches can be used on fractional 4, 6, 12 point, spline fasteners and Torx® fasteners.
- The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve speed.
- 15-degree angled offset box end helps keep shank clear of obstructions.
- Anti-Slip Design (ASD) open end.

Contents:

- 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 inch



Part No.	Description	Weight (lbs)
JSCVS-9S	9 Pc Stubby Reversible Ratcheting Combi. Wrench Set Spline Imperial	1.63

GearWrench Combi. Wrench Sets

GEARWRENCH 4 PIECE COMBINATION RATCHETING SPANNER SET — IN

Contents:

3/8"	7/16"
1/2"	9/16"



Part No.	Description
GW 9304	4 Piece Combination Ratcheting Spanner Set

GEARWRENCH 4 PIECE COMBINATION RATCHETING SPANNER SET — MM

Contents:

10mm	12mm
13mm	14mm



Part No.	Description
GW 9404	4 Piece Metric Combination Ratcheting Spanner Set

GEARWRENCH 8 PIECE COMBINATION RATCHETING SPANNER SET — IN

Contents:

5/16"	3/8"
7/16"	1/2"
9/16"	5/8"
11/16"	3/4"



Part No.	Description
GW 9308	8 Piece Combination Ratcheting Spanner Set

GEARWRENCH 12 PIECE COMBINATION RATCHETING SPANNER SET — MM

Contents:

8mm	9mm
10mm	11mm
12mm	13mm
14mm	15mm
16mm	17mm
18mm	19mm



Part No.	Description
GW 9412	12 Piece Metric Combination Ratcheting Spanner Set

GEARWRENCH 8 PIECE XL COMBINATION SPANNER SET — IN

Contents:

5/16"	3/8"
7/16"	1/2"
9/16"	5/8"
11/16"	3/4"



Part No.	Description
GW 85198	8 Piece XL Combination Ratcheting Spanner Set

GEARWRENCH 12 PIECE XL COMBINATION SPANNER SET — MM

Contents:

8mm	9mm
10mm	11mm
12mm	13mm
14mm	15mm
16mm	17mm
18mm	19mm



Part No.	Description
GW 85098	12 Piece Metric XL Combination Ratcheting Spanner Set

GEARWRENCH 7 PIECE GEARRATCHET™ STUBBY COMBI. RATCHETING SPANNER SET — IN

Contents:

3/8"	7/16"
1/2"	9/16"
5/8"	11/16"
3/4"	



Part No.	Description
GW 9507	7 Piece Stubby Combination Ratcheting Spanner Set

GEARWRENCH GEARRATCHET™ 10 PC STUBBY COMBI. RATCH. SPANNER SET — MM

Contents:

10mm	11mm
12mm	13mm
14mm	15mm
16mm	17mm
18mm	19mm



Part No.	Description
GW 9520	10 Pc Metric Stubby Combi. Ratcheting Spanner Set

GEARWRENCH 9 PIECE XL X-BEAM COMBI. RATCHETING SPANNER SET — IN

Contents:

5/16"	11/32"
3/8"	7/16"
1/2"	9/16"
5/8"	11/16"
3/4"	



Part No.	Description
GW 85898	9 Pc XL X-Beam Combination Ratcheting Spanner Set

GEARWRENCH 10 PIECE GEARRATCHET™ STUBBY COMBINATION SPANNER SET — MM

Contents:

8mm	9mm
10mm	11mm
12mm	13mm
14mm	15mm
16mm	17mm
18mm	19mm



Part No.	Description
GW 85888	10 Pc XL X-Beam Combi. Ratcheting Spanner Set Metric

GEARWRENCH 8 PIECE XL LOCKING FLEX HEAD SPANNER SET — IN

Contents:

5/16"	3/8"
7/16"	1/2"
9/16"	5/8"
11/16"	3/4"



Part No.	Description
GW 85798	8 Piece XL Locking Flex Head Ratcheting Spanner Set

GEARWRENCH 12 PIECE XL LOCKING FLEX HEAD SPANNER SET — MM

Contents

8mm	9mm
10mm	11mm
12mm	13mm
14mm	15mm
16mm	17mm
18mm	19mm



Part No.	Description
GW 85698	12 Pc Metric XL Locking Flex Head Ratch. Spanner Set

GEARWRENCH 8 PIECE STANDARD REVERS. RATCHETING COMBINATION SPANNER SET — IN

Contents:

5/16"	3/8"
7/16"	1/2"
9/16"	5/8"
11/16"	3/4"



Part No.	Description
GW 9533	8 Pc Standard Reversible Ratcheting Combi Spanner Set

GEARWRENCH 10 PC STANDARD REV. RATCHETING COMBI. SPANNER SET — MM

Contents:

8mm	9mm
10mm	11mm
12mm	13mm
14mm	15mm
16mm	17mm
18mm	19mm



Part No.	Description
GW 9620	10 Pc Metric Stand. Rev. Ratcheting Combi Spanner Set

GEARWRENCH 13 PIECE STANDARD REVERS. RATCHETING COMBI SPANNER SET — IN

Contents:

5/16"	11/32"	3/8"	7/16"
1/2"	9/16"	11/16"	5/8"
13/16"	3/4"	7/8"	15/16"
1"			



Part No.	Description
GW 9509	13 Pc Stand. Reversible Ratcheting Combi Spanner Set

GEARWRENCH 12 PC STANDARD REV. RATCHETING COMBI SPANNER SET — MM

Contents:

8mm	9mm	10mm	11mm
12mm	13mm	14mm	15mm
16mm	17mm	18mm	19mm
21mm	22mm	24mm	25mm



Part No.	Description
GW 9602	12 Pc Metric Stand. Rev. Ratcheting Combi Spanner Set

GEARWRENCH 7 PIECE FLEX HEAD STAND. COMBINATION RATCHETING SPANNER SET — IN

Contents:

3/8"	7/16"
1/2"	9/16"
5/8"	11/16"
3/4"	



Part No.	Description
GW 9700	7 Pc Flex Head Standard Combi. Ratcheting Spanner Set

GEARWRENCH 12 PIECE FLEX HEAD STANDARD COMBI SPANNER SET — MM

Contents:

8mm	9mm
10mm	11mm
12mm	13mm
14mm	15mm
16mm	17mm
18mm	19mm



Part No.	Description
GW 9900	12 Pc Met. Flex Head Stan. Combi. Ratch. Spanner Set

GEARWRENCH 8 PIECE FLEX HEAD STAND. COMBINATION SPANNER SET — IN

Contents:

5/16"	3/8"
7/16"	1/2"
9/16"	5/8"
11/16"	3/4"



Part No.	Description
GW 9701	8 Pc Flex Head Stan. Combi. Ratcheting Spanner Set

GEARWRENCH 10 PIECE FLEX HEAD STANDARD COMBI SPANNER SET — MM

Contents:

8mm	9mm
10mm	11mm
12mm	13mm
14mm	15mm
16mm	17mm
18mm	19mm



Part No.	Description
GW 9901	10 Pc Met. Flex Head Stan. Combi. Ratch. Spanner Set

GEARWRENCH 7 PIECE GEARRATCHET™ FLEX HEAD STUBBY SPANNER SET — IN

Contents:

3/8"	7/16"
1/2"	9/16"
5/8"	11/16"
3/4"	



Part No.	Description
GW 9570	7 Piece Flex Head Stubby Ratcheting Spanner Set

GEARWRENCH 10 PIECE GEARRATCHET™ FLEX HEAD STUBBY SPANNER SET — MM

Contents:

10mm	11mm
12mm	13mm
14mm	15mm
16mm	17mm
18mm	19mm



Part No.	Description
GW 9550	10 Pc Metric Flex Head Stubby Ratcheting Spanner Set

Stahlwille Ring Ratchet Wrenches

STAHLWILLE RATCHET RING SPANNERS – 12 POINT 25 — MM

- Straight
- 22 teeth
- Chrome-plated



Part No.	Size (mm)	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a)	Weight (g)
4113 07 08	7 x 8	109	15	17	9	55
4113 09 10	9 x 10	139	20	23	9	80
4113 10 11	10 x 11	170	26	30	12	144
4113 12 13	12 x 13	170	26	30	12	135
4113 14 15	14 x 15	170	26	30	12	126
4113 16 18	16 x 18	205	33	36	12	196
4113 17 19	17 x 19	205	33	36	12	188

STAHLWILLE RATCHET RING SPANNERS – 12 POINT 25AN — IN

- Straight
- 22 teeth
- Solid steel
- Fed. Spec. GGG-W-001405



Part No.	Size (in)	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a)	Weight (g)
4156 16 20	1/4 x 5/16	109	15	17	9	60
4156 20 22	5/16 x 11/32	109	15	17	9	60
4156 24 28	3/8 x 7/16	139	20	23	9	90
4156 32 34	1/2 x 9/16	174	26	30	12	160
4156 36 38	5/8 x 11/16	205	33	36	12	257
4156 40 44	3/4 x 7/8	235	36	40	13	296
4156 42 46	13/16 x 15/16	235	36	40	12	281

STAHLWILLE RATCHET RING SPANNERS – 12 POINT SPLINE 25ASP — MM

- Straight
- 22 teeth
- Chrome-plated



Part No.	Spline Size (mm)	Size (in)	OAL (in) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a)	Weight (g)
4157 08 10	8 x 10	1/4 x 5/16	109	15	17	9	59
4157 12 14	12 x 14	3/8 x 7/16	139	20	23	9	84
4157 16 18	16 x 18	1/2 x 9/16	174	26	30	12	153
4157 20 22	20 x 22	5/8 x 11/16	205	33	36	12	250
4157 24 28	24 x 28	3/4 x 7/8	235	36	40	13	279

STAHLWILLE REVERSIBLE RATCHET RING SPANNERS – 12 POINT 26A — IN

- 22 teeth
- Angled
- Chrome-plated



Part No.	Size (in)	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a)	Weight (g)
4155 16 20	1/4 x 5/16	109	15	17	9	55
4155 24 28	3/8 x 7/16	139	20	23	9	80
4155 32 34	1/2 x 9/16	170	26	30	12	140

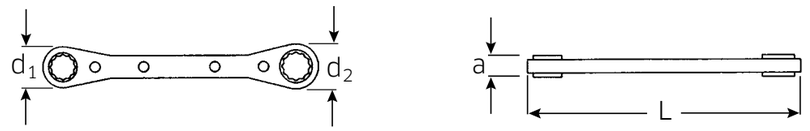
STAHLWILLE REVERSIBLE RATCHET BIT HOLDER FOR 6 POINT BITS 25B — IN

- Magnetic location
- Reversible heads angled
- Chrome-plated

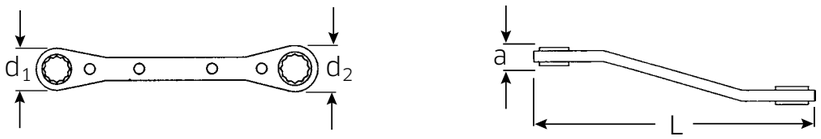


Part No.	Size (in)	OAL (mm) (L)	Outside Head Width (mm) (d1)	Outside Head Width (mm) (d2)	Head Thickness (mm) (a1)	Head Thickness (mm) (a2)	Weight (g)
4154 16 20	1/4 x 5/16	138	20	23	15	17	105

BOX RATCHETS DIMENSIONAL REFERENCES



Straight Version



Offset Version

PROTO® Ratcheting Box Wrenches

PROTO® BLACK CHROME REVERSIBLE RATCHETING DOUBLE BOX WRENCHES – SPLINE

IN

- The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve efficiency.
- Ratcheting spline box end is chamfered for easy application to the fastener.
- Spline design enables the wrench to contact conventional fasteners away from the corners, which help apply force over a large area helping to reduce risk of fastener rounding.
- Spline design also helps prevent rounding of corners and other fastener damage that could lead to Foreign Object Damage (FOD).
- Spline wrenches can be used on fractional 4, 6, 12 point and spline fasteners.

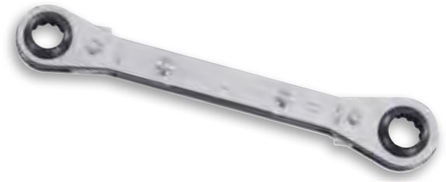


Part No.	Size (in)	Outside Head Width (in) (d1)	Head Thickness (in) (a)	Outside Head Width (in) (d2)	OAL (In) (L)	Weight (lbs)
JSBV0709	7/32 x 9/32	11/16	1/8	11/16	4-1/2	0.08
JSBV0810	1/4 x 5/16	11/16	1/8	11/16	4-1/2	0.08
JSBV1214	3/8 x 7/16	7/8	1/8	7/8	5-15/16	0.12
JSBV1618	1/2 x 9/16	1	3/16	1	7-1/16	0.23
JSBV2022	5/8 x 11/16	1-3/16	3/16	1-3/16	7-7/8	0.35
JSBV2428	3/4 x 7/8	1-5/8	1/4	1-5/8	9-5/8	0.63
JSBV2630	13/16 x 15/16	1-13/16	1/4	1-13/16	10-1/4	0.84
JSBV3236	1 x 1-1/8	2-5/16	5/16	2-5/16	11-5/8	0.95

PROTO® REVERSIBLE RATCHETING DOUBLE BOX WRENCHES – 12 POINT

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- Built in retaining ring in each ratchet wheel adds speed and convenience.
- Shorter length for access to confined workspaces.
- Reversing switch lever allows for easy changes in turning direction which helps improve speed.
- The wrench self-aligns with the fastener.
- 12 point box end allows for fine indexing.
- Fits 4, 6 and 12 point fasteners.



Part No.	Size (in)	OAL (mm) (L)	Weight (lbs)
J1191LO	1/4 x 5/16	4-1/2	0.15
J1192LO	3/8 x 7/16	5-1/2	0.21
J1193LO	1/2 x 9/16	6-7/8	0.31
J1194LO	5/8 x 11/16	8-1/8	0.58
J1195LO	3/4 x 7/8	9-1/4	0.67

PROTO® RATCHETING DOUBLE BOX WRENCHES – 12 POINT

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- Shorter length for access to confined workspaces.
- The wrench self-aligns with the fastener.
- 12 point box end allows for fine indexing.
- Fits 4, 6 and 12 point fasteners.
- Sizes marked with * are reversible



Part No.	Size (in)	Outside Head Width (in) (d1)	Head Thickness (in) (a)	Outside Head Width (in) (d2)	OAL (In) (L)	Weight (lbs)
J1191T-A	1/4 x 5/16	9/32	3/8	43/64	4-1/2	0.12
J1192T-A	3/8 x 7/16	3/4	3/8	7/8	5-1/2	0.17
J1193T-A	1/2 x 9/16	1	1/2	1-1/8	6-7/8	0.29
J1194-A	5/8 x 11/16	1-19/64	1/2	1-7/16	8-1/8	0.44
J1195-A	3/4 x 7/8	1-13/32	1/2	1-37/64	9-1/4	0.52
J1196-A	5/8 x 3/4	1-19/64	1/2	1-7/16	8-1/8	0.47
J1197-A	13/16 x 15/16	1-13/32	1/2	1-37/64	9-1/4	0.52
J1198 *	1-1/4 x 1-1/16	1-29/32	9/16	2-1/4	15	1.38
J1199 *	1-1/16 x 1-1/4	1-29/32	9/16	2-1/4	15	1.38

PROTO® REVERSIBLE RATCHETING DOUBLE BOX WRENCHES – 12 POINT

MM

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- Built in retaining ring in each ratchet wheel adds speed and convenience for greater accessibility.
- Shorter length for access to confined workspaces.
- Reversing switch lever allows for easy changes in turning direction which helps improve speed.
- The wrench self-aligns with the fastener.
- 12 point box end allows for fine indexing.



Part No.	Size (mm)	OAL (in) (L)	Weight (lbs)
J1191MLO	7 x 8	4-1/2	0.16
J1192MLO	9 x 10	5-1/2	0.23
J1193MLO	11 x 12	6-7/8	0.33
J1194MLO	13 x 14	6-7/8	0.61
J1195MLO	15 x 17	8-1/8	0.7

PROTO® RATCHETING DOUBLE BOX WRENCHES – 12 POINT

MM

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- Shorter length for access to confined workspaces.
- The wrench self-aligns with the fastener.
- 12 point box end allows for fine indexing and fits 4, 6 and 12 point fasteners.
- Fits 4, 6 and 12 point fasteners.



Part No.	Size (mm)	Outside Head Width (in) (d1)	Head Thickness (in) (a)	Outside Head Width (in) (d2)	OAL (in) (L)	Weight (lbs)
J1195M-A	15 x 17	1-19/64	1/2	1-7/16	8-7/64	0.48
J1196M	16 x 18	1-19/64	1/2	1-7/16	8-7/64	0.48
J1197M	19 x 21	1-13/32	1/2	1-37/64	9-15/64	0.55

PROTO® RATCHETING DOUBLE BOX WRENCHES – 6 POINT

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- Shorter length for access to confined workspaces.
- The wrench self-aligns with the fastener.
- 6 point box end allows for large wrench to fastener contact area which helps prevent fastener rounding.



Part No.	Size (in)	Outside Head Width (in) (d1)	Head Thickness (in) (a)	Outside Head Width (in) (d2)	OAL (in) (L)	Weight (lbs)
J1191-A	1/4 x 5/16	19/32	3/8	43/64	4-1/2	0.12
J1192-A	3/8 x 7/16	3/4	1/2	7/8	5-1/2	0.18
J1193-A	1/2 x 9/16	1	1/2	1-1/8	6-7/8	0.29

PROTO® RATCHETING DOUBLE BOX WRENCHES – 6 POINT

MM

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- Shorter length for access to confined workspaces.
- The wrench self-aligns with the fastener.
- 6 point box end allows for large wrench to fastener contact area which helps prevent fastener rounding.



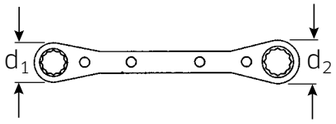
Part No.	Size (mm)	Outside Head Width (in) (d1)	Head Thickness (in) (a)	Outside Head Width (in) (d2)	OAL (in) (L)	Weight (lbs)
J1191M-A	7 x 8	19/32	3/8	43/64	4-1/2	0.12
J1192M-A	9 x 10	25/32	3/8	7/8	5-1/2	0.17
J1193MA-A	11 x 13	1-1/64	1/2	1-5/32	6-7/8	0.31
J1194MA-A	12 x 14	1-1/64	1/2	1-5/32	6-7/8	0.39

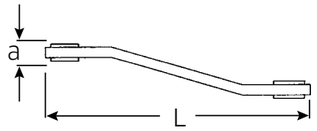
PROTO® OFFSET REVERSIBLE RATCHETING DOUBLE BOX WRENCHES – 6 POINT

IN

- 25° offset box end helps keep shank clear of obstructions.
- Shorter length for access to confined workspaces.
- Reversing switch lever allows for easy changes in turning direction which helps improve speed.
- Full polish finish on handle provides corrosion resistance and easy to clean surfaces.
- 6 point box end allows for large wrench to fastener contact area which helps prevent rounding of the fastener.







Part No.	Size (in)	Outside Head Width (In) (d1)	Head Thickness (In) (a)	Outside Head Width (In) (d2)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1181-A	1/4 x 5/16	19/32	3/8	43/64	3/8	4-1/4	0.15
J1182-A	3/8 x 7/16	25/32	3/8	7/8	3/8	5-7/16	0.21
J1183-A	1/2 x 9/16	1	1/2	1-9/64	1/2	6-3/4	0.43

PROTO® OFFSET REVERSIBLE RATCHETING DOUBLE BOX WRENCHES – 6 POINT

MM

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 25° offset box end helps keep shank clear of obstructions.
- Shorter length for access to confined workspaces.
- 6 point box end allows larger wrench to fastener contact area which helps prevent rounding of the fastener.
- Reversing switch lever allows for easy changes in turning direction which helps improve speed.
- The wrench self-aligns with the fastener.



Part No.	Size (mm)	Outside Head Width (in) (d1)	Head Thickness (in) (a)	Outside Head Width (in) (d2)	OAL (in) (L)	Weight (lbs)
J1181M-A	7 x 8	19/32	3/8	43/64	4-1/4	0.13
J1182M-A	9 x 10	25/32	3/8	7/8	5-7/16	0.22
J1183MA-A	11 x 13	1-1/64	1/2	1-5/32	6-3/4	0.32
J1184MA-A	12 x 14	1-1/64	1/2	1-5/32	6-3/4	0.32

PROTO® OFFSET REVERSIBLE RATCHETING DOUBLE BOX WRENCHES – 12 POINT

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- 25° offset box end helps keep shank clear of obstructions for greater accessibility.
- Shorter length for access to confined workspaces.
- Reversing switch lever allows for easy changes in turning direction which helps improve speed.
- 12 point box end allows for fine indexing.



Part No.	Size (in)	Outside Head Width (in) (d1)	Head Thickness (in) (a)	Outside Head Width (in) (d2)	OAL (in) (L)	Weight (lbs)
J1179T	7/32 x 9/32	19/32	3/8	43/64	4-1/4	0.15
J1181T	1/4 x 5/16	19/32	3/8	41/64	4-1/4	0.15
J1182T	3/8 x 7/16	25/32	3/8	7/8	5-7/16	0.21
J1183T	1/2 x 9/16	1	1/2	1-9/64	6-3/4	0.43
J1184-A	5/8 x 11/16	1-19/64	1/2	1-7/16	8	0.58
J1185-A	3/4 x 7/8	1-13/32	1/2	1-9/16	9-1/8	0.77
J1186	5/8 x 3/4	1-19/64	1/2	1-7/16	8	0.58

PROTO® OFFSET REVERSIBLE RATCHETING DOUBLE BOX WRENCHES – 12 POINT

MM

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- Built in retaining ring in each ratchet wheel adds speed and convenience.
- Shorter length for access to confined workspaces.
- Reversing switch lever allows for easy changes in turning direction which helps improve speed.
- The wrench self-aligns with the fastener.
- 12 point box end allows for fine indexing.



Part No.	Size (mm)	Outside Head Width (in) (d1)	Head Thickness (in) (a)	Outside Head Width (in) (d2)	Head Thickness (in) (D1)	OAL (in) (L)	Weight (lbs)
J1185M-A	15 x 17	1-19/64	1/2	1-7/16	1/2	8	0.46
J1186M-A	16 x 18	1-19/64	1/2	1-7/16	1/2	8	0.46
J1187M-A	19 x 21	1-13/32	1/2	1-37/64	1/2	9-1/8	0.52

Henchman Ratcheting Box Wrenches

HENCHMAN REVERSIBLE RATCHETING DOUBLE BOX WRENCHES – 12 POINT

IN

- Full polish: Easy to clean and corrosion resistant
- Easy access to confined workspaces due to shorter length
- Self-aligns with the fastener
- Large wrench to fastener contact area
- 12 point to prevent fastener rounding
- Turning direction easily reversible with lever
- Made in USA



Part No.	Size (in)	Outside Head Width (in) (d1)	Head Thickness (in) (a)	Outside Head Width (in) (d2)	OAL (in) (L)	Weight (lbs)
H27-588	1/4 x 5/16	19/32	3/8	43/64	4.38	0.12
H27-591	3/8 x 7/16	3/4	1/2	7/8	5.51	0.18
H27-594	1/2 x 9/16	1	1/2	1-1/8	6.86	0.29

HENCHMAN REVERSIBLE OFFSET RATCHETING DOUBLE BOX WRENCHES – 12 POINT

IN

- Full polish: Easy to clean and corrosion resistant
- Easy access to confined workspaces due to shorter length
- Self-aligns with the fastener
- Large wrench to fastener contact area
- 12 point to prevent fastener rounding
- Turning direction easily reversible with lever
- Greater accessibility with 25° offset box end
- For 4, 6 and 12 point fasteners.
- Made in USA



Part No.	Size (in)	Outside Head Width (in) (d1)	Head Thickness (in) (a)	Outside Head Width (in) (d2)	OAL (in) (L)	Weight (lbs)
H27-614	1/4 x 5/16	0.625	0.375	0.625	4.328	0.15
H27-617	3/8 x 7/16	0.796	0.375	0.796	5.968	0.21
H27-620	1/2 x 9/16	1.015	0.500	1.015	6.515	0.43
H27-622	5/8 x 11/16	1.281	0.375	1.281	7.656	0.58
H27-626	3/4 x 7/8	1.406	0.375	1.406	8.750	0.77

GearWrench Ring Ratchet Wrenches

GEARWRENCH RING/RING RATCHETING SPANNERS — IN



Part No.	Size	A	B	C	D	E
GW 9201	5/16 x 3/8	5.039	0.625	0.256	0.750	0.287
GW 9202	7/16 x 1/2	6.299	0.811	0.303	0.930	0.339
GW 9203	9/16 x 5/8	7.480	1.020	0.354	1.130	0.390
GW 9204	11/16 x 3/4	9.055	1.201	0.406	1.278	0.422

GEARWRENCH RING/RING RATCHETING SPANNERS — MM



Part No.	Size	A	B	C	D	E
GW 9210	8 x 9	5.118	0.625	0.256	0.689	0.272
GW 9211	10 x 11	5.906	0.750	0.287	0.811	0.303
GW 9212	12 x 13	6.693	0.885	0.323	0.930	0.339
GW 9213	14 x 15	7.480	1.020	0.354	1.070	0.370
GW 9214	16 x 18	8.268	1.130	0.390	1.239	0.421
GW 9215	17 x 19	9.055	1.201	0.406	1.278	0.441

GEARWRENCH HALF MOON REVERSIBLE RING/RING SPANNERS — IN



Part No.	Size	A	B	C	D	E
GW 9841	3/8 x 7/16	5.118	0.854	0.299	0.752	0.335
GW 9842	1/2 x 9/16	6.181	1.201	0.350	0.929	0.366
GW 9843	5/8 x 11/16	7.874	1.240	0.402	1.130	0.433
GW 9844	3/4 x 7/8	9.055	1.535	0.453	1.280	0.512

GEARWRENCH HALF MOON REVERSIBLE RING/RING SPANNERS — MM



Part No.	Size	A	B	C	D	E
GW 9851	10 x 12	5.118	0.854	0.299	0.752	0.335
GW 9852	11 x 13	5.748	0.929	0.315	0.811	0.350
GW 9853	14 x 16	6.575	1.130	0.366	1.024	0.409
GW 9854	15 x 17	7.874	1.240	0.402	1.130	0.433
GW 9855	19 x 22	9.055	1.535	0.453	1.280	0.512

GEARWRENCH S-SHAPE REVERSIBLE RING/RING SPANNERS — IN



Part No.	Size	A	B	C	D	E
GW 85326	3/8 x 7/16	5.157	0.752	0.299	0.854	0.335
GW 85334	1/2 x 9/16	6.220	0.929	0.350	1.024	0.366
GW 85342	5/8 x 11/16	8.032	1.130	0.402	1.240	0.433
GW 85352	3/4 x 7/8	8.740	1.280	0.453	1.535	0.512

GEARWRENCH S-SHAPE REVERSIBLE RING/RING SPANNERS — MM



Part No.	Size	A	B	C	D	E
GW 85222	10 x 12	5.157	0.752	0.299	0.854	0.335
GW 85224	11 x 13	5.591	0.811	0.315	0.929	0.350
GW 85230	14 x 16	6.850	1.024	0.366	1.201	0.417
GW 85232	15 x 17	8.032	1.130	0.402	1.240	0.433
GW 85241	19 x 22	8.740	1.280	0.453	1.535	0.512

Stahlwille Ring Wrench Sets

STAHLWILLE RING RATCHET WRENCH SETS 25 — MM

in roll-up wallet made of extremely tough textile with Velcro fastener:



Part No.	Contents (mm)	Weight (g)
96 411 3 02	9 x 10, 12 x 13, 14 x 15, 17 x 19	556
96 411 3 01	7 x 8, 9 x 10, 10 x 11, 12 x 13, 14 x 15, 16 x 18, 17 x 19	1150

STAHLWILLE RING RATCHET WRENCH SETS 25A — IN

in roll-up wallet made of extremely tough textile with Velcro fastener:



Part No.	Contents (in)	Weight (g)
96 415 6 02	3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16, 3/4 x 7/8	1000
96 415 6 01	1/4 x 5/16, 5/16 x 11/32, 3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16, 3/4 x 7/8, 13/16 x 15/16	1271

STAHLWILLE 7 PIECE RING RATCHET WRENCH SET ES25/7 — MM

- in 175 x 350 x 30mm molded plastic inlay

Contents:

- 7 x 8, 9 x 10, 10 x 11, 12 x 13, 14 x 15, 16 x 18, 17 x 19 mm



Part No.	Description	Weight (g)
96 83 8 108	7 Piece Ring Ratchet Wrench Set Metric	1020

PROTO® Ring Wrench Sets

PROTO® 3 PIECE RATCHETING BOX WRENCH SET – 12 POINT

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- Built in retaining ring in each ratchet wheel adds speed and convenience for greater accessibility.
- Shorter length for access to confined workspaces.
- The wrench self-aligns with the fastener.
- 12 point box end allows for fine indexing.
- Fits 4, 6 and 12 point fasteners.
- Contents: 3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16 inch



Part No.	Description	Weight (lbs)
J1190B	3 Pc Ratcheting Box Wrench Set 12 Pt Imp	1.10

PROTO® 5 PIECE RATCHETING BOX WRENCH SET – 12 POINT

IN

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- Shorter length for access to confined workspaces.
- The wrench self-aligns with the fastener.
- 12 point box end allows for fine indexing.
- Fits 4, 6 and 12 point fasteners.
- Contents: 1/4 x 5/16, 3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16, 3/4 x 7/8 inch



Part No.	Description	Weight (lbs)
J1190A	5 Pc Ratcheting Box Wrench Set 12 Pt Imp	1.72

PROTO® 5 PIECE REVERSIBLE RATCHETING BOX WRENCH SET – 12 POINT

MM

- Built in retaining ring in each ratchet wheel adds speed and convenience for greater accessibility.
- Reversing switch lever allows for easy changes in turning direction which helps improve speed.
- 12 point box end allows for fine indexing, fits 4, 6 and 12 point fasteners.
- Contents: 7 x 8, 9 x 10, 11 x 13, 12 x 14, 15 x 17mm



Part No.	Description	Weight (lbs)
J1190MLO	5 Pc Rev. Ratch. Box Wrench Set 12 Pt Met.	2.03

PROTO® 7 PIECE OFFSET RATCH. BOX WRENCH SET – 6 & 12 POINT

MM

- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- 6 point box end allows larger wrench to fastener contact area which helps prevent rounding of the fastener.
- 25° offset box end helps keep shank clear of obstructions.
- Reversing switch lever allows for easy changes in turning direction which helps improve speed.
- Contents: 7 x 8, 9 x 10, 11 x 13, 12 x 14, 15 x 17, 16 x 18, 19 x 21mm



Part No.	Description	Weight (lbs)
J1180MA	7 Pc Offset Ratch. Box Wrench Set Metric	3.60

PROTO® 5 PIECE REVERSIBLE RATCHETING BOX WRENCH SET – 12 POINT

IN

- Full polish finish on handle provides corrosion resistance and easy to clean surfaces.
- Built-in retaining ring in each ratchet wheel adds speed and convenience for greater accessibility.
- Wrench self-aligns on the fastener which helps save time.
- 12 point box end allows for fine indexing, helping improve speed and access.
- Fits 4, 6 and 12 point fasteners.
- Contents: 1/4 x 5/16, 3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16, 3/4 x 7/8 inch



Part No.	Description	Weight (lbs)
J1190LO	5 Pc Rev. Ratcheting Box Wrench Set Imp	2.18

PROTO® 5 PIECE RATCHETING BOX WRENCH SET – 6 & 12 POINT

MM

- Full polish finish provides corrosion resistance and easy to clean surfaces.
- Shorter length for access to confined workspaces.
- The wrench self-aligns with the fastener.
- 6 point box end allows for a large wrench to fastener contact area which helps prevent fastener rounding, 12 point box end allows for fine indexing, fits 4, 6 and 12 point fasteners.
- Contents: 7 x 8, 9 x 10, 11 x 13, 12 x 14, 15 x 17mm



Part No.	Description	Weight (lbs)
J1190MA	5 Piece Ratcheting Box Wrench Set Metric	2.12

PROTO® 5 PIECE OFFSET REV. RATCHETING BOX WRENCH SET – 6 & 12 POINT

IN

- 25° offset box end helps keep shank clear of obstructions.
- Reversing switch lever allows for easy changes in turning direction which helps improve speed.
- 6 point box end allows for large wrench to fastener contact area which helps prevent rounding of the fastener.
- 12 point box end allows for fine indexing, helping to improve speed and access.
- Contents: 1/4 x 5/16, 3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16, 3/4 x 7/8 inch



Part No.	Description	Weight (lbs)
J1180A	5 Pc Offset Rev. Ratch. Box Wrench Set	2.24

PROTO® 8 PIECE REVERSIBLE RATCHETING BOX WRENCH SET – SPLINE

IN

- Black chrome finish is corrosion resistant and visually distinctive.
- For use with specialty spline bolts used when weight and size of bolt heads must be minimized.
- Contents: 7/32 x 9/32, 1/4 x 5/16, 3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16, 3/4 x 7/8, 13/16 x 15/16, 1 x 1-1/8 inch



Part No.	Description	Weight (lbs)
JSBV-8S	8 Pc Rev. Ratch. Box Wrench Set Spline	4.12

GearWrench Ring Wrench Sets

GEARWRENCH 4 PIECE HALF MOON REVERSIBLE RING/RING SPANNER SET

IN

Contents:
3/8" x 7/16"
1/2" x 9/16"
5/8" x 11/16"
3/4" x 7/8"



Part No.	Description
GW 9840	4 Pc Half Moon Reversible Ring/Ring Spanner Set Imp

GEARWRENCH 5 PIECE HALF MOON REVERSIBLE RING/RING SPANNER SET

MM

Contents:
10 x 12mm
11 x 13mm
14 x 16mm
15 x 17mm
19 x 22mm



Part No.	Description
GW 9850	5 Pc Half Moon Reversible Ring/Ring Spanner Set Metric

GEARWRENCH 4 PIECE S-SHAPE REVERSIBLE RING/RING SPANNER SET

IN

Contents:
3/8" x 7/16"
1/2" x 9/16"
5/8" x 11/16"
3/4"x 7/8"



Part No.	Description
GW 85399	4 Piece S-Shape Reversible Ring/Ring Spanner Set Imp

GEARWRENCH 5 PIECE S-SHAPE REVERSIBLE RING/RING SPANNER SET

MM

Contents:
10 x 12mm
11 x 13mm
14 x 16mm
15 x 17mm
19 x 22mm



Part No.	Description
GW 85299	5 Pc S-Shape Reversible Ring/Ring Spanner Set Metric

GEARWRENCH 4 PIECE RING/RING RATCHETING SPANNER SET

IN

Contents
5/16" x 3/8"
7/16" x 1/2"
9/16" x 5/8"
11/16" x 3/4"



Part No.	Description
GW 9240	4 Piece Ring/Ring Ratcheting Spanner Set Imperial

GEARWRENCH 6 PIECE RING/RING RATCHETING SPANNER SET

MM

Contents:
8 x 9mm
10 x 11mm
12 x 13mm
14 x 15mm
16 x 18mm
17 x 19mm



Part No.	Description
GW 9260	6 Piece Ring/Ring Ratcheting Spanner Set Metric

PROTO® Service Wrenches

PROTO® SATIN SERVICE WRENCHES

IN

- Thin pattern for use on jam nuts, check nuts or lock nuts.
- 30° angle head allows access to difficult to reach fasteners.
- Short shank allows for use in confined spaces.
- Satin finish provides corrosion resistance and a slip-resistant grip



Part No.	Size (in)	Throat Depth (in) (B)	Outside Head Width (in) (C)	Head Thickness (in) (D)	OAL (in) (L)	Weight (lbs)
J3524	3/4	7/32	1-11/16	1/4	6-1/4	0.22
J3526	13/16	7/32	1-11/16	1/4	6-1/4	0.22
J3528	7/8	7/32	1-11/16	1/4	6-1/4	0.22
J3530	15/16	1/4	1-7/8	1/4	6-7/8	0.25
J3532	1	1/4	1-7/8	1/4	6-7/8	0.25
J3534	1-1/16	1/4	1-7/8	1/4	6-7/8	0.25
J3536	1-1/8	5/16	2-1/16	1/4	7	0.31
J3538	1-3/16	5/16	2-1/16	1/4	7	0.31
J3540	1-1/4	19/64	2-1/16	1/4	7	0.45
J3542	1-5/16	29/64	2-1/2	9/32	7-5/8	0.44
J3544	1-3/8	7/16	2-1/2	9/32	7-5/8	0.43
J3546	1-7/16	7/16	2-1/2	9/32	7-5/8	0.42
J3548	1-1/2	27/64	2-1/2	9/32	7-5/8	0.43
J3550	1-9/16	7/16	2-5/8	9/32	7-5/8	0.43
J3552	1-5/8	7/16	2-5/8	9/32	7-5/8	0.42
J3554	1-11/16	27/64	2-5/8	9/32	7-5/8	0.7
J3556	1-3/4	45/64	3-1/8	5/16	8-1/2	0.69
J3558	1-13/16	11/16	3-1/8	5/16	8-1/2	0.69
J3560	1-7/8	11/16	3-1/8	5/16	8-1/2	0.68
J3562	1-15/16	11/16	3-1/8	5/16	8-1/2	0.68
J3564	2	21/32	3-1/2	5/16	8-1/2	0.66
J3568	2-1/8	21/32	3-1/2	5/16	8-1/2	0.65
J3572	2-1/4	39/64	3-1/2	5/16	8-1/2	0.61
J3576	2-3/8	39/64	3-1/2	5/16	8-1/2	0.61
J3580	2-1/2	19/32	3-1/2	5/16	8-1/2	0.59
J3582	2-9/16	9/16	3-1/2	5/16	8-1/2	0.57

MM

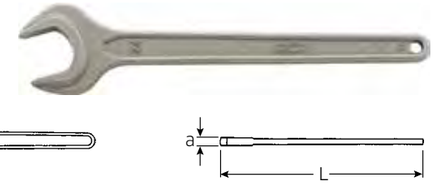
Part No.	Size (mm)	Outside Head Width (in) (C)	Head Thickness (in) (D)	OAL (in) (L)	Weight (lbs)
J3519M	19	1-11/16	1/4	6-1/4	0.22
J3521M	21	1-11/16	1/4	6-1/4	0.22
J3522M	22	1-11/16	1/4	6-1/4	0.22
J3524M	24	1-7/8	1/4	6-7/8	0.25
J3527M	27	1-7/8	1/4	6-7/8	0.25
J3530M	30	2-1/16	1/4	7	0.31
J3532M	32	2-1/16	1/4	7	0.30
J3536M	36	2-1/2	1/4	7-5/8	0.45
J3537M	37	2-1/2	9/32	7-5/8	0.43
J3538M	38	2-1/2	9/32	7-5/8	0.42
J3540M	40	2-5/8	9/32	7-5/8	0.43
J3541M	41	2-5/8	9/32	7-5/8	0.43
J3542M	42	2-5/8	9/32	7-5/8	0.43
J3544M	44	2-5/8	9/32	7-5/8	0.43
J3546M	46	3-1/8	9/32	7-5/8	0.70
J3548M	48	3-1/8	5/16	8-1/2	0.70
J3550M	50	3-1/8	5/16	8-1/2	0.68
J3552M	52	3-1/2	5/16	8-1/2	0.66
J3555M	55	3-1/2	5/16	8-1/2	0.66
J3560M	60	3-1/2	5/16	8-1/2	0.61
J3565M	65	3-1/2	5/16	8-1/2	0.57

Stahlwille Single-End Spanners

STAHLWILLE SINGLE-END SPANNERS 4004

MM

- DIN 894 up to 85 mm
- Special tool steel, grey finish



Part No.	Size (mm)	OAL (mm) (L)	Outside Head Width (mm) (b)	Head Thickness (mm) (a)	Weight (g)
40040240	24	215	50	8.9	147
40040270	27	238	56	9.8	193
40040300	30	261	62	10.8	275
40040320	32	273	66	11.8	315
40040360	36	300	74	12.8	421
40040410	41	335	83.5	12.8	555
40040460	46	369	93	14.8	770
40040500	50	412	102	17	1003
40040550	55	457	112	18	1235
40040600	60	492	122	18	1650
40040650	65	528	132	19	1900
40040700	70	572	142	20	2035
40040750	75	608	152	21	2758
40040800	80	645	162	22	2963
40040850	85	690	173	23	3510
40040900	90	690	173	23	3425
40040950	95	847	195	25	5943
40041000	100	847	195	25	5500
40041050	105	1000	217	28	8400
40041100	110	1000	217	28	9000
40041150	115	1000	225	28	8500
40041200	120	1000	225	28	8500
40041250	125	1000	225	28	7934
40041300	130	1000	225	28	8500
40041350	135	1000	225	28	8000

STAHLWILLE ADJUSTABLE WRENCHES – SHIFTERS 4025

ASME B107.100

MM

- DIN 3117/ISO 6787 (B shape)
- Jaw offset 22.5°
- Chrome Vanadium, chrome plated





Part No.	Size (mm)	Max Opening (mm)	OAL (mm) (L)	Outside Head Width (mm) (b)	Head Thickness (mm) (a)	Weight (g)
40250104	4	13	115	35	9.5	52
40250106	6	24	161	50	10.8	155
40250108	8	30	207	62	14	310
40250110	10	34	259	74	15.8	490
40250112	12	39	311	84	19	805
40250115	15	44	386	106	25	1320
40250118	18	53	462	124	30	2040

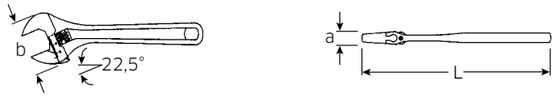
STAHLWILLE ADJUSTABLE WRENCHES – SHIFTERS
4026

ASME B107.100

MM

- DIN 3117/ISO 6787 (B Shape)
- Jaw offset 22.5°
- Chrome Vanadiuml, chrome plated





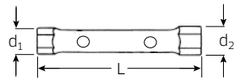
Part No.	Size (mm)	Max Opening (mm)	OAL (mm) (L)	Outside Head Width (mm) (b)	Head Thickness (mm) (a)	Weight (g)
40 26 01 04	4	13	115	35	9.5	52
40 26 01 06	6	24	161	50	10.8	155
40 26 01 08	8	30	207	62	14	310
40 26 01 10	10	34	259	74	15.8	490
40 26 01 12	12	39	311	84	19	805
40 26 01 15	15	44	386	106	25	1320
40 26 01 18	18	53	462	124	30	2040

STAHLWILLE TUBE SPANNERS
10750

MM

- DIN 896 Type B
- Made of seamlessly drawn precision steel tubing
- Recessed at both ends
- Chrome Alloy Steel, surface polished and chrome plated





Part No.	Size (mm)	OAL (mm) (L)	Diameter (mm) (d1)	Diameter (mm) (d2)	Weight (g)
43 33 06 07	6 x 7	110	10.5	11.5	26
43 33 08 09	8 x 9	110	13	14.5	38
43 33 10 11	10 x 11	125	16	17	50
43 33 12 13	12 x 13	145	19	20.5	78
43 33 14 15	14 x 15	145	21.5	22.5	78
43 33 16 17	16 x 17	155	24	26	127
43 33 17 19	17 x 19	160	26	28.5	199
43 33 18 19	18 x 19	160	27.5	28.5	199
43 33 20 22	20 x 22	170	29.5	32	232
43 33 21 23	21 x 23	170	30.5	33	251
43 33 24 26	24 x 26	190	34.5	37	300
43 33 24 27	24 x 27	190	34.5	38.5	301
43 33 30 32	30 x 32	205	42	45	382
43 33 32 36	32 x 36	225	45	50	535
43 33 36 41	36 x 41	225	50	56	648
43 33 41 46	41 x 46	245	56	62	845
43 33 46 50	46 x 50	245	62	68	878
43 33 55 60	55 x 60	245	70	76	1178

STAHLWILLE TOMMY BARS
10750 1/2

MM

- For Box Spanners
- Stepped



Part No.	Size (mm)	for Box Spanner Size	OAL (mm) (L)	Weight (g)
48 01 00 06	6	6 x 7–14 x 15	180	49
48 01 00 07	7	16 x 17–24 x 27	320	305
48 01 00 08	8	30 x 32–55 x 60	630	1400

PROTO® Adjustable Wrenches

PROTO® SATIN ADJUSTABLE WRENCHES

ASME B107.100
AS49841

- Satin finish provides corrosion resistance and a slip-resistant grip.
- Extra wide jaw capacity.
- Square jaw opening provides strength and tight fit.
- Rugged I-beam style handle and reinforced stress areas; radius corner design.



Part No.	Max Opening (in)	OAL (in)	Weight (lbs)
J704	1/2	4	0.17
J706	15/16	6	0.28
J708	1-1/8	8	0.58
J710	1-5/16	10	0.90
J712	1-1/2	12	1.58
J715	1-11/16	15	3.00
J718	2-1/16	18	4.26
J724	2-7/16	24	6.41

PROTO® SATIN CLIK-STOP® ADJUSTABLE WRENCHES

ASME B107.100

- Satin finish provides corrosion resistance and a slip-resistant grip.
- Extra wide jaw capacity.
- Square jaw opening provides strength and tight fit.
- Clik-Stop® locking design holds the moving jaw of an adjustable wrench in place when the wrench is in use.



Part No.	Max Opening (in)	OAL (in)	Weight (lbs)
J704L	1/2	4	0.13
J706L	5/16	6	0.34
J708L	1-1/8	8	0.57
J710L	1-5/16	10	0.95
J712L	1-1/2	12	1.54
J715L	1-11/16	15	3.13
J718L	2-1/16	18	5.73
J724L	2-7/16	24	8.84

PROTO® 3 PIECE ADJUSTABLE WRENCH SET

ASME B107.100

- Satin finish provides corrosion resistance and a slip-resistant grip.
- Extra wide jaw capacity.
- Square jaw opening provides strength and tight fit.
- Rugged I-beam style handle and reinforced stress areas; radius corner design.
- Contents: 1-1/8, 1-5/16, 1-1/2 inch



Part No.	Description	Weight (lbs)
J795	3 Piece Adjustable Wrench Set	2.6

PROTO® 3 PIECE CLIK-STOP® ADJUSTABLE WRENCH SET

ASME B107.100

- Clik-Stop® locking design holds the moving jaw of an adjustable wrench in place when the wrench is in use.
- Satin finish provides corrosion resistance and a slip-resistant grip.
- Extra wide jaw capacity.
- Square jaw opening provides strength and tight fit.
- Contents: 1-1/8, 1-5/16, 1-1/2 inch



Part No.	Description	Weight (lbs)
J790	3 Pc Clik-Stop® Adj. Wrench Set	3.08

Please contact us for our range of Proto Tethered Tools.



Proxene Adjustable Wrenches

PROXENE ADJUSTABLE WRENCHES

IN

- Satin finish provides corrosion resistance and a slip-resistant grip.
- Precision Jaw, almost no movement
- Good value for money



Part No.	Jaw Opening	OAL (in)
PXM 9004	100mm	15mm
PXM 9006	150mm	21mm
PXM 9008	200mm	24mm
PXM 9010	250mm	31mm
PXM 9012	300mm	36mm

PROTO® Hook Wrenches

PROTO® ADJUSTABLE PIN SPANNER WRENCHES

IN

- Non-reflective black oxide finish
- Precision machined pins provide engagement with side holes or slots.
- Used to tighten side slot nuts on collars, lock nuts and bearings.



Part No.	Capacity Range	Pin Diameter (in)	Pin Length (in)	Hook Thick. (in)	OAL (in)	Weight (lbs)
JC491	3/4 to 2	1/8	1/8	11/32	6-3/8	0.23
JC492	3/4 to 2	3/16	5/32	11/32	6-3/8	0.23
JC494	1-1/4 to 3	3/16	3/16	13/32	8-1/8	0.42
JC495	1-1/4 to 3	1/4	7/32	13/32	8-1/8	0.42
JC497	2 to 4-3/4	1/4	1/4	15/32	11-3/8	0.99
JC499	4-1/2 to 6-1/4	3/8	1/4	15/32	12-1/8	1.08

PROTO® ADJUSTABLE HOOK SPANNER WRENCHES

IN

- Non-reflective black oxide finish for use where non-plated products are required.
- Use to tighten side slot nuts on collars, lock nuts and bearings.



Part No.	Capacity Range	Pin Length (in)	Hook Thick. (in)	OAL (in)	Weight (lbs)
JC471	3/4 to 2	11/32	1/8	6-3/8	0.23
JC472	1-1/4 to 3	13/32	5/32	8-1/8	0.43
JC474	2 to 4-3/4	15/32	3/16	11-3/8	1.03
JC474A	4-1/2 to 6-1/4	15/32	1/4	12-1/8	1.07
JC474B	6-1/8 to 8-3/4	15/32	5/16	13-3/4	1.40

PROTO® BLACK OXIDE ADJUSTABLE FACE SPANNER WRENCHES

IN

- Non-reflective black oxide finish for use where non-plated products are required.
- Precision machined pins provide engagement with holes or slots on the face of a bearing or nut.
- Used to tighten collars, lock nut rings and seal/packing nuts on hydraulic cylinders.



Part No.	Max Opening (in)	Pin Diameter (in)	Pin Length (in)	OAL (in)	Weight (lbs)
JC482	2	3/16	1/4	6-3/8	0.31
JC483	3	1/4	1/4	8-1/4	0.52
JC484	4	5/16	1/2	10-3/8	1.02

Pipe & Strap Wrenches

PROTO® ALUMINIUM PIPE WRENCHES

- Graduation markings on hook jaw show approximate opening for pipe sizes
- Large knurl and power threads provide fast, positive jaw adjustment
- Riveted jaw pin for safety
- Light weight aluminum for less job fatigue



Part No.	Max Opening (in)	Height (in)	OAL (in)	Weight (lbs)
J810A	1-1/2	3	10	1.10
J812A	2	3	12	1.72
J814A	2	3	14	2.15
J818A	3-1/2	3	18	3.60
J824A	4	4	24	5.65
J836A	5	5	36	10.60
J848A	6	6	48	17.00

PROTO® HEAVY-DUTY FILTER STRAP WRENCH

- Heavy-duty cordura strap for high-torque application requirements.
- For 3/8" and 1/2" ratchet or breaker bar use.
- Fits large oil filters up to 9" (228 mm) diameter.



Part No.	Dia. Min. (in)	Dia. Max. (in)	Dia. Min. (mm)	Dia. Max. (mm)	Width (in)
JFF278	4	9	100	228	3-51/64

DMC CONNECTOR STRAP WRENCH

Accepts 3/8 inch Square Drive handle



Part No.	Dia. Max. (mm)	Handle Length
TG70	76.2	165

PROTO® 4 PIECE INTERNAL PIPE WRENCH SET

IN

- Ideal for removing broken threaded pipe ends, plugs, and fittings.
- Installation and removal without thread damage.
- Eccentric cam action engages wrench against the walls of the pipe.
- Hex body allows for use of adjustable wrench for added torque.
- Made from hardened steel and plated to help prevent rust.
- Contents: 3/8, 3/4, 1/2, 1 inch



Part No.	Description	Weight (lbs)
J140SET	4 Piece Internal Pipe Wrench Set	1.95

Stahlwille Box Spanner Sets

STAHLWILLE TUBE SPANNER SETSI 10750

MM

- DIN 896 Type B
- made of seamlessly drawn precision steel tubing
- recessed at both ends
- Chrome Alloy Steel, surface polished and chrome plated



Part No.	Contents (mm)	Weight (g)
96 43 12 02	8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22	830
96 43 12 05	6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 23; 24 x 27; 30 x 32	1830

STAHLWILLE 10 PIECE TUBE SPANNER SET ES 10750

MM

- in 175 x 350 x 30mm molded plastic inlay

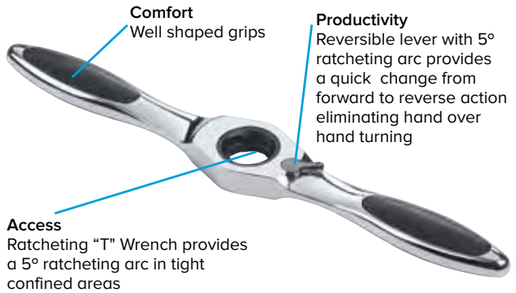
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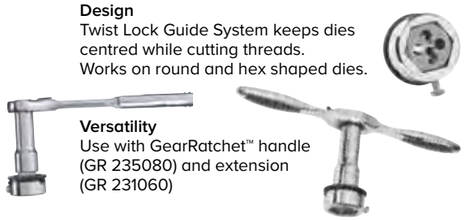
- Box Spanners: 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22 mm
- Tommy Bars: 6, 7



Part No.	Description	Weight (g)
96 83 81 68	10 Piece Metric Box Spanner Set	1132

GearWrench Tap & Die





GEARWRENCH 40 PIECE TAP AND DIE DRIVE TOOL SET

Includes: small tap Adapter, medium tap Adapter, die Adapter, sliding "T" for Adapters, Tap and Die Ratcheting "T" Wrench, 17 taps, 17 dies, thread guage, #5 screwdriver



Part No.	Description
GW 3885	Imperial 40 Piece Tap and Die Drive Set
GW 3886	Metric 40 Piece Tap and Die Drive Set

GEARWRENCH TAP AND DIE RATCHETING T-WRENCH



Part No.	Description
GW 3881	Tap and Die Ratcheting T Wrench

GEARWRENCH DIE ADAPTER



Part No.	Description
GW 3884	Die Adapter

GEARWRENCH SMALL TAP ADAPTER

- Fits tap ranges from #4 to 3/8" (3 to 10mm).
- Includes: small tap Adapter and sliding "T" for Adapters.



Part No.	Description
GW 3882	Small Tap Adapter

GEARWRENCH MEDIUM TAP ADAPTER

- Fits tap ranges from 3/8" to 1/2" (10 to 12mm).
- Includes: medium tap Adapter and sliding "T" for Adapters.



Part No.	Description
GW 3883	Medium Tap Adapter

ALPHA STANDARD METRIC CARBON TAPS



Part No.	Description	Size	Pitch
MCCS020	Set of 3	M2.0	0.40
MCCT020	Taper Lead	M2.0	0.40
MCCI020	Internediate Lead	M2.0	0.40
MCCB020	Bottom Lead	M2.0	0.40
MCCS030	Set of 3	M3.0	0.50
MCCT030	Taper Lead	M3.0	0.50
MCCI030	Internediate Lead	M3.0	0.50
MCCB030	Bottom Lead	M3.0	0.50
MCCS040	Set of 3	M4.0	0.70
MCCT040	Taper Lead	M4.0	0.70
MCCI040	Internediate Lead	M4.0	0.70
MCCB040	Bottom Lead	M4.0	0.70
MCCS050	Set of 3	M5.0	0.80
MCCT050	Taper Lead	M5.0	0.80
MCCI050	Internediate Lead	M5.0	0.80
MCCB050	Bottom Lead	M5.0	0.80
MCCS060	Set of 3	M6.0	1.00
MCCT060	Taper Lead	M6.0	1.00
MCCI060	Internediate Lead	M6.0	1.00
MCCB060	Bottom Lead	M6.0	1.00

IRWIN MACHINE IMPERIAL AND METRIC PLUG TAP & 1" HEX DIE SET 75 PIECES

IN
MM

Drive Tools

- No set-screw needed, simply twist to insert and remove die
- Ergonomic handles for control and comfort when threading
- Drive with die stock, 3/8" ratchet or t-handle included
- Drive with adjustable jaw
- Die adapter accommodates standard 1" hex dies

Taps

- Self-Aligning taps start and thread straight every time
- Chip breaking technology cuts chips easier

Dies

- Self-Aligning dies start and tread straight every time
- Additional streangth - more steel at critical points

Contents:

- Machine Screw Plug Tap and 1" Hexagon Dies: 4 - 40 NC, 6 - 32 NC, 8 - 32 NC, 10 - 24 NC, 10 - 32 NF, 12 - 24 NC
- Imperial: 1/4" - 20 NC, 1/4" - 28 NF, 5/16" - 18 NC, 5/16" - 24 NF, 3/8" - 16 NC, 3/8" - 24 NF, 7/16" - 14 NC, 7/16" - 20 NF, 1/2" - 13 NC, 1/2" - 20 NF
- Metric: 3 mm - 0.50, 4 mm - 0.70, 4 mm - 0.75, 5 mm - 0.80, 5 mm - 0.90, 6 mm - 1.00, 7 mm - 1 .00, 8 mm - 1.00, 8 mm - 1.25, 9 mm - 1.00, 9 mm - 1.25, 10 mm - 1.25, 10 mm - 1.50, 11 mm - 1.50, 12 mm - 1.25, 12 mm - 1.75
- Pipe: 1/8" - 27 NPT, 1/8" - 28 BSP
- Threading Tools: PTS Die Stock - 1", PTS Die Spacer, PTS Adj Tap Socket - Small No. 4 to 1/4" (3 mm-6 mm), PTS Adj Tap Socket - Medium 1/4" to 1/2" (6 mm - 12 mm), T-Bar for Adj Tap Socket, Imp. Pitch Gauge, Metric Pitch Guage



Part No.	Description
1813816	Plug Tap & Die Set 1" Hex 75 Pieces Metric

IRWIN MACHINE IMPERIAL PLUG TAP & 1" HEX DIE SET 39 PIECES

IN

Whether creating new tools from raw steel or repairing damaged and worn threads, achieving a precise fit is essential. IRWIN Industrial Tools® sets the standard for delivering quality every step of the way in your threading applications.

Contents:

- Plastic case
- Machine Screw Plug Tap and 1" Hexagon Dies: 4 - 40 NC, 6 - 32 NC, 8 - 32 NC, 10 - 24 NC, 10 - 32 NF, 12 - 24 NC
- Imperial Plug Tap and 1" Hexagon Dies: 1/4" - 20 NC, 1/4" - 28 NF, 5/16" - 18 NC, 5/16" - 24 NF, 3/8" - 16 NC, 3/8" - 24 NF, 7/16" - 14 NC, 7/16" - 20 NF, 1/2" - 13 NC, 1/2" - 20 NF
- Pipe Thread Plug Tap and 1" Hexagon Dies: 1/8" - 27 NPT
- Threading Tools: Adjustable Die Stock - 1" Dies, T-Handle Wrench - Taps No. 0 to 1/4", Adj. Handle Tap Wrench - Taps No. 0 to 1/2", 18 Leaf Standard Thread Pitch Gauge



Part No.	Description
25914	Machine Screw Tap & Solid Round Die Set 39 Pcs Metric

PROTO® L-Key Sets

PROTO® 18 PIECE STANDARD HEX KEY SET

IN

- in Metal storage box.

Contents:

- 0.028, 0.035, 0.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, 1/2, 9/16, 5/8 inch



Part No.	Description	Weight (lbs)
J4986	18 Piece Standard Hex Key Set	3.36

PROTO® 15 PIECE STANDARD HEX KEY SET

MM

- in Metal storage box.

Contents:

- 0.07, 0.09, 1.3, 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10, 12, 14, 17 mm



Part No.	Description	Weight (lbs)
J4988M	15 Piece Metric Standard Hex Key Set	3.4

PROTO® 13 PIECE STANDARD HEX KEY SET

IN

- in Molded plastic holder.

Contents:

- 0.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 inch



Part No.	Description	Weight (lbs)
J4980	13 Piece Standard Hex Key Set	0.60

PROTO® 13 PIECE HEX KEY SET – LONG

IN

- in Molded plastic holder.

Contents:

- 0.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 inch



Part No.	Description	Weight (lbs)
J4983	13 Piece Long Hex Key Set	0.84

PROTO® 11 PIECE STANDARD HEX KEY SET

IN

- in Molded plastic holder.

Contents:

- 0.050, 1/16, 3/32, 5/64, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4 inch



Part No.	Description	Weight (lbs)
J4981	11 Piece Standard Hex Key Set	0.24

PROTO® 9 PIECE STANDARD HEX KEY SET

MM

- in Molded plastic holder.
- Overall length for hex keys ranges from 33/64" to 1-17/32".

.Contents:

- 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10 mm



Part No.	Description	Weight (lbs)
J4984	9 Piece Metric Standard Hex Key Set	0.54

PROTO® 7 PIECE STANDARD HEX KEY SET

IN

- in Molded plastic holder.

Contents:

- 5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4 inch



Part No.	Description	Weight (lbs)
J4982	7 Piece Standard Hex Key Set	1.20

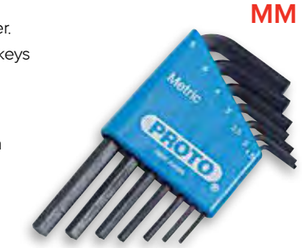
PROTO® 7 PIECE STANDARD HEX KEY SET

MM

- in Molded plastic holder.
- Overall length for hex keys ranges from 44 mm to 88 mm.

Contents:

- 1.5, 2, 2.5, 3, 4, 5, 6 mm



Part No.	Description	Weight (lbs)
J4985	7 Piece Metric Standard Hex Key Set	0.16

PROTO® 13 PIECE ROUND HEAD HEX KEY SET BALLPOINT

IN

- in Molded plastic holder.
- Screws can be tightened or loosened at angles up to 25°.

Contents:

- .050, 1/6, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 inch



Part No.	Description	Weight (lbs)
J4995	13 Pc Round Head Hex Key Set Imperial	0.82

PROTO® 9 PIECE ROUND HEAD HEX KEY SET – BALLPOINT

MM

- in Molded plastic holder.
- Ball end can tighten or loosen screws at angles up to 25°.

.Contents:

- 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10 mm



Part No.	Description	Weight (lbs)
J4984	9 Piece Standard Hex Key Set Metric	1.70

PROTO® 11 PIECE T-HANDLE HEX KEY SET

IN

Contents:

- 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 inch



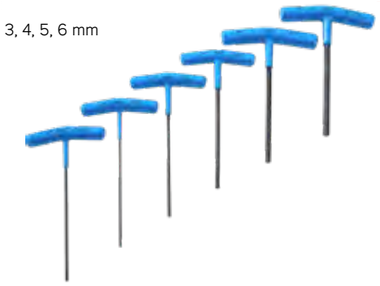
Part No.	Description	Weight (lbs)
J4968	11 Piece T-Handle Hex Key Set Imperial	3.98

PROTO® 6 PIECE T-HANDLE HEX KEY SET

MM

Contents:

- 2, 2.5, 3, 4, 5, 6 mm



Part No.	Description	Weight (lbs)
J4969	6 Piece T-Handle Hex Key Set Metric	1.00

PROTO® 9 PIECE FOLDING HEX KEY SET

ASME B18.3

IN

- Case is 4-1/4" long.
- Black oxide bits are 1-7/16" to 2-3/4" long.
- Cushioned palm grip for comfort.

Contents:

- 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4 inch



Part No.	Description	Weight (lbs)
J4993CG	9 Piece Folding Hex Key Set Imperial	0.47

PROTO® 7 PIECE FOLDING HEX KEY SET LONG

ASME B18.3.2M

MM

- Case is 3-1/2" long.
- Cushioned palm grip for comfort.

.Contents:

- 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10 mm



Part No.	Description	Weight (lbs)
J4974CG	7 Piece Long Folding Hex Key Set Metric	0.31

PROTO® 6 PIECE FOLDING CUSHION GRIP HEX KEY SET

IN

- Case is 5-1/2" long.
- Cushioned palm grip for comfort.

Contents:

- 5/32, 3/16, 7/32, 1/4, 5/16 inch



Part No.	Description	Weight (lbs)
J4996CG	6 Pc Folding Cushion Grip Hex Key Set Imp	0.24

PROTO® 9 PIECE FOLDING HEX KEY SET

IN

- Case is 5-1/2" long.
- Cushioned palm grip for comfort.

Contents:

- 0.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16 inch



Part No.	Description	Weight (lbs)
J4992CG	9 Pc Folding Hex Key Set Imp	0.18

Wiha L-Key Sets

Wiha MAGICRING®

- Suitable for removing sunkhead standard screws and for inserting and working on screws in horizontal, inclined or deep pocket holes
- Holds screws made of steel and non-magnetisable materials such as stainless steel, titanium and aluminium
- Ideal for applications where there is insufficient space for a simple hex key
- No troublesome searching for dropped screws



MagicRing®

WIHA 13 PIECE BALLPOINT HEX L-KEY SET WITH MAGICRING®

IN

- Chrome-plated
- In ProStar Holder

Contents:

- 0.05, 1/16, 5/64, 3/32, 7/64 (non ballpoint)
- 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 (ballpoint)



Part No.	Description
369 RSZ13	13 Pc Ballpoint Hex L-Key Set with MagicRing® Imperial

WIHA 9 PIECE BALLPOINT HEX L-KEY SET WITH MAGICRING® CHROME-PLATED

MM

- In ProStar Holder

Contents:

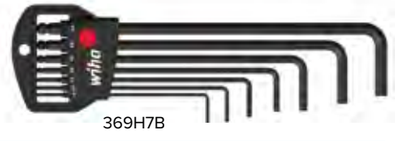
- 1.5, 2, 2.5 mm (non ballpoint)
- 3, 4, 5, 6, 8, 10 mm (ballpoint)



Part No.	Description
369 RS9	9 Pc Ballpoint Hex L-Key Set with MagicRing® Metric

WIHA BALLPOINT HEX L-KEY SETS STANDARD

- Chrome-vanadium steel, through-hardened, bronzed
- In Holder



369H7B

Part No.	Contents
369H7B	1.5, 2, 2.5, 3, 4, 5, 6 mm
369 H9B	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10 mm
369 HZ8	5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4, 5/16 inch
369SZ13B	0.05, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 inch

WIHA 13 PIECE BALLPOINT HEX L-KEY SET

IN

- Bronzed
- In ProStar Holder

Contents:

- 0.05, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 inch



Part No.	Description
369ZB	13 Piece Ballpoint Hex L-Key Set Imperial

WIHA 9 PIECE BALLPOINT HEX L-KEY SET CHROME SERIES

MM

- In Holder, chrome-plated

Contents:

- 1.5, 2, 2.5, 3, 4, 5, 6, 7, 8 mm



Part No.	Description
369 H9C	9 Pc Ballpoint Hex L-Key Set Chrome Series Metric

Wiha Hex & Torx® L-Keys

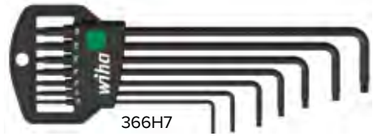
Wiha L-keys are essential for all users who are faced with a screw fastening task in difficult work conditions. The shortened L-key arm for difficult-to-access screws significantly reduces the risk of an injury, as the hand-working space is increased by over 30%.

Wiha ball-end tools enable fastening at angles of up to 25° per side. The risk of an accident is reduced since the tool does not slip out of the screw. Screws made of steel and non-magnetic materials are securely held in any position with the Wiha MagicRing and MagicSpring.



WIHA TORX® L-KEY SETS

- Bronzed
- In Holder



366H7

Part No.	Contents
366H7	T6, T7, T8, T9, T10, T15, T20
366RH8	T9, T10, T15, T20, T25, T27, T30, T40
366BEH8	T9, T10, T15, T20, T25, T27, T30, T40 Ballpoint

WIHA TORX® L-KEY SETS – SHORT

- Bronzed
- In Holder



363H7

Part No.	Contents
363H7	T6, T7, T8, T9, T10, T15, T20
363 HM7	T6, T7, T8, T9, T10, T15, T20 Ballpoint
363H8	T9, T10, T15, T20, T25, T27, T30, T40
363H9	T8, T9, T10, T15, T20, T25, T27, T30, T40 Ballpoint

WIHA POCKETSTAR FOR HEX SCREW BALLPOINT WITH MAGICRING®

- Ballpoint Hex keys in fold out holder
- With MagicRing®
- In large PocketStar



369 RP7

MagicRing®

Part No.	Contents
369 RP7	2, 2.5, 3, 4, 5, 6, 8 mm
369 RPZ9	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4 inch

WIHA POCKETSTAR FOR HEX SCREW STANDARD

- Hex keys in fold out holder
- In large PocketStar



351 PG7

Part No.	Contents
351 PG7	2, 2.5, 3, 4, 5, 6, 8 mm
351 PZ9	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4 inch

WIHA HEX L-KEY SETS – SHORT

MM

- Nickel-plated
- In Holder



Part No.	Contents (mm)
351H7	1.5, 2, 2.5, 3, 4, 5, 6
351H9	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10
351H11	1.5, 2, 2.5, 3, 4, 5, 6, 7, 8, 9, 10

WIHA 13 PIECE HEX L-KEY SET – SHORT

IN

- Nickel-plated
- In ProStar Holder

Contents:

- 0.05, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 inch



Part No.	Description
351SZ13	13 Piece Hex L-Key Set Short Imperial

WIHA 9 PIECE BALLPOINT HEX L-KEY SET – PREMIUM

MM

- Matt chrome-plated
- In ProStar Holder

Contents:

- 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10 mm

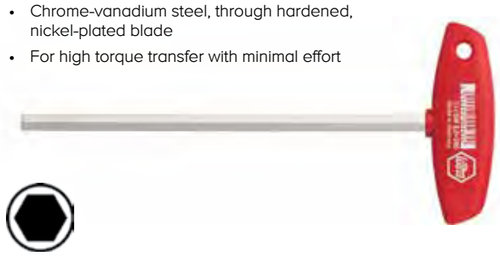


Part No.	Description
369S9	9 Piece Ballpoint Hex L-Key Set Premium Metric

HEX L-KEYS WITH T-HANDLE

MM

- Hex Driver with T-handle
- Chrome-vanadium steel, through hardened, nickel-plated blade
- For high torque transfer with minimal effort



Part No.					
33420	2	100	–	126	80
33420200	2	200	–	226	80
33425	2.5	100	–	126	80
33425200	2.5	200	–	226	80
33430	3	100	–	126	80
33430150	3	150	–	176	80
33430200	3	200	–	226	80
33440	4	100	–	126	80
33440150	4	150	–	176	80
33440200	4	200	–	226	80
33440350	4	350	5+	382	100
33450	5	100	–	132	100
33450150	5	150	–	182	100
33450200	5	200	–	232	100
33450350	5	350	–	382	100
33460	6	100	–	132	100
33460150	6	150	–	182	100
33460200	6	200	–	232	100
33460350	6	350	–	382	100
33470	7	200	–	232	100
33480	8	100	–	132	100
33480150	8	150	–	182	100
33480200	8	200	–	232	100
33480350	8	350	–	382	100
334100	10	100	–	138	120
334100200	10	200	–	238	120
334120	12	200	–	238	120

WIHA TORX® L-KEYS WITH T-HANDLE COMFORT GRIP

- Torx® Driver with T-handle
- Matt chrome-plated
- Ergonomic handle design with integrated soft zones

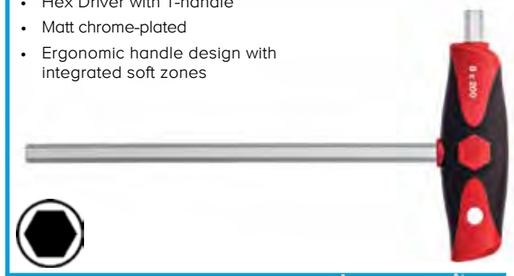


Part No.			
26172	T10	100	80
26173	T15	100	80
26174	T20	100	100
26175	T25	150	100
26176	T27	150	100
26177	T30	150	100
26178	T40	150	100

HEX L-KEYS WITH T-HANDLE COMFORT

MM

- Hex Driver with T-handle
- Matt chrome-plated
- Ergonomic handle design with integrated soft zones

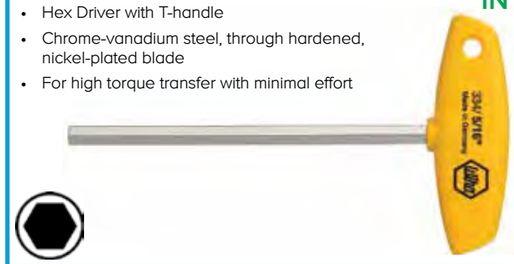


Part No.			
26164	2	100	80
26165	2.5	100	80
26166	3	100	80
26167	4	150	80
26168	5	150	100
26169	6	150	100
26170	8	200	100
26171	10	200	120

WIHA HEX L-KEYS WITH T-HANDLE

IN

- Hex Driver with T-handle
- Chrome-vanadium steel, through hardened, nickel-plated blade
- For high torque transfer with minimal effort



Part No.				
334 Z332	3/32	150	176	80
334 Z764	7/64	150	176	80
334 Z180	1/8	150	176	80
334 Z964	9/64	150	176	80
334 Z532	5/32	150	176	80
334 Z316	3/16	150	182	100
334 Z732	7/32	150	182	100
334 Z140	1/4	150	182	100
334 Z516	5/16	150	182	100
334 Z380	3/8	150	182	100

WIHA 6 PIECE T-HANDLE HEX SET WITH MAGICRING®

MM

- T-handle Hex Set with MagicRing®
- Chrome-plated

Contents:

- 3 x 100, 4 x 150, 5 x 150, 6 x 150, 8 x 200, 10 x 200 mm



Part No.	Description
334RVB	6 Piece T-Handle Hex Set with MagicRing®

WIHA SHORT ALLEN KEYS

IN



Part No.		Length 1	Length 2	Metric
351 1.5	1.5	46	15	-
351 2.0	2	51	18	-
351 2.5	2.5	57	20	-
351 3.0	3	64	23	-
351 3.5	3.5	70	26	-
351 4.0	4	72	29	-
351 4.5	4.5	80	31	-
351 5.0	5	83	33	-
351 5.5	5.5	90	35	-
351 6.0	6	94	38	-
351 7.0	7	99	41	-
351 8.0	8	105	44	-
351 9.0	9	114	47	-
351 10	10	119	50	-
351 11	11	129	53	-
351 12	12	134	57	-
351 14	14	151	70	-
351 17	17	173	80	-
351 19	19	195	89	-
351Z0.05	0.05	41	13	1.27
351Z116	1/16	47	16	1.59
351Z564	5/64	51	18	1.98
351Z332	3/32	55	22	2.38
351Z764	7/64	58	21	2.78
351Z18	1/8	61	23	3.18
351Z964	9/64	65	25	3.57
351Z532	5/32	72	29	3.97
351Z316	3/16	76	30	4.76
351Z732	7/32	84	34	5.56
351Z14	1/4	94	37	6.35
351Z516	5/16	106	43	7.94
351Z38	3/8	117	48	9.53
351Z12	1/2	143	59	12.7
351Z916	9/16	158	64	14.29
351Z58	5/8	178	71	15.88
351Z34	3/4	198	89	19.05

WIHA BALLPOINT ALLEN KEYS

IN



Part No.		Length 1	Length 2	Metric
369Z0.05	0.05	72	13	1.27
369Z116	1/16	80	15	1.59
369Z564	5/64	88	18	1.98
369Z332	3/32	101	20	2.38
369Z764	7/64	111	21	2.78
369Z18	1/8	121	23	3.18
369Z964	9/64	136	27	3.57
369Z532	5/32	148	29	3.97
369Z316	3/16	163	33	4.76
369Z732	7/32	176	36	5.56
369Z14	1/4	191	38	6.35
369Z516	5/16	210	43	7.94
369Z38	3/8	232	50	9.53

WIHA ALLEN KEYS

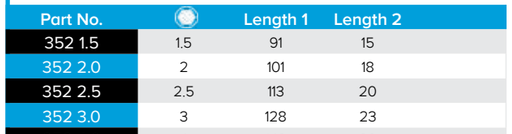
MM



Part No.		Length 1	Length 2
352B 0.7	0.7	67	6
352B 0.9	0.9	70	9
352B 1.3	1.3	80	13
352B 1.5	1.5	91	15
352B 2.0	2	101	18
352B 2.5	2.5	113	20
352B 3.0	3	128	23
352B 4.0	4	142	29
352B 5.0	5	163	33
352B 6.0	6	184	38
352B 7.0	7	194	41
352B 8.0	8	206	44
352B 10.0	10	231	50
352B 12.0	12	259	57
352B 14.0	14	291	70

WIHA ALLEN KEYS

MM



Part No.		Length 1	Length 2
352 1.5	1.5	91	15
352 2.0	2	101	18
352 2.5	2.5	113	20
352 3.0	3	128	23
352 4.0	4	142	29
352 5.0	5	163	33
352 6.0	6	184	38
352 7.0	7	194	41
352 8.0	8	206	44
352 10	10	231	50
352 12	12	259	57
352 14	14	291	70
352 17	17	333	80
352 19	19	375	89

WIHA BALLPOINT ALLEN KEYS

MM



Part No.		Length 1	Length 2
369 1.5	1.5	91	15
369 2.0	2	101	18
369 2.5	2.5	113	20
369 3.0	3	128	23
369 4.0	4	142	29
369 5.0	5	163	33
369 6.0	6	184	38
369 7.0	7	194	41
369 8.0	8	206	44
369 10.0	10	231	50
369 12.0	12	259	57



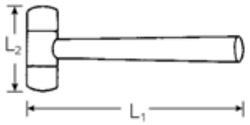
Striking, Hooks & Pry Tools

Hammers 458
Punches 465
Chisels 468
Punch & Chisel Sets 469
Hole Punches 472
Punch Accessories 473
Picks & Probes 474
Pry Tools 475

Stahlwille Hammers

STAHLWILLE PLASTIC HAMMERS 10955

With interchangeable heads of impact resistant cellulose acetane and ash handle





Part No.	Face Diameter (mm)	Head Length (mm) (L1)	OAL (mm) (L2)	Weight (g)
70160027	27	265	90	235
70160032	32	280	100	320
70160035	35	290	105	376
70160040	40	320	110	545
70160050	50	340	115	873

STAHLWILLE PLASTIC SPARE HEADS 10955R

- Made of impact resisting cellulose acetate
- These are lightly heated and then tapped into position



Part No.	Size (mm)	Weight (g)
79040027	27	14
79040032	32	22
79040035	35	29
79040040	40	39
79040050	50	69

STAHLWILLE NYLON SPARE HEADS 10956R

These are lightly heated and then tapped into position

Part No.	Size (mm)	Weight (g)
79050027	27	11
79050032	32	18
79050035	35	23
79050040	40	31
79050050	50	53
79050060	60	83

STAHLWILLE NYLON HAMMERS 10956

With interchangeable heads of shockproof nylon vestamid and hickory handle



Part No.	Face Diameter (mm)	Head Length (mm) (L1)	OAL (mm) (L2)	Weight (g)
70171027	27	265	90	232
70171032	32	280	100	336
70171035	35	290	105	413
70171040	40	320	110	546
70171050	50	340	115	865
70171060	60	380	135	1339

STAHLWILLE RUBBER COMPOSITION HAMMERS 10940

- DIN 5128
- With two plane faces
- With ash handle



Part No.	Face Diameter (mm)	Head Length (mm) (L1)	OAL (mm) (L2)	Weight (g)
70140001	55	320	90	317
70140002	65	350	115	527
70140003	75	350	130	780
70140004	90	380	140	1220

STAHLWILLE EMBOSSING HAMMER 10958

- Aluminium
- Cylindrical
- With hickory handle



Part No.	Face Dia. (mm)	Head Length	OAL (mm) (L2)	Weight (g)
70240040	40	340	155	648

STAHLWILLE SPARE HEADS 10959R

For dead blow hammers

Part No.	Size (mm)	Weight (g)
79091030	30	19
79091035	35	26
79091040	40	38
79091050	50	72
79091060	60	118

STAHLWILLE DEAD BLOW HAMMER 10959

- The hollow head is partially filled with steel shot which adds to the weight, prevents recoil
- With interchangeable heads made of medium-hard polyurethane and with a hickory handle



Part No.	Face Diameter (mm)	Head Length (mm) (L1)	OAL (mm) (L2)	Weight (g)
70240040	40	340	155	648

STAHLWILLE ENGINEERS HAMMERS

- Metal overstrike sleeves provide excellent protection against "misses"
- Ergonomically designed, doubly shaped hickory handle
- Lacquered handle end improves grip
- Complies with DIN 1041
- DIN and weight are punched into the hammer head



Part No.	Face Diameter (mm)	Head Length (mm) (L1)	OAL (mm) (L2)	Weight (g)
70110009	200	280	95	254
70110010	300	300	105	400
70110011	500	320	118	600
70110013	800	350	130	951
70110015	1000	360	135	1132
70110016	1500	380	145	1617
70110017	2000	400	155	2285

STAHLWILLE CLUB HAMMERS 10962

- Metal overstrike sleeves provide excellent protection against "misses"
- Ergonomically designed, doubly shaped hickory handle
- Lacquered handle end improves grip
- Complies with DIN 6475
- DIN and weight are punched into the club hammer head



Part No.	Face Diameter (mm)	Head Length (mm) (L1)	OAL (mm) (L2)	Weight (g)
70111010	1000	260	95	1410
70111015	1250	260	100	1660
70111020	1500	280	110	1910

STAHLWILLE ENGINEERS HAMMERS 10970

With ash handle



Part No.	Face Diameter (mm)	Head Length (mm) (L1)	OAL (mm) (L2)	Weight (g)
70120001	1/4	270	67	176
70120005	1/2	290	82	320
70120006	3/4	310	93	454
70120002	1	320	99	572
70120004	1 1/2	350	118	790
70120003	2	380	126	1045

PROTO® Hammers

PROTO® BALL PEIN HAMMERS – INDUSTRIAL FIBERGLASS HANDLE

ASME B107.400

- Well-balanced professional hammer with hardened drop-forged head bonded to strong, lightweight fiberglass handle.
- Exclusive Rim-Tempered™ process minimizes chipping from off-center strikes.
- Molded jacket over the fiberglass handle provides maximum overstrike protection



Part No.	Head Weight	Face Diameter (in) (D)	Head Length (in) (H)	OAL (in) (L)	Weight (lbs)
J1312PGD	12 oz.	-	-	12-1/16	1.31
J1316PGD	16 oz.	-	-	13	1.54
J1324PGD	24 oz.	-	-	14-3/16	2.18
J1332PGD	32 oz.	-	-	15-1/4	2.62

PROTO® BALL PEIN HAMMERS – INDUSTRIAL WOOD HANDLE

ASME B107.400

- Tough drop-forged head with Rim-Tempered™ hardened face and pein.
- Face, chamfer, cheeks and pein are polished and have a protective coating of clear lacquer.
- Hardwood handles have contoured shape with red lacquer grip.



Part No.	Head Weight	Face Diameter (in) (D)	Head Length (in) (H)	OAL (in) (L)	Weight (lbs)
J1304PD	4 oz.	-	-	11	0.45
J1308PD	8 oz.	-	-	12	0.83
J1312PD	12 oz.	-	-	13	1.14
J1316PD	16 oz.	-	-	14-1/2	1.45
J1324PD	24 oz.	-	-	15	2.00
J1332PD	32 oz.	-	-	15-7/8	2.42
J1340PD	40 oz.	-	-	16-3/8	2.84

PROTO® ANTI-VIBE® BALL PEIN HAMMERS – 4 OZ.

- Patented Anti-Vibe® technology delivers greater vibration dampening effect than traditional one-piece steel hammer.
- Molded, textured rubber grip provides a slip-resistant grip and increased control.
- Rim tempered striking surface adds extra durability and safety.



Part No.	Head Weight (oz)	Overall Length (in)	Weight (lbs)
J1304AVP	4	11	0.45
J1308AVP	8	12	0.83
J1312AVP	12	13	1.14
J1316AVP	16	14-1/2	1.45
J1324AVP	24	15	2.00
J1332AVP	32	15-7/8	2.42
J1340AVP	40	16-3/8	2.84

PROTO® CLUB HAMMERS

ASME B107.54M

- Well-balanced, drop-forged steel head with a hardened face.
- Designed for use with chisels, punches, star drills, and hardened nails.
- Fiberglass handle with ergonomic, non-slip grip.



Part No.	Head Weight	Face Diameter (in) (D)	Head Length (in) (H)	OAL (in) (L)	Weight (lbs)
J1442G	2 lbs.	1-3/8	4-1/8	11-3/8	2.72
J1443G	3 lbs.	1-5/8	4-3/8	11-5/8	3.70
J1444G	4 lbs.	1-15/16	4-3/4	11-15/16	4.32

PROTO® SLIP RESISTANT FIBREGLASS HANDLE SLEDGE HAMMERS

ASME B107.54M

- Designed for striking metal, concrete, and stone.
- Strong fiberglass handle with slip-resistant cushion grip.



Part No.	Head Weight	Face Diameter (in) (D)	Head Length (in) (H)	OAL (in) (L)	Weight (lbs)
J1433G	2.5 lbs.	1-11/16	3	15-11/16	3.28
J1434G	3 lbs.	1-7/8	4-1/2	15-7/8	3.94
J1435G	4 lbs.	2	5	16	4.84
J1436G	6 lbs.	2-1/4	5-3/4	34-1/4	8.05
J1437G	8 lbs.	2-3/8	6-1/2	34-3/8	10.14
J1438G	10 lbs.	2-1/2	7-1/2	34-1/2	12.36
J1439G	12 lbs.	2-3/4	7-3/8	34-3/4	14.50

PROTO® BRASS HAMMERS

- Mar-resistant soft brass head helps absorb impact and helps reduce work damage.
- Spark-resistant for safe use near combustible materials.
- Fiberglass handle with ergonomic, non-slip grip.
- Warning: Handling of brass material may expose you to lead. Wash hands after use.



Part No.	Head Weight	Face Diameter (in) (D)	Head Length (in) (H)	OAL (in) (L)	Pall Pein Diameter
J1430G	1.5 lbs.	1-1/2	3-1/2	13-1/2	2.09
J1432G	2.6 lbs.	1-3/4	3-1/2	13-3/4	3.45
J1431G	3.8 lbs.	2	3-5/8	14-3/4	4.38

PROTO® CROSS PEIN HAMMERS

ASME B107.54M

- For use with unhardened metals.
- Pein is designed for shaping and bending metals.
- Strong fiberglass handle with slip-resistant cushion grip.



Part No.	Head Weight	Face Diameter (in) (D)	Head Length (in) (H)	OAL (in) (L)	Weight (lbs)
J1441G	4 lbs.	1-15/16	5-35/64	15-15/16	4.45

HENCHMAN BRASS HAMMER

- Precision manufactured and hand assembled entierly within the USA
- Brass head hand turned and polished from CDA 360 brass rod
- Hickory handle seasoned and turned, then pressed into the finished brass head and securely brass pinned



Part No.	Head Weight	Face Diameter (in) (D)	Head Length (in) (H)	OAL (in) (L)	Weight (lbs)
H69-420	-	-	-	-	-

HENCHMAN COMPOSITE TAP HAMMER

- Tap skin composites to quickly and easily detect delamination or disbonding
- Head: Rounded end and tapered blunt end



Part No.	Head Weight	Face Diameter (in) (D)	Head Length (in) (H)	OAL (in) (L)	Weight (lbs)
H69-400	-	1.7	4	7.25	0.094

PROTO® SOFT FACE HAMMERS – WITHOUT TIPS

Fiberglass handle with ergonomic, non-slip grip.



Part No.	Face Diameter (in)	Head Length (in)	Tip Series	OAL (in)	Weight (lbs)
JSF100	1	2	SF10 Series Tips	12	0.36
JSF105	1	2	SF10 Series Tips	12	0.52
JSF150	1-1/2	2-3/8	SF15 Series Tips	13-1/2	0.85
JSF155	1-1/2	2-3/8	SF15 Series Tips	13-1/2	1.02
JSF200	2	2-1/2	SF20 Series Tips	15	1.01
JSF205	2	2-1/2	SF20 Series Tips	15	1.80
JSF250	2-1/2	3-1/4	SF25 Series Tips	16-1/2	2.00

PROTO® SURFACE PROTECTIVE TIPS

- Available in seven different hardnesses for each size tip, from super soft to extra hard. They fit universal hammers and offer the following features:
- Resistant to oil, gasoline, and common industrial chemicals.
- Helps eliminate sting, vibration, and rebound.
- Non-combustible.
- Color coded for degree of hardness for easy identification.



Part No.	Hardness	Color	Weight (lbs)
JSF10S	Soft	Brown	0.05
JSF10M	Medium	Red	0.09
JSF10T	Tough	Green	0.05
JSF10H	Hard	Black	0.04
JSF10XH	Extra Hard	Yellow	0.04
JSF15SS	Super Soft	Grey	0.09
JSF15S	Soft	Brown	0.10
JSF15M	Medium	Red	0.10
JSF15T	Tough	Green	0.10
JSF15MH	Medium Hard	Cream	0.08
JSF15H	Hard	Black	0.09

Part No.	Hardness	Color	Weight (lbs)
JSF15XH	Extra Hard	Yellow	0.80
JSF20S	Soft	Brown	0.20
JSF20M	Medium	Red	0.21
JSF20T	Tough	Green	0.22
JSF20MH	Medium Hard	Cream	0.20
JSF20H	Hard	Black	0.23
JSF20XH	Extra Hard	Yellow	0.20
JSF25M	Medium	Red	0.42
JSF25T	Tough	Green	0.38
JSF25MH	Medium Hard	Cream	0.39
JSF25H	Hard	Black	0.36
JSF25XH	Extra Hard	Yellow	0.37

PROTO® SOFT FACE HAMMERS – WITH MEDIUM/HARD TIPS

- Supplied with one medium and one hard tip installed.
- Fiberglass handle with ergonomic, non-slip grip.



Part No.	Face Diameter (in)	Head Length (in)	Tip Series	OAL (in)	Weight (lbs)
JSF105HM	1	2	SF10 Series Tips	13	0.60
JSF150HM	1-1/2	2-3/8	SF15 Series Tips	13-1/2	0.79
JSF200HM	2	2-1/2	SF20 Series Tips	14	1.43
JSF205HM	2	2-1/2	SF20 Series Tips	14	2.06

PROTO® SOFT FACE HAMMERS – WITH MEDIUM/TOUGH TIPS

- Supplied with one medium and one hard tip installed.
- Fiberglass handle with ergonomic, non-slip grip.



Part No.	Face Diameter (in)	Head Length (in)	Tip Series	OAL (in)	Weight (lbs)
J1360	1-3/16	2-3/4	J1360M/J1360T	13-21/64	0.81
J1362	1-11/32	2-3/16	J1384M/J1384T	13-15/32	1.05
J1364	1-11/16	4-11/16	J1364M/J1364T	14-53/64	2.06

HENCHMAN SOFT FACED NYLON HAMMER WITH PLASTIC HANDLE

- No metal pegs or inserts to damage the workpiece when worn.
- Serrations in the metal head prevent faces coming loose during use.



Part No.	Head Weight	Face Diameter	Head Length (in) (H)	OAL	Weight (kg)
TH712	-	38mm / 1-1/2 in	-	305mm / 12 in	0.65

PROTO® DEAD BLOW HAMMERS

- Spark-resistant for safe use near combustible materials.
- Head contains steel shot to help prevent rebound and vibration.
- Fiberglass handle.



Part No.	Head Weight	Face Diameter (in) (D)	Head Length (in) (H)	OAL (in) (L)	Weight (lbs)
J1429DB	1 lbs.	1-5/8	4	13-5/8	1.73
J1430DB	2 lbs.	2	4-3/8	14-3/4	2.16
J1432DB	3 lbs.	2-7/16	4-5/8	16-7/16	2.16
J1431DB	4 lbs.	2-5/8	5	17	3.28

STANLEY RUBBER MALLET

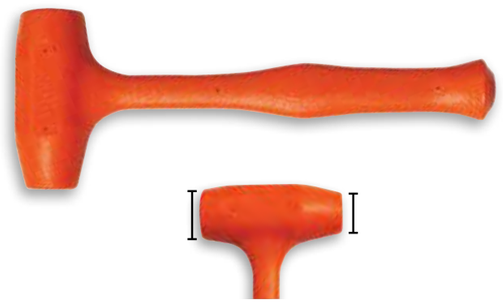
- Rubber head helps minimize marring and surface damage.
- Tough rubber head molded to a wood handle



Part No.	Head Weight	Face Diameter (in) (D)	Head Length (in) (H)	OAL (in) (L)	Weight (lbs)
57-522	18oz	2-3/8	3-7/8	13-1/2	1.35

PROTO® DEAD BLOW COMPO-CAST® COMBO FACE HAMMERS

- Top welded handle-to-head assembly adds extra durability and safety.
- Hot urethane Uni-Cast construction outlasts all other soft face striking tools. Urethane composition provides shape-retaining faces even after repeated striking on hard surfaces and sharp edges.
- Handle is reinforced with solid steel shaft for greater strength safety.
- Top of head molded with a flat surface.
- Dual head design (Standard Dead Blow and Slim-line heads).
- Comfortable dual molded grip.



Part No.	Head Weight (oz)	Face Diameter (in)	Head Length (in)	OAL (in)	Weight (lbs)
J57-530	15	1 x 1-1/4	3-47/64	10-13/32	0.90
J57-531	21	1-1/4 x 1-35/64	4-17/32	11-21/32	1.40
J57-532	28	1-11/32 x 1-45/64	5-9/64	13-1/4	1.80
J57-533	46	1-45/64 x 2-3/32	5-51/64	14-1/4	2.95
J57-534	56	1-61/64 x 2-13/32	6-13/64	15-61/64	3.70

PROTO® DUAL-FACE COMPO-CAST® HAMMERS

- Hot urethane Uni-Cast construction outlasts all other soft face striking tools. Urethane composition helps provide shape-retaining faces even after repeated striking on hard surfaces and sharp edges.
- Top welded handle-to-head assembly helps add extra durability and safety.
- Handle is reinforced with solid steel shaft for strength and safety.
- Top of head molded with a flat surface, leaving handle out of dirt and grime.
- Comfortable dual molded grip.
- Available in Brass & Steel with an opposing Standard Dead Blow Face.



Part No.	Tip Finish	Face Diameter (in)	Head Length (in)	Head Weight (oz)	OAL (in)	Weight (lbs)
J24DFB	Brass	1-1/4 x 1-11/16	4-5/16	24	13	1.75
J24DFS	Steel	1-1/4 x 1-11/16	4-5/16	24	13	1.81

STANLEY DEAD BLOW COMPO-CAST® SLIMLINE HAMMERS

- Slimline model offers unique profile for assembly and repair applications in confined areas.
- Uni-Cast™ construction of non-ferrous materials eliminates sparking and won't absorb liquids.
- No exposed metal on face, head or shaft.
- Soft face helps prevent marring.
- Dead blow function eliminates bounceback when striking hardened surfaces.
- Steel reinforced handle provides strength and resists breaking on overstrike.



Part No.	Head Weight	Face Diameter (in) (D)	Head Length (in) (H)	OAL (in) (L)	Weight (lbs)
57-540	5 oz (142 g)	29/32 in (23 mm)	2-15/16 in (74 mm)	9-1/2 in (241 mm)	-
57-541	14 oz (397 g)	1-19/64 in (33 mm)	4-3/16 in (106 mm)	10-1/2 in (267 mm)	-
57-542	18 oz (510 g)	1-33/64 in (38 mm)	4-1/4 in (108 mm)	12-1/8 in (308 mm)	-
57-543	21 oz (595 g)	1-17/32 in (39 mm)	5-1/4 in (133 mm)	12-7/8 in (327 mm)	-

STANLEY DEAD BLOW COMPO-CAST® SLEDGE HAMMERS

- Non-sparking, soft-face sledgehammers.
- Uni-Cast™ construction of non-ferrous materials eliminates sparking and won't absorb liquids.
- No exposed metal on face, head or shaft.
- Soft face helps prevent marring.
- Urethane covering helps reduce noise.
- Flat area on head allows upright storage.
- Steel reinforced handle provides strength and resists breaking on overstrike.
- Dead blow function eliminates bounceback when striking hardened surfaces.



Part No.	Head Weight	Face Diameter (in) (D)	Head Length (in) (H)	OAL (in) (L)	Weight (lbs)
57-550	5 lbs (2.26 kg)	2-55/64 in (73 mm)	7 in (178 mm)	19-5/8 in (498 mm)	-
57-551	8 lbs (3.62 kg)	2-61/64 in (75 mm)	7-1/8 in (181 mm)	29-7/8 in (759 mm)	-
57-552	10.5 lbs (4.76 kg)	3-25/64 in (86 mm)	8-1/8 in (206 mm)	29-7/8 in (759 mm)	-
57-554	11.5 lbs (5.21 kg)	3-25/64 in (86 mm)	8-1/8 in (206 mm)	36-18 in (918 mm)	-

STANLEY DEAD BLOW COMPO-CAST® BALL PEIN HAMMERS

- Forged and heat-treated head for increased durability.
- Rim tempered head reduces incidences of chipping or spalling.
- Non-sparking, chemical resistant molded urethane covering.
- The head is filled with steel shot to eliminate bounce back for dead blow action.



Part No.	Head Weight	Face Diameter (in) (D)	Head Length (in) (H)	OAL (in) (L)	Pall Pein Diameter
54-516	16 oz (454 g)	4-1/8 in (105 mm)	4-1/8 in (105 mm)	4-1/8 in (105 mm)	4-1/8 in (105 mm)
54-524	24 oz (680 g)	4-7/16 in (113 mm)	4-7/16 in (113 mm)	4-7/16 in (113 mm)	4-7/16 in (113 mm)
54-532	32 oz (907 g)	4-3/4 in (121 mm)	4-3/4 in (121 mm)	4-3/4 in (121 mm)	4-3/4 in (121 mm)

Standard Punches

STAHLWILLE PARALLEL PIN PUNCHES 108

- DIN 6450, octagonal
- chrome vanadium, lacquered silver



Part No.	Tip Width (mm)	Dia (mm)	Dia (mm)	OAL (mm)	Weight (g)
70071152	2	2	8	115	29
70070013	3	3	8	125	35
70070001	2,5	2,5	10	150	65
70070002	3	3	10	150	62
70070003	4	4	10	150	64
70070004	5	5	10	150	67
70070005	6	6	10	150	72
70070006	8	8	10	150	81
70070009	3	3	10	175	57
70070010	4	4	10	175	64
70070012	6	6	10	175	69
70070008	8	8	12	200	141
70070011	10	10	12	200	159

PROTO® PIN PUNCHES

ASME B107.410

Two-piece design allows the tip to be hard for durability while allowing it to be produced straight to help prevent binding.



Part No.	Tip Width (in)	Shank (in)	OAL (in)	Weight (lbs)
J471/4X1/16	1/16	1/4	4-3/8	0.05
J471/4X3/32	3/32	1/4	4-3/4	0.06
J475/16X1/8	1/8	5/16	5-3/16	0.09
J475/16X5/32	5/32	5/16	5-9/16	0.01
J473/8X3/16	3/16	3/8	5-7/8	0.15
J477/16X7/32	7/32	3/8	6-3/8	0.22
J471/2X1/4	1/4	3/8	6-3/4	0.29

PROTO® PIN PUNCHES SUPER DUTY

ASME B107.410

One-piece design for strength and durability.



Part No.	Tip Width (in)	Shank (in)	OAL (in)	Weight (lbs)
J48116	1/16	1/4	4-1/8	0.05
J48332	3/32	1/4	4-1/2	0.07
J48018	1/8	5/16	4-3/4	0.09
J48532	5/32	5/16	5	0.01
J48316	3/16	3/8	5-1/4	0.15
J48732	7/32	7/16	5-1/2	0.22
J48014	1/4	7/16	5-3/4	0.29
70-124G*	9/32	7/16	5-3/4	0.32
J48516	5/16	1/2	6-1/4	0.35
J48038	3/8	5/8	6-1/2	0.53

STAHLWILLE PIN PUNCHES 109

With guide bush



Part No.	Tip Width (mm)	Dia (mm)	Dia (mm)	OAL (mm)	Weight (g)
70090001	1	0,9	5	80	7
70090002	2	1,4	5,5	82	12
70090003	3	1,8	6	86	12
70090004	4	2,4	7	95	18
70090005	5	2,8	7	97	19
70090006	6	3,4	8	100	25
70090007	7	3,9	9	100	27
70090008	8	5,9	10	103	47

HENCHMAN PIN PUNCHES

Made in France



Part No.	Description	Tip Width (mm)
408-2	Pin Punch	2
408-2.5	Pin Punch	2.5
408-3	Pin Punch	3
408-4	Pin Punch	4
408-5	Pin Punch	5
408-6	Pin Punch	6
408-7	Pin Punch	7
408-8	Pin Punch	8
408-10	Pin Punch	10

HENCHMAN PIN PUNCHES LONG

Made in France



Part No.	Description	Tip Width (mm)
408L-2	Long Pin Punch	2
408L-2.5	Long Pin Punch	2.5
408L-3	Long Pin Punch	3
408L-4	Long Pin Punch	4
408L-5	Long Pin Punch	5
408L-6	Long Pin Punch	6
408L-7	Long Pin Punch	7
408L-8	Long Pin Punch	8
408L-10	Long Pin Punch	10

PROTO® PIN PUNCHES SUPER DUTY LONG

ASME B107.410

One-piece design for strength and durability.



Part No.	Tip Width (in)	Shank (in)	OAL (in)	Weight (lbs)
J48532LS2	5/32	3/8	8	0.14
J48316LS2	3/16	3/8	8	0.15
J48732LS2	7/32	7/16	8	0.20
J48014LS2	1/4	1/2	8	0.30
J48516LS2	5/16	1/2	8	0.41

PROTO® ROLL PIN PUNCHES

One-piece design for strength and durability.



Part No.	Tip Width (in)	Shank (in)	OAL (in)	Weight (lbs)
J49116S2	1/16	1/4	3-3/4	0.04
J49332S2	3/32	1/4	4-1/4	0.08
J49018S2	1/8	5/16	4-3/4	0.08
J49532S2	5/32	5/16	5-1/4	0.08
J49316S2	3/16	3/8	5-7/16	0.10
J49732S2	7/32	3/8	5-7/8	0.16
J49014S2	1/4	7/16	6-7/16	0.16
J49038S2	3/8	1/2	7-1/2	0.32
J49012S2	1/2	5/8	7-1/2	0.52

PROTO® LONG ALIGNING PUNCH

ASME B107.410

- Application: to align holes in two or more pieces of metal through which a bolt or screw is to be inserted.
- One-piece design for strength and durability.



Part No.	Tip Width (in)	Shank (in)	OAL (in)	Weight (lbs)
J155/8S2	3/16	5/8	16	0.90

PROTO® STARTING PUNCHES

ASME B107.410

- Similar to drift punches, but with wider points and heavier, shorter body.
- Application: to align holes in two or more pieces of metal through which a bolt or screw is to be inserted.
- Application: for installing and removing pins and shafts.
- One-piece design for strength and durability.



Part No.	Tip Width (in)	Shank (in)	OAL (in)	Weight (lbs)
J503/16S2	1/16	1/4	4-1/8	0.03
J501/4S2	3/32	1/4	5	0.06
J505/16S2	1/8	5/16	5-1/8	0.10
J503/8S2	3/16	3/8	5-5/8	0.17
J507/16S2	7/32	7/16	6	0.24
J501/2S2	1/4	1/2	6-1/2	0.33

PROTO® BRASS LINE-UP PUNCHES

ASME B107.410

- Spark-resistant, mar-resistant.
- Designed to help prevent damage to the object being struck.
- Warning: Handling of brass material may expose you to lead. Wash hands after use.



Part No.	Tip Width (in)	Shank (in)	OAL (in)	Weight (lbs)
J9638HB	3/8	10	1.00	0.03
J96716HB	7/16	14	1.50	0.33

PROTO® PRICK PUNCHES

ASME B107.410

- Application: sheet metal work for scribing and for punching starting holes for sheet metal screws.
- One-piece design for strength and durability.



Part No.	Tip Width (in)	Shank (in)	OAL (in)	Weight (lbs)
J441/4S2	-	1/4	4-3/4	0.06
J445/16S2	-	5/16	5	0.09
J443/8S2	-	3/8	5-1/4	0.14

STAHLWILLE CENTRE PUNCHES 105

- DIN 7250
- octagonal
- chrome vanadium, lacquered silver



Part No.	Size	Dia (mm)	OAL (mm)	Weight (g)
70050001	100 x 10	10	100	52
70050005	120 x 10	10	120	63
70050002	120 x 12	12	120	90

PROTO® CENTER PUNCHES

ASME B107.410

- Application: metal working layout.
- Provides a broad dent in marking intersecting center lines, hole locations, and pilot drill starting point.
- One-piece design for strength and durability.



Part No.	Tip Width (in)	Shank (in)	OAL (in)	Weight (lbs)
J411/4S2	-	1/4	4-3/4	0.05
J415/16S2	-	5/16	4-5/8	0.09
J413/8S2	-	3/8	4-7/8	0.14
J417/16S2	-	7/16	5-1/4	0.19
J411/2S2	-	1/2	5-5/8	0.29
J415/8S2	-	5/8	6-1/4	0.45

HENCHMAN CENTRE PUNCH

Made in France



Part No.	Description	Size
406-2.5	Centre Punch	2.5mm
406-3	Centre Punch	3mm
406-4	Centre Punch	4mm
406-6	Centre Punch	6mm

HENCHMAN AUTOMATIC CENTRE PUNCH

- 12mm Body Diameter
- Made in France



Part No.	Description	OAL
306	Automatic Centre Punch	125mm

Drift Punches

PROTO® 3 PIECE BRASS DRIFT PUNCH SET

ASME B107.410

- Spark-resistant, mar-resistant.
- Designed to help prevent damage to the object being struck.
- Includes a pouch for convenient storage solution.
- Warning: Handling of brass material may expose you to lead. Wash hands after use.
- Contents: 3/4, 1/2, 3/8 inch



Part No.	Description	Weight (lbs)
J9633B	3 Piece Brass Drift Punch Set	1.65

PROTO® 3 PIECE BRASS HEAVY-DUTY PUNCH SET NON SPARKING

- Spark-resistant, mar-resistant.
- Designed to help prevent damage to the object being struck.
- Includes a pouch for convenient storage solution.
- Warning: Handling of brass material may expose you to lead. Wash hands after use.
- Contents: 3/4, 1/2, 3/8 inch



Part No.	Description	Weight (lbs)
J9633HB	3 Piece Brass Heavy-Duty Punch Set	4.10

BRASS DRIFT PUNCHES

- Made in China
- Designed to help prevent damage to the object being struck.
- Warning: Handling of brass material may expose you to lead. Wash hands after use.



Part No.	Description	Size (mm)
BP 1002	Brass Drift Punch	6 x 150
BP 1004	Brass Drift Punch	10 x 150
BP 1006	Brass Drift Punch	13 x 200
BP 1008	Brass Drift Punch	19 x 250
BP 1010	3 Piece Set Brass Drift Punches	6, 10, 13

HENCHMAN BRONZE DRIFT PUNCHES

- Punch Diameter (mm): 9.5
- Overall Length (mm): 200
- Material: Bronze



Part No.	Description	Size (in)
H70-518	Bronze Drift Punch	3/8 x 8

PROTO® BRASS DRIFT PUNCHES

ASME B107.410

- Spark-resistant, mar-resistant.
- Designed to help prevent damage to the object being struck.
- Warning: Handling of brass material may expose you to lead. Wash hands after use.



Part No.	Tip Width (in)	OAL (in)	Weight (lbs)
J49920	1/2	7-7/8	0.46
J9634B	3/4	8	1.05
J9638B	3/8	6	0.20
J9634HB	3/4	12	1.60
J9612B	1/2	7	0.40

HENCHMAN BRASS DRIFT PUNCHES

Stock cut to length



Part No.	Description	Size (in)
H70-318	Brass Drift Punch	1/2 x 6
H70-320	Brass Drift Punch	1/2 x 6-1/2
H70-322	Brass Drift Punch	1/2 x 8
H70-330	Brass Drift Punch	1/4 x 6-1/2
H70-332	Brass Drift Punch	1/4 x 8
H70-336	Brass Drift Punch	3/8 x 6-1/2
H70-338	Brass Drift Punch	3/8 x 8
H70-354	Brass Drift Punch	1/8 x 10
H70-358	Brass Drift Punch	3/16 x 10
H70-364	Brass Drift Punch	3/4 x 6-1/2
H70-376	Brass Drift Punch	13/16 x 12
H70-380	Brass Drift Punch	3/4 x 13

HENCHMAN ALUMINIUM DRIFT PUNCHES

Stock cut to length



Part No.	Description	Size (in)
H70-136	Aluminium Drift Punch	1/2 x 12
H70-230	Aluminium Drift Punch	3/4 x 6
H70-234	Aluminium Drift Punch	3/4 x 10
H70-252	Aluminium Drift Punch	5/8 x 20
H70-253	Aluminium Drift Punch	5/8 x 10
H70-274	Aluminium Drift Punch	1-1/2 x 20
H70-275	Aluminium Drift Punch	1/2 x 10

HENCHMAN NYLON DRIFT PUNCH

Stock cut to length



Part No.	Description	Size (in)
H70-458	Nylon Drift Punch	8 x 1/2
H70-460	Nylon Drift Punch	10 x 1/2
H70-466	Nylon Drift Punch	10 x 3/4
H70-472	Nylon Drift Punch	10 x 1
H70-476	Nylon Drift Punch	15 x 1
H70-492	Nylon Drift Punch	12 x 1-1/2

STAHLWILLE DRIFT PINS 104

- DIN 6458
- octagonal
- chrome vanadium, lacquered silver



Part No.	Size	Dia (mm)	Dia (mm)	OAL (mm)	Weight (g)
70060007	120 x 2	2	10	120	60
70060010	120 x 3	3	10	120	60
70060002	120 x 4	4	10	120	62
70060008	120 x 5	5	10	120	64
70060003	120 x 6	6	10	120	66
70060009	120 x 8	8	12	120	68

PROTO® DRIFT PUNCHES

ASME B107.410

- Application: to align holes in two or more pieces of metal through which a bolt or screw is to be inserted.
- Application: for installing and removing pins and shafts.
- One-piece design for strength and durability.



Part No.	Tip Width (in)	Shank (in)	OAL (in)	Weight (lbs)
J961/4S2	3/32	1/4	10	0.12
J965/16S2	1/8	5/16	10	0.19
J963/8S2	3/16	3/8	10	0.28
J967/16S2	7/32	7/16	10	0.37
J961/2S2	1/4	1/2	10	0.49
J965/8S2	5/16	5/8	10	0.70
J963/4S2	3/8	3/4	10	1.02

Chisels

STAHLWILLE COLD CHISELS 102

- DIN 6453
- flat
- chrome vanadium steel, lacquered silver



Part No.	Size	OAL (mm)	Width (mm)	Weight (g)
70020002	125	125	15	96
70020003	150	150	18	172
70020004	175	175	21	269
70020005	200	200	24	379
70020007	250	250	25	521
70020008	300	300	26	591

PROTO® COLD CHISELS SUPER-DUTY

ASME B107.410

- Hand ground cutting edge to the exact angle for cutting through tough metals.
- 20% larger striking surface than standard chisels directs the power to the cutting edge.
- Longer shank features a knurl for better grip and easy positioning.



Part No.	Tip Width (in)	Shank (in)	OAL (in)	Weight (lbs)
J86038	3/8	5/16	6	0.13
J86012	1/2	7/16	6-13/16	0.26
J86058	5/8	1/2	7-5/8	0.44
J86034	3/4	5/8	8-7/16	0.75
J86078	7/8	3/4	9-1/4	1.09
J86001	1	7/8	10-1/16	1.46

PROTO® COLD CHISELS

ASME B107.410

- Made from S2 steel and specially heat-treated for greater strength and durability.
- Hand ground cutting edge to the exact angle for cutting through tough metals.
- Modified parabolic striking end to help reduce mushrooming and chipping.



Part No.	Tip Width (in)	Shank (in)	OAL (in)	Weight (lbs)
J86A3/16S2	1/4	3/16	4-7/8	0.04
J86A1/4S2	5/16	1/4	5-1/8	0.07
J86A5/16S2	3/8	5/16	5-3/8	0.12
J86A3/8S2	7/16	3/8	5-9/16	0.17
J86A7/16S2	1/2	7/16	6	0.25
J86A7/16X12S2	1/2	7/16	12	0.51
J86A1/2S2	5/8	1/2	6-3/4	0.37
J86A1/2X12S2	5/8	1/2	12	0.68
J86A5/8S2	3/4	5/8	6-7/8	0.54
J86A5/8X12S2	3/4	5/8	12	1.03
J86A3/4X8S2	7/8	3/4	8	0.89
J86A3/4X12S2	7/8	3/4	12	1.40
J86A7/8X18S2	1	7/8	18	2.42
J86A7/8X8S2	1	7/8	8-1/2	1.13
J86A7/8X12S2	1	7/8	12	1.75
J86A1X8S2	1-3/16	1	8-1/4	1.56

PROTO® CAPE CHISELS

ASME B107.410

- Hand ground cutting edge to the exact angle for cutting through tough metals.
- A polished identification panel on one of the flats is marked with the tool number and size in a black inlay.



Part No.	Tip Width (in)	Shank (in)	OAL (in)	Weight (lbs)
J721/4S2	3/16	1/4	4-5/8	0.06
J725/16S2	5/16	5/16	5-1/8	0.10

Punch & Chisel Sets

STAHLWILLE 6 PIECE PIN/CENTRE PUNCH SET 105-8/6K

Contents:

- Parallel Pin Punches: 150 x 2,5; 150 x 3; 150 x 4; 150 x 5; 150 x 6 mm
- Centre Punch: 120 x 10 mm
- In plastic container stand



Part No.	Description	Weight (g)
96700711	6 Piece Pin/Centre Punch Set	483

STAHLWILLE 6 PIECE PARALLEL PIN PUNCH SET 108/6 T

Contents:

- 150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm
- In textile bag



Part No.	Description	Weight (g)
96700703	6 Piece Parallel Pin Punch Set	460

STAHLWILLE 6 PIECE PARALLEL PIN PUNCH SET 108/6 D

Contents:

- 150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm
- In plastic stand



Part No.	Description	Weight (g)
96700701	6 Piece Parallel Pin Punch Set	450

STAHLWILLE 5 PIECE CHISEL, PIN, PUNCH SET 102-5/6

Contents:

- Cold Chisels: 125 mm, 150 mm with hex shaft
- Cross-cut Chisel: 125 mm with hex shaft
- Drift Pins: 120 x 2 mm, 120 x 4 mm
- Centre Punch: 120 x 10 mm
- in textile bag



Part No.	Description	Weight (g)
98812203	5 Piece Chisel Pin Punch Set	470

PROTO® 7 PIECE SUPER-DUTY PIN PUNCH SET

ASME B107.410

- One-piece design for strength and durability.
- Reverse taper to help prevent binding.
- Set offers a wide range of sizes to handle a variety jobs.
- Includes a pouch for convenient storage solution.

Contents:

- 1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4 inch



Part No.	Description	Weight (lbs)
J48007	7 Piece Super-Duty Pin Punch Set	0.90

PROTO® 7 PIECE PIN PUNCH SET

ASME B107.410

- Two-piece design allows the tip to be hard for durability while allowing it to be produced straight to help prevent binding.
- Set offers a wide range of sizes to handle a variety jobs.
- Includes a pouch for convenient storage solution.

Contents:

- 1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4 inch



Part No.	Description	Weight (lbs)
J47A	7 Piece Pin Punch Set	1.15

PROTO® 5 PIECE LONG DRIVE PIN PUNCH SET

ASME B107.410

- One-piece design for strength and durability.
- Reverse taper to help prevent binding.
- Set offers a wide range of sizes to handle a variety jobs.
- Includes a pouch for convenient storage solution.

Contents:

- 5/32, 3/16, 7/32, 1/4, 5/16 inch



Part No.	Description	Weight (lbs)
J48005LS2	5 Piece Long Drive Pin Punch Set	0.90

HENCHMAN 8 PIECE BRASS PIN PUNCH SET SHORT NON SPARKING

- Made from brass hexagonal stock.
- Ideal size for use in portable kits.
- Length: 3-1/2 inch (90 mm)
- In plastic pouch

Contents:

- 1/16, 3/32, 1/8, 5/32, 3/18, 7/32, 1/4, 5/16 inch



Part No.	Description
H70-308	8 Piece Brass Pin Punch Set Short

PROTO® 12 PIECE PUNCH AND CHISEL SET

ASME B107.410

- Two-piece design allows the tip to be hard for durability while allowing it to be produced straight to help prevent binding.
- Set offers a wide range of sizes to handle a variety jobs.
- Includes a pouch for convenient storage solution.

Contents:

- Cape Chisel: 7/32 inch
- Diamond Point Chisel: 3/16 inch
- Cold Chisels: 5/16, 7/16, 1/2 inch
- Centre Punch: 3/8 inch
- Pin Punches: 3/32, 3/16, 1/8 inch
- Starting Punches: 1/16, 3/16, 1/8 inch



Part No.	Description	Weight (lbs)
J2S2	12 Piece Punch and Chisel Set	1.80

PROTO® 7 PIECE ROLL PIN PUNCH SET

ASME B107.410

- One-piece design for strength and durability.
- Reverse taper to help prevent binding.
- Set offers a wide range of sizes to handle a variety jobs.
- Includes a pouch for convenient storage solution.

Contents:

- 1/4, 1/8, 1/16, 3/16, 3/32, 5/32, 7/32 inch



Part No.	Description	Weight (lbs)
J49007S2	7 Piece Roll Pin Punch Set	0.77

STAHLWILLE 6 PIECE DRIFT PIN, CENTRE PUNCH SET 104-5/6D

Contents:

- Drift Pins: 120 x 2, 120 x 3, 120 x 4, 120 x 5, 120 x 6 mm
- Centre Punch: 120 x 10 mm
- In plastic stand



Part No.	Description	Weight (g)
96700601	6 Piece Drift Pin, Centre Punch Set	417

HENCHMAN 5 PIECE PIN PUNCH SET

- Long pin punch set in wallet, made in France
- Contents: 2, 3, 4, 5, 6mm



Part No.	Description
H70-825	5 Piece Pin Punch Set

HENCHMAN 8 PIECE PIN PUNCH SET – LONG

- Long pin punch set in wallet, made in France
- Contents: 2, 3, 4, 5, 6, 8, 9, 10 mm



Part No.	Description
H70-8288	8 Piece Long Pin Punch Set

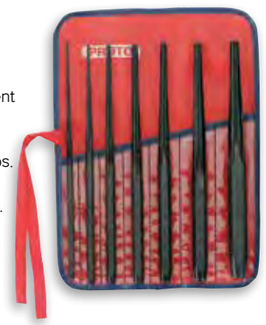
PROTO® 7 PIECE DRIFT PUNCH SET

ASME B107.410

- One-piece design for strength and durability.
- Reverse taper to help prevent binding.
- Set offers a wide range of sizes to handle a variety jobs.
- Includes a pouch for convenient storage solution.

Contents:

- 1/4, 3/32, 3/8, 3/16, 1/8, 5/16, 7/32 inch



Part No.	Description	Weight (lbs)
J96AS2	7 Piece Drift Punch Set	3.46

PROTO® 5 PIECE DRIFT PUNCH SET

ASME B107.410

- One-piece design for strength and durability.
- Reverse taper to help prevent binding.
- Set offers a wide range of sizes to handle a variety jobs.
- Includes a pouch for convenient storage solution.

Contents:

- 1/4, 3/16, 1/8, 5/16, 7/32 inch



Part No.	Description	Weight (lbs)
J96BS2	5 Piece Drift Punch Set	2.30

HENCHMAN 10 PIECE SOFT FACE PUNCH SET

- Made in France
- Interchangeable tips made of Nylon / Brass / Aluminium
- Contents: 8 Tips 10-14 mm, 1 Handle/Chuck, box



Part No.	Description
H70-714	10 Piece Soft Face Punch Set

PROTO® 26 PIECE PUNCH AND CHISEL SET

ASME B107.410

- Reverse taper to help prevent binding.
- Set offers a wide range of sizes to handle a variety jobs.
- Includes a pouch for convenient storage solution.

Contents:

- Cold Chisels: 5/8, 5/16, 1-3/16, 1/4, 7/8, 3/8, 3/4, 1/2, 1 inch
- Center Punches: 1/2, 3/8 inch
- Prick Punch: 5/16 inch
- Pin Punches: 1/4, 3/32, 3/16, 1/8, 5/32, 7/32 inch
- Starting Punch: 1/4, 3/32, 3/16, 1/8, 7/32 inch
- Drift Punches: 1/4, 3/16, 1/8 inch



Part No.	Description	Weight (lbs)
J46S2	26 Piece Punch and Chisel Set	8.91

PROTO® 5 PIECE COLD CHISEL SET

ASME B107.410

- Hand ground cutting edge to the exact angle for cutting through tough metals.
- Reverse taper to help prevent binding.
- Set offers a wide range of sizes to handle a variety jobs.
- Includes a pouch for convenient storage solution.

Contents:

- 5/8, 5/16, 7/16, 3/8, 1/2 inch



Part No.	Description	Weight (lbs)
J86CS2	5 Piece Cold Chisel Set	1.17

PROTO® 7 PIECE COLD CHISEL SET

- One-piece design for strength and durability.
- Hand ground cutting edge to the exact angle for cutting through tough metals.
- Reverse taper to help prevent binding.
- Set offers a wide range of sizes to handle a variety jobs.
- Includes a pouch for convenient storage solution.

Contents:

- 5/8, 5/16, 7/8, 7/16, 3/8, 3/4, 1/2 inch



Part No.	Description	Weight (lbs)
J86BS2	7 Piece Cold Chisel Set	2.75

PROTO® 5 PIECE PUNCH AND CHISEL SET

- Reverse taper to help prevent binding.
- Set offers a wide range of sizes to handle a variety jobs.
- Includes a pouch for convenient storage solution.

Contents:

- Cold Chisel 5/8 inch
- Center Punch: 3/8 inch
- Pin Punches: 3/16, 1/8 inch
- Starting Punch: 1/8 inch



Part No.	Description	Weight (lbs)
J3S2	5 Piece Punch and Chisel Set	1.04

PROTO® 5 PIECE SUPER-DUTY CHISEL SET

- 20% larger striking surface than standard chisels directs the power to the cutting edge.
- One-piece design for strength and durability.
- Longer shank features a knurl for better grip and easy positioning.
- Reverse taper to help prevent binding.
- Set offers a wide range of sizes to handle a variety jobs.
- Includes a pouch for convenient storage solution.

Contents:

- 3/8, 1/2, 5/8, 3/4, 7/8 inch



Part No.	Description	Weight (lbs)
J86000	5 Piece Super-Duty Chisel Set	2.84

Hole Punches

BOEHM 16 PIECE HOLE PUNCH SET 3 - 30 MM

MM

- Can be paired and interchanged quickly and easily, and locked in their patented unique locking system. Often known as joint-cutters or wad punches, have many varied uses, and can be used for cutting out gaskets and sealing rings in foam, cardboard, leather, rubber, fibre, plastic and lead.
- Not only is the quality of these punches unsurpassable, but there is also the added bonus of being able to use pairs of punches. The hollow punch sets can be paired and inter-changed very quickly and easily by using the patented lock in chuck system.
- Used for cutting out clean and circular gaskets and sealing rings in a variety of materials including cardboard, leather, rubber, fibre, lead and plastic. A paired set of punches can be used to cut washers or sealing rings, etc.

Contents:

- Punches: 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 mm
- Handle/Chuck



Part No.	Description
JLB330CM	16 Piece Metric Hole Punch Set 3 - 30 mm

BOEHM 18 PIECE HOLE PUNCH SET 1/8 - 1-3/16 INCH & COMPASS

IN

- Can be paired and interchanged quickly and easily, and locked in their patented unique locking system. Often known as joint-cutters or wad punches, have many varied uses, and can be used for cutting out gaskets and sealing rings in foam, cardboard, leather, rubber, fibre, plastic and lead.
- Not only is the quality of these punches unsurpassable, but there is also the added bonus of being able to use pairs of punches. The hollow punch sets can be paired and inter-changed very quickly and easily by using the patented lock in chuck system.
- Used for cutting out clean and circular gaskets and sealing rings in a variety of materials including cardboard, leather, rubber, fibre, lead and plastic. A paired set of punches can be used to cut washers or sealing rings, etc.

Contents:

- Punches: 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1, 1-1/6, 1-1/8, 1-3/16 inch
- Handle/Chuck
- Compass
- Centering Pin



Part No.	Description
JLB330PRUS	18 Piece Hole Punch Set 1/8 - 1-3/16 inch & Compass

BOEHM 18 PIECE HOLE PUNCH SET 3 - 30 MM & COMPASS

MM

- Can be paired and interchanged quickly and easily, and locked in their patented unique locking system. Often known as joint-cutters or wad punches, have many varied uses, and can be used for cutting out gaskets and sealing rings in foam, cardboard, leather, rubber, fibre, plastic and lead.
- Not only is the quality of these punches unsurpassable, but there is also the added bonus of being able to use pairs of punches. The hollow punch sets can be paired and inter-changed very quickly and easily by using the patented lock in chuck system.
- Used for cutting out clean and circular gaskets and sealing rings in a variety of materials including cardboard, leather, rubber, fibre, lead and plastic. A paired set of punches can be used to cut washers or sealing rings, etc.

Contents:

- Punches: 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 mm
- Handle/Chuck
- Compass
- Centering Pin



Part No.	Description
JLB330PR	18 Piece Metric Hole Punch Set 3 - 30 mm & Compass

HENCHMAN ARCH PUNCHES

- Applications: round holes in gasket material, leather, rubber, canvas, cardboard, plastic & other soft material
- Geometries of the cutting edge prevents jamming of material inside the punch.
- Cutting Edge induction hardened



Part No.	Description	Dia.(MM)	Dia. (Imp.)
H70-204	Arch Punch 4MM	4	0.157
H70-205	Arch Punch 5MM	5	0.197
H70-206	Arch Punch 6MM	6	0.236
H70-208	Arch Punch 8MM	8	0.315
H70-210	Arch Punch 10MM	10	0.394
H70-211	Arch Punch 11MM	11	0.433
H70-212	Arch Punch 12MM	12	0.472
H70-213	Arch Punch 13MM	13	0.512
H70-214	Arch Punch 14MM	14	0.551
H70-215	Arch Punch 15MM	15	0.591
H70-216	Arch Punch 16MM	16	0.630
H70-217	Arch Punch 17MM	17	0.669
H70-218	Arch Punch 18MM	18	0.709
H70-220	Arch Punch 20MM	20	0.787
H70-223	Arch Punch 23MM	23	0.906
H70-224	Arch Punch 24MM	24	0.945
H70-226	Arch Punch 26MM	26	1.024
H70-227	Arch Punch 27MM	27	1.063
H70-228	Arch Punch 28MM	28	1.102
H70-229	Arch Punch 29MM	29	1.142
H70-230	Arch Punch 30MM	30	1.181

Part No.	Description	Dia.(MM)	Dia. (Imp.)
H70-230	Arch Punch 30MM	30	1.181
H70-231	Arch Punch 31MM	31	1.220
H70-232	Arch Punch 32MM	32	1.260
H70-233	Arch Punch 33MM	33	1.299
H70-234	Arch Punch 34MM	34	1.339
H70-235	Arch Punch 35MM	35	1.378
H70-236	Arch Punch 36MM	36	1.417
H70-237	Arch Punch 37MM	37	1.457
H70-238	Arch Punch 38MM	38	1.496
H70-239	Arch Punch 39MM	39	1.535
H70-240	Arch Punch 40MM	40	1.575
H70-241	Arch Punch 41MM	41	1.614
H70-242	Arch Punch 42MM	42	1.654
H70-243	Arch Punch 43MM	43	1.693
H70-244	Arch Punch 44MM	44	1.732
H70-245	Arch Punch 45MM	45	1.772
H70-246	Arch Punch 46MM	46	1.811
H70-247	Arch Punch 47MM	47	1.850
H70-248	Arch Punch 48MM	48	1.890
H70-249	Arch Punch 49MM	49	1.929

HENCHMAN 9 PIECE BELT PUNCH SET

- Hollow punch set for making clean holes in gasket material, leather, rubber, canvas, cardboard, plastic & other soft material

Contents:

- 2.5; 3.0; 4.0; 5.0; 6.0; 7.0; 8.0; 9.0; 10mm



Part No.	Description
H70-200	9 Piece Belt Punch Set

Punch Accessories

PROTO® PUNCH AND CHISEL HOLDER

- Holds punches and chisels up to one inch in diameter reducing the risk of injury.
- Nylon insert absorbs shock.
- Large four-sided handle.



Part No.	Tip Width (in)	Shank (in)	OAL (in)	Weight (lbs)
J2108	-	-	8	0.60

STAHLWILLE FINGER PROTECTOR 112

- for cold chisels No 102 and cross-cut chisels No 103 from 200 mm onward
- for grooving chisel No 110, shaft section 23 x 13 mm
- chisel not included



Part No.	Description	Weight (g)
79160001	Finger Protector	101

Picks & Probes

DENTAL PROBES

Hex handled, strong stainless steel dental probes, for fine work



Part No.	Description
51007	Straight Probe
51008	Hooked Probe
51009	Angled Probe
51010	Curved Probe
51011	4 Piece Dental Probe Set

MINI BRASS O-RING PICK SET 2 PIECES

Contents:

- Straight pry bar 5 11/16" long
- Shepherd's crook pry bar 5 13/16" long
- 2 Pcs in pouch



Part No.	Description	Weight (oz)
H91-035	2 Piece Mini Brass O-Ring Pick set	1-1/2

HENCHMAN HOOK & PICK SET 4 PIECES

- Contains straight, 45°, 90° and round tip
- Perfect for removing O-rings, scribing and parts alignment. Ergonomical round handles for perfect grip, greater control and reduction of hand fatigue.



Part No.	Description	OAL
H91-201	4 Piece Hook & Pick Set	150mm (nominal)

SPRING HOOK

- Strong, hardened spring hook – push/pull.
- A handy tool for many other applications too.
- Made in Germany



Part No.	Description	OAL
2-132	Spring Hook	183mm

PROTO® COTTER PIN PULLER

- Precision formed curves provide excellent leverage in prying out cotter pins quickly and easily.
- Large plastic handle.



Part No.	Blade Width (in)	OAL (in)	Weight (lbs)
J2306D	3-7/16	7-3/4	0.25

Pry Bars

PROTO® PRY BARS WITH HANDLE

Large four-sided handle for a better grip and added comfort.



Part No.	Tip (in)	OAL (in) (L)	Weight (lbs)
J2140	5/8	14-1/2	0.92
J2142	5/8	17-1/2	1.08
J2146	3/4	28	1.37
J2148	3/4	31-7/8	2.17

LOW COST 12" PRYBAR

- Sturdy Prybar with handle
- Great for cowlings rather than breaking screwdrivers



Part No.	Blade Width (in)	Blade Width (mm)	OAL (in)
ABP6062	5/8	16	12

PROTO® 4 PIECE PRY AND ROLLING HEAD BARS SET

- Set includes rolling head and aligning bars.
- Black oxide finish to help prevent rust corrosion; extending tool life and performance.

Contents:

- Pry Bars: 5/8, 3/4 inch
- Rolling Head Bars 1/2, 5/8 inch



Part No.	Description	Weight (lbs)
J2100	4 Piece Pry and Rolling Head Bars Set	8.50

PROTO® ALIGNING PRY BARS

Application: for prying, positioning, and aligning applications.



Part No.	Tip (in)	Shank (in)	OAL (in) (L)	Weight (lbs)
J2116	1/2	1/2	16	0.77
J2120	5/8	5/8	18	1.23
J2124	3/4	3/4	24	2.36
J2125	7/8	7/8	30	4.72

HENCHMAN METAL SKIN WEDGE PRY TOOL

- Usually a very hard-to-find product, made of heat-treated steel to allow the wedge to slightly flex to reduce breakage.
- Width: 1 inch
- Body thickness: 1/4 inch



Part No.	Description
H70-512	Metal Skin Wedge Pry Tool

HENCHMAN 3 PIECE METAL SKIN WEDGE PRY TOOL SET

- Usually a very hard-to-find product, made of heat-treated steel to allow the wedge to slightly flex to reduce breakage.
- Width: 1 inch
- Body thickness: 1/4 inch



Part No.	Description
H70-513	3 Piece Metal Skin Wedge Pry Tool Set

STAHLWILLE TYRE LEVER

- Essentially a tyre lever, but handy general pry bar
- 600m long
- Chrome alloy steel



Part No.	Description
74010601	Tyre Lever 600mm long

PROTO® ROLLING HEAD BARS

Application: Pry and aligning bar with a long pointed taper and 90° rolling head for leverage.



Part No.	Tip (in)	Shank (in)	OAL (in) (L)	Weight (lbs)
J2126	1/2	1/2	12	1.30
J2130	5/8	5/8	16	2.40



Drivers & Screw Extraction

Apex Screwdriver Bits 478
Wiha Screwdriver Bits 480
PROTO® Bit Adapters 484
Ratchet Screwdriver Sets 485
Ratcheting Drivers 486
Wiha SoftFinish® Screwdrivers 488
Wiha Hex Bolster Screwdrivers 491
Specialist Drivers 491
PROTO® Screwdrivers 492
Wiha System 6 Reversible Blade System ... 493
Wiha System 4 Reversible Blade System ... 494
Wiha PicoFinish® Screwdrivers 495
Screw Extractors & Sets 497

Apex Screwdriver Bits

Apex bits are renowned for their quality and used extensively in the aircraft maintenance industry. There is no doubt that Apex lead the market on bits, manufactured according to high US standards. Due to the enormous range, we have only catalogued some of the most popular lines, please enquire if you have not found what you are looking for.

APEX PHILLIPS® INSERT BITS 1/4"



Part No.		
440-1	PH1	25
440-2	PH2	25
440-3	PH3	25

APEX PHILLIPS® ACR INSERT BITS 1/4"



Part No.		Type	
440-1-ACR1-R	PH1	Removal	25
440-1-ACR1-D	PH1	Driving	25
440-1-ACR1	PH1	Both	25
440-2-ACR2-R	PH2	Removal	25
440-2-ACR2-D	PH2	Driving	25
440-2-ACR2	PH2	Both	25
446-2-ACR2-D	PH2	Driving	25
440-22-ACR2-R	PH2	Removal	51
440-22-ACR2-D	PH2	Driving	51
440-22-ACR2	PH2	Both	51
440-3-ACR3-R	PH3	Removal	25
440-3-ACR3-D	PH3	Driving	25
440-3-ACR3	PH3	Both	25

APEX SLOTTED INSERT BITS 1/4"



Part No.		
445-1	3/16"	25
445-2	7/32"	25
445-3	1/4"	25

APEX TRI-WING® INSERT BITS 1/4"



Part No.		
TWD-0	0	25
TWD-1	1	25
TWD-2	2	25
TWD-3	3	25
TWD-4	4	25
TWD-5	5	25
TWD-6	6	25
TWD-7	7	25

TRI-WING® is a registered trademark of Camcar Textron
HI-TORQUE® is the registered trademark of Textron Fasteners

APEX TORQ-SET® INSERT BITS 1/4"



Part No.		
212-0	0	25
212-1	1	25
212-2	2	25
212-3	3	25
212-4	4	25
212-5	5	25
212-6	6	25
212-8	8	25
212-10	10	25
212-1/4	1/4	25

APEX HI-TORQUE® BITS



Part No.		Bolt Nom Ø	Drive	
212-0	0	#0, #1, #2	1/4"	25
212-1	1	#3, #4, #5, #6	1/4"	25
212-2	2	#8	1/4"	25
212-3	3	#10	1/4"	25
212-4	4	1/4"	1/4"	25
212-5	5	1/4"	3/8"	32
212-6	6	5/16"	3/8"	32
212-8	8	3/8"	3/8"	32
212-10	10	7/16"	1/2"	41
212-1/4	1/4	1/2"	1/2"	41

APEX HI-TORQUE® PIZZA BITS



Part No.		Bolt Nom Ø	Drive	
HT3202M	2	#8	1/4"	32
HT3203M	3	#10	1/4"	35
HT3304M	4	1/4"	3/8"	68
HT3305M	5	5/16"	3/8"	70
HT3306M	6	3/8"	3/8"	80
HT3407M	7	7/16"	1/2"	82
HT3408M	8	1/2"	1/2"	84

APEX REPLACEMENT PIZZA WHEELS



Part No.		Ø
HTB2M	2	13
HTB3M	3	14
HTB4M	4	22
HTB5M	5	25
HTB6M	6	31
HTB7M	7	35
HTB8M	8	38

APEX TORQ-SET® POWER DRIVE BITS 1/4"



Part No.	Tip	Drive	OAL (in)
170-0	0	1/4	1-1/4
170-1	1	1/4	1-1/4
170-2	2	1/4	1-1/4
170-3	3	1/4	1-1/4
170-4	4	1/4	1-1/4
170-5	5	1/4	1-1/4
170-6	6	1/4	1-1/4
170-8	8	1/4	1-1/4
170-10	10	1/4	1-1/4
170-1/2	1/2	1/4	1-1/4

APEX TORQ-SET® POWER DRIVE BITS 1/4"



Part No.	Tip	Drive	OAL (in)
273-0	0	1/4	1-15/16
273-1	1	1/4	1-15/16
273-2	2	1/4	1-15/16
273-3	3	1/4	1-15/16
273-4	4	1/4	1-15/16
273-5	5	1/4	1-15/16
273-6	6	1/4	1-15/16
273-8	8	1/4	1-15/16
273-10	10	1/4	1-15/16

APEX MORTORQ® INSERT BITS



Part No.	Tip	Drive	OAL (in)
440-MT-00	00	1/4	1
440-MT-0	0	1/4	1
440-MT-1	1	1/4	1
440-MT-2	2	1/4	1
440-MT-3	3	5/16	1-1/4

APEX TORQ-SET® POWER DRIVE BITS 7/16"



Part No.	Tip	Drive	OAL (in)
265-1/4	1/4	7/16	3-1/2
265-5/16	5/16	7/16	3-1/2

APEX TORQ-SET® POWER DRIVE BITS 7/16"



Part No.	Tip	Drive	OAL (in)
265A-1/4	1/4	7/16	6
265A-5/16	5/16	7/16	6
265A-7/16	7/16	7/16	6

APEX TORQ-SET® POWER DRIVE BITS 1/4" ACR



Part No.	Tip	Drive	OAL (in)
170-6-ACR	6	1/4	1-1/4
170-8-ACR	8	1/4	1-1/4
170-10-ACR	10	1/4	1-1/4

APEX TORQ-SET® POWER DRIVE BITS 1/4" ACR



Part No.	Tip	Drive	OAL (in)
170-1/4B	1/4	1/4	1-1/4
170-5/16B	5/16	1/4	1-1/4
170-3/8B	3/8	1/4	1-1/4

APEX TORQ-SET® INSERT BITS 5/16"



Part No.	Tip	Drive	OAL (in)
212-8A	8	5/16	1-1/4
212-10A	10	5/16	1-1/4
212-1/4A	1/4	5/16	1-1/4
212-5/16A	5/16	5/16	1-1/4
212-3/8A	3/8	5/16	1-1/4

APEX TORQ-SET® POWER DRIVE BITS 5/16"



Part No.	Tip	Drive	OAL (in)
170-8A	8	5/16	1-1/4
170-10A	10	5/16	1-1/4
170-1/4A	1/4	5/16	1-1/4
170-5/16A	5/16	5/16	1-1/4
170-3/8A	3/8	5/16	1-1/4

APEX TORQ-SET® POWER DRIVE BITS 7/16"



Part No.	Tip	Drive	OAL (in)
170-1/4	1/4	7/16	1-1/4
170-5/16	5/16	7/16	1-1/4
170-3/8	3/8	7/16	1-1/4
170-7/16	7/16	7/16	1-1/4

APEX TORQ-SET® POWER DRIVE BITS 7/16" ACR



Part No.	Tip	Drive	OAL (in)
170-1/4-ACR	1/4	7/16	1-1/4
170-5/16-ACR	5/16	7/16	1-1/4
170-3/8-ACR	3/8	7/16	1-1/4

Wiha Screwdriver Bits

Impressive quality / versatile range



Optimum cost/performance ratio is attributed to the process-controlled heat treatment.guaranteeing uniform product quality.

Wiha Standard Bits ideally meet high prformance requirements in terms of both quality and price

WIHA PHILLIPS® INSERT BITS



Part No.		
7011Z025	PH0	25
7011Z125	PH1	25
7011Z225	PH2	25
7011Z325	PH3	25

WIHA PHILLIPS® ACR INSERT BITS



Part No.		
7011Z025	PH1	25
7011Z125	PH2	25
7011Z225	PH3	25

WIHA POZIDRIV INSERT BITS



Part No.		
7012Z025	PZ0	25
7012Z125	PZ1	25
7012Z225	PZ2	25
7012Z235	PZ3	25

WIHA POZIDRIV ACR INSERT BITS



Part No.		
7012A125	PZ1	25
7012A225	PZ2	25
7012A325	PZ3	25

WIHA SLOTTED INSERT BITS



Part No.			
7012A125	4.5	25	0.6
7012A225	5.5	25	0.8
7012A325	6.5	25	1.2
7010 Z8525	8.0	25	1.6

WIHA TORX® INSERT BITS



Part No.		
7015005	T5	25
7015006	T6	25
7015007	T7	25
7015008	T8	25
7015009	T9	25
7015010	T10	25
7015015	T15	25
7015020	T20	25
7015025	T25	25
7015027	T27	25
7015030	T30	25
7015040	T40	25

WIHA SECURITY TORX® INSERT BITS



Part No.		
7015TR007	T7H	25
7015TR008	T8H	25
7015TR009	T9H	25
7015TR010	T10H	25
7015TR015	T15H	25
7015TR020	T20H	25
7015TR025	T25H	25
7015TR027	T27H	25
7015TR030	T30H	25
7015TR040	T40H	25

WIHA TORX® PLUS IP INSERT BITS



Part No.		
7016 4IP	T4	25
7016 5IP	T5	25
7017 6IP	T6	25
7016 7IP	T7	25
7016 8IP	T8	25
7016 9IP	T9	25
7016 10IP	T10	25
7016 15IP	T15	25
7016 20IP	T20	25
7016 25IP	T25	25
7016 27IP	T27	25
7016 30IP	T30	25
7016 40IP	T40	25

WIHA HEX INSERT BITS



Part No.		
701315	1.5	25
701320	2.0	25
701325	2.5	25
701330	3.0	25
701340	4.0	25
701350	5.0	25
701360	6.0	25
701380	8.0	25

WIHA TRI-WING® INSERT BITS



Part No.		
7019TW0	0	25
7019TW1	1	25
7019TW2	2	25
7019TW3	3	25
7019TW4	4	25
7019TW5	5	25

WIHA TORQ-SET® INSERT BITS



Part No.		
7019TS0	0	25
7019TS1	1	25
7019TS2	2	25
7019TS3	3	25
7019TS4	4	25
7019TS5	5	25
7019TS6	6	25
7019TS8	8	25
7019TS10	10	25
7019TS1/4	1/4	32

WIHA SLOTTED POWERDRIVE BITS



Part No.			
7040030	3.0	50	0.5
7040035	3.5	50	0.6
7040040	4.0	50	0.5
7040045	4.5	50	0.6
7040055	5.5	50	0.8
7040065	6.5	50	1.2
7040080	8.0	50	1.2

TRI-WING® is a registered trademark of Camcar Textron

WIHA PHILLIPS® POWERDRIVE BITS



Part No.		
7041150	PH1	50
7041250	PH2	50
7041350	PH3	50

WIHA PHILLIPS® POWERDRIVE BITS



Part No.		
7041170	PH1	70
7041190	PH1	90
70411127	PH1	127
70411150	PH1	150
7041270	PH2	70
7041290	PH2	90
70412127	PH2	127
70412150	PH2	150
7041370	PH3	70
7041390	PH3	90

WIHA POZIDRIV POWERDRIVE BITS



Part No.		
7042150	PZ1	50
7042250	PZ2	50
7042350	PZ3	50

WIHA POZIDRIV POWERDRIVE BITS



Part No.		
7042170	PZ1	70
7042190	PZ1	90
70421127	PZ1	127
70421150	PZ1	150
7042270	PZ2	70
7042290	PZ2	90
70422127	PZ2	127
70422150	PZ2	150
7042370	PZ3	70
7042390	PZ3	90

WIHA HEX POWERDRIVE BITS



Part No.		
7043Z15	1.5	50
7043Z20	2.0	50
7043Z25	2.5	50
7043Z30	3.0	50
7043Z40	4.0	50
7043Z50	5.0	50
7043Z60	6.0	50
7043Z80	8.0	50

WIHA TORX® POWERDRIVE BITS



Part No.		
7045T05	T5	50
7045T06	T6	50
7045T07	T7	50
7045T08	T8	50
7045T09	T9	50
7045T10	T10	50
7045T15	T15	50
7045T20	T20	50
7045T25	T25	50
7045T27	T27	50
7045T30	T30	50
7045T40	T40	50

WIHA SECURITY TORX® POWERDRIVE BITS



Part No.		
7045TR07	T7H	50
7045TR08	T8H	50
7045TR09	T9H	50
7045TR10	T10H	50
7045TR15	T15H	50
7045TR20	T20H	50
7045TR25	T25H	50
7045TR30	T30H	50
7045TR35	T35H	50
7045TR40	T40H	50

WIHA TRI-WING® POWERDRIVE BITS



Part No.		
7049TW3	3	50
7049TW4	4	50
7049TW5	5	50
7049TW6	6	50

WIHA 31 PIECE 1/4" BIT SET STANDARD 25MM

- Housing: Practical, rugged plastic box.
- Bits: 25 mm Standard bits.
- Bit holder: Universal holder, magnetic.

Contents:

7010 Z — 1 x 4.5, 1 x 5.5, 1 x 6.5
7011 Z — 2 x PH1, 6 x PH2, 1 x PH3
7012 Z — 2 x PZ1, 6 x PZ2, 1 x PZ3
7013 — 4.0, 5.0, 6.0
7015 — T10, T15, T20, T25, T30, T40
41922 — Bit holder magnetic extra strong magnet, 60 mm



Part No.	Description
7979-01	31 Piece 1/4" Bit Set Standard 25mm

WIHA UNIVERSAL BIT HOLDERS



Part No.	Style	
7113S	Universal Bit Holder with Magnet	60
7140	Universal Bit Holder with Retaining Ring	60

WIHA BIT SOCKETS WITH RETAINING RING



Part No.			
720114	1/4	1/4	25
720138	1/4	3/8	30
720112	1/4	1/2	35

1/4" HEX-SQUARE DRIVE ADAPTERS



Part No.			
724014050	1/4	1/4	50
724038	3/8	1/4	50

TRI-WING® is a registered trademark of Camcar Textron

WIHA TORQ-SET® POWERDRIVE BITS



Part No.		
7049 TS4	4	50
7049 TS5	5	50
7049 TS6	6	50
7049 TS8	8	50
7049 TS10	10	50

WIHA BIT HOLDERS 1/4" – MAGNETIC



Part No.			
38414125	1/4	125	225
38414300	1/4	300	400

WIHA DRIVERS FOR HEX NUTS – FLEXIBLE SHAFT



Part No.			
372050	5	50	261
372055	5.5	150	261
372060	6	150	261
372070	7	150	268
372080	8	150	268
372100	10	175	293
372130	13	175	293
38614	1/4	150	268

WIHA BIT HOLDER SETS WITH BITS

- The alternative to a screwdriver set.
- Eight drive shapes in one screwdriver.
- High grade chrome-vanadium steel, through hardened
- Ergonomic Wiha SoftFinish® multi-component handle with roll-off protection
- Stainless steel bit holder with strong magnet
- Suitable for DIN 3126, ISO 1173, style D 6.3
- 5 mm Standard bits



Part No.				
3809-8-STD	6.5	PH1, PH2, PH3	T15, T20, T25	PZ2
3809-8-Torx®	–	–	T6, T8, T10, T15, T20, T25, T30, T40	–
3809-8-PPS	5.5, 6.5	PH1, 3x PH2, 2x PH3	–	–

WIHA NUTDRIVER POWERBITS



Part No.		
704450	5.0	55
704455	5.5	55
704460	6.0	55
704470	7.0	55
704480	8.0	55
704410	10.0	55
704413	13.0	55
7044140	1/4	55
7044516	5/16	55
7044380	3/8	55

WIHA NUTDRIVER BITS WITH MAGNETS



Part No.		
7044M50	5.0	55
7044M55	5.5	55
7044M60	6.0	55
7044M70	7.0	55
7044M80	8.0	55
7044M10	10.0	55
7044M13	13.0	55
7044M140	1/4	55
7044M516	5/16	55
7044M380	3/8	55

WIHA STUBBY BIT-HOLDING DRIVERS



Part No.					
DST-06	PH1	4.5	15	41	1/4"
DST-07	PH2	6.0	16	42	1/4"

WIHA STUBBY BIT HOLDER SETS WITH BITS



Part No.				
3801-6-STD	4.5, 6.5, 8.0mm	PH1, PH2 PH3	–	–
3801-6-Torx®	–	–	T10, T15, T20, T25, T30, T40	–
3801-6-PPS	4.5, 6.5, 8.0mm	–	–	PZ1, PZ2 PZ3

PROTO® Bit Adapters

PROTO® EXTENSIONS – SQUARE TIPS, BALL DETENT.



- Made of forged steel.
- Size stamped on tool for easy identification.
- Not for use on impact applications.

Part No.	Drive Size (in)	Male Square	Style	OAL (in) (L)	Weight (lbs)
J7111	7/16 Hex	3/8	Pin	2-3/4	0.14
J7121	7/16 Hex	1/2	Pin	2-3/4	0.17

PROTO® EXTENSIONS SQUARE TIP



- Made of forged steel.
- Size stamped on tool for easy identification.
- Ball detent.

Part No.	Drive Size (in)	Male Square	Style	OAL (in) (L)	Weight (lbs)
J61302	1/4 Hex	1/4	Pin	2	0.04
J61304	1/4 Hex	1/4	Pin	4	0.08
J61306	1/4 Hex	1/4	Pin	6	0.12
J61352	1/4 Hex	1/4	Ball	2	0.04
J61402	1/4 Hex	3/8	Pin	2	0.05
J61404	1/4 Hex	3/8	Pin	4	0.13
J61406	1/4 Hex	3/8	Pin	6	0.13
J61502	7/16 Hex	3/8	Ball	2	0.05

PROTO® MAGNETIC BIT HOLDERS



Part No.	Drive	OAL (in)	Weight (lbs)
J61222	1/4	2-1/4	0.07
J61223	1/4	2-31/32	0.08
J61234	1/4	2-1/4	0.05
J61238	1/4	3	0.10
J61224	1/4	4	0.12
J61226	1/4	6	0.20

PROTO® BIT HOLDERS

Not for use on impact applications.



Part No.	Drive	OAL (in)	Weight (lbs)
J61200	1/4	2-1/4	0.04

PROTO® 3 PIECE NUT SETTER SET 1/4" HEX SHANK

- TorquePlus™ features apply.
- Magnets feature enhanced holding power to help improve fastener retention, helping to increase productivity.
- Distinctive gold finish.
- Contents: 1/4, 5/16, 3/8 inch



Part No.	Description	Weight (lbs)
J61909HS	3 Piece Nut Setter Set 1/4" Hex Shank	0.21

PROTO® POWER BIT HOLDER

Not for use on impact applications.



Part No.	Drive	Hex	OAL (in)	Weight (lbs)
J6925	1/4	1/4	1	0.04
J6931	3/8	1/4	1-3/4	0.07
J6930	3/8	5/16	1-5/16	0.07
J6935	1/2	5/16	1-1/2	0.11

PROTO® 38 PIECE INSERT/POWER BIT SET

- Magnetic base provides tool organization as well as portability.
- Strong magnetic bond allows for superior holding strength.
- Holder allows bits to remain organized in a tool box drawer as well as on any metal surface.
- Mixed assortment of standard, slotted, Phillips®, and Torx® tips and clutches to help in a variety of tasks.

Contents:

- Philips 1/4" Insert Bits: #0, #1, #2, #3, #2 (Reduced Dia.)
- Pozidriv 1/4" Insert Bits: #1, #2
- Slotted 1/4" Insert Bits: 4F-5R, 6F-8R, 8F-10R, 10F-12R, 12F-14R, 14F-16R
- Torx® Insert Bits: T6, T7, T8, T9, T10, T15, T20, T25, T30, T40
- Socket Heads: 3/32, 7/64, 1/8, 9/64, 5/32, 3/16 inch
- Square Recess: #0, #1, #2, #3
- Clutch Insert Bits: 1/8, 5/32, 3/16 inch
- Bit Holder Magnetic
- Bit Holder Power



Part No.	Description	Weight (lbs)
J61906	38 Piece Insert/Power Bit Set	1.21

Ratchet Screwdriver Sets

HENCHMAN MEGAPRO 1/4" DRIVE RATCHETING SCREWDRIVER

- 28 tooth ratchet
- 303 stainless steel shaft
- 12 insert bits

Contents:

- 1/4 inch hex Driver
- Philips® Insert Bits: PH1, PH2, PH3
- Square Insert Bit: 2
- Slotted Insert Bits: 4mm, 6mm
- Torx® Insert Bits: T10, T15, T20, T25, T27, T30

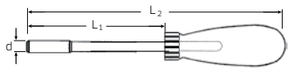


Part No.	Description	Weight (g)
211R1C36RD	5 Piece Magnetic Ratcheting Screwdriver with Bits Set	295

STAHLWILLE 1/4" DRIVE HANDLE – RATCHETING BIT HOLDER 4008

- easy change of direction (anticlockwise, clockwise and fixed) by simply twisting the locking ring
- ergonomically designed, non-slip 2-component handle for optimum force transmission
- storage compartment for 6 bits in the handle; push button to open (size 1)
- for bit screwdriver inserts with external hex 1/4" DIN 3126/ISO 1173 Type C 6.3
- 1/4" sockets can be used with adaptor No 3115/1 (external hex and square drive 1/4")
- easy bit change thanks to internal hex. drive with magnet
- knurled spin section for faster screw advance
- heavy-duty mechanism with 48 teeth (7.5° working angle)



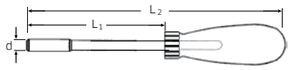


Part No.	Drive Size	Size	Dia. (D)	Shaft Length (L1) (mm)	OAL (L2) (mm)	Depth (d) (mm)	Weight (g)
1812 00 01	1/4	1	D 6.3	127	250	10	220

STAHLWILLE 1/4" DRIVE HANDLE – RATCHETING BIT HOLDER 4008

- easy change of direction (anticlockwise, clockwise and fixed) by simply twisting the locking ring
- ergonomically designed, non-slip 2-component handle for optimum force transmission
- storage compartment for 6 bits in the handle; push button to open (size 1)
- for bit screwdriver inserts with external hex 1/4" DIN 3126/ISO 1173 Type C 6.3
- 1/4" sockets can be used with adaptor No 3115/1 (external hex and square drive 1/4")
- easy bit change thanks to internal hex. drive with magnet
- knurled spin section for faster screw advance
- heavy-duty mechanism with 48 teeth (7.5° working angle)





Part No.	Drive Size	Size	Dia. (D)	Shaft Length (L1) (mm)	OAL (L2) (mm)	Depth (d) (mm)	Weight (g)
1812 00 02	1/4	2	D 6.3	25	95	10	137

PROTO® 28 PIECE 1/4" DRIVE MAGNETIC SCREWDRIVER BIT SET

- Packaged in plastic blow-molded case for easy storage.

Contents:

- Philips® Insert Bits: 0, 1, 2, 3
- Slotted Insert Bits: 3F-4R, 4F-5R
- Slotted Insert Bits: 7/32, 5/32, 9/32 inch
- Torx® Insert Bits: T10, T15, T20, T25, T30, T40
- Square Recess Insert Bits: 0, 1, 2, 3
- Socket Heads: 5/64, 3/32, 1/8, 5/32, 3/16 inch
- Clutches: 1/8, 5/32 inch
- Magnetic Bit Holder



Part No.	Description	Weight (lbs)
J61929	28 Piece 1/4" Drive Magnetic Screwdriver Bit Set	1.07

Ratcheting Drivers



GEARDRIVER™ RATCHETING HANDLES



Part No.	Description	OAL (mm)
GW 890001	Standard GearDriver™ Handle	-
GW 890005	Stubby GearDriver™ Handle	-
GW 890006	GearDriver™ T-Handle	-

GEARDRIVER™ MAGNETIC BIT SHAFT



Part No.	Description	OAL (mm)
GW 310901	Magnetic Bit Shaft	90
GW 310902	Magnetic Bit Shaft	150
GW 310903	Magnetic Bit Shaft	250

GEARDRIVER™ 1/ 4" DRIVE SOCKET SHAFT



Part No.	Description	OAL (mm)
GW 311901	1/4" Dr. Skt. Shaft	90
GW 311902	1/4" Dr. Skt. Shaft	150
GW 311904	1/4" Dr. Skt. Shaft	250

GEARDRIVER™ FLEXIBLE SHAFTS (BITS OR SOCKETS)

The 2 long versions are extremely flexible, up to 180°



Part No.	Description	OAL (mm)
GW 890008	180° Flex Shaft for Bits*	275
GW 890009	180° Flex Shaft for 1/4" Dr Sockets*	275
GW 311903	Flex Shaft for 1/4" Dr Sockets	150

GEARDRIVER™ 39 PIECE RATCHETING SCREWDRIVER SET

- 1 x GearDriver™ Handle
- 3 x Magnetic Bit Driver Shafts: 3-1/2", 6" & 10",
- 3 x 1/4" Dr. Socket Shafts: 3-1/2", 6" & 10"
- 1 x Flexible Shaft - 6" 1/4" socket to bit Adapter
- 30 x Drive Bits



Part No.	Description
GW 8939	39 Piece Ratcheting Driver Set

GEARDRIVER™ 3 PIECE STUBBY RATCHETING SCREWDRIVER SET

- GW 890005 Stubby GearDriver™ Handle
- GW 310901 GearDriver™ Magnetic Bit Shaft 3-1/2"
- 7011 ACR PH 2 x 25 Wiha Bit



Part No.	Description
GW 890091	3 Piece Stubby Racheting Screwdriver Set

GEARDRIVER™ 4 PIECE STANDARD RACHETING SCREWDRIVER SET

- GW 890001 GearDriver™ Handle (Removable Cap for storage of bits)
- GW 310902 GearDriver™ Magnetic Bit Shaft 6"
- 7011 ACR PH 2 x 25 Wiha Bit
- 7010 Z Slotted 6.5 x 25 Wiha Bit



Part No.	Description
GW 890092	4 Piece Standard Racheting Screwdriver Set

GEARDRIVER™ 3 PIECE FLEX SHAFT RATCHETING SCREWDRIVER SET

- GW 890001 GearDriver™ Handle(Removable Cap for storage of bits)
- GW 311903 GearDriver™ 1/4" Dr. Skt. Flex Shaft 6"
- GW 890002 1/4" Dr Bit Adapter



Part No.	Description
GW 890093	3 Piece Flex Shaft Ratcheting Screwdriver Set

GEARDRIVER™ 3 PIECE T-HANDLE SHORT RATCHETING SCREWDRIVER SET

- GW 890006 GearDriver™ T-Handle
- GW 310901 GearDriver™ Magnetic Bit Shaft 3-1/2"
- 7011 ACR PH 2 x 25 Wiha Bit



Part No.	Description
GW 896091	3 Piece T-Handle Racheting Screwdriver Set

GEARDRIVER™ 3 PIECE T-HANDLE LONG RACHETING SCREWDRIVER SET

- GW 890006 GearDriver™ T-Handle
- GW 310902 GearDriver™ Magnetic Bit Shaft 6"
- 7011 ACR PH 2 x 25 Wiha bit



Part No.	Description
GW 896092	3 Piece T-Handle Long Racheting Screwdriver Set

HENCHMAN 52 TOOTH 1/4" REVERSIBLE BIT RATCHET

- Excellent for working in tight spaces
- Only 93mm long it fits in the palm of your hand
- Possibility of lengthening the handle by using an insert bit in the magnetic holder inside the base handle to gain greater tourque (max 10Nm)
- Quick-disk on the drive head allows for quick tightening or loosening of fasteners when ratcheting is not required
- 1/4" magnetic bit holder



Part No.	Description
H66-958	52 Tooth 1/4" Reversible Bit Ratchet

HENCHMAN MINIATURE BIT RATCHET 25° OFFSET

- Ideal for confined work areas
- Miniature ratchet with 25° offset head for use with 1/4" hex bits
- 72-tooth ratchet mechanism allowing 5° rotational movement between teeth
- Incorporates a magnetic bit holder
- Fingertip adjustment by means of knurled thumbscrew
- Reverse lever for one-handed operation
- Vinyl grip provides a comfort grip



Part No.	Description
H66-940	Miniature Bit Ratchet 25° Offset

HENCHMAN MINIATURE BITS RATCHET STRAIGHT

- Ideal for confined work areas
- Miniature ratchet, straight version for use with 1/4" hex bits
- 72-tooth ratchet mechanism allowing 5° rotational movement between teeth
- Incorporates a magnetic bit holder
- Fingertip adjustment by means of knurled thumbscrew
- Reverse lever for one-handed operation
- Vinyl grip provides a comfort grip



Part No.	Description
H66-936	Miniature Bits Ratchet Straight

GEARDRIVER™ RATCHET FOR 1/4" BITS

With fine ratcheting mechanism



Part No.	Description
F26BR	Ratchet for 1/4" Bits

HENCHMAN 1/4 & 5/16 REVERSIBLE BIT RATCHET

- Smallest, lowest profile head in the industry
- Quick-disk on the drive head allows for quick tightening or loosening of fasteners when ratcheting is not required
- 1/4" Socket drive adapter easily converts this bit ratchet into a 1/4" socket driver
- 1/4" Reversible 52-Tooth Ratcheting
- 5/16" Reversible 64-Tooth Ratcheting
- 1/4" Ratchet 30Nm
- 5/16" Ratchet 40Nm
- Polished Chrome Finish



Part No.	Description
H66-964	1/4 & 5/16 Reversible Bit Ratchet

HENCHMAN MINIATURE BIT RATCHET 25° REVERSE OFFSET

- Ideal for confined work areas
- Miniature ratchet with 25° reverse offset head for use with 1/4" hex bits
- 72-tooth ratchet mechanism allowing 5° rotational movement between teeth
- Incorporates a magnetic bit holder
- Fingertip adjustment by means of knurled thumbscrew
- Reverse lever for one-handed operation
- Vinyl grip provides a comfort grip



Part No.	Description
H66-938	Miniature Bit Ratchet 25° Reverse Offset

1/4" SQUARE DRIVE FINGER DISC RATCHET

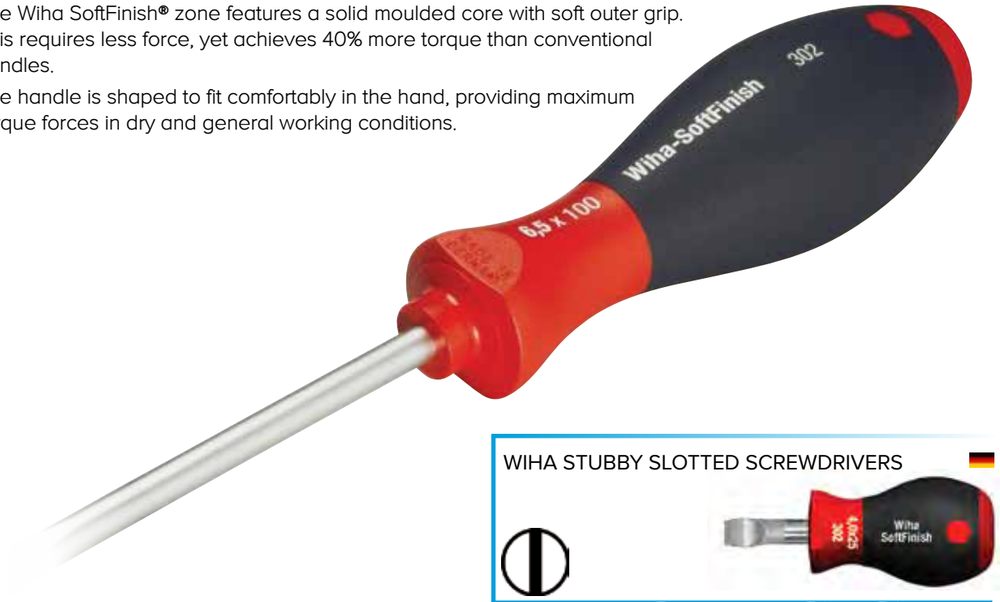
- ABS finger grip disc ratchet with 72 teeth
- Left/Right direction switch.



Part No.	Description	Diameter
H66-968	1/4" Square Drive Finger Disc Ratchet	50 mm

Wiha SoftFinish® Screwdrivers

- The Wiha SoftFinish® zone features a solid moulded core with soft outer grip. This requires less force, yet achieves 40% more torque than conventional handles.
- The handle is shaped to fit comfortably in the hand, providing maximum torque forces in dry and general working conditions.



WIHA SLOTTED SCREWDRIVERS



Part No.					
302020	2.0	65	0.4	2.0	169
302025	2.5	75	0.4	2.5	179
302030	3.0	80	0.5	3.0	184
302030100	3.0	100	0.5	3.0	204
302030150	3.0	150	0.5	3.0	254
302030200	3.0	200	0.5	3.0	304
302035	3.5	100	0.6	3.5	204
302035200	3.5	200	0.5	3.5	304
302040	4.0	100	0.8	4.0	211
302040150	4.0	150	0.8	4.0	261
302040200	4.0	200	0.8	4.0	311
302040300	4.0	300	0.8	4.0	411
302045080	4.5	80	0.8	4.5	191
302045	4.5	125	0.8	4.5	236
302055	5.5	125	1.0	5.5	236
302055150	5.5	150	1.0	5.5	261
302055200	5.5	200	1.0	5.5	311
302055300	5.5	300	1.0	5.5	411
302060100	6.0	100	1.2	6.0	218
302060150	6.0	150	1.2	6.0	268
302065100	6.5	100	1.2	6.0	218
302065150	6.5	150	1.2	6.0	268
302065200	6.5	200	1.2	6.0	318
302080150	8.0	150	1.2	7.0	274
302080	8.0	175	1.2	7.0	299
302100	10.0	200	1.6	8.0	324
302120	12.0	250	2.0	8.0	374
302140	14.0	250	2.5	11.0	374

Phillips® is a trademark of Phillips® Screw Company

WIHA STUBBY SLOTTED SCREWDRIVERS

Part No.					
302040025	4.0	25	0.8	4.0	81
302055025	5.5	25	1.0	5.5	81
302065025	6.5	25	1.2	6.5	81
302080025	8.0	25	1.2	8.0	81

WIHA PHILLIPS® SCREWDRIVERS



Part No.					
3110060	PH0	60	3.0	164	23
3110100	PH0	100	3.0	204	23
3111080	PH1	80	4.5	191	30
3111100	PH1	100	4.5	211	30
3111200	PH1	200	4.5	311	30
3111300	PH1	300	4.5	411	30
3112100	PH2	100	6.0	218	36
3112150	PH2	150	6.0	268	36
3112200	PH2	200	6.0	318	36
3112300	PH2	300	6.0	418	36
3113150	PH3	150	8.0	274	41
3114200	PH4	200	10.0	324	41

WIHA STUBBY PHILLIPS® SCREWDRIVERS



Part No.					
3111025	PH1	25	4.5	81	34
3112025	PH2	25	6.0	81	34
3113025	PH3	25	8.0	81	34

WIHA POZIDRIV SCREWDRIVERS



Part No.				
3130060	PZ0	60	3.0	164
3131080	PZ1	80	4.5	191
3131300	PZ1	300	4.5	411
3132100	PZ2	100	6.0	218
3132300	PZ2	300	6.0	418
3133150	PZ3	150	8.0	274

WIHA STUBBY POZIDRIV SCREWDRIVERS



Part No.				
3131025	PZ1	25	4.5	81
3132025	PZ2	25	6.0	81
3133025	PZ3	25	8.0	81

WIHA TORX® SCREWDRIVERS



Part No.				
362 T3	T3	60	2.5	164
362 T4	T4	60	2.5	164
362 T5	T5	60	2.5	164
362 T6	T6	60	3.5	164
362 T7	T7	60	3.5	164
362 T8	T8	60	3.5	164
362 T9	T9	60	4.0	171
362 T10	T10	80	4.0	191
362 T15	T15	80	4.0	191
362 T20	T20	100	4.0	211
362 T25	T25	100	4.5	211
362 T27	T27	115	5.5	233
362 T30	T30	115	6.0	233
362 T40	T40	130	7.0	254
362 T45	T45	130	8.0	254

WIHA SECURITY TORX® SCREWDRIVERS



Part No.				
362 TR07	T7H	60	3.5	164
362 TR08	T8H	60	3.5	164
362 TR09	T9H	60	4.0	171
362 TR10	T10H	80	4.0	191
362 TR15	T15H	80	4.0	191
362 TR20	T20H	100	4.0	211
362 TR25	T25H	100	4.5	211
362 TR27	T27H	115	5.5	233
362 TR30	T30H	115	6.0	233
362 TR40	T40H	130	7.0	254

Torx® is a trademark of Acument Intellectual Properties, LLC

WIHA NUTDRIVERS



Part No.			
341040	4	125	236
341050	5	125	236
341055	5.5	125	236
341060	6	125	236
341070	7	125	243
341080	8	125	243
341090	9	125	243
341100	10	125	243
341110	11	125	243
341120	12	125	249
341130	13	125	249
341140	14	125	249
341150	15	125	249
341160	16	125	249
341170	17	125	249
347316	3/16	125	231
347140	1/4	125	238
347516	5/16	125	238
347380	3/8	125	238
347716	7/16	125	246
347120	1/2	125	246

WIHA NUTDRIVERS – MAGNETIC



Part No.			
341MAG55	5.5	125	236
341MAG55-10	5.5	250	367
341MAG70	7.0	125	243

WIHA FOR HEX NUTS – FLEXIBLE SHAFT



Part No.			
372050	5	50	261
372055	5.5	150	261
372060	6	150	261
372070	7	150	268
372080	8	150	268
372100	10	175	293
372130	13	175	293
38614	1/4	150	268

WIHA BIT HOLDER 1/4" – MAGNETIC



Part No.			
38414125	1/4	125	225
38414300	1/4	300	400

WIHA DRIVER FOR HEX SCREWS



Part No.			
356025	2.5	75	179
356030	3	75	179
356040	4	75	186
356050	5	75	186
356060	6	100	218
356080	8	100	218

WIHA DRIVER FOR HEX SCREWS – BALL POINT



Part No.			
36701501	1.5	75	179
36702001	2	100	204
36702501	2.5	100	204
36703001	3	100	204
36704001	4	100	211
36705001	5	100	211
36706001	6	125	243
36708001	8	150	268
36710001	10	150	271
36712001	12	150	271

WIHA SLOTTED SCREW-HOLDING DRIVERS



Part No.				
398-25	2.5	75	186	30
398-30	3.0	100	211	30
398-40	4.0	125	243	36
398-50	5.0	150	268	36
398-60	6.0	175	293	36

WIHA PHILLIPS® SCREW-HOLDING DRIVERS



Part No.				
397-0	PH0	100	211	30
397-1	PH1	125	236	36
397-2	PH2	175	286	36

WIHA 6 PIECE SLOTTED & PHILLIPS® SCREWDRIVER SET

Contents:

302
- 3.5 x 100
- 4.5 x 125
- 5.5 x 150
- 6.5 x 150

311
- PH1 x 80
- PH2 x 100



Part No.	Description
302HK6SO	6 Piece Slotted & Phillips® Screwdriver Set

WIHA 6 PIECE TORX® SCREWDRIVER SET

Contents:

362
- T10 x 80
- T15 x 80
- T20 x 100
- T25 x 100
- T30 x 115
- T40 x 130



Part No.	Description
362K6SO	6 Piece Torx® Screwdriver Set

WIHA 5 PIECE NUTDRIVER SET

Contents:

341
- 5.5 x 125
- 7 x 125
- 8 x 125
- 10 x 125
- 13 x 125



Part No.	Description
341K5	5 Piece Nutdriver Set

WIHA 6 PIECE SLOTTED & PHILLIPS® SLIMLINE SCREWDRIVER SET – INSULATED

Contents:

320N
- 3.0 x 100
- 4.0 x 100
- 5.5 x 125
- 6.5 x 150

321 N
- PH1 x 80
- PH2 x 100



Part No.	Description
3201K6	6 Piece Slotted & Phillips® VDE Screwdriver Set Slimline

Torx® is a trademark of Acument Intellectual Properties, LLC
Phillips® is a trademark of Phillips® Screw Company

Wiha Hex Bolster Screwdrivers

- The Wiha SoftFinish® zone features a solid moulded core with soft outer grip. in the hand, providing maximum torque forces
  This requires less force, yet achieves 40% more torque than conventional handles.
- The Hex bolster shank allows for a wrench to be applied and is s stronger shank than the round series
- Also available with a solid steel cap and hex blade extending through the handle





WIHA SLOTTED HEX BOLSTER SCREWDRIVERS



Part No.					
308065	6.5	125	1.2	6.0	238
30808150	8.0	150	1.2	8.0	268
308090	9.0	150	1.4	8.0	268
30810175	10.0	175	1.6	8.0	293
308120	12.0	200	2.0	10.0	318
308140	14.0	250	2.5	10.0	368

WIHA SLOTTED STRIKEABLE SCREWDRIVERS



Part No.					
530065	6.5	125	1.2	6.0	238
530080	8.0	150	1.2	8.0	268
530100	10.0	175	1.6	8.0	296
530120	12.0	200	2.0	10.0	321
530120	14.0	250	2.5	10.0	371

Specialist Drivers

STAHLWILLE OFFSET SLOTTED SCREWDRIVERS



Part No.	End A	End B
73273001	0.6	3.5
73273002	0.8	4.0
73273003	1.0	5.5
73273004	1.2	8.0

STAHLWILLE OFFSET PHILLIPS SCREWDRIVERS



Part No.	End A	End B
73282001	PH1	PH2
73282002	PH3	PH4

CABIN LAVATORY SCREWDRIVER

Anti-tamper 1/4 turn screwdriver for toilets on Boeing 737 aircraft



Part No.	Description
29-90-114-10	Cabin Lavatory Screwdriver

WIHA MAGNETISER / DEMAGNETISER

Magnetises screwdriver tips quickly and effortlessly, so that screws and small parts can be mounted much more easily.

Demagnetise the screwdriver again by pushing it through the steps several times until it is demagnetised. The tool's strong permanent magnet has an extremely long service life.



Part No.	Description
400 10	Magnetiser/Demagnetiser

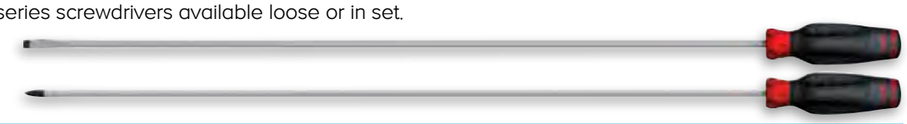
Phillips® is a trademark of Phillips® Screw Company

PROTO® Screwdrivers

PROTO® 2 PIECE EXTRA-LONG COMBINATION SCREWDRIVERS

ASME B107.600

- Extra long series screwdrivers available loose or in set.



Part No.	Description	Tip		
JK1424R	Screwdriver, Slotted, 1/4 wide tip x 24" blade	6.35mm	600mm	24"
JP0224R	Screwdriver, Phillips 2 tip x 24" blade	Ph2	600mm	24"
J1202SCXL	2 Piece Extra-Long Combination Screwdriver Set			

PROTO® COMBINATION SCREW STARTER



Part No.	OAL (in)	Weight (lbs)
J9866	6-1/4	0.04

PROTO® SLOTTED SCREW STARTERS



Part No.	OAL (in)	Weight (lbs)
J9851	2-5/8	0.02
J9853	5-5/8	0.04
J9855	9-5/8	0.09

PROTO® PHILLIPS® SCREW STARTERS



Part No.	OAL (in)	Weight (lbs)
J9882	2-3/4	0.02
J9884	5-3/4	0.05
J9886	9-3/4	0.06

PROTO® 7 PIECE HOLLOW SHAFT NUT DRIVER SET

ASME B107.12

- Full hollow shaft design for maximum bolt clearance.
- One-piece shaft design for greater strength and durability.
- Ideal for electronics, assembly, and various industrial applications.
- Color coded handles for easy size identification.
- OAL: 6-11/16 inch

Contents:

- 3/16, 1/4, 5/16, 11/32, 3/8, 7/16, 1/2 inch

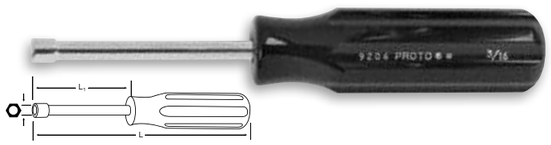


Part No.	Description
J9200H	7 Piece Hollow Shaft Nut Driver Set

PROTO® TRADITIONAL NUT DRIVERS

ASME B107.12

- Full hollow shaft design for maximum bolt clearance (part numbers ending with "H").
- One-piece shaft design for greater strength and durability.
- Ideal for electronics, assembly, and industrial applications.
- Color coded handles for easy size identification.



Part No.	Size (in)	Size(mm)	OAL (in)	Weight (lbs)
J9206H	3/16	–	2-3/4	0.18
J9208H	1/4	–	2-3/4	0.18
J9210H	5/16	–	2-3/4	0.19
J9211H	11/32	–	2-3/4	0.22
J9212H	3/8	–	2-3/4	0.19
J9214H	7/16	–	2-3/4	0.27
J9216H	1/2	–	2-3/4	0.27
J9206	3/16	–	2-3/4	0.20
J9207	7/32	–	2-3/4	0.20
J9208	1/4	–	2-3/4	0.19
J9209	9/32	–	2-3/4	0.23
J9210	5/16	–	2-3/4	0.23
J9211	11/32	–	2-3/4	0.22
J9212	3/8	–	2-3/4	0.23
J9214	7/16	–	2-3/4	0.34

Part No.	Size (in)	Size (mm)	OAL (in)	Weight (lbs)
J9216	1/2	–	2-3/4	0.34
J9218	9/16	–	2-3/4	0.45
J9220	5/8	–	2-3/4	0.50
J9204M	–	4	2-7/8	0.19
J9205M	–	5	2-7/8	0.19
J92055M	–	5.5	2-7/8	0.19
J9206M	–	6	2-7/8	0.19
J9207M	–	7	2-7/8	0.22
J9208M	–	8	2-7/8	0.22
J9209M	–	9	2-7/8	0.24
J9210M	–	10	2-7/8	0.29
J9211M	–	11	2-7/8	0.36
J9212M	–	12	2-7/8	0.36
J9213M	–	13	2-7/8	0.43
J9214M	–	14	2-7/8	0.50

Phillips® is a trademark of Phillips® Screw Company

Wiha System 6 Reversible System

- The Wiha SYSTEM 6 and SYSTEM 4 reversible blade systems are high- quality, industrial quality products, made with state of the art materials and finished to the highest standard of workmanship.
- The 150mm long reversible blades are made of high quality chrome-vanadium-molybdenum steel, are through hardened and chrome plated.
- The various handles are especially ergonomically designed and guarantee optimal force transmission.
- The Wiha reversible blade systems provide the right tool for every application – ideal for industry, trade and the ambitious handyman

WIHA SYSTEM 6 HANDLES



Part No.	Description			
284SF	System 6 Handle	6.0	115	36
284ESD	ESD Safe Handle	6.0	115	36

WIHA 6 PIECE SYSTEM 6 STARTER SET

- in rollup pouch

Contents:

- SL 3.5 x 4.5 x 150
- SL 4.0 x 6.0 x 150
- SL 5.5 x 6.5 x 150
- PH1 x PH2 x 150
- Hex 5.0 x 5.0



Part No.	Description
281T6	6 Piece System 6 Starter Set

WIHA 8 PIECE SYSTEM 6 NUTDRIVER SET

- in rollup pouch

Contents

- 5.0, 5.5, 6.0, 7.0, 8.0, 10.0, 13.0 mm



Part No.	Description
U106T8	7 Piece System 6 Nutdriver Set

WIHA 12 PIECE SYSTEM 6 NUTDRIVER SET

- in rollup pouch

Contents:

- 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 13.0 mm



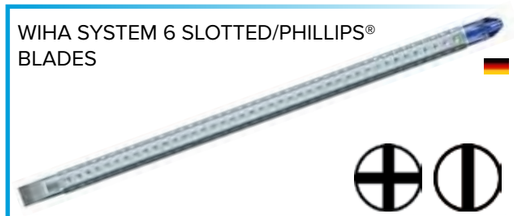
Part No.	Description
U106T12	12 Piece System 6 Nutdriver Set

WIHA SYSTEM 6 SLOTTED BLADES



Part No.				
276270	3.5	4.5	150	6.0
006297	4.0	6.0	150	6.0
302080025	5.5	6.5	150	6.0

WIHA SYSTEM 6 SLOTTED/PHILLIPS® BLADES



Part No.				
006655	4.0	PH1	150	6.0
006662	6.0	PH2	150	6.0
006679	6.5	PH3	150	6.0

WIHA SYSTEM 6 PHILLIPS® BLADES



Part No.				
006310	PH1	PH2	150	6.0
276287	PH2	PH3	150	6.0

WIHA SYSTEM 6 POZIDRIV BLADES



Part No.				
006327	PZ1	PZ2	150	6.0
276294	PZ2	PZ3	150	6.0

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WIHA SYSTEM 6 BALL END HEX BLADES



Part No.				
006358	2.5	2.5	150	6.0
006365	3	3	150	6.0
006372	4	4	150	6.1
006389	5	5	150	6.0
006396	6	6	150	6.0

WIHA SYSTEM 6 TORX® BLADES



Part No.				
006549	T6	T8	150	6.0
006556	T7	T9	150	6.0
006563	T10	T15	150	6.1
006570	T20	T25	150	6.0
006587	T30	T40	150	6.0

Many more interchangeable blades and sets available to order, please enquire.

WIHA SYSTEM 6 BIT HOLDER BLADE



Part No.			
03882	1/4	150	6.0

Wiha System 4 Reversible System

WIHA SYSTEM 4 HANDLE

System 4 Handle for telescopic, reversible blades (adjustable 18-90mm length)



Part No.	Description			
2691	System 4 Handle	4.0	105	23

WIHA 6 PIECE SYSTEM 4 BLADE SET

- in rollup pouch

Contents:

- SL 1.5 x 3.0
- SL 2.0 x 3.5
- SL 2.5 x 4.0
- PH000 x PH00
- PH0 x PH1



Part No.	Description
269T6	6 Piece System 4 Blade Set

WIHA 4 PIECE SYSTEM 4 BLADE SET

- in rollup pouch

Contents:

- SL 2.0 x PH00
- SL 3.0 x PH0
- SL 4.0 x PH1



Part No.	Description
269T4	4 Piece System 4 Blade Set

WIHA 11 PIECE SYSTEM 4 BLADE SET

- in rollup pouch

Contents:

- SL 1.5 x 3.0
- SL 2.0 x 3.5
- SL 2.5 x 4.0
- PH000 x PH00
- PH0 x PH1
- Hex 1.3, 1.5, 2.0, 2.5, 3.0, 8, 9, 10, 11, 13 mm

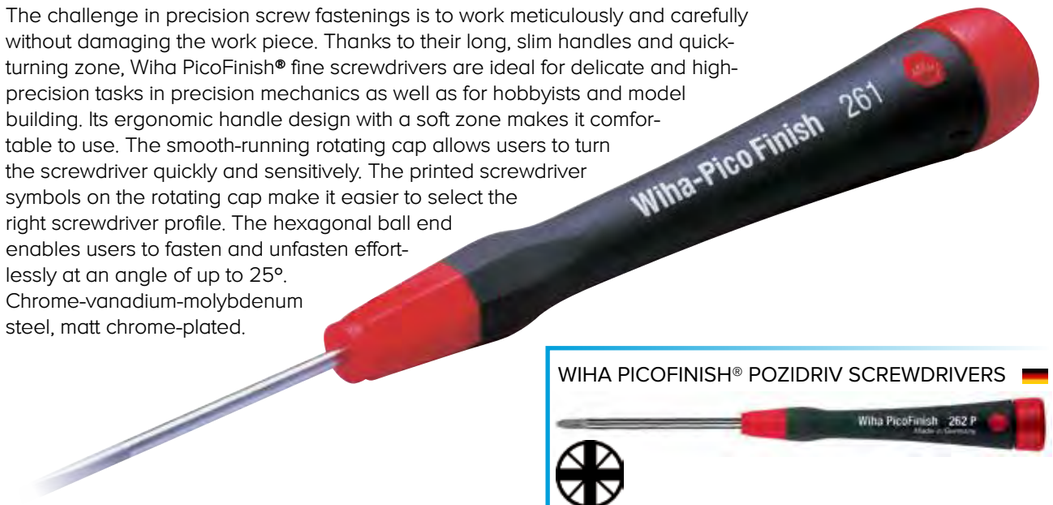


Part No.	Description
269T11	11 Piece System 4 Blade Set

Torx® is a trademark of Acument Intellectual Properties, LLC

Wiha PicoFinish® Screwdrivers

The challenge in precision screw fastenings is to work meticulously and carefully without damaging the work piece. Thanks to their long, slim handles and quick-turning zone, Wiha PicoFinish® fine screwdrivers are ideal for delicate and high-precision tasks in precision mechanics as well as for hobbyists and model building. Its ergonomic handle design with a soft zone makes it comfortable to use. The smooth-running rotating cap allows users to turn the screwdriver quickly and sensitively. The printed screwdriver symbols on the rotating cap make it easier to select the right screwdriver profile. The hexagonal ball end enables users to fasten and unfasten effortlessly at an angle of up to 25°. Chrome-vanadium-molybdenum steel, matt chrome-plated.



WIHA PICOFINISH® POZIDRIV SCREWDRIVERS

Part No.				
262 P0	PZ0	50	3.0	150
262 P1	PZ1	60	4.0	160

WIHA PICOFINISH® SLOTTED SCREWDRIVERS



Part No.					
260P08040	0.8	40	0.16	2.0	134
260P10040	1.0	40	0.18	2.0	134
260P12040	1.2	40	0.2	2.0	134
260P15040	1.5	40	0.25	2.0	134
260P18040	1.8	40	0.3	2.0	134
260P20040	2.0	40	0.4	2.0	140
260P25050	2.5	50	0.4	2.5	150
260P25100	2.5	100	0.4	2.5	200
260P30050	3.0	50	0.5	3.0	150
260P30100	3.0	100	0.5	3.0	200
260P30150	3.0	150	0.5	3.0	250
260P35060	3.5	60	0.6	3.5	160
260P40060	4.0	60	0.8	4.0	160
260P40100	4.0	100	0.8	4.0	200
260P40150	4.0	150	0.8	4.0	250

WIHA PICOFINISH® TORX® SCREWDRIVERS



Part No.				
267P03	T3	40	2.5	134
267P04	T4	40	2.5	134
267P05	T5	40	2.5	134
267P06	T6	40	2.5	140
267P07	T7	40	2.5	140
267P08	T8	40	2.5	140
267P09	T9	50	3.0	150
267P10	T10	50	3.0	150
267P15	T15	60	3.5	160
267P20	T20	60	4.0	160

WIHA PICOFINISH® PHILLIPS® SCREWDRIVERS



Part No.					
261P000	PH000	40	2.0	134	9
261P00	PH00	40	2.0	134	9
261P0	PH0	50	3.0	150	18
261P1	PH1	60	4.0	160	18
261P1080	PH1	80	4.0	180	18
261P1150	PH1	150	4.0	250	18

WIHA PICOFINISH® HEX SCREWDRIVERS



Part No.				
263P07	0.7	40	0.028	134
263P09	0.9	40	0.035	134
263P13	1.3	40	0.050	134
263P15	1.5	50	–	144
263P20	2.0	50	5/64	150
263P25	2.5	60	–	160
263P30	3.0	60	–	160
263PZ116	1/16	50	–	144
263PZ332	3/32	60	–	160
263PZ764	7/64	60	–	160
263PZ180	1/8	60	–	160

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Phillips® is a trademark of Phillips® Screw Company

WIHA PICOFINISH® HEX BALLPOINT SCREWDRIVERS



Part No.				
264 P13	1.3	40	0.050	134
264 P15	1.5	50	–	150
264 P20	2.0	50	–	150
264 P25	2.5	60	–	160
264 P30	3.0	60	–	160
264P Z116	1/16	50	–	150
264P Z564	5/64	50	–	150
264P Z332	3/32	50	–	150
264P Z764	7/64	60	–	160
264P Z180	1/8	60	–	160
264P Z964	9/64	60	–	160
264P Z532	5/32	60	–	160

WIHA PICOFINISH® NUTDRIVERS



Part No.			
265 P015	1.5	60	160
265 P018	1.8	60	160
265 P020	2	60	160
265 P025	2.5	60	160
265 P030	3	60	160
265 P032	3.2	60	160
265 P035	3.5	60	160
265 P040	4	60	160
265 P045	4.5	60	160
265 P050	5	60	160
265 P055	5.5	60	160
265 P060	6	60	160
265 P070	7	60	160
265P Z332	3/32	60	160
265P Z764	7/64	60	160
265P Z180	1/8	60	160
265P Z964	9/64	60	160
265P Z532	5/32	60	160
265P Z316	3/16	60	160
265P Z732	7/32	60	160
265P Z140	1/4	60	160

WIHA 6 PIECE PICOFINISH® HEX BALLPOINT SCREWDRIVER SET

Contents:

263P 0.9 x 40

264P 1.3 x 40
1.5 x 50
2.0 x 50
2.5 x 60
3.0 x 60



Part No.	Description
264PK6	6 Piece PicoFinish® Ballpoint Hex Screwdriver Set

WIHA 6 PIECE PICOFINISH® TORX® SCREWDRIVER SET

Contents:

267P T7 x 40
T8 x 40
T9 x 50
T10 x 50
T15 x 60
T20 x 60



Part No.	Description
267PK6	6 Piece PicoFinish® Torx® Screwdriver Set

WIHA 6 PIECE PICOFINISH® NUTDRIVER SET

Contents:

265P 2.5 x 60
3.0 x 60
3.5 x 60
4 x 60
5 x 60
5.5 x 60



Part No.	Description
265PK6	6 Piece PicoFinish® Nutdriver Set

WIHA 6 PIECE PICOFINISH® SLOTTED & PHILLIPS® SET

Contents:

260P 1.5 x 40
2.0 x 40
2.5 x 50
3.0 x 50

261P PH00 x 40
PH0 x 50



Part No.	Description
260PK6	6 Piece PicoFinish® Slotted & Phillips® Screwdriver Set

WIHA 7 PIECE PICOFINISH® SLOTTED & PHILLIPS® SCREWDRIVER SET

Contents:

260 1.5 x 40
2.0 x 40
2.5 x 50
3.0 x 50

261P PH00 x 40
PH0 x 50
PH1 x 60



Part No.	Description
260PK7	7 Piece PicoFinish® Slotted & Phillips® Screwdriver Set

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Phillips® is a trademark of Phillips® Screw Company

Screw Extractors & Sets

STAHLWILLE 25 PIECE STUD REMOVER SET 905/25

- in black plastic box

Contents:

- M5-M16, 3/16"-5/8"
- 5 HSS twist drills sizes (3.2; 4.8; 6.4; 8; 8.7 mm)
- 5 fluted removal pins sizes 1–5 for threads M5–M16
- 5 splined nuts, sizes 1–5
- 10 drill guides, sizes 1–10



Part No.	Description	Weight (g)
96713025	25 Piece Stud Remover Set	605

SCREW EXTRACTORS (EZ OUTS

- Spiral flutes designed to embed themselves deeper
- Made from Carbon Steel



Part No.	Size	For Screw Size
EZ-1	#1	3/32-5/32"
EZ-2	#2	5/32-7/32"
EZ-3	#3	7/32-9/32"
EZ-4	#4	9/32-3/8"
EZ-5	#5	3/8-1/2"
EZ-8967	Set of 5 in Box	

STAHLWILLE 6 PIECE SCREW EXTRACTOR SET 900/6T

- for left-hand threads
- in textile bag
- Contents: Sizes 1-6



Part No.	Description	Weight (g)
96710101	6 Piece Screw Extractor Set	230

WEDGE-PROOF SCREW EXTRACTORS

- Designed to remove broken fasteners without breaking or jamming
- Made from C4150 alloy steel



Part No.	Size	For Screw Size
EZ8939	1/8"	3/16"
EZ8940	5/32"	1/4"
EZ8941	3/16"	5/16"
EZ8942	7/32"	3/8"
EZ8943	1/4"	7/16"
EZ8944	9/32"	1/2"
EZ8945	5/16"	9/16"
EZ8946	11/32"	5/8"
EZ8947	3/8"	11/16"
EZ8948	13/32"	3/4"
EZ8949	Set of 10 in Box	

SCREW EXTRACTOR SET MULTISPLINE 25 PIECES

- for extracting sheared screws, bolts and stud screws from threaded holes
- suitable for right- hand and left-hand threads
- in textile bag
- Contents:
- Sizes: 1/8" to 7/8" in 1/32" Increments
  (3mm to 22mm in 0.8mm)



Part No.	Description	Weight (g)
EZ8988	25 Piece Screw Extractor Set	248

PROTO® SCREW EXTRACTORS

- Drive into end of broken pipe or fitting.
- Use tap holder or wrench on extractor to turn out broken part.
- Size stamped on extractor refers to drill bit size to be used with that extractor.



Part No.	U.S.S. (in)	Drill Size (in)	Dia. Min (in)	Dia. Max (in)	OAL (in)	Weight (lbs)
J9521	1/4, 5/16	1/8	1/8	3/16	2-5/16	0.02
J9522	3/8	3/16	11/64	3/16	2-5/8	0.02
J9523	7/16	7/32	13/64	1/4	2-7/8	0.05
J9524	1/2, 9/16	5/16	19/64	5/16	3	0.07
J9525	5/8	3/8	11/32	3/8	3-1/4	0.12
J9500A	Set of 5 in Tool Roll					0.26

STAHLWILLE SCREW EXTRACTORS 900

for left hand threads



Part No.	Size	for	Drive	OAL	Drill	Weight
71010001	1	M3-M4 1/8-5/32"	1/8	49	2 mm 5/64"	3g
71010002	2	M5-M7 3/16-1/4"	9/64	54	3 mm 7/64"	6g
71010003	3	M8 5/16"	3/16	59	5 mm 3/16"	12g
71010004	4	M10-M12 3/8-7/16"	9/32	65	6,4 mm 1/4"	25g
71010005	5	M14-M16 1/2-9/16"	23/64	88	8 mm 5/16"	50g
71010006	6	M18-M22 5/8-3/4"	31/64	95	12 mm 15/32"	103g

STAHLWILLE 5 PIECE SCREW EXTRACTOR SET 901/5T

- for extracting sheared screws, bolts and stud screws from threaded holes
- suitable for right- hand and left-hand threads
- in textile bag
- Contents: Sizes 1-5



Part No.	Description	Weight (g)
96710505	5 Piece Screw Extractor Set	248

"OLD MAN" SCREW KNOCKER REMOVER TOOL

- Standard .401 shank to fit rivet gun for removing stubborn screws
- 3/8" Drive accepts sockets or 1/4 bit adapter available separately



Part No.	Description
RS4809	200mm Screw Knocker
RS4810	100mm Screw Knocker
720138	3/8" Drive - 1/4" Bit Holder

STAHLWILLE SCREW EXTRACTORS 901

- with centre punch tip
- double-edged



Part No.	Size	for	Drive	OAL	Drill	Weight
71050001	1	M5-M6 3/16-1/4"	1/4	60	3,2 mm 1/8"	6g
71050002	2	M8-M10 5/16-3/8"	3/8	67	4,8 mm 3/16"	16g
71050003	3	M10-M12 7/16-1/2"	1/2	75	6,4 mm 1/4"	30g
71050004	4	M12-M16 1/2-9/16"	5/8	90	9,5 mm 3/8"	60g
71050005	5	M16-M20 5/8-3/4"	3/4	90	11,1 mm 7/16"	100g

EL BRUTUS SCREW EXTRACTORS

- Drive into end of broken pipe or fitting.
- Use tap holder or wrench on extractor to turn out broken part.
- Size stamped on extractor refers to drill bit size to be used with that extractor.



Part No.	U.S.S. (in)	Drill Size (in)	Dia. Min (in)	Dia. Max (in)	OAL (in)	Weight (lbs)
BRUT-5	1/4, 5/16	1/8	1/8	3/16	2-5/16	0.02
BRUT-7	3/8	3/16	11/64	3/16	2-5/8	0.02

PROTO® BOLT EXTRACTOR SOCKETS

- Proto® Bolt Extractor Sockets make it easy to remove rusted, rounded, or damaged nuts and bolts.
- The working end has a helical shaped flute to help grip rounded fasteners, round head bolts, and pan head screws.
- Proto® Bolt Extractor Sockets can be used in combination with other drive tools (such as ratchets, adjustable wrenches, sockets, or combination wrenches) to help reach fasteners in difficult locations.
- Through-hole design helps gain access to fasteners at the end of long bolts or studs.
- Can be used on SAE or metric fasteners.
- 3/4" Drive size.



Part No.	Hex Size (in)	Hex Size (mm)	Drive Size (in)	Drive End Outside Diameter (in)	Nut End Outside Diameter (in)	Nut Depth (in)	OAL (in)	Weight (lbs)
J69X09	1/4, 9/32	7	3/4	7/16	11/16	9/16	1-1/16	0.05
J69X10	5/16	8	3/4	31/64	11/16	9/16	1-1/16	0.05
J69X11	11/32	9	3/4	17/32	11/16	33/64	1-1/16	0.06
J69X12	3/8	–	3/4	9/16	11/16	33/64	1-1/16	0.06
J69X13	13/32	10	3/4	19/32	11/16	33/64	1-1/16	0.06
J69X14	7/16	11	3/4	21/32	11/16	33/64	1-1/16	0.07
J69X15	15/32	12	3/4	11/16	3/4	33/64	1-1/16	0.08
J69X16	1/2	13	3/4	3/4	3/4	33/64	1-1/16	0.09
J69X18	9/16	14	3/4	11/16	7/8	33/64	1-1/16	0.09
J69X20	5/8	15, 16	3/4	59/64	15/16	33/64	1-1/16	0.10

PROTO® 10 PIECE 3/4" DRIVE BOLT EXTRACTOR SOCKET SET

- Easy to remove rusted, rounded, or damaged nuts and bolts.
- Working end with helical shaped flute to help grip rounded fasteners, round head bolts, and pan head screws.
- Can be used in combination with other drive tools to help reach fasteners in difficult locations.
- Through-hole design helps gain access to fasteners at the end of long bolts or studs.
- Can be used on SAE or metric fasteners.
- OAL: 1-1/16 inch

Contents:

- 7 mm / 1/4" / 9/32"; 8 mm / 5/16"; 9 mm / 11/32"; 3/8"; 10 mm / 13/32"; 11 mm / 7/16"; 12 mm / 15/32"; 13 mm / 1/2"; 14 mm / 9/16"; 15 mm / 16 mm / 5/8"



Part No.	Description	Weight (lbs)
J69X00	10 Piece Bolt Extractor Socket Set	0.86

PROTO® 13 PIECE 3/8" DRIVE HAND IMPACT DRIVER SET

- Designed to loosen hard to turn bolts and nuts.
- Hand impact driver has heavy-duty spring for added torque.
- Popular interchangeable bits are packaged in plastic blow-molded box for easy storage.

Contents:

- Hand Impact Driver 3/8" DR 5-1/2"
- Philips Insert Bit 1/4 in Hex: #1, #2, #3
- Slotted Insert Bit 1/4 in Hex: 3/16", 9/32",
- Philips Insert Bit 5/16 in Hex: #1, #2, #3
- Slotted Insert Bit 5/16 in Hex: 3/16", 9/32"
- Powerdrive Bit 3/8 in Drive 5/16" Hex
- Powerdrive Bit 3/8 in Drive 1/4" Hex



Part No.	Description	Weight (lbs)
J7099A	13 Piece Hand Impact Driver Set	2.36



Pliers, Cutters & Shears

Knipex Pliers & Cutters 502
PROTO® Pliers 506
Multigrip & Soft Jaw Pliers 509
Circlip Pliers 510
Tsunoda Electronic Series Pliers 513
Wiha ESD Cutters 514
Wire Twisting Pliers 516
Other Pliers 517
Shears & Scissors 518
Knives 520

Knipex Pliers & Cutters

KNIPEX COMBINATION PLIERS

- With gripping zones for flat and round material
- With cutting edges for soft and hard wire
- Long cutting edges for thicker cables
- Cutting edges additionally induction hardened, cutting edge hardness approx. 60 HRC



Part No.			
03 02 160	160	3.1	2.0
03 02 180	180	3.4	2.2
03 02 200	200	3.8	2.5

KNIPEX COMBINATION PLIERS

- With gripping zones for flat and round material
- With cutting edges for soft and hard wire
- Long cutting edges for thicker cables



Part No.	↔ mm	○	○
03 01 140	140	2.8	1.8
03 01 160	160	3.1	2.0
03 01 180	180	3.4	2.2
03 01 200	200	3.8	2.5
03 01 250	250	3.8	2.5

KNIPEX LINEMANS PLIER

- Additional gripping zone below the joint for powerful leverage and pressing performance
- With cutting edges for soft and hard wire



Part No.	↔ mm	○	○
09 11 240	240	4.6	3.0

KNIPEX SLIP JOINT PLIER

- Five-way adjustable slip joint with push button adjustment for precise adjustment of gripping capacity
- Five-way adjustable slip joint with push button adjustment for precise adjustment of gripping capacity



Part No.	↔ mm	Description
28 01 200	200	Slip Joint Plier

KNIPEX SNIPE NOSE SIDE CUTTING PLIERS

- With cutting edges for soft, medium-hard and hard wire
- Cutting edges additionally induction hardened, cutting edge hardness approx. 61 HRC



Part No.	↔ mm	○	○
25 02 140	140	2.5	1.6
25 02 160	160	2.5	1.6
26 12 200	200	3.2	2.2

KNIPEX SNIPE NOSE SIDE CUTTING PLIERS

- Suitable for finer gripping and cutting work
- Pointed, half-round jaws, knurled gripping surfaces
- With cutting edges for soft, medium-hard and hard wire



Part No.	↔ mm	○	○
25 01 125	125	2.2	1.6
25 01 140	140	2.5	1.6
25 01 160	160	2.5	1.6

KNIPEX SNIPE NOSE SIDE CUTTING PLIERS

- Suitable for finer gripping and cutting work
- Pointed, half-round jaws, knurled gripping surfaces
- With cutting edges for soft, medium-hard and hard wire



Part No.	↔ mm	○	○
26 11 200	200	3.2	2.2

KNIPEX BENT LONG NOSE PLIERS – 40°

- High bending strength of the pliers tips
- Gripping surfaces cross-hatched, knurled



Part No.	↔ mm	Description
38 21 200	200	Bent Long Nose

KNIPEX BENT SNIPE NOSE SIDE CUTTING PLIERS 40°

- High bending strength of the pliers tips
- Gripping surfaces cross-hatched, knurled



Part No.	↔ mm	Description
26 21 200	200	Bent Snipe Nose

○ Soft wire	Copper, aluminium	220 - 250	
○ Medium hard wire	Iron nail	750 - 800	
○ Hard wire	Spring wire, steel nails	1,800 - 1,900	
● Piano wire	Hardened spring steel	2,200 - 2,300	

Test wires standardised in DIN ISO 5744

KNIPEX BENT LONG NOSE PLIERS – 70°

- High bending strength of the pliers tips
- Gripping surfaces cross-hatched, knurled



Part No.	↔ mm	Description
38 71 200	200	Bent Long Nose

KNIPEX DOUBLE OFFSET LONG NOSE PLIERS

- High bending strength of the pliers tips
- Gripping surfaces cross-hatched, knurled



Part No.	↔ mm	Description
38 31 200	200	Cranked Jaw Plier

KNIPEX SPARK PLUG PLIERS

- High bending strength of the pliers tips
- Gripping surfaces cross-hatched, knurled



Part No.	↔ mm	Description
38 91 200	200	rounded grip

KNIPEX NEEDLE NOSE PLIERS

- Smooth ground gripping surfaces



Part No.	↔ mm	Description
31 11 160	160	Needle Nose Pliers

KNIPEX FINE BENT NOSE PLIERS 40°

- Gripping of components or wires of the smallest diameters
- Bending of relay springs or contacts



Part No.	↔ mm	Description
32 31 135	135	Fine Bent Nose Pliers

KNIPEX DUCK BILL PLIERS

- 9 mm wide at the tip and tapering to 1.5 mm thickness
- Smooth gripping surfaces



Part No.	↔ mm	Description
33 01 160	160	Duck Bill Pliers

KNIPEX FLAT NOSE ASSEMBLY PLIERS EXTENDED HANDLE

- Specially suitable for gripping and assembly work with a higer grasping power
- Knurled gripping surfaces



Part No.	↔ mm	Description
28 01 200	200	Flat Nose Plier

KNIPEX NEEDLE-NOSE PLIERS, EXTENDED HANDLE

- Specially suitable for gripping and assembly work with a higer prehensile power
- Knurled gripping surfaces



Part No.	↔ mm	Description
28 21 200	200	Flat Nose Plier

KNIPEX LONG REACH NEEDLE NOSE PLIERS

- For gripping, adjustment and assembly work in hard to reach areas
- Serrated pipe grip to grip round parts



Part No.	↔ mm	Description
28 71 280	200	Long Reach Pliers

KNIPEX LONG REACH NEEDLE NOSE PLIERS 45°

- For gripping, adjustment and assembly work in hard to reach areas
- Serrated pipe grip to grip round parts



Part No.	↔ mm	Description
28 81 280	200	Long Reach Pliers

KNIPEX UPHOLSTERY PLIERS

- Securely insert upholstery clips, guide and hold with the special groove
- Closing spring holds the pliers closed



Part No.	mm	Description
91 92 180	180	Upholstery Pliers

KNIPEX FLAT NOSE PLIER

- Flat, short, wide jaws
- Knurled gripping surfaces



Part No.	mm	Description
20 01 125	125	Flat Nose Plier
20 01 140	140	Flat Nose Plier
20 01 160	160	Flat Nose Plier
20 01 180	180	Flat Nose Plier

KNIPEX MECHANICS' GRIPPING PLIERS

- High bending strength of the pliers tips
- Gripping surfaces cross-hatched, knurled



Part No.	mm	Description
38 41 190	190	Gripping Pliers

KNIPEX RELIEVED FLAT NOSE PLIERS

- Gripping surfaces cross-hatched, knurled
- Flat, wide jaws



Part No.	mm	Description
29 11 160	160	Relieved Flat Nose Pliers

KNIPEX ROUND LONG NOSE PLIERS

Heavy-duty and hard-wearing gripping pliers



Part No.	mm	Description
30 31 160	200	round

KNIPEX ELECTRONICS PLIERS

- For fine assembly work, e g. in electronics and fine mechanics
- For gripping, holding and bending



Part No.	mm	Description
35 62 145	145	Electronics Pliers

KNIPEX ELECTRONICS PLIERS

- For fine assembly work, e g. in electronics and fine mechanics
- For gripping, holding and bending



Part No.	mm	Description
35 22 115	115	Electronics Pliers

KNIPEX PRECISION ELECTRONIC SNIPE NOSE PLIERS

Made of ball bearing steel precisely machined with locking screw in lap joint



Part No.	mm	Description
34 22 130	130	Electronic Snipe Nose Plier
34 22 130 ESD	130	with Dissipative Handles

KNIPEX MINI GRIPPING PLIERS

- Precision pliers for fine assembly work, e g. in electronics and fine mechanics
- For gripping, holding, bending and adjusting



Part No.	mm	Description
37 13 125	125	flat, wide jaws

KNIPEX COMPACT BOLT CUTTERS

- Cuts bolts, rivets, etc.



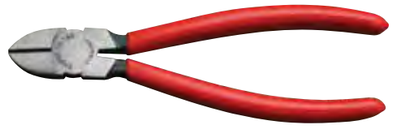
Part No.	mm	Cutting Capacity	
71 01 160	160	Ø 4.4 mm	Compact Bolt Cutter
71 01 200	200	Ø 5.2 mm	Compact Bolt Cutter
71 01 250	250	Ø 5.6 mm	Compact Bolt Cutter

○	Soft wire	Copper, aluminium	220 - 250
○	Medium hard wire	Iron nail	750 - 800
○	Hard wire	Spring wire, steel nails	1.800 - 1.800
●	Piano wire	Hardened spring steel	2.200 - 2.300

Test wires standardised in DIN ISO 5744

KNIPEX SIDE CUTTERS

- Clean cutting of thin copper wires, also at the cutting-edge tips
- Precision cutting edges for soft and hard wire



Part No.	mm	○	○	○	○
70 01 110	110	3.0	–	1.2	–
70 01 125	125	3.0	–	1.5	–
70 01 140	140	4.0	–	1.8	–

KNIPEX HIGH LEVERAGE SIDE CUTTERS

- High cutting performance with minimum effort due to optimum co-ordination of the cutting edge angle and transmission ratio
- For very tough, continuous use



Part No.	mm	○	○	○	○
74 01 160	160	–	3.4	2.5	2.0
74 01 180	180	–	3.8	2.7	2.2
74 01 200	200	–	4.2	3.0	2.5
74 01 250	250	–	4.6	3.5	3.0

KNIPEX SIDE CUTTER FOR ELECTROMECHANICS

- Cutting edges additionally induction-hardened, cutting edge hardness approx. 63 HRC
- With sharp, precisely aligned cutting edges
- Lap joint



Part No.	mm	○	○	○	○
76 01 125	125	0,4-3,0	2.3	1.5	0.6

KNIPEX MINI SIDE CUTTER

- Provides optimised movement when tightening steel mesh knots during reinforced concrete work
- With cutting edges for soft and hard wire



Part No.	mm	○	○	○	○
70 11 110	110	3.0	2.0	1.2	–

KNIPEX SIDE CUTTER FOR PLASTICS

- Cutting face flush ground
- For nearly flush cutting of moulded plastic components from sprues



Part No.	mm	Description
72 01 160	160	flush ground

KNIPEX DIAGONAL CUTTERS

- Clean cutting of thin copper wires, also at the cutting-edge tips
- Precision cutting edges for soft and hard wire
- Narrow head style for use in confined areas



Part No.	mm	○	○	○	○
70 02 125	125	3.0	2.3	1.5	–
70 02 140	140	4.0	2.5	1.8	–
70 02 160	160	4.0	2.8	2.0	–
70 02 180	180	4.0	3.0	2.5	–
74 02 200	200	–	4.2	3.0	2.5

KNIPEX HIGH LEVERAGE SIDE CUTTERS – 25°

- High cutting performance with minimum effort due to optimum co-ordination of the cutting edge angle and transmission ratio
- For very tough, continuous use



Part No.	mm	○	○	○	○
74 21 200	200	–	4.2	3.0	2.5

KNIPEX ELECTRONICS DIAGONAL CUTTER

- For general electronic cutting work
- Low-friction double spring for gentle and even opening



Part No.	mm	○	○	○	○
77 02 115	115	0.3-1.6	1.2	0.6	–

KNIPEX ELECTRONICS FLUSH CUTTER

- Ground micro bevel for fine cutting work on PCB's in electronics to provide a flush cut
- Trimming of cable ties



Observe cutting capacity to avoid damage to flush jaws, these cutters should not be selected for general purpose work.

Part No.	mm	○	○	○
77 42 115	115	0.3-1.3	0.8	-

KNIPEX PRECISION ELECTRONIC CUTTERS

Made of ball bearing steel precisely machined with locking screw in lap joint



Part No.	mm	○	○	○	Style
79 02 125	125	0.2-0.7	1.3	0.7	round
79 02 125 ESD	125	0.2-0.7	1.3	0.7	round
79 32 125	125	0.2-1.5	1.1	0.6	pointed
79 32 125 ESD	125	0.2-1.5	1.1	0.6	pointed

PROTO® Pliers

PROTO® HEAVY-DUTY DIAGONAL CUTTING PLIERS

- Induction hardened cutting edge.
- Powerful leverage cuts heavy wire with ease.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J209G	7-5/16	2-5/32	7/8	1/2
J210G	8-1/2	3/4	1-7/32	15/32

PROTO® DIAGONAL CUTTING PLIERS ANGLED HEAD

- Angled head for work in confined areas.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J210AHG	8-1/8	3/4	1-7/32	5/32

PROTO® DIAGONAL CUTTING PLIERS – COIL SPRING

ASME B107.500

- Coil springs.
- Induction hardened cutting edges.
- Thin narrow jaws for access in tight areas.

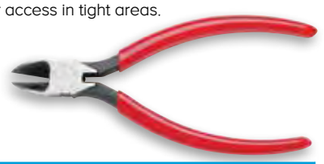


Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J285BSG	4-5/8	13/32	7/16	1/4
J204SG	4-7/16	18/32	9/16	5/16

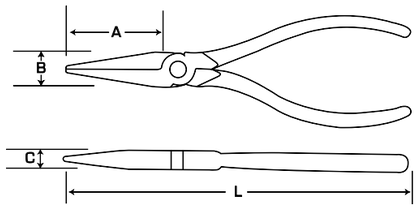
PROTO® DIAGONAL CUTTING PLIERS

ASME B107.500

- Induction hardened cutting edges.
- Thin narrow jaws for access in tight areas.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J285G	4-5/8	13/32	7/16	1/4
J204G	4-7/16	18/32	9/16	5/16
J205G	5-1/16	3/4	19/32	3/8
J206G	6-1/16	13/16	3/4	7/16
J207G	7-5/16	1	7/8	15/32



PROTO® HIGH LEVERAGE DIAGONAL CUTTING PLIERS LONG REACH – ANGLED HEAD

- Extra-long handle provides high leverage cutting capabilities with less user effort.
- 30° angled head for hard-to-reach areas.
- Wide handle contour for less fatigue.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J244G	11-1/8	1	63/64	1-5/32

PROTO® DIAGONAL PLASTIC CUTTING PLIERS

- Adjusting set screw allows fast, precise cutting and prevents cutting edges from damaging each other.
- Coil spring for reduced hand fatigue.
- Induction hardened cutting edges.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J212G	6-1/16	3/4	3/4	7/16
J213G	7-5/16	1	29/32	1/2

PROTO® DIAGONAL CUTTING PLIERS LONG REACH – GRIPPING TIP

- Cutting and gripping capabilities in one tool.
- Serrated gripping surface at tips.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J246G	11-1/8	27/32	63/64	25/64

PROTO® END-CUTTING PLIERS HIGH LEVERAGE

ASME B107.500

- Semi-flush cutting in areas inaccessible to side-cutting pliers.
- High leverage for easy cutting of most wires



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J272G	8-1/4	5/16	1-3/4	1-3/16

PROTO® LINEMAN'S PLIERS NEW ENGLAND STYLE

ASME B107.500

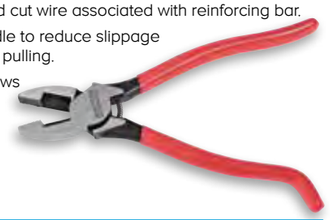
- Slim rounded nose for easy access in restricted spaces.
- Diamond serrated jaws.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J266G	6-3/16	1-3/32	29/32	1/2
J267G	7-1/4	1-9/32	1-1/8	1/2

PROTO® IRON WORKER'S PLIERS

- Designed to tie and cut wire associated with reinforcing bar.
- Hook bend in handle to reduce slippage when gripping and pulling.
- Coil spring holds jaws open, yet close easily.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J269WSG	9-1/4	1-9/16	1-9/32	5/8

PROTO® COMBINATION SLIP-JOINT PLIERS WITH GRIP

ASME B107.500

- Has two jaw positions and shear type wire cutter.
- Plastisol grips for added comfort.



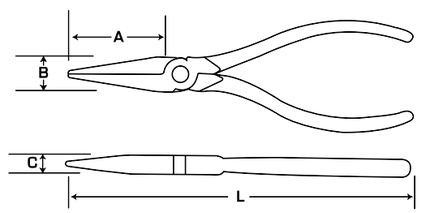
Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J275G	5-13/16	1-5/16	7/8	9/32
J276G	6-9/16	1-3/4	1-3/16	3/8
J278G	8-1/16	1-3/4	1-13/64	3/8
J280G	9-9/16	2-3/8	1-7/16	15/32

PROTO® HOSE CLAMP PLIERS

- Installs and removes wire spring tension clamps.
- Two position jaws grip full range of clamp sizes.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J252G	7-3/4	–	–	–



PROTO® LINEMAN'S PLIERS

ASME B107.500

- For utility linemen, wiring and electrical equipment installation, and maintenance.
- Induction hardened cutting edges and diamond serrated jaws.
- Built-in insulation crusher
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J268G	8-5/8	1-1/2	1-3/16	5/8

PROTO® LINEMAN'S PLIERS HIGH LEVERAGE

ASME B107.500

- Jaws have offset rivet for increased leverage.
- Designed for cutting No. 8 and other large wires.
- Diamond serrated jaws.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J269G	9-1/4	1-3/16	1-3/32	5/8

PROTO® COMBINATION SLIP-JOINT PLIERS

ASME B107.500

Two jaw positions and shear type wire cutter.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J276	6-1/2	1-3/4	1-3/16	3/8

PROTO® NEEDLE-NOSE PLIERS

ASME B107.500

- Diamond serrated jaws.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J282G	4-7/8	1-3/16	7/16	1/4
J229-03G	5-9/16	1-11/16	1/2	9/32
J220G	6-5/8	1-7/8	11/16	3/8

PROTO® NEEDLE-NOSE PLIERS WITH CUTTER

ASME B107.500

- Induction hardened cutting edges.
- Diamond serrated jaws.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J226G	6-5/8	1-7/8	11/16	3/8

PROTO® NEEDLE-NOSE PLIERS COIL SPRING

ASME B107.500

- Diamond serrated jaws.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J282BSG	5	1-3/16	7/16	1/4

PROTO® NEEDLE-NOSE PLIERS WITH CUTTER – COIL SPRING

ASME B107.500

- Induction hardened cutting edges.
- Diamond serrated jaws.
- Coil spring.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J229-01G	5-9/16	1-11/16	1/2	9/32
J226-01G	7-1/2	2-5/8	3/4	3/8

PROTO® NEEDLE-NOSE PLIERS LONG REACH

ASME B107.500

- Extra-long handle allows greater access to confined, restricted areas.
- Improved fulcrum point provides more holding power at the tip with less gripping effort.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J240G	11-9/16	2-13/16	23/32	13/32

PROTO® NEEDLE-NOSE PLIERS BENT NOSE LONG REACH

- Extra-long handle allows greater access to confined, restricted areas.
- Improved fulcrum point provides more holding power at the tip with less gripping effort.
- Bent nose design to reach around obstructions.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J241G	11-3/8	2-9/16	23/32	13/32

PROTO® NEEDLE-NOSE PLIERS LONG

ASME B107.500

- Long handle for added leverage.
- Diamond serrated jaws.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J228G	7-25/32	1-9/16	17/32	7/16

PROTO® NEEDLE-NOSE PLIERS LONG THIN

ASME B107.500

- Very thin nose allows access into minimum clearance areas.
- Diamond serrated jaws.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J222G	6-1/16	2-1/8	11/16	11/32

PROTO® NEEDLE-NOSE PLIERS LONG EXTRA THIN

ASME B107.500

- Extra slim-nose pliers for light precision work.
- Designed for gripping, looping, and twisting wire in confined areas.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness in) (C)
J223G	6-5/32	2-5/32	1/2	9/32

PROTO® DUCKBILL PLIERS

ASME B107.500

- Wide, flat nose for better grip than standard needle-nose pliers.
- Diamond serrated jaws.
- Long handle for added leverage.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J227G	7-25/32	1-9/16	17/32	7/16

PROTO® NEEDLE-NOSE PLIERS BENT NOSE

ASME B107.500

- Nose bent to 78° angle to reach around obstructions.
- Very thin nose allows access into minimum clearance areas.
- Diamond serrated jaws.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in) (A)	Jaw Width (in) (B)	Jaw Thick-ness (in) (C)
J225G	6-5/16	1-5/8	3/4	3/8

Multigrip & Soft Jaw Pliers

HENCHMAN SOFT JAW CONNECTOR WRENCH

- Adjustable – Box joint style.
- To avoid damage when working with military style connectors.



Part No.	Description
AT508K	Soft Jaw Wrench
04-529-1	Replacement Jaws

PROTO® SOFT JAW – CANNON PLUG PLIERS

- Capacity of 3/4" to 2-1/2".
- Four position pivot design provides greater concentricity.
- Replaceable urethane padded jaws protect work piece from marking or scratching
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Max. Opening (in)	Spare Jaws
J253G	9-1/2	3/4 - 2-1/2	253GRK

KNIPEX WATER PUMP PLIERS MULTIGRIPS

- 9-notch adjustment positioning for 30% more gripping capacity
- Good access to the workpiece due to slim size of head and joint area
- Self-locking on pipes and nuts



Part No.	mm	Grip Range
88 02 180	180	6-36mm
88 02 250	250	6-36mm
88 02 300	300	6-36mm

KNIPEX ALLIGATOR WATER PUMP PLIERS MULTIGRIPS

- 9-notch adjustment positioning for 30% more gripping capacity
- Good access to the workpiece due to slim size of head and joint area
- Self-locking on pipes and nuts



Part No.	mm	Grip Range
88 01 180	180	6 - 36mm
88 01 250	250	6 - 36mm
88 01 300	300	6 - 36mm

KNIPEX WATER PUMP PLIERS MULTIGRIPS

- For connectors, oil filters, plastic pipes and siphons
- For gentle loosening of hoses on nozzles and filter cartridges
- 25 adjustment positions, box-joint design



Part No.	mm	Grip Range	Description
81 11 250	250	10 - 75mm	black
81 13 250	250	10 - 75mm	chrome
81 19 250	–	–	Replacem. Jaws

KNIPEX PARRALLEL WRENCH

- Replaces the need for sets of metric and imperial spanners
- Smooth jaws for damage free installation of plated fittings – working directly on chrome!



Part No.	mm	Grip Capacity
86 03 180	180	1-1/2 in / 40mm
86 03 250	250	2 in / 52mm
86 03 300	300	2-1/2 in / 68mm

KNIPEX MINI PARALLEL WRENCH

- Replaces the need for sets of metric and imperial spanners
- Smooth jaws for damage free installation of plated fittings - working directly on chrome!



Part No.	mm	Grip Range
86 03 150	150	1 - 27mm

KNIPEX ALLIGATOR WATER PUMP PLIERS MULTIGRIPS

- 9-notch adjustment positioning for 30% more gripping capacity
- Good access to the workpiece due to slim size of head and joint area
- Self-locking on pipes and nuts



Part No.	mm	Grip Range
88 03 180	180	6 - 36mm
88 03 250	250	6 - 36mm
88 03 300	300	6 - 36mm

KNIPEX COBRA® HIGHTECH WATER PUMP PLIERS

- Push the button for adjustment on the workpiece
- Self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- Reliable catching of the hinge bolt: no unintentional shifting



Part No.	mm	Grip Capacity
87 01 125	125	1 in / 29mm
87 01 150	150	1-1/4 in / 32mm
87 01 180	180	1-1/2 in / 42mm
87 01 250	250	2 in / 50mm
87 01 300	300	2-3/4 in / 70mm

KNIPEX COBRA® HIGHTECH WATER PUMP PLIERS

- Push the button for adjustment on the workpiece
- Self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- Reliable catching of the hinge bolt: no unintentional shifting



Part No.	mm	Grip Capacity
87 03 125	125	1 in / 29mm
87 03 150	150	1-1/4 in / 32mm
87 03 180	180	1-1/2 in / 42mm
87 03 250	250	2 in / 50mm
87 03 300	300	2-3/4 in / 70mm

PROTO® SMALL ANGLE NOSE PLIERS

- Nose angled for easy access.
- Angled teeth provide superior gripping power over standard right angled teeth.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Jaw Length (in)	Jaw Width (in)	Jaw Thickness (in) (C)
J235	4-1/16	3/4	5/8	11/64

PROTO® TONGUE AND GROOVE POWER-TRACK® II PLIERS

ASME B107.500

- Special fastener ensures permanent assembly
- Angled teeth provide superior gripping power over standard right angled teeth.



Part No.	OAL (in)	Max. Open. (in)	Jaw Length (in)	Jaw Width (in)
J261SG	4-5/8	15/32	7/8	13/16
J262SG	7-1/16	1-1/8	1-3/8	1-3/4
J260SG	10-3/16	2-1/8	1-15/16	2-3/4
J264SG	12	2-5/8	2-1/4	2-3/4
J265SG	16-7/8	4-1/16	3-3/8	4-1/8

Circlip Pliers

WIHA CIRCLIP PLIERS – INTERNAL/BENT

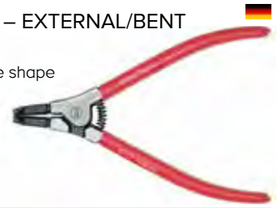
- Head shape D: 90° angle shape
- Drop forged, cylindrical precision tips



Part No.	mm	inches	
Z331 J01	140	5	8-13
Z331 J11	140	5	12-25
Z331 J21	180	7	19-60

WIHA CIRCLIP PLIERS – EXTERNAL/BENT

- Head shape D: 90° angle shape
- Drop forged, cylindrical precision tips



Part No.	mm	inches	
Z341 A01	140	5	3-10
Z341 A11	140	5	10-25
Z341 A21	180	7	19-60

WIHA CIRCLIP PLIERS – EXTERNAL/STRAIGHT

- Straight shape head
- Drop forged, cylindrical precision tips



Part No.	mm	inches	
Z340 A00	140	5	3-10
Z340 A10	140	5	10-25
Z340 A20	180	7	19-60

WIHA CIRCLIP PLIERS – INTERNAL/STRAIGHT

- Straight shape head
- Drop forged, cylindrical precision tips



Part No.	mm	inches	
Z330 J00	140	5	8-13
Z330 J10	140	5	12-25
Z330 J20	180	7	19-60

KNIPEX CIRCLIP PLIERS – INTERNAL/STRAIGHT

- Pliers body and tips: chrome vanadium steel, forged, oil-hardened
- Solid style, forged
- Non-slip, solid tips



Part No.	mm	Tip Dia.	
44 11 J1	140	1.3	12-25
44 11 J2	180	1.8	19-60
44 11 J4	320	3.2	85-140

KNIPEX CIRCLIP PLIERS – INTERNAL/BENT 90°

- Pliers body and tips: chrome vanadium steel, forged, oil-hardened
- Solid style, forged
- Non-slip, solid tips



Part No.	mm	Tip Dia.	
44 21 J01	130	0.9	8-13
44 21 J11	130	1.3	12-25
44 21 J21	170	1.8	19-60

KNIPEX CIRCLIP PLIERS – EXTERNAL/STRAIGHT

- Pliers body and tips: chrome vanadium steel, forged, oil-hardened
- Solid style, forged
- Non-slip, solid tips



Part No.	mm	Tip Dia.	
46 11 A0	140	0.9	3-10
46 11 A2	180	1.8	19-60
46 11 A3	210	2.3	40-100
46 11 A4	320	3.2	85-140

KNIPEX CIRCLIP PLIERS – EXTERNAL/BENT 90°

- Pliers body and tips: chrome vanadium steel, forged, oil-hardened
- Solid style, forged
- Non-slip, solid tips



Part No.	mm	Tip Dia.	
46 21 A11	125	1.3	10-25
46 21 A21	170	1.8	19-60
46 21 A31	200	2.3	40-100
46 21 A41	300	3.2	85-140

PROTO® RETAINING RING PLIERS CONVERTIBLE

ASME B107.500

- Converts from internal to external or vice versa, when pivot screw is moved to adjacent tapped hole.
- Use with either External or Internal Retaining Rings.
- Fixed tips are precision formed and induction hardened for accurate fit and long wear.
- Use the largest diameter tip that will fit the retaining ring being removed or installed.



Part No.	Tip Size	Tip Angle	OAL (in)	Bore Dia. (in) (Int.)
J399	.038	0°	5-7/8	3/8 - 9/16
J370	.038	45°	5-3/4	3/8 - 9/16
J371	.038	90°	5-11/16	3/8 - 9/16
J372	.047	0°	5-7/8	5/8 - 1
J373	.047	45°	5-3/4	5/8 - 1
J374	.047	90°	5-11/16	5/8 - 1
J385	.070	0°	7-1/2	1-1/16 - 13/4
J375	.070	45°	7-3/8	1-1/16 - 13/4
J376	.070	90°	7-1/8	1-7/16 - 2
J377	.090	0°	9-1/4	1-13/16 - 3
J378	.090	45°	9	1-13/16 - 3
J379	.090	90°	8-5/8	1-13/16 - 3
J399L	.038	18°	6	3/8 - 9/16
J371L	.038	90°	6	3/8 - 9/16
J385L	.070	18°	7-1/4	1-1/16 - 1-3/4
J376L	.070	90°	7-1/4	1-7/16 - 2

PROTO® RETAINING RING PLIERS EXTERNAL

ASME B107.500

- Used with External Retaining Rings.
- Fixed tips are precision formed and induction hardened for accurate fit and long wear.



Part No.	Tip Size	Tip Angle	OAL (in)	Weight
J391	.038	0°	6-1/8	0.15 lbs
J397	.038	90°	6-1/8	0.15 lbs
J393	.070	0°	6-7/8	0.22 lbs
J395	.115	0°	9-1/8	0.49 lbs

PROTO® RETAINING RING PLIERS INTERNAL

ASME B107.500

- Used with Internal Retaining Rings.
- Fixed tips are precision formed and induction hardened for accurate fit and long wear.



Part No.	Tip	Length (in)	Bore Dia. (in) (Internal)
J388	.023 0°	5-1/4	–
J390	.025 0°	5-3/8	1/4-5/16, 1/4-5/16, 1/4-5/16, 5/8
J389	.038 0°	5-3/8	3/8-9/16
J398	.038 45°	5-3/8	3/8-9/16, 3/8-9/16, 3/4-1
J392	.070 0°	6-1/2	1-1/16 - 13/4, 1-1/16 - 1-3/4, 1-1/16 - 1-3/4, 1-7/16 - 2
J394	.090 0°	9	1-13/16 - 3, 1-13/16 - 3, 1-13/16 - 3, 2-1/16 - 3

PROTO® 4 PIECE CONVERTIBLE RETAINING RING PLIER SET

- Design permits quick change-over to work internal or external ring without any need to tighten a screw.
- Pliers have a return spring designed to reduce fatigue and facilitate operation.
- Pliers have air cushioned grips which spreads loads across the hand increasing comfort.
- Ring range: External (Shaft) 1/4"- 2"; Internal (Bore) 3/8"- 2.



Part No.	Description	Weight
J360C	4 Piece Conv. Retaining Ring Plier Set	1.26 lbs

PROTO® LARGE RETAINING RING PLIERS INTERNAL/EXTERNAL

ASME B107.500

- Spring-loaded ratchet mechanism minimizes operator fatigue by allowing the ring to be compressed or expanded through gradual moves and then locks at the desired size without continued pressure on the handles. Heavy and large rings are safely and easily controlled.
- Replaceable tips in 0°, 45°, and 90° make it possible to remove and install rings in most applications. (Replacements available).



Part No.	Tip	OAL (in)	Bore Dia. (in) (Int.)	Shaft Dia. (in) (Ext.)
J364	.120 0°	16-1/2	3-1/16 - 6	–
J365	.120 0°	16-1/2	–	3-1/2 - 6-1/2

PROTO® 12 PIECE CONVERTIBLE RETAINING RING PLIERS SET

- Convenient blow-molded carrying case includes storage for spare rings.
- Ring range: External (Shaft) 1/4"- 3-11/32"; Internal (Bore) 3/8" - 3".



Contents	Tip Size	Tip Angle	Length (in)	Shaft Diameter (in) (External)	Bore Diameter (in) (Internal)	Weight (lbs)
J399	.038	0°	5-7/8	1/4 - 43/64	3/8 - 9/16	0.15
J370	.038	45°	5-3/4	1/4 - 3/64	3/8 - 9/16	0.16
J371	.038	90°	5-11/16	1/2 - 25/32	3/8 - 9/16	0.16
J372	.047	0°	5-7/8	11/16 - 7/8	5/8 - 1	0.16
J373	.047	45°	5-3/4	11/16 - 7/8	5/8 - 1	0.15
J374	.047	90°	5-11/16	13/16 - 1	5/8 - 1	0.16
J385	.070	0°	7-1/2	15/16 - 1-7/16	1-1/16 - 13/4	0.29
J375	.070	45°	7-3/8	1 - 1-7/16	1-1/16 - 13/4	0.32
J376	.070	90°	7-1/8	1 - 1/16, 2	1-7/16 - 2	0.31
J377	.090	0°	9-1/4	1-1/2 - 3-1/2	1-13/16 - 3	0.54
J378	.090	45°	9	1-1/2 - 3-1/2	1-13/16 - 3	0.55
J379	.090	90°	8-5/8	1-1/2 - 1-3/4	1-13/16 - 3	0.56

Part No.	Description	Weight (lbs)
J360B	12 Piece Convertible Retaining Ring Pliers Set	4.82

PROTO® 6 PIECE CONVERTIBLE RETAINING RING PLIERS SET

- Convenient blow-molded carrying case includes storage for space rings.
- Ring range: External (Shaft) 1/4"- 3-11/32"; Internal (Bore) 3/8" - 3".



Contents	Tip Size	Tip Angle	Length (in)	Shaft Diameter (in) (External)	Bore Diameter (in) (Internal)	Weight (lbs)
J399	.038	0°	5-7/8	1/4 - 43/64	3/8 - 9/16	0.15
J371	.038	90°	5-11/16	1/2 - 25/32	3/8 - 9/16	0.16
J372	.047	0°	5-7/8	11/16 - 7/8	5/8 - 1	0.16
J374	.047	90°	5-11/16	13/16 - 1	5/8 - 1	0.16
J385	.070	0°	7-1/2	15/16 - 1-7/16	1-1/16 - 13/4	0.29
J376	.070	90°	7-1/8	1 - 1/16, 2	1-7/16 - 2	0.31

Part No.	Description	Weight (lbs)
J360A	6 Piece Convertible Retaining Ring Pliers Set	2.10

PROTO® 18 PIECE SMALL PLIERS SET WITH REPLACEABLE TIPS

- Includes one internal and one external plier.
- Contains 16 interchangeable tips: 4 of each of .039 90°, .047 45°, .047 0° and .070 0° (Replacements available).
- Pliers overall length 6-1/4".
- Weight: 0.64 lbs

Contents:

- External 1/4" - 2"
- Internal 3/8" - 2"



Part No.	Description
J380	18 Piece Small Pliers Set with Replaceable Tips

PROTO® 18 PIECE LARGE PLIERS SET WITH REPLACEMENT TIPS

- Includes one internal and one external plier.
- Convenient blow-molded carrying case includes storage for spare rings.

Contents:

- External 1-1/2" - 3-3/4"
- Internal 2-7/16" - 4"



Part No.	Description
J361	18 Piece Large Pliers Set with Replacement Tips

Tsunoda Electronic Series Pliers

Precision Japanese made pliers offering incredible performance at a really affordable level. Made of top grade steel. Comfortable small handles. Suits high volume production level work. Fitted with leaf springs.



TSUNODA SIDE CUTTER

- Micro bevel jaw
- Offering almost flush cut
- Perfect high volume cutter



Part No.	Description	Capacity	OAL (mm)
TM01	Side Cutter	1.2mm	119

TSUNODA LONG NOSE PLIER

- With serrated jaws and cutter
- Ideal for production work



Part No.	Description	Capacity	OAL (mm)
TM03	Long Nose Plier	1.2mm	136

TSUNODA OBLIQUE TIP CUTTER

- Micro bevel jaw
- Ideal for snipping IC legs



Part No.	Description	Capacity	OAL (mm)
TM10	Oblique Tip Cutter	1.2mm	122

TSUNODA LONG NOSE PLIER

- With serrated jaws and cutter
- Ideal toolkit plier



Part No.	Description	Capacity	OAL (mm)
TM04	Long Nose Plier	1.2mm	154

Wiha ESD Cutters

Precision for electronic professionals

- Drop forged from the best selected, suitable carbon steels for the best technical properties
- Cutting edges are additionally induction hardened up to 64 HRC for maximum service life and cutting results
- Finely mirror polished heads provide safety as there are no flaking chrome particles preventing damage to electronic components
- Precision Box Joint: Close fit prevents distortion, low-wear for clearance and jolt-free movement
- Dual leaf springs and extremely ergonomic multi-component handle provide for comfortable, controlled and sensitive work
- Surface resistance of 106-109 Ohms is appropriate for electronic work in ESD-controlled areas as defined in DIN EN 61340-5-1 / DIN EN 61340-5-2 standards

Safety Notice: ESD Safe, which is not suitable for cutting or working with live wires.



WIHA SIDE CUTTER MINI – POINTED SHAPE

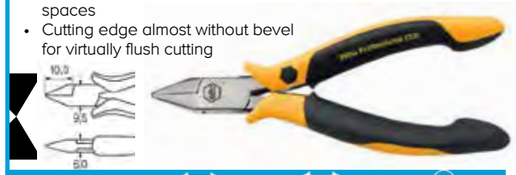
- Narrow, pointed head
- Cutting edge with semi-flush cutting, individually tested



Part No.	mm	inches			
Z401 11504	115	4 1/2	1.0	0.6	0.3

WIHA SIDE CUTTER MINI RELIEVED – POINTED SHAPE

- Extra narrow, short head for working in particularly restricted spaces
- Cutting edge almost without bevel for virtually flush cutting



Part No.	mm	inches	
Z404 11504	115	4 1/2	1.0

WIHA FULL-FLUSH CUTTER

- Wide, pointed head
- Cutting edge without bevel for absolute flush cutting



Part No.	mm	inches	
Z413 11504	115	4 1/2	1.0

WIHA SIDE CUTTER WITH SAFETY WIRE CATCHER

- Wide, pointed head
- With safety wire catcher



Part No.	mm	inches	
Z414 11504	115	4 1/2	1.2

If you did not find what you were looking for, please call our sales team!

Details of cutting results of cutting pliers.

Symbol	Types of wire	Example	Tensile strength ca. N/mm²
○	Soft wire	Copper, aluminium	220 - 250
◎	Medium hard wire	Iron nail	750 - 800
◉	Hard wire	Spring wire, steel nails	1.600 - 1.800
●	Piano wire	Hardened spring steel	2.200 - 2.300

Test wires standardised in DIN ISO 5744

WIHA OVAL SHAPE SIDE CUTTER

- Wide, semi-circular head
- Bevelled cutting edges, even appropriate for thin, hard wires



Part No.	mm	inches			
Z441 11504	115	4 1/2	1.4	1.0	0.4

WIHA SNIPE NOSE PLIERS

- Straight head
- Fine semi-circular tips
- Model Z362-120LJ with lap joint (NWS)



Part No.	mm	A	B	D	F	Jaws
Z360 12004	120	9.5	23	6.5	1.4	Serrated
Z362 14504	145	12.0	40	7.5	2.0	Serrated

WIHA OBLIQUE END CUTTER – WIDE

- Wide head, angled at 29°
- Cutting edge with full flush cutter function for virtually flush cutting



Part No.	mm	inches	
Z461 11504	115	4 1/2	1.2

WIHA BENT NOSE PLIERS

- Angled at 45°
- Fine, semi-circular tips



Part No.	mm	inches	Jaws
Z361 12004	120	4 3/4	Serrated

WIHA OBLIQUE END CUTTER – FLUSH

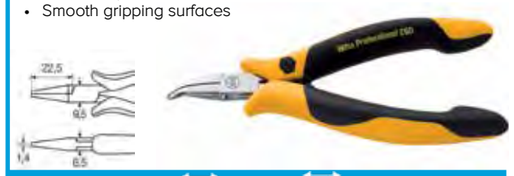
- Cutting edge with full flush cutter function for virtually flush cutting
- Extra small head
- Cutting edges at 40°



Part No.	mm	inches	
Z464 11004	110	4 3/8	0.6

WIHA FLAT NOSE PLIERS

- Flat, short jaws
- Smooth gripping surfaces



Part No.	mm	inches	Jaws
Z380 12004	120	4 3/4	Serrated

WIHA OBLIQUE END CUTTERS – NARROW

- Extra narrow, slim shape
- Cutting edge for virtually flush cutting



Part No.	mm	inches	
Z471 11004	110	4 3/8	0.6

WIHA ROUND NOSE PLIERS

- Round, short jaws
- Smooth gripping surfaces



Part No.	mm	inches
Z370 12004	120	4 3/4



Wire Twisting Pliers

PROTO® SAFETY WIRE TWISTER PLIERS

ASME B107.500

- Safety wire is often used in aviation and other applications where vibration may cause fasteners to back out.
- Heat-treated cutting edges for cutting tough stainless steel safety wire.
- Flat top diamond serrations on jaws hold wire securely and resist nicking.
- Diagonal nose allows access in tight work areas.
- Automatic spring return feature speeds operation and reduces fatigue.
- J190 designed for wire sizes .020" - .041".
- J191, J192, J195 designed for wire sizes .020" - .060".
- J192 Ergonomically designed.
- J195 Left hand twist.



Part No.	OAL (in) (L)	Weight (lbs)
J190	8-3/8	0.59
J191	10-3/8	0.85
J192	10-3/8	0.85
J195	10-3/8	0.85

PROTO® 3 PIECE SAFETY WIRE TWISTER PLIERS SET

- Contains three different twisters to cover almost any application.
- Packed in handy, durable plastic storage case.

Contents:

- 6" and 9" wire twister pliers and deep reach pliers.



Part No.	Description
J194	3 Piece Safety Wire Twister Pliers Set

STAHLWILLE LOCKWIRE PLIER

- Clockwise and anticlockwise use
- Automatic return action
- Suitable for locking wires up to 1.6 mm
- Side cutter
- Chrome Vanadium
- Serrated jaws for positive grip
- 40 Degree angled Jaws



Part No.	Description	OAL (mm)
65751220	Reversible Lockwire Plier	230
65751280	Reversible Lockwire Plier	280

PROTO® SAFETY WIRE TWISTER PLIERS REVERSIBLE

- Reversible safety wire pliers provide right and left twist capability often eliminating the need for a second plier.
- Meets SAE Aerospace Standard AS 567 Twister Requirements.
- Provides all of the features of standard Proto® Safety Wire Pliers.
- J196 designed for wire sizes .020" - .041".
- J197 designed for wire sizes .020" - .060".
- J198 designed for wire sizes .020" - 0.60".



Part No.	OAL (in) (L)	Weight (lbs)
J196	8-3/4	0.64
J197	11	0.88
J198	12-1/4	0.91

PROTO® SAFETY WIRE TWISTER PLIERS DEEP REACH

Designed for access into close clearance areas.



Part No.	Description	OAL (in)
J193	Safety Wire Twister Pliers Deep Reach	18-1/8

HENCHMAN LOCKWIRE PLIERS

- Excellent value for money
- Made in Taiwan



Part No.	Description	OAL (in)
DWT-6R	Reversible Lockwire Plier	6
DWT-9R	Reversible Lockwire Plier	9

HENCHMAN LOCKWIRE PLIERS

- Excellent value for money
- Made in Taiwan



Part No.	Description	OAL (in)
DWT-6	Lockwire Plier	6
DWT-9	Lockwire Plier	9

HENCHMAN LOCKWIRE SOFT STAINLESS STEEL

- 1 LB
- Corrosion Resisting
- MS20995-C
- Made in USA



Part No.	Description	Dia (in/mm)
H68-025	Lockwire Soft Stainless Steel	0.025 / 0.635
H68-032	Lockwire Soft Stainless Steel	0.032 / 0.812

COPPER SAFETY LOCK WIRE

- Soft annealed copper wire
- 1 LB Spool
- Available in 0.020", 0.025" and 0.032" diameter



Part No.	Description	Dia (in)
MS20995CU20	Copper Safety Lock Wire	0.020
MS20995CU25	Copper Safety Lock Wire	0.025

Other Pliers

GEARWRENCH DOUBLE-XTM STORK NOSE NOSE PLIERS

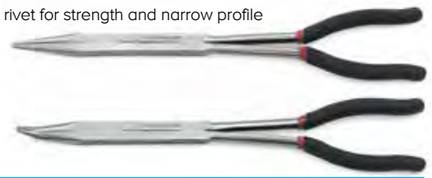
- Jaws open greater distance than the handle for added reach in tight locations
- Compound joint allows access with minimal handle movement
- Maximum reach without exceeding centre point of inference
- Dual-dipped for comfort and grip
- Corrosion resistant Alloy steel
- Flush rivet for strength and narrow profile



Part No.	Description	OAL (in)
KD 82005D	Double-XTM Straight Pliers	13.27
KD 82006D	Double-XTM 45° Pliers	13.27

GEARWRENCH 2 PIECE DOUBLE-XTM STORK NOSE NOSE PLIER SET

- Jaws open greater distance than the handle for added reach in tight locations
- Compound joint allows access with minimal handle movement
- Maximum reach without exceeding centre point of inference
- Dual-dipped for comfort and grip
- Corrosion resistant Alloy steel
- Flush rivet for strength and narrow profile



Part No.	Description
KD 82106	2 Piece Double-XTM Plier Set

HEMOSTATS/FORCEPS STRAIGHT LOCKING STAINLESS STEEL



Part No.	Description	OAL (mm)
A1 11.000.160	Forceps	160

HENCHMAN FLUTING PLIERS



Part No.	Description	OAL (mm)
PF04112	Fluting Pliers	189

HENCHMAN HAND SEAMER

Jaw Size: 1/4" to 1 1/4"D x 6"



Part No.	Description	OAL (mm)
HS1002	Hand Seamer	203

Shears & Scissors

PROTO® AVIATION SHEARS

ASME B107.500

- Available in straight, left, or right models.
- Compound leverage multiplies handle pressure and increases control for intricate cutting.
- Serrated blades for maximum grip of the material being cut.
- Color coded vinyl grips.



Part No.	Cuts	Handle Colour	Blade Length (in)	Overall Length (in)
J303L	Left	Red	1-3/8	10
J303R	Right	Green	1-3/8	10
J303S	Straight	Yellow	1-3/8	10

PROTO® AVIATION SHEARSOFFSET

ASME B107.500

- Available in left or right models.
- Compound leverage multiplies handle pressure and increases control.
- Offset handle keeps hands above working area for cutting ease and comfort.
- Serrated blades for maximum grip of the material being cut.



Part No.	Cuts	Handle Colour	Blade Length (in)	Overall Length (in)
J303LS	Left	Red	1-1/4	10
J303RS	Right	Green	1-1/4	10

KNIPEX SHEET METAL NIBBLER

- For cutting iron, copper or aluminium sheet metal up to max. 1.2 mm thickness, plastic up to max. 2.0 mm thickness
- Cutting width: 2.7 mm



Part No.	Description	OAL (mm)
90 55 280	Sheet Metal Nibbler	280

PROTO® STRAIGHT CUTTING SNIPS

- Designed for all straight cutting including inside and outside corners.
- Plastisol grips for added comfort.



Part No.	Blade Length (in)	OAL (in) (L)	Weight (lbs)
J317	1-1/2	7	0.48
J320	2	10	0.93
J322	2-3/4	12-3/4	1.64

TIN SNIPS – AVIATION

- Drop-forged molybdenum alloy blades induction hardened
- Available in straight, left, or right models



Part No.	Description	Colour	OAL (mm)
29-751	Tin Snips Aviation Left Cut	Red	250
29-752	Tin Snips Aviation Right Cut	Green	250
29-753	Tin Snips Aviation Straight	Yellow	250

TIN SNIPS – OFFSET

45mm Cutting Length



Part No.	Description	Colour	OAL (mm)
29-765	Ofset Tin Snips Left Cut	Red	250
29-766	Ofset Tin Snips Right Cut	Green	250

TIN SNIPS – LONG

75mm Cutting Length



Part No.	Description	Colour	OAL (mm)
29-756	Tin Sips Long Straight Cut	Yellow	290

PROTO® CIRCULAR CUTTING DUCKBILL SNIPS

- Duckbill snips are designed for circle and odd shaped radius cutting.
- Plastisol grips for added comfort.



Part No.	Blade Length (in)	OAL (in) (L)	Weight (lbs)
J307	1-1/2	7	0.45
J310	2	10	0.95
J312	2-3/4	12-3/4	1.61

PROTO® HEAVY-DUTY SNIPS

ASME B107.500

- J334 cuts up to 18 gauge CR steel & 22 gauge SS
- Designed for making straight and moderately irregular cuts..
- Plastisol grips for added comfort.



Part No.	Description	Blade L. (in)	OAL (in) (L)	Weight (lbs)
J334	Combination Snips	3-7/8	14	3.02
J336	Bulldog Tinner Snips	2-1/2	16	3.63

PROTO® MINIATURE SNIPS

- Improved shearing action
- Increased length of cut from 1-1/8" to 2". and jaw opening
- Serrated bottom blade to grip material
- Ergonomic handle design
- Cuts up to 26 gauge cold-roll sheet metal, Copper wire up to 18 AWG, Soft steel wire up to 22 AWG



Part No.	Blade Length (in)	OAL (in) (L)	Weight (lbs)
J308	1-1/8	6-1/2	0.325

JEWELLERS SNIPS

Suits fine detailed cutting



Part No.	Description	OAL (mm) (L)
29-707	Jewellers Snips	180

STRAIGHT PATTERN TIN SNIPS

- Short Version: 57mm Cutting Length
- Long Version: 75mm Cutting Length



Part No.	Description	OAL (mm) (L)
TS1002	Straight Pattern Tin Snips short	250
TS1003	Straight Pattern Tin Snips long	310

CIRCULAR PATTERN TIN SNIPS

- 57mm Cutting Length
- Unique blade desighn is perfect for cutting circles



Part No.	Description	OAL (mm) (L)
TS1005	Circular Pattern Tin Snips	250

STEEL TAILORING SHEARS

- Smooth knife edge blades
- Adjustable pivot for resharpening



Part No.	Description	OAL (in)
TSS-10	Steel Tailoring Shears	10
TSS-12	Steel Tailoring Shears	12

INDUSTRIAL SCISSORS

Ambidextrous, comfort grip, industrial grade scissors. One blade finely serrated and one knife edge.



Part No.	Description	OAL (mm)
SB 29-800	Industrial Scissors	210
SB 29-900	Industrial Scissors	235
SB 29-915	Industrial Scissors	280
SB 29-916	Industrial Scissors	300

UTILITY SCISSORS

- Ambidextrous handles
- Serrated edge
- Stainless Steel blades



Part No.	Description	OAL (mm) (L)
29-802	Utility Scissors Industrial	205

MULTIPURPOSE SCISSORS

- Large 38mm2 Cable Cutting Capacity
- Cable Strip Notch in blades to aid stripping wires
- Micro-Serrated blade



Part No.	Description	OAL (mm) (L)
29-513	Multipurpose Scissors	140

GENERAL PURPOSE SHEARS

With finely serrated blades of high quality, for industrial applications.



Part No.	Description	OAL
SB 29-701	Shear, standard (black)	185mm
SB 29-702	Shear, hi-tensile (red)	185mm
SB 29-700	Shear, long blades (black)	200mm

STEEL TAILORING SHEARS – LEFT HANDED

- Smooth knife edge blades
- Adjustable pivot for resharpening



Part No.	Description	OAL (in)
TSS-10L	Steel Tailoring Shears	10

Knives

ULTRA GRIP GREY RETRACTABLE KNIFE

- Ribbed body for improved hand grip with gloves
- Die cast zinc construction for longer life
- Ergonomic shape fits all size hands
- Includes 3 blades



Part No.	Description
115-2BGH	Ultra Grip Grey Retractable Knife

AUTO-LOADING RETRACTABLE KNIFE

- Fast auto-loading for quick and easy blade changes
- 5 blade magazine with hinged cover, automatically re-loads new blades on front of knife
- All metal construction with smooth mechanism
- 5 blades included



Part No.	Description
112-1X	Auto-Loading Retractable Knife

AUTO-LOADING RETRACTABLE KNIFE

- Automatic blade retracting system reduces injuries
- Large wrap around button, can be used from both sides or the top
- Hi Viz Orange Colour



Part No.	Description
119-1R	Auto-Loading Retracting Knife

AUTO-RETRACTING KNIFE WITH THUMLOCK

- Automatic blade retracting system reduces injuries
- Suits both left and right hand users
- Rubber grip sides reduce slipping



Part No.	Description
114-2RS	Auto-Retracting Knife with Thumlock

STEALTH AUTOLOADING POCKET KNIFE

- Automatic blade loading
- Slide-lock retractable blade



Part No.	Description
3038	Auto-Retracting Knife with Thumlock

FOLDING QUICKLOCK KNIFE

- Quick change utility blade
- Compact folding design
- Secure rubber grip
- Belt clip



Part No.	Description
3033	Folding Quicklock Knife

HEAVY DUTY LARGE CUTTER – 18MM

Magazine holds eight blades. Auto- feeder, locking mechanism for heavy duty work.



Part No.	Description
L-17RE	Snap-Off Knife, 18mm
SB 201-4	Replacement Blades (10)

18MM SNAP-OFF KNIFE AUTO-LOCK

- Auto-lock blade mechanism
- Blade snapper at rear
- Stainless steel sleeve



Part No.	Description
902-1	18mm Snap-Off Knife Auto-Lock

SIDE-SLIDE SAFETY SELF-RETRACTING KNIFE

Automatic blade retracting system reduces injuries



Part No.	Description
SB 412-1	Side-Slide Safety self-retracting Knife
SB 412B	Replacement Blades (10)

9MM SNAP-OFF KNIFE STEEL BODY

- All steel body
- Blade snapper at rear



Part No.	Description
220-1	9mm Snap-Off Knife Steel Body

ART KNIFE LIGHT DUTY

Strong metal blade holding Knurled finger grip chuck



Part No.	Description
50001	Art Knife Light Duty

ART KNIFE MEDIUM DUTY

Strong metal blade holding Knurled finger grip chuck



Part No.	Description
50002	Art Knife Medium Duty

ART KNIFE NO 5

Supplied with safety cap



Part No.	Description
50005	Art Knife No.5

SCALPEL

Standard scalpel handles and a retractable handle is available for safety purposes. The standard type comes in either nickel alloy or in the economy version – stainless steel.

A



B



C



Part No.	Description	
SH 3NA	Nickel Alloy Scalpel Handle – A	1
NO.3SS	Stainless Steel Scalpel Handle – B	1
2800	Retractable Handle – C	1
SM11	No. 11 Blade, pointed	100
SM10	No. 10 Blade, rounded	100

KNIPEX CABLE KNIFE

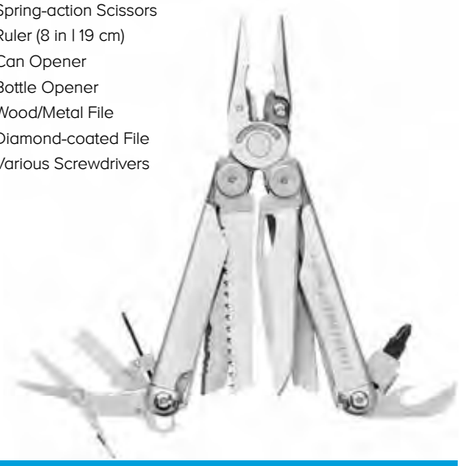
- Blade with wire stripping ground notch for fast and convenient cable & wire stripping
- Ergonomic handle shape pocket knife with folding blade
- Tether attachment point at the end of handle



Part No.	Dimensions	Blade Length
16 20 50 SB	120 x 34 x 14mm	80mm

LEATHERMAN WAVE PLUS MULTITOOL

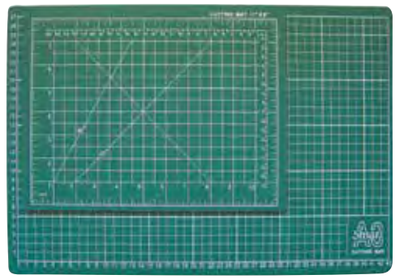
- Needlenose Pliers
- Replaceable Wire Cutters
- Electrical Crimper
- Wire Stripper
- 2 x Knives
- Saw blade
- Spring-action Scissors
- Ruler (8 in | 19 cm)
- Can Opener
- Bottle Opener
- Wood/Metal File
- Diamond-coated File
- Various Screwdrivers



Part No.	Description
YL832524	Leatherman Wave Plus Multitool in Nylon Pouch

SELF-HEALING CUTTING MAT

Green cutting mat with metric grid marking.



Part No.	Description	Size
SB A4G3	A4 Cutting Mat	300 x 220
SB A3G3	A3 Cutting Mat	450 x 300

Cable Strippers & Crimpers

Cable Cutters & Wirestrippers 524
Ideal Wirestrippers 526
Mil-Spec Connector Tooling 530
Pneumatic Crimpers 541
Connector Tooling Kits 547

Cable Cutters & Wirestrippers

KNIPEX TWO STAGE CABLE SHEAR

- For cutting copper and aluminium cables
- Not suitable for steel wire and hard drawn copper conductors
- Cutting action with initial cut (insulating sheath in the front cutting area) and final cut (conductor in the back cutting area), for cables up to Ø 20 mm



Part No.	mm	Ø
95 11 200	200	20

KNIPEX CABLE SHEARS

- For cutting copper and aluminium single conductors as well as multiple stranded cables
- Clean and smooth cut without crushing and deformation
- Not suitable for steel wire and hard drawn copper conductors
- Easy cutting with one-hand operation



Part No.	OAL (in) (L)	Weight (lbs)
95 11 165	6-1/2	0.47

KNIPEX COMPACT BOLT CUTTERS

- Most efficient joint design ensures exceptional cutting performance
- Cuts bolts, nails, rivets, etc. up to 5.2 mm dia.
- Precision cutting edges for soft and hard wire as well as piano wire



Part No.	mm		
71 01 200	200	6.0	3.6

STRIPAX WIRESTRIPPER

- Uses 33 blades within each jaw to self-adjust and conform to the profile of different wire sizes and insulation densities
- Self-adjusting blades strip solid or stranded wire
- Built-in wire cutter
- Strip length adjusts from 1/8" to 3/4"
- Reinforced fibreglass construction



Part No.	Description	Wire Range
9005	Stripax Wire Stripper	10-26 AWG

KNIPEX WIRE ROPE CUTTER

- With two crimping dies for end caps on Bowden cable sheaths and end ferrules for traction cables
- Comfortable work thanks to handy, slim design and internal opening spring
- Bolted joint for precise blade guidance, re-adjustable
- For medium hard wire up to 6 mmdia., e.g. Bowden cords, but also for cables and steel rods
- Special blade geometry prevents the wire rope fanning out
- High leverage for reduced effort



Part No.	mm	WR	FE
96 61 190	190	6mm	4mm

PROTO® CABLE CUTTER

- Cuts up to 3/0 fine stranded copper battery cable (not for use on steel cable).
- Precision ground blades minimize deflection.
- Positive fastener maintains pressure on matching cutting surfaces.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Weight (lbs)
J288	7-1/2	0.56

T®-STRIPPER WIRESTRIPPERS

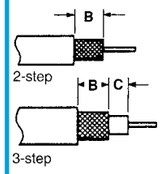
- Form-ground, knife-type blades for accurate, easy stripping without nicking the insulation
- Built-in wire cutter and looping holes
- Convenient plier nose for extra gripping strength
- Laser-etched wire guage for easy-to-read visibility
- Spring-loaded automatic opening
- Corrosion-resistant, black oxide finish
- Tough steel construction
- Locking tabs keep spring in place



Part No.	Description	Wire Range
45-120	T®-5 T®-Stripper	138mm
45-121	T®-6 T®-Stripper	138mm
45-125	T®-7 T®-Stripper	138mm
45-124	T®-8 T®-Stripper	160mm

COAXIAL WIRESTRIPPERS

The Swedish Corex wire stripper is available in two or three step versions for various strip lengths to suit a wide variety of cables. The standard CX strippers to be selected for cables from 2.5-7.6mm diameter and the Maxicorex is for cables of 7-15.0mm diameter.





Part No.	Dimension C	Dimension B
CX-202	–	6.0mm
CX-203	–	9.2mm
CX-204	–	12.0mm
CX-207	–	6.8mm
CX-300	5.5mm	5.5mm
CX-305	6.0mm	6.0mm
CX-309	6.8mm	2.5mm
CX-399	7.5mm	3.5mm
MAXI COREX 2	–	12.7mm
MAXI COREX 3	9.5mm	3.2mm

PROTO® WIRE STRIPPER – PLIERS

- Strips 10-22 AWG (American Wire Gauge).
- Crimps insulated and non-insulated terminals for 10-22 AWG wire.
- Crimps non-insulated 7mm and 8mm auto ignition wire.
- Cuts screw/bolt sizes 4-40, 5-40, 6-32, 8-32, 10-32, 10-24 and copper wire.
- Plier nose designed to grip, bend, and pull wire.
- Extended length curved cutter to handle heavier wire with less force.



Part No.	OAL (in) (L)	Weight (lbs)
J298	8-1/4	0.05

PROTO® WIRE STRIPPER – CUTTER

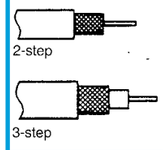
- Strips wire sizes 10, 12, 14, 16, 18, and 20 AWG (American Wire Gauge).
- Plier nose for pulling and looping wire.
- Spring return and convenient handle lock.
- Plastisol grips for added comfort.
- For copper wire.



Part No.	OAL (in) (L)	Weight (lbs)
J297	6-1/16	0.521

COAXIAL WIRESTRIPPERS

Low cost versions of coaxial strippers in 2 step and 3 step models-





Part No.	Description	Cable
HT312B	Coaxial Stripper	RG58/59 (3 step)
HT332D	Coaxial Stripper	RG58/59/62/2/174 (2 step)
HT322S	Coaxial Stripper	12.0mm

OUTER SHEATH REMOVAL TOOL

Cable stripper for removal of outer PVC sheaths. With removable swivel blade.



Part No.	Description	Range
SC 2/S	Sheath Stripper	8-28mm

OUTER SHEATH REMOVAL TOOLS

Cable stripper with finger action swivel blade.



Part No.	Description	Range
HT325B	Sheath Stripper	4.5-25.0mm

PROTO® WIRE STRIPPER

- Strips wire sizes 22, 24, 26, 28, and 30 AWG (American Wire Gauge).
- Wire cutter.
- Plier nose for pulling and looping wire.
- Automatic spring return.
- Plastisol grips for added comfort.



Part No.	OAL (in) (L)	Weight (lbs)
J296	6-1/16	0.21

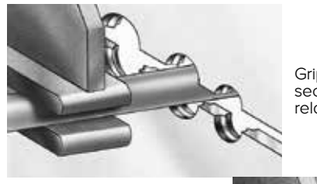
WIRE WRAP STRIPPER



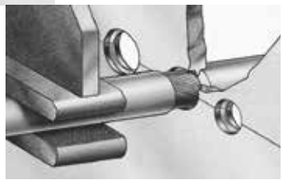
Part No.	Description	Wire Range
CK3757-2	Wire Wrap Stripper	20-30AWG

Ideal Wirestrippers

- Milspec die type blades allow precision stripping
- Strips 30 through 10 AWG solid or stranded wire
- Inner cutting hole sized to conductor and counter-bored holes sized to insulation
- Replaceable grippers
- Optional short stop latch and transparent wire stop
- Cushioned, comfort grip handles
- Custom Stripmaster® Lite is 75% of the size of Custom Stripmaster® Wire Stripper and strips 16 through 30 AWG solid or stranded wire
- Custom Stripmaster® Lite requires one-third less hand pressure for each strip actuation



Gripper pads hold the wire securely in a centerline relationship with the blade



Die-type blades incorporate a counter-bored hole sized to the conductor. This varies depending on insulation type and thickness.

CUSTOM STRIPMASTER® WIRESTRIPPERS – MILSPEC APPLICATIONS



The 45-170 Series is a Custom Stripmaster Wirestripper frame without the short stop latch and wire stop.

45-169 through 45-188 include grit-type pads (standard). 45-369 through 45-388 include file-type pads. 45-469 through 45-488 include parallel-type pads.

Wire Size AWG / MM2 Nominal	30 / 0.05	28 / 0.08	26 / 0.13	24 / 0.2	22 / 0.22	20 / 0.5	18 / 1.0	16 / 1.5	14 / 2.5	12 / 4.0	10 / 6.0	Blade Part No.
For type E Teflon® (600V)												
45-176									.076/.0935	.096/.113	.119/.136	L-5559
45-177			.023/.039	.028/.043	.034/.052	.042/.0595	.052/.070	.061/.081				L-5560
45-178	.016/.032	.019/.035	.023/.039									L-5561
For type EE Teflon® (600V)												
45-173									.076/.104	.096/.125	.119/.144	L-5562
45-174			.023/.0465	.028/.055	.034/.0595	.042/.067	.052/.0785	.061/.089				L-5563
45-175	.016/.042	.019/.043	.023/.0465									L-5564
For other misc. insulations												
45-170									.076/.113	.0937/.138	.116/.154	L-5210
45-171			.022/.052	.0292/.0595	.035/.0635	.042/.073	.052/.086	.062/.096				L-5211
45-172	.016/.037	.020/.040	.024/.043									L-5436
For wire wrap and other thin insulated wire												
45-179	.012/.020					------ Three identical holes ------						L-7625
45-169	.012/.019	.014/.023	.018/.025	.024/.033		------ Solid wires ------						L-9300

CUSTOM STRIPMASTER® LITE WIRESTRIPPERS – MILSPEC APPLICATIONS



Specifications: Cutting Hole Diameter/Counterbore Diameter (in inches)
Tolerances: Cutter Diameter: +- 0.001; Counterbore Diameter: +- 0.002
Teflon and Kapton are registered trademarks of E.I. du Pont de Nemours and Company.

Wire Size AWG / MM2 Nominal	30 / 0.05	28 / 0.08	26 / 0.13	24 / 0.2	22 / 0.22	20 / 0.5	18 / 1.0	16 / 1.5	Blade Part No.
MIL-W-16878 Type E 600V Teflon® Wire									
45-638					.034/.052	.042/.0595	.052/.070	.061/.081	LB-918
45-639			.023/.039	.028/.043	.034/.052	.042/.0595			LB-919
45-640	.016/.032	.019/.035	.023/.039	.028/.043					LB-920
MIL-W-16878 Type EE 1000V Teflon® Wire									
45-635					.034/.0595	.042/.067	.052/.0785	.061/.089	LB-915
45-636			.023/.0465	.028/.055	.034/.0595	.042/.067			LB-916
45-637	.016/.042	.019/.043	.023/.0465	.028/.055					LB-917
General Purpose									
45-632					.035/.0635	.042/.073	.052/.086	.062/.096	LB-912
45-633			.022/.052	.0292/.0595	.035/.0635	.042/.073			LB-913
45-634	.016/.037	.020/.040	.024/.043	.0292/.0595					LB-914
Wire Wrapping (thin insulation solid wire)									
45-641	.012/.020					------ Three identical holes ------			LB-921
45-631	.012/.019	.014/.023	.018/.025	.024/.033		------ Solid wires ------			LB-911

REPLACEMENT FRAME ASSEMBLIES



Frame for Custom Stripmaster® Wirestrippers – no blade included

Part No.	Description
L-5616	Frame only, 10-14 AWG
L-5617	Frame only, 16-.30 AWG
L-5618	Frame only, 10-14 AWG, Wire stop and latch
L-5619	Frame only, 16-30 AWG, Wire stop and latch

Frame for Custom Stripmaster® Lite Wirestrippers – no blade included

Part No.	Description
LB-895	Frame only
LB-896	Frame only, Wire stop and latch

STOP LATCHES



Transparent wire stop provides uniform stripping strength



Short-stop latch protects wire strands by limiting the stripping stroke to 5/32" and retains the slug until the wire is ready for terminating

For Custom Stripmaster® Wirestrippers

Part No.	Description
L-5269	Short
L-5270	Transparent

For Custom Stripmaster® Lite Wirestrippers

Part No.	Description
LB-1194	Short
LB-1195	Transparent

REPLACEMENT GRIPPER PADS

Gripper Pads are available in your choice of either parallel, file or grit-type. File-type pads may be used on hard-to-grip insulators such as Kapton® and some Teflon®

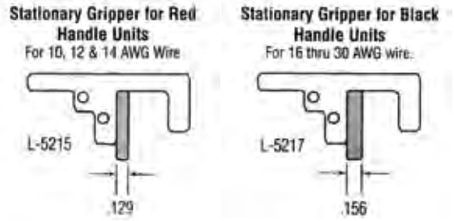


Moveable Grippers for Custom Stripmaster® Wire

Part No.	Surface Type
L-5212	Grit
LB-718	File
LB-727	Parallel

Moveable Grippers for Custom Stripmaster® Lite Wire

Part No.	Surface Type
L-5616	Grit
L-5617	File
L-5618	Parallel



Stationary Grippers Custom Stripmaster® Wirestrippers

Part No.	Description
L-5215	.129" thick, 10-14 AWG
L-5217	.156" thick, 16-30 AWG

STRIPMASTER® WIRESTRIPPERS – ELECTRICAL/INDUSTRIAL APPLICATIONS

- One-step stripping enhances productivity
- Spring-action motion increases leverage and reduces operator fatigue
- Precision-ground, knife-type blades provide clean, accurate stripping
- Sturdy diecast frame provides long-term durability
- Wire gripper holds wire securely in position



Part No.	Wire Size AWG / MM2 Nominal	30 / 0.05	28 / 0.08	26 / 0.13	24 / 0.2	22 / 0.22	20 / 0.5	18 / 1.0	16 / 1.5	14 / 2.5	12 / 4.0	10 / 6.0	8 / 8.0	Blade Part No.
45-090											.106	.141	.159	L-4419
45-091								.073	.073	.085	.105	.144		L-4420
45-092						.048	.048	.061	.072	.090	.113	.144		L-4421
45-097				.026	.032	.039	.048	.061	.072					L-4994
45-098		.016	.021	.026	.032	.039	.048							L-5361

BAND-IT BANDING TOOL

- To tension and cut stainless 1/4" steel bands to a preset level from 100 to 180 pounds.
- Used for EMP/EMI/RFI shield terminations on connector backshell assemblies.
- Same as Glenair 600 058



Part No.	Description	OAL
A40199	BAND-IT Banding Tool	1/4 in

BAND-IT BANDING TOOL

- To tension and cut stainless 1/8" steel bands to a preset level from 50-100 pounds.
- Used for EMP/EMI/RFI shield terminations on connector backshell assemblies.
- Same as Glenair 600 061



Part No.	Description	Capacity
A30199	BAND-IT Banding Tool	1/8 in

SAFE-T-CABLE APPLICATION TOOL HAND OPERATED

with 7 Inch Nose for .032 Safe-T-Cable



Part No.	Description	Cable Dia	Capacity
SCTR203	Adjustable Tension	0.22	3 in
SCTR207	Adjustable Tension	0.22	7 in
SCTR323	Adjustable Tension	0.32	3 in
SCTR327	Adjustable Tension	0.32	7 in
SCTR403	Adjustable Tension	0.40	3 in
SCTR407	Adjustable Tension	0.40	7 in
SCT203	Pre-Set Tension	0.22	3 in
SCT207	Pre-Set Tension	0.22	7 in
SCT323	Pre-Set Tension	0.32	3 in
SCT327	Pre-Set Tension	0.32	7 in
SCT403	Pre-Set Tension	0.40	3 in
SCT407	Pre-Set Tension	0.40	7 in

SAFE-T-CABLE APPLICATION TOOL PNEUMATIC

with 7 Inch Nose for .032 Safe-T-Cable



Part No.	Description	Cable Dia	Capacity
SCTPR203	Adjustable Tension	0.22	3 in
SCTPR207	Adjustable Tension	0.22	7 in
SCTPR323	Adjustable Tension	0.32	3 in
SCTPR327	Adjustable Tension	0.32	7 in
SCTPR403	Adjustable Tension	0.40	3 in
SCTPR407	Adjustable Tension	0.40	7 in
SCTP203	Pre-Set Tension	0.22	3 in
SCTP207	Pre-Set Tension	0.22	7 in
SCTP323	Pre-Set Tension	0.32	3 in
SCTP327	Pre-Set Tension	0.32	7 in
SCTP403	Pre-Set Tension	0.40	3 in
SCTP407	Pre-Set Tension	0.40	7 in

ROLL CRIMP TERMINAL CRIMPING TOOLS



Part No.	Description	Application
HT236C	Roll-Crimp Tool	1.5 - 6mm²
HT236U	D-Sub Roll Crimp Tool	10 - 22 AWG

PRE-INSUATED TERMINAL CRIMP TOOLS



Part No.	Description	Application
HT236H	Pre-Insulated Ratchet Crimper	Red/Blue/Yellow

CONTACT CRIMP TOOL D-TYPE

A low cost 4-way indent tool for crimping solid D-subminiature contacts for RS232 interface connectors.



Part No.	Description	Range
H1440	D-Subminiature Contact Crimp Tool	16-22WG

COAXIAL CONNECTOR CRIMPING TOOLS



Part No.	⬡	⬢	⬢	●	●	■	Application, RG cable
HT336A	-	6.5	5.41	-	1.72	-	58, 59, 62, 141, 142, 223
HT336G	6.48	5.41	3.50	2.54	1.75	1.1	58, 59, 62, 141, 142, 174, 223
HT336K	10.9	-	3.25	2.5	-	-	8, 9, 11, 213, 214, 174, 179
HT336I	-	7.9	6.3	5.2	2.3	1.6	58, 59, 6, 174

CABLE TIE GUN BASIC

- For cable ties from 2.2 to 4.8mm wide
- Fastens and automatically cuts ties with adjustable bundling pressure
- Maximum thickness 1.6mm



Part No.	Description	OAL
HT218	Cable Tie Gun	160mm

CABLE TIE GUN STAINLESS STEEL

- For cable ties up to 7.9mm wide
- Fastens and automatically cuts cable ties with adjustable bundling pressure
- Maximum thickness 0.3mm



Part No.	Description	OAL
HT338	Stainless Steel Tie Gun	180mm

PANDUIT CABLE TIE GUN – SMALL

- With tool-controlled tension that provides a flush cut-off and speeds up installation to lower installed cost.
- For Subminiature, Miniature, Intermediate, and Standard Cross Section Cable Ties.



Part No.	Description	Weight
GTS-E	Panduit Cable Tie Gun	2.9kg

CABLE TIE GUN HEAVY DUTY

- For cable ties up to 4.66mm wide
- Suited to repeated use in production
- Fastens and automatically cuts ties with adjustable bundle pressure
- Maximum thickness 1.3mm



Part No.	Description	OAL
HT328	Cable Tie Gun	168mm

PANDUIT CABLE TIE GUN

- With tool-controlled tension that provides a flush cut-off and speeds up installation to lower installed cost.
- For Standard, Heavy-Standard, Light-Heavy, and Heavy Cross Section Cable Ties.



Part No.	Description	Weight
GTH-E	Panduit Cable Tie Gun	3.4kg

CABLE TIES

Quality cable ties in black or natural. Contract pricing available for high quality users.



Part No.	Size	Colour	
FCT 10201	2.5 x 100mm	Black	100
FCT 10202	3.2 x 150mm	Black	100
FCT 10203	4.8 x 200mm	Black	100
FCT 10204	4.8 x 300mm	Black	100
FCT 10205	4.8 x 370mm	Black	100
FCT 10225	2.5 x 100mm	Natural	100
FCT 10226	3.2 x 150mm	Natural	100
FCT 10227	4.8 x 200mm	Natural	100

PRESSMASTER CRIMP TOOLS – KOMFORT-LINE

Designed to achieve maximum ergonomics, reliability and durability for a wide range of crimping applications. Optimised linkage reduces grip-force by approximately 40% compared to the average crimping tool. Komfort-line crimping tools have ergonomically shaped, cushion gripped handles and are made in two frame sizes. The 'K Frame" allows for two-handed operation for larger crimping applications, whereas the "M Frame" size has been designed for single handed operation when crimping small contacts or terminals.



M-Frame (212mm long)



K-Frame (255mm long)

Part No.	Terminal type	Die Profile	Size	Crimp Form	Crimper Frame
KSAS 0760	Insulated Red,Blue, Yellow terminals		0.75 - 5.0mm²		K
PRS MRB 0115	Uninsulated roll-crimp terminals		0.1 - 1.5mm²		M
KRB 0560 K	Uninsulated roll-crimp terminals		0.5 - 6.0mm²		K
MCC 0908S	Coaxial RG 174/316		4.25/3.25/1.69		M
PRS MCC 1113	Coaxial RG 58 + RG 59		6.48/5.41/1.69		M
KCC 2511K	Coaxial RG 58 + RG 214		0.90/5.41/2.54/1.69		K

Mil-Spec Connector Tooling

KNIPEX FOUR-MANDREL CRIMPING PLIERS FOR TURNED CONTACTS



- Crimping capacity can be adjusted in increments of 0.01 mm
- With digital display of the preset crimping capacities and possibility of re-calibration via RESET function with electronic wear monitoring
- Adjustment in mm, inches or comparable selection positions according to MIL

Part No.	Description	Range
97 52 63 DG	Knipex Self-Adjusting Crimping Pliers	28-14 AWG 0.08-2.5mm²
97 52 63 DG A	D-Sub Roll Crimp Tool	28-14 AWG 0.08-2.5mm²
97 52 65 DG	Knipex Self-Adjusting Crimping Pliers	26-10 AWG 0.14 — 6 mm²
97 52 65 DG A	D-Sub Roll Crimp Tool	26-10 AWG 0.14 — 6 mm²

KNIPEX FOUR-MANDREL CRIMPING PLIERS FOR TURNED CONTACTS



- Universally adjustable locator for the repeatable exact alignment of turned contacts in crimping pliers
- Individually adjustable to contacts in diameter and depth

Part No.	Description
97 59 65 2	Knipex Universal Locator

ASTRO STANDARD STEP ADJUSTABLE LARGE CRIMP FRAME TOOL M22520/1-01 (615708)



- 8 indent Crimp
- Dial selectable
- Uses turret and single position heads
- Cycle controlled Ratchet

The **Astro M22520/1-01 (615708)** is qualified to MIL-DTL-22520/1. This dial selectable 8-step tool has extensive applications within the wire barrel sizes 12-22 and wire sizes 12-26 AWG. This tool produces an eight indent crimp configuration which provides maximum tensile strength for both MS and proprietary contacts when used with wire of various compositions.

The beauty of this tool is in the ease of its use. The operator simply has to attach the appropriate turret head, or universal positioner, to the tool and then set the selector to the desired step for the wire being used. The ratchet is designed to ensure a complete cycle of the tool. A complete and accurate crimp is obtained each and every time, with no partial crimps.

This Large Crimp Frame tool is designed to be used with a turret head, a positioner or a universal head. These heads are easily attached with the use of built in hex socket screws. A data plate is permanently attached to each head. The data plate lists the contacts, for which the head was designed, along with selector settings that correspond to the wire being used.

Astro recommends that all of its tools be gaged periodically, to assure accurate calibration.
A gauge M22520/3-1 (615716) is available for this purpose.

The **M22520/1-01** tool is 9¼ inches long and weighs approximately 20 ounces. It is aslo available in a pneumatic version, P/N APC708,

Part No.	Astro Ref	DMC Ref	USAGE/DESCRIPTION	NSN
M22520/3-1	615716	G125	Gauge for M22520/1-01; /2-01	5220-00-165-7604
M22520/1-01	615708	AF8	Tool Frame	5120-00-165-3912
M22520/1-02	615709	TH1A	Turret	5120-00-016-6382
M22520/1-03	615710	TH4	Turret	5120-00-016-6554
M22520/1-04	615711	TH163	Turret	5120-00-016-7582
M22520/1-05	615712	UH2-5	Universal Positioner	5120-00-165-3911
M22520/1-06	615713	TP45	Positioner	5120-00-016-7647
M22520/1-07	615714	TP85	Positioner	5120-00-016-7651
M22520/1-08	615715	TH199	Turret	5120-00-016-7654
M22520/1-09	615821	TP360	Positioner	5120-00-132-5039
M22520/1-10	615822	TP365	Positioner	5120-00-132-5095
M22520/1-11	616406	TP465	Positioner	5120-01-127-5231
M22520/1-12	616407	TH270	Turret	5120-01-036-9220
M22520/1-13	616408	TH285	Turret	5120-01-036-9221
M22520/1-14	616409	TH286	Turret	5120-01-036-9222
M22520/1-15	616410	TP485	Positioner	5120-01-036-9223
M22520/1-16	620172	TP513	Positioner	5120-01-075-8138
M22520/1-17	620537	TP651	Positioner	–

MINIATURE STEP ADJUSTABLE CRIMP TOOL M22520/2-01 (615717)



- 8 indent Crimp
- Dial selectable
- Uses bayonet positioners
- Cycle controlled Ratchet

The Astro M22520/2-01 (615717) is qualified to MIL-DTL-22520/2 is a Small Crimp Frame with an adjustable 8-indent crimp configuration providing excellent results on contacts sizes 20-28 and wire sizes 20-32 AWG.

A wide variety of MS and proprietary contacts and wire compositions can be crimped by simply attaching a positioner in the bayonet-type socket and adjusting the selector to one of the eight preselected settings. The tool is equipped with a positive ratchet that requires the completion of the crimp cycle to ensure the integrity of each crimp.

Astro offers a wide variety of positioners to accommodate various mil-spec and proprietary contacts. Each positioner has a data plate which provides the correct crimp depth setting for the contact and wire combination. Astro also offers two adjustable positioners (615179 & 615179-1) that allow you to adjust the crimp location according to your specific needs.

Astro recommends the periodic gaging of all its tools. A gauge M22520/3-1 (615716), is available for this purpose.

The M22520/2-01 (615717) is 7-1/2 inches long and weighs 11 ounces. It is also available in a pneumatic version, P/N 621100.

For ultra precise crimps on miniature and subminiature contacts with very thin wire barrel dimensions, Astro offers the 620613, built from the same tool frame as the M22520/2-01 (615717) and utilizes the same positioners.

Part No.	Astro Ref	DMC Ref	USAGE/DESCRIPTION	NSN
M22520/2-01	615717	AFM8	Tool Frame	5120-00-165-3910
M22520/2-02	615718	K1S	Positioner	5120-00-165-3913
M22520/2-03	615719	K60S	Positioner	5120-00-016-7657
M22520/2-04	615720	K151	Positioner	5120-00-017-3640
M22520/2-05	615721	K3	Positioner	5120-00-017-3742
M22520/2-06	615722	K41	Positioner	5120-00-017-3809
M22520/2-07	615723	K40	Positioner	5120-00-017-3827
M22520/2-08	615724	K13-1	Positioner	5120-00-017-3921
M22520/2-09	615725	K42	Positioner	5120-00-017-3927
M22520/2-10	615726	K43	Positioner	5120-00-017-3932
M22520/2-11	615727	K287	Positioner	5120-00-017-3934
M22520/2-12	615729	K286	Positioner	5120-00-017-3935
M22520/2-13	616031	K338	Positioner	5120-00-132-6939
M22520/2-14	616032	K340	Positioner	5120-00-132-6962
M22520/2-15	616033	K341	Positioner	5120-00-132-6978
M22520/2-16	616034	K339	Positioner	5120-00-132-7868
M22520/2-17	616035	K342	Positioner	5120-00-132-7893
M22520/2-18	616036	K343	Positioner	5120-00-132-7894
M22520/2-19	616037	K330-2	Positioner	5120-00-132-7872
M22520/2-20	616038	K331-2	Positioner	5120-00-132-9004
M22520/2-21	616039	K332-2	Positioner	5120-00-133-0029
M22520/2-22	615448	K212	Positioner	5120-01-106-3737
M22520/2-23	616191	K267	Positioner	5120-01-117-3905
M22520/2-24	616260	K7S-1	Positioner	5120-00-348-7531
M22520/2-25	616411	K261-1	Positioner	5120-00-132-6932
M22520/2-26	616412	K262-1	Positioner	5120-00-133-3263
M22520/2-27	616413	K269-1	Positioner	–
M22520/2-28	616414	K373-1	Positioner	5120-00-124-3678
M22520/2-29	616415	K372-1	Positioner	5120-00-124-3682
M22520/2-30	616416	K404	Positioner	5120-01-117-3905
M22520/2-31	616417	K406	Positioner	–
M22520/2-32	620261	K496	Positioner	–
M22520/2-33	615257	K47S	Positioner	–
M22520/2-34	620499	K323	Positioner	–
M22520/2-35	620517	K532-1	Positioner	–
M22520/2-36	616429	K475	Positioner	–

INTERMEDIATE STEP ADJUSTABLE TOOL 616336 (M22520/7-01))



- 8 indent Crimp
- Dial selectable
- Cycle controlled Ratchet
- Lightweight and easy to use
- Uses bayonet positioners

The Astro 616336 is qualified to MIL-DTL-22520/7.

This tool is an 8-Step Selectable with varying applications within the wire barrel sizes 16-22 and wire sizes 16-28 AWG.

The 616336 produces an 8 indent crimp configuration, which provides excellent results on MS and proprietary contacts and wire of various compositions.

The 616336 tool is designed to be used with a positioner that features easy attachment with a bayonet socket mount. A data plate is permanently attached to each positioner. This data plate provides the correct selector setting to be used for each contact and wire combinations. This helps to eliminate error in choosing the proper crimp depth.

Astro recommends that all of its tools be gaged periodically to assure accurate calibration. A gauge 616337 (M22520/3-3) is available for this purpose.

The 616336 tool is 7 1/4 inches long and weighs approximately 11 ounces. The 616336 is available in a pneumatic version, P/N 621101.

An adjustable positioner is available P/N 642020.

A wide variety of Positioners are available, in addition to those listed. Please contact factory for additional information.

Turret and Positioner Selection Charts for MIL-C-39029/ AS39029 Contacts on page 533.

Part No.	Astro Ref No.	DMC Ref	USAGE/DESCRIPTION	NSN
M22520/7-01	616336	–	Tool Frame	5120-00-133-1747
M22520/7-02	616327	–	Positioner	5120-00-133-1769
M22520/7-03	616328	–	Positioner	5120-00-133-1770
M22520/7-04	616329	–	Positioner	5120-00-133-1772
M22520/7-05	616330	–	Positioner	5120-00-133-1778
M22520/7-06	616331	–	Positioner	5120-00-133-1781
M22520/7-07	616332	–	Positioner	5120-00-133-1782
M22520/7-08	616333	–	Positioner	5120-00-133-1785
M22520/7-09	616334	–	Positioner	5120-00-133-1790
M22520/7-10	616335	–	Positioner	5120-00-133-1792
M22520/7-11	620083	–	Positioner	5120-01-122-1201
M22520/7-12	620084	–	Positioner	5120-01-112-2925
M22520/7-13	620085	–	Positioner	5120-01-110-4472
M22520/3-3	616337	G145	Gauge for M22520/7-01	5220-00-338-0378

TURRET AND POSITIONER SELECTION CHARTS FOR MIL-C-39029 / AS39029 CONTACTS

For M22520/1-01, M22520/2-01, M22520/7-01 Crimp Tools

Positioners/Locators for contacts of MIL-C-5015 (MS 3450 Series/rear-release Type) and MIL-C-83723 Series II

Part No.	Astro Ref No.	Mil-Spec Contact No.	Supersedes Military Part No.	BIN Code	Style	Mating End Size	Wire Barrel Size	Type/ Class
M22520/1-02	615709	M39029/30-165-16	MS3163-16S-16 M83723-30T17	217	SKT	16S	16	A/B
M22520/1-02	615709	M39029/29-16-16	MS3162-16-16 M83723-29T16	212	PIN	16	16	A/B
M22520/1-02	615709	M39029/30-16-16	MS3163-16-16 M83723-30T16	218	SKT	16	16	A/B
M22520/1-02	615709	M39029/29-12-12	MS3162-12-12 M83723-29T12	213	PIN	12	12	A/B
M22520/1-02	615709	M39029/30-12-12	MS3163-12-12 M83723-30T12	219	SKT	12	12	A/B

Positioners/Locators for contacts of MIL-C-26482 Series II, MIL-C-81703 Series III, MIL-C-83723 Series III, MIL-C-83733

Part No.	Astro Ref No.	Mil-Spec Contact No.	Supersedes Military Part No.	BIN Code	Style	Mating End Size	Wire Barrel Size	Type/ Class
M22520/2-02 M22520/1-02	615718 615709	M39029/4-20-20	M83723-33B20	110	PIN	20	20	A/B
M22520/2-02 M22520/1-02	615718 615709	M39029/5-20-20	M83723-34B20	115	SKT	20	20	A/B
M22520/1-02	615709	M39029/4-16-16	M83723-33B16	111	PIN	16	16	A/B
M22520/1-02	615709	M39029/5-16-16	M83723-34B16	116	SKT	16	16	A/B
M22520/1-02	615709	M39029/4-16-20	–	112	PIN	16	20	A/B
M22520/1-02	615709	M39029/5-16-20	–	117	SKT	16	20	A/B
M22520/1-02	615709	M39029/4-12-12	M83723-34B12	113	PIN	12	12	A/B
M22520/1-02	615709	M39029/5-12-12	–	118	SKT	12	16	A/B
M22520/1-02	615709	M39029/4-12-16	–	111	PIN	12	16	A/B
M22520/1-02	615709	M39029/5-12-16	M83723-34B16	119	SKT	12	16	A/B

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Positioners/Locators for contacts of MIL-C-26500

Part No.	Astro Ref No.	Mil-Spec Contact No.	Supersedes Military Part No.	BIN Code	Style	Mating End Size	Wire Barrel Size	Type/ Class
M22520/2-02 M22520/1-02	615718 615709	M39029/31-241	MS24254-20P	241	PIN	20	20	A/B
M22520/2-02 M22520/1-02	615718 615709	M39029/32-260	MS24255-20S	260	SKT	20	20	A/B
M22520/1-02	615709	M39029/31-229	MS24253-16P	229	PIN	16	16	A/B
M22520/1-02	615709	M39029/32-248	MS24255-16S	248	SKT	16	16	A/B
M22520/1-02	615709	M39029/31-235	MS24254-12P	235	PIN	12	12	A/B
M22520/1-02	615709	M39029/32-254	MS24255-12S	254	SKT	12	12	A/B

TURRET AND POSITIONER SELECTION CHARTS FOR MIL-C-39029 / AS39029 CONTACTS

For M22520/1-01, M22520/2-01, M22520/7-01 Crimp Tools

Positioners/Locators for contacts of MIL-C-24308

Part No.	Astro Ref No.	Mil-Spec Contact No.	Supersedes Military Part No.	BIN Code	Style	Mating End Size	Wire Barrel Size	Type/ Class
M22520/2-08	615724	M39029/64-369	M24308/11-1	369	PIN	20	20	A/A
M22520/2-08	615724	M39029/63-368	M24308/10-1	368	SKT	20	20	A/A

Positioners/Locators for contacts of MIL-C-5015 (MS3400 Series/Front-Release Type)

Part No.	Astro Ref No.	Mil-Spec Contact No.	Supersedes Military Part No.	BIN Code	Style	Mating End Size	Wire Barrel Size	Type/ Class
M22520/1-02	615709	M39029/44-288	MS90453-16-16	288	PIN	16	16	A/B
M22520/1-02	615709	M39029/45-295	MS90454-16-16	295	SKT	16	16	A/B
M22520/1-02	615709	M39029/44-287	MS90453-16-22	287	PIN	16	22	A/B
M22520/1-02	615709	M39029/45-294	MS90454-16-22	294	SKT	16	22	A/B
M22520/1-02	615709	M39029/44-290	MS90453-12-12	290	PIN	12	12	A/B
M22520/1-02	615709	M39029/45-297	MS90454-12-12	297	SKT	12	12	A/B
M22520/1-02	615709	M39029/44-289	MS90453-12-16	289	PIN	12	16	A/B
M22520/1-02	615709	M39029/45-296	MS90454-12-16	296	SKT	12	16	A/B

Positioners/Locators for contacts of MIL-C-38999 Series I, III, IV

Part No.	Astro Ref No.	Mil-Spec Contact No.	Supersedes Military Part No.	BIN Code	Style	Mating End Size	Wire Barrel Size	Type/ Class
M22520/2-07	615723	M39029/56-348	MS27655-22D MS27490-22D	348	SKT	22	22D	A/B
M22520/2-07	615723	M39029/56-349	MS27490-22M	349	SKT	22	22M	A/B
M22520/2-07	615723	M39029/56-350	MS27490-22	350	SKT	22	22	A/B
M22520/2-10	615726 615711	M39029/56-351	MS27655-20 MS27490-20	351	SKT	20	20	A/B
M22520/1-04	615711	M39029/56-352	MS27655-16 MS27490-16	352	SKT	16	16	A/B
M22520/1-04	615711	M39029/56-353	MS27655-12 MS27490-12	353	SKT	12	12	A/B

Positioners/Locators for contacts of MIL-C-26482 Series I

Part No.	Astro Ref No.	Mil-Spec Contact No.	Supersedes Military Part No.	BIN Code	Style	Mating End Size	Wire Barrel Size	Type/ Class
M22520/2-02 M22520/1-02	615718 615709	M39029/56-348	MS3192A20-20A	240	PIN	20	20	A/A
M22520/2-02 M22520/1-02	615718 615709	M39029/56-349	MS3193A20-20A	259	SKT	20	20	A/A
M22520/1-02	615709	M39029/56-350	MS3192-16-16A	228	PIN	16	16	A/A
M22520/1-02	615709	M39029/56-351	MS3193-16-16A	247	SKT	16	16	A/A
M22520/1-02	615709	M39029/56-352	MS3192-12-12A	234	PIN	12	12	A/A
M22520/1-02	615709	M39029/56-353	MS3193-12-12A	253	SKT	12	12	A/A

TURRET AND POSITIONER SELECTION CHARTS FOR MIL-C-39029 / AS39029 CONTACTS

For M22520/1-01, M22520/2-01, M22520/7-01 Crimp Tools

Contacts for Connector Family: MIL-C-28840

Part No.	Astro Ref No.	Mil-Spec Contact No.	Supersedes Military Part No.	BIN Code	Style	Mating End Size	Wire Barrel Size	Type/ Class
M22520/34-02	620636	M39029/83-450	M39029/83-20-22	450	PIN	20	22	A/B
M22520/34-02	620636	M39029/83-451	M39029/83-20-28	451	PIN	20	28	A/B
M22520/34-02	620636	M39029/84-452	M39029/84-20-22	452	SKT	20	22	A/B
M22520/34-02	620636	M39029/84-453	M39029/84-20-28	453	SKT	20	28	A/B

Positioners/Locators for contacts of MIL-C-38999 Series I, II, III, IV, MIL-C-83733, MIL-C-24308, and MIL-C-55302/68/69/71/72/75								
Part No.	Astro Ref No.	Mil-Spec Contact No.	Supersedes Military Part #	Bin Code	Style	Mating End Size	Wire Barrel Size	Type/ Class
M22520/2-09	615725	M39029/58-360	MS27494-22D MS27493-22D M24308/13-1	360	PIN	22	22D	A/B
M22520/2-06	615722	M39029/57-354	MS27492-22D MS27491-22D M24308/12-1	354	SKT	22	22D	A/B
M22520/2-09	615725	M39029/58-361	MS27494-22M MS27493-22M	361	PIN	22	22M	A/B
M22520/2-06	615722	M39029/57-355	MS27492-22M MS27491-22M	355	SKT	22	22M	A/B
M22520/2-09	615725	M39029/58-362	MS27494-22 MS27493-22	362	PIN	22	22	A/B
M22520/2-06	615722	M39029/57-356	MS27492-22 MS27491-22	356	SKT	22	22	A/B
M22520/2-10 M22520/1-04	615726 615711	M39029/58-363	MS27494-20 MS27493-20	363	PIN	20	20	A/B
M22520/2-10 M22520/1-04	615726 615711	M39029/57-357	MS27492-20 MS27491-20	357	SKT	20	20	A/B
M22520/1-04	615711	M39029/58-364	MS27494-16 MS27493-16	364	PIN	16	16	A/B
M22520/1-04	615711	M39029/57-358	MS27492-16 MS27491-16	358	SKT	16	16	A/B
M22520/1-04	615711	M39029/58-365	MS27494-12 MS27493-12	365	PIN	12	12	A/B
M22520/1-04	615711	M39029/57-359	MS27492-12 MS27491-12	359	SKT	12	12	A/B

BIN (Basic identification number) code color bands, reading in sequence from wire barrel end of the contact.
Each digit of the BIN code shall be designated on the contact by a color band in accordance with the following:

0 - Black	5 - Green
1 - Brown	6 - Blue
2 - Red	7 - Violet
3 - Orange	8 - Gray
4 - Yellow	9 - White

For contacts not listed above, please contact our sales team.

HEAVY DUTY PNEUMATIC CRIMP TOOL AMT23B (M22520/23-01)



- 8 indent crimp configuration
- Designed with safety in mind
- Meets all MIL-DTL-22520/23 requirements
- No extra booster required for large contacts
- Interchangeable dies and locators

The AMT23B takes all the work out of crimping those large contacts. Using interchangeable dies and locators, this tool crimps contact sizes 8 through 0000. The steady, uniform crimp force, provided by the air logic function delay, crimps even the largest of these contacts without cracking them. Unlike similar tools, Astro's AMT23B crimps its full range without using a booster Adapter.

The AMT23B is designed with operator safety in mind. The air logic function delay allows adequate time to remove fingers from the crimp area before crimping begins.

This tool is easily portable and weighs less than 19 pounds. It operates on 80-120 P.S.I. and requires a regulated, filtered and lubricated air supply for optimal function. Astro offers the 11413 air regulator for this purpose. The tool comes with a 1/2 inch diameter air coupler for convenient quick disconnect.

Part No.	Mill-Spec No.	Description
AM328	M22520/23-01	Heavy Duty Pneumatic Crimp Tool

AMT23B (M22520/23-01) DIE & LOCATOR SELECTION CHART

M22520/23-01 INTERCHANGEABLE DIES AND LOCATORS		
Part No.	Mill-Spec No.	Description
AMT23B	M22520/23-01	Crimp Tool
AMT23002DA	M22520/23-02	Die Assy. #8
AMT23003DA	M22520/23-03	Die Assy. #6
AMT23004DA	M22520/23-04	Die Assy. #4
AMT23005DA	M22520/23-05	Die Assy. #1/0
AMT23006DA	M22520/23-06	Die Assy. #2/0
AMT23007DA	M22520/23-07	Die Assy. #4/0
AMT23009L	M22520/23-09	Locator #8
AMT23010L	M22520/23-10	Locator #6
AMT23011L	M22520/23-11	Locator #4
AMT23012L	M22520/23-12	Locator #4,4N,4G
AMT23013L	M22520/23-13	Locator #1/0
AMT23014L	M22520/23-14	Locator #1/0,1/0N
AMT23015L	M22520/23-15	Locator #2/0,2/0N
AMT23016L	M22520/23-16	Locator #4/0,4/0N

Die Assembly Gaging Limits			
Part No.	Contact Size	Go	No Go
AMT23002DA	M22520/23-01	.130	.136
AMT23003DA	M22520/23-02	.171	.178
AMT23004DA	M22520/23-03	.195	.202
AMT23005DA	M22520/23-04	.325	.332
AMT23006DA	M22520/23-05	.351	.358
AMT23007DA	M22520/23-06	.425	.432

Gages	
Gauge No.	Die Assembly
AMTG2302	AMT23002DA
AMTG2303	AMT23003DA
AMTG2304	AMT23004DA
AMTG2305	AMT23005DA
AMTG2306	AMT23006DA
AMTG2307	AMT23007DA

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M22520/23-01 INTERCHANGEABLE DIES AND LOCATORS			
Part No.	Contact Size	MS Contact No.	
AMT23009L	8	M39029/29-8-8 M39029/30-8-8 MS90453-8-8 MS90454-8-8	M30929/29-214 M39029/30-220 M39029/44-291 M39029/45-298
AMT23010L	6	MS90559-11	M39029/48-317
	6N	MS90559-12	M39029/48-318
	6G	MS90559-14	M39029/49-319
	6	MS90560-7	M39029/49-329
	6G	MS90560-8	M39029/49-330
AMT23011L	4	M39029/29-4-4 M39029/30-4-4 MS90453-4-4 MS90454-4-4	M39029/29-215 M39029/30-221 M39029/44-292 M39029/45-299
AMT23012L	4	MS90559-8	M39029/48-320
	4N	MS90559-9	M39029/48-321
	4G	MS90559-13	M39029/48-322
	4	MS90560-5	M39029/49-331
	4G	MS90560-9	M39029/49-332

M22520/23-01 INTERCHANGEABLE DIES AND LOCATORS			
Part No.	Contact Size	MS Contact No.	
AMT23013L	1/0	M39029/29-0-0 M39029/30-0-0 MS90453-0-0 MS90454-0-0	M39029/29-216 M39029/30-222 M39029/44-293 M39029/45-300
AMT23014L	1/0	MS90559-5	M39029/48-323
	1/0N	MS90559-6	M39029/48-324
	1/0	MS90560-3	M39029/49-333
AMT23015L	2/0	MS90559-3	M39029/48-325
	2/0N	MS90559-4	M39029/48-326
	2/0	MS90560-2	M39029/49-334
AMT23016L	4/0	MS90559-1	M39029/48-327
	4/0N	MS90559-2	M39029/48-328
	4/0	MS90560-1	M39029/49-335

MINIATURE ADJUSTABLE CRIMP TOOL 612596 (MS3198-1)



- 8 indent crimp
- Dial selectable
- Uses bayonet-style positioners
- Cycle controlled

The Astro 612596 meets performance requirements for MS3198-1 and M22520/34-01. This lightweight compact tool uses MS3198, M22520/34, M22520/2 and proprietary bayonet-style positioners to crimp most pin and socket contacts smaller than size 20 to wires size 20 AWG and smaller.

The 612596 is step-adjustable to eight preselected crimp depths. The correct crimp depth is determined by using the data plate located on each positioner. This tool utilizes the same positive ratchet found on other Astro crimpers, which requires the completion of a crimp cycle before the handles will return to their open position. This feature ensures the integrity of every crimp.

Astro recommends the periodic gaging of all its crimping tools. For this purpose Astro offers the M22520/3-1 (615716) gauge with the tool in the number 8 selector position. For use on M22520/34-01 applications Astro recommends using the M22520/35 (621064) gauge with the crimp depth selector set on the number 6 setting.

Part No.	Mill-Spec No.	Description
612596	MS3198-1	Miniature Adjustable Crimp Tool

Positioners/Locators for contacts of MIL-C-26482 Series II. MIL-C-81703 Series III MIL-C-83723 Series III, MIL-C-83733							
Part No.	Astro Ref No.	Mil-Spec Contact No.	Supersedes Military Part No.	BIN Code	Style: Pin or Socket	Mating End Size	Wire Barrel Size
-	-	M39029/4-110	M83723-33B20 M39029/4-20-20	110	PIN	20	20
M22520/2-02	615718	M39029/5-115	M83723-34B20 M39029/5-20-20	115	SKT	20	20
MS3198-1P MS3198-1PA	612759 613382	M39029/9-132 THRU M39029/9-136	M39029/9-20-20C1 THRU M39029/9-20-20C5	132 THRU 136	PIN	20	20
-	-	M39029/10-138 THRU M39029/10-142	M39029/9-20-20C1 THRU M39029/10-20-20C5	138 THRU 142	SKT	20	20

Positioners/Locators for contacts of MIL-C-28840 series							
Part No.	Astro Ref No.	Mil-Spec Contact No.	Supersedes Military Part No.	BIN Code	Style: Pin or Socket	Mating End Size	Wire Barrel Size
M22520/34-02	620636	M39029/83-450	M39029/83-20-22	450	PIN	20	22
M22520/34-02	620636	M39029/83-451	M39029/83-20-28	451	PIN	20	28
M22520/34-02	620636	M39029/84-452	M39029/84-20-22	452	SKT	20	22
M22520/34-02	620636	M39029/64-453	M39029/84-20-28	453	SKT	20	28

Contacts for Connector Family: MIL-C-21097							
Part No.	Astro Ref No.	Mil-Spec Contact No.	Supersedes Military Part No.	BIN Code	Style: Pin or Socket	Mating End Size	Wire Barrel Size
MS3196-4P	613023	M39029/9-01	-	-	SKT	20	20

612596 (MS3198-1) POSITIONER SELECTION CHARTS

Contacts for Connector Families: MIL-C-38999 Series I, II, III, IV, MIL-C-83733, MIL-C-24308 & MIL-C-55302/68/69/71/72/75

Military Part No.	BIN Code	Supersedes Military Part #	Style: Pin or Socket	Mating End Size	Wire Barrel Size	Positioner/ Turret Part No.	Astro Ref No.
M39029/58-360	360	MS27494-22D MS27493-22D M24308/13-1	PIN	22	22D	M22520/2-09	615725
M39029/58-361	361	MS27494-22M MS27493-22M	PIN	22	22M	MS3196-8P	613642
M39029/58-362	362	MS27494-22 MS27493-22	PIN	22	22		
M39029/57-354	354	MS27492-22D MS27491-22D M24308/12-1	SKT	22	22D	M22520/2-06	615722
M39029/57-355	355	MS27492-22M MS27491-22M	SKT	22	22M	MS3196-6P	613640
M39029/58-363	363	MS27494-20 MS27493-20	PIN	20	20	M22520/2-10 MS3196-9P	615726 613643
M39029/57-357	357	MS27492-20 MS27491-20	SKT	20	20	M22520/2-10 MS3196-9P	615726 613643

Contacts for Connector Family: MIL-C-38999 Series I, III, IV

Military Part No.	BIN Code	Supersedes Part No.	Style: Pin or Socket	Mating End Size	Wire Barrel Size	Positioner/ Turret Part No.	Astro Ref No.
M39029/56-349	349	MS27490-22M	SKT	22	22M	M22520/2-07	615723
M39029/56-350	350	MS27490-22	SKT	22	22	MS3198-7P	613641
M39029/56-351	351	MS27655-30 MS27490-20	SKT	20	20	M22520/2-10 MS3196-9P	615726 613643

Contacts for Connector Family: MIL-C-81511 Series I & II

Military Part No.	BIN Code	Supersedes Part No.	Style: Pin or Socket	Mating End Size	Wire Barrel Size	Positioner/ Turret Part No.	Astro Ref No.
M39029/46-303	303	MS90460 A23-22	PIN	23	22	MS3196-2PA MS3196-2P	613381 612760
M39029/46-304	304	MS90460 B23-22	SKT	23	22		
M39029/47-313	313	MS90461 A23-22	PIN	23	22		
M39029/47-314	314	MS90461 B23-22	SKT	23	22		

Contacts for Connector Family: MIL-C-26500

Military Part No.	BIN Code	Supersedes Part No.	Style: Pin or Socket	Mating End Size	Wire Barrel Size	Positioner/ Turret Part No.	Astro Ref No.
M39029/31-241	241	MS24254-20P	PIN	20	20	M22520/2-02 MS3196-1P, MS3196-1PA	615718 612759, 613382
M39029/32-260	260	MS24255-20S	SKT	20	20	M22520/2-02 MS3198-1P, MS3198-1PA	615718 612759, 613382

BIN (Basic identification number) code color bands, reading in sequence from wire barrel end of the contact.
Each digit of the BIN code shall be designated on the contact by a color band in accordance with the following:

0 - Black 1 - Brown 2 - Red 3 - Orange 4 - Yellow 5 - Green 6 - Blue 7 - Violet 8 - Gray 9 - White

STANDARD SELF-ADJUSTING CRIMP TOOL MS3191



- 4 or 8 indent
- Cycle controlled ratchet
- No dial adjustment required

The MS3191 series of tools still continue to set a standard of excellence for crimping tools. This series of crimping tools is one of the easiest to use. Simply selecting the proper positio-ner determines the crimp depth, crimp location and point of ratchet release.

Four or eight indent crimp provides a uniform displacement of wire and contact material, on contact sizes 12-20 and wire sizes 12-26 AWG.

As with all Astro pin and socket crimp tools, the MS3191 series tools can be ordered with a variety of indentor configurations, including octadent (tool part number: 612600).

A large selection of positioners is available for this tool. If we do not have a positioner to meet your special needs, Astro will custom design and manufacture positioners for you. Various tool-positioner combination packages are available. Extra positioners are conveniently stored in the tool handle. (See chart for details.)

A gauge kit (part number ATK 6000 [MS3196-2]) is available for the recommended periodic gaging.

This tool weighs approximately 20 ounces and is 9 1/2 inches long.

The following MS contacts can be crimped with the MS3191-A frame assembly when used with the positioners specified:

For Locators in addition to those listed please consult our sales team.

Part No.	Mill-Spec No.	Description
11210	MS3191-A	Frame Assembly
10692	MS3191-1	Crimp Tool
11234	MS3191-2	Crimp Tool

Locator Part No.	Locator MS Designation
11062	MS3191-20A
2520-3	MS3191-16A
2520-4	MS3191-12A
10854-1	MS3191-208
10854-2	MS3191-168
3538-3	MS3191-20C
11045-1	MS3191-22D
11045-2	MS3191-16D

Crimp Tool Assembly Part No .	Consists of	
	Crimp Tool Frame	Positioners
MS3191-1 (10692)	MS3191-A (11210)	MS3191-20A MS3191-16A MS3191-12A
MS3191-2 (11234)	MS3191-A (11210)	MS3191-20B MS3191-16B

8-STEP ADJUSTABLE CRIMP TOOL EUS309



- 8 indent crimp
- Dial selectable
- Cycle controlled ratchet
- Lightweight and easy to use
- Uses bayonet positioners

The ASTRO EUS309 is used to crimp powered D sub contacts but is not limited to this function.

It is an 8 step adjustable crimp tool, cycled controlled and capable of crimping wire barrel sizes 12-20. Its crimp range is slightly larger than that of the 615708 (M22520/1-01) and utilizes the same basic components.

It has a distinctive red look and is the same size and weight as the 615708 (9¼ inches long, approximately 20 ounces).

Various turrets and single head positoners are available upon consulting the factory.

Astro recommends periodic gaging with a P/N EUS309-G.

This tool weighs approximately 20 ounces and is 9½ inches long.

The following MS contacts can be crimped with the MS3191-A frame assembly when used with the positioners specified:

For Locators in addition to those listed please contact our sales team.

Gaging Information (Dimension in Inches)		
Selector Setting #	Go Size .0001	No Go Size.0001
1	.0360	.0410
2	.0450	.0500
3	.0520	.0570
4	.0610	.0660
5	.0690	.0740
6	.0760	.0810
7	.0860	.0950
8	.1000	.1100

Part No.	Mill-Spec No.	Description
EUS309	MS3191-A	8-Step Adjustable Crimp Tool

MIL SPEC CRIMP TOOL SELECTION CHARTS

Vendor (Cage) Connector Series and Type	Basic Connector Part No.	Contact Part No.	Pin or SKT	Color Bands 1st	2nd	3rd	BIN Code	Contact Size Mating End	Wire Barrel	Wire Range or Cable	Contact Gage	Crimp Tool	Accessory	Installation Tool	Removal Tool	Removal Tool (unwired Contacts)
Military Specs MIL-C-38999 Circular Rear Release Contacts Series I Scoop-proof Bayonet Coupling Series II Low Silhouette Bayonet Coupling Series III Threaded Coupling Series IV Breech Coupling	Series I MS27466 ( ) MS27467 ( ) MS27468 ( ) MS27496 ( ) MS27498 ( ) MS27505 ( ) MS27515 ( ) MS27652 ( ) MS27653 ( ) MS27654 ( ) MS27656 ( ) MS27661 ( )	M39029/58-360	P	ORN	BLU	BLK	360	22	22D	22-28	AT 0022	615717 or 616336	615725 or 616332	ATML 0801B or M81969/14-01 (green)	ATML 0802B or M81969/14-01 (white)	ATK 2005 with (black) ATK2005-22D-1
		M39029/56-348	LS	ORN	YEL	GRA	348					615717 or 616336	615723 or 616330			
		M39029/57-354	SS	ORN	GRN	YEL	354					615717 or 616336	615722 or 616331			
		M39029/58-361	P	ORN	BLU	BRN	361					615717 or 616336	615725 or 616332			
		M39029/56-349	LS	ORN	YEL	WHI	349	22	22M	24-28		615717 or 616336	615723 or 616330			
		M39029/57-355	SS	ORN	GRN	GRN	355					615717 or 616336	615722 or 616331			
	Series II MS27472 ( ) MS27473 ( ) MS27474 ( ) MS27479 ( ) MS27480 ( ) MS27481 ( ) MS27484 ( ) MS27497 ( ) MS27500 ( ) MS27504 ( ) MS27508 ( ) MS27513 ( ) MS27664 ( )	M39029/58-362	P	ORN	BLU	RED	362	22	22	22-26		615717 or 616336	615725 or 616332	ATML 0803B	ATML 0804B	ATK 2005 with (brown) ATK 2005-22-1
		M39029/56-350	LS	ORN	GRN	BLK	350					615717 or 616336	615723 or 616330			
		M39029/57-356	SS	ORN	GRN	BLU	356					615717 or 616336	615722 or 616331			
	Series III D38999/20 ( ) D38999/24 ( ) D38999/26 ( ) D38999/29 ( ) D38999/30 ( )	M39029/58-363	P	ORN	BLU	ORN	363	20	20	20-24	AT 0020	615708 or 615717 or 616336	615711 (red) or 615726 or 616333	ATML 0805B or M81969/14-10 (red)	ATML 0806B or M81969/14-10 (orange)	ATK 2005 with (red) ATK 2005-20-1
		M39029/56-351	LS	ORN	GRN	BRN	351									
		M39029/57-357	SS	ORN	GRN	VIO	357									
	Series IV D38999/40 ( ) D38999/42 ( ) D38999/44 ( ) D38999/46 ( ) D38999/47 ( ) D38999/49 ( )	M39029/58-364	P	ORN	BLU	YEL	364	16	16	16-20	AT 0016	615708 or 616336	615711 (blue) or 616329	ATML 0807BB or M81969/14-03 (blue)	ATML080B or M81969/14-03 (white)	ATK 2005 with (blue) ATK 2005-16-1
		M39029/56-352	LS	ORN	GRN	RED	352									
		M39029/57-358	SS	ORN	GRN	GRA	358									
		M39029/58-365	P	ORN	BLU	GRN	365	12	12	12-14	AT 0012	615708	615711 (yellow)	ATML 0809B or M81969/14-04 (yellow)	ATML 0810B or M81969/14-04 (white)	ATK 2005 with (yellow) ATK 2005-12-1
		M39029/56-353	LS	ORN	GRN	ORN	353									
		M39029/57-359	SS	ORN	GRN	WHI	359									
		M39029/29-212	P	RED	BRN	RED	212	16								
		M39029/30-217	S	RED	BRN	VIO	217	16S								
		M39029/30-218	S	RED	BRN	GRA	218									
		M39029/85-454	P	YEL	GRN	YEL	454									
		M39029/85-455	P	YEL	GRN	GRN	455							ATML 08207B or M81969/14-03 or ATR 1105	ATML 08208B or M81969/14-03 or ATR 2112	M81969/30 handle with ATML 3006 (blue)
		M39029/85-456	P	YEL	GRN	BLU	456		16	16-20	AT 0016					
		M39029/85-457	P	YEL	GRN	VIO	457	16								
		M39029/86-462	S	YEL	BLU	RED	462									
		M39029/86-463	S	YEL	BLU	ORN	463									
		M39029/86-464	S	YEL	BLU	YEL	464									
		M39029/86-465	S	YEL	BLU	GRN	465					615708	615709			
MIL-C-83723 SERIES II CIRCULAR THREADED COUPLING REAR RELEASE CONTACTS	M83723/17 ( ) M83723/18 ( ) M83723/19 ( ) M83723/20 ( ) M83723/21 ( ) M83723/22 ( ) M83723/23 ( ) M83723/24 ( ) M83723/52 ( ) M83723/53 ( )	M39029/29-213	P	RED	BRN	ORN	213	12	12	12-14	AT 0012			ATML 08209B or M81969/14-04 or ATR 1153	ATML 08210B or M81969/14-04 or ATR 2160	M81969/30 handle with ATML 3007 (yellow)
		M39029/30-219	S	RED	BRN	WHI	219									
		M39029/85-458	P	YEL	GRN	GRA	458									
		M39029/85-459	P	YEL	GRN	WHI	459									
		M39029/85-460	P	YEL	BLU	BLK	460									
		M39029/85-461	P	YEL	BLU	BRN	461									
		M39029/86-466	S	YEL	BLU	BLU	466									
		M39029/86-467	S	YEL	BLU	VIO	467									
		M39029/86-468	S	YEL	BLU	GRA	468									
		M39029/86-469	S	YEL	BLU	WHI	469									
		M39029/29-214	P	RED	BRN	YEL	214	8	8	8-10	–	AMT23B	AMT-23002DA AM-T23009L	not needed	M81969/29-02	
		M39029/30-220	S	RED	RED	BLK	220									
		M39029/29-215	P	RED	BRN	GRN	215	4	4	4-6	–		AMT-23004DA AMT23011L		M81969/29-03	
		M39029/30-221	S	RED	RED	BRN	221									
		M39029/29-216	P	RED	BRN	BLU	216	0	0	0-2	–		AMT-23005DA AMT23013L		M81969/29-04	
		M39029/30-222	S	RED	RED	RED	222									

MIL SPEC CRIMP TOOL SELECTION CHARTS

Vendor (Cage) Connector Series and Type	Basic Connector Part No.	Contact Part No.	Pin or SKT	Color Bands 1st	2nd	3rd	BIN Code	Contact Size Mating End	Wire Barrel	Wire Range or Cable	Contact Gage	Crimp Tool	Accessory	Installation Tool	Removal Tool	Removal Tool (unwired Contacts)
MIL-C-5015 MS 3400* Series Circular Threaded Coupling Front Release Contacts	MS3400 ( )	M39029/44-287	P	RED	GRA	VIO	287	16	22	22-26	AT 0016	615708 or 616336	615709 (blue)	ATML 1701	ATML 1901B	ATML 1901B
		M39029/45-294	S	RED	WHI	YEL	294									
	MS3401 ( )	M39029/44-288	P	RED	GRA	GRA	288	16	16	16-20			616328			
		M39029/45-295	S	RED	WHI	GRN	295									
	MS3402 ( )	M39029/44-289	P	RED	GRA	WHI	289	12	16	16-20	AT 0012	615708	615709 (yellow)	ATML 1702	ATML 1902B	ATML 1902B
		M39029/45-296	S	RED	WHI	BLU	296									
	MS3404 ( )	M39029/44-290	P	RED	WHI	BLK	290	12	12	12-14						
		M39029/45-297	S	RED	WHI	VIO	297									
	MS3406( )	M39029/44-291	P	RED	WHI	BRN	291	8	8	8-10	–	AMT23B	AMT23002DA AMT23009L	–	ATML 1903B	ATML 1903B
		M39029/45-298	S	RED	WHI	GRA	298									
	MS3408 ( )	M39029/44-292	P	RED	WHI	RED	292	4	4	4-6			AMT23004DA AMT23011L	–	ATML 1904B	ATML 1904B
		M39029/45-299	S	RED	WHI	WHI	299									
	MS3409 ( )	M39029/44-293	P	RED	WHI	ORN	293	0	0	0-2			AMT23005DA AMT23013L	–	ATML 1905B	ATML 1905B
		M39029/45-300	S	ORN	BLK	BLK	300									
MIL-C-5015 MS3450* Series Circular Threaded Coupling Rear Release Contacts	MS3450 ( )	M39029/30-217	S	RED	BRN	VIO	217	16S	16	16-20	AT 0016	615708 or 616336	615709 (blue)	ATML 08207B or ATR 1105 or M81969/14-03	ATML 08208B or ATR 2112 or M81969/14-03	M81969/30 Handle with ATML 3006
		M39029/29-212	P	RED	BRN	RED	212						616328			
	MS3451 ( )	M39029/30-218	S	RED	BRN	GRA	218	16	16							
		M39029/29-213	P	RED	BRN	ORN	213			12-14	AT 0012	615708	615709 (yellow)	ATR 1153 or M81969/14-04 or ATML 08209B	ATR 2160 or M81969/14-04 or ATML 08210B	M81969/30 Handle with ATML 3007
	MS3452( )	M39029/30-219	S	RED	BRN	WHI	219	12	12							
		M39029/29-214	P	RED	BRN	YEL	214									
	MS3454 ( )	M39029/30-220	S	RED	RED	BLK	220	8	8	8-10		AMT23B	AMT23002DA AMT23009L	–	ATML 1501 or M81969/29-02	–
		M39029/29-215	P	RED	BRN	GRN	215									
	MS3456 ( )	M39029/30-221	S	RED	RED	BRN	221	4	4	4-6	–		AMT23004DA AMT23011L	–	ATML 1502 M81969/29-03	–
		M39029/29-216	P	RED	BRN	BLU	216									
	MS3459 ( )	M39029/30-222	S	RED	RED	RED	222	0	0	0-2			AMT23005DA AMT23013L	–	ATML 1503 or M81969/29-04	
MIL-C-26482 Series I Circular Bayonet Coupling Front Release Contacts	MS3120 ( ) MS3128 ( )	M39029/31-240	P	RED	YEL	BLK	240	20	20	20-24	AT 0020	615708 or 615717 or 616336	615709 (red) ——— 615718 ——— 616327	ATML 1703B	ATML 1906B	ATML 1906B
	MS3121 ( )	M39029/32-259	S	RED	GRN	WHI	259									
	MS3122 ( )	M39029/31-228	P	RED	RED	GRA	228	16	16	16-20	AT 0016	615708 or 616336	615709 (blue) ——— 615709 ——— 616336	ATML 1704B	ATML 1901B	ATML 1901B
	MS3124 ( )	M39029/32-247	S	RED	YEL	VIO	247									
	MS3126 ( )	M39029/31-234	P	RED	ORN	YEL	234	12	12	12-14	AT 0012	615708	615709 (yellow)	ATML 1705B	ATML 1902B	ATML 1902B
	MS3127 ( ) MS3128 ( )	M39029/32-253	S	RED	GRN	ORN	253									
	MS3470 ( )	M39029/4-110	P	BRN	BRN	BLK	110	20	20	20-24	AT 0020	615708 or 615717 or 616336	615709 (red) ——— 615718 ——— 616327	ATR 1078 or M81969/14-11 (red)	ATR 2080 or M81969/14-11 (white)	M81969/30 Handle with ATML 3005 (red)
	MS3471 ( )	M39029/5-115	S	BRN	BRN	GRN	115									
	MS3472 ( )	M39029/4-111	P	BRN	BRN	BRN	111	16	16	16-20	AT 0016	615708 or 616336	615709 (blue)	ATML 08207B or ATR 1105 or M81969/14-03 (blue)	ATML 08208B or ATR 2112 or M81969/14-03 (white)	M81969/30 Handle with ATML 3006 (blue)
	MS3474 ( )	M39029/5-116	S	BRN	BRN	BLU	116									
	MS3475 ( )	M39029/4-112	P	BRN	BRN	RED	112	16	20	20-24			616328			
		M39029/5-117	S	BRN	BRN	VIO	117									
	MS3476 ( )	M39029/4-113	P	BRN	BRN	ORN	113	12	12	12-14	AT 0012	615708	615709 (yellow)	ATML 08209B or ATR 1153 or M81969/14-04 (yellow)	ATML 08210B or ATR 2160 or M81969/14-04 (white)	M81969/30 Handle with ATML 3007 (yellow)
		M39029/5-118	S	BRN	BRN	GRA	118									
		M39029/4-114	P	BRN	BRN	YEL	114	12	16	16-20						
		M39029/5-119	S	BRN	BRN	WHI	119									

MIL SPEC CRIMP TOOL SELECTION CHARTS

Vendor (Cage) Connector Series and Type	Basic Connector Part No.	Contact Part No.	Pin or SKT	Color Bands 1st	2nd	3rd	BIN Code	Contact Size Mating End	Wire Barrel	Wire Range or Cable	Contact Gage	Crimp Tool	Accessory	Installation Tool	Removal Tool	Removal Tool (unwired Contacts)
MIL-C-83723 Series III Bayonet Coupling Rear Release Contacts	M83723/71 ( ) M83723/72 ( ) M83723/73 ( ) M83723/74 ( ) M83723/75 ( ) M83723/76 ( ) M83723/77 ( ) M83723/78 ( ) M83723/84 ( ) M83723/85 ( ) M83723/86 ( ) M83723/87 ( ) M83723/91 ( ) M83723/92 ( ) M83723/95 ( ) M83723/96 ( ) M83723/97 ( ) M83723/98 ( )	M39029/4-110	P	BRN	BRN	BLK	110	20	20	20-24	AT 0020	615708	615709	ATML 08205B or M81969/14-11 or ATR 1078	ATML 08206B or M81969/14-11 or ATR 2080	M81969/30 Handle with ATML 3005 (red)
		M39029/5-115	S	BRN	BRN	GRN	115									
		M39029/9-132	P	BRN	ORN	RED	132									
		M39029/9-133	P	BRN	ORN	ORN	133									
		M39029/9-134	P	BRN	ORN	YEL	134									
		M39029/9-135	P	BRN	ORN	GRN	135									
		M39029/9-136	P	BRN	ORN	BLU	136									
		M39029/10-138	S	BRN	OEN	GRA	138									
		M39029/10-139	S	BRN	OEN	WHI	139									
		M39029/10-140	S	BRN	YEL	BLK	140									
		M39029/10-141	S	BRN	YEL	BRN	141									
		M39029/10-142	S	BRN	YEL	RED	142									
		M39029/4-112	P	BRN	BRN	RED	112	16	20	20-24	AT 0016			ATML 08207B or M81969/14-03 or ATR 1105	ATML 08208B or M81969/14-03 or ATR 2112	ATML 3006
		M39029/5-117	S	BRN	BRN	VIO	117									
		M39029/4-111	P	BRN	BRN	BRN	111	16	16	16-20						
		M39029/5-116	S	BRN	BRN	BLU	116									
		M39029/4-113	P	BRN	BRN	ORN	113	12	12	12-14				ATML 08209B or M81969/14-04 or ATR 1153	ATML 08210B or M81969/14-04 or ATR 2160	ATML 3007
		M39029/5-118	S	BRN	BRN	GRA	118									
		M39029/4-114	P	BRN	BRN	YEL	114	12	16	16-20				M81969/14-03	M81969/14-03	ATML 3006
		M39029/5-119	S	BRN	BRN	WHI	119									
		M39029/7-126	P	BRN	RED	BLU	126	12 shielded			AT 0012	Inner Contact 615717 Outer Contact 620175	Inner Contact 616413 Outer Contact 620294	M81969/14-03	M81969/14-03	M81969/30 Handle with ATML 3007 (yellow)
		M39029/7-127	P	BRN	RED	VIO	127									
		M39029/7-128	P	BRN	RED	GRA	128									
		M39029/8-129	S	BRN	RED	WHI	129									
		M39029/8-130	S	BRN	ORN	BLK	130									
		M39029/8-131	S	BRN	ORN	BRN	131									

Pneumatic Crimpers

PNEUMATIC CRIMP TOOL APC708 (FUNCTIONAL EQUIVALENT TO M22520/1-01)



- Portable or bench-mounted
- Cycle controlled ratchet

8-Step Adjustable Manual Feed Pneumatic Crimping Tool APC708

A fast, versatile, pneumatically actuated four indenter tool for crimping MS style or proprietary circular contacts. This tool accommodates all turret head assemblies used with the M22520/1-01 crimping tool. The tool is capable of accommodating contact sizes 12 to 26 and wire sizes 12 to 30 AWG.

Astro manufactures the ATK6002 gaging kit with the gaging pin assemblies for each selector setting. Contact the factory for price and availability. Tool can be either hand held or mounted on an optional bench mount (P/N 11380). The tool can be actuated by the tool trigger or a foot pedal assembly (P/N 11380-2). (The bench mount and foot pedal can be purchased together as P/N 11380-3). Using these accessories leaves the operator's hands free for inserting and removing contacts and wire. This tool operates on 80-120 P.S.I. Astro recommends a filtered, regulated and lubricated air supply for optimal performance. Astro offers the 11413 air regulator for this purpose.

Part No.	Mill-Spec No.	DMC Ref	Usage/Description	NSN
615716	M22520/3-1	–	Gauge for /1-01 /2-01	5220-00-165-7604
615709	M22520/1-02	–	Turret	5120-00-016-6382
615710	M22520/1-03	–	Turret	5120-00-016-6554
615711	M22520/1-04	–	Turret	5120-00-016-7582
615712	M22520/1-05	–	Universal Positioner	5120-00-165-3911
615713	M22520/1-06	–	Positioner	5120-00-016-7647
615714	M22520/1-07	–	Positioner	5120-00-016-7651
615715	M22520/1-08	–	Turret	5120-00-016-7654
615821	M22520/1-09	–	Positioner	5120-00-132-5039
615822	M22520/1-10	–	Positioner	5120-00-132-5095
616406	M22520/1-11	–	Positioner	5120-01-127-5231
616407	M22520/1-12	–	Turret	5120-01-036-9220
616408	M22520/1-13	–	Turret	5120-01-036-9221
616409	M22520/1-14	–	Turret	5120-01-036-9222
616410	M22520/1-15	–	Positioner	5120-01-036-9223
620172	M22520/1-16	–	Positioner	5120-01-075-8138
620537	M22520/1-17	–	Positioner	–

PNEUMATIC CRIMP TOOLS FOR CIRCULAR CONTACTS



- Portable or bench-mounted
- Cycle controlled ratchet
- Foot pedal assembly available

Tools can be either hand held or mounted on an optional bench mount and foot pedal assembly (part number 11380-3). Using this assembly leaves the operator's hands free for inserting and removing contacts and wire. These tools operate on 80-120 P.S.I. Astro recommends a filtered, regulated and lubricated air supply for optimal performance. Astro offers the 11413 air regulator for this purpose. The internally adjusted line of crimp tools is designed for adjustments by qualified personnel only. This tool features an adjustment knob located inside the front cover plate of the tool. Once set by qualified personnel, the tool is not adjustable by the assembly line operator, thus helping to eliminate operator error. The tool operates with replaceable, single position locators. When using these locators, the internally adjustable tools can crimp a wire range of 8-30 AWG. The internally adjusted tools can be adapted to accept the MS3191-4 and M22520/1 turrets by ordering a 620754 turret Adapter assembly.

Standard internally adjustable tool: 612871 Mini tip tool: part number 612768

4 indent style tool: part number 11221.

4 indent style tool with 3 locators: part number 10967: 3212 (20 GA.) 3213 (16 GA.) 3214 (12 GA.)

Part No.	Contact Size	Contacts Accommodated (Ref.)
3212	20	MS 3190 MS 24254
3213	16	MS 3192 MS 3193 MS 24225 NAS 1662 NAS 1663 MS 18134
3214	12	MS 18136 M39029/4 M39020/5
11568-1	20	MS 17803 MS 17807
11568-1	16	MS 17804 MS 17808 M39029/34 M39029/35
612507	22	MS 27491-22, 22D, 22M MS 27492-22, 22D, 22M MS 27493-22, 22D, 22M MS 27494-22, 22D, 22M M39029/57 M39029/58
613264		M39029/56 MS 27490-22, 22D, 22M
7005626	20	M39029/56 M39029/57 M39029/58 MS 27490-20 MS27491-20 MS27492-20 MS27493-20 MS27494-20
7008289	16	M39029/58 MS 27493-16 MD 27494-16
7008300		M39020/56 M39029/57 MS 27490-16 MS 27491-16 MS 27492-16
12		M39029/56 M39029/57 M39029/58 MS 27490-12 MS 27491-12 MS 27492-12 MS 27493-12 MS 27494-12

PORTABLE INTERMEDIATE AND MINIATURE PNEUMATIC TOOLS



- Conforms to performance requirements of MIL-DTL-22520
- Portable or bench-mounted operation
- Eliminates operator fatigue and reduces carpal tunnel syndrome problems

The intermediate and miniature portable pneumatic crimping tools, 621100 and 621101, provide all the features of the M22520/2-01 and the M22520/7-01.

Reduced operator fatigue and reduced carpal tunnel syndrome occurrences make these tools ideal for assembly line operation. Both tools can be used as portable units or can be bench mounted (part number 621102) and used with an optional foot pedal (part number 620372). If both bench mount and foot pedal are desired, order part number 620925.

The 621100 is color coded blue to match the M22520/2-01 and accepts all /2 positioners.

The 621101 uses the standard M22520/7 positioners and is color coded green to match the /7 tool.

Both tools feature the eight step adjustable selector found on the M22520 8-indent style crimping tools. Operating procedures for these tools are identical to the hand operated models.

Both the 621100 and 621101 operate at 80-120 PSI and require a lubricated, regulated and filtered air supply. Astro offers the 11413 regulator for this purpose.

We always recommend the periodic gaging of our tools.

These tools are each 10 1/2 inches long and weigh approximately 32 ounces.

Part No.	Astro Ref No.	Gage	Description
M22520/2-01	621100	615716 (M22520/3-01)	Portable Intermediate and Miniature Pneumatic Tool
M22520/7-01	621101	616337 (M22520/3-03)	Portable Intermediate and Miniature Pneumatic Tool

CONTACT INSTALLATION / REMOVAL TOOLING – PLASTIC





Part No.	Type	Contact Size	Series	Colour
M81969/1-01	Insert/Remov	22	AS81659 Series II	Grn/Wht
M81969/1-02	Insert/Remov	20	MIL-DTL-24308, AS81659 Series II	Red/Wht
M81969/1-03	Insert/Remov	16	AS81659 Series II	Blu/Wht
M81969/1-04	Insert/Remov	12	MIL-DTL-24308, AS81659 Series II	Grn/Wht
M81969/14-01	Insert/Remov	22D	MIL-C-26482, MIL-C-81703, MIL-C-83723, MIL-C-38999, MIL-T-81714	Grn/Wht
M81969/14-02	Insert/Remov	20	MIL-C-5015, MIL-C-24308, MIL-C-26482 Series II, MIL-C-83723, MIL-C-83733, MIL-C-38999 Series I & II, MIL-C-81511, MIL-C-81511 Series III & IV	Red/Wht
M81969/14-03	Insert/Remov	16	MIL-DTL-55302/68 & /69, MIL-DTL-38999, MIL-DTL-26482 Series II, AS81703 Series III, MIL-DTL-83733, MIL-DTL-83723 Series II & III, AS501511, AS81714	Blu/Wht
M81969/14-04	Insert/Remov	12	MIL-DTL-55302/68 & /69, MIL-DTL-38999, MIL-DTL-26482 Series II, AS81703 Series III, MIL-DTL-83733, MIL-DTL-83723 Series II & III, AS50151, AS81714	Yel/Wht
M81969/14-05	Insert/Remov	10	MIL-C-38999	Gra/Wht
M81969/14-10	Insert/Remov	20	MIL-DTL-55302/68 & /69, MIL-DTL-38999	Red/Ora
M81969/14-11	Insert/Remov	20	MIL-DTL-26482 Series II, AS81703 Series III, MIL-DTL-83733, MIL-DTL-83723 Series II & III, AS50151, AS81714	Red/Wht
M81969/16-01	Insert/Remov	20	MIL-C-81511 Series 3 & 4	Red/Wht
M81969/16-02	Insert/Remov	16	MIL-C-81511 Series 3 & 4	Blu/Wht
M81969/16-03	Insert/Remov	12	MIL-C-81511 Series 3 & 4	Yel/Wht
M81969/16-04	Insert/Remov	23	MIL-C-81511 Series 3 & 4	Grn/Wht
M81969/29-02	Removal	8	MIL-DTL-26482 Series II, AS81703 Series III, MIL-DTL-83733, MIL-DTL-83723 Series II & III, AS50151, AS81714	Red
M81969/29-03	Removal	4	MIL-DTL-26482 Series II, AS81703 Series III, MIL-DTL-83733, MIL-DTL-83723 Series II & III, AS50151, AS81714	Blu
M81969/29-04	Removal	0	MIL-DTL-26482 Series II, AS81703 Series III, MIL-DTL-83733, MIL-DTL-83723 Series II & III, AS50151, AS81714	Yel
M81969/39-01	Insert/Remov	20	MIL_DTL-34308, AS81659	Grn/Wht

SOFT JAW CONNECTOR WRENCH

- Adjustable – Box joint style.
- To avoid damage when working with military style connectors.
- Replaceable jaws available



Part No.	Description
AT508K	Soft Jaw Wrench

GO-NO-GO GAUGE

Periodic gauging is recommended to ensure accurate calibration of mil-spec crimp tools.



Part No.	Description
M22520/3-1	Go-No-Go Gauge

CONTACT INSTALLATION/REMOVAL TOOLING – METAL





Part No.	DMC Ref	Type	Contact Size	Colour
M81969/2-01	DAK126-23A	Insertion	22	Yel
M81969/2-02	DAK126-20A	Insertion	20	Red
M81969/2-03	DAK126-16A	Insertion	16	Blu
M81969/2-04	DAK126-12A	Insertion	12	Yel
M81969/3-01	DRK129-23A	Removal	23	Yel
M81969/3-02	DRK129-20A	Removal	20	Red
M81969/3-03	DRK129-16A	Removal	16	Blu
M81969/3-04	DRK129-12A	Removal	12	Yel
M81969/3-05	DRK125-23A	Removal	23	Yel/Blk
M81969/3-06	DRK125-20A	Removal	20	Red/Blk
M81969/3-07	DRK125-16A	Removal	16	Blu/Blk
M81969/3-08	DRK125-12A	Removal	12	Yel/Blk
M81969/8-01	DAK95-22B	Removal	22D	Grn
M81969/8-02	DRK95-22B	Removal	22M	Grn/Wht
M81969/8-03	DAK95-22B	Insertion	22	Brn
M81969/8-04	DRK95-22B	Removal	22	Brn/Wht
M81969/8-05	DAK95-20B	Insertion	20	Red
M81969/8-06	DRK95-20B	Removal	20	Red/Wht
M81969/8-07	DAK95-16B	Insertion	16	Blu
M81969/8-08	DRK95-16B	Removal	16	Blu/Wht
M81969/8-09	DAK95-12B	Insertion	12	Yel
M81969/8-10	DRK95-12B	Removal	12	Yel/Wht
M81969/8-205B	DAK83-20B	Insertion	20	Red/Blk
M81969/8-206B	DRK83-20B	Removal	20	Red/Wht/Blk
M81969/8-207	DAK83-16B	Insertion	16	Blu/Blk
M81969/8-208	DRK83-16B	Removal	16	Blu/Wht/Blk
M81969/8-209	DAK83-12B	Insertion	12	Yel/Blk
M81969/8-210	DRK83-12B	Removal	12	Yel/Wht/Blk
M81969/15-01	DRK250-8	Removal	8	–
M81969/15-02	DRK250-4	Removal	4	–
M81969/15-03	DRK250-0	Removal	1/0	–
M81969/17-01	DAK55-16A	Insertion	16	Blu
M81969/17-02	DAK55-12A	Insertion	12	Yel
M81969/17-03	DAK20B	Insertion	20	Red
M81969/17-04	DAK16B	Insertion	16	Blu
M81969/17-05	DAK12B	Insertion	12	Yel
M81969/17-06	DAK55-8B	Insertion	8	Red
M81969/17-07	DAK55-4B	Insertion	4	Blu
M81969/17-08	DAK55-0B	Insertion	0	Yel
M81969/17-09	DAK83S-20	Insertion	20	Red
M81969/18-01	DAK123A	Insertion	16/20	Grn
M81969/18-02	DAK123-22A	Insertion	22	Gold
M81969/19-01	DRK16B	Removal	16	Blu
M81969/19-02	DRK12B	Removal	12	Yel
M81969/19-03	DRK56-8B	Removal	8	Red
M81969/19-04	DRK56-4B	Removal	4	Blu
M81969/19-05	DRK56-0B	Removal	0	Yel
M81969/19-06	DRK20B	Removal	20	Yel
M81969/19-07	DRK20A	Removal	20	Red
M81969/19-08	DRK16A	Removal	16	Blu
M81969/19-09	DRK12A	Removal	12	Grn
M81969/19-10	DHK20A	Removal	20	–
M81969/19-11	DHK16A	Removal	16	–
M81969/20-01	DRK124A	Removal	16	–

MilSpec No	DMC Ref	Type	Contact Size	Colour
M81969/20-02	DRK124-22A	Removal	22	–
M81969/21-01	DHK368	Insert/Remov	16	–
M81969/22-01	DRK222	Removal	16	–
M81969/23-01	DAK1-16P-S	Insertion	16	–
M81969/23-02	DAK1-16S-S	Insertion	16	–
M81969/27-01	DRK178-1A	Removal	4/0	–
M81969/27-02	DRK178-2A	Removal	2/0	–
M81969/27-03	DRK178-3A	Removal	1/0	–
M81969/27-04	DRK178-4A	Removal	2	–
M81969/27-05	DRK178-5A	Removal	4	–
M81969/27-06	DRK178-6A	Removal	6	–
M81969/28-01	DRK310	Removal	COAX	–
M81969/28-02	DRK337	Removal	COAX	–
M81969/29-01	CIET16-9	Removal	16	Blu
M81969/30A-01	DRK130-22A	Removal	22	Yel
M81969/30A-02	DRK130-20A	Removal	20	Red
M81969/30A-03	DRK130-16A	Removal	16	Blu
M81969/30A-04	DRK130-12A	Removal	12	Yel
M81969/30A-05	DRK110-20-2	Removal	20	Red
M81969/30A-06	DRK110-16-2	Removal	16	Blu
M81969/30A-07	DRK110-12-2	Removal	12	Yel
M81969/30B-01	DRK501B	Removal	22	Blk/Yel
M81969/30B-02	DRK502B	Removal	20	Blk/Red
M81969/30B-03	DRK503B	Removal	16	Blk/Blu
M81969/30B-04	DRK504B	Removal	12	Blk/Yel
M81969/30B-05	DRK505B	Removal	20	Silv/Red
M81969/30B-06	DRK506B	Removal	16	Silv/Blu
M81969/30B-07	DRK507B	Removal	12	Silv/Yel
M81969/30B-08	DRK508B	Removal	22D	Brn/Brn
M81969/30B-09	DRK509B	Removal	22M	Brn/Yel
M81969/30B-10	DRK510B	Removal	22	Brn/Grn
M81969/30B-11	DRK511B	Removal	20	Brn/Red
M81969/30B-12	DRK512B	Removal	16	Brn/Blu
M81969/30B-13	DRK513B	Removal	12	Brn/Yel
M81969/30B-19	DRK519B	Removal Tool Set		
M81969/30B-20	DRK520B	Removal	Handle	Handle
M81969/30B-21	DRK521B	Removal	22	Yel
M81969/30B-22	DRK522B	Removal	20	Red
M81969/30B-23	DRK523B	Removal	16	Blu
M81969/30B-24	DRK524B	Removal	12	Yel
M81969/30B-25	DRK525B	Removal	20	Red
M81969/30B-26	DRK526B	Removal	16	Blu
M81969/30B-27	DRK527B	Removal	12	Yel
M81969/30B-28	DRK528B	Removal	22D	Brn
M81969/30B-29	DRK529B	Removal	22M	Yel
M81969/30B-30	DRK530B	Removal	22	Grn
M81969/30B-31	DRK531B	Removal	20	Red
M81969/30B-32	DRK532B	Removal	16	Blu
M81969/30B-33	DRK533B	Removal	12	Yel
M81969/30B-34	DRK534B	Removal Tool Set		
M81969/30B-35	DRK535B	Removal Tool Set		
M81969/30B-36	DRK536B	Removal Tool Set		
M81969/33-01	DAK55-225A	Insert/Remov	22	Red
M81969/33-02	DAK55-22JA	Insert/Remov	22	Red
M81969/34-01	DRK56-22A	Removal	22	Red

DMC Tooling® -owned by Daniels Manufacturing Corporation

C-FRAME CRIMPING TOOLS 620175 (M22520/5-01), 620215 (M22520/10-01)

Utilizing an extensive variety of interchangeable single, double, and triple hexagonal dies these MIL-DTL-22520 qualified tools can be used to crimp a wide range of MS and proprietary coaxial and triaxial connectors and contacts. Astro also manufactures dies for many other crimping purposes. These include, but are not limited to, insulated and uninsulated terminal lugs, end caps and wire splicing. Astro can design and manufacture die sets for many other applications. The interchangeable dies facilitate a large cost savings over single purpose crimpers. Instead of buying a different tool for each application, only separate dies are needed.

The 620175 and 620215 C-frame crimping tools, like other Astro crimpers, are simple to use.

1. Select the proper die.
2. Insert it into the crimp tool (the die will be firmly held in place by the internal spring clips built into each tool).

The positive ratchet in these tools will not allow the handles to retract until the tool has been fully cycled. This eliminates incomplete or partial crimps.

The 620175 is 11 inches long and weighs 22 ounces, the 620215 is 9 inches long and weighs 11 ounces, the 620175 (/5-01) tool is also available in a pneumatic version, P/N 621200.



Big selection of dies as well as blank dies and calibration gauges on offer – contact us.

M22520/10-01 DIES

Part No.	Astro Ref No.	NSN	A Hex.	Length	B Hex.	Length
M22520/10-02	620285	5120-00-116-3275	.091	.270	–	–
M22520/10-03	620288	5120-00-116-3283	.255	.325	–	–
M22520/10-04	620286	5120-00-116-3003	.138	.090	.118	.270
M22520/10-05	620289	5120-00-116-3276	.128	.325	.105	.325
M22520/10-06	620216	5120-00-116-4807	.160	.400	–	–
M22520/10-07	620290	5120-00-116-3278	.213	.325	.178	.325

Part No.	Astro Ref No.	NSN	A Hex.	Length	B Hex.	Length
M22520/5-02	620560	-	.091	.090	.068	.270
M22520/5-03	620291	5120-00-133-0534	.128	.325	.105	.325
M22520/5-04	620292	5120-00-133-0537	.138	.090	.118	.270
M22520/5-05	620293	5120-00-133-0577	.213	.325	.178	.325
M22520/5-06	620294	5120-00-133-0579	.128	.094	–	–
M22520/5-07	620295	5120-00-133-0580	.255	.325	–	–
M22520/5-08	620296	5120-00-133-0581	.128	.375	–	–
M22520/5-09	620365	5120-00-133-0582	.178	.400	.068	.093
M22520/5-10	620297	5120-00-133-0583	.160	.400	–	–
M22520/5-11	620366	5120-00-133-0584	.213	.400	.068	.093
M22520/5-13	620367	5120-00-133-0585	.255	.400	.068	.093
M22520/5-15	620528	5120-00-133-0586	.263	.400	.068	.093
M22520/5-17	620298	5120-00-133-0597	.118	.375	–	–
M22520/5-19	620299	5120-00-116-3159	.255	.400	.213	.400
M22520/5-21	620300	5120-00-116-3284	.475	.400	–	–
M22520/5-23	620301	5120-00-133-0618	.384	.400	–	–
M22520/5-25	620368	5120-00-133-0622	.429	.400	.100	.120
M22520/5-27	620302	5120-00-133-0640	.532	.400	–	–
M22520/5-29	620371	5120-00-116-3285	.324	.400	.100	.120
M22520/5-31	620303	5120-00-133-0642	.501	.400	–	–
M22520/5-33	620304	5120-00-116-3158	.343	.400	.105	.400
M22520/5-35	620305	5120-00-116-3156	.324	.400	.128	.400
M22520/5-37	620306	5120-00-116-3136	.314	.400	.151	.400
M22520/5-39	620307	5120-00-116-3134	.309	.400	.160	.400
M22520/5-41	620308	5120-00-116-3135	.290	.400	.178	.400
M22520/5-43	620309	5120-00-116-3106	.268	.400	.197	.400
M22520/5-45	620310	5120-00-116-3088	.231	.400	.218	.400
M22520/5-47	620311	5120-00-133-0643	.359	.400	–	–
M22520/5-49	620312	5120-00-133-0644	.401	.400	–	–
M22520/5-51	620313	5120-00-116-3040	.431	.400	–	–
M22520/5-53	620314	5120-00-116-3160	.454	.400	–	–
M22520/5-55	620315	5120-00-133-0653	.324	.400	–	–
M22520/5-57	620369	5120-00-133-0676	.213	.400	.100	.120
M22520/5-59	620370	5120-00-133-0683	.255	.400	.100	.120
M22520/5-61	620316	5120-00-116-3004	.429	.400	–	–
M22520/5-63	620317	5120-00-133-0533	.263	.400	.091	.270
M22520/5-100	620617	5120-00-126-0860	–	Special	–	–
M22520/5-101	620618	5120-01-081-4213	–	–	–	–
M22520/5-102	630000	5120-01-081-4212	–	–	–	–
M22520/5-103	630001	5120-01-082-8985	–	–	–	–
M22520/5-104	630003	–	–	–	–	–

NOTE: Also available Die #620836 Combination of M22520/5-102 and M22520/5-103. We have listed above military dies available.
This is only a partial listing of dies available from Astro. Please consult factory with your specific application requirement.

PNEUMATIC HEX DIE CRIMPER



- Cost effective
- Increases productivity
- Uses standard M22520/5 dies
- Lightweight and fully portable
- Helps reduce operator fatigue and carpal tunnel syndrome

Astro offers two portable, pneumatic versions of the M22520/5-01 hand die crimp tool. The 621200 has a 2" bore for standard applications, and the 621500 has a 3.5" bore for heavier duty applications.

The 621200 and 621500 are trigger or foot pedal actuated and operate at 32 cycles per minute. These sturdy, lightweight crimpers offer increased productivity, reduced operator fatigue and reduced carpal tunnel syndrome.

Using standard M22520/5 dies, the full cycling feature of these tools consistently produces quality crimps while delivering over one ton of crimping force at the die face.

Weighing just over five pounds this versatile system can be easily moved from station to station.

Designed with safety in mind, these tools have a cover over the crimping area to help prevent the accidental crimping of fingers.

Both the 621200 & 621500 require 80-120 PSI and a regulated, filtered and lubricated air supply. For this purpose Astro offers the 11413 air regulator. These tools can be easily adapted for field use by simply attaching an air cylinder.

The 621500 pneumatic C-frame crimp tool is fitted with a larger pneumatic cylinder for applications that require crimping larger gages and/or harder materials. This 3.5" cylinder delivers approximately an 80% increase of power (crimp die force) over the standard 621200 tool with no noticeable increase in cycle time.

Accessories for 621200 & 621500:

- 621201 Bench Mount only
- 621202 Swivel Mount with Foot Switch
- 621224 Foot Switch only

Part No.	Mill-Spec No.	Bore Size	Description
621200	M22520/5-01	2 inch	Pneumatic Hex Die Crimper
621500	M22520/5-01	3.5 inch	Pneumatic Hex Die Crimper

CT TERMINAL DIE CRIMPING TOOLS



- Meets all performance requirements for M22910 and M22520
- Permanently attached dies
- Cycle controlled

The Astro 11707-1 (miniature) and 11545 (standard) crimping tools are versatile and easy to use.

Among their many applications, these durable, all-steel tools crimp MS-25036 terminal lugs, MS25181 splices, MS25274 endcaps and other types of fittings.

The 11545 (standard) crimps 12-10 through 26-24.

The 11707-1 (miniature) crimps 16-14 through 26-24, especially useful in hard to reach places where space is limited.

Both the 11707-1 and 11545 have selector knob adjustments, allowing a choice of precise crimp settings over a wide range of applications.

These tools are equipped with retractable locators for the positioning of terminal lugs and wire. When crimping splice fittings the locator can be easily adjusted to its retracted position. The same inline die system combined with the positioner ratchet found in Astro's other C-Frame tools are featured in these terminal crimping tools.

Astro recommends the periodic gaging of all its tools, p/n 612406 for gaging the 11545 and 621069 for 11707-1.

Part No.	Mill-Spec No.	Length	Weight	Gage	Description
11707-1	MS90413-1A	8.5 inch	14 ounces	612406	CT Terminal Die Crimping Tool Miniature
11545		10.5 inch	29 ounces	621069	CT Terminal Die Crimping Tool Standard

CH HEX DIE CRIMPING TOOLS 612648 (M22910/7-01) & 613214



- All steel construction
- Interchangeable dies
- Cycle controlled

These tools are the forerunners of the M22520/5 and M22520/10. Due to their ongoing popularity and reliability we continue to offer them as an integral part of our tool line.

These all steel, C-frame crimping tools feature interchangeable, pop-in hex dies for either MS or proprietary applications including BNC, TNC and N series RF connectors. Astro will design dies for special applications upon request.

The 612648 (standard) and 613214 (miniature) tools are easy to use. Simply install the proper interchangeable die set and squeeze the handles. The positive bottoming of the inline die system, along with the cycle controlled ratchet assures perfect uniform crimping.

The 612648 (standard) is 10½ inches long and weighs approximately 27 ounces.

The 613214 (miniature) is 9½ inches long and weighs approximately 15 ounces.

The dies listed are a portion of what is manufactured for your application requirements. Please consult the factory.

Note: Blank die assembly (unhardened) 615135. All dies .400" wide unless otherwise noted. The 612648 frame and military dies are available in kit form: (M22910/6-1) 613437.

NOTE: Blank die assembly (unhardened) - 613599. All dies .375" wide unless otherwise noted.

612648 SINGLE HEX	
Die Set Part No	#Hex Dimension
613317	0.082
613218	0.093
614242	.100 x .175 wide
612734	0.105
612948	0.112
612778	0.128
612981	0.151
613622	.151 x .275 wide
613461	.156 x .095 wide
612661	0.16
613545	0.165
612195	0.172
612742	0.178
613456	0.183
613125	0.195
613967	.198 x 3/16 wide

612648 SINGLE HEX	
Die Set Part No	#Hex Dimension
612746	.197 (closed frame)
613313	0.202
612763	0.213
612971	0.218
913968	.232 x 3/16 wide
612748	0.231
613455	0.24
612766	0.255
613573	0.263
612676	0.268
613801	.272 x 3/16 wide
612893	.290 x .400 wide
612978	0.309
612308	.296 x 3/16 wide
612899	0.314
612989	0.324

612648 SINGLE HEX	
Die Set Part No	#Hex Dimension
614325	0.327
613292	0.333
612992	0.343
613369	.359 (M22910/7-19)
613289	0.372
613396	.384 (M22910/7-20)
613394	.401 (M22910/7-21)
613452	0.415
614326	0.425
612807	0.429
613377	.431 (M22910/7-22)
612943	0.44
613375	.454 (M22910/7-23)
613373	.475 (M22910/7-24)
613398	.501 (M22910/7-25)
613378	.532 (M22910/7-26)

612648 DOUBLE HEX					
Die Set	MS #	A Hex	Width	B Hex	Width
613550		.068	.125	.100	.125
613869		.068	.090	.213	.400
612700		.069	.093	.213	.400
613870		.096	.090	.251	.400
613872		.096	.125	.384	.400
613871		.096	.125	.431	.400
612880		.080	.093	.215	.400
613569		.084	.400	.244	.400
613788		.100	.400	.197	.400
613146		.100	.125	.324	.400
613148		.100	.125	.415	.400
613802		.100	.125	.429	.400
612823		.102	.400	.255	.400
613842		.102	.093	.255	.400
612804		.102	.400	.268	.400
612665		.105	.400	.128	.400
613759		.105	.400	.160	.400
613249		.105	.400	.328	.400
613399	M22910/7-11	.105	.400	.343	.400
613207		.105	.400	.429	.400
612962		.112	.400	.128	.400
613779		.120	.400	.197	.400
612481		.128	.400	.160	.400

612648 DOUBLE HEX					
Die Set	MS #	A Hex	Width	B Hex	Width
612720		.128	.400	.178	.400
613279		.128	.400	.213	.400
612820		.128	.400	.255	.400
613392	M22910/7-12	.128	.400	.324	.400
613212		.151	.400	.160	.400
612791		.151	.400	.255	.400
613389	M22910/7-13	.151	.400	.314	.400
613730		.160	.400	.195	.400
613729		.160	.400	.268	.400
613387	M22910/7-14	.160	.400	.309	.400
612912		.178	.400	.197	.400
612663		.178	.400	.231	.400
613178		.178	.400	.268	.400
613386	M22910/7-15	.178	.400	.290	.400
613209		.178	.400	.324	.400
613371	M22910/7-16	.197	.400	.268	.400
612762		.197	.400	.309	.400
612997		.213	.400	.250	.400
613367	M22910/7-17	.213	.400	.255	.400
612673		.213	.400	.290	.400
613365	M22910/7-18	.218	.400	.231	.400
612787		.218	.400	.290	.400
612797		.255	.400	.268	.400

612648 TRIPLE HEX	
Die Set #	Hex Dimension
612876	.067 x .177 x .212
614234	.068 x .178 x .213
613233	.105 x .128 x .151
612310	.105 x .128 x .197
612784	.105 x .128 x .178
613189	.105 x .128 x .202
612972	.105 x .134 x .202
612892	.105 x .151 x .255
612841	.112 x .128 x .213
613184	.112 x .160 x .197
612825	.128 x .160 x .213
612886	.128 x .160 x .218

613214 SINGLE HEX	
Die Set #	Hex Dimension
614243	0.087
614245	0.093
614414	0.1
613812	0.105
613035	0.107
614342	0.112
613845	0.118
613848	0.128
613003	0.151
613847	0.16
612494	0.166
613849	0.178

613214 SINGLE HEX	
Die Set #	Hex Dimension
613810	0.197
613851	0.213
613005	0.218
613846	0.231
613850	0.255
613009	0.268
613011	0.29
613099	0.3
613013	0.309

Connector Tooling Kits

Let Henchman's experience and in-depth knowledge take the guesswork out of your service kit requirements.
Our research team has years of experience in kit design. Let Henchman put that knowledge to work for you!

Henchman offers customized crimping tool kits for a wide variety of applications. Many kits are designed for specific aircraft or system maintenance while others cover a particular connector series or other special customer needs.

Kits are not only a convenient way to keep all your tools together, but they keep the information that you require for your connector wiring repair at your fingertips.

Whether you are buying individual tools or complete service kits, Astro is in the connector assembly tool business to serve you and to make your job faster and easier.

- Military aircraft kits
- General aviation kits
- Commercial aircraft kits
- Installation and removal tool kits

See our selection of Connector Tooling Kits in the toolkit section.







Astro kit containers are constructed of molded plastic, fiberglass or metal depending upon varying applications or customer preference.

Components are contained in foam cavities, for protection and ease of identification. Contents charts, corresponding to each foam cavity, identify components stored in that location.

Clamps, Vises & Pullers

Visegrip..... 550

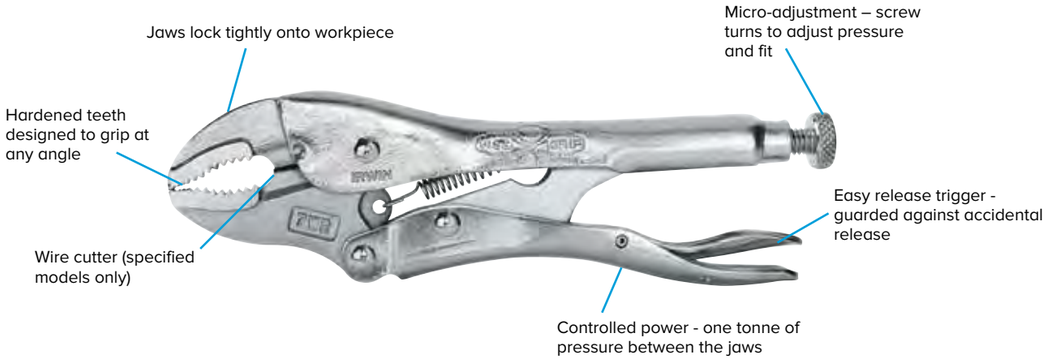
Irwin Clamps..... 552

PanaVise..... 554

Bearing Pullers..... 555

Visegrip

- The world's most versatile hand tools
- Built to be the strongest and toughest locking tool
- Used for turning, cutting, tightening, clamping and twisting
- High-grade alloy steel, heat treated for maximum strength and durability



STRAIGHT JAW LOCKING PLIERS

- Straight jaws provide maximum contact on flat, square or hex work
- Popular uses include welding, metal work and safer grinding
- Can also be used as a portable vice



Part No.	Size	Jaw Thickness (mm)	Jaw Adjustment
10R	250	15.9	38.1
7R	175	4.1	28.6

CURVED JAW LOCKING PLIERS

- Curved jaws put tremendous pressure on four points of any style nut or bolt head and better fits on round stock
- Can be used as a non-slip pipe wrench, pliers, adjustable wrench, emergency handle and all purpose clamp



Part No.	Size	Jaw Thickness (mm)	Jaw Adjustment
10CR	250	9.5	47.6
7CR	175	8	41.3

LONG NOSE LOCKING PLIERS WITH WIRE CUTTER

- Long straight nose provides easy access to narrow, hard to reach places
- Ideal for precision work and hobbies



Part No.	Size	Jaw Thickness (mm)	Jaw Adjustment
9LN	225	4.8	76.2
6LN	150	3.2	25.4
4LN	100	3.2	19

CURVED JAW LOCKING PLIERS WITH WIRE CUTTER

- Curved jaws put tremendous pressure on four points of any style nut or bolt head and better fits on round stock
- Wire cutter will handle up to 6.5mm bolt
- Can be used as a non-slip pipe wrench, pliers, adjustable wrench, emergency handle and all purpose clamp



Part No.	Size	Jaw Thickness (mm)	Jaw Adjustment
10WR	250	9.5	47.6
7WR	175	8	41.3
5WR	125	6.4	31.7
4WR	100	6.4	23.8

LOCKING C-CLAMPS WITH REGULAR TIP

- Heavy duty jaw grips around work of all shapes
- Useful for plumbers, mechanics, welders and anyone who works with large objects



Part No.	Size	Jaw Adjustment	Throat Depth
24R	600	0-317	393
18R	455	0-203	241
11R	275	0-95	63
6R	150	0-50	35

LOCKING C-CLAMPS WITH SWIVEL PADS (SOFT PADS ALSO AVAILABLE)

Swivel pads hold tapered work, awkward fabricating jobs, and delicate projects without damaging the work surface



Part No.	Size	Jaw Adjustment	Throat Depth
24SP	600	0-317	393
18SP	455	0-203	241
11SP	275	0-95	63
6SP	150	0-50	31
4SP	100	0-38	25

LOCKING PINCH-OFF TOOL

- Pinches off and locks on tubing instantly - ideal for emergencies
- Easy-release trigger
- Ideal for refrigeration industry



Part No.	Size	Jaw Thickness (mm)	Jaw Adjustment
RR	175	6.4	25

LOCKING C-CLAMP – LARGE THROAT

Ideal for welding and automotive applications



Part No.	Size	Jaw Thickness (mm)	Jaw Adjustment
53006	–	0-190	240

LOCKING WELDING CLAMP

- Holds work in proper alignment - even when material is not identical in thickness
- Postive lock leaves hands free
- Deep throat u-shaped jaws for visibility and working space



Part No.	Size	Jaw Thickness (mm)	Jaw Adjustment
9R	225	69	41

LOCKING CHAIN CLAMP

- Holds and locks around any shape or size
- Adjusts quickly for ratchet action in either direction



Part No.	Size	Description
20R	225	Chain Clamp
20EXT	455	Extension Chain
20REP	455	Replacement Chain

LOCKING SHEET METAL TOOL

- Locks to work with powerful grip
- Makes bread pan corners and can crimp and double crimp
- Excellent for upholstery work



Part No.	Size	Jaw Thickness (mm)	Jaw Adjustment
8R	200	79	44

LARGE JAW LOCKING PLIERS

- Heavy duty jaw grips around work of all shapes
- Useful for plumbers, mechanics, welders and anyone who works with large objects



Part No.	Size	Jaw Thickness (mm)	Jaw Adjustment
12LC	300	0-79	80
6LC	150	0-36	45

Irwin Clamps



QUICK CHANGE BAR CLAMPS

- Quick Change multi-positioning jaw – locks on end-pin or any position on bar
- Clamp can be converted to a spreader – no tools needed
- Throat depth 82.5mm
- Superior clamping force of up to 113kg



Part No.	Jaw Opening	KG force
1964742	150mm (6")	63
1964744	300mm (12")	
1964713	460mm (18")	

MICRO BAR CLAMP & SPREADERS

- Soft, durable pads protect delicate work surfaces
- Easily converts to a spreader
- Made from strong, lightweight resin material
- Throat depth 30mm
- Clamping force up to 31kg



Part No.	Jaw Opening
1964746	100mm (4 ")

PRO CLAMPS – SMALL



Part No.	Clamping Capacity	Frame Load
10503564	200mm (8")	305kg
10503565	300mm (12")	305kg
10503566	400mm (16")	305kg
10503567	600mm (24")	305kg
10503568	800mm (32")	305kg

PRO CLAMPS – MEDIUM

Clamping depth 120mm



Part No.	Clamping Capacity	Frame Load
10503569	300mm (12")	510kg
10503570	400mm (16")	510kg
10503571	600mm (24")	510kg
10503572	800mm (32")	510kg
10503573	1000mm (40")	510kg

SPRING CLAMPS

- Made from strong, lightweight resin material
- Jaw contoured to hold round and odd-shaped objects
- Removable soft rubber jaw pads



Part No.	Jaw Opening
CS58100	25mm
CS58200	50mm
CS58300	75mm

HANDI CLAMPS

- One-handed operation – a simple hand squeeze applies pressure
- Quick Release trigger allows for fast, easy positioning and release
- Can reach around odd shapes
- Non-marking swivel pads
- Made from strong, lightweight resin material



Part No.	Jaw Opening
CH59100	38mm
CH59200	50mm
CH59400	100mm

MEDIUM DUTY G-CLAMPS – CAST IRON

- I-braced design, cast from strong S.G. ductile iron
- Adjustable steel swivel shoe
- Fused handle designed to bend if overloaded



Part No.	Capacity	Throat Depth	Frame Load
120/3	75mm	55mm	455kg
120/4	100mm	60mm	545kg
120/6	150mm	75mm	635kg
120/8	200mm	85mm	775kg
120/10	250mm	105mm	1000kg
120/12	300mm	115mm	1135kg

HANDI-KLAMPS

Non-Marring rubber clamping surface



Part No.	Description	Jaw Depth
CH01	Handi-Klamp	25mm
CH02	Handi-Klamp	38mm

TOGGLE CLAMP

- Ideal for assembly applications
- Perfect for limited space areas
- Strong construction
- More styles available, please enquire



Part No.	Jaw Capacity	OAL
CT 99311	27mm	144mm

TOOLMAKERS PARALLEL CLAMPS



Part No.	Capacity	Jaw Length
CP410	25mm	50mm
CP411	38mm	75mm
CP412	63mm	100mm
CP413	89mm	125mm

KANT TWIST CLAMPS

- Features a floting jaw that always stays parallel
- Considerably lighter weight than comparable size G clamps.



Part No.	Reach	Gap (Height)
CK401	13mm	25mm
CK405	32mm	50mm
CK410	32mm	75mm
CK420	84mm	150mm

ENGINEERS VICES

- Tough cast iron construction
- General purpose vice with provision for fixed mounting to workbench

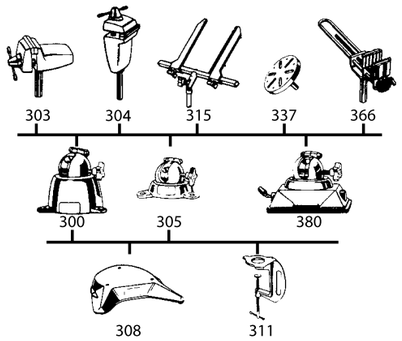


Part No.	Jaw Width	Jaw Opening	Jaw Depth
REC-EV1	75mm	95mm	50mm
REC-EV3	100mm	120mm	70mm
REC-EV4	115mm	140mm	80mm
REC-EV5	125mm	165mm	85mm
REC-EV6	150mm	205mm	90mm
REC-EV8	205mm	235mm	100mm

PanaVise

The world's most innovative work holding

- Panavise tilts, turns and rotates requiring only one turn of the control knob to securely position your work exactly where you want it.
- Ideal for general work in electronics and instruments.



PANAVISE SETS


Fig 1


Fig 2

Part No.	Description	Fig
PAN 201	Panavise Junior Set	1
PAN 301	Panavise Standard Set	2

PANAVISE INTERCHANGEABLE HEADS


Fig 1

Fig 2

Fig 3

Part No.	Description	Fig
PAN 303	Standard Head	1
PAN 304	Low Profile Head	2
PAN 366	Wide Opening Head	3

PANAVISE SPECIALTY HEADS

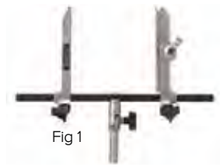

Fig 1

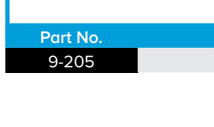

Fig 2

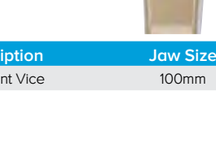
Part No.	Description	Fig
PAN 315	Circuit Board Holder	1
PAN 337	Fixturing Head	2

PANAVISE BASE OPTIONS


Fig 1


Fig 3


Fig 2


Fig 4

Part No.	Description	Fig
PAN 300	Standard Base	1
PAN 305	Low Profile Base	2
PAN 380	Vacuum Base	3
PAN 308	Weighted Base 2-3kg	4

PANAVISE BENCH CLAMP MOUNT



Part No.	Description
PAN 311	Bench Clamp Mount

BALL JOINT VICE

- German constructed vice with ball and socket joint for easy rotation in any direction. With the flip of one lever, the head can be securely locked in any desired position.
- Ideal for heavy duty work in elec-tronics or more precision industrial applications



Part No.	Description	Jaw Size
9-205	Ball Joint Vice	100mm

Bearing Pullers

PROTO® 43 PIECE 6 TON STANDARD PULLER SET

- Makes over 20 of the most often used pullers: Internal, External, Slide Hammer, Rear Axle, Harmonic Balancer, etc.
- Weight (lbs): 27.68

Contents:

- 1 x T-Handle Slide Rod, 24" Long, 1 x 2-1/2 lbs. Slide Hammer, 1 x Reversible Adjusting Nut, 1 x Two Jaw Yoke, 1 x Three Jaw Yoke, 1 x Slotted Crossarm, 2-Way/3-Way, 3 x Reversible Jaw, 6" Reach, 3 x Reversible Jaw, 4" Reach, 2 x Inside Jaw, 2" Reach, 3 x Jaw Pivot Pin, 1 x Inside Hook Jaw, 1 x Forcing Screw, 1 x Standard Detachable Tip, 3 x Cap Screw, 3/8"-16 UNC x 3", 3 x Cap Screw, 3/8"-24 UNF x 3", 3 x Cap Screw, 3/8"-16 UNC x 4", 1 x 5 lbs. Slide Hammer, 1 x Short Slide Rod, 12-3/4" Long, 1 x Rear Axle Flange Foot, 10 x Set Puller Blind Bearing, 1 x Gear and Bearing Separator, in Blow-Molded Case



Part No.	Description
J4290B	43 Piece 6 Ton Standard Puller Set

PROTO® 20 PIECE 10 TON PROTO®-EASE™ WIDE PULLER SET

- Required for large parts with heavy press-fits.
- Reaches to over 12" and spread of 11"
- Makes over 10 different adjustable and straight jaw pullers.
- Weight (lbs): 39.00

Contents:

- 1 x Forcing Screw, 1 x Standard Tip, 1 x 2-Way Crossarm, 11" Long, 1 x 3-Way Crossarm 11" Long, 3 x Adjustable Jaw Block Assembly, 3 x Dual Reach Jaw, 3 x Cap Screw Jaw, 3 x Long Narrow Jaw, 3 x Spring Clip, 1 x Bearing Separator, in Blow-Molded Case



Part No.	Description
J4292B	20 Piece 10 Ton Proto®-Ease™ Puller Set

PROTO® 3 JAW GEAR PULLER 11 INCH

Weight (lbs): 6.38



Part No.	Max Spread	Max Reach	Forcing Screw Length	Thread	Rating
J4038	11	9	9	11/16"-18	7 Ton

PROTO® 3 JAW GEAR PULLER 7 INCH REVERSIBLE

Weight (lbs): 2.97



Part No.	Max Spread	Max Reach	Forcing Screw Length	Thread	Rating
J4046	7	5-1/2	7	9/16"-20	5 Ton

PROTO® BATTERY CABLE AND SMALL BEARING PULLER

- Uses toggle-type action to grip onto all standard post battery terminals.
- Pulls small bearings and gears with 1" reach and spread.



Part No.	Description	Weight
J4041	Battery Cable and Small Bearing Puller	0.65

PROTO® 3 JAW GEAR PULLER, 10" REVERSIBLE

Weight (lbs): 5.93



Part No.	Max Spread	Max Reach	Forcing Screw Length	Thread	Rating
J4047	10	5-1/2	9	11/16"-18	7 Ton



Fluke Test Equipment

Digital Multimeters 558
Infrared Thermometers 568
Insulation Testers 572
Clamp Meters 574
Electrical Testers 579
Bonding Testers 579
Test Leads, Probes & Clips 580

Digital Multimeters

Models	Compact Meter 113	114	115	117	Insulation Testers 1577	1587 FC	Specialty Meters 27 II	28 II	28 II EX	279 FC	Advanced Meters 87 V	287	289	Wireless Meters 3000 FC	Industrial Maintenance and Field Service Meters 175	177	179
Basic Features																	
CountsCounts	6000	6000	6000	6000	6000	6000	6000	20000	20000	6000	20000	50000	50000	6000	6000	6000	6000
True-RMS Readings	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC+DC	AC+DC	AC	AC	AC	AC
Basic DC Accuracy	0.5%	0.5%	0.5%	0.5%	0.2%	0.09%	0.1%	0.05%	0.05%	0.09%	0.05%	0.025%	0.025%	0.09%	0.15%	0.09%	0.09%
Wide Bandwidth							30kHz	20kHz	20kHz		20kHz	100kHz	100kHz				
Auto/Manual Ranging	•	•	•	•			•	•	•	•		•	•	•	•	•	•
ATEX II 2G Eex ia IIC T4 Safety Rating ZT/Z2 Measurements																	
Voltage AC/DC	600V	600V	600V	600V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V
Current AC/DC			10A	10A	400mA	400mA	10A	10A	10A	2500A AC (w/ iFlex)	10A	10A	10A	400mA	10A	10A	10A
Resistance	60kΩ	40MΩ	40MΩ	40MΩ	50MΩ	50MΩ	50MΩ	50MΩ	50MΩ	50MΩ	50MΩ	500MΩ	500MΩ	50MΩ	50MΩ	50MΩ	50MΩ
Frequency				100kHz		100kHz	200kHz	200kHz	200kHz	100kHz	200kHz	1MHz	1MHz	100kHz	100kHz	100kHz	100kHz
Capacitance	9.999µF			9.999µF		9.999µF	9.999µF	9.999µF	9.999µF	9.999µF	9.999µF	1µF to 100µF	1µF to 100µF	9.999µF	9.999µF	9.999µF	9.999µF
Temperature						+500°C	+60°C	+1090 °C	+1090 °C		+1090°C	+1350°C	+1350°C				+400°C
dB							60 nS	60 nS	60 nS			60dB	60dB				
Conductance							•/–	•/–	•/–		50nS	50nS	50nS				
Duty Cycle/Pulse Width							•	•	•		•/–	•/•	•/•				
Continuity/Diode Test		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Motor Drive (ASD) Measurements												•	•				
VoltAlert™ non-contact Voltage Detection																	
VCHEK																	
LoZ: Low Input Impedance												•	•				
Microamps											•	•	•				
Insulation Test																	
Number of Insulation Test Ranges					2	5											
Display																	
Removable Wireless Display																	
Dot Matrix Display												•	•	•			
Dual Display												•	•	•			
Analog Bargraph	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Backlight	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Graphical Trend Display											Two level	Two level	Two level	•			
Diagnostics and Data												•	•				
Min/Max Recording with Time Stamp							•	•	•	•	•/–	•/•	•/•	•/–	•/–	•/–	•/–
Fast Min/Max							250µs	250µs	250µs		250µs	250µs	250µs				
Display Hold/Auto (Touch) Hold							•/–	•/–	•/–	•/–	•/•	•/•	•/•	•/•	•/•	•/•	•/•
Relative Reference							•	•	•	•	•	•	•	•	•	•	•
Stand-alone Logging														(with FC app)			
Trend Capture												•	•	(with FC app)			
Readings Memories												10,000	10,000	(with FC app)			
USB Interface																	
Other Features												•	•				
Real Time Clock											•						
Automatic Selection, AC/DC Volts																	
Closed Case Calibration												•	•	•			
Separate Battery/Fuse Access												•	•	•	•	•	•
Operating Temperature Range																	
Warranty and Electrical Safety																	
Input Alert											•	•	•				
IP Rating	IP42	IP42	IP42	IP42			IP67	IP67	IP67	IP40	IP30			IP54			
Safety Rating (EN 61010) CAT III	600V	600V	600V	600V	1000V		1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V
Safety Rating (EN 61010) CAT IV				600V			600V	600V	600V	600V	600V	600V	600V	600V	600V	600V	600V

FLUKE 279 FC TRUE-RMS THERMAL MULTIMETER



Fluke 279 FC

Find. Repair. Validate. Report.

The industry first Fluke 279 FC is a full-featured digital multimeter with integrated thermal imaging and is designed to increase your productivity and confidence. The thermal multimeter helps you find, repair, validate, and report many electrical issues quickly so that you are confident problems are solved.

- Full-featured multimeter with built-in thermal imager
- 15 measurement functions including: AC voltage with low-pass filter, DC voltage, Resistance, Continuity, Capacitance, Diode test, Min/Max/Avg, AC current (with iFlex), Frequency
- Thermal imaging reveals many electrical issues quickly and safely, eliminating the need for time-consuming testing and validation
- Two-in-one tool is designed to increase productivity – no need to go back to the truck or office to retrieve a shared camera or wait for the thermographer – do more in less time
- iFlex expands your measurement capabilities – get into tight, hard to reach spaces for current measurement (up to 2500A AC)
- Save measurements and images while communicating wire-lessly with a smart phone up to 6.1 metres away (no obstructions)
- Rechargeable lithium ion battery allows for a for a full work day (10+ hours) under normal conditions
- Image resolution: 80 x 60
- 3.5in / 8.89cm colour LCD screen
- CAT III 1000V, CAT IV 600V measurement category
- Three year warranty

Specifications

DMM	
Basic DC Accuracy	0.09%
Bandwidth	1% 45Hz to 65Hz, full Time low pass Filter
Voltage	AC/DC 1000V
Current AC	iFlex Flexible Current Probe (included with the 279 FC/IFlex)
Resistance	50MΩ
Frequency	100kHz
Capacitance	9,999µF
Continuity with Beeper	Yes
Diode Test	Yes
Min/Max Recording	Yes
Display Hold	Yes
Infrared Camera	
Infrared Resolution	80 x 60
Image capture Frequency	8 Hz
Field of View	36° (w) x 27° (h)
NETD	≤200mK
Infrared Spectral Band	7.5 to 14 microns
Center Point	Yes (with center point Temp)
Focus Mechanism	Fixed focus
Temperature Range	-10°C to 200°C Accuracy: ±5°C or (±5% as tested)
Emissivity	0.95 fixed
Background Compensation	20°C fixed
Memory Storage	Approximately 100 Images (internal)
File Format	Non-radiometric .is2
Other	
Battery Type	Rechargeable Lithium-ion Battery (Charge Time: 4.5 Hours)
Operating Temperature	-10°C to 50°C
Storage Temperature	-20°C to 60°C
Relative Humidity	0% to 90% (0°C to 35°C) 0% to 75% (35°C to 40°C) 0% to 45% (40°C to 50°C)
Altitude	2,000 meters (6,561 feet)
Temperature Coefficient	Add 0.1 x specified Accuracy for each °C above 28°C or below 18°C
Ingress Protection	(IP) IP40 (non-operating)
Certifications	CE, CSA, FCC
Safety Compliance	IEC 61010-1: Pollution Degree 2; IEC 61010-2-033: CAT III 1000V/CAT IV 600V
EMC	EN 61326-1:2012
Size	215.9mm x 93.9mm x 57.1mm
Weight	0.793kg

Recommended Accessories



i2500-10
10 inch iFlex® Flexible Current Probe



i2500-18
18 inch iFlex® Flexible Current Probe



BC500
AC Power Charger



BP500
Lithium-Ion Battery 3000 mAh Battery



C280
Carrying Case



MC6
Fluke MeterCleaner™ Wipes

Recommended Kits

Buy more, Save more



Fluke 279FC I/B TRMS Combo Kit



Included Accessories

TL75 Test Leads, Rechargeable Lithium-ion Battery, Charger, 18-inch (45.72 cm) iFlex Flexible Current Probe, Hanging Strap, Soft Carrying Case.
279 FC I/B Kit also includes: Additional Lithium-ion Battery.

Ordering Information

Fluke 279 FC/ iFlex	TRMS Thermal Multimeter with iFlex
Fluke 279 FC I/B Kit	TRMS Thermal Multimeter with iFlex and Extra Battery Kit

FLUKE 3000 FC WIRELESS DIGITAL MULTIMETER

See it. Save it. Share it.

The Fluke 3000 FC True-RMS Wireless Multimeter and Fluke Connect® wireless test tools put tools, not your body, near live electrical panels. It's simple. Just de-energise the cabinet, open the panel while wearing PPE and connect the remote modules, whether they are voltage modules, current clamps, flexible current loops or thermometers. Then read the results on the3000 FC Wireless Multimeter from a safe distance. You can display the meter measurement, plus readings from up to 3 wireless modules, while reducing the risk of arc flash by separating yourself from hazardous measurement situations.

Better still, the Fluke 3000 FC Series Wireless Multimeter can send measurement data to your smartphone, so you can save and share measurements from the field with your team anytime, from anywhere.



Fluke 3000 FC

Other capabilities of Fluke Connect and the 3000 FC.

- Connect to your PC with USB dongle (optional) for analysis and diagnosis in detailLimited lifetime manufacturer's warranty
- Perform for analysis with your smarthphone and the FC App and share the results using Fluke Cloud™ storage and ShareLive™ video call. View data or graphs to get input from team members

The Fluke 3000 FC Series Wireless Multimeter with the Fluke Connect app has all the essentials for convenient test and measurement troubleshooting.

- AC and DC voltage measurements to 1000V
- AC and DC current with 0.01 mA resolution
- Continuity, resistance, diode test, capacitance and frequency measurements
- MIN/MAX Recording
- CAT III 1000 V, Cat IV 600 V; IP54
- Three year warranty

Recommended Accessories



TL238
SureGrip™
Test Lead Set



C35
Soft Carrying Case



PC ADAPTER
Fluke Connect®
Wireless PC Adapter

Recommended Kits

Buy more, Save more

Fluke 3000 FC General Maintenance System

Fluke 3000 FC Industrial System

Fluke 3000 FC HVAC System

Fluke 3000 FC/1AC-II Wireless Multimeter and Non-Contact Voltage Detector Kit

Fluke 3000 FC/EDA2 Wireless Multimeter and Deluxe Accessories Combo Kit

Fluke 3000 FC/TPAK Wireless Multimeter and Magnetic Hanger Combo Kit

Specifications

Functions	Range	Basic Accuracy
AC voltage	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000V	1.0 % + 3
DC voltage	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000V	0.09 % + 2
Continuity	600 Ω	Meter beeps at < 25 Ω, beeper detects opens or shorts of 250 µs or longer
Resistance	600 Ω, 600.0 Ω, 6.000 kΩ, 60.00 kΩ, 60.00 kΩ, 600.0 kΩ, 50.00 MΩ	0.5 % + 1
Diode test	2.000 V	1 % + 2
Capacitance	1000 nF, 10.00 µF, 100.0 µF, 9999 µF[1]	1.2 % + 2
mA AC (45 Hz to 1 kHz)	60.00 mA, 400.0 mA[3]	1.5 % + 3
mA DC[2]	60.00 mA, 400.0 mA[3]	0.5 % + 3
Frequency	99.99 Hz, 999.9 Hz, 9.999 kHz, 99.99 kHz	0.1 % + 1

[1] In the 9999 µF range for measurements to 1000 µF, the measurement accuracy is 1.2 % + 2.
[2] Input burden voltage (typical): 400 mA input 2 mV/mA.
[3] 400.0 mA accuracy specified up to 600 mA overload.
For all specifications: accuracy is specified for one year after calibration, at operating temperatures of 18 °C to 28 °C, with relative humidity at 0 % to 90 %. Accuracy specifications take the form of ± ([% of Reading] + [Number of least significant digits]).

Included Accessories

TL175 Test Leads, AC175 Alligator Clips, Manual Information Pack.

Ordering Information

FLK-3000 FC	FC Wireless Digital Multimeter
FLK-3000 FC GM	Wireless General Maintenance Kit
FLK-3000 FC IND	Wireless Industrial System Kit
FLK-3000 FC HVAC	Wireless HVAC System Kit
FLK-3000 FC /1AC-II	Wireless Multimeter & Non-Contact Voltage Detector Combo Kit
FLK-3000 FC /EDA2	Wireless Multimeter Deluxe Accessories Combo Kit
FLK-3000 FC /TPAK	Wireless Multimeter & Magnetic Hanger Combo Kit

FLUKE 280 SERIES TRUE-RMS LOGGING MULTIMETERS

Find little problems before they become big

The Fluke 287/FC and 289/FC are the next generation in high performance industrial logging multimeters.

These high performance industrial logging multimeters are designed to solve complex problems faster in many applications. Log data and review it graphically on-screen to help minimise downtime.

Communicate wirelessly with your smart phone directly from the field with the Fluke Connect® app and get quick answers or next step authorisations faster than ever before. It's as simple as adding the Fluke ir3000 FC Connector to the standard Fluke 287 and 289 (connector sold separately).



Fluke 287

Full-featured multimeter with built-in thermal imager

- Large 50,000 count, 1/4 VGA dot matrix display with white backlight
- Logging function with expanded memory for unattended monitoring of signals over time. Using on-board TrendCapture, users can graphically review logged readings without needing a PC. Store up to 10,000 recorded events
- Save, name, and recall multiple logging sessions before PC download is necessary
- Field upgradeable and expandable meter lets you stay current as new capabilities are added.
- Two terminal 50 ohm range with 1 milliohm resolution, 10 mA source current. Useful for measuring and comparing differences in motor winding resistance or contact resistance (289/FC)
- Low-pass filter for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment (289/FC)
- Limited lifetime manufacturer's warranty

Recommended Accessories



TLK287
Electronic
Test Lead Set



TLK289
Industrial
Test Lead Set



FVF-SC2
Flukeview Forms
Software with Cable



C280
Soft Case



I410
AC/DC
Current Clamp



IR3000 FC
Fluke Connect® ir3000
Connector

Recommended Kits

Buy more, Save more

Fluke 287 FlukeView® Forms Combo Kit

Fluke 287 FlukeView® Forms Combo Kit with ir3000FC Connector

Fluke 289 FlukeView® Forms Combo Kit

Fluke 289 FlukeView® Forms Combo Kit with ir3000FC Connector

Features

	287	289
Multiple on-screen Displays	•	•
True-RMS AC Bandwidth	100kHz	100kHz
dBV/dBm	•	•
DC mV Resolution	1µV	1µV
Megohm Range up to	500MΩ	500MΩ
Conductance	50.00nS	50.00nS
Continuity Beeper	•	•
Elapse Time Clock/ Time of Day Clock	•	•
Min/Max/Avg/Duty Cycle/ Pulse Width	•	•
Isolated optical DMM Interface with USB PC Connection	•	•
Auto/Touch Hold	•	•
Over 200 Hours logging Capacity with new Power saving Function	•	•
Lo Ohm Capability	—	•
LoZ Volts	—	•
Low Pass Filter	—	•

Specifications

Functions	Range	Basic Accuracy
AC Volts or DC Volts	50.000mV, 500.00mV, 5.0000V, 50.000V, 500.00V, 1000.0V	0.025% 0.4% (True-RMS) (AC)
AC Current DC Current	500.00µA, 5000.0µA, 50.000mA, 400.00mA, 5.0000A, 10.000A	0.15% 0.7% (True-RMS)
Temperature (excluding Probe)	-200.0°C to 1350.0°C	1.0%
Resistance	50.000Ω, 500.00Ω, 5.0000kΩ, 50.000kΩ, 500.00kΩ, 5.0000MΩ, 50.00MΩ, 500.0MΩ	0.05%
Capacitance	1.000nF, 10.00nF, 100.0nF, 1.000µF, 10.00µF, 100.0µF, 1000µF, 10.00mF, 100mF	1.0%
Frequency	99.999Hz, 999.99Hz, 9.9999kHz, 99.999kHz, 999.99kHz	.005%

Included Accessories

TL175 Test Leads, AC175 Alligator Clips, Probe Holder, six AA Batteries (installed), Calibration Certificate Sheet.

Ordering Information

FLUKE-287	True-RMS Industrial Logging Multimeter with TrendCapture
FLUKE-289	True-RMS Electronics Logging Multimeter with TrendCapture
FLUKE-287/ FVF Kit	FlukeView Forms Combo Kit
FLUKE-289/ FVF Kit	FlukeView Forms Combo Kit
FLUKE-287/ FVF/IR3000 Kit	Industrial Logging Multimeter and Software Combo Kit
FLUKE-289/ FVF/IR3000 Kit	Industrial Logging Multimeter and Software Combo Kit
FLUKE-IR3000 FC	Fluke Connect® ir3000 Connector

FLUKE 83V AND 87V DIGITAL MULTIMETERS


Fluke 87V

Fluke 83V

Performance and Accuracy for maximum Industrial Productivity

The Fluke 80-V Series have improved measurement functions, troubleshooting features, resolution and accuracy to solve more problems on motor drives, in plant automation, power distribution, and electromechanical equipment.

The Fluke 87V has a unique function for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment. A built-in thermometer conveniently allows you to take temperature readings without having to carry a separate instrument.

Electrical Safety

All inputs are protected to CAT III 1000 V and CAT IV 600 V. They can withstand impulses in excess of 8,000 V to help protect you from arc blast resulting from surges and spikes.

Limited lifetime manufacturer's warranty.

Features

	87V	83V
True-RMS AC Voltage and Current for accurate Measurements on non linear Signals	•	–
Selectable Filter for accurate Voltage and Frequency Measurements on Motor Drives	•	–
6000 Counts, 3-3/4 Digits	•	•
4-1/2 Digit Mode for precise Measurements (20,000 Counts)	•	–
Measure up to 1000V AC and DC	•	•
Built in Thermometer lets you carry one less Tool (TC Probe included)	•	–
Frequency to 200kHz and % Duty Cycle	•	•
Resistance, Continuity and Diode Test	•	•
10,000µF Capacitance Range for Components and Motor Caps	•	•
Min/Max-Average Recording with Min/Max Alert to capture Variations automatically	•	•
Battery Life with Backlight off	400 Hours	
Size	201mm x 98mm x 52mm	
Weight	355g	

Specifications

Functions	Range	Basic Accuracy 87V	Basic Accuracy 83V
DC Volts	600.0mV, 6.000V, 60.00V, 600.0V, 1000V	0.05%	0.1%
AC Volts	600.0mV, 6.000V, 60.00V, 600.0V, 1000V	0.7% (True-RMS)	0.5%
DC Current	600.0µA, 6000µA, 60.00µA, 600.0mA, 6.000A, 10.00A	0.2%	0.4%
AC Current	600.0µA, 6000µA, 60.00µA, 600.0mA, 6.000A, 10.00A	1.0% (True-RMS)	1.2%
Temperature (excl. Probe)	-200°C to 1090°C	1.0%	—
Temperature Probe	-40°C to 260°C	2.2°C or 2%	—
Resistance	600.0Ω, 6.000kΩ, 60.00kΩ, 600.0kΩ, 6.000MΩ, 50.00MΩ	0.2%	0.4%
Capacitance	10.00nF, 100.0nF, 1.000µF, 10.00µF, 100.0µF, 9,999µF	1.0%	1.0%
Frequency	199.99Hz, 1.9999kHz, 19.999kHz, 199.99kHz	0.005%	0.005%

Recommended Accessories


TPAK
Magnetic Meter Hanger


TL220
SureGrip® Industrial Test Lead Set


TL175
TwistGuard™ Test Leads


TL224
SureGrip™ Silicone Insulated Test Leads


AC285
SureGrip™ Alligator Clips


I400
AC Current Clamp


C43
Soft Carry Case


CXT80
Extreme Case

Recommended Kits

Buy more, Save more


Fluke 87V/E2 Industrial Electrician's Combo Kit

Included Accessories

TL175 Test Leads, AC175 Alligator Clips, Yellow Holster (H80M excl. TPAK), 80BK Temperature Probe (87V only), 9 V Battery (installed), User Manual and Technical Notes.

Ordering Information

FLUKE-83V	Industrial Multimeter
FLUKE-87V	True-RMS Industrial Multimeter
FLUKE-87V /E2	Industrial Electrician Combo Kit

FLUKE 170 SERIES DIGITAL MULTIMETERS


Fluke 179

Versatile Meters for Field Service or Bench Repair

The three models of the Fluke 170 Series True-RMS Digital Multimeters (179,177,175) have the features needed to find most electrical, electro-mechanical and heating and ventilation problems. They are simple to use and have significant improvements over Fluke's standards, and a much larger display that's easier to view.

- True RMS voltage and current measurements
- 0.09% basic accuracy (177, 179)
- 6000 count resolution
- Digital display with analog bargraph and backlight (177, 179)
- Manual and automatic ranging
- Display Hold and Auto Hold
- Frequency and capacitance measurements
- Resistance, continuity and diode measurements
- Temperature measurements (179)
- Min-max-average recording
- Smoothing mode allows filtering of rapidly changing inputs
- Easy battery exchange without opening the case
- Closed case calibration through front panel
- Ergonomic case with integrated protective holster
- EN61010-1 CAT III 1000V / CAT IV 600V
- Measures twice as fast as other multimeters
- Battery life: 200 hours typical for alkaline.
- Size (HxWxL): 4.3cm x 9.0cm x 18.5cm
- Limited lifetime manufacturer's warranty


Fluke 177


Fluke 175

Electrical Safety

All inputs are protected to measurement CAT III 1000 V and CAT IV 600 V. These meters can withstand transient impulses in excess of 8000 V to help protect you from arc blasts resulting from surges and spikes.

Features

	179	177	175
Max Voltage AC/DC	1000	1000	1000
True-RMS	•	•	•
Temperature	•	–	–
Basic DC Accuracy	0.09%	0.09%	0.15%
Backlight	•	•	–
Min/Max/Avg	•	•	•
Compatible with ToolPak™ Meter hanging Kit with Magnet	•	•	•
Limited Lifetime Warranty	•	•	•

Specifications

Functions	Range	Best Accuracy
DC Voltage	600.0mV, 6.000V, 60.00V, 600.0V, 1000V	± 0.09% (177 and 179) ± 0.15% (175)
AC Voltage[1]	600.0mV, 6.000V, 60.00V, 600.0V, 1000V	± 1.0% of reading
DC Current	60.00mA, 400.0mA, 6.000A, 10.00A2	± 1.0% of reading
AC Current[2]	60.00mA, 400.0mA, 6.000A, 10.00A2	± 1.5% of reading
Resistance	600.0Ω, 6.000kΩ, 60.00kΩ, 600.0kΩ, 6.000MΩ, 50.00MΩ	± 0.9% of reading
Capacitance	1000nF, 10.00µF, 100.0µF, 9999µF	± 1.2% of reading
Frequency[3]	99.99Hz, 999.9Hz, 9.999Hz, 99.99kHz	± 0.1% of reading
Temperature (Model 179)	-40°C to +400°C	1.0% of reading

[1] All AC voltage and AC current ranges are specified from 5% of range to 100% of range.
[2] 10A continuous, 20A for up to 30 seconds.
[3] Voltage frequency is specified from 2Hz to 100kHz. Current frequency is specified from 2Hz to 30kHz.

Recommended Accessories


TPAK
Magnetic Meter Hanger


TL81A
Deluxe Electronic Test Lead Set


TL175
TwistGuard™ Test Leads


i410
AC/DC Current Clamp


AC220
SureGrip™ Alligator Clips


TP220
SureGrip™ Industrial Test Probes


FOM
Fiber Optic Meter


80K-15
High Voltage Probe


C35
Soft Carrying Case


CAMO C25
Camouflage Carrying Case

Recommended Kits

Buy more, Save more


Fluke 179/EDA2 Industrial Digital Multimeter Combo Kit

Included Accessories

Test Leads with 4mm Lantern Tips, 9V Battery (installed) and User Manual, 80BK Temperature Probe (179 only).

Ordering Information

FLUKE-175	True RMS Digital Multimeter
FLUKE-177	True RMS Digital Multimeter
FLUKE-179	True RMS Digital Multimeter
FLUKE-179/ EDA2	Electronics Combo Kit
FLUKE-179/ IMSK	Industrial Multimeter Service Kit

FLUKE 110 SERIES TRUE-RMS DIGITAL MULTIMETERS



Fluke 116

Fluke 117

Dependable Digital Multimeters for Electrical and HVAC Purposes

All the models in the Fluke 110 Series are True-RMS Multimeters with a large 3-1/2 digit / 6,000 count display. The Fluke 117 includes integrated VoltAlert™ non-contact voltage detector and LoZ ghost voltage detector features to get the job done faster. The Fluke 116 is the HVAC/R Multimeter with temperature, microamps, and LoZ to quickly troubleshoot problems with HVAC/R equipment. The Fluke 115 is a compact meter for a wide variety of electrical/electronic testing applications, while the Fluke 114 and 113 are basic electrical troubleshooting meters designed for "go/no-go" testing.

- VoltAlert™ technology for integrated non-contact voltage detection (117)
- AutoVolt feature for automatic ac/dc voltage selection (117, 116, 114)
- Built in thermometer for HVAC applications (116)
- Microamps to test flame sensors (116)
- VCHEK™ LoZ low impedance measurement function to simultaneously test for voltage/continuity (113)
- LoZ: Low input impedance prevents false readings due to "ghost voltage" (117, 116, 114)
- Large display and white LED backlight to work in poorly lit areas more effectively
- Three year warranty

Recommended Accessories



C115
Soft Carrying Case



TPAK
Magnetic Meter Hanger



TL175
TwistGuard™ Test Leads



80PK-27
SureGrip™ Industrial Surface Probe (Fluke 116)

Recommended Kits

Buy more, Save more



Fluke 116/323 HVAC Combo Kit



IB117K FLUKE 117 Multimeter + Insulated Hand Tools Starter Kit

Specifications

Functions	117	116	115	114	113
AC/DC Voltage	600V	600V	600V	600V	600V
AC/DC Current	10A	600.0µA	10A	–	–
Resistance	40MΩ	40MΩ	40MΩ	40MΩ	60MΩ
Capacitance	1nF to 9,999µF	1nF to 9,999µF	1nF to 9,999µF	–	1nF to 9,999µF
Diode Test	•	–	•	–	•
Frequency	5Hz to 99.99kHz	5Hz to 99.99kHz	5Hz to 99.99kHz	–	–
Temperature	–	+400°C		–	–
Safety Rating	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V

Features

	117	115	113
VoltAlert™ Detector	•	–	–
AutoVolt/LoZ	•	–	LoZ
Analogue Bargraph	•	•	•
True-RMS for accurate Measurements on non-linear Loads	•	•	•
Min/Max Recording	•	•	•
Display Hold	•	•	•
3-1/2 Digits	•	•	•
6000 Counts	•	•	•
CAT III 600V Safety rated	•	•	•
	116	114	
Temperature	•	–	
Microamps	•	–	
Frequency	•	–	
Capacitance	•	–	
Diode Test	•	–	
AutoVolt/LoZ	•	•	
Analogue Bargraph	•	•	
True-RMS for accurate Measurements on non-linear Loads	•	•	
Min/Max Recording	•	•	
Display Hold	•	•	
3-1/2 Digits	•	•	
6000 Counts	•	•	

Included Accessories

TL75 Test Leads, Holster, 80BK Integrated Temperature Probe (116), User's Manual and 9V Battery (installed).

Ordering Information

FLUKE-113	Utility True RMS Digital Multimeter
FLUKE-114	Electrical True RMS Digital Multimeter
FLUKE-115	True RMS Digital Multimeter
FLUKE-116	HVAC True RMS Digital Multimeter
FLUKE-117	Adv. Electrical True RMS Multimeter
FLUKE-116/323	HVAC and Clamp Meter Combo Kit
FLUKE-116/ 62 MAX +	HVAC Multimeter and Infrared Thermometer Kit
FLUKE-117/323	Electrical Combo Kit
IB117K	117 Multimeter + Insulated Hand Tools Starter Kit

FLUKE 27 II, 28 II AND 28 IIEX INDUSTRIAL IP67 DIGITAL MULTIMETERS



Fluke 27 II

Fluke 28 II

The 27 II, 28 II and 28 IIEx-AU Digital Multimeters are designed for tough work environments. All three meters have IP 67 waterproof and dustproof rating. They both have an extended operating temperature range of -15 °C to + 55 °C and 95 % humidity.

- Unique function for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment (28 II, 28 IIEx)
- Built-in thermometer conveniently allows you to take temperature readings without having to carry a separate instrument (28 II, 28 IIEx)
- Hi-resolution 20,000 count display mode (28 II, 28 IIEx)
- Resistance and continuity. Relative mode to remove test lead resistance from low ohms measurements
- Large digit display with bright, two-level backlight
- Backlit keypad buttons allow for easy visibility in low-lit areas
- Optional magnetic hanger for easy setup and viewing freeing your hands for other tasks
- Intrinsically safe certifications from the world's leading certification bodies (28 IIEx)
- Limited lifetime manufacturer's warranty

Specialty Models

Fluke 28 IIEx-AU Intrinsically Safe True-RMS Multimeter

CAT III 1000V/CAT IV 600V electrical safety rating

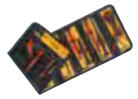
II 2 G Ex ia IIC T4



Recommended Accessories



TPAK
Magnetic Meter Hanger



TLK-225
SureGrip™ Master Accessory Kit



PV350
Pressure-Vacuum Module



i410
AC/DC Current Clamp



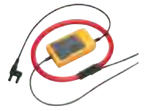
CXT80
Soft Carrying Case



C25
Soft Carrying Case



TL175
TwistGuard™ Test Leads



I2000 FLEX
AC Current Clamp

Specifications

Functions		27 II	28 II	28 II Ex
DC Voltage	Range		0.1 mV to 1000 V	
	Accuracy	0.05 % +1	0.05 % +1	0.05 % +1
AC Voltage	Range		0.1 mV to 1000 V	
	Accuracy	0.5 % +3	0.7 % +4	0.7 % +4
DC Current	Range		0.1 µA to 10 A	
	Accuracy	0.2 % + 4	0.2 % + 4	0.2 % + 4
AC Current	Range		0.1 µA to 10 A	
	Accuracy	1.5 % + 2	1.0 % + 2	1.0 % + 2
Resistance	Range		0.1 0 to 50 MΩ	
Display Counts		6000	6000/19,999	6000/19,999
Capacitance		1 nF to 9999 µF		10 nF to 9999 µF
Frequency		0.5 Hz to 199.99 kHz		
Temperature			-200 °C to +1090 °C	-200 °C to +1090 °C
Low pass filter (measurement on VSD's)			Yes	Yes
Compliance		CAT IV 600 V, CAT III 1000 V		
Measurement method		Avg. responding	True-RMS	True-RMS
Power		Two AAA batteries		
Battery life		800 hours		400 hours
Dimensions (DxWxH)		6.35 cm x 10.0 cm x 19.81 cm		
Weight with holster		698.5 g		

Features

	27 II	28 II	28 II Ex
Tested to withstand a 3 m drop	•	•	•
Wide 1000 V measurement range	•	•	•
True-RMS AC voltage and current for accurate measurements on non-linear signals	–	•	•
Low pass filter	–	•	•
Temperature	–	•	•
Average responding voltage and current measurements	•	–	–
10 A continuous (20 A for 30 seconds)	•	•	•
Frequency and capacitance	•	•	•
Record signal fluctuations using the Min/Max function	•	•	•

Included Accessories

TL175 Test Leads, AC175 Alligator Clips, 80BK-A Temperature Probe (28 II), Holster, User Manual, and Three AA Batteries (installed).

Ordering Information

FLUKE-27II	Industrial Multimeter
FLUKE-28II	Industrial Multimeter
FLUKE-28IIEx/AU	Intrinsically Safe Industrial Multimeter

FLUKE 77IV DIGITAL MULTIMETER



Fluke 77IV

Versatile Multimeter for Field Service or Bench Repair

The Fluke 77IV Digital Multimeter has the features needed to repair most electrical and electronic problems. This meter is simple to use and has significant improvements over Fluke's original 70 Series with more measurement functions, conformance to the latest safety standards, and a much larger display that is easier to view.

- Wide 1000V measurement range
- Average responding AC measurements
- 0.3% accuracy
- 10 amps continuous
- Frequency and capacitance
- Resistance and continuity
- Large display
- Backlight for work in dim areas
- Min/Max to record signal fluctuations
- Integral holster with probe holders
- Free your hands with the optional TPAK magnetic hanger
- Auto and manual ranging
- Battery Life: 400 hours typical
- Weight: 0.42kg
- Size (HxWxD): 185mm x 90mm x 43mm
- Limited lifetime manufacturer's warranty

LISTED 950 Z

Recommended Accessories



i400
AC Current Clamp



C35
Soft Carrying Case



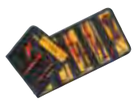
TPAK
Magnetic Meter Hanger



TL225
SureGrip™ Stray Voltage Adaptor Test Lead Kit



I2000 FLEX
AC Current Clamp



TLK-225
SureGrip™ Master Accessory Kit

Specifications

Functions	Maximum	Max. Resolution	Accuracy
Voltage DC	1000V	1mV	±(0.3%+1)
Voltage AC	1000V	1mV	±(2.0%+2)
Current DC	10A	0.01mA	±(1.5%+2)
Current AC	10A	0.01mA	±(2.5%+2)
Resistance	50MΩ	0.1Ω	±(0.5%+1)
Capacitance	9,999µF	1nF	±(1.2%+2)
Frequency	99.99kHz	0.01Hz	±(0.1%+1)

Accuracies are best accuracies for each function.

General Specifications

Accuracy is specified for 1 year after calibration, at operating temperatures of 18°C to 28°C, with relative humidity at 0 % to 90 %. Accuracy specifications take the form of ±[% of Reading] + [Counts]).

V Maximum Voltage between any Terminal and Earth Ground	1000V
Surge Protection	8kV Peak per IEC 61010
W Fuse for mA Input	440mA, 1000V FAST Fuse
W Fuse for A Input	11A, 1000V FAST Fuse
Display	Digital: 6,000 Counts, updates 4/sec
Bar Graph	33 Segments, updates 32/sec
Frequency	10,000 Counts
Capacitance	1,000 Counts
Operating Altitude	2,000 Metres
Storage Altitude	12,000 Metres
Operating Temperature	-10°C to + 50°C
Storage Temperature	-40°C to + 60°C
Temperature Coefficient	0.1 X (specified Accuracy/°C (< 18°C or > 28°C)
Electromagnetic Compatibility (EN 61326-1:1997)	In an RF Field of 3V/M, Accuracy = specified Accuracy except in Temperature: specified Accuracy ± 5°C
Relative Humidity (maximum non-condensing)	90% to 35°C; 75% to 40°C; 45% to 50°C
Battery Life	400 Hours
Size (HxWxL) and Weight	185mm x 90mm x 43mm; 420 Grams
Safety Compliance	ANSI/ISA S82.02.01, CSA C22.2-1010.1, IE 61010 to 1000V Measurement Category III, 600V Measurement Category IV
Certifications	CSA, TÜV (EN61010), UL, TÎ, (N10140), VDE

Included Accessories

Test Leads with 4mm Lantern Tips, 9V Battery (installed), Manual Information Pack.

Ordering Information

FLUKE-77-4 Digital Multimeter

FLUKE 8846A, 8845A AND 8808A PRECISION BENCH MULTIMETERS



Fluke 8846A



Fluke 8845A



Fluke 8808A

True RMS

Fluke 8846A/8845A 6.5 Digit Precision Multimeters

These digital multimeters perform the functions you would expect to see in a multifunction DMM, including measuring volts, ohms and amps. Basic V DC accuracy of up to 0.0024 %, 10 A current range, and a wide ohms range give you an unbeatable combination of measurement capability.

Extend the meters' utility even more with their graphical display modes, including Trendplot™ paperless recorder mode, statistics and histograms – features you won't find on other multimeters.

- 6.5 digit resolution
- Up to 0.0024 % accuracy
- Graphical analysis modes: TrendPlot, Histogram and Statistics
- Dual measurement inputs: front/rear
- Dual measurement display
- Wide measurement range
- IEEE, LAN, RS-232 interfaces
- USB memory device port (8846A)
- TL2X4 wire measurement technique
- 17025 accredited report of calibration included
- Three year warranty

Fluke 8808A 5.5 Digit Multimeter

The Fluke 8808A multimeter has a broad range of functions, measuring volts, ohms and amps with a basic V DC accuracy of 0.015 %. The meter is easy to use and include innovative functions to simplify routine testing and precision 4 wire resistance measurements.

- Up to 0.015 % accuracy
- Dual measurement display
- Sensitive DC leakage current ranges
- Front panel setup keys
- TL2X4 wire measurement technique
- Three year warranty

Recommended Accessories



TL2X4W-TWZ
2x4-Wire Ohms Tweezers Test Leads



TL2X4W-PTII
2x4-Wire Ohms Test Lead



Y8846D
Rack Mount Kit, Dual



884X-CASE
Molded Plastic Case

Sample Screens

Fluke 8846A/8845A



Built-in TrendPlot graphically plots extent of drift and intermittent events.



Critical measurement statistics are conveniently displayed together.

Specifications

	8808A	8845A	8846A
Display	Dual	Dual, graphical	
Resolution (Digits)	5.5	6.5	
Measurements	V AC, V DC, I DC, I AC, Ω, Cont, Diode	V AC, V DC, I DC, I AC, Ω, Cont, Diode	
Basic V DC Accuracy (% Reading + % Range)	0.015 + 0.003	0.0035 + 0.0005	0.0024 + 0.0005
Advanced Measurements/ Functions	2x4 Wire Ohms, freq, i-Leakage dedicated Setup Keys	2x4 Wire Ohms, freq, period	2x4 Wire Ohms, freq, Period, Capacitance, Temp (RTD)
Math	Null, dBm, dB, Min, Max	Null, dBm, dB, Min, Max, Ave, Std Deviation, MX+B	
Analysis	Limit Compare	Limit Compare, TrendPlot, Histogram, Statistics	
USB Memory Device Port	–	–	•
Interfaces	RS-232, USB via optional Adaptor	RS-232, IEEE-488.2, LAN, USB via optional Adaptor	
Safety Rating	CAT I 1000V, CAT II 600V	CAT I 1000V, CAT II 600V	

Included Accessories

LCI Line Power Cord, Test Lead Set, Spare Line Power Fuse, Programmers Manual / User Manual on CD-ROM, 884X-USB USB to RS232 Cable Adaptor, FVF-BASIC FlukeView® Forms Software Basic Version.

Ordering Information

FLUKE 8808A	5.5 Digit Multimeter
FLUKE 8808A/SU	5.5 Digit Multimeter (Software + Cable)
FLUKE 8845A	6.5 Digit Precision Multimeter
FLUKE 8845A/SU	6.5 Digit Precision Multimeter (Software + Cable)
FLUKE 8846A	6.5 Digit Precision Multimeter
FLUKE 8846A/SU	6.5 Digit Precision Multimeter (Software + Cable)

Calibration & Service Agreement units also available.

Infrared Thermometers









	560 Series Fluke 561	560 Series Fluke 566	570 Series Fluke 568/568Exx	570 Series Fluke 572-2	Fluke 62 MAX	60 Series Fluke 62 MAX+	Fluke 64 MAX
Temperature Range	- 40 to 550°C	- 40 to 650°C	- 40 to 800°C	- 30 to 900°C	-30 to 500°C	-30 to 650°C	-30 to 600°C
Distance to Spot	12:1	30:1:00	50:1:00	60:1:00	10:01	12:01	20:01
Laser Sighting	Single-Point Laser	Single-point Laser	Single-point Laser	Offset Dual Laser, Output <1 mW	Single Laser	Dual Laser	Single Laser
Accuracy	1.0%	1.0%	1.0%	1.0%	1.5%	1.0%	1.0%
Response Time	< 500mSec	< 500mSec	< 500mSec	< 500 mSec	< 500mSec	< 300mSec	< 500mSec
Recommended Distance to Spot	Up to 2.5m	Up to 4.5m	Up to 7.5m	Up to 9 m	Up to 2m	Up to 2m	Up to 2m
Adjustable Emissivity	•	•	•	•	•	•	•
MIN/MAX Readings	•	•	•	•	•	•	•
AVG Readings		•	•	•	•	•	•
DIF Readings	•	•	•	•	•	•	•
Backlit LCD Display		•	•	•			
Audible Hi/Lo Alarm		•	•	•			•
Visible Hi/Lo Alarm		•	•	•			•
Includes Contact Probe	Thermocouple K	Thermocouple K	Thermocouple K	Thermocouple K			
Probe Input (types)							
Data Logging (no of measurements)	20 Points	20 Points	99 Points	99 Points			99 Points
PC Interface			USB	USB 2.0			
FlukeView® Forms Software compatible		•	•	•			

Recommended Applications



Plant/Facilities Maintenance

- Preventive and Predictive Maintenance
- Energy Eudits
- Vehicle and Fleet Maintenance Programs
- Faulty Electrical/Circuit Connections
- Petrochemical/Hazardous Locations
- Motors, Pumps and Bearings



Heating/Ventilation/Air Conditioning/Refrigeration

- Leaky Ductwork
- Thermostats
- Temperature Balancing
- Steam Distribution Systems
- Compressor Lines



Manufacturing Processes

- Molding Temperature Measurement
- Printing, Paper and Converting
- Thermoforming Plastics
- Electronics Paint Curing/Drying
- Food Chemical and Pharmaceutical



Safety and Protection

- Fire Localisation
- Hazardous Materials
- Faulty Ballasts
- Search and Rescue
- Smoldering Embers
- Equipment Maintenance

FLUKE 560 AND 570 SERIES INFRARED THERMOMETERS



Fluke 568

Fluke 561

Fluke 561, 566 and 568 Infrared and Contact Thermometers

With a straight-forward user interface and soft-key menus, the Fluke 561, 566 and 568 make even complex measurements easy. With just a few pushes of a button you can easily adjust emissivity, start data logging, or turn on and off alarms. With a rugged, easy-to-use design, the Fluke 561, 566 and 568 can stand up to tough industrial, electrical, and mechanical environments.

- Confidently measure more surfaces, with adjustable emissivity and built-in materials table
- Log and download measurements for reporting (568)
- Two levels of backlight (566, 568)
- Audible and visual alarms
- Min/Max/Dif functions
- Includes KTC bead probe and compatible with any k-type thermocouple
- Two year warranty

Speciality Model

Fluke 568Ex Intrinsically Safe Infrared Thermometer



- Measure -40°C to 800°C
- 50:1 distance to spot ratio with dual laser sighting for fast, accurate targeting
- Display resolution 0.1°C of reading
- Adjustable emissivity and predefined emissivity table
- Safety Certification ATEX/ IECEx for Class1, Div 1 and
- Div 2 or Zone 1 and 2 hazardous environments

Specifications	561	566	568/568 Ex
Infrared Temperature Range	-40°C to 535°C	-40°C to 650°C	-40°C to 800°C
Accuracy	Greater of ± 1% or ± 1°C		
Distance to Spot (D:S)	12:1	30:1	50:1
Sighting	Laser Point		
Typical Distance to Target	Up to 2.5 m	Up to 4.5 m	Up to 7.5 m
Probe Type	Thermocouple K		
Contact Temperature Range	-40°C to 550°C	-270°C to 1372°C	
Number of on-board Memory Locations	—	20	99
Material Type Adjustment (Emissivity)	Hi/Med/Lo	Material Table or 0.1 to 1.00 by 0.01	
High and low Alarms	—	High and low Alarms	



Fluke 572-2



Fluke 572-2 High Temperature Infrared Thermometer

The Fluke 572-2 Infrared Thermometer is the one product you can use in high temperature industrial environments all around the world. This is the best choice for when you need accurate results for high temperature readings from a long distance.

- Measure -30°C to 900°C
- 60:1 distance to spot ratio with dual laser sighting for fast, accurate targeting
- Last reading Hold (20 seconds)
- High and low temperature alarm
- Data storage and review (99 data sets)
- Compatible with standard mini-connector K-type thermocouples, including ones you already own and have installed
- Current Temperature plus MAX, MIN, DIF, AVG temperature displays
- Adjustable emissivity and predefined emissivity table
- FlukeView® Forms documenting software
- Two year warranty

Specifications	572-2
Infrared Temperature Range	-30°C to 900°C
Infrared Accuracy (Calibration Geometry with ambient Temperature 23°C ± 2°C)	≥ 0°C: ± 1°C or ± 1% of the Reading, whichever is greater ≥-10°C to <0°C: ± 2°C <-10°C: ± 3°C
Distance to Spot (D:S)	60:1 (calculated at 90% Energy)
Laser Sighting	Offset Dual Laser, Output <1mW
Hi/Low Alarms	Audible and two-colour visual
Min/Max/Avg/Dif	•
Trigger Lock	•
Data Storage	99 points
K-type Thermocouple Input Temperature Range	-270°C to 1372°C
K-type Thermocouple Input Accuracy (with ambient Temperature 23°C ± 2°C)	< -40°C: ± (1°C + 0.2°/1°C) ≥ -40°C: ± 1% or 1°C, whichever is greater

Recommended Accessories



80PK-22
SureGrip™ Immersion Probe



80PK-27
SureGrip™ Surface Temperature Probe



80PK-8
Pipe Clamp Probe



80PK-11
Pipe Clamp Probe



80PK-18
Pipe Clamp Probe Kit



C1600
Gear Tool Box

Included Accessories

560 Series: Thermocouple K-type Velcro Pipe Probe (561 only), K-type Thermocouple Bead Probe (566 & 568 only), FlukeView® Forms Software (568 only), USB Cable (568 only), Hard Carrying Case, two AA Batteries and User Manual with Measurement Guide.

572-2: K-type Thermocouple Bead Probe, USB 2.0 Computer Interface Cable, FlukeView® Forms Documenting Software, Hard Carrying Cse, Getting Started Guiode and User Manual (CD)

Ordering Information

FLUKE-561	HVACPro Infrared Thermometer
FLUKE-566	IR Thermometer
FLUKE-568	IR Thermometer
FLUKE-568 Ex	Intrinsically Safe IR Thermometer

FLUKE 60 SERIES INFRARED THERMOMETERS



Fluke 62 MAX

Fluke 62 MAX, 62 MAX+ and New 64 MAX IR Thermometers

The Fluke 62 MAX, 62 MAX+ and new 64 MAX IR Thermometers have the precision you need to do your job accurately and will not break the budget. Designed and tested to survive a 3 metre drop, you can count on these lightweight, compact infrared thermometers to work when you need them to work–even in the harshest environments and when you're not able to be there.

- Precise laser technology for more accurate and repeatable measurements
- Temperature accuracy of up to ≥ 0°C: ± 1°C or ± 1% of reading whichever is greater with 20:1 distance to spot ratio (64 MAX)
- Flashlight (64 MAX) and large, easy-to-read backlit LCD display for easy viewing even in dark environment
- IP54 rated for extra protection against airborne contaminants
- Get your tool to work when you can't–set time and desired interval between measurements and Auto Capture will capture spot temperatures unattended (64 MAX)
- 99 data point logging (64 MAX)
- Displays the minimum, maximum or average temperature, or the difference between two measurements
- Hi & Lo alarms for rapid display of measurements outside set limits
- Dual rotating lasers to help you identify area to be measured (62 MAX+)
- Small and lightweight, fits easily into your tool box
- Three year warranty

Recommended Accessories



H6
Electrical Tester Holster



FLK-TI-TRIPOD
Tripod Mounting Accessory for 64 MAX

Recommended Kits

Buy more, Save more

Fluke T5-600/62 MAX+/1AC-II Infrared Thermometer and Electrical Tester Kit

Fluke T6-600/62 MAX+/1AC-II Infrared Thermometer and Electrical Tester Kit

Fluke 116/62 MAX+ Technician's Combo Kit

Fluke 414D/62 MAX and Laser Distance Meter/Infrared Thermometer Combo Kit

Specifications

	62 MAX	62 MAX+	64 MAX
Temperature Range	-30°C to 500°C	-30°C to 650°C	- 30°C to 600°C
Accuracy	± 1.5°C or ± 1.5% of reading, whichever is greater -10°C to 0°C: ± 2.0 -30°C to -10°C: ±3.0	± 1.0°C or ± 1.0% of reading, whichever is greater -10°C to 0°C: ± 2.0 -30°C to -10°C: ± 3.0	± 1.0°C or ± 1.0% of reading, whichever is greater ± 2.0°C at -10°C to 0°C ± 3.0°C at -30°C to -10°C
Emissivity	0.10 to 1.00		
Optical Resolution	10:1 (calculated at 90% energy)	12:1 (calculated at 90% energy)	20:1 (calculated at 90% energy)
Compliance	EN/IEC 61010-1: 2001		
Laser Safety	FDA and EN 60825-1 Class II		

Included Accessories

Fluke 64 MAX, 62 MAX and 62 MAX+: Two AA Batteries and Instruction Sheet.

Ordering Information

FLUKE-62 MAX	Single Laser IR Thermometer, 10:1 Spot
FLUKE-62 MAX PLUS (+)	Dual Laser IR Thermometer, 12:1 Spot
FLUKE 62 MAX+ /323/1AC	IR Thermometer Clamp Meter and Voltage Detector Kit
FLUKE-64 MAX	IR Thermometer
FLUKE-T6-600/62MAX+ /1AC	T6-600 Tester, 62MAX+ & 1AC-II Combo Kit
1587KIT/62 MAX+	2-in-1 ADV Elec Kit with 62MAX+ i400 AC Current Clamp

FLUKE 50 SERIES II THERMOMETERS



Fluke 54 II B

Fluke 53 II B

Lab Accuracy in a Field Thermometer

The Fluke 50 Series II Contact Thermometers offer fast response and laboratory accuracy in a rugged handheld test tool.

- Laboratory accuracy: ± (0.05 % + 0.3°C)
- Large backlit dual display
- Min/Max/Avg
- Electronic offset function maximises overall accuracy
- Supports a wide range of thermocouple types
- Temperatures displayed in°C, °F, or Kelvin (K)
- Three year warranty

Powerful Data-logging Capabilities

The Fluke 53 II B and 54 II B can log up to 500 points of data to internal memory.

- User-adjustable recording intervals
- Real-time clock captures the exact event time
- Recall function lets logged data be easily reviewed
- Download data to optional FlukeView® PC software



Fluke 51 II

Fluke 52 II

Speciality Model



FlukeFoodPro™ Food Safety Thermometers

The Fluke FoodPro Thermometer Series provides a complete temperature measurement and monitoring solution for food service professionals.
It includes two useful temperature inspection tools, which are designed to enable foodservice professionals to quickly and accurately measure food product temperatures and to help detect potential food safety problems.

The Fluke FoodPro non-contact thermometer is the first line of defense against improper receiving, storage and holding temperatures. Using an infrared measurement technique, the highly accurate FoodPro quickly reads surface temperatures, allowing workers to make rapid and frequent temperature measurements – faster than contact units and without fear of cross contamination. The easy-to-see illumination light shows you the measurement area.

Specifications

	51 II	52 II	53 II B	54 II B
Thermocouple Types	J,K,T,E	J,K,T,E	J,K,T,E,N,R,S	J,K,T,E,N,R,S
Number of Inputs	Single	Dual	Single	Dual
Time Stamp	Relative Time	Relative Time	Time of Day	Time of Day
Splash/Dust Resistant	•	•	•	•
Dual Display with Backlight	•	•	•	•
Min/Max/Avg Recording	•	•	•	•
(T_1-T_2) True Differential	–	•	–	•
Data Logging up to 500 Points	–	–	•	•
IR Data Port for Interface to PC	–	–	•	•
Compatible with FlukeView® Software	–	–	•	•
Battery Life	1000 Hours typical, AA			
Size (H x W x D)	173 x 86 x 38mm			
Weight	0.4g			

Temperature Range and Accuracy	
J-type Thermocouples	-210°C to 1200°C
K-type Thermocouples	-200°C to 1372°C
T-type Thermocouples	-250°C to 400°C
E-type Thermocouples	-150°C to 1000°C
N-type Thermocouples	-200°C to 1300°C
R- and S-type Thermocouples	0°C to 1767°C
Temperature Accuracy above -100°C:	
J, K, T, E, and N-type	± [0.05% + 0.3°C]
R and S-type	± [0.05% + 0.4°C]
Temperature Accuracy below -100°C:	
J, K, E, and N-types	± [0.20% + 0.3°C]
T-type	± [0.50% + 0.3°C]

Included Accessories

Fluke 50 Series Thermometers: Impact Absorbing Holster, Two Bead Probe Thermocouples 80PK-1 (54 and 52 only), One Bead Probe Thermocouple, 80PK-1 (51 and 53 only).

Fluke FoodPro (FP): AA Battery and Quick Start Guide.

Ordering Information

FLUKE-51 II	Single Input Digital Thermometer
FLUKE-52 II	Dual Input Digital Thermometer
FLUKE 53 II B	Single Input Digital Thermometer w/ Data Logging
FLUKE 54 II B	Dual Input Digital Thermometer
FLUKE FP	FoodPro™ Food Safety Thermometer

Insulation Testers

FLUKE 1587 FC AND 1577 INSULATION MULTIMETERS

FLUKE CONNECT



Fluke 1587 FC

Fluke 1577

Two powerful Tools in one

The Fluke 1587 FC and 1577 Insulation Multimeters combine a digital 1 kV insulation tester with a full-featured, true-RMS digital multimeter in a single compact, handheld unit, which provides maximum versatility for both troubleshooting and preventive maintenance.

- Insulation test (1587 FC: 0.01MΩ to 2GΩ) (1577: 0.1MΩ to 600MΩ)
- Insulation test voltages (1587 FC: 50V, 100V, 250V, 500V, 1000V), (1577: 500V, 1000V) for many applications
- Live circuit detection prevents insulation test if voltage > 30V is detected for added user protection
- Auto-discharge of capacitive voltage for added user protection
- Filter for motor drive measurements (1587 FC only)
- AC/DC voltage, DC millivolts, AC/DC milliamps, resistance (Ω), and continuity
- Capacitance, diode test, temperature, Min/Max, and frequency (Hz) (1587 FC only)
- Auto power off to save battery power
- Large display with backlight and large digits
- Included accessories: Remote probe, test leads and probes, alligator clips, (Type K thermocouple, 1587 FC only)
- Accepts optional Fluke TPAK magnetic hanging system to free your hands for other work
- Rugged, utility hard case allows you to bring everything you need for the job
- Three year warranty

The Fluke 1587 FC Insulation Multimeter adds four powerful diagnostic functions through the Fluke Connect® Measurements app:

- PI/DAR timed ratio tests with Trendlt™ graphs identifies moisture and contaminated insulation problems faster
- Memory storage through Fluke Connect eliminates writing down results, reduces errors and saves data for historical tracking over time
- Temperature Compensation through app for establishing accurate baselines and relevant historical comparisons

Recommended Accessories



i400
AC Current Clamp



TPAK
Magnetic Meter Hanger



C100
Universal Carrying Case



TL27
Heavy Duty Test Leads

Recommended Kits

Buy more, Save more



Fluke 1587/i400 Current Clamp FC Kit



Fluke 1587 FC Advanced Electrical Troubleshooting Kit



Fluke 1587 FC/MDT Advanced Motor and Drive Troubleshooting Kit

Specifications

	1587 FC	1577
Insulation Test Voltages 50V, 100V, 250V, 500V, 1000V	•	–
Insulation Test Voltages 500V, 1000V	–	•
Insulation Resistance	0.01MΩ to 2.0GΩ	0.1MΩ to 600MΩ
Auto-Discharge of capacitive Voltage	•	•
Insulation Test Smoothing Reading	•	–
Frequency	•	–
Capacitance	•	–
Diode Test	•	–
Temperature	•	–
Min/Max	•	–
Low-pass Filter (for Work on VSDs)	•	–
AC/DC Voltage	•	•
DC Millivolts	•	•
AC/DC Milliamps	•	•
Resistance	0.1Ω to 50MΩ	0.1Ω to 50MΩ
Continuity	•	•
Remote Probe, Test Leads, Alligator Clips	•	•
Type K Thermocouple	•	–
Rugged, Utility Hardcase	•	•
Auto Power-off	•	•

Included Accessories

Remote Probe, Test Leads, Alligator Clips, K-type Thermocouple (1587 FC only), Hard Case, User Documentation.

Ordering Information

FLUKE-1577	Utility True RMS Digital Multimeter
FLUKE-1587T	Insulation Multimeter for Telecommunications
FLUKE-1587FC	Insulation Multimeter with Fluke Connect
FLUKE-1587/ MDT FC Kit	FC 2-in-1 Adv Motor & Drive Kit w/9040, i400
FLUKE-1587/ I400 FC KIT	FC 2-in-1 Insulation Multimeter with i400
1587KIT/ 62MAX+FC	FC 2-in-1 Adv Elec Kit w/ 62MAX+ i400

FLUKE 1507 AND 1503 INSULATION RESISTANCE TESTERS



Fluke 1507

Fluke 1503

These lightweight, affordable insulation testers are perfect for troubleshooting, commissioning and preventive maintenance applications.

- These lightweight, affordable insulation testers are perfect for troubleshooting, commissioning and preventive maintenance applications.
- Automatic calculation of polarisation index and dielectric absorption ratio (1507 only)
- Multiple test voltages: 50V, 100V, 250V, 500V, 1000V (1507 only)
- Remote test probe for rapid testing
- Insulation test range 0.01MΩ to 10GΩ (1507), 0.1 MΩ to 2000MΩ (1503)
- Compare (Pass/Fail) function for repetitive tests (1507 only)
- Live circuit detection prevents insulation test if voltage > 30V is detected
- Auto-discharge of capacitive voltage
- AC/DC voltage: 0.1V to 600V
- Lo ohms/Earth-bond continuity (200mA) for checking connections and motor windings
- Resistance: 0.01Ω to 20.00Ω
- One year warranty

Recommended Accessories



TPAK
Magnetic Meter Hanger



TL225
Stray Voltage Adaptor Test Lead Kit



TL27
Heavy Duty Test Lead Set



TLK289
Industrial Master Test Lead Set



C116
Soft Carrying Case



C101
Hard Case

Specifications

	1503	1507
User-selectable Test Voltages for many Applications	•	•
Additional Test Voltages 50V, 100V, 250V	–	•
Special Remote Control Probe for easy and safe Measurements	•	•
Auto-Discharge of Capacitive Voltage for added User Protection	•	•
Live Circuit Detection prevents Insulation Test if Voltage > 30V is detected for added User Protection	•	•
Save both Time and Money with automatic Calculation of Polarisation Index and dielectric Absorption Ratio	–	•
Auto Power-off to save Batteries	•	•
Large Display with Backlight	•	•
Continuity Function (200mA)	•	•
Compare Function (pass/fail) for fast repetitive Tests	–	•

Specifications

Insulation	1503	1507
Insulation Test Range	0.1MΩ to 2000MΩ	0.01MΩ to 10GΩ
Test Voltages	500V, 1000V	50V, 100V, 250V, 500V, 1000V
Test Voltage Accuracy	+ 20%, - 0%	+ 20%, - 0%
Insulation Test Current	1mA nominal	1mA nominal
AC/DC Voltage Measurement	600V (0.1V resolution)	600V (0.1V resolution)
Resistance Measurement Range	0.01Ω to 20kΩ	0.01Ω to 20kΩ
Auto Discharge	Discharge time < 0.5 second for C = 1µF or less	Discharge time < 0.5 second for C = 1µF or less
Maximum Capacitive Load	Up to 1µF	Up to 1µF
Open Circuit Test Voltage	> 4V , < 8V	> 4V , < 8V
Short Circuit Current	> 200mA	> 200mA
General		
Battery Life	Meter: 1000 hours Insulation Test: >1000 tests	
Size (H x W x D)	203mm x 100mm x 50mm	
Weight	0.55kg	



Insulation Test at a distribution Panel



Wiring Test in a small Distribution Box – all in one Spot

Included Accessories

TL224 Test Leads, TP74 Test Probes, Clips PN 1958654 (red) and PN 1958646 (black), Holster, Remote Probe and User Manual.

Ordering Information

FLUKE-1507	Insulation Tester
FLUKE-1503	Insulation Tester

Clamp Meters

FLUKE 381 REMOTE DISPLAY TRUE-RMS AC/DC CLAMP METER WITH IFLEX™



Fluke 381

The world's most advanced clamp meter

The Fluke 381 True-RMS AC/DC Clamp Meter combines iFlex flexibility with remote reading capability for the ultimate in innovation and safety. Now one technician can do jobs that would otherwise require two people. Clamp the Fluke 381 around a conductor, remove the display and walk across the room to operate controls or remove protective equipment, all while watching real-time readings.

The iFlex™ Flexible Current Probe (included) expands the measurement range to 2500 A AC while providing increased display flexibility. With a cord that runs 6 feet, you can finally measure those tight spaces, awkward sized conductors and disorganised wires.

- Remote display reads measurements up to 9.1 metres away
- iFlex Flexible Current Probe included, 18 inch circumference
- 2500 A AC current measurement with iFlex
- 999.9 A AC and DC current measurement with fixed jaw
- 1000 V AC and DC voltage measurement
- Frequency measurement to 500 Hz
- 60 kΩ resistance measurement
- Min/Max/Avg and inrush recording
- CAT IV 600 V, CAT III 1000 V
- Three year warranty

Recommended Accessories



TL175
TwistGuard™ Test Leads



TLK289
Industrial Master Test Lead Set



AC87
Heavy Duty Bus Bar Clip Set



FTP-1
SureGrip™ Fused Test Probe Set



I2500-10
10 inch iFlex® Flexible Current Probe



C345
Large Soft Case

Included Accessories

18-inch iFlex™ Flexible Current Probe, Test Leads, Soft Carrying Case, Instruction Card, Safety Information Sheet, Two AA Alkaline Batteries.

FLUKE 365 DETACHABLE JAW TRUE-RMS AC/DC CLAMP METER



Fluke 365

Where rugged meets reliable

The Fluke 365 True-RMS AC/DC Clamp Meter offers a small, detachable jaw with 1.2 metres of coil that makes it easy to take and read measurements in tight or hard-to-reach places.

- 200 A AC and DC current measurement with detachable jaw
- 600 VAC and DC voltage measurement
- Detachable jaw makes accessing wires and viewing the display easier
- Built in flashlight/torch allows for easy illumination and identification of wires
- CAT III 600 V
- Compact design fits in your hand and can be used while wearing protective equipment
- State of the art signal processing allows for use in noisy electrical environments while providing stable readings
- Large, easy to read, backlight display automatically sets the correct measurement range so you do not need to change switch positions while taking a measurement
- Three year warranty

Recommended Accessories



FTPL-1
SureGrip™ Fused Test Probe and Lead Set



TL71
Premium Test Lead Set



TL220
SureGrip™ Industrial Test Lead Set



FTP-1
SureGrip™ Silicone Insulated Test Leads



AC285
SureGrip™ Alligator Clips



C43
Small Soft Case

Included Accessories

Test Leads, Soft Carrying Case, Instruction Card, Safety Information Sheet, Two AA Alkaline Batteries.

FLUKE 370 SERIES CLAMP METERS

FLUKE CONNECT



Fluke 376 FC with iFlex™

Be ready for anything

The Fluke 370 Series of True-RMS Clamp Meters provides a range of state of-the-art features to meet even the most demanding job requirements. All four of the clamp meters have improved base features such as a large, backlit display, true-RMS standard, CAT IV safety rating and a durably constructed body.

Additionally, the 376 FC, 375 FC and 374 FC are a part of the Fluke Connect® family of wireless test tools and are compatible with the iFlex™ Flexible Current Probe (included with the 376 FC, sold separately for the 375 FC and 374 FC), and provide increased measurement readings to 1000 A and 1000 V AC and DC.

Three year warranty.



Fluke 375 FC



Fluke 374 FC



Fluke 373

Specifications

Functions	Range	373	374 FC	375 FC	376 FC
AC Current	0 to 600.0 A	2% ± 5 counts	2% ± 5 counts	2% ± 5 counts	–
	0 to 999.9 A	–	–	–	2% ± 5 counts
DC Current	0 to 600.0 A	–	2% ± 5 counts	2% ± 5 counts	–
	0 to 999.9 A	–	–	–	2% ± 5 counts
AC Voltage	0 to 600.0 V	1% ± 5 counts	–	–	–
	0 to 1000 V	–	1% ± 5 counts	1% ± 5 counts	1% ± 5 counts
DC Voltage	0 to 600.0 V	1% ± 5 counts	–	–	–
	0 to 1000 V	–	1% ± 5 counts	1% ± 5 counts	1% ± 5 counts
Resistance Range		0 to 6000 Ω	0 to 6000 Ω	0 to 6000 Ω	0 to 60 kΩ
Display Counts		32 mm	34 mm	34 mm	34 mm
Capacitance		750 MCM	750 MCM	750 MCM	750 MCM
Weight with holster		–	–	500 Hz	500 Hz

Fluke iFlex™ Flexible Current Probe



Unprecedented measurement flexibility

The iFlex Flexible Current Probe expands the measurement range of select Fluke Clamp Meters to 2500 A AC while providing increased display flexibility, improved wire access and the ability to measure awkward-sized conductors. Available in 18 inch and 10 inch coil sizes.

- Compatible to Fluke 374 FC, 375 FC, 376 FC and 381
- CAT IV 600 V, CAT III 1000 V
- 7.5 mm coil diameter allows measurement in tight spaces
- 1.8 m cable
- Three-year warranty

Visit www.fluke.com/au/clamps for additional specifications.

Recommended Accessories



TL223-1
SureGrip™ Electrical Test Lead Set



TL224
SureGrip™ Silicone Insulated Test Leads



TL175
TwistGuard™ Test Leads



AC285
SureGrip™ Alligator Clips



I2500-18
18 inch iFlexTM Flexible Current Probe



C43
Small Soft Case

Fluke Connect® Enabled

The Fluke 376 FC, 375 FC, and 374 FC are a part of the Fluke Connect family of wireless test tools.

- Trend measurements, pinpoint intermittent faults and transmit results wirelessly by connecting your meter to your phone via Fluke Connect Measurements app
- Create and send reports right from the field
- Stay safely away from the arc flash zone through Bluetooth connectivity

Included Accessories

18-inch iFlex™ Flexible Current Probe (Fluke 376FC only), Test Leads, Soft Carrying Case, Instruction Card, Safety Information Sheet, Two AA Alkaline Batteries.

Ordering Information

FLUKE-373	True-RMS AC Clamp Meter
FLUKE-374 FC	True-RMS AC/DC FC Clamp Meter
FLUKE-375 FC	True-RMS AC/DC FC Clamp Meter
FLUKE-376 FC	True-RMS AC/DC FC Clamp Meter with iFlex™
i2500-10 iFlex™	Flexible Current Probe 25 cm
i2500-18 iFlex™	Flexible Current Probe 45 cm

FLUKE 320 SERIES TRUE-RMS CLAMP METERS



Fluke 324 Fluke 323

Fluke 325

Go to Work with the Best

True-RMS measurements and optimised ergonomics make the Fluke 320 Series True-RMS Clamp Meters the best general troubleshooting tools for commercial and residential electricians. The 323, 324 and 325 are designed to verify the presence of load current, AC voltage and continuity of circuits, switches, fuses and contacts. These small and rugged clamp meters are ideally suited for current measurements up to 400 A in tight cable compartments.

The Fluke 325 also offers DC current and frequency measurements.

- 400A AC current measurement (AC and DC current; 325 only)
- 600V AC and DC voltage measurement
- True-RMS AC voltage and current for accurate measurements on non-linear signals
- Resistance measurement to up to 40kΩ with continuity detection
- Temperature and capacitance measurement (324 and 325 only)
- Frequency measurement (325 only)
- Slim, ergonomic design
- Large, easy to read backlight display (324 and 325 only)
- CAT IV 300V/CAT III 600V safety rating
- Hold button
- Two year warranty

Recommended Accessories



C43
Small Soft Case



C37
Camouflage Carrying Case



TL175
TwistGuard™ Test Leads



TL223-1
SureGrip™ Electrical Test Lead Set



L210
Probe Light and Extender



MC6
MeterCleaner™ Wipes

Specifications

Measurements	Residential/Commercial Electrical 323	324	Light Industrial 325
AC Current	•	•	•
AC Voltage	•	•	•
Resistance	•	•	•
Continuity	•	•	•
DC Volts	•	•	•
DC Current	–	–	•
True-RMS	•	•	•
Frequency	–	–	•
Min/Max/Avg	–	–	•
Temperature	–	•	•
Capacitance	–	•	•
Display			
Display Hold	•	•	•
Backlight	–	–	•
Specifications			
Jaw Opening	30mm		
Max Wire Size	600MCM		
Current Range AC RMS	0 to 400.0A		
Accuracy AC Current (50/60Hz)	2.0% ± 5 Digits	1.5% ± 5 Digits	2.0% ± 5 Digits
AC Response	True-RMS		
Current Range DC	–	–	0 to 400A
Accuracy DC Current	–	–	2.0% ± 5 Digits
Voltage Range AC	0 to 600.0V		
Accuracy AC Voltage	1.5% ± 5 Digits		
Voltage Range DC	0 to 600.0V		
Accuracy DC Voltage	1% ± 5 Digits		
Resistance Range	0 to 4000Ω		0 to 40kΩ
Frequency Measurement Range	–	–	500Hz



Included Accessories

Test Leads, Soft Case, User Manual

Ordering Information

FLUKE-323	True RMS Clamp Meter
FLUKE-324	True RMS Clamp Meter
FLUKE-325	True RMS Clamp Meter

FLUKE 350 SERIES AC/DC TRUE-RMS CLAMP METERS



Fluke 353

Fluke 355

Versatile, professional and accurate

Confidently take reliable readings with the True-RMS Fluke 353 and 355 Clamp Meters — the tools of choice for high current clamp-on amp meter measurements up to 2000 A.

- Reliably handle a wide range of high-current applications with 2000 A AC+DC True-RMS, 1400 A AC, and 2000 A DC
- Large 58 mm jaw
- Inrush current measurement
- High voltage measurement of 1000 V AC+DC True-RMS, 600 V AC, and 1000 V DC (355 only)
- Resistance to 400 KΩ (355 only)
- Continuity beeper (355 only)
- Frequency measurement to 1 KHz
- Selectable low-pass filter mode
- Min/Max/Avg
- Large display with backlight
- Three year warranty

Recommended Accessories



80TK
Thermocouple Module



TP38
Insulated Test Probe



FTP-1
Fuse Test Probe Set



80PK-8
Type K Pipe Thermocouple Probe



TL175
TwistGuard™ Test Leads



TLK-225
Test Lead Set



L215
SureGrip™ Electrical Test Lead Set



TL223-1
Type K Pipe Thermocouple Probe



C345
Large Soft Case



C1600
Gear Tool Box

Specifications

True-RMS Measurements	353 •	355 •
Display Backlight	•	•
Motor Start-up Current	•	•
Min/Max/Average	•	•
Voltage AC/DC	–	•
Resistance Measurement	–	•
Continuity Measurement with beeper	–	•

Functions	Range	373	376 FC
Current AC/DC	0-40.00 A	1.5% ± 15 counts	1.5% ± 15 counts
	0-40.00 A	1.5% ± 5 counts	1.5% ± 5 counts
	0-2000 A; 1400 AC RMS		
Crest Factor		2.4	2.4
Voltage AC/DC	0-4.000 V	–	1% ± 10 counts
	0-40.00 V	–	1% ± 5 counts
	0-400.0 V	–	
	0-600 V AC RMS	–	
	0-1000 V DC	–	
Resistance	0-400.0 Ω	–	1.5% ± 5 counts
	0-4.000 kΩ	–	
	0-40.00 kΩ	–	
	0-400.0 kΩ	–	
Continuity Beeper	Appr. ≤ 30 Ω	–	
Frequency	5.0Hz to 100.0Hz	0.2% ± 2 counts	0.2% ± 2 counts
	100.1Hz to 999Hz	0.5% ± 5 counts	0.5% ± 5 counts
Power Supply		6 x 1.5V AA NEDA 15A or IEC LR6	
Battery Life		100 hours (with typical usage, backlight off)	
Size (HxWxD)		300 mm x 98 mm x 52 mm	
Jaw opening			
Weight		0.814 kg	

Included Accessories

Fluke 353: C43 Soft Meter Case, Six AA Batteries, User Manual.
Fluke 355: C43 Soft Meter Case, Six AA Batteries, TL224 SureGrip™ Silicone Test Lead Set, TP2 Slim Reach Test Probe Set (2 mm), AC285
SureGrip™ Alligator Clip Set, User Manual.

Ordering Information

FLUKE-353	True-RMS AC/DC Clamp Meter
FLUKE-355	True-RMS AC/DC Clamp Meter

FLUKE 902 FC TRUE-RMS HVAC CLAMP METER



Fluke 902 FC

Improve productivity in the field

The Fluke 902 FC delivers the features necessary to diagnose and repair HVAC systems. Additionally, with Fluke Connect® you can trend measurements, create and send reports right from the field, safely stay away from live equipment.Remote display reads measurements up to 9.1 metres away

Applications for HVAC

- 200 µA DC current measurements to measure flame rod
- Extended resistance range to measure thermistors up to 60kΩ
- Capture flue gas temperature
- Measure start and run motor capacitors
- Measure performance of variable frequency drives
- Temperature measurement from -10 °C to 400 °C
- 1000 µF capacitance measurement
- CAT III 600V, CAT IV 300V safety rating
- Three year warranty

Specifications

Functions	Range	Resolution	Accuracy
A AC (via Jaw)	60/600 A	0.01/0.1 A	2.0% ± 5 digit (45-65 Hz) 2.5% ± 5 digit (65-400Hz)
V AC	600 V	0.1 V	1.5% ± 5 digit (45-400Hz)
V DC	600 V	0.1 V	1% ± 5 digits
Ohms	600/6,000 /60,000 Ω	0.1/1/10	1% ± 5 digits
µA	200 µA	0.1 µA	1% ± 4 digits
Contact Temperature	10 to 400°C	0.1 C/F	1% ± 8 digits
Capacitance	100.0/1000µF	0.1/1µF	1% +/- 4 digits
Continuity Beeper			
Beep Volume	75 dBA nom. 15 cm from case front		
On Threshold	<=30 Ω		

Recommended Accessories



AC220
SureGrip™
Alligator Clips



TL224
SureGrip™
Insulated Test Leads



80PK 8
Pipe Clamp
Temperature Probe



80AK-A
Thermocouple
Adapter



TPAK
Magnetic Hanging
Strap



C781
Meter Case

Included Accessories

TL75 Test Leads, 80BK Integrated DMM Temperature Probe, Two AA Alkaline Batteries, Soft Carrying Case, Statement of Calibration Practices and User Manual.

Ordering Information

FLUKE-902 FC — HVAC Clamp Meter

FLUKE 368 FC/369 FC AC TRUE-RMS LEAKAGE CURRENT CLAMP METERS



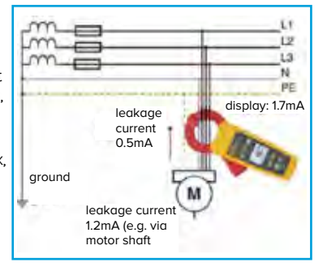
Fluke 369 FC

Fluke 368 FC

Measure leakage current to track small problems, avoid large problems

The Fluke 360 Series of True-RMS Leakage Current Clamp Meters help users detect, document, record and compare leakage current readings over time as a means of preventing unplanned downtime, and identifying intermittent GFCI and RCD trips, without taking equipment offline..

- True-RMS measurements for accuracy when measuring complex, non-sinusoidal waveforms
- Jaw size: 40 mm (368 FC) and 61 mm (369 FC)
- Current resolution 1 µA/0.01 mA and 0.01 A/0.1 A
- Frequency range 40 Hz to 1 kHz
- Selectable filter 40 Hz to 70 Hz or wideband 40 Hz to 1 kHz
- Highest resolution of 1 µA, measure up to 60 A
- Forward-facing LED worklight for use in dark wiring cabinets
- Backlit display; auto backlight off and auto power off for extended battery life.
- Wireless data connectivity via Fluke Connect
- CAT III 600V safety rating
- Three year warranty



Specifications

Measurement Function	Alternating current
AC Ampere Range	3 mA, 30 mA, 300 mA, 3 A, 30 A, 60 A
Range Selection	mA A: manual selection 3 mA, 30 mA, 300 mA: automatic selection 3 A, 30 A, 60 A: automatic selection
Frequency	40 Hz to 1 kHz
Crest Factor	Three

Included Accessories

Soft Case, Two AA Batteries, Safety Manual.

Ordering Information

FLUKE 368 FC — AC Leakage Current Clamp Meter

FLUKE 369 FC — AC Leakage Current Clamp Meter

Electrical Testers

FLUKE VOLTALERT™ FAMILY

- VoltAlert™ AC non-contact voltage testers from Fluke are easy to use - just place the tip to a terminal strip, outlet, or supply cord. When the tip glows red, you know there's voltage present. right tool for the job.
- Two year warranty.



Fluke 1AC-II



Fluke LVD1A



Fluke LVD2

Functions	1AC-A1-II	LVD1A	LVD2
Voltage	90 V AC to 1000 V AC	40 V AC to 300 V AC	90 V AC to 900 V AC
CAT Rating	CAT IV 1000V	CAT IV 600V	CAT IV 600V
Voltage Detection	•	•	•
Batteries included	•	•	•
On/Off Button	•	•	•
Voltbeat	•		
Audible/Silent	•		
LED Flashlight		•	•

Bonding Testers

M1 MILLIOHM METER®

The M1 Milliohm Meter® – handheld bonding meter for measuring low electrical resistance in the aviation industry. All measurements are displayed in milliohms. No conversions, no zeroing of the meter or any other compensation for cables, etc. are needed.

- 0.01 to 19999 milliohms
- 100 milliamps DC
- Accuracy <0.1% of readings
- NIST accuracy certified
- UL913 flightline approved
- CE certified



Part No.	Description
M1-G-KIT	BCD Milliohm Meter

MEGGER MILLIOHM METER

The DLRO2 can measure low resistance values across a wide range of applications including the aircraft industry. Lightning protection testing measuring mΩ resistance between receptors, wing tip to wing tip etc.

- Use of long leads at 1 A without compromising test speed
- Safely test the resistance of inductive loads at 1 A
- <600 V active protection against inadvertent live connections without blowing a fuse
- Ideal for outdoor use with protection against dust and moisture to IP54



Part No.	Description
DLRO2	Megger Low Resistance Ohmeter

Test Lead Accessories

BASIC ELECTRONIC TEST LEAD SET



- Six piece set with zippered case
- Probes, alligator clips and tip extenders for electronic applications
- CAT II 300V
- CAT III 1000V, CAT IV 600V with protective cap

Part No.	Description
TL80A	Basic Electronic Test Lead Set

DELUXE TEST LEAD KIT



- Set of five Automotive Back Probe Pins
- SureGrip™ Silicone Test Leads
- SureGrip™ Test Probes
- SureGrip™ Plunger Style Alligator Clips
- SureGrip™ Alligator Clips
- SureGrip™ Hook Clips
- Carrying Case

Part No.	Description
TLK282	Deluxe Test Lead Kit

TELECOM TEST LEAD SET



- Five-way multipoint test clips for telecommunications applications
- Flexible silicone insulated leads are heat and cold resistant
- CAT I 30V, 8A

Part No.	Description
TL26A	Telecom Test Lead Set

ELECTRONIC TEST PROBES WITH REPLACEMENT TIPS



- Small profile provides accessibility
- Comes with five sets of replaceable tips
- Replacement tips: TP912
- CAT II 1000V, 3A

Part No.	Description
TL910	Electronic Test Probes

SLIM REACH™ TEST PROBES



- Slender probe bodies for probing closely spaced or recessed points
- CAT II 1000V, 10A
- TP38: CAT III 1000V, CAT IV 600V

Part No.	Description	Style
TP1	Slim Reach™ Test Probe	Flat Blade
TP2	Slim Reach™ Test Probe	2mm Tip
TP4	Slim Reach™ Test Probe	4mm Tip
TP38	Slim Reach™ Test Probe	SS; insulated

ELECTRONIC TEST PROBES



- Tapered tip ideal for probing electronic components or boards
- Removable guard for IC probing
- CAT III 1000V, 10A

Part No.	Description
TP80	Electronic Test Probes

SUREGRIP™ SILICONE INSULATED TEST LEADS



- Fit over TL71 and TL75 test lead sets
- IC Test Tip Adaptor, 3A
- Extended Probe Tip, 3A
- Med. Alligator Clip, 5A
- CAT II 300V

Part No.	Description
TL222	SureGrip™ Silicone Insulated Test Lead

SUREGRIP™ SILICONE INSULATED TEST LEADS



- Superior strain relief
- 1.5m silicone-insulated wire resists heat and cold
- CAT III 1000V, CAT IV 600V, 10A

Part No.	Description
TL224	SureGrip™ Silicone Insulated Test Lead

SUREGRIP™ FUSED TEST PROBES



- Built-in fuses for added protection
- 2mm threaded probe tips include removable 4mm lantern-style spring contacts
- Removable GS38 insulated caps
- CAT III 1000V, CAT IV 600V, 10A

Part No.	Description
FTP-1	SureGrip™ Fused Test Probe

SUREGRIP™ INDUSTRIAL TEST PROBES



- Sharp, .5 inch stainless steel tip provides reliable contact
- Flexible finger barrier improves grip
- CAT II 1000V, 10A

Part No.	Description
TP220	SureGrip™ Industrial Test Probe

SUREGRIP™ FUSED TEST PROBES WITH LEADS



- FTP-1 Fused Test Probes with built-in fuses for added protection
- TL224 Silicone Insulated Test Leads
- CAT III 1000V, CAT IV 600V, 10A

Part No.	Description
FTPL-1	SureGrip™ Fused Test Probes with Leads

RIGID BACKPROBE PIN SET



- Two inch long Pins pass between the weather pack seal and wire
- Use with Fluke TL71 or TL75 Test Lead Sets
- Rated to 60V dc

Part No.	Description
TP88	Rigid Backprobe Pin Set

BACK PROBE PIN SET



- Set of five 1.5 inch Pins
- Rated to 60V dc
- Easy connection past weather pack seals to connector conductors
- Use with Fluke TL71 or TL75 Test Lead Sets

Part No.	Description
TP40	Back Probe Pin Set

RETRACTABLE PROBE ASSEMBLY



- Retractable, insulated sharp probe tip
- CAT III 300V, 3A

Part No.	Description
TL40	Retractable Probe Assembly

SUREGRIP™ SILICONE TEST LEAD EXTENSION KIT



- Superior strain relief
- Includes two Adaptors to extend leads 1.5m
- CAT III 1000V, CAT IV 600V, 10A

Part No.	Description
TL221	SureGrip™ Silicone Test Lead Extension Kit

TEST PROBE ADAPTOR KIT



- Fit over TL71 and TL75 test lead sets
- IC Test Tip Adaptor, 3A
- Extended Probe Tip, 3A
- Med. Alligator Clip, 5A
- CAT II 300V

Part No.	Description
TP920	Test Probe Adaptor Kit

SUREGRIP™ ALLIGATOR CLIPS



- Insulated, nickel plated jaws grip objects up to .375 inch
- Blunt tip grabs round screw heads
- CAT III 1000V, CAT IV 600V, 10A

Part No.	Description
AC220	SureGrip™ Alligator Clip

SUREGRIP™ HOOK CLIPS



- Profile narrows to .22 inch at tip
- Hook opening .20 inch front, .08 inch base
- CAT III 1000V, CAT IV 600V, 3A

Part No.	Description
AC280	SureGrip™ Hook Clip

SUREGRIP™ PINCER CLIPS



- 4.5 inch flexible, insulated shaft
- Nickel plated pincers open to .20 inch
- CAT III 1000V, CAT IV 600V, 1A

Part No.	Description
AC283	SureGrip™ Pincer Clip

HIGH VOLTAGE PROBES



- Allows a Digital Multimeter to measure up to 6,000V peak, 15,000V peak and 40,000V peak respectively
- 1000:1 division ratio output when connected to 10MΩ Multimeter
- Ground Clip included
- For low energy applications that are referenced to ground only

Part No.	Description
80K-6	High Voltage Probes 6,000V
80K-15	High Voltage Probes 15,000V
80K-40	High Voltage Probe 40,000V

INSULATION-PIERCING CLIP SET



- Stainless steel probe pierces insulation on 14, 16 and 18 gauge wire
- Design provides complete insulation while working on fuel injectors or sensors
- TP81 for use with modular test leads (Fluke TL224)
- TP82 slips over probe tips (Fluke TL71)
- Rated to 60V dc

Part No.	Description
TP81	Insulation-piercing Clip Set
TP82	Insulation-piercing Clip Set

SUREGRIP™ ALLIGATOR CLIPS



- Multi-purpose tooth pattern grips anything from fine gauge wire to a .75 inch nut
- Nickel-plated steel jaws
- Accepts standard modular 4mm test leads
- CAT III 1000V, CAT IV 600V, 10A

Part No.	Description
AC285	SureGrip™ Alligator Clip

THREADED ALLIGATOR CLIPS



- Threads securely onto TL175 or TP175 probes
- Insulated alligator clips with flexible boots
- Jaw opening: 7mm (0.275in)
- Jaw contact material: nickel-plated steel
- CAT III 1000V, CAT IV 600V

Part No.	Description
AC175	Threaded Alligator Clips

EXTENDED TOOTH ALLIGATOR CLIPS



- Extended tooth jaw with front placement for attaching to screw heads
- Accepts standard 4mm modular test leads
- Jaw opening: 8mm (0.31in)
- Jaw contact material: nickel-plated steel
- CAT III 1000V, CAT IV 600V

Part No.	Description
AC285	SureGrip™ Aligator Clip

RETRACTABLE TEST LEAD



- Used for testing electrical circuits
- Retractable test leads pull out and stay at desired length
- Rewinds test leads into its own protective case when not in use
- With insulated alligator clip
- 18 gauge copper wire

Part No.	Description
LANG1130	30ft Retractable Single Test Lead

RETRACTABLE TEST LEAD



- Used for testing electrical circuits
- Retractable test leads pull out and stay at desired length
- Rewinds test leads into its own protective case when not in use
- With insulated alligator clip
- 18 gauge copper wire

Part No.	Description
LANG1130	10ft Retractable Three-Wire Test Lead



Avionics Laboratory/PCB Level

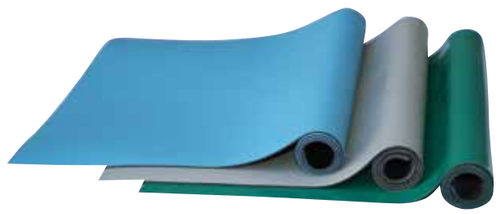
Static Control 584
ESD Test Equipment 588
ESD Cleaning 589
Purex Fume Extraction 590
JBC Soldering Equipment 592
Hakko Soldering Equipment 594
Various Soldering 596
Ultrasonic Cleaning Baths 597

Static Control

BENCH & TABLE MATTING

Dual Layer Rubber Mat
- The ultimate dual-layer rubber bench mat provides an easy to clean dissipative surface in either grey or blue. The black conductive layer beneath forms a good non-slip layer on the bench. Chemical and heat resistant. Green version is ideal to designate a lead-free work area.
- NOTE: continuous runs of static dissipative materials should be grounded at 1.8m intervals to ensure proper dissipation rates. Grounding hardware is to be ordered separately.

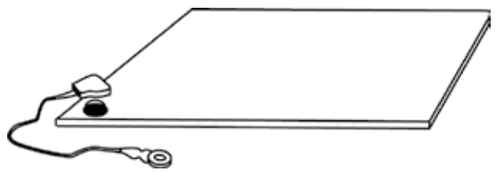
Electrical Properties
- Upper Layer (dissipative): 10E7~10E9 ohms,
- Bottom Layer (conductive): 10E3~10E5 ohms,
- Volume Resistance: 10E7~10E10 ohms
- Abrasion Rate: 0.02g/c



Part No.	Description	Colour
HRM 060/10B	10m Roll 600mm wide	blue
HRM 060/10G	10m Roll 600mm wide	grey
HRM 090/10B	10m Roll 900mm wide	blue
HRM 090/10G	10m Roll 900mm wide	grey
HRM 090/10GR	10m Roll 900mm wide	green
HRM 120/10B	10m Roll 1200mm wide	blue
HRM 120/10G	10m Roll 1200mm wide	grey

TABLE MAT KITS

Convenient table mat kits, supplied with one fitted stud and one common point ground cord (HGC 8431).



Part No.	Description	Colour
HTM 060/09B	0.6m x 0.9m	blue
HTM 060/09G	0.6m x 0.9m	grey
HTM 060/09GR	0.6m x 0.9m	green
HTM 060/12B	0.6m x 1.2m	blue
HTM 060/12G	0.6m x 1.2m	grey
HTM 060/12GR	0.6m x 1.2m	green

UNIVERSAL SNAP KIT

Can be installed with a screwdriver.



Part No.	Description
80014	Universal Snap Kit

SNAP STUDS

Cost saving snap studs for where larger quantities are required.
A riveting tool is required to install these studs.



Part No.	Description
03-DUR-550	Female 10mm Socket
03-DUR-550A	Fixing Post

SNAP STUD ADAPTERS



Converts 10mm stud to 10mm socket



Converts 10mm socket to 10mm stud.

Part No.	Description
80010	Stud to Socket Adapter
80012	Socket to Stud Adapter

FIELD SERVICE KIT

This mat is ideal for field service work, providing a temporary ESD work surface and also can be used to protect a PCB if wrapped around it.



Part No.	Description	Colour
HSK-1	600 x 600mm	Red

BENCH GROUND PLATE WRIST STRAP GROUND

An under-bench wrist strap ground for two wrist straps. Fitted with a 3.0m cord, terminated with a ring terminal. Two 10mm park studs



Part No.	Description
HWSG 01	Wrist Strap Ground, metal plate

BENCH GROUND BOX WRIST STRAP GROUND

An under-bench wrist strap ground for two wrist straps. Fitted with a 3.0m cord, terminated with a ring terminal. One 10mm park stud.



Part No.	Description
HWSG 02	Wrist Strap Ground Box

DOME GROUND CORD

For grounding of mats. Fitted with a dome shaped, low profile top. 3.0m cord terminated with ring terminal. Normally used in conjunction with the HWSG 02 for bench mats.



Part No.	Description
HGC 8430	Dome Ground Cord

COMMON POINT GROUND CORD

A popular method of grounding mats in a simple manner. Plugs onto the stud on a mat and provides two sockets for wrist straps.



Part No.	Description
HGC 8431	Common Point Ground Cord

MAINS GROUNDING PLUG

A convenient plug for earthing to mains ground. With earth screw to accept ring terminals.



Part No.	Description
463 SAS	Mains Ground Plug

WRIST STRAP

Metal wrist band for superior skin contact and durability. Adjustable system leaves no extra link loose. Fitted with 10mm snap.



Part No.	Description
60106	Metal Wrist Band (Band only)
CORD 6PL	Coil Cord 1meg (see image at bottom of page)

PREMIUM QUALITY WRIST STRAP

Premium quality soft elastic fabric with silver coated filament. Easily adjusted for size. The standard choice for production lines. Includes cord (3m extended).



Part No.	Description
HWRS 8001	Premium Wrist Strap

CAM-LOCK WRIST STRAP

Cam-lock adjustable economy wrist strap of high quality. Strap interior with stainless steel/nylon filament for increased skin contact. Includes cord (2.1m extended).



Part No.	Description
HWRS ASS	Economy Wrist Strap

REPLACEMENT COIL CORDS

Various options of coil cords fitted with 1meg resistors in cord.



Part No.	Description	Length
CORD-6FT-P1	10mm Snap to Banana Plug	1.8m
CORD-6FT-P2	10mm Snap to Snap	1.8m
60332	4mm Snap to Banana Plug	3.6m
60316	10mm Snap to Banana Plug	3.6m

ESD DUST POLYCOTTON COAT

A range of ESD polycotton coats with carbon fibre thread available for production facilities.



Blue Part No.	White Part No.	Description	Size
HCPC-S	HCPC-W-S	Polycotton Coat	S
HCPC-M	HCPC-W-M	Polycotton Coat	M
HCPC-L	HCPC-W-L	Polycotton Coat	L
HCPC-XL	HCPC-W-XL	Polycotton Coat	XL
HCPC-2XL	HCPC-W-2XL	Polycotton Coat	2XL
HCPC-3XL	HCPC-W-3XL	Polycotton Coat	3XL
HCPC-4XL	HCPC-W-4XL	Polycotton Coat	4XL
HCPC-5XL	HCPC-W-5XL	Polycotton Coat	5XL
HCPC-6XL	HCPC-W-6XL	Polycotton Coat	6XL
HCPC-7XL	HCPC-W-7XL	Polycotton Coat	7XL

BENCHTOP ZERO VOLT IONISER

- Voltage offset controlled to ±3 Volts typical
- Features steady state DC ionization and Desco EMIT's patented (US Patent #4,974,115) Sense Feedback balancing
- Rapid Access Maintenance
- Provides automatic balancing of the ionization system
- Sealed "Thru-Tunnel" air flow design



Part No.	Description
50670	Benchtop Zero Volt Ioniser

CLEANROOM VACUUM – HEPA TYPE

ESD Safe Cleanroom vacuum which exceeds Cleanroom Class 100,000 standards.
The Omega cleanroom vacuum comes standard with a true HEPA cartridge filter, 10' ESD safe hose, shoulder strap, 16" ESD safe rubber flexible gooseneck, and power cord.

See also page 176.



Part No.	Description
VACOMEGAS2ECRH	Cleanroom Vacuum

ESD PU COATED GLOVES

Polyurethane coating on palm and fingers for delicate handling of components.

NOTE: glove on left is top fit, glove on right is palm fit.



Part No.	Description	Size
HPFG-900S	Small palm fit Glove	M
HPFG-900M	Medium palm fit Glove	L
HPFG-900L	Large palm fit Glove	XL
HPFG-900XL	Extra large palm fit Glove	S
HTFG-900S	Small top fit Glove	M
HTFG-900M	Medium top fit Glove	L
HTFG-900L	Large top fit Glove	XL
HTFG-900XL	Extra large top fit Glove	2XL

PREMIUM VELCRO HEELSTRAP

American heel strap with non-marking interior. Fastening system with velcro for quick fitting. Double heel cup offers two wear surfaces.
1 meg resistor. RG 106 to 107



Part No.	Description
70030	Premium Velcro Heelstrap

HI-VIS PREMIUM HEELSTRAP

Hi-Vis, three layer, American premium quality heel strap. Hook and stretch loop fastening system for maximum comfort. RG 106 to 107



Part No.	Description
70007	Hi-Vis Premium Heelstrap

DISPOSABLE HEELSTRAPS

Disposable heel straps with self adhesive section adhering to the underside of heel.

Comes in pack of 100.



Part No.	Description
70001	Disposable Heelstrap
249220	Wall-mounted Dispenser

STICKY FLOOR MATS

Sixty-layer sticky mats for entrances to controlled work areas.
Removes contamination from heels and soles of shoes, wheels of trolleys, etc.



Part No.	Description	Size
HSM 3645	Large Sticky Mat	36" x 45"
HSM 2436	Small Sticky Mat	24" x 36"

ESD VINYL FLOORING

- Polyflor static dissipative floor covering is a homogenous, vinyl material available in a 2m wide roll
- Resistance is <109
- Various colours available
- Applied with conductive glue, copper tape in grid and welded joints
- Inspection and measurement of area is required prior to quotation



Part No.	Description
–	Please contact our sales team for a quote

CONDUCTIVE TOOLBOX

Convenient toolbox for electronic production line applications with tote tray.



Part No.	Description	Size
116-632	Toolbox	368 x 184 x 134mm

PREMIUM ESD CHAIRS

- A variety of colours including custom embroidery available
- Seat Dimensions: 490 x 460mm
- Seat Height Range: depending on the base option from 470 up to 900mm
- Material Back: ESD Poly Mesh
- Material Seat: ESD Fabric
- Material Base: Polished aluminium
- Grounding chain included
- Height adjustable arms optional
- Seat slider optional
- Glides instead of castors optional



Part No.	Description	Seat Height
HM-ESDC-PDT ESD	Drafting Chair tall, with foot ring	640-900mm
HM-ESDC-PDS ESD	Drafting Chair	580-780mm
HM-ESDC-POT ESD	Office Chair tall	500-630mm
HM-ESDC-POS ESD	Office Chair	470-550mm

CONDUCTIVE FLOOR PAINT

- Grey conductive floor paint in accordance with MIL-HDBK-263-B for manufacturing and test areas.
- 105 Ohms RTG
- Coverage: 7.2-9.6m2 per liter per coat. Two coats recommended



Part No.	Description	Size
71017	Floor Paint	19L

ESD STATGUARD FLOOR FINISH

- Static dissipative (Rp 107-108 ohms)
- Can be applied on many hard surfaces or sealed floors including vinyl, VCT, linoleum,rubber, asphalt, and concrete
- Easy to apply: improves productivity
- Produces beautiful, long lasting, durable finish, but easier to strip
- UL classified for slip resistance only



Part No.	Description	Size
71046	Floor Finish	10L

CONDUCTIVE STORAGE BINS

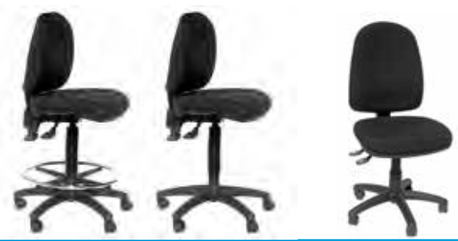
With rear clip for wall rail, fitting most rail systems.



Part No.	Description	L	W	H
7804.715	Conductive Bin	96mm	100mm	50mm
7804.719	Conductive Bin	175mm	100mm	75mm
7804.721	Conductive Bin	235mm	145mm	125mm
7804.725	Conductive Bin	350mm	200mm	200mm
7804.727	Conductive Bin	500mm	300mm	200mm

ESD CHAIRS

- A variety of colours including custom embroidery available
- Seat Dimensions: 490 x 460mm
- Seat Height Range: depending on the base option from 470 up to 900mm
- Material Back: ESD Poly Mesh
- Material Seat: ESD Fabric
- Material Base: Polished aluminium
- Grounding chain included
- Height adjustable arms optional
- Seat slider optional
- Glides instead of castors optional



Part No.	Description	Seat Height
HM-ESDC-EDT ESD	Drafting Chair tall, with foot ring	640-900mm
HM-ESDC-EDS ESD	Drafting Chair	580-780mm
HM-ESDC-EOT ESD	Office Chair tall	500-630mm
HM-ESDC-EOS ESD	Office Chair	470-550mm

ESD Test Equipment

COMBINATION TESTER

A 3-state touch tester designed for fast, frequent testing of ESD personnel grounding devices. The Combo Tester incorporates a unique dual test circuit design which improves accuracy of testing and eliminates the need for separate wrist strap and foot grounder test units. The 99000 is equipped with a 750 Kiloohm - 35 Megohm circuit, ideal for testing of wrist straps and footwear.

Test parameters are factory set but can be adjusted to match your own specifications. The Combo Tester is very simple to operate. A green light signals the user that everything is OK. A red light and an audible indicator means that the circuit resistance is either too low or too high.





Part No.	Description
99000	Combo Tester
99004	Combo Tester with Stand

WRIST STRAP AND FOOTWEAR TESTERS

- Operates off 9V battery
- Range: 900K – 35meg ohm
- A wall plate/sign is available to mount the tester at a central point. For heelstraps, a stainless steel footplate and ground cord is available as shown below.



Part No.	Description
HWT8401	Wrist Strap and Heel Strap Tester

WALL AND FOOT PLATE

Convenient wall plate holds HWT8401 tester and a ground cord connects the tester to the stainless steel floorplate for footwear testing. Ground cord supplied with the footplate.





Part No.	Description
HWP 8401	Wall Plate for Wrist Tester
HWP 8404	Foot Plate with Ground Cord

DIGITAL SURFACE RESISTANCE METER KIT

- Measures resistance point-to-point (Rtt) and resistance-to-ground (Rtg) of worksurfaces, flooring systems, garments, packaging, and other materials in accordance with IEC 61340-2-3 and IEC 61340-5-1
- Determines if a surface is conductive, dissipative or insulative for ESD control applications in electronics manufacturing or handling environments
- Large OLED display shows resistance mantissa and exponent, temperature, relative humidity and test voltage
- Internal memory stores and recalls up to 100 measurements. Captures resistance, temperature, humidity and test voltage
- Measurement stability modes set the 15-second electrification period for test requirements
- Electrode spacers spaces the 2.27kg electrodes to 25cm and 91cm for resistance point-to-point (Rtt) measurement requirements of IEC 61340-2-3 and IEC 61340-4-1
- Measurement location labels (pack of 25) labels and tracks areas and materials measured for surface resistance
- Resistance range of <1.0 x 103 to >1.0 x 1012 Ohms
- Under load voltages of (10V or 100V ±5%)



192090 Kit Includes:
1x Digital Surface Resistance Meter;
2x Test Leads, 1.5m Length;
2x 2.27 kg Electrodes;
1x Electrode Spacer, 25cm; 1x Electrode Spacer, 91cm;
4x AA Alkaline Batteries; 1x Ground Plug Adapter; 1x Gator Clip;
25x Measurement Location Labels; 1x Plastic Carrying Case;
1x Certificate of Calibration

Part No.	Description
19290	Digital Surface Resistance Meter Kit
19291	Digital Surface Resistance Meter
222002	Concentric Ring Probe
222003	Concentric Ring Probe Kit
222633	Shielded Test Leads, 1 Pair
222634	2.27 kg Electrodes, 1 Pair

SURFACE RESISTANCE CHECKER

- Automatically selected 10V and 100V test voltage
- Fitted with a built in 15-second timer to help user to comply with EN guidelines
- Range: 103 to 1012ohms
- Built-in parallel electrodes



Part No.	Description
225717	Surface Resistance Checker

ESD Cleaning

DOUBLE ENDED ESD BRUSHES

ESD safe. Hog bristle is clamped either end of 125mm tube. One end is chisel shaped for difficult access areas.



Part No.	Description	Bristle Length
1005CK	Double End Brush	13 and 6mm
1010CK	Double End Brush	6 and 4.5mm

APPLICATOR STYLE ESD BRUSHES

ESD Safe. Available in stiff hog bristle or soft horsehair.



Part No.	Description	Width
403-239	Applicator Brush, soft	19mm
403-240	Applicator Brush, stiff	19mm

LARGE SCRATCH ESD BRUSH

ESD safe. Stiff hog bristle is perfect for board rework.



Part No.	Description	Brush Face
36CK	Large Scratch Brush	22 x 57mm

SMALL SCRATCH ESD BRUSH

ESD safe. Stiff hog bristle is ideal for cleaning applications.



Part No.	Description	Brush Face
30CK	Small Scratch Brush	9 x 35mm

FLUX ESD BRUSH

ESD safe. Hog Bristle.



Part No.	Description	Bristle Length
WA12CK	Flux Brush	9 x 22mm

CONDUCTIVE PLASTIC BRUSHES

For general PCB cleaning. Plastic handle and Nylon bristles.



Part No.	Brush Face	Bristle Length
SRB0851	4 x 15mm	18mm
SRB0852	10mm Diameter	18mm

CONDUCTIVE PLASTIC BRUSH

Conductive plastic brush for general PCB cleaning.



Part No.	Description	Bristle Length
HCB-B	Conductive Brush	9 x 35mm

SOLVENT PUMP BOTTLE

One touch pump with air tight check valve, preventing cross contamination of solvent returning into dispenser bottle. ESD safe, 109 to 1010.



Part No.	Description	Size
MA 618	Pump Bottle	6 fl.oz.

KIMWIPES

Lint free, single ply paper wipes ideal for screens and filters.



Part No.	Description	
KW 4103	Kimwipes	200

WIPES

Lint free, single ply paper wipes ideal for screens and filters.



Part No.	Description	
STI 200	Safetiss Wipes	200

LINT FREE WIPES

- Material: Non-woven blend of polyester and lyocell
- ESD Category: Static neutral when used with liquids
- Strength: Excellent, both wet and dry
- 350 x 350mm



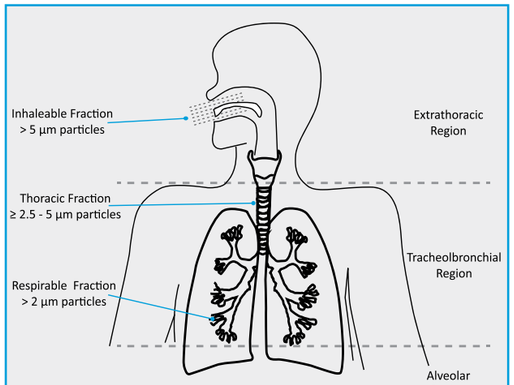
Part No.	Description	
SCT-2357-100	Lint Free Wipes	100

Purex Fume Extraction

Fume Extraction

Soldering fumes from hand soldering stations means a worker has to be in close proximity to the fumes. These are the workers that need the best protection. With ongoing health concerns such as chronic asthma, acne, and other issues it is critical to provide a safe work environment.

Solutions to extract from 1 station to over 20. A full line of capture options include stainless-steel arms, clear hood cowls, pen nibs and screwed bench brackets



Inhalation & Depostion of Particles

UNIVERSAL TIP FUME EXTRACTION KIT

1 x 1.5m x 5.5mm ID x 1.5mm wall clear silicone hose
1 x screw in Adapter (8mm hose, M10)
5 x 8mm Ø hose clips
1 x universal iron stand
1 x soldering iron stand
1 x cup standard iron
1 x cup metcal iron
1 x extraction tube clip weller
1 x ectraction tube clip metcal/mini weller
1 x extraction tube strap universal
1 x 6mm Ø x 100mm extraction tube weller
1 x 6mm Ø x 135mm extraction tube metcal
1 x 6mm Ø x 225 extraction tube universal



Part No.	Description
300001	Universal Tip Fume Extraction Kit

HOSE KIT

2m x 50mm flexible hose
with 2 connecting cuffs



This Set is also included in all the other Connection Kits.

Part No.	Description
120117	Purex Hose Kit

FLEXIBLE ARM KIT 38MM

38mm flexible stainless steel arm with fixed pen nib and screwed bench bracket



Part No.	Description
100294	Purex 38mm Flexible Arm Kit

FLEXIBLE ARM KIT 38MM

38mm flexible stainless steel arm with conical cowl, pen nib and clamped bench bracket



Part No.	Description
100295	Purex 38mm Flexible Arm Kit

FLEXIBLE ARM KIT 50MM

50mm flexible stainless steel arm with fixed large clear hood and clamped bench bracket



Part No.	Description
100292	Purex 50mm Flexible Arm Kit

FLEXIBLE ARM KIT 50MM

50mm flexible stainless steel arm with fixed clear hood cowl and clamped bench bracket



Part No.	Description
100299	Purex 50mm Flexible Arm Kit

EDSYN SMOKE EXTRACTOR

- Desktop solder smoke absorber that can be mounted horizontally or vertically
- A third mounting position is also available with an optional arm stand



Part No.	Description
CE 174-350	Benchtop Fume Extractor
CE 174-905	Filter Front Rotating (Pack of 5)
CE 174-906	Filter Rear Stationery (Pack of 5)

HAKKO SMOKE ABSORBER

- Desktop solder smoke absorber that can be mounted horizontally or vertically
- A third mounting position is also available with an optional arm stand



Part No.	Description
FA400	Hakko Smoke Absorber
A1001	Filters Set (Pack of 5)

PUREX ANALOGUE CONTROL FUME EXTRACTION SYSTEMS

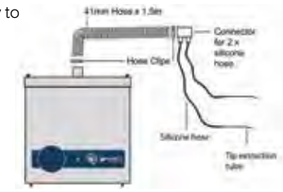


2TIP
230V / 170m³/h

1

- Run LED – signals when machine is on
- Highest grade HEPA and carbon technology
- Quiet in operation
- Simple to install and easy to relocate
- Ideal for 2 soldering tips

Included:
- Unit
- Main and Pre-Filter
- Connection Kit



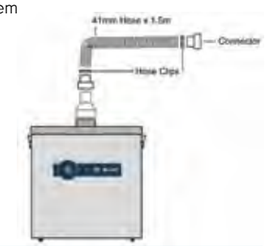
Part No.	Description
072120	2TIP Analogue Tip Extraction System

3-15TIP
230V / 200m³/h

2

- Filter blocked warning system
- Highest grade HEPA and carbon technology
- Quiet in operation
- Simple to install and easy to relocate
- Up to 15 soldering tips

Included:
- Unit
- 1 Main and 2 Pre-Filters
- Connection Kit 072300



Part No.	Description
072300	3-15TIP Analogue Tip Extraction System

FUMECUBE LITE
230V / 170m³/h

3

- Run LED & speed control
- Highest grade HEPA and carbon technology
- Adjustable airflow
- Quiet in operation
- Simple to install / easy to relocate

Included:
- Unit
- Main and Pre-Filter
- Connection Kit(s) 100294



Part No.	Description
072082	Fumecube Lite Single Arm
072083	Fumecube Lite Dual Arm

FUMECUBE
230V / 170m³/h

4

- VariColour filter blocked warning system
- Highest grade HEPA and carbon technology
- Automatic electronic flow control – maintains a constant extraction rate even as the filter blocks
- Quiet in operation
- Simple to install and easy to relocate

Included:
- Unit
- Main and Pre-Filter
- Connection Kit 100295



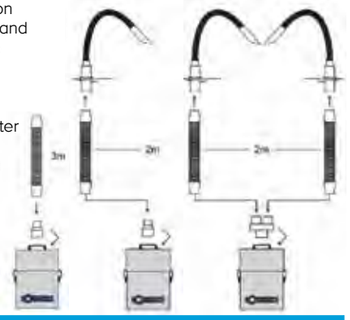
Part No.	Description
072066	Fumecube Single Arm
072065	Fumecube Dual Arm

FUMECUBE MAX
230V / 170m³/h

5

- VariColour filter blocked warning system
- Highest grade HEPA and carbon technology
- Automatic electronic flow control – maintains a constant extraction rate even as the filter blocks
- Quiet in operation
- Simple to install and easy to relocate

Included:
- Unit
- Main and Pre-Filter
- 1 Connection Kit (various options)



Part No.	Description
072142	Fumecube Max Single Arm
072144	Fumecube Max Dual Arm
072140	Fumecube Max Hose

FUMECUBE PRO
230V / 170m³/h

6

- VariColour filter blocked warning system
- Highest grade HEPA and carbon technology
- Automatic electronic flow control – maintains a constant extraction rate even as the filter blocks
- Quiet in operation
- Simple to install and easy to relocate

Included:
- Unit
- Main and Pre-Filter
- Connection Kit 100295



Part No.	Description
072650	Fumecube Pro Single Arm
072600	Fumecube Pro Dual Arm

JBC Soldering Equipment

JBC CD-2BQE SOLDERING STATION 230V

- For general electronics jobs
- Features a large back-lit graphic display. Any changes to the original setting can be easily made via menu on the display.
- Incorporates a USB Connector (Type B) to update station software and create graphs
- All settings can be locked by PIN
- Peak Power: 130W / 23.5V
- Temperature Range: 90-450ºC
- Included: Control Unit CD and Handpiece T245-A
- Cartridges C245-903 & C245-741 not included



Part No.	Description
CD-2BQE	Digital Soldering Station – STD Handpiece

JBC CS-2E ELECTRIC DESOLDERING STATION 230V

- Desoldering station with electric suction system
- Incorporates a USB Connector (Type B) to update station software and create graphs
- Flow Rate: 9 SLPM
- Peak Power: 40 W / 23.5V
- Temperature Range: 180º-450ºC
- Included: Control Unit CSV, MS-A Electric Desoldering Module, DS360-A Micro Desoldering Iron with Tips C360-002 and C360-004



Part No.	Description
CS-2E	Electric Desoldering Station

JBC DDSE / DDVE DESOLDERING STATION 230V

- Complete solution to rework circuits, manages two tools simultaneously, compatible with ten different tools
- Peak Power: 150W per tool
- Temperature: 90-450ºC
- Flow Rate: 9 SLPM / 15SLPM

Included:
- Control Unit DDE
- Desoldering Module MSE-A
- Handles T245-A and DR560-A
- Stands AS-SE and DR-SE
- Tip Cleaner CL8499



Part No.	Description
DDSE-2QC	2 Tools Electric DDE Station
DDVE-2QC	2 Tools Pneumatic DDE Station

JBC METAL BRUSHES

For more in depth cleaning of the tips and cartridges



Part No.	Description
CL6217	Metal Brush narrow
CL8973	Metal Brush square for NAST Station
CL6220	Metal Brush wide

JBC CP-2QE MICRO TWEEZER STATION 230V

- For soldering and rework SMT components with Micro Tweezers
- Incorporates a USB Connector (Type B) to update station software and create graphs
- Peak Power: 80W / 23.5V
- Temperature Range: 90-450ºC
- Included: Control Unit CP and AM120-A adjustable Micro Tweezers
- Cartridges C120 not included



Part No.	Description
CP-2QE	Micro Tweezer Station

JBC RMSE / RMVE REWORK STATION 230V

- Quickest and safest complete solution to repair and rework electronic circuits
- Can also be used for cleaning pads in SMD circuits
- It is composed by stackable modules and all the necessary accessories to make your job easier

Included:
- Control Units DDE and JTSE
- Stands AD-SE, JT-SE and DR-SE
- Desoldering Iron DR560-A
- Handpiece T245-A
- MSE-A Suction Module
- CL9885 Tip Cleaning Stand
- Nozzles JN2015, JN2012, JN2020, C560-005 and C560-013
- Extractor Desk with 3 Extractors, 5 Protectors and 2 Tripods
- Cartridge Holder SCH-A, Thermocouple PH218, Hose Set, Kapton Tape PH217, Pick & Place T260-A



Part No.	Description
RMSE-2QE	Digital Electric Rework Station
RMVE-2QE	Digital Pneumatic Rework Station

JBC CLEANING SPONGES

- Softest cleaning method to eliminate excess in any soldering or rework job
- Allows to maintain tips continuously clean by reducing wear
- Designed to be placed into the tip wiper. This way you just need one hand to use it.
- S0354 is also supplied with the tip cleaning stand



Part No.	Description
S7751	Sponge 46 x 37mm
S0354	Sponge 36 x 69mm
S6169	Sponge 58 x 58mm

JBC CL6210 BRASS WOOL

- Very effective cleaning method.
- Leaves a small layer of solder on the tip preventing oxidation between cleaning and rewetting.



Part No.	Description
CL6210	Brass Cleaning Wool

JBC C245 SERIES TIPS FOR T245 STANDARD HANDPIECE

- The C245 cartridge range is the widest one of JBC with many shapes, sizes and special models.
- They are appropriate for general soldering purposes and they are perfect for both SMD components or for applications with high power requirements such as ground plane soldering.



Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description
C245-029	0.4mm Bent Conical	C245-030	0.3mm Conical	C245-032	0.4mm Conical	C245-126	0.4mm Bent Conical
C245-259	1.5mm Bent Conical	C245-260	2mm Bent Conical	C245-444	1.2mm Chisel	C245-731	0.3mm Chisel
C245-741	2.4mm Chisel	C245-742	0.8mm Chisel	C245-903	1mm Conical	C245-906	0.7mm Chisel
C245-907	1mm Chisel	C245-908	1.5 Chisel	C245-930	0.5mm Conical	C245-931	2.7mm Mini Spoon
C245-938	3.8mm Mini Spoon	C245-939	6mm Knife	C245-965	1.9mm Mini Spoon	C245-966	6.6mm Chisel
C245-041	1mm Conical	C245-052	4.9mm Dome	C245-053	3.8mm Dome	C245-054	6.5mm Dome
C245-119	1mm Teflon Conical	C245-121	13mm Scraper	C245-138	12mm Knife	C245-150	Chip Removal
C245-301	8.8mm Chamfered	C245-753	Chisel Nickel	C245-757	Chip Removal	C245-758	Chip Removal

Hakko Soldering Equipment

HAKKO FX888D DIGITAL SOLDERING STATION WITH IRON ESD SAFE

- Digital model in an analog-model price bracket
- Small footprint only 100mm (W) x 120mm (D)
- Simple and easy operation with only two operation buttons of UP and ENTER in the center
- Digital Display – Makes it easy to check the set temperature at a glance
- Password Function – Settings can be locked using a password to prevent them from being changed unexpectedly. Of course, it is possible to restrict all setting changes or prevent users from switching to particular modes.
- Preset Mode – Convenient feature to change the set temperature. Simply select the desired temperature from a selection of preset temperatures registered in advance. Up to five preset temperatures can be registered.
- Adjustment Mode – Temperature adjustment is an essential part of any strict quality control system. With the adjustment mode you can adjust the tip temperature to match the set temperature in case that there is a difference between those temperatures due to tip shape, heater replacement or other factors.



Part No.	Description
FX888D	Digital Soldering Station & Iron excl. Tip

HAKKO FX951 DIGITAL SOLDERING STATION WITH IRON ESD SAFE

- The new standard for lead-free soldering utilizing a 70W composite tip
- Rapid thermal response accurately maintains tip temperature
- 84 different tip profiles available
- Vertical, small foot print ESD safe design
- "Supervisor" card control of parameter settings
- Selectable shut-down and sleep modes to extend tip life and reduce oxidisation
- Optional anti-bacterial coloured sleeves for quick tip selection
- Additional Nitrogen systems available for low flux soldering



Part No.	Description
FX951	Digital Soldering Station & Iron excl. Tip

HAKKO FX838 DIGITAL HEAVY DUTY SOLDERING STATION WITH IRON ESD SAFE

- The new standard for lead-free soldering utilizing a 70W composite tip
- Rapid thermal response accurately maintains tip temperature
- 84 different tip profiles available
- Vertical, small foot print ESD safe design
- "Supervisor" card control of parameter settings
- Selectable shut-down and sleep modes to extend tip life and reduce oxidisation
- Optional anti-bacterial coloured sleeves for quick tip selection
- Additional Nitrogen systems available for low flux soldering



Part No.	Description
FX838	Digital Heavy Duty Soldering Station & Iron excl. Tip

HAKKO FX950 ANALOGUE SOLDERING STATION WITH IRON ESD SAFE

- The excellent thermal recovery allows setting lower preset temperatures
- It is also useful for lead-free soldering which requires higher melting temperatures
- The composite tip is a soldering tip integrated with heating element and sensor. Despite its highly compact design, the tip offers superior thermal responsitivity and greatly improved thermal recovery.
- 85 variations of HAKKO tips are available for various types of soldering from IC modifications to soldering of power sections.
- The lock key can lock the present temperature
- Digital offset makes temperature correction easy



Part No.	Description
FX950	Analogue Soldering Station & Iron excl. Tip

HAKKO FM206 3 PORT DE-/SOLDERING STATION ESD SAFE

- Multi-station enabling soldering, desoldering and SMD rework
- Single-nozzle hot air handpiece comes as standard equipment
- Graphic LCD display enables easy viewing and operation
- Features expandability in which the handpiece can be switched as needed for added functions
- Comes with hot air-type rework functions which expands the range of repair of SMD parts with hot air handpiece

Included:
- FM2024 Desoldering Tool
- FM2029 Hot Air Tool
- FM2027 Soldering Handpiece

Optional additional handpieces available.



Receptacle 1	Receptacle 2	Receptacle 3
	FM2022 Tweezer Handpiece	** FM2029 Hot Air Tool
	FM2023 Tweezer Handpiece	
* FM2024 Desoldering Tool	* FM2024 Desoldering Tool	* FM2024 Desoldering Tool
FM2026 Soldering Handpiece	FM2026 Soldering Handpiece	FM2026 Soldering Handpiece
FM2027 Soldering Handpiece	FM2027 Soldering Handpiece	FM2027 Soldering Handpiece

*FM2024 can be connected to FM206 to all 3 receptacles, but it can only be used with one receptacle at a time

**FM2029 can only be used with FM206 receptacle 3

Part No.	Description
FM206	3 Port Soldering/Desoldering Station

HAKKO FM204 DESOLDERING STATION ESD SAFE

- New design with reduced distance between the nozzle end and filter pipe prevents clogging of sucked solder
- Easy maintenance
- Detachable handle allows two-ways use – Gun or Straight
- Equipped with a nozzle lock function
- With sleep function
- Auto power shut-off function
- Excellent thermal recovery with nozzle integrated with heater and sensor



Part No.	Description
FM204	Lead-Free Desoldering Station

HAKKO FR400 HEAVY-DUTY DESOLDERING STATION ESD SAFE

- Heavy-duty desoldering station with built-in vacuum pump
- Quick and secure desoldering even on high heat capacity and high heat dissipation PWB with super power
- Secure desoldering with valve function
- Reduced solder clogging through anti clogging function



Part No.	Description
FR400	Heavy-Duty Desoldering Station

HAKKO FM203 DUAL PORT DE-/SOLDERING STATION ESD SAFE

A single station plays multiple roles: Soldering, desoldering, and SMD rework
- Two handpieces can be selected in various combinations
- Supplied with one FM2027 soldering handpiece as standard
- A wide range of handpieces available
- Power save function
- Auto power shut-off function
- Two connection ports for simultaneous use of two handpieces
- N2 system can be incorporated with an optional handpiece (FM2026)
- Selectable buzzer and alert ON/OFF setting
- Excellent thermal recovery with the use of composite tip

Compatible Handpieces:

FM2022	FM2026**
FM2023	FM2027
FM2024*	

*FM2024: Each handpiece needs a desoldering control box and compressor

**FM2026: Each handpiece needs an N2 generator (FX780), flowmeter (FX791), compressor, regulator etc.



Part No.	Description
FM203	Dual Port De-/Soldering Station

Various Soldering

WELLER MAINS MAGNASTAT IRONS

Temperature controlled mains soldering irons for all day use on production lines where static sensitive components are not involved.



Part No.	Description
W60D	60W Magnastat Iron
W100D	100W Magnastat Iron

QUICK BRAID DESOLDER WICK – GENERAL PURPOSE

- Cleaner, faster, more consistent
- Oxide-free clean copper
- More strands of copper (more surface area) per square inch
- Designed to leave residue which is environmentally safe
- Uses pure type 'R' resin flux conforming to all the requirements of Mil-F-14256F, Type 'R' and ANSI/J-STD-004
- Packaged in 5, 25 and 100 foot lengths



Part No.	Width	Length	Colour
Q-A-5	0.63mm	1.5m / 5ft	Silver
Q-B-5	1.27mm	1.5m / 5ft	Gold
Q-C-5	1.90mm	1.5m / 5ft	Green
Q-D-5	2.54mm	1.5m / 5ft	Blue
Q-E-5	3.17mm	1.5m / 5ft	Brown
Q-A-25	0.63mm	7.6m / 25ft	Silver
Q-B-25	1.27mm	7.6m / 25ft	Gold
Q-C-25	1.90mm	7.6m / 25ft	Green
Q-D-25	2.54mm	7.6m / 25ft	Blue
Q-E-25	3.17mm	7.6m / 25ft	Brown
Q-A-100	0.63mm	30.5m / 100ft	Silver
Q-B-100	1.27mm	30.5m / 100ft	Gold
Q-C-100	1.90mm	30.5m / 100ft	Green
Q-D-100	2.54mm	30.5m / 100ft	Blue
Q-E-100	3.17mm	30.5m / 100ft	Brown

BUTANE GAS

- Gas for Piezo Cordless Soldering
- Use only filtered butane gas in piezo irons.



Part No.	Description
BR200	Butane Gas, 300ml

PORTASOL PIEZO KIT

- Gas soldering iron supplied in box with sponge
- Comes with hot knife tip



Part No.	Description
PSI 100K	Portasol Kit

KESTER LEAD FREE SOLDER WIRE – NO CLEAN

- Kester SN96.5 AG3 CU0.5 in 1lb (450g) spools in "275" no-clean cored flux, 58 core size (2.2%)
- RoHS Ready



Part No.	Description	Diameter
24-7068-7608	LF Solder Wire, No Clean	0.38mm
24-7068-7603	LF Solder Wire, No Clean	0.51mm
24-7068-7617	LF Solder Wire, No Cle an	0.64mm
24-7068-7601	LF Solder Wire, No Clean	0.78mm

SOLDAPULT PLASTIC DESOLDERING PUMP

- Plastic Barrel Desoldering Pump
- For one-handed, high-vacuum solder suction



Part No.	Description
CE 114-202	Desoldering Pump Plastic 330mm OAL
CE 407-294	Desoldering Pump Conductive 330mm OAL

Ultrasonic Cleaning Baths

Ultrasonics are like soundwaves but have frequencies above our range of hearing. Ultrasound energy is transmitted to the liquid in the cleaning bath by transducers underneath. This energy causes cavitation – which is the rapid implosion and explosion of the tiny bubbles of air within the liquid. The cavitation causes turbulence in the liquid that gently scrubs all surfaces of the items being cleaned.

Pulse Swept power technology ensures printed circuit boards, instruments and delicate items are cleaned to your exacting requirements without damage. Enables cleaning without manual scrubbing. All models fitted with a timer and touch control keypad. Heating offered as an option.



Models with TD = Timer, no heater; Models with HD = Timer and heater

Part No.	Bath L x W x D (mm)	Size L x W x D (mm)	Capacity (L)	Heating (Peak)	Power
80TD	235 x 138 x 65	279 x 219 x 170	1.6	–	60W
120TD	153 x 138 x 100	180 x 219 x 179	2	–	60W
160TD	235 x 138 x 100	279 x 219 x 170	3	–	70W
160HD	235 x 138 x 100	279 x 219 x 170	3	100W	70W
250TD	295 x 150 x 150	338 x 234 x 232	6	–	120W
250HD	295 x 150 x 150	338 x 234 x 232	6	200W	120W
500TD	298 x 238 x 150	338 x 323 x 237	10	–	130W
500HD	298 x 238 x 150	338 x 323 x 237	10	200W	130W
800TD	300 x 330 x 150	340 x 323 x 285	15	–	250W
800HD	300 x 330 x 150	340 x 323 x 285	15	200W	250W
1000TD	495 x 295 x 150	545 x 380 x 240	20	–	250W
1000HD	495 x 295 x 150	545 x 380 x 240	20	400W	250W
2000TD	495 x 295 x 200	545 x 382 x 290	30	–	350W
2000HD	495 x 295 x 200	545 x 382 x 290	30	400W	350W
3000TD	620 x 495 x 200	545 x 382 x 290	60	–	600W
3000HD	620 x 495 x 200	545 x 382 x 290	60	1600W	600W
3800TD	600 x 450 x 300	712 x 591 x 419	80	–	650W
3800HD	600 x 450 x 300	712 x 591 x 419	80	1600W	650W

ISOPROPANOL

Mild cleaning of circuit boards, for removal of fluxes and other contaminants



Part No.	Description	Size
ISO-20L	Isopropanol	20L
ISO-5L	Isopropanol	5L
ISO-1L	Isopropanol	1L

SAFEWASH SUPER

Electrolube Safewash is the most effective aqueous cleaning product available. It is currently in use by major manufacturers in a wide variety of cleaning machines. Safewash is effective in all equipment types including batch ultrasonics, in-line spray. dishwasher and also by hand. Removes fluxes, solder paste and other contaminants.



Part No.	Description	Size
ISO-20L	Safewash Super	5L
ISO-5L	Safewash Super	25L



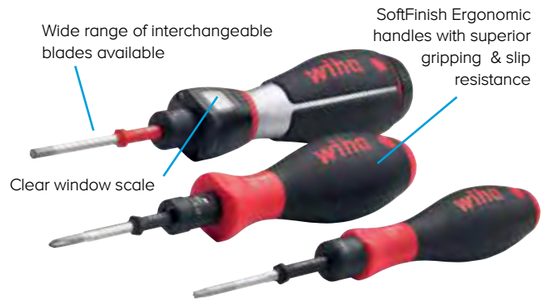
Force, Tension & Torque

Torque Screwdrivers 600
Coaxial Torque Wrench 604
Torque Wrenches 605
Digital Torque Wrenches 612
Torque Adapters & Multipliers 622
Torque Drivers 624
Torque Nutrunners 630
Desoutter Tool Management 636
Desoutter Torque Controllers 637
Torque Testing Solutions 638
Tensiometers & Equipment 648

Torque Screwdrivers

A convincing Concept – The exact Torque!

Made to EN ISO 6798, BS EN 26789, ASME B107.14M standards for repeated fastening of sensitive and expensive components in assembly, or in final inspections and quality assurance applications.

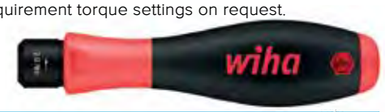


Also available in ESD safe and 1000V insulated versions!



WIHA TORQUEFIX® FACTORY PRESET

- TorqueFix® Torque Screwdriver with a Fixed Torque Value pre-set by Wiha.
- ±6%, Traceable to national standards
- Special requirement torque settings on request.



Part No.	Nm			
28501040	0.4	4	112	23
28501050	0.5	4	112	23
28501060	0.6	4	112	23
28501080	0.8	4	112	23
28501090	0.9	4	112	23
28501110	1.1	4	119	30
28501120	1.2	4	119	30
28501150	1.5	4	119	30
28501200	2.0	4	119	30
28501250	2.5	4	119	30
28501300	3.0	4	126	36
28501380	3.8	4	126	36
28501500	5.0	4	132	41
28501550	5.5	4	132	41
28501600	6.0	4	132	41
28501720	7.2	4	132	41

WIHA TORQUEVARIO®-S: ADJUSTABLE WITH SCALE

- TorqueVario®-S Torque Screwdriver with Torque Value can be set via Window Scale
- Supplied with torque setter
- ±6%, traceable to national standards (*Model 0.1-0.6Nm = ±10%)



Part No.	Nm			
28521060	0.1-0.6*	4	127	23
28521100	0.4-1.0	4	127	23
28521200	0.8-2.0	4	131	30
28521500	1.0-5.0	4	138	36
28521800	2.0-8.0	4	142	41

WIHA TORQUEVARIO® SET

Set of 13 pieces: Universal bit holder, 10 bits (PH1, PH2, PZ1, PZ2, T10, T15, T20, T25, 2.5 flat, 3.0 flat), Torque Vario 1.0 - 5.0 Nm and torque setter



Part No.	Description
268 930	Torque Vario Set 1.0 - 5.0Nm

WIHA TORQUEVARIO® SET

Set of 13 pieces: Universal bit holder, 10 bits (T7, T8, T9, T10, T15, 7IP, 8IP, 9IP, 10IP, 15IP) Torque Vario 1.0 - 5.0 Nm and torque setter



Part No.	Description
346 140	Torque Vario Set 1.0 - 5.0Nm

WIHA EASYTORQUE PRESET TORQUE SCREWDRIVER

- Multi-component handle designed for the hand enables optimal power transmission
- Audible and perceptible click when the pre-set torque has been attained
- Rapid identification with imprint on handle end
- Use with a Wiha torque interchangeable blade



Part No.	Nm			
36229	0.5	4	130	34
36230	0.6	4	130	34
36240	0.9	4	130	34
36231	1.1	4	130	34
36233	1.2	4	130	34
36234	1.4	4	130	34
36235	1.4	4	130	34
36236	2.5	4	130	34
36237	3.0	4	130	34
36238	3.8	4	130	34
36320	4.0	4	130	34
36321	4.5	4	130	34
36239	5.0	4	130	34

Digital iTorque Mechatronic Torque Screwdrivers

- Torque value can be set via a digital scale. Automatic release with calibration alert.
- Torque can be conveniently set directly via push button integrated in handle. Ergonomic plastic/metal compound handle of quality, robust materials. Handle sizes proportioned to optimise torque setting. Distinctly audible and perceptible click signal when set toque is reached. {%s}
- According to EN ISO 6798, BS EN 26789, ASME B107.14M standards
- ±6% accuracy, traceable to national standards.
- Torque bit universal holder exchange blade for accommodating (1/4") bits (included in delivery).
- For applications where recommended torque settings are important. Use in combination with a Wiha torque interchangeable blade.
- Click Control – integrated counter records all applications. Calibration alert following 5,000 applications (normative reference value/resettable) Large digital display for simple stepless setting of torque value. Units can be simply switched – Nm > in.lbs / Ncm > in.oz. A high service life: Can be recalibrated by Wiha Services Can be individualised in the order process – information available at mytorque.wiha.com.
- Products can be designed individually using the configurator at mytorque.wiha.com. (Can be chosen freely: two text fields, graphics field, calibration alarm, torque unit)

Many more interchangeable blades available to order!



WIHA TORQUE 1/4" UNIVERSAL BIT HOLDER



Part No.			
27526	1/4"	4	155

WIHA 1/4" SQUARE DRIVE ADAPTER BLADE



Part No.			
26229	1/4"	4	155

WIHA SLOTTED INTERCHANGEABLE BLADE



Part No.					max. Nm
26227	1.5	4	175	42	0.15
26228	2.0	4	175	42	0.4
26151	2.5	4	175	42	0.4
26277	3.0	4	175	42	0.6
26278	3.5	4	175	42	1.1
26279	4.0	4	175	42	2.5

WIHA PHILLIPS® INTERCHANGEABLE BLADE



Part No.					max. Nm
26197	PH0	4	175	42	0.4
26058	PH1	4	175	42	3.8
27079	PH2	4	175	42	5.5

WIHA iTORQUE DIGITAL TORQUE SCREWDRIVER

- Digital Wiha iTorque variable Torque Screwdriver
- Supplied with universal bit holder (Suits 1/4 insert bits)



Part No.	Nm	lbs			
36886	0.4-1.5	60-210 in.oz	4	134	34
36887	0.8-3.0	7-26 in.lbs	4	134	34
36888	1.0-5.0	9-50 in.ilbs	4	134	40

WIHA HEX INTERCHANGEABLE BLADE



Part No.					max. Nm
26544	1.3	4	175	42	0.4
26200	1.5	4	175	42	0.9
26060	2.0	4	175	42	1.8
26061	2.5	4	175	42	3.8
26062	3.0	4	175	42	5.5
26063	4.0	4	175	42	8.0

WIHA TORX® INTERCHANGEABLE BLADE



Part No.					max. Nm
27818	T6	4	175	42	0.6
27812	T7	4	175	42	0.9
27813	T8	4	175	42	1.3
27814	T9	4	175	42	2.5
27816	T10	4	175	42	5.5
27816	T15	4	175	42	5.5
27817	T20	4	175	42	8.0
29467	T25	4	75	42	8.0

- Soft-grip T-handle for extreme comfort and optimal torque transmission. Audible and perceptible click when the pre-set torque has been attained. {%s}
- According to EN ISO 6798, BS EN 26789, ASME B107.14M standards
- ±6%, traceable to national standards.
- For applications where recommended torque settings are important. Use in combination with an interchangeable 6 mm blade for Wiha T-handle torque tools.
- Delivered in plastic case, incl. factory calibration certificate.



T-HANDLE TORQUEFIX® FACTORY PRESET



Part No.	Nm			
29228	6	6	120	56
29229	8	6	120	56
29230	10	6	120	56
29231	12	6	120	56
29236	12.5	6	120	56
29232	14	6	120	56

T-HANDLE TORQUEVARIO® ADJUSTABLE WITH SCALE



Part No.	Nm			
2893514	5-14	6	120	56

1/4" UNIVERSAL BIT HOLDER FOR T-HANDLE TORQUE TOOLS



Part No.			
28758	1/4"	6	125

TORQUEVARIO® SET

Set of 11 pieces: TorqueVario 5-14Nm, torque setter, 1/4 Adapter and 3/8 Adapter

- 4.0, 5.0, 6.0
- T25, T30, T40



Part No.	Description
292 348	Torque Vario Set 5-14Nm

GEDORE TORQUE SCREWDRIVER TYPE FS PRESET

- Adjustable torque screwdriver without scale
- Working Accuracy: +/- 6% tolerance of the set torque
- Acc. to DIN EN ISO 6789, traceable to national standards
- Precision radial ball clutch and cam design for controlled bi-directional tightening
- Precision mechanism slips very noticeably through when the set torque is reached
- Automatic resetting to the starting position
- Anodised aluminium handgrips
- Model 755-05 with additional removable T-bar



Part No.			Torque Range cN m	Torque Range N m	Length
755-01	–	1/4 / 6.3	4.4-22	0.04-0.22	76
755-02	1/4 / 6.3	–	4.4-22	0.04-0.22	104
755-03	1/4 / 6.3	1/4 / 6.3	27-135	0.27-1.35	111
755-04	1/4 / 6.3	1/4 / 6.3	80-400	0.8-4.0	127
755-05	1/4 / 6.3	–	–	2.8-13.6	137

GEDORE TORQUE SCREWDRIVER TYPE S VARIABLE

- Adjustable torque screwdriver with scale
- Locking of the value by means of an adjustable knob
- Working Accuracy: +/- 6% tolerance of the set torque
- Acc. to DIN EN ISO 6789, traceable to national standards
- Precision radial ball clutch and cam design for controlled bi-directional tightening
- Precision mechanism slips very noticeably through when the set torque is reached
- Automatic resetting to the starting position
- Anodised aluminium handgrips



Part No.			Torque Range cN m	Torque Range N m	OAL
757-01	1/4 / 6.3	1/4 / 6.3	24-120	0.24-1.2	169mm
757-06	1/4 / 6.3	1/4 / 6.3	120-600	1.2-6	184mm
757-09	1/4 / 6.3	1/4 / 6.3	400-900	4-9	184mm

PROTO® TORQUE SCREWDRIVERS – IN-OZ

ASME B107.14M

- Calibrated to ± 4% of torque reading, clockwise at 20% to 100% of full scale.
- 1/4" Square to 1/4" Hex Adapter included for use with insert bits.
- Industrial heavy-duty design.
- Aircraft grade aluminum, aircraft quality spring.
- Positive self locking lock ring.
- Floating three point reaction for repeatability.
- Laser marked easy-to-read scale.
- N.I.S.T. (National Institute of Standards and Technology) traceable certification supplied with J6104ACERT.



Part No.	Drive Size (in)	Torque Range	Increments	Width (in)	Height (in)	OAL (in)	Weight (lbs)
J6104A	1/4	20-100 in oz	2 in oz	1-1/4	1-1/4	6-1/2	1.00
J6104ACERT	1/4	20-100 in oz	2 in oz	1-1/4	1-1/4	6-1/2	1.00
J6106A	1/4	7-36 in lbs	1 in lbs	1-1/4	1-1/4	6-1/2	1.00
J6106ACERT	1/4	7-36 in lbs	1 in lbs	1-1/4	1-1/4	6-1/2	1.00

STAHLWILLE TORQUE SCREWDRIVERS TORSIOMETER 760



- Indicating type
- The measuring element is a torsional leaf spring
- Clockwise tightening (with trailing pointer) and anticlockwise tightening
- With 1/4" internal hex drive (F 6.3 DIN 3126)
- Comparative scale in in·lb and cursor
- Inserts and adaptors with external hex E 6.3 (1/4")
- DIN 3126/ISO 1173 are securely held and firmly controlled in the mounting shaft (for bit screwdriver inserts, refer to page 184)
- To attach 1/4" sockets, please order adaptor No 3115 (refer to page 182)
- Certificate in accordance with DIN EN ISO 6789-2:2017
- Display deviation value ± 4%

Part No.	Size	Torque Range (in-lb)	Torque Range (cN m)	Increments (cN m)	Diameter (mm)	OAL (mm)	Weight (g)
51 04 00 07	7.5	1.5-6.5	15-75	2.5	F 6.3	185	225
51 04 00 15	15	3-13	30-150	5	F 6.3	185	225
51 04 00 30	30	6-26	60-300	10	F 6.3	185	230
51 04 00 60	60	15-52	120-600	20	F 6.3	185	230

STAHLWILLE TORQUE SCREWDRIVERS TORSIOMAX 775

- Click-type
- For torque-controlled bolt tightening in the cN·m and in·lb ranges
- For one-off or production runs
- Anticlockwise and clockwise tightening
- With 1/4" internal hex drive (F 6.3 DIN 3126/ISO1173)
- Infinitely variable via micrometer scale (twist scale)
- Disengaging clutch coupling prevents the preset value being exceeded
- The shape of the handle and its surface texture ensure safe and accurate transmission of torque
- Insert tools: For all 1/4" hex E 6.3, Phillips-head screws, POZIDRIV/ SUPADRIV®, straight-slot, TORX®, hex bits (see pp. 184)
- Certificate in accordance with DIN EN ISO 6789-2:2017
- Display deviation value ± 6%



Part No.	Size	Fig	Torque Range (cN m)	Increments (cN m)	Torque Range (in lb)	Increments (in lb)	Diameter (mm)	OAL (mm)	Weight (g)
51 06 00 03	3	A	2-30	0.2			F 6.3	105	55
51 06 00 12	12	B	20-120	1			F 6.3	157	180
51 06 00 30	30	B	40-300	1			F 6.3	160	205
51 06 00 50	50		100-500	2.5			F 6.3	205	420
51 06 01 00	100	C	400-1000	5			F 6.3	235	630
51 46 00 03	a/3				0.2-3	0.02	F 6.3	105	55
51 46 00 12	a/12				2-12	0.1	F 6.3	157	200
51 46 00 50	a/50				10-50	0.25	F 6.3	205	440

STAHLWILLE TORQUE SCREWDRIVERS TORSIOTRONIC® 10

- Indicating and click-type
- Integrated ratcheting bit-holder with 80 teeth that provide a particularly small ratchet angle of only 4.5° and thus enable particularly sensitive working – ideal for hard-to-reach fasteners
- After the tool trips, the slip mechanism prevents the preset tightening torque from being inadvertently exceeded, which protects against overtightening
- Clear display of all the relevant information in a bright, battery-saving colour OLED display – readable at almost any angle
- Visual assessment of the torqueingm action by means of the traffic light colours in the display and laterally placed LEDs
- Display in a number of languages
- Long-lasting battery charge with battery-saving stand-by mode. The rechargeable batteries can be quickly and easily changed.
- Stores up to 2500 fasteners and sequences for reading out and documenting on the PC later by means of the integrated micro-USB interface
- The target torque and tolerances can be individually set to evaluate the readings
- Easy learning curve thanks to almost self-explanatory controls and an easily understood menu structure
- Three operating modes (first peak, track, peak hold)
- Tactile, visual and acoustic trigger signals.
- The ergonomically designed convex handle promotes strain-free working and is resistant to oils, grease, fuels, brake fluids and Skydrol
- Clockwise and anticlockwise operation
- With 1/4" male square drive (6.3 DIN 3120/ISO 1174-1) for 1/4" sockets
- With 1/4" female square drive in the handle end (6.3 DIN 3120/ISO 1174-1) for attaching a 1/4" T-bar
- Units of measure: cN·m, N·m, ft·lb, in·lb, in·oz
- Included in the set: SENSOMASTER 4 software, USB cable, bit holder, T-bar handle (size 10)
- Supplied with 3.6 V lithium battery, type 18650, packaged according to UN 3480
- Certificate in accordance with DIN EN ISO 6789-2:2017
- In robust plastic case
- Display deviation value ± 4%





Part No.	Size	Torque Range (cN m)	Torque Range (N m)	Torque Range (ft lb)	Torque Range (in lb)	Torque Range (in oz)	OAL (mm)	Weight (g)
96 51 07 12	1.2	12-120	0.12-1.2	0.08-0.885	1.06-10.7	16.9-169.9	317	569
96 51 07 30	3	30-300	0.3-3	0.2-2.3	2.6-26.6	42-425	317	570
96 51 07 60	6	60-600	0.6-6	0.4-4.45	5.3-53.1	84.5-849.5	317	572
96 51 07 00	10	100-1000	1-10	0.7-7.3	8.8-88.5	141-1417	317	575
96 51 17 12	1.2	12-120	0.12-1.2	0.08-0.885	1.06-10.7	16.9-169.9	317	523
96 51 17 30	3	30-300	0.3-3	0.2-2.3	2.6-26.6	42-425	317	524
96 51 17 60	6	60-600	0.6-6	0.4-4.45	5.3-53.1	84.5-849.5	317	526
96 51 17 00	10	100-1000	1-10	0.7-7.3	8.8-88.5	141-1417	317	529

Coaxial Torque Wrench

COAXIAL TORQUE SPANNER

Torque spanner for 8mm AF nuts preset to 1N.m, specifically for use with coaxial connectors.



Part No.	Description	OAL
CHD0801	Coax Torque Spanner	131mm

Torque Wrenches

PROTO® RATCHETING HEAD MICROMETER TORQUE WRENCHES – IN-LBS MEETS ASME STANDARD

ASME B107.14M

- Calibrated to +/- 3% clockwise direction (for J6060A, calibrated to +/- 4% clockwise direction) and +/- 6% counter clockwise direction at 20% to 100% of full scale.
- Calibration is accomplished by manually loading the torque wrench.
- Manufactured to meet standard industrial torque applications such as general industry, heavy equipment and maintenance.



Part No.	Drive Size (in)	Torque Range (in-lbs)	Increments (in-lbs)	Head Width (in)	Head Depth (in)	OAL (in)	Weight (lbs)	Storage Case	Repair Kit
J6060A	1/4	10-50	1	1-1/16	7/8	9-1/2	1.20	J6006PBF	J6062RK
J6062C	1/4	40-200	1	1-1/32	3/4	11-7/8	2.60	J6006PBF	J6062RK
J6064C	3/8	40-200	1	1-1/32	7/8	11-7/8	2.60	J6006PBF	J6064RK
J6066C	3/8	200-1000	5	1-7/16	1-1/64	15-1/2	3.00	J6006PBF	J6006RK
J6068C	1/2	360-1800	10	1-7/8	1-13/32	21-1/2	5.00	J6014PBF	J6014RK
J6072C	1/2	600-3000	10	1-7/8	1-13/32	27-1/8	5.90	J6014PBF	J6014RK

PROTO® RATCHETING HEAD MICROMETER TORQUE WRENCHES – FT-LBS MEETS ASME STANDARD

ASME B107.14M

- Calibrated to +/- 3% clockwise direction and +/- 6% counter clockwise at 20% to 100% of full scale.
- Calibration is accomplished by manual loading the torque wrenches.
- Manufactured to meet standard industrial torque applications, general industry, heavy equipment, and maintenance.



Part No.	Drive Size (in)	Torque Range (ft-lbs)	Increments (ft-lbs)	Head Width (in)	Head Depth (in)	OAL (in)	Weight (lbs)	Storage Case	Repair Kit
J6006C	3/8	16-80	0.5	1-7/16	1-1/64	15-1/2	3.00	J6006PBF	J6006RK
J6012C	3/8	20-100	0.5	1-7/16	1-1/64	17	3.30	J6006PBF	J6006RK
J6008C	1/2	16-80	0.5	1-7/16	1-7/32	15-1/2	3.00	J6006PBF	J6008RK
J6016C	1/2	30-150	1	1-7/8	1-13/32	21-1/2	5.00	J6014PBF	J6014RK
J6014C	1/2	50-250	1	1-7/8	1-13/32	27-1/8	5.90	J6014PBF	J6014RK
J6018AB	3/4	60-300	2	2-5/8	2-1/16	32-23/32	14.00	J6007PB	J6018RK
J6020AB	3/4	120-600	2	2-5/8	2-1/16	41-9/16	15.50	J6007PB	J6018RK
J6022B	1	140-700	2	2-5/8	2-5/16	46-27/32	20.50	J6007PB	J6022RK

PROTO® RATCHETING HEAD MICROMETER TORQUE WRENCHES – NM MEETS ASME STANDARD

ASME B107.14M

- Calibrated to +/- 3% clockwise direction and +/- 6% counter clockwise direction at 20% to 100% of full scale.
- Calibration is accomplished by manual loading the torque wrenches.
- Manufactured to meet standard industrial torque applications, general industry, heavy equipment, and maintenance.



Part No.	Drive Size (in)	Torque Range (Nm)	Increments (Nm)	Head Width (in)	Head Depth (in)	OAL (in)	Weight (lbs)	Storage Case	Repair Kit
J6006MC	3/8	16-80	0.5	1-7/16	1-1/64	15-1/2	3.00	J6006PBF	J6006RK
J6006NMC	3/8	16-80	0.5	1-7/16	1-1/64	15-1/2	3.00	J6006PBF	J6006RK
J6016MC	1/2	40-200	1	1-7/8	1-13/32	21-1/2	5.00	J6014PBF	J6014RK
J6016NMC	1/2	40-200	1	1-7/8	1-13/32	21-1/2	5.00	J6014PBF	J6014RK
J6014MC	1/2	70-350	1	1-7/8	1-13/32	27-1/8	5.90	J6014PBF	J6014RK
J6014NMC	1/2	70-350	1	1-7/8	1-13/32	27-1/8	5.90	J6014PBF	J6014RK
J6020NM	3/4	160-800	4	2-5/8	2-1/16	41-9/16	15.50	J6007PB	J6018RK

PROTO® FIXED HEAD MICROMETER TORQUE WRENCHES – IN-LBS MEETS ASME STANDARD

ASME B107.14M

- Calibrated to +/- 3% clockwise direction and +/- 6% and counter clockwise direction at 20% to 100% of full scale.
- Calibration is accomplished by manual loading the torque wrenches.
- Manufactured to meet standard industrial torque applications, general industry, heavy equipment, and maintenance.



Part No.	Drive Size (in)	Torque Range (in-lbs)	Increments (in-lbs)	Head Width (in)	Head Depth (in)	OAL (in)	Weight (lbs)	Storage Case
J6061C	1/4	40-200	1	25/32	3/4	11-45/64	2.60	J6006PBF
J6063C	3/8	40-200	1	25/32	7/8	11-45/64	2.60	J6006PBF
J6065C	3/8	200-1000	5	55/64	7/8	15-13/64	3.00	J6006PBF

PROTO® FIXED HEAD MICROMETER TORQUE WRENCHES – FT-LBS MEETS ASME STANDARD

ASME B107.14M

- Calibrated to +/- 3% clockwise direction and +/- 6% counter clockwise at 20% to 100% of full scale.
- Calibration is accomplished by manual loading the torque wrenches.
- Manufactured to meet standard industrial torque applications, general industry, heavy equipment, and maintenance.



Part No.	Drive Size (in)	Torque Range (ft-lbs)	Increments (ft-lbs)	Head Width (in)	Head Depth (in)	OAL (in)	Weight (lbs)	Storage Case
J6005C	3/8	16-80	0.5	55/64	7/8	15-13/54	3.00	J6006PBF
J6013C	1/2	50-250	1	1-1/8	1-7/32	26-23/32	5.90	J6014PBF
J6015C	1/2	30-150	1	1-1/8	1-7/32	21-1/8	5.00	J6014PBF
J6017B	3/4	120-600	2	1-7/8	1-7/8	41-11/64	15.50	J6007PB

PROTO® FIXED HEAD MICROMETER TORQUE WRENCH 200-1000 FT-LBS

ASME B107.14M
AS28431
TO33K6-4-2193-1
ISO 6789
JIS B4650

- Includes an extension handle.
- Torque wrench is 40" long. Weight and over all length are for torque wrench with the extension handle.
- Packaged in a metal box for easy storage.
- Calibrated ± 4% of torque reading clockwise and ±6% counter clockwise at 20% to 100% of full scale.
- Certified wrenches to ±2% one direction are available upon request.

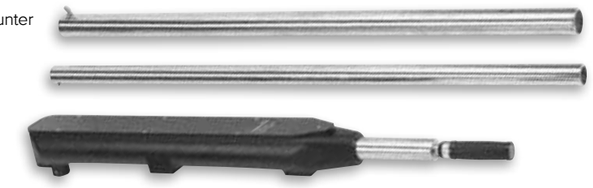


Part No.	Drive Size (in)	Torque Range (ft-lbs)	Increments (ft-lbs)	Head Width (in)	Head Depth (in)	OAL (in)	Weight (lbs)
J6023	1	200-1000	5	1-7/8	2-1/4	69	24.50

PROTO® FIXED HEAD MICROMETER TORQUE WRENCH 400-2000 FT-LBS

ASME B107.14M
AS28431
TO33K6-4-2193-1
ISO 6789
JIS B4650

- Includes two extension handles, each 43" long.
- Torque wrench is 34-1/4" long. Weight and overall length are for torque wrench assembled with both extension handles.
- Calibrated ±4% of torque reading clockwise and ±6% counter clockwise at 20% to 100% of full scale.



Part No.	Drive Size (in)	Torque Range (ft-lbs)	Increments (ft-lbs)	Head Width (in)	Head Depth (in)	OAL (in)	Weight (lbs)
J6025	1	400-2000	10	3-1/16	4-1/8	107-1/2	53.1

PROTO® DIAL TORQUE WRENCHES – FT-LBS/MKG

ASME B107.14M
ISO 6789
JIS B4650

- Accurate to ± 4% of torque reading in both directions at 20% to 100% of full scale.
- Industrial all steel or aluminum torque transfer components.
- High alloy torsion drive design — accuracy not effected by hand position.
- Dual scale (English/Metric) with clockwise and counterclockwise operation — fewer wrenches needed to complete job.
- Memory needles are standard on all wrenches except electric light models.
- Easy-to-read, high contrast scale.
- Laser marked serial number for traceability.
- N.I.S.T. (National Institute of Standards and Technology) traceable CW certification supplied with each wrench.
- J6133F and J6141F include one removeable extension handle for easy force application.
- J6149F includes five removeable extensions (requires two operators) and electric LED and buzzer.



J6113F



J6121F



J6149F



J6133F

Part No.	Drive Size (in)	Torque Range (ft-lbs)	Torque Range (metric)	Increments (in-lbs)	OAL (in)	Weight (lbs)
J6113F	3/8	10-50	1.4-7 mkg	1	10-1/4	2.20
J6121F	1/2	35-175	5-24 mkg	5	21-1/2	4.00
J6125F	1/2	50-250	7-35 mkg	5	21-1/2	3.80
J6134F	3/4	70-350	–	10	27-7/8	7.10
J6133F	3/4	120-600	16-80 mkg	10	46-1/2	9.90
J6141F	1	200-1000	28-140 mkg	20	74-1/4	27.00
J6149F	1	400-2000	56-280 mkg	40	110-3/4	48.00

PROTO® DIAL TORQUE WRENCHES – NM/IN-LBS, FT-LBS

ASME B107.14M

- 2-10 Nm thru 50-250 Nm / 18-90 in-lbs. thru 35-175 ft-lbs
- Accurate to ± 4% of torque reading in both directions at 20% to 100% of full scale.
- Industrial all steel or aluminum torque transfer components.
- High alloy torsion drive design — accuracy not effected by hand position.
- Dual scale (Metric/English) with clockwise and counterclockwise operation — fewer wrenches needed to complete job.
- Memory needles are standard on all wrenches except electric light models.
- Easy-to-read, high contrast scale.
- Laser marked serial number for traceability.
- N.I.S.T. (National Institute of Standards and Technology) traceable CW certification supplied with each wrench.



Part No.	Drive Size (in)	Torque Range (ft-lbs)	Increments (ft-lbs)	Head Width (in)	Head Depth (in)	OAL (in)	Weight (lbs)
J6169NMF	1/4	–	18-90	2-10	0.2	10	1.30
J6177NMF	3/8	–	50-250	6-30	0.5	10	1.50
J6113NMF	3/8	10-50	–	14-70	2	14-7/8	2.10
J6121NMF	1/2	35-175	–	50-250	5	21-1/2	4.00

PROTO® DIAL TORQUE WRENCHES – IN-LBS/CM-KG

ASME B107.14M
ISO 6789
JIS B4650

- 6-30 in-lbs. thru 120-600 in-lbs. / 7-35 cm-kg thru 140-700 cm-kg.
- Accurate to ± 4% of torque reading in both directions at 20% to 100% of full scale.
- Industrial all steel or aluminum torque transfer components.
- High alloy torsion drive design — accuracy not effected by hand position.
- Dual scale (English/Metric) with clockwise and counterclockwise operation — fewer wrenches needed to complete job.
- Memory needles are standard on all wrenches except electric light models.
- Easy-to-read, high contrast scale.
- Laser marked serial number for traceability.
- N.I.S.T. (National Institute of Standards and Technology) traceable CW certification supplied with each wrench.



Part No.	Drive Size (in)	Torque Range (metric)	Torque Range (in-lbs)	Increments (in-lbs)	OAL (in)	Weight (lbs)
J6168F	1/4	7-35 cm-kg	6-30	0.5	10	1.00
J6169F	1/4	18-90 cm-kg	15-75	1	10	1.40
J6177F	3/8	56-280 cm-kg	50-250	5	10	1.30
J6181F	3/8	140-700 cm-kg	120-600	10	10	2.20

PROTO® DIAL ELECTRONIC TORQUE WRENCHES – IN-LBS, FT-LBS

ASME B107.300

- xtended operation range in ft-lbs., in-lbs. and Nm units.
- Precision Accuracy: + / - 1% in BOTH directions.
- Accuracy valid from 10% to 100% of full scale.
- Large easy to read digits.
- Patented rotary bezel. LCD and key pad rotate both ways, up to 359 degrees for easy viewing.
- Torque target zone adjustable 1% to 10% indicates when the desired torque limit is approaching.
  - Yellow light indicates the low end of the zone
  - Green light and buzzer sounds when the target is reached
  - Red Light with intermittent buzzer indicates over-torqued
- One button target torque setting.
- Ergonomically designed for user comfort.
- Operates on standard 9 volt battery.
- Torsion drive strain gauge technology improves accuracy.
- Users can pull on the handle anywhere and still maintain accuracy.
- Built on durable chrome body (not painted) with nylon-6 rotary bezel.
- Rotary dial is shrouded with metal walls to protect display.
- Peak, hold and track modes standard.
- Fast sampling rate helps maintain high accuracy during torque applications.
- Easy to use by production line or quality control inspector.



J6345



J6345B



J6351

Part No.	Drive Size (in)	Torque Range (ft-lbs)	Torque Range (in-lbs)	Torque Range (Nm)	Increments (ft-lbs)	Increments (in-lbs)	Increments (Nm)	Width (in)	Height (in)	OAL (in)	Weight (lbs)
J6339	1/4	0.63-6.25	7.5-75	0.84-8.47	0.01	0.01	0.01	3	2-1/2	11	1.40
J6342	1/4	0.83-8.33	10-100	1.11-11.13	0.01	0.1	0.01	3	2-1/2	11	1.40
J6345	3/8	2.1-21	25-250	2.8-28.2	0.01	0.1	0.01	3	2-1/2	11	1.40
J6345A	3/8	5-50	60-600	6.78-67.8	0.01	0.1	0.1	3	2-1/2	11	1.40
J6345B	1/2	10-100	120-1200	13.3-133.5	0.01	1	1	3	4	22	2.80
J6346	1/2	25-250	300-3000	33.8-338	0.1	1	0.1	3	4	22	2.80
J6347	3/4	60-600	720-7200	81-813	0.1	1	0.1	3	4	22	2.80
J6349	1	100-1000	–	140-1400	–	–	–	4	5	77	20.00
J6351	1	200-2000	–	271-2700	–	–	–	4	5	125	46.00

STAHLWILLE TORQUE WRENCH INDUSTRIAL MANOSKOP® 755

- For work on production lines or series production. No setting scale; have to be set with testers
- Click-type
- Any force applied to the tool after the 'click' or applied in the opposite direction to the current function (up to the maximum of the wrench's range) does not act on the trigger mechanism and cannot cause damage to it
- Mount for interchangeable insert tools (755/4-30)
- Dual stop signal
- Particularly light and easy to handle
- Handle and shank are made of square tubular steel
- Anticlockwise torquing thanks to swap-over insert tools
- On request with preset cut-out value (surcharge 10%)
- Display deviation value ± 4%



Part No.	Size	Torque Range (ft lb)	Torque Range (N m)	Mount Size (mm)	OAL (mm)	Weight (g)
50 01 00 04	4	4-30	4-40	9 x 12	201	500
50 01 00 10	10	15-74	20-100	9 x 12	318	635
50 01 00 20	20	30-147	40-200	14 x 18	457	1045
50 01 00 30	30	40-220	60-300	14 x 18	609	1210

755R/1 WITH PERMANENTLY INSTALLED RATCHET



Part No.	Size	Torque Range (ft lb)	Torque Range (N m)	OAL (mm)	Weight (g)
50 10 00 01	1/4 in	1.0-9.0	1.5-12.5	173.5	335

STAHLWILLE TORQUE WRENCH SERVICE MANOSKOP® 730 QUICK WITH MOUNT

- Click-type
- The measuring element is only under load while force is being applied, no need for manual reset to zero
- Mount for interchangeable insert/shell tools
- QuickRelease safety lock (sizes 5–65)
- Rapid setting thanks to easy-action locking lever in the handle (sizes 5–65)
- Ergonomically designed, non-slip adjuster with a thumb recess
- Magnifying glass integrated in the display window
- Optimised convex handle for strain-free working
- Dual stop signal
- Twin scales N·m/ft·lb and N·m/in·lb (sizes 5–80)
- On request also available as an N·m-only version without twin scale (sizes 5-65)
- Can be applied for either clockwise or anticlockwise tightening by turning the inserts over
- Any force applied to the tool after the 'click' or applied in the opposite direction to the current function – e.g. forcible loosening of a jammed screw - does not act on the trigger mechanism and cannot cause damage to it
- Calibration using perfectControl® calibrating unit No 7794 or calibration system No 7706. Readjustment does not require disassembly.
- Certificate in accordance with DIN EN ISO 6789-2:2017
- Display deviation value ± 4%



Part No.	Size	Torque Range (ft lb)	Increments (ft lb)	Torque Range (N m)	Increments (N m)	Mount Size (mm)	OAL (mm)	Weight (g)
50 18 40 05	5	5-36	1	6-50	2	9 x 12	315	780
50 18 40 10	10	15-72.5	2.5	20-100	2.5	9 x 12	370	936
50 18 40 12	12	20-95	2.5	25-130	2.5	14 x 18	410	1074
50 18 40 20	20	30-145	5	40-200	5	14 x 18	455	1310
50 18 40 40	40	60-300	10	80-400	10	14 x 18	590	1540
50 18 40 65	65	100-480	20	130-650	20	14 x 18	875	3192
50 18 45 65	II/65	100-480	20	130-650	20	22 x 28	897	4104
50 58 40 05	a/5	50-440 in lb	10 in lb	6-50	2	9 x 12	315	780
50 58 40 10	a/10	180-880 in lb	20 in lb	20-100	2.5	9 x 12	370	934
50 58 40 12	a/12	225-1150 in lb	25 in lb	25-130	2.5	14 x 18	410	1076
50 58 40 20	a/20	350-1750 in lb	50 in lb	40-200	5	14 x 18	455	1216

WITH TOOL CARRIER



Part No.	Size	Torque Range (in lb)	Increments (in lb)	Torque Range (N m)	Increments (N m)	Mount Size (mm)	OAL (mm)	Weight (g)
50 18 40 02	2			4-20	0.5	9 x 12	179	315
50 18 40 04	4			8-40	1	9 x 12	223	395
50 58 40 01	a/2-1	17.5-87.5	2.5			9 x 12	179	315
50 58 40 02	a/2	30-175	5			9 x 12	179	315
50 58 40 04	a/4	70-350	10			9 x 12	223	395

STAHLWILLE TORQUE WRENCH STANDARD MANOSKOP® 721 QUICK WITH PERMANENTLY INSTALLED RATCHET

- Click-type
- The measuring element is only under load while force is being applied, no need for manual reset to zero
- Rapid setting thanks to easy-action locking lever in the handle
- Ergonomically designed, non-slip adjuster with a thumb recess
- Magnifying glass integrated in the display window
- Dual stop signal
- Twin scales N·m/ft·lb
- Optimised convex handle for strain-free working
- Any force applied to the tool after the 'click' or applied in the opposite direction to the current function – e.g. forcible loosening of a jammed screw - does not act on the trigger mechanism and cannot cause damage to it
- All the sensitive components are protected by the sturdy tubular steel housing
- Calibration using perfectControl® calibrating unit No 7794 or calibration system No 7706. Readjustment does not require disassembly.
- Certificate in accordance with DIN EN ISO 6789-2:2017
- Display deviation value ± 4%



Part No.	Size	Torque Range (ft lb)	Increments (ft lb)	Torque Range (N m)	Increments (N m)	Drive Size (in)	OAL (mm)	Weight (g)
50 20 40 05	5	5-36	1	6-50	2	3/8	352	880
50 20 40 15	15	25-110	5	30-150	5	1/2	452	1282
50 20 40 20	20	30-145	5	40-200	5	1/2	483	1349
50 20 40 30	30	50-220	10	60-300	10	1/2	553	1646

721QR QUICK WITH PERMANENTLY INSTALLED QUICKRELEASE RATCHET



Part No.	Size	Torque Range (ft lb)	Increments (ft lb)	Torque Range (N m)	Increments (N m)	Drive Size (in)	OAL (mm)	Weight (g)
50 20 41 15	15	25-110	5	30-150	5	1/2	452.5	1268
50 20 41 20	20	30-145	5	40-200	5	1/2	482	1338

STAHLWILLE TORQUE WRENCH SERVICE MANOSKOP® 730NR WITH PERMANENTLY INSTALLED FINE-TOOTH RATCHET

- In sturdy plastic box (size 65 in steel box)
- Deviation of indication ± 4%



Part No.	Size	Torque Range (ft lb)	Increments (ft lb)	Torque Range (N m)	Increments (N m)	Drive Size (in)	OAL (mm)	Weight (g)
96 50 31 05	5 FK	7-37	1	10-50	5	3/8	364	973
96 50 31 10	10 FK	15-75	2.5	20-100	10	1/2	420	1146
96 50 31 20	20 FK	30-150	5	40-200	10	1/2	513.5	1583
96 50 21 40	40 FK	60-300	10	80-400	20	3/4	657	2122
96 50 22 65	65 FK-HD	100-480	20	130-650	50	3/4	944	3698

STAHLWILLE TORQUE WRENCH SERVICE MANOSKOP® 730NR WITH PERMANENTLY INSTALLED FINE-TOOTH RATCHET QUICKRELEASE

- In sturdy plastic box
- With QuickRelease safety lock
- Deviation of indication ± 4%



Part No.	Size	Torque Range (ft lb)	Increments (ft lb)	Torque Range (N m)	Increments (N m)	Drive Size (in)	OAL (mm)	Weight (g)
96 50 21 05	5QR FK	7-37	1	10-50	5 / 0.25	3/8	372.5	961
96 50 21 10	10QR FK	15-75	2.5	20-100	10 / 0.5	1/2	428.5	1129
96 50 21 20	20QR FK	30-150	5	40-200	10 / 1	1/2	526	1589

STAHLWILLE TORQUE WRENCH SERVICE MANOSKOP® 730N WITH MOUNT

- Click-type
- The measuring element is only under load while force is being applied, no need for manual reset to zero
- Fast, accurate setting thanks to QuickSelect quick-action adjuster
- Dual stop signal
- Easy-to-read double scale with colour coding to differentiate between N·m/ft·lb and ft·lb/in·lb scales
- Any force applied to the tool after the 'click' or applied in the opposite direction to the current function – e.g. forcible loosening of a jammed screw -does not act on the trigger mechanism and cannot cause damage to it
- Two-component handle with ergonomically designed green softer layers (resistant to oils, grease, fuels, brake fluids and skydrol)
- Calibration using perfectControl® calibrating unit No 7794 or calibration system No 7706. Readjustment does not require disassembly.
- Certificate in accordance with DIN EN ISO 6789-2:2017
- Supplied in textile bag (from size 65)

Specifications:

- Mount for interchangeable insert tools
- QuickRelease safety lock
- Can be applied for either clockwise or anticlockwise tightening by turning the inserts over
- Display deviation value ± 3% (size 2; a/2 4 %)

730N/10



730N/80



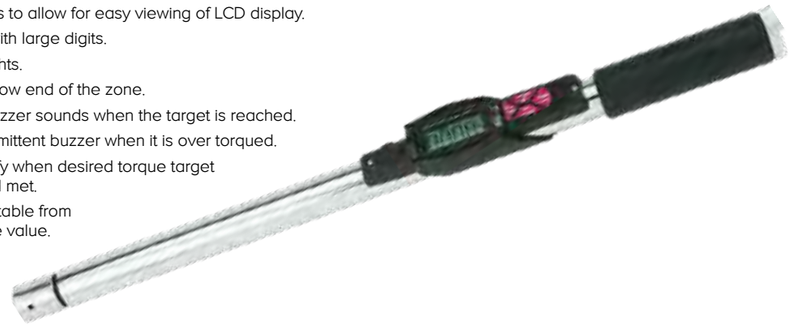
Part No.	Size	Torque Range (ft lb)	Increments (ft lb)	Torque Range (in lb)	Increments (in lb)	Torque Range (N m)	Increments (N m)	Mount Size (mm)	OAL (mm)	Weight (g)
50 18 11 02	2			40-180	10	4-20	1 / 0.2	9 x 12	275	737
50 18 10 05	5	7-37	1			10-50	5 / 0.25	9 x 12	330	831
50 18 10 10	10	15-75	2.5			20-100	10 / 0.5	9 x 12	386	988
50 18 10 12	12	20-95	2.5			25-130	10 / 0.5	14 x 18	421	1128
50 18 10 20	20	30-150	5			40-200	10 / 1	14 x 18	467	1264
50 18 10 40	40	60-300	10			80-400	20 / 2	14 x 18	607	1655
50 18 10 65	65	100-480	20			130-650	50 / 2.5	14 x 18	890	3231
50 18 13 65	II/65	100-480	20			130-650	50 / 2.5	22 x 28	911	3504
50 18 10 80	80	120-600	25			160-800	100 / 5	22 x 28	1178	4825
50 18 11 00	100	150-750	25			200-1000	100 / 5	22 x 28	1363	5000
50 58 11 02	a/2	3-15	0.5	40-180	10 / 2			9 x 12	275	737
50 58 10 05	a/5	7-37	1	90-450	50 / 2.5			9 x 12	330	831
50 58 10 10	a/10	15-75	2.5	180-900	100 / 5			9 x 12	386	988
50 58 10 20	a/20	30-150	5	350-3800	100 / 10			14 x 18	467	1264
50 58 10 40	a/40	60-300	20 / 2	800-3600	100			14 x 18	607	1655

Digital Torque Wrenches

PROTO® 1/2" DRIVE ELECTRONIC TORQUE WRENCH

ASME B107.28

- Full interface with Proto® Interchangeable Head Attachments.
- Accuracy of +/- 2% of indicated value in both clockwise and counter clockwise directions.
- Broad accuracy range extends from 10% to 100% of Full Scale to help reduce the number of torque wrenches required.
- Ninety-nine "on-board" memory storage locations help improve efficiency when taking multiple torque readings.
- Three units of measure are available (Ft-lb, In-lb, and Nm).
- Three operating modes: Track Mode, Peak Hold and Auto Clear.
- Fast sampling rate helps maintain high accuracy during torque applications.
- Torque wrench head rotates to allow for easy viewing of LCD display.
- Easy to read LCD Display with large digits.
- 3-way Red/Green/Yellow lights.
- Yellow light appears at the low end of the zone.
- Green light appears and buzzer sounds when the target is reached.
- Red light appears with intermittent buzzer when it is over torqued.
- Audible buzzer helps identify when desired torque target zones are approaching and met.
- Target torque zone is adjustable from 1% to 10% of targeted torque value.

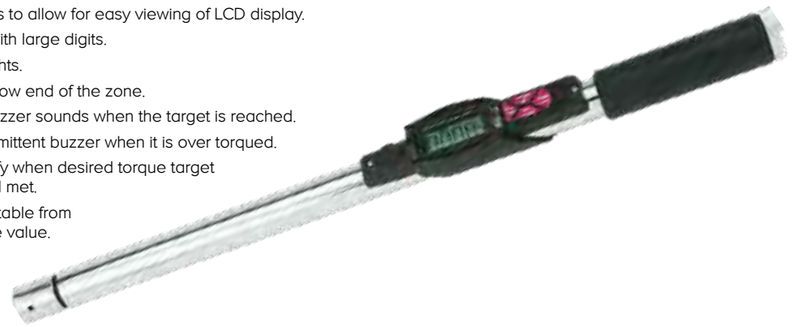


Part No.	Drive Size (in)	Torque Range (ft-lbs)	Increments (ft-lbs)	Torque Range (in-lbs)	Increments (in-lbs)	OAL (in)	Weight (lbs)
JH7-250F	1/2	25-250	0.1	300-3000	1	23	3.00

PROTO® 1/4" DRIVE ELECTRONIC TORQUE WRENCH

ASME B107.28

- Full interface with Proto® Interchangeable Head Attachments.
- Accuracy of +/- 2% of indicated value in both clockwise and counter clockwise directions.
- Broad accuracy range extends from 10% to 100% of Full Scale to help reduce the number of torque wrenches required.
- Ninety-nine "on-board" memory storage locations help improve efficiency when taking multiple torque readings.
- Three units of measure are available (Ft-lb, In-lb, and Nm).
- Three operating modes: Track Mode, Peak Hold and Auto Clear.
- Fast sampling rate helps maintain high accuracy during torque applications.
- Torque wrench head rotates to allow for easy viewing of LCD display.
- Easy to read LCD Display with large digits.
- 3-way Red/Green/Yellow lights.
- Yellow light appears at the low end of the zone.
- Green light appears and buzzer sounds when the target is reached.
- Red light appears with intermittent buzzer when it is over torqued.
- Audible buzzer helps identify when desired torque target zones are approaching and met.
- Target torque zone is adjustable from 1% to 10% of targeted torque value.



Part No.	Drive Size (in)	Torque Range (ft-lbs)	Increments (ft-lbs)	Torque Range (in-lbs)	Increments (in-lbs)	OAL (in)	Weight (lbs)
JH4-250	1/4	2.1-20.8	0.01	25-250	0.1	17-1/4	2.2

STAHLWILLE ELECTRONIC TORQUE WRENCH SENSOTORK® 701/2 WITH PERMANENTLY INSTALLED FINE-TOOTH RATCHET QUICKRELEASE

- Indicating
- Slim, compact shape for smaller torques from 1 N·m upwards
- Measuring units: N·m, cN·m, ft·lb, in·lb
- Measurements independent of the point of application of force
- Additional functions using SENSOMASTER 4 software (not included, free download):
  - Adjustable joints
  - Evaluation of tightening operation by means of coloured LEDs, buzzer and vibration
  - Calibrating interval adjustable
  - Logging function
- Supplied with 3.6 V lithium battery, type 14500, packed in accordance with UN3091, Class 9
- Calibration in conjunction with perfectControl® calibrating unit No 7794 or complete calibration system No 7706. Re-adjustment does not require disassembly
- Certificate in accordance with DIN EN ISO 6789-2:2017
- In sturdy plastic box
- Display deviation value ± 4%
- * without battery / not hazardous



Part No.	Torque Range (cN m)	Increments (in lb)	Torque Range (N m)	Increments (ft lb)	Drive Size (in)	OAL (mm)	Weight (g)
96 50 45 02	100-2000	9-180	1-20	0.7-15	1/4	210	145
96 50 46 02 *	100-2000	9-180	1-20	0.7-15	1/4	210	132

STAHLWILLE ELECTRONIC TORQUE WRENCH SERVICE MANOSKOP® 730D WITH MOUNT

- Tactile and acoustic trigger signal
- Mount for interchangeable insert tools
- QuickRelease safety lock
- Fast setting using convenient keypad
- Automatic compensation to achieve correct tightening torque even if a changed extension is entered
- Overload protection by means of acoustic and visual signals
- Automatic keypad lock prevents inadvertent changes
- Display also works for anticlockwise torque
- Units of measurement: N·m, ft·lb, in·lb
- Different tolerance limits can be set for each joint
- Visual red and green signals in the display confirm the status of the joint
- Additional security for presets (function mode, trigger or preset value, unit of measurement, tolerance, save, deviating extension) using PIN code
- Up to 7.500 measurements can be stored
- USB interface
- Automatic notification of the next calibration date
- Calibration using perfectControl® calibrating unit No 7794 or calibration system No 7791
- Two-component handle with ergonomically designed green softer layers (resistant to oils, grease, fuels, brake fluids and skydrol)
- Certificate in accordance with DIN EN ISO 6789-2:2017
- In sturdy plastic box (sizes 40-100 in steel box)
- Patent
- Supplied with two 1.5 V AA batteries. AA/LR6, 1.2 V rechargeable cells may also be used
- Display deviation value ± 2%, ± 1 digit



730D/20



730D/80

Part No.	Size	Torque Range (ft lb)	Torque Range (in lb)	Torque Range (N m)	Setting/Display Resolution ft lb	Setting/Display Resolution in lb	Setting/Display Resolution N m	Mount Size (mm)	OAL (mm)	Weight (g)
96 50 17 10	10	7.4-75	90-900	10-100	0.2/0.1	2/1.0	0.2/0.1	9 x 12	467	1085
96 50 17 20	20	15-150	180-1800	20-200	0.5/0.1	5/1.0	0.5/0.1	14 x 18	548	1361
96 50 17 40	40	30-300	360-3600	40-400	1.0/0.1	10/1.0	1.0/0.1	14 x 18	688	3300
96 50 17 65	65	48-480	580-5800	65-650	1.0/0.1	10/1.0	1.0/0.1	14 x 18	870	3300
96 50 19 65	II/65	48-480	580-5800	65-650	1.0/0.1	10/1.0	1.0/0.1	22 x 28	892	3224
96 50 20 80	80	60-600	720-7200	80-800	1.0/1.0	10/1.0	1.0/1.0	22 x 28	1160	4577
96 50 21 00	100	74-750	900-9000	100-1000	1.0/1.0	10/1.0	1.0/1.0	22 x 28	1344	4995

STAHLWILLE JACK CABLE 7751

with Jacks at both ends, 90° angled



Part No.	Description
52 11 00 51	Jack Cable for Manoskop

STAHLWILLE USB ADAPTOR 7757-1



Part No.	Description
52 11 10 57	USB Adaptor for Manoskop

STAHLWILLE ELECTRONIC TORQUE WRENCH SERVICE MANOSKOP® 730DR WITH REVERSIBLE RATCHET INSERT TOOL



730DR/20

730DR/100

Part No.	Size	Torque Range (ft lb)	Torque Range (in lb)	Torque Range (N m)	Setting/Display Resolution ft lb	Setting/Display Resolution in lb	Setting/Display Resolution N m	Mount Size (mm)	Drive Size (in)	OAL (mm)	Weight (g)
96 50 18 10	10	7.4-75	90-900	10-100	0.2/0.1	2/1.0	0.2/0.1	9 x 12	1/2	501	1232
96 50 18 20	20	15-150	180-1800	20-200	0.5/0.1	5/1.0	0.5/0.1	14 x 18	1/2	595	1663
96 50 18 40	40	30-300	360-3600	40-400	1.0/0.1	10/1.0	1.0/0.1	14 x 18	3/4	738	2232
96 50 18 65	65	48-480	580-5800	65-650	1.0/0.1	10/1.0	1.0/0.1	14 x 18	3/4	975	3767
96 50 20 65	II/65	48-480	580-5800	65-650	1.0/0.1	10/1.0	1.0/0.1	22 x 28	3/4	977	3994
96 50 18 80	80	60-600	720-7200	80-800	1.0/1.0	10/1.0	1.0/1.0	22 x 28	3/4	1255	6492
96 50 18 00	100	74-750	900-9000	100-1000	1.0/1.0	10/1.0	1.0/1.0	22 x 28	3/4	1439	6910

STAHLWILLE ELECTROMACHANICAL TORQUE WRENCH ANGLE-CONTROLLED MANOSKOP® 714 WITH MOUNT

- 4 measuring modes (torque, angle, torque backed up by angle, angle backed up by torque)
- high-definition colour display with additional side-mounted indicator lamps
- freely configurable menu structure
- optionally: Li-ion battery No 7195-2 and charger No 7160
- 3 function modes: cut-out, peak hold (indicating mode with peak value) and track (indicating mode with current value)
- micro USB interface
- bayonet connection for battery compartment
- QuickRelease safety lock change system for insert tools
- data storage (≤ 2500 tightening jobs)
- as many as 200 joints can be programmed in up to 25 preset sequences
- different tolerance limits can be set for each joint
- acoustic and visual assessment of the joint
- rapid, accurate setting via keypad
- the automatic keypad lock prevents inadvertent changes
- overload protection by means of acoustic and visual signals and a fail-safe system (clockwise)
- automatic notification of the next calibration date, either by the number of joints or the time interval
- fully automated calibrating and adjusting using the perfectControl® calibrating and adjusting unit No 7794-2 (torque) or 7794-3 (torque and angle)
- units of measure: N·m, ft·lb, in·lb
- tightening torque is automatically corrected if a deviating extension is entered
- immediately reusable after release
- clockwise and anticlockwise tightening – it may be necessary to refit the insert tool rotated through 180° for anticlockwise tightening in the cut-out mode
- tactile and acoustic trigger signal
- torque and angle are simultaneously visible
- all readings are independent of the point of application of force (with sizes 1, 2 and 4)
- safe handling due to ergonomically designed handle (resistant to oils, grease, fuels, brake fluid and skydrol)
- 3 certificates (torque indicating/clicking in accordance with DIN EN ISO 6789-2:2017, angle)
- in sturdy plastic box (size 40-100 in steel box)
- design patent, patent
- supplied with SENSOMASTER 4 software, USB cable, 4 AAA/LR03 micro-batteries, 1.5 V. AAA, 1.2 V, micro NiMH rechargeable batteries can be used
- display resolution, angle 0.1°
- display deviation value, angle ±1%, ±1 digit
- display resolution, torque ≤ 60 N·m: 0.01 N·m; > 60 N·m: 0.1 N·m
- display deviation value, torque ±2%, ±1 digit



714/2



714/20



714/80

Part No.	Size	Torque Range (ft lb)	Torque Range (in lb)	Torque Range (N m)	Mount Size (mm)	OAL (mm)	Weight (g)
96 50 09 01	1	0.7-7.5	9-90	1-10	9 x 12	226	370
96 50 09 02	2	1.5-15	18-180	2-20	9 x 12	226	380
96 50 09 04	4	3-30	36-360	4-40	9 x 12	252	420
96 50 09 06	6	4.5-45	54-540	6-60	9 x 12	393	810
96 50 09 10	10	7.4-75	90-900	10-100	9 x 12	466	1085
96 50 09 20	20	15-150	180-1800	20-200	14 x 18	547	1361
96 50 09 40	40	30-300	360-3600	40-400	14 x 18	687	1765
96 50 09 65	65	48-480	580-5800	65-650	22 x 28	890	3222
96 50 09 80	80	60-600	720-7200	80-800	22 x 28	1158	4572
96 50 01 00	100	74-750	900-9000	100-1000	22 x 28	1343	4990

STAHLWILLE ELECTROMACHANICAL TORQUE WRENCH ANGLE-CONTROLLED MANOSKOP® 714R WITH REVERSIBLE RATCHET INSERT TOOL



714R/2



714R/20



714R/80

Part No.	Size	Torque Range (ft lb)	Torque Range (in lb)	Torque Range (N m)	Mount Size (mm)	Drive Size (in)	OAL (mm)	Weight (g)
96 50 10 01	1	0.7-7.5	9-90	1-10	9 x 12	1/4	269	432
96 50 10 02	2	1.5-15	18-180	2-20	9 x 12	1/4	269	442
96 50 10 04	4	3-30	36-360	4-40	9 x 12	1/4	295	482
96 50 10 06	6	4.5-45	54-540	6-60	9 x 12	3/8	427	965
96 50 10 10	10	7.4-75	90-900	10-100	9 x 12	1/2	500	1232
96 50 10 20	20	15-150	180-1800	20-200	14 x 18	1/2	594	1663
96 50 10 40	40	30-300	360-3600	40-400	14 x 18	3/4	737	2275
96 50 10 65	65	48-480	580-5800	65-650	22 x 28	3/4	980	5137
96 50 10 80	80	60-600	720-7200	80-800	22 x 28	3/4	1253	6187
96 50 11 00	100	73-735	885-8850	100-1000	22 x 28	3/4	1438	6905

STAHLWILLE ELECTRONIC TORQUE WRENCH ANGLE-CONTROLLED SENSOTORK® 713R WITH REVERSIBLE RATCHET INSERT TOOL

- simple, flexible operation thanks to operator guidance on large-format display
- very broad measuring range (5% to 100% of rated value)
- supplied with insert tool reversible ratchet
- more insert tools
- QuickRelease safety lock
- for clockwise and anticlockwise torquing
- measurements independent of the point of application of force
- units of measurement: N·m, ft·lb, in·lb
- advance warning points programmable for visual, tactile and acoustic signals
- backlit display aids evaluation of the tightening operation (traffic-light colours)
- insert tool lengths can be individually set
- maintenance friendly due to easy adjustment and automatic reminder of next calibration date
- repeated joints can be collated to form a single menu-guided
- tightening jobs are stored with a timestamp
- individual identification markings possible
- password protection to prevent inadvertent changes and make the tool tamper-proof
- meets requirements of DKD-R 3-7, Class 2
- with 2 certificates (torque in accordance with DIN EN ISO 6789-2:2017/angle)
- in sturdy plastic box (size 40 in tough steel box)
- supplied with two 1.5 V AA batteries. AA/LR6, 1.2 V NiMH rechargeable cells may also be used
- fully automated calibration (torque) using perfectControl® calibrating unit No 7794-2. Readjustment does not require disassembly.
- registered design
- display deviation value ± 1%
- Torque and angle simultaneously displayed



Part No.	Size	Torque Range (ft lb)	Torque Range (N m)	Mount Size (mm)	Drive Size (in)	OAL (mm)	Weight (g)
96 50 16 06	6	2.5-44	3-60	9 x 12	3/8	378	856
96 50 16 20	20	7-148	10-200	14 x 18	1/2	608	1552
96 50 16 40	40	15-296	20-400	14 x 18	3/4	838	2332

STAHLWILLE ELECTRONIC TORQUE WRENCH SENSOTORK® 712R/6 WITH REVERSIBLE RATCHET INSERT TOOL

- Same features as 713R without angle function



Part No.	Size	Torque Range (ft lb)	Torque Range (N m)	Mount Size (mm)	Drive Size (in)	OAL (mm)	Weight (g)
96 50 15 06	6	2.5-44	3-60	9 x 12	3/8	378	856

STAHLWILLE RATCHET INSERT TOOLS RATCHET QUICKRELEASE 725QR



- reversible
- with QuickRelease safety lock
- size 4: 22 teeth
- sizes 5 and 10: 30 teeth

Part No.	Size	Drive Size (in)	Mount Size (mm)	max N m	Weight (g)
58 25 30 04	4	1/4	9 x 12	40	50
58 25 30 05	5	3/8	9 x 12	100	130
58 25 30 10	10	1/2	9 x 12	100	141

STAHLWILLE RATCHET INSERT TOOLS BIT RATCHET 725B



- reversible
- with inside hexagon, 1/4" or 5/16", DIN 3126/ISO 1173 D 6.3 or D8
- for direct acceptance of bits 1/4" or 5/16" outside hexagon C 6.3 (size 4: 22 teeth, size 5: 30 teeth)
- internal hex drive with a collar-thrust spring
- bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173)

Part No.	Size	Drive Size (in)	Mount Size (mm)	Weight (g)
58 25 50 04	4	1/4	9 x 12	54
58 25 50 05	5	5/16	9 x 12	117

STAHLWILLE RATCHET INSERT TOOLS SQUARE DRIVE RATCHET 734



Part No.	Size	Drive Size (in)	Mount Size (mm)	max N m	Weight (g)
58 24 00 04	4	1/4	9 x 12	40	71
58 24 00 05	5	3/8	9 x 12	80	76
58 24 00 10	10	1/2	9 x 12	100	82

STAHLWILLE INSERT TOOLS RING SPANNER 732/10

MM



Part No.	Size (mm)	Mount Size (mm)	Weight (g)
58 22 10 07	7	9 x 12	37
58 22 10 08	8	9 x 12	40
58 22 10 10	10	9 x 12	44
58 22 10 11	11	9 x 12	41
58 22 10 12	12	9 x 12	49
58 22 10 13	13	9 x 12	55
58 22 10 14	14	9 x 12	52
58 22 10 15	15	9 x 12	52
58 22 10 16	16	9 x 12	54
58 22 10 17	17	9 x 12	59
58 22 10 18	18	9 x 12	56
58 22 10 19	19	9 x 12	65
58 22 10 21	21	9 x 12	71
58 22 10 22	22	9 x 12	74

STAHLWILLE RATCHET INSERT TOOL RATCHET 725/4



- reversible
- 22 teeth

Part No.	Size	Drive Size (in)	Mount Size (mm)	max N m	Weight (g)
58 25 40 04	4	1/4	9 x 12	40	62

STAHLWILLE RATCHET INSERT TOOLS RATCHET FINE TOOTH 735



- reversible
- 60 teeth
- * also available as clockwise only

Part No.	Size	Drive Size (in)	Mount Size (mm)	max N m	Weight (g)
58 25 00 05	5	3/8	9 x 12	100	150
58 25 00 10	10 *	1/2	9 x 12	100	147

STAHLWILLE INSERT TOOLS RATCHET QUICKRELEASE 725QR/30



- reversible
- with QuickRelease safety lock
- 36 teeth

Part No.	Size	Drive Size (in)	Mount Size (mm)	Weight (g)
58 25 30 20	20	1/2	14 x 18	325

STAHLWILLE RATCHET INSERT TOOLS SQUARE DRIVE RATCHET 734F

with permanently attached, captive square drive



Part No.	Size	Drive Size (in)	Mount Size (mm)	Weight (g)
58 24 10 04	4	1/4	9 x 12	72
58 24 10 05	5	3/8	9 x 12	75

STAHLWILLE INSERT TOOLS RING SPANNER 732A/10

IN



Part No.	Size (in)	Mount Size (mm)	Weight (g)
58 62 10 16	1/4	9 x 12	36
58 62 10 20	5/16	9 x 12	37
58 62 10 24	3/8 [1]	9 x 12	37
58 62 10 28	7/16	9 x 12	40
58 62 10 32	1/2	9 x 12	53
58 62 10 34	9/16	9 x 12	52
58 62 10 36	5/8	9 x 12	54
58 62 10 38	11/16	9 x 12	58
58 62 10 40	3/4	9 x 12	58
58 62 10 42	13/16	9 x 12	68
58 62 10 44	7/8	9 x 12	69

STAHLWILLE INSERT TOOLS OPEN ENDED SPANNER 731/10

IN



Part No.	Size (in)	Mount Size (mm)	Weight (g)
58 611016	1/4	9 x 12	36
58 611020	5/16	9 x 12	53
58 611024	3/8	9 x 12	38
58 611028	7/16	9 x 12	37
58 611032	1/2	9 x 12	44
58 611034	9/16	9 x 12	49
58 611036	5/8	9 x 12	64
58 611038	11/16	9 x 12	76
58 611040	3/4	9 x 12	73

STAHLWILLE INSERT TOOLS TORX® 732TX/10



Part No.	Size	Mount Size (mm)	Weight (g)
58 29 10 06	E6	9 x 12	40
58 29 10 08	E8	9 x 12	45
58 29 10 10	E10	9 x 12	45
58 29 10 12	E12	9 x 12	50
58 29 10 14	E14	9 x 12	60

STAHLWILLE INSERT TOOLS CROWRING 733/10

MM



Part No.	Size (mm)	Mount Size (mm)	Weight (g)
58 23 10 10	10	9 x 12	57
58 23 10 11	11	9 x 12	55
58 23 10 12	12	9 x 12	59
58 23 10 13	13	9 x 12	55
58 23 10 14	14	9 x 12	60
58 23 10 16	16	9 x 12	65
58 23 10 17	17	9 x 12	64
58 23 10 18	18	9 x 12	74
58 23 10 19	19	9 x 12	70
58 23 10 21	21	9 x 12	88
58 23 10 22	22	9 x 12	92
58 23 10 24	24	9 x 12	75

STAHLWILLE INSERT TOOLS RING SPANNER 732AG/10

IN

Part No.	Size (in)	Mount Size (mm)	Weight (g)
58 62 12 16	1/4	9 x 12	28
58 62 12 20	5/16	9 x 12	31
58 62 12 24	3/8	9 x 12	42
58 62 12 28	7/16	9 x 12	43
58 62 12 32	1/2	9 x 12	58
58 62 12 34	9/16	9 x 12	58
58 62 12 36	5/8	9 x 12	74

STAHLWILLE INSERT TOOLS OPEN ENDED SPANNER 731/10

MM



Part No.	Size (mm)	Mount Size (mm)	Weight (g)
58 21 10 07	7	9 x 12	40
58 21 10 08	8	9 x 12	39
58 21 10 09	9	9 x 12	38
58 21 10 10	10	9 x 12	42
58 21 10 11	11	9 x 12	41
58 21 10 12	12 [1]	9 x 12	43
58 21 10 13	13	9 x 12	45
58 21 10 14	14	9 x 12	52
58 21 10 15	15	9 x 12	51
58 21 10 16	16	9 x 12	58
58 21 10 17	17	9 x 12	60
58 21 10 18	18	9 x 12	71
58 21 10 19	19	9 x 12	74

STAHLWILLE INSERT TOOLS RING SPANNER 732G/10

MM

HPQ® high performance steel, gunmetal finish



Part No.	Size (mm)	Mount Size (mm)	Weight (g)
58 62 00 07	7	9 x 12	31
58 62 00 08	8	9 x 12	33
58 62 00 09	9	9 x 12	44
58 62 00 10	10	9 x 12	45
58 62 00 13	13	9 x 12	60

STAHLWILLE INSERT TOOLS CROWRING 733A/10

IN



Part No.	Size (in)	Mount Size (mm)	Weight (g)
58 63 10 24	3/8	9 x 12	55
58 63 10 28	7/16	9 x 12	56
58 63 10 32	1/2	9 x 12	58
58 63 10 34	9/16	9 x 12	59
58 63 10 36	5/8	9 x 12	61
58 63 10 38	11/16	9 x 12	48
58 63 10 40	3/4	9 x 12	76

STAHLWILLE INSERT TOOLS ADAPTOR 7370/10

for using insert tools with an outer square drive of 14 x 18 mm on torque wrenches with an internal square drive of 9 x 12 mm



Part No.	Size (mm)	Mount Size (mm)	Weight (g)
58 29 00 10	14 x 18	9 x 12	118

FORCE, TENSION & TORQUE

DESOUTTER QUALITY DIGITAL WRENCH DWTA

Aimed primarly for Quality Residual Torque checks organized in routes (Process Capability Tests) and Joint analysis for engineering purposes, the DWTA in combination with Delta 7D offers also a possibility to perform tightening strategies in restricted access conditions with a high level of precision and curves / results and statistics displayed.

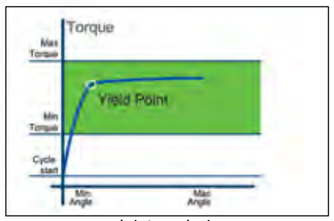
Non Length Dependent Transducer thanks to double bridge strain gauge. To guarantee a tightening result independent from operator hand position +/-1 % of torque reading (from 10 % to 100 % of torque range)



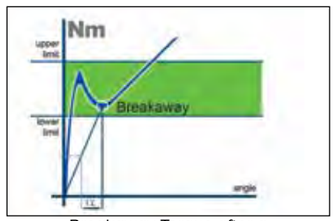




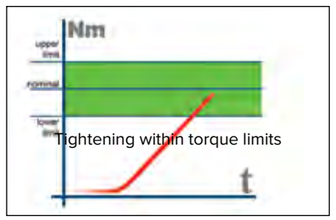
Military connector for standard transducer cable



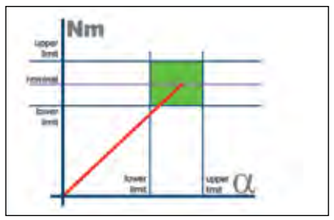
Joint analysis



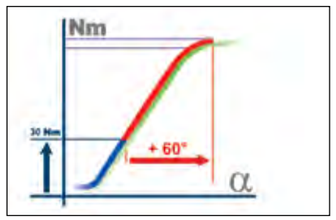
Breakaway Torque after a predefined angle rotation (α)



Tightening within torque limits



Tightening within torque and angle limits (tightening to a window)



Tightening with torque and additional angle rotation (torque + angle)

Part No.	Model	Pic Ref	Torque Range		Angle	Drive		Included Ratchet	Length		Weight	
			Nm	in.lb		mm	in	in	kg	lb	kg	lb
615 165 760 0	DWTA 30		3-30	2.21-22.1	4	9x12	0.35x0.47	3/8	402	15.8	0.9	2.0
615 165 761 0	DWTA 150 Short		15-150	11.06-110.6	4	14x18	0.55x0.71	1/2	418	24.6	1.8	4.0
615 165 762 0	DWTA 400		40-400	29.5-295	4	14x18	0.55x0.71	3/4	1026	40.4	2.8	6.2

DESOUTTER DELTA WRENCH DIGITAL WRENCH FOR TORQUE & ANGLE MEASUREMENT

The digital wrench integrates is a unique device and flexible solution for both production and quality strategy in tightening. Delta Wrench provides high accuracy solution for both torque and angle controlled joints tightening. Delta Wrench ensures perfect tightening operator independent thanks to automatic pre-defined PSet selection. It also includes residual torque measurement Quality strategies and traceability for a perfect quality audit with predefined routes.

- In order to provide a clear guidance to the operator during tightening, the vibrating wrench is configurable to give you an immediate feedback even in a loud environment of work.
- Non Length Dependent Transducer thanks to double bridge strain gauge. To guarantee a tightening result independent from operator hand position. Accuracy of +/-1% on Torque reading value (from 10 to 100% of the nominal torque)
- USB Port for DELTA QC free software communication for programming 200 predefined PSet or to Export result.
- Ergonomic keyboard to recall the predefined PSet
- Standard interchangeable heads and reversible ratchets
- A visual Backlight RGB colour display AND a complementary vibrating sensation system for an optimal operator guidance
- Embedded high capacity Li-Ion battery
- All models are supplied with box including reversible ratchet with TAG and Delta QC Free Version (Batteries supplied separately)



Automatic residual point detection

Part No.	Model	Range		Angle	Drive		Included Ratchet	Length		Weight	
		Nm	ft.lb		mm	in	in	mm	in	kg	lb
615 935 230 0	Delta Wrench 30-AV	3-30	2.21	x	9x12	0.35x0.47	3/8	402	15.8	0.9	2.0
615 935 231 0	Delta Wrench 150-AV Short	15-150	11.06-110.6	x	14x18	0.55x0.71	1/2	418	16.5	1.0	2.2
615 935 232 0	Delta Wrench 200-AV	20-200	14.75-147.5	x	14x18	0.55x0.71	1/2	625	24.6	2	4.4
615 935 233 0	Delta Wrench 400-AV	40-400	29.5-295	x	14x18	0.55x0.71	3/4	1026	40.4	2.8	6.2
615 935 234 0	Delta Wrench 500-AV	50-500	36.88-368.8	x	21X26	0.82X1.02	3/4	1137	44.8	5.5	12.1
615 935 235 0	Delta Wrench 800-AV	80-800	59.0-590	x	Ø 28	Ø 1.1	1	1305	51.4	6.7	14.8

DESOUTTER LI-ION BATTERY AND BATTERY CHARGER



Part No.	Description
615 936 150 0	Delta Wrench Battery
615 936 151 0	Delta Wrench Battery Charger

DESOUTTER DELTAQC SOFTWARE

Part No.	Description
615 927 651 0	DeltaQC Licensed 1 user
615 927 652 0	DeltaQC Licensed 5 users
615 927 653 0	DeltaQC Advanced 1 user
615 927 654 0	DeltaQC Advanced 5 users

DESOUTTER DELTA WRENCH ACCESSORIES REVERSIBLE RATCHET



Part No.	Mount Size (mm)	Size (in)
615 397 125 0	9 x 12	1/4
615 397 126 0	9 x 12	3/8
615 397 127 0	9 x 12	1/2
615 397 200 0	14 x 18	1/2
615 936 439 0	14 x 18 HD	3/4
615 936 441 0	21 x 26	3/4
615 397 204 0	Ø 28	1

DESOUTTER DELTA WRENCH ACCESSORIES OPEN END SPANNER MM



Part No.	Mount Size (mm)	Size (mm)
615 397 055 0	9 x 12	7
615 397 056 0	9 x 12	8
615 397 057 0	9 x 12	9
615 397 058 0	9 x 12	10
615 397 059 0	9 x 12	11
615 397 060 0	9 x 12	12
615 397 061 0	9 x 12	13
615 397 062 0	9 x 12	14
615 397 063 0	9 x 12	15
615 397 064 0	9 x 12	16
615 397 065 0	9 x 12	17
615 397 066 0	9 x 12	18
615 397 067 0	9 x 12	19
615 397 131 0	14 x 18	13
615 397 132 0	14 x 18	14
615 397 133 0	14 x 18	15
615 397 134 0	14 x 18	16
615 397 135 0	14 x 18	17
615 397 136 0	14 x 18	18
615 397 137 0	14 x 18	19
615 397 138 0	14 x 18	21
615 397 139 0	14 x 18	22
615 397 140 0	14 x 18	24
615 397 141 0	14 x 18	27
615 397 142 0	14 x 18	30
615 397 143 0	14 x 18	32
615 397 144 0	14 x 18	34

DESOUTTER DELTA WRENCH ACCESSORIES RING SPANNER MM



Part No.	Mount Size (mm)	Size (mm)
615 397 078 0	9 x 12	7
615 397 079 0	9 x 12	8
615 397 080 0	9 x 12	10
615 397 081 0	9 x 12	11
615 397 082 0	9 x 12	12
615 397 083 0	9 x 12	13
615 397 084 0	9 x 12	14
615 397 085 0	9 x 12	15
615 397 086 0	9 x 12	16
615 397 087 0	9 x 12	17
615 397 088 0	9 x 12	18
615 397 089 0	9 x 12	19
615 397 090 0	9 x 12	21
615 397 091 0	9 x 12	22
615 397 173 0	14 x 18	13
615 397 174 0	14 x 18	14
615 397 175 0	14 x 18	15
615 397 176 0	14 x 18	16
615 397 177 0	14 x 18	17
615 397 178 0	14 x 18	18
615 397 179 0	14 x 18	19
615 397 180 0	14 x 18	21
615 397 181 0	14 x 18	22
615 397 182 0	14 x 18	24
615 397 183 0	14 x 18	27
615 397 184 0	14 x 18	30
615 397 185 0	14 x 18	32
615 397 186 0	14 x 18	34
615 397 187 0	14 x 18	36
615 397 188 0	14 x 18	41

DESOUTTER DELTA WRENCH ACCESSORIES OPEN END SPANNER IN



Part No.	Mount Size (mm)	Size (in)
615 397 069 0	9 x 12	1/4
615 397 070 0	9 x 12	5/16
615 397 071 0	9 x 12	3/8
615 397 072 0	9 x 12	7/16
615 397 073 0	9 x 12	1/2
615 397 074 0	9 x 12	9/16
615 397 075 0	9 x 12	5/8
615 397 076 0	9 x 12	11/16
615 397 077 0	9 x 12	3/4
615 397 145 0	14 x 18	7/16
615 397 146 0	14 x 18	1/2
615 397 147 0	14 x 18	9/16
615 397 148 0	14 x 18	5/8
615 397 149 0	14 x 18	11/16
615 397 150 0	14 x 18	3/4
615 397 151 0	14 x 18	13/16
615 397 152 0	14 x 18	7/8
615 397 153 0	14 x 18	15/16
615 397 154 0	14 x 18	1
615 397 172 0	14 x 18	1-1/8

DESOUTTER DELTA WRENCH ACCESSORIES OPEN END SPANNER IN



Part No.	Mount Size (mm)	Size (in)
615 397 092 0	9 x 12	1/4
615 397 093 0	9 x 12	5/16
615 397 094 0	9 x 12	3/8
615 397 095 0	9 x 12	7/16
615 397 096 0	9 x 12	1/2
615 397 097 0	9 x 12	9/16
615 397 098 0	9 x 12	5/8
615 397 099 0	9 x 12	11/16
615 397 100 0	9 x 12	3/4
615 397 101 0	9 x 12	13/16
615 397 102 0	9 x 12	7/8
615 397 189 0	14 x 18	1/2
615 397 190 0	14 x 18	9/16
615 397 191 0	14 x 18	5/8
615 397 192 0	14 x 18	11/16
615 397 193 0	14 x 18	3/4
615 397 194 0	14 x 18	13/16
615 397 195 0	14 x 18	7/8
615 397 196 0	14 x 18	15/16
615 397 197 0	14 x 18	1

DESOUTTER DELTA WRENCH ACCESSORIES CROWRING SPANNER MM



Part No.	Mount Size (mm)	Size (mm)
615 397 103 0	9 x 12	10
615 397 104 0	9 x 12	11
615 397 105 0	9 x 12	12
615 397 106 0	9 x 12	13
615 397 107 0	9 x 12	14
615 397 108 0	9 x 12	16
615 397 109 0	9 x 12	17
615 397 110 0	9 x 12	18
615 397 111 0	9 x 12	19
615 397 112 0	9 x 12	21
615 397 113 0	9 x 12	22
615 397 114 0	9 x 12	24

DESOUTTER DELTA WRENCH ACCESSORIES BIT HOLDER



Part No.	Mount Size (mm)	Size (in)
615 397 128 0	9 x 12	1/4
615 397 129 0	9 x 12	5/16
615 397 202 0	14 x 18	5/16

DESOUTTER DELTA WRENCH ACCESSORIES CROWRING SPANNER IN



Part No.	Mount Size (mm)	Size (in)
615 397 115 0	9 x 12	3/8
615 397 116 0	9 x 12	7/16
615 397 117 0	9 x 12	1/2
615 397 118 0	9 x 12	9/16
615 397 119 0	9 x 12	5/8
615 397 120 0	9 x 12	11/16
615 397 121 0	9 x 12	3/4

DESOUTTER DELTA WRENCH ACCESSORIES SQUARE DRIVE RATCHET



Part No.	Mount Size (mm)	Size (in)
615 397 122 0	9 x 12	1/4
615 397 123 0	9 x 12	3/8
615 397 124 0	9 x 12	1/2
615 397 198 0	14 x 18	1/2
615 397 199 0	14 x 18	3/4

Torque Adapters & Multipliers

PROTO® DIGITAL TORQUE AND ANGLE ADAPTERS

ASME B107.300

- Torque and angle tightening with one tool: productivity improvement, digital display minimizes reading errors, and delivers high precision.
- +/-2° (rotating 90° at speed of 30° / sec) for angle accuracy.
- +/-3% clockwise or +/-4% counter clockwise for torque accuracy.
- LEDs for easy viewing of results and audible beep when desired level is reached.
- Buzzer and LED indicator for the 9 pre-settable target torques or angles.
- Five Units Selectable (N.m, ft-lb, in.lb, kg.cm, degree).
- 50 data memory for recall and joint torque-angle auditing.
- Auto Sleep after about 2 minutes idle.
- Both AAA and rechargeable batteries are compatible.



Part No.	Drive Size (in)	Torque Range (ft-lbs)	Torque Range (in-lbs)	Torque Range (Nm)	OAL (in)	Weight (lbs)	Battery Type	Storage Case
J6280TA100	3/8	5-99.5	60-1195	6.8-135	3-23/64	0.70	2 AAA included	J6310PB
J6280TA150	1/2	7.4-147.5	88-1770	10-200	3-23/64	0.70	2 AAA included	J6415PB
J6280TA250	1/2	12.5-250.7	150-3009	17-340	3-23/64	0.70	2 AAA included	J6425PB

PROTO® DIGITAL ANGLE ADAPTER

ASME B107.300

- Digital angle value readout.
- Ultra simple use: autotest and reset upon powering on.
- Adapter magnetized so it attaches to all types of ratchets.
- +/-2° accuracy (rotating 90° at speed of 30° / sec).
- +/-2% clockwise and counter clockwise for torque accuracy.
- LEDs for easy viewing of results and audible beep when desired level is reached.
- Buzzer and LED indicator for the 9 pre-settable target torques.
- 50 data memory for recall and joint torque auditing.
- Auto Sleep after about 2 minutes idle.
- Both AAA and rechargeable batteries are compatible.



Part No.	Drive Size (in)	Torque Range (ft-lbs)	Torque Range (in-lbs)	Torque Range (Nm)	OAL (in)	Weight (lbs)	Battery Type	Storage Case
J6300TWA	–	–	–	–	2-9/32	0.50	2 AAA included	J6300PB

PROTO® TORQUE MULTIPLIERS 750 FT-LBS

- Maximum rated input: 227 ft-lbs. (308 Nm).
- Maximum rated output: 750 ft-lbs. (1017 Nm).
- Standard torque accuracy is +/- 5% of reading.
- Reaction system: tubular reaction bar.
- Gear system: single stage planetary.



Part No.	Input Drive (in)	Output Drive (in)	Torque Ratio	Head Depth (in) (A)	Head Length (in) (B)	Handle Length (in) (L1)	OAL (in) (L)	Weight (lbs)
J6202A	1/2	3/4 Sq. Male	1:3.33	3-3/32	2-13/16	5-1/4	8-19/32	4.00
J6202ACERT	1/2	3/4 Sq. Male	1:3.33	3-3/32	2-13/16	5-1/4	8-19/32	4.00

PROTO® TORQUE MULTIPLIERS 1200 FT-LBS

- Maximum rated input: 200 ft-lbs. (271 Nm).
- Maximum rated output: 1200 ft-lbs. (1626 Nm).
- Standard torque accuracy is +/- 5% of reading.
- Reaction system: tubular reaction bar.
- Gear system: single stage planetary.
- Angle of turn protractor: 5° increments.



Part No.	Input Drive (in)	Output Drive (in)	Torque Ratio	Head Depth (in) (A)	Head Length (in) (B)	Handle Length (in) (L1)	OAL (in) (L)	Weight (lbs)	Repair Kit
J6212	1/2	3/4 Sq. Male	1:6	4	3-15/16	14-1/8	19-19/32	9.10	J6212RD
J6212CERT	1/2	3/4 Sq. Male	1:6	4	3-15/16	14-1/8	19-19/32	9.10	J6212RD

PROTO® TORQUE MULTIPLIERS 2200 FT-LBS

- Maximum rated input: 162 ft-lbs. (220 Nm).
- Maximum rated output: 2200 ft-lbs. (2983 Nm).
- Standard torque accuracy is +/- 5% of reading.
- Reaction system: tubular reaction bar.
- Gear system: two stage planetary.
- Angle of turn protractor: 5° increments.
- Anti-backlash device: self-contained, 3 position.



Part No.	Input Drive (in)	Output Drive (in)	Torque Ratio	Head Depth (in) (A)	Head Length (in) (B)	Handle Length (in) (L1)	OAL (in) (L)	Weight (lbs)	Repair Kit
J6222	1/2	1 Sq. Male	1:13.6	5-3/4	4-1/16	14-1/8	19-19/32	15.20	J6222RD
J6222CERT	1/2	1 Sq. Male	1:13.6	5-3/4	4-1/16	14-1/8	19-19/32	15.20	J6222RD

PROTO® TORQUE MULTIPLIERS 3200 FT-LBS

- Maximum rated input: 173 ft-lbs. (235 Nm).
- Maximum rated output: 3200 ft-lbs. (4338 Nm).
- Standard torque accuracy is +/- 5% of reading.
- Reaction system: tubular reaction bar.
- Gear system: two stage planetary.
- Angle of turn protractor: 5° increments.
- Anti-backlash device: self-contained, 3 position.



Part No.	Input Drive (in)	Output Drive (in)	Torque Ratio	Head Depth (in) (A)	Head Length (in) (B)	Handle Length (in) (L1)	OAL (in) (L)	Weight (lbs)	Repair Kit
J6232	1/2	1 Sq. Male	1:18.5	6-1/2	4-1/16	14-1/8	19-19/32	18.30	J6232RD
J6232CERT	1/2	1 Sq. Male	1:18.5	6-1/2	4-1/16	14-1/8	19-19/32	18.30	J6232RD

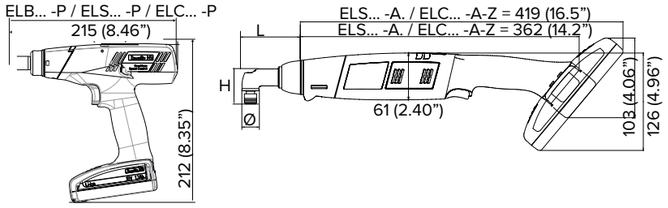
Torque Drivers

DESOUTTER TORQUE DRIVER E-LIT SERIES

- 0.4 to 60 Nm (3.5 to 530 in. lb) - 50 to 1550 rpm



Part No.	Model	Pic Ref	Torque Range		Rotational Speed	Output Drive	Weight without Battery		Voltage
			Nm	in.lb	rpm	W	kg	lb	V
E-lit plus – Electronic brushless motor									
615 165 415 0	ELB 2.5-1250-P	A	0.4-2.5	3.5-22	1250	Hex. 1/4 F	0.8	1.76	18
615 165 416 0	ELB 6-900-P	A	0.8-6	7.1-53	900	Hex. 1/4 F	0.8	1.76	18
615 165 440 0	ELB 6-670-P	A	0.8-6	7.1-53	670	Hex. 1/4 F	0.8	1.76	18
615 165 417 0	ELB 8-670-P	A	1.5-8	13.3-70	670	Hex. 1/4 F	0.8	1.76	18
615 165 418 0	ELB 12-600-P	A	3-12	26.5-106	570	Hex. 1/4 F	0.8	1.76	18
E-lit premium – Electronic brushless speed setting									
615 165 419 0	ELS 2.5-1550-P	A	0.4-2.5	3.5-22	500-1550	Hex. 1/4 F	0.8	1.76	18
615 165 420 0	ELS 6-1000-P	A	0.8-6	7.1-53	300-1000	Hex. 1/4 F	0.8	1.76	18
615 165 605 0	ELS 8-400-P	A	1.5-8	13.3-70	120-400	Hex. 1/4 F	0.8	1.76	18
615 165 421 0	ELS 8-800-P	A	1.5-8	13.3-70	300-765	Hex. 1/4 F	0.8	1.76	18
615 165 825 0	ELS 8-400-P4S	A	1.5-8	13.3-70	120-400	Sq. 1/4	0.8	1.76	18
615 165 422 0	ELS 12-600-P	A	3-12	26.5-106	250-570	Hex. 1/4 F	0.8	1.76	18
615 165 826 0	ELS 12-400-P4S	A	3-12	26.5-106	120-400	Sq. 1/4	0.8	1.76	18
615 165 725 0	ELS 7-360-A4S	B	1.5-7	13.3-62	120-360	Sq. 1/4	1.2	2.6	18
615 165 628 0	ELS 7-880-A	B	1.5-7	13.3-62	400-880	Hex. 1/4 F	1.2	2.6	18
615 165 888 0	ELS 7-880-A10S	B	1.5-7	13.3-62	400-880	Sq. 3/8	1.2	2.6	18
615 165 629 0	ELS 15-480-A	B	5-15	44.2-133	200-480	Sq. 3/8	1.2	2.6	18
615 165 839 0	ELS 15-480-A4S	B	5-15	44.2-133	200-480	Sq. 1/4	1.2	2.6	18
615 165 630 0	ELS 30-300-A	C	10-30	88.5-265	100-300	Sq. 3/8	1.5	3.3	36
615 165 631 0	ELS 45-180-A	C	20-45	177-398	50-180	Sq. 3/8	1.5	3.3	36
615 165 632 0	ELS 60-160-A	D	25-60	220-530	50-160	Sq.1/2	1.97	4.33	36
E-lit wireless – Communication									
615 166 100 0	ELC 6-1000-P-W	A	0.8-6	7.1-53	300-1000	Hex. 1/4 F	0.9	1.76	18
615 166 101 0	ELC 8-400-P-W	A	1.5-8	13.3-70	120-400	Hex. 1/4 F	0.9	1.76	18
615 166 102 0	ELC 8-800-P-W	A	1.5-8	13.3-70	300-765	Hex. 1/4 F	0.9	1.76	18
615 166 103 0	ELC 12-600-P-W	A	3-12	26.5-106	250-570	Hex. 1/4 F	0.9	1.76	18
615 166 104 0	ELC7-360-A4S-W	B	3-7	13.3-62	150-360	Sq. 1/4	1.2	2.6	18
615 166 105 0	ELC7-880-A-W	B	3-7	13.3-62	400-880	Sq. 3/8	1.2	2.6	18
615 166 106 0	ELC15-480-A-W	B	5-15	44.2-133	200-480	Sq. 3/8	1.2	2.6	18
615 166 107 0	ELC30-300-A-W	C	10-30	88.5-265	100-300	Sq. 3/8	1.5	3.3	36
615 166 108 0	ELC45-180-A-W	C	20-45	177-398	50-180	Sq. 3/8	1.5	3.3	36
615 166 109 0	ELC60-160-A-W	D	25-60	220-530	50-160	Sq.1/2	2	4.3	36



Model	H		L		Ø	
	mm	in	mm	in	mm	in
ELS7 / ELC7	45.5	1.79	75.7	2.98	22	0.87
ELS15 / ELC15	41.5	1.63	75.7	2.98	22	0.87
ELS30 / ELC30	45.5	1.79	134.2	5.28	28	1.10
ELS45 / ELC45	51.1	2.01	144.6	5.69	35	1.38
ELS60 / ELC60	57.1	2.25	158.5	6.24	40	1.57

	Accessories optional	Pistol	Angle Head 18V	Angle Head 36V	ELC -W Tools	Part No.
	Battery Type					
1	Li-ion Battery 18V 2.1 Ah – 0.35 kg (0.77lb)	x	x		x	615 812 099 0
2	Li-ion Battery 18V 4.2 Ah – 0.60 kg (1.32lb)	x	x		x	615 812 100 0
3	Li-ion Battery 36V 2.1 Ah – 0.60 kg (1.32lb)			x	x	615 811 924 0
	Chargers					
4	Charger Universal 18 / 36V	x	x	x	x	615 813 270 0
•	Power Cord C13-C14 L=0.3m (daisy chain cable)	x	x	x	x	615 813 383 0
	Protective Covers – Tools					
5	For Pistol – Clear	x			x	615 396 870 0
5	For Pistol – Black	x			x	615 211 030 0
5	For Pistol – Blue	x			x	615 211 031 0
5	For Pistol – Red	x			x	615 211 032 0
5	For Pistol – Grey	x			x	615 211 033 0
5	For Body angle head – Black		x	x	x	615 211 004 0
5	For Body angle head – Blue		x	x	x	615 211 025 0
5	For Body angle head – Red		x	x	x	615 211 026 0
5	For Body angle head – Grey		x	x	x	615 211 027 0
6	For Angle < 15Nm – Black		x		x	615 397 672 0
6	For Angle 30Nm – Black			x	x	615 573 214 0
6	For Angle 45Nm – Black			x	x	615 573 215 0
6	For Angle 60Nm – Black			x	x	615 211 005 0
	Protective Covers – Battery					
7	For Battery 18V 2.1Ah – Clear	x	x		x	615 396 871 0
7	For Battery 18V 2.1Ah – Black	x	x		x	615 211 041 0
7	For Battery 18V 2.1Ah – Blue	x	x		x	615 211 042 0
7	For Battery 18V 2.1Ah – Red	x	x		x	615 211 043 0
7	For Battery 18V 2.1Ah – Grey	x	x		x	615 211 044 0
7	For Battery 18V 4.2Ah / 36V 2.1Ah – Clear	x	x	x	x	615 396 872 0
7	For Battery 18V 4.2Ah / 36V 2.1Ah – Black	x	x	x	x	615 211 046 0
7	For Battery 18V 4.2Ah / 36V 2.1Ah – Blue	x	x	x	x	615 211 047 0
7	For Battery 18V 4.2Ah / 36V 2.1Ah – Red	x	x	x	x	615 211 048 0
7	For Battery 18V 4.2Ah / 36V 2.1Ah – Grey	x	x	x	x	96 03 14 48
	Miscellaneous					
•	Kit Overmould Presto (x10 pcs)					615 211 057 5
8	Speed Setting Module (ELS/ELC version)	x	x	x	x	615 396 829 0
9	Side handle – Pistol	x			x	615 396 757 0
10	Suspension bail – Pistol	x			x	443 703
11	Kit colour rings – Pistol (7 colors: white, yellow, orange, green, blue, purple, grey)	x			x	615 396 742 5
11	Kit colour rings – Angle tools (8 colors: white, yellow, orange, green, blue, purple, grey, black)		x	x	x	615 970 114 5
12	Kit Nose Crowfoot	x			x	615 810 695 0
13	eDOCK + Battery data interface	x	x	x	x	615 813 400 0
•	E-LIT CONFIG software	x	x	x	x	-
•	CVI CONFIG software				x	-
	Desoutter Tool Holsters					
14	DTH-42	x			x	107892
15	DTH-90	x			x	615 812 119 0
16	DTH TWIN (single) without rail		x	x	x	615 811 411 0
17	DTH TWIN rail kit with 2 Twin holders		x	x	x	615 811 412 5
18	DTH TWIN stand kit with 2 Twin holders		x	x	x	615 811 413 5



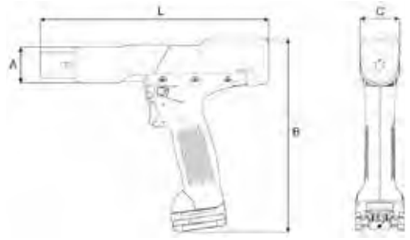
DESOUTTER TORQUE SCREWDRIVER B-FLEX – PISTOL GRIP

- 1.5 to 17 Nm (1.1 to 12.5 ft. lb) - 10 to 1800 rpm
- Battery not included in standard offfering
- Battery 18V, 2.1Ah - Weight: 0.35kg (0.77lb) / 18V, 4.2Ah & 36V, 2.1Ah - Weight: 0.60kg (1.32lb)

Accessories see page 629







Part No.	Model	Pic Ref	Output Drive	Torque Range						Rotational Speed		Weight without Battery		Voltage
				min	rec	max	min	rec	max					
			in	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	18V	36V	kg	lb	V
B-FLEX – Transducerized battery tool														
615 165 899 0	EPB 8-1800-4Q	A	Hex.1/4	1.5	7	8	1.1	5.2	5.9	900	1800	1	2.2	18/36
615 165 903 0	EPB 8-1800-10S	B	Sq.3/8	1.5	7	8	1.1	5.2	5.9	900	1800	1	2.2	18/36
615 165 978 0	EPB14-900-4Q	A	Hex.1/4	4	12	14	2.4	8.8	10.3	540	940	1	2.2	18/36
615 165 977 0	EPB14-900-10S	B	Sq.3/8	4	12	14	2.4	8.8	10.3	540	940	1	2.2	18/36
615 165 905 0	EPB 17-700-4Q	A	Hex.1/4	7	15	17	5.2	11	12.5	400	700	1	2.2	18/36
615 165 901 0	EPB 17-700-10S	B	Sq.3/8	7	15	17	5.2	11	12.5	400	700	1	2.2	18/36
B-FLEX – Advanced														
615 165 972 0	EPBA 8-1800-4Q	A	Hex.1/4	1.5	7	8	1.1	5.2	5.9	900	1800	1	2.2	18/36
615 165 971 0	EPBA 8-1800-10S	B	Sq.3/8	1.5	7	8	1.1	5.2	5.9	900	1800	1	2.2	18/36
615 165 974 0	EPBA14-900-4Q	A	Hex.1/4	4	12	14	2.4	8.8	10.3	540	940	1	2.2	18/36
615 165 973 0	EPBA14-900-10S	B	Sq.3/8	4	12	14	2.4	8.8	10.3	540	940	1	2.2	18/36
615 165 976 0	EPBA 17-700-4Q	A	Hex.1/4	7	15	17	5.2	11	12.5	400	700	1	2.2	18/36
615 165 975 0	EPBA 17-700-10S	B	Sq.3/8	7	15	17	5.2	11	12.5	400	700	1	2.2	18/36

Model	L		A		B		C	
	mm	in	mm	in	mm	in	mm	in
EPB 8-1800-4Q	227	8.94	32	1.26	206	8.11	38	1.5
EPB 8-1800-10S	227	8.94	32	1.26	206	8.11	38	1.5
EPB 14-900-4Q	227	8.94	32	1.26	206	8.11	38	1.5
EPB 14-900-10S	227	8.94	32	1.26	206	8.11	38	1.5
EPB 17-700-4Q	227	8.94	32	1.26	206	8.11	38	1.5
EPB 17-700-10S	227	8.94	32	1.26	206	8.11	38	1.5



DESOUTTER TORQUE SCREWDRIVER B-FLEX – ANGLE HEAD

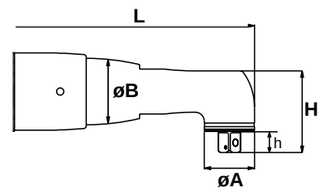
- 5 to 95 Nm (3.7 to 70 ft. lb) - 10 to 900 rpm
- Battery not included in standard offering
- Battery 36V, 2.1Ah - Weight: 0.60 kg

Accessories see page 629



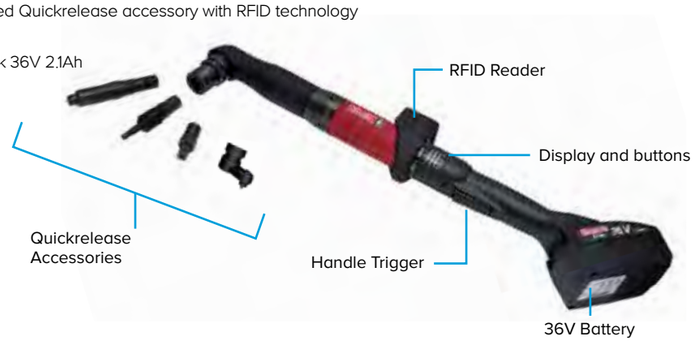
Part No.	Model	Pic Ref	Square Drive	Torque Range						Rotational Speed		Weight without Battery		Voltage
				min	rec	max	min	rec	max					
			in	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	18V	36V	kg	lb	V
B-FLEX – Transducerized battery tool														
615 165 731 0	EAB 15-900	•	1/4	5	13	15	3.7	9.6	11	900	1.55	3.42	36	18/36
615 165 732 0	EAB 26-560	A	3/8	5	24	26	3.7	18	19	560	1.65	3.64	36	18/36
615 165 733 0	EAB 32-410	A	3/8	7	30	32	5.2	22	24	410	1.65	3.64	36	18/36
615 165 734 0	EAB 45-330	B	3/8	9	40	45	6.6	30	33	330	1.76	3.88	36	18/36
615 165 735 0	EAB 50-450	B	3/8	9	45	50	6.6	33	37	450	2.04	4.50	36	18/36
615 165 736 0	EAB 60-370	B	1/2	10	55	60	7.4	41	44	370	2.35	5.18	36	18/36
615 165 737 0	EAB 75-300	C	1/2	12	70	75	8.8	52	55	300	2.94	6.48	36	18/36
615 165 738 0	EAB 95-240	C	1/2	19	90	95	14	66	70	240	2.98	6.57	36	18/36
B-FLEX – Advanced														
615 165 961 0	EABA15-900	•	1/4	5	13	15	3.7	9.6	11	900	1.55	3.42	36	18/36
615 165 962 0	EABA26-560	A	3/8	5	24	26	3.7	18	19	560	1.65	3.64	36	18/36
615 165 963 0	EABA32-410	A	3/8	7	30	32	5.2	22	24	410	1.65	3.64	36	18/36
615 165 964 0	EABA45-330	B	3/8	9	40	45	6.6	30	33	330	1.76	3.88	36	18/36
615 165 965 0	EABA50-450	B	3/8	9	45	50	6.6	33	37	450	2.04	4.50	36	18/36
615 165 966 0	EABA60-370	B	1/2	10	55	60	7.4	41	44	370	2.35	5.18	36	18/36
615 165 967 0	EABA75-300	C	1/2	12	70	75	8.8	52	55	300	2.94	6.48	36	18/36
615 165 968 0	EABA95-240	C	1/2	19	90	95	14	66	70	240	2.98	6.57	36	18/36

Model	L		H		H		Ø A		Ø B	
	mm	in	mm	in	mm	in	mm	in	mm	in
EAB 15-900	470	18.5	10.2	0.40	33.8	1.33	22	0.87	37.0	1.46
EAB 26-560	496	19.5	12.0	0.47	45.7	1.80	28	1.10	37.0	1.46
EAB 32-410	496	19.5	12.0	0.47	45.7	1.80	28	1.10	37.0	1.46
EAB 45-330	506	19.9	12.0	0.47	51.0	2.00	35	1.38	37.0	1.46
EAB 50-450	546	21.5	12.0	0.47	51.0	2.00	35	1.38	37.0	1.46
EAB 60-370	559	22.0	11.9	0.468	57.0	2.20	40	1.57	41.0	1.61
EAB 75-300	582	22.9	17.5	0.69	60.4	2.38	45	1.77	48.5	1.91
EAB 95-240	582	22.9	17.5	0.69	60.4	2.38	45	1.77	48.5	1.91



DESOUTTER TORQUE SCREWDRIVER B-FLEX – QRX

- 5 to 95 Nm (3.7 to 70 ft. lb) - 10 to 560 rpm
- Advanced Multi Applications Tool: Possibility to use the same tool for multiple applications
- Real Time Pset selection for the selected Quickrelease accessory with RFID technology
- *Weight without battery
- All tools are powered by a battery pack 36V 2.1Ah
- Battery pack weight: 560g / 1.23 lb



Part No.	Model	Pic Ref	Torque Range			Rotational Speed	Weight*	
			min	rec	max			
			Nm	Nm	Nm	rpm	kg	lb
615 166 080 0	EABA26-560 QRX		5	24	26	560	2.04	4.50
615 166 081 0	EABA32-410 QRX		7	30	32	410	2.04	4.50
615 166 082 0	EABA45-330 QRX		9	40	45	330	2.21	4.87
615 166 083 0	EABA50-450 QRX		9	45	50	450	2.49	5.49
615 166 084 0	EABA60-370 QRX		10	55	60	370	2.82	6.22
615 166 085 0	EABA75-300 QRX		12	70	75	300	3.42	7.54
615 166 086 0	EABA95-240 QRX		19	90	95	240	3.46	7.63

DESOUTTER TORQUE SCREWDRIVER BLRTA

- 10 to 25 Nm (7.4 to 18.4 ft.lb) - 1520 to 2350 rpm
- Boost Productivity by reducing cycle time, improving joint quality and providing process quality
- Boost Flexibility: Free of cable management, free of reaction arm, reduced total cost of ownership
- Boost the uptime of the operator and tool

Accessories see page 629



Description	Standalone Version
Wifi Communication	N/A
Programming on the tool	x
Pset	6
No. of step in Pset	1
Assembly process	N/A
Results	10 000 with CVI analyzer
Tightening Curve	N/A
Disconnected mode	N/A

Part No.	Model	Pic Ref	Output Drive	Output Retaining	Torque Range				Rotational Speed		Length		Weight		Volt-age
				Type	min	max	min	max							
			in		Nm	Nm	ft.lb	ft.lb	18V	36V	mm	in	kg	lb	V
615 166 023 0	BLRTA025-2350-10S	A	Sq 3/8	Through hole	6	25	4.4	18.4	1520	2350	233	9.17	1.2	2.6	18/36
615 166 024 0	BLRTA025-2350-4Q	B	Hex.1/4	Quick change chuck	6	25	4.4	18.4	1520	2350	233	9.17	1.2	2.6	18/36

Accessories optional		Part No. EAB/QRX	EPB/EPBA	BLRTA
	Battery Type			
1	Li-ion Battery 18V 2.1 Ah - 0.35 kg (0.77lb)		615 812 099 0	615 812 099 0
2	Li-ion Battery 18V 4.2 Ah - 0.60 kg (1.32lb)		615 812 100 0	615 812 100 0
3	Li-ion Battery 36V 2.1 Ah - 0.60 kg (1.32lb)	615 811 924 0	615 811 924 0	615 811 924 0
	Charger			
4	Charger Universal 18 / 36V	615 813 270 0	615 813 270 0	615 813 270 0
•	Power Cord C13-C14 L=0.3m (daisy chain cable)	615 813 383 0	615 813 383 0	615 813 383 0
	Protective Covers – Tools			
5	For Angle head EAB 15	615 211 003 0		
5	For Angle head EAB 26/32	615 573 207 0		
5	For Angle head EAB 45/50	615 573 208 0		
5	For Angle head EAB 60	615 573 209 0		
5	For Angle head EAB 75/95	615 573 210 0		
6	Pistol protective cover Black		615 211 019 0	
	Protective Covers – Battery			
7	For Battery 18V 2.1Ah - Clear		615 396 871 0	615 396 871 0
7	For Battery 18V 2.1Ah - Black		615 211 041 0	615 211 041 0
7	For Battery 18V 2.1Ah - Blue		615 211 042 0	615 211 042 0
7	For Battery 18V 2.1Ah - Red		615 211 043 0	615 211 043 0
7	For Battery 18V 2.1Ah - Grey		615 211 044 0	615 211 044 0
7	For Battery 18V 4.2Ah / 36V 2.1Ah - Clear	615 396 872 0	615 396 872 0	615 396 872 0
7	For Battery 18V 4.2Ah / 36V 2.1Ah - Black	615 211 046 0	615 211 046 0	615 211 046 0
7	For Battery 18V 4.2Ah / 36V 2.1Ah - Blue	615 211 047 0	615 211 047 0	615 211 047 0
7	For Battery 18V 4.2Ah / 36V 2.1Ah - Red	615 211 048 0	615 211 048 0	615 211 048 0
7	For Battery 18V 4.2Ah / 36V 2.1Ah - Grey	615 211 049 0	615 211 049 0	615 211 049 0
	Miscellaneous			
8	Nose crowfoot adapter for EPB		615 565 518 0	
9	E-dock	615 811 976 0	615 811 976 0	615 811 976 0
10	Side handle		615 397 016 0	
	Desoutter Tool holster			
11	DTH TWIN (single) without rail	615 811 411 0		
12	DTH TWIN rail kit with 2 Twin holders	615 811 412 5		
13	DTH TWIN stand kit with 2 Twin holders	615 811 413 5		
14	DTH90		615 812 119 0	615 812 119 0



Torque Nutrunners

DESOUTTER PISTOL GRIP ELECTRIC NUTRUNNERS – CVI3

- 0.5 to 40 Nm (0.11 to 9 ft.lb) - 680 to 2000 rpm
- CVI II Adapter needed

Accessories see page 631



Part No.	Model	Pic Ref	Output Drive	Torque Range						Rotational Speed	Length		Weight	
				min	Rec	max	min	Rec	max					
			in	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	rpm	mm	in	kg	lb
615 166 198 0	ERP5	A	Hex. 1/4 F	0.5	5	5	0.11	1.12	1.12	2000	222	8.7	1.1	2.4
615 166 199 0	ERP20	B	Hex. 1/4 F	3	20	20	0.67	4.5	4.5	1540	232	9.1	1.2	2.6
615 166 200 0	ERP30	B	Sq. 3/8	5	30	30	1.12	6.7	6.7	1070	228	9.0	1.2	2.6
615 165 263 0	ERP40	C	Sq. 3/8	6	40	40	1.35	9	9	680	263	10.4	2.1	4.6
615 166 202 0	ERP5TC	D	Hex. 1/4 F	0.5	5	5	0.11	1.12	1.12	2000	248	9.8	2.5	5.5
615 166 203 0	ERP20TC	D	Hex. 1/4 F	3	20	20	0.67	4.5	4.5	1540	258	10.2	2.6	5.7

DESOUTTER ELECTRIC TRANSDUCERIZED HIGH TORQUE NUTRUNNERS – CVI3

- 75 to 1700 Nm (55 to 1253 ft.lb) - 85 to 822 rpm
- ERS / ERPHT Adaptor necessary







Complete Loop:



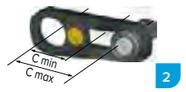
Part No.	Model	Pic Ref	Output Drive	Torque Range				Max Rundown Torque	Speed	Gearbox Diameter		Length		Weight		Spline
				min	max	min	max									
			in	Nm	Nm	ft.lb	ft.lb	Nm	rpm	mm	in	mm	in	kg	lb	
615 165 883 0	ERP250	A	3/4	75	250	55	184	18	822	54	2.13	355	13.9	5.1	11.2	3
615 165 884 0	ERP500	B	3/4	150	500	110	368	37	347	67	2.64	390	15.3	5.8	12.8	4
615 165 885 0	ERP750	C	1	225	750	165	553	56	245	67	2.64	410	16.1	6.2	13.7	5
615 165 886 0	ERP1000	C	1	300	1000	221	737	75	205	67	2.64	420	16.5	6.4	14.1	5
615 165 887 0	ERP1700	•	1	510	1700	376	1253	127	85	84	3.31	455	17.9	8.3	18.3	9



Reaction Bars	Spline	1 Straight	2 S-Type	3 L-Type Aluminium	4 Square	5 Sliding Drive	6 Sliding Drive Extended C-C	7 Suspension Bail	8 Side Handle
ERP250	3	615 812 097 5	615 812 068 5	615 812 072 5	615 812 057 5	615 812 113 5	-	615 812 123 0	615 576 085 0
ERP500	4	615 812 054 5	615 812 069 5	615 812 073 5	615 812 058 5	615 812 062 5	615 812 063 5	615 812 123 0	615 576 085 0
ERP750 / ERP1000	5	615 812 055 5	615 812 070 5	-	615 812 059 5	615 812 064 5	615 812 065 5	615 812 123 0	615 576 085 0
ERP1700	9	615 812 056 5	615 812 071 5	-	615 812 060 5	615 812 066 5	615 812 067 5	615 812 123 0	615 576 085 0

	Accessories optional		Part No.
	Nutrunner Cable		
1	Tool cable 3m (9.8ft)		615 917 461 0
	Tool cable 5m (16ft)		615 917 462 0
	Tool cable 10m (32.8ft)		615 917 464 0
	Tool cable 15m (49.2ft)		615 917 465 0
	Sliding Drive C-C		
	C min mm (in)	**C max mm (in)**	
2	70 (2.76)	120 (4.72)	615 812 113 5
	76 (3)	126 (4.96)	615 812 062 5
	82 (3.23)	218 (8.58)	615 812 063 5
	80 (3.15)	125 (4.92)	615 812 064 5
	82 (3.23)	218 (8.58)	615 812 065 5
	80 (3.15)	130 (5.11)	615 812 066 5
	80 (3.15)	280 (11.0)	615 812 067 5
	Miscellaneous		
3	ERS-ERPHT Adaptor		615 936 537 0





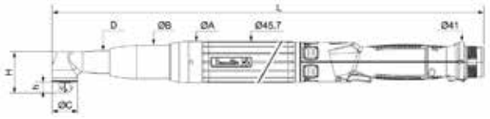


DESOUTTER ANGLE HEAD ELECTRIC NUTRUNNERS – CVI3

- 3 to 105 Nm (2.2 to 77.4 ft.lb) - 500 to 1300 rpm

Accessories see page 631





Model	h		H		Ø A		Ø B		Ø C		Ø D	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
EAD20-1300	12.0	0.47	45.5	1.79	46	1.81	37	1.46	28	1.10	25	0.98
EAD32-900	12.0	0.47	45.5	1.79	46	1.81	37	1.46	28	1.10	25	0.98
EAD50-900	12.0	0.47	51.1	2.01	46	1.81	37	1.46	35	1.38	28	1.10
EAD60-625	12.0	0.47	56.7	2.23	58	2.28	41	1.61	40	1.57	32	1.26
EAD60-625 - 1/2"	12.0	0.47	52.0	2.43	58	2.28	41	1.61	40	1.57	32	1.26
EAD70-800	12.0	0.47	56.7	2.23	58	2.28	43	1.69	40	1.57	32	1.26
EAD70-800 - 1/2"	17.0	0.67	62.0	2.43	58	2.28	43	1.69	40	1.57	32	1.26
EAD80-650	17.5	0.69	60.4	2.38	58	2.28	48	1.89	45	1.77	40	1.57
EAD105-500	17.5	0.69	60.4	2.38	58	2.28	48	1.89	45	1.77	40	1.57

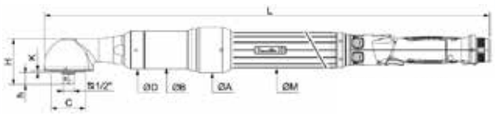
Part No.	Model	Pic Ref	Square Drive	Torque Range						Rotational Speed	Length		Weight	
				min	Rec	max	min	Rec	max					
			in	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	rpm	mm	in	kg	lb
615 165 606 0	EAD20-1300		3/8	3	18	20	2.2	13.3	14.8	1300	481	19.2	1.6	3.53
615 165 607 0	EAD32-900		3/8	5	30	32	3.7	22.1	23.6	900	481	19.2	1.6	3.53
615 165 609 0	EAD50-900		3/8	8	45	50	5.9	33.2	40.6	900	531	20.9	2	4.41
615 166 079 0	EAD60-625		3/8	10	55	60	7.4	41	44	625	504	19.8	2.1	4.5
615 166 188 0	EAD60-625 - 1/2"		1/2	10	55	60	7.4	41	44	625	504	19.8	2.1	4.5
615 165 611 0	EAD70-800		3/8	12	65	70	8.9	47.9	51.6	800	544	21.4	2.3	5.07
615 165 882 0	EAD70-800		1/2	12	65	70	8.9	47.9	51.6	800	544	21.4	2.3	5.07
615 165 612 0	EAD80-650		1/2	15	75	80	11.1	55.3	59	650	567	22.3	2.9	6.39
615 165 613 0	EAD105-500		1/2	20	90	105	14.8	66.4	77.4	500	567	22.3	2.9	6.39

DESOUTTER ANGLE HEAD ELECTRIC NUTRUNNERS – CVI3

- 35 to 660 Nm (26 to 487 ft.lb) - 160 to 430 rpm

Accessories see page 631





Model	h		H		Ø A		Ø B		Ø C		Ø D	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
EAD160-430	17.1	0.67	65	2.56	66	2.6	55	2.17	52	2.05	50	1.16
EAD200-370	23	0.91	85	3.35	66	2.6	55	2.17	52	2.05	62	2.44
EAD280-260	23	0.91	85	3.35	66	2.6	55	2.17	52	2.05	62	2.44
EAD280-370	23	0.91	85	3.35	76	2.99	55	2.17	66	2.60	62	2.44
EAD440-250	24	0.94	91	3.58	76	2.99	67	2.64	66	2.60	75	2.95
EAD660-160	33.1	1.3	110	4.33	76	2.99	67	2.64	66	2.60	106	4.17

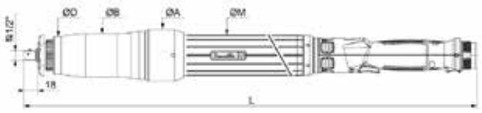
Part No.	Model	Pic Ref	Square Drive	Torque Range						Rotational Speed	Length		Weight	
				min	Rec	max	min	Rec	max					
			in	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	rpm	mm	in	kg	lb
615 165 681 0	EAD160-430		1/2	35	150	160	26	111	118	430	650	25.6	4.3	9.5
615 165 682 0	EAD200-370		3/4	60	170	200	44	125	148	370	673	26.5	5.1	11.2
615 165 683 0	EAD280-260		3/4	60	250	280	44	184	207	260	673	26.5	5.1	11.2
615 165 684 0	EAD280-370		3/4	60	250	280	44	184	207	370	681	26.8	6.1	13.5
615 165 685 0	EAD440-250		3/4	100	400	440	74	295	325	250	735	28.9	8.4	18.5
615 165 686 0	EAD660-160		1	100	600	660	74	443	487	160	774	30.4	11.0	24.3

DESOUTTER IN-LINE ELECTRIC NUTRUNNERS – CVI3

- 3 to 75 Nm (2.2 to 57.5 ft.lb) - 800 to 1200 rpm

Accessories see page 631





Model	Ø A		Ø B		Ø C	
	mm	in	mm	in	mm	in
EID20-1200-4Q	62	2.44	37	1.46	60	2.36
EID25-1200	62	2.44	37	1.46	60	2.36
EID32-900	62	2.44	37	1.46	60	2.36
EID44-1200	62	2.44	48	1.89	54	2.13
EID65-900	58	2.28	48	1.89	54	2.13
EID75-800	58	2.28	48	1.89	54	2.13

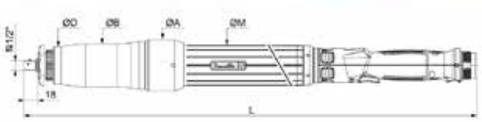
Part No.	Model	Pic Ref	Output Drive	Torque Range						Rotational Speed	Length		Weight	
				min	Rec	max	min	Rec	max					
			in	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	rpm	mm	in	kg	lb
615 165 992 0	EID20-1200-4Q*		Hex. 1/4 F	3	18	21	2.2	13.3	15.5	1200	430	16.9	1.45	3.20
615 165 614 0	EID25-1200*		Sq. 3/8	3	20	25	2.2	14.8	18.4	1200	430	16.9	1.45	3.20
615 165 615 0	EID32-900*		Sq. 3/8	5	30	32	3.7	22.1	25.1	900	430	16.9	1.45	3.20
615 165 616 0	EID44-1200*		Sq. 3/8	7	40	44	5.2	29.5	33.2	1200	489	19.3	2	4.41
615 165 617 0	EID65-900		Sq. 1/2	10	60	65	7.4	44.3	47.9	900	489	19.3	2	4.41
615 165 618 0	EID75-800		Sq. 1/2	20	70	75	14.8	51.6	57.5	800	489	19.3	2	4.41

DESOUTTER IN-LINE ELECTRIC NUTRUNNERS – CVI3

- 20 to 270 Nm (15 to 199 ft.lb) - 410 to 670 rpm

Accessories see page 631





Model	Ø A		Ø B		Ø C		Ø D	
	mm	in	mm	in	mm	in	mm	in
EID120-660	66	2.60	55	2.17	52	2.05	42.0	1.65
EID170-670	72	2.83	55	2.17	66	2.60	42.0	1.65
EID270-410	76	2.99	67	2.64	66	2.60	53.5	2.11

Part No.	Model	Pic Ref	Square Drive	Torque Range						Rotational Speed	Length		Weight	
				min	Rec	max	min	Rec	max					
			in	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	rpm	mm	in	kg	lb
615 165 677 0	EID120-660		1/2	20	110	120	15	81	89	660	583	22.9	3.3	7.3
615 165 678 0	EID170-670		1/2	40	150	170	30	111	125	670	591	23.3	4.6	10.1
615 165 679 0	EID270-410		3/4	60	250	270	44	184	199	410	625	24.6	6.1	13.5



Offset Closed





Offset Open



Double start



Flush Socket tools

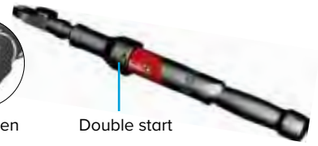


In line Closed





In line Open



Double start



Hold and Drive tools

DESOUTTER NUTRUNNER EPBHT HIGH TORQUE

- 150 to 2000 Nm (36.9-995.7 ft. lb) - 3.2 to 78 rpm
- Battery not included in standard offfering



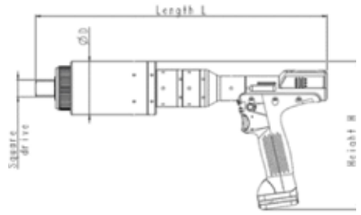












Model	Ø D		Length (L)		Height (H)	
	mm	in	mm	in	mm	in
A	48	1.9	290	11.4	206	8.1
B	48	1.9	311	12.2	206	8.1
C	48	1.9	311	12.2	206	8.1
D	63.5	2.5	426	16.8	211.5	8.3
E	83.5	3.3	460	18.1	211.5	8.3
F	80	3.1	433	17	219.5	8.6

Part No.	Model	Pic Ref	Square Drive	Torque Range				Rotational Speed		Weight without Battery		Voltage
				min	max	min	max					
			in	Nm	Nm	ft.lb	ft.lb	18V	36V	kg	lb	V
Pistol Version 150 Nm												
STM3996000	EPBHT 150-78	A	1/2	50	150	36.9	110.6	78	1.8	3.9	36	18/36
STM4001000	EPBAHT 150-78	A	1/2	50	150	36.9	110.6	78	1.8	3.9	36	18/36
STM4006000	EPBCHT 150-78	A	1/2	50	150	36.9	110.6	78	1.8	3.9	36	18/36
Pistol Version 300 Nm												
STM3997000	EPBHT 300-20	B	3/4	125	300	92.2	221.2	20	2	4.4	36	18/36
STM4002000	EPBAHT 300-20	B	3/4	125	300	92.2	221.2	20	2	4.4	36	18/36
STM4007000	EPBCHT 300-20	B	3/4	125	300	92.2	221.2	20	2	4.4	36	18/36
Pistol Version 500 Nm												
STM3998000	EPBHT 500-10	C	3/4	300	500	239.7	368.8	10	2	4.4	36	18/36
STM4003000	EPBAHT 500-10	C	3/4	300	500	239.7	368.8	10	2	4.4	36	18/36
STM4008000	EPBCHT 500-10	C	3/4	300	500	239.7	368.8	10	2	4.4	36	18/36
Pistol Version 1000 Nm												
STM4146000	EPBHT 1000-6	D	1	500	1000	405.6	737.5	6	4.3	9.4	36	18/36
STM4149000	EPBAHT 1000-6	D	1	500	1000	405.6	737.5	6	4.3	9.4	36	18/36
STM4033000	EPBCHT 1000-6	D	1	500	1000	405.6	737.5	6	4.3	9.4	36	18/36
Pistol Version 1500 Nm												
STM4147000	EPBHT 1500-4	E	1	950	1500	700.7	1106.3	4	6.6	14.5	36	18/36
STM4150000	EPBAHT 1500-4	E	1	950	1500	700.7	1106.3	4	6.6	14.5	36	18/36
STM4034000	EPBCHT 1500-4	E	1	950	1500	700.7	1106.3	4	6.6	14.5	36	18/36
Pistol Version 2000 Nm												
STM4148000	EPBHT 2000-3	F	1	1350	2000	995.7	1475.1	3.2	6.1	13.4	36	18/36
STM4151000	EPBAHT 2000-3	F	1	1350	2000	995.7	1475.1	3.2	6.1	13.4	36	18/36
STM4035000	EPBCHT 2000-3	F	1	1350	2000	995.7	1475.1	3.2	6.1	13.4	36	18/36

DESOUTTER NUTRUNNER EABX HIGH TORQUE

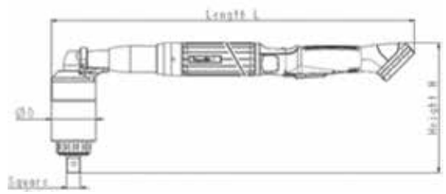
- 250 to 1500 Nm (184.4 to 1106.3 ft. lb) - 4 to 10 rpm
- Battery not included in standard offfering

Please contact us for Accessories.









Model	Ø D		Length (L)		Height (H)	
	mm	in	mm	in	mm	in
A	48	1.9	482	19	137	5.4
B	63.5	2.5	512	20.1	183	7.2
C	83.5	3.3	529	20.8	298	11.7

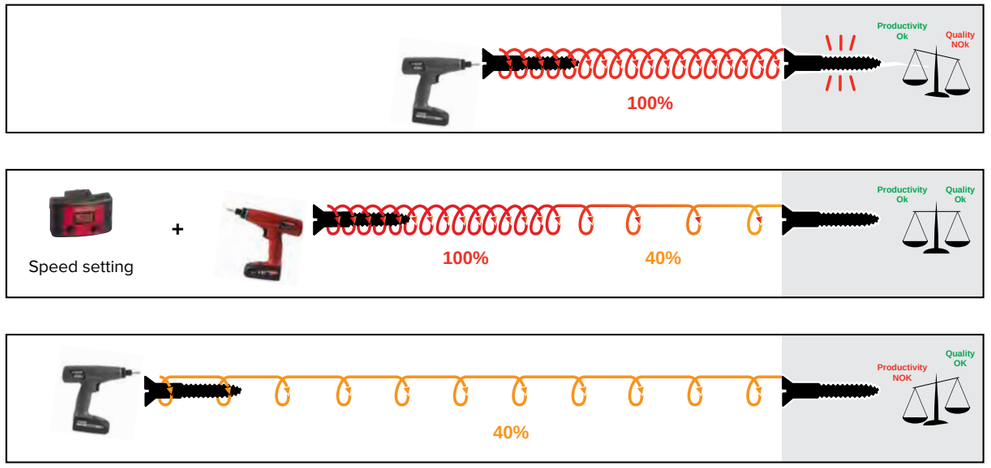
Part No.	Model	Pic Ref	Square Drive	Torque Range				Rotational Speed		Weight without Battery		Voltage
				min	max	min	max					
			in	Nm	Nm	ft.lb	ft.lb	18V	36V	kg	lb	V
Angle Version 150 Nm												
STM3999000	EABHT 500-10	A	3/4	250	500	184.4	368.8	10	2.4	5.3	36	18/36
STM4004000	EABAHT 500-10	A	3/4	250	500	184.4	368.8	10	2.4	5.3	36	18/36
STM4009000	EABCHT 500-10	A	3/4	250	500	184.4	368.8	10	2.4	5.3	36	18/36
Angle Version 300 Nm												
STM4000000	EABHT 1000-6	B	3/4	500	1050	368.8	774.4	4	3.6	7.9	36	18/36
STM4005000	EABAHT 1000-6	B	3/4	500	1050	368.8	774.4	4	3.6	7.9	36	18/36
STM4010000	EABCHT 1000-6	B	3/4	500	1050	368.8	774.4	4	3.6	7.9	36	18/36
Angle Version 500 Nm												
STM4152000	EABHT 1500-4	C	1	550	1500	405.6	1106.3	5	6.7	14.7	36	18/36
STM4153000	EABAHT 1500-4	C	1	550	1500	405.6	1106.3	5	6.7	14.7	36	18/36
STM4047000	EABCHT 1500-4	C	1	550	1500	405.6	1106.3	5	6.7	14.7	36	18/36

Desoutter Tool Management

E-LIT Tool management device to optimize your assembly process

- Two speed setting easily controlled by external module
- Guarantee quality and keep high productivity
- Decrease final speed to ensure tightening quality
- Avoid quality defects in your final product
- Decrease starting speed to facilitate bolt engagement





Wireless clutch tool solution

- TU E-LIT WIFI proposes a better production follow-up, a better error proofing and a better total cost of ownership of your production line by integrating and controlling a clutch tool on the CONNECT platform.
- BETTER CONTROL OF PRODUCTION LINE by enable or disable clutch tool
- PRODUCTION QUALITY IMPROVEMENT with traceability on standard joint
- EASY INTEGRATION thanks to CONNECT platform connectivity
- Features:
  - Enable/disable tool according to production process: Batch count, Reverse mode or Open protocol, I/Os & Field bus
  - Setting adjustments to fit with application requirements: Up to 3 speeds, 4 Pset & 4 Assembly Process, Batch count
  - OK/NOK reports and prevent from FALSE OK: OK/NOK, Re-hit, Cross thread prevention
  - Traceability information for a better follow-up and analysis: Results linked with a VIN NUMBER, lock tool when memory is full (option), CVI MONITOR, ANALYZER & NET WEB compatible





Desoutter Torque Controllers

Please visit our website for a Product PDF with detailed Features

DESOUTTER TORQUE CONTROLLERS



Part No.	Model	Pic Ref	Consumption (Current)		Main Supply	Width		Height		Depth		Weight	
			115V	220V	50/60Hz	mm	in	mm	in	mm	in	kg	lb
615 932 691 0	CVI3 Vision	A	4A	2A	Single-phase	175	6.9	361	14.2	310	12.2	9.3	20.5
615 932 694 0	CVI3 Vision eSTOP	A	4A	2A	Single-phase	175	6.9	361	14.2	310	12.2	9.3	20.5
615 932 697 0	TWINCVI3	B	8A	4A	Single-phase	265	10.4	361	14.2	310	12.2	15	33.1
615 932 698 0	TWINCVI3 eSTOP	B	8A	4A	Single-phase	265	10.4	361	14.2	310	12.2	15	33.1
615 932 690 0	CVI3 Function	C	4A	2A	Single-phase	175	6.9	361	14.2	310	12.2	9.3	20.5
615 932 693 0	CVI3 Function eSTOP	C	4A	2A	Single-phase	175	6.9	361	14.2	310	12.2	9.3	20.5
615 932 695 0	CVI3 Essential	D	4A	2A	Single-phase	175	6.9	361	14.2	310	12.2	9.3	20.5

	Accessories optional	Part No.
	Fieldbus Modules	
1	Profibus module	615 927 595 0
2	ProfiNet module (1 port)	615 927 596 0
3	ProfiNet module (2 ports)	615 927 597 0
3	ProfiNet IRT module (2 ports)	615 927 070 0
4	DeviceNet module	615 927 599 0
4	CC-Link module	615 927 598 0
5	EtherNet IP module	615 927 594 0
6	Modbus TCP module	615 927 615 0
	ePOD	
7	ePOD1	615 936 075 0
7	ePOD2	615 936 076 0
7	ePOD3	615 936 077 0
7	ePOD2C	615 936 311 0
7	ePOD3C	615 936 318 0
7	ePOD4C	615 936 312 0
7	ePOD eCompass	615 936 333 0
7	ePOD Essential	615 936 836 0
	Other Accessories	
8	Table mounting	615 397 399 5
9	Wall mounting CVI3 Function/Essential/Vision	615 397 631 5
10	Wall mounting TWINCVI3	615 811 897 0
11	Cable with 2 M8 male plugs - 0.5m (1.64ft)	615 917 626 0
	Cable with 2 M8 male plugs - 1m (3.28ft)	615 917 633 0
	Cable with 2 M8 male plugs - 2m (6.56ft)	615 917 634 0
12	Cable with 1 M8 male plugs - 5m (16.40ft)	615 917 635 0
	Power Cord	
A	European	615 917 069 0
B	US NEMA 5-15	615 917 060 0
C	US NEMA 5-20	615 917 063 0
D	UK	615 917 070 0
E	Chinese	615 917 061 0



Torque Testing Solutions

ANDILOG CENTORMETER

The Andilog Centormeter range allows you to calibrate and check all of your measuring instruments: torque wrenches, torque screwdriver, screw gun, compression and tension system, force gauges, etc.

The new version of the Centormeter equipment verifies the regulating torque value of screw guns. This includes electric, pneumatic and hydraulic screw guns where rotation speed can be regulated up to 3,000 RPM.

The Centormeter traces the curve, enabling immediate visualization of the increase in the torque.

The range of sensors allows for precise measurements from 0-6Nm up to 0-1,400Nm.

Each base is equipped with a main sensor and can support additional sensors, which will be recognized without the user doing a thing.

System includes:
- A Centormeter with one torque sensor
- Power plug
- A support base with fixing holes
- One square drive on the torque sensor
- Certificate of calibration traceable to COFRAC

Software Options:
- RSiC software compatible: Donwload your data to Microsoft Excel
- Datastick compatible : Save all your data directly on a SD memory card and read your results on a computer.

Features:
- Accuracy: 0,5% FS
- Resolution: 1/10,000 PFS
- Display current value and peak: √
- Units: N.m, kg.cm, lb.in, mN.m, lb.ft
- Sampling Rate: 1 000 Hertz
- Tare: √
- Auto-off: √
- Average and standard Deviation: √
- Low Battery Indicator: √
- RS232 Output: √
- Backlight Display: √
- Rechargeable Battery: √
- Operating Time: 8h
- Power Supply: 110V / 220V



Part No.	Capacity	Accuracy	Resolution	Square
CTRMTR-H3	3Nm	0.015Nm	1.5mNm	3/8" Female
CTRMTR-H6	6Nm	0.03Nm	1.5mNm	3/8" Female
CTRMTR-W15	15Nm	0.075Nm	1.5mNm	3/8" Female
CTRMTR-W60	60Nm	0.3Nm	6mNm	3/8" Female
CTRMTR-W150	150Nm	0.75Nm	15mNm	1/2" Female
CTRMTR-W300	300Nm	1.5Nm	30mNm	1/2" Female
CTRMTR-W650	650Nm	3.25Nm	65mNm	3/4" male
CTRMTR-W1400	1400Nm	7Nm	1.4Nm	1" male

ADDITIONAL TORQUE SENSORS

All ANDILOG additional torque sensors can be used with the same display screen in order to measure different capacities with great precision. Each sensor is provided with a support stand, a SPiP connector to connect to the instrument and its certificate of calibration traceable to COFRAC. Mounted with a SPiP connector, the Centor meter can read and recognize automatically the sensor and load all the parameters.


Vertical


Horizontal

Part No.	Capacity	Accuracy	Resolution	Square	Axis
CMV/TH 3	3Nm	0.015Nm	1.5mNm	3/8" F/M	Vertical
CMV/TH 6	6Nm	0.03Nm	1.5mNm	3/8" F/M	Vertical
CMV/TH 15	15Nm	0.075Nm	1.5mNm	3/8" F/M	Vertical
CMV/TH 60	60Nm	0.3Nm	6mNm	3/8" F/M	Vertical
CMV/TH 150	150Nm	0.75Nm	15mNm	1/2" F/M	Vertical
CMV/TH 300	300Nm	1.5Nm	30mNm	1/2" F/M	Vertical
CMV/TH 650	650Nm	3.25Nm	65mNm	3/4" male	Vertical
CMV/TH 1400	1400Nm	7Nm	1.4Nm	1" male	Vertical
CMH/TH 3	3Nm	0.015Nm	1.5mNm	3/8" F/M	Horizontal
CMH/TH 6	6Nm	0.03Nm	1.5mNm	3/8" F/M	Horizontal
CMH/TH 15	15Nm	0.075Nm	1.5mNm	3/8" F/M	Horizontal
CMH/TH 60	60Nm	0.3Nm	6mNm	3/8" F/M	Horizontal
CMH/TH 150	150Nm	0.75Nm	15mNm	1/2" F/M	Horizontal
CMH/TH 300	300Nm	1.5Nm	30mNm	1/2" F/M	Horizontal
CMH/TH 650	650Nm	3.25Nm	65mNm	3/4" male	Horizontal
CMH/TH 1400	1400Nm	7Nm	1.4Nm	1" male	Horizontal

ADDITIONAL DYNAMIC TORQUE SENSORS

The dynamic torque sensors are used to check torque on assembled parts. It is placed between the screwdriver and the screw and measure directly the torque applied on the screw.



Part No.	Capacity	Accuracy	Resolution	Square
SPiP DT 6	6Nm	0.03Nm	0.6mNm	1/4"
SPiP DT 12	12Nm	0.06Nm	1.2mNm	1/4"
SPiP DT 24	24Nm	0.1Nm	2.4mNm	3/8"
SPiP DT 60	60Nm	0.3Nm	6mNm	3/8"
SPiP DT 150	150Nm	0.75Nm	15mNm	1/2"
SPiP DT 600	600Nm	1.5Nm	60mNm	3/4"

RUN DOWN ADAPTERS

Designed to provide consistent and reliable torque readings for use with power driven torque control tools. Reduces the impact and irregular peaks that cause poor repeatability. Each RDA has an effective Torque Range and will supply repeatable torque data within that range if used correctly. It's mounted in-line between the tool drive and transducer. These run down Adapters are designed to provide consistent and reliable torque readings for use with power driven torque control tools.



Part No.	Accuracy	Resolution	Square
RDA 10i	0.1 - 1Nm	1/4"	63mm
RDA 25i	0.3 - 3Nm	1/4 "	63mm
RDA 50i	0.6 - 6Nm	1/4 "	63mm
RDA 100i	1 - 12Nm	/4 "	63mm
RDA 250i	2.8 - 28Nm	1/4 "	60mm
RDA 50F	6 - 60Nm	3/8"	83mm
RDA 100F	13 - 135Nm	1/2"	83mm
RDA 250F	30 - 300Nm	1/2"	83mm
RDA 500F	65 - 650Nm	3/4"	111mm
RDA 1000F	140 - 1400Nm	1"	182mm

CENTOR FIRST – DIGITAL FORCE GAUGE

The force gauge Centor First is a simple and yet complete digital force gauge which uses efficient technology to simplify force measurements. A big display shows the force measured in tension or compression in the unit selected by the operator: newtons, kilograms or pounds. The bar graph completes the measurement. It can be used on a test stand (manual or motorized) or as a manual force gauge.

The three keys make it very easy to use this force gauge and access the essential functions: measurement of the peak tension or compression value, resetting to zero and changing the measuring units. It is an ideal tool for basic tests during production. Its metal casing, protected by an elastomer hull, gives it exceptional strength.

The internal sensor stands up to an overload of 200% of its maximum capacity. Simple, accurate, robust, supplied with its own carrying case, mains adaptor and certificate of calibration, ready for use, it is the basic force gauge for force measurement.



Specifications:
- Accuracy: 0.25% FS
- Resolution: 1 / 1,000
- Sampling Rate: 1,000Hz
- Auto-off: 15min
- Bargraph: √
- Units: N, lb, kg
- Battery Life: 8 hours

Part No.	Capacity	Model	RS232 Port
CNR-FT-100	100N	Centor First	No
CNR-FT-250	250N	Centor First	No
CNR-FT-500	500N	Centor First	No
CNR-FTXZ-100	100N	Centor First XZ	Yes
CNR-FTXZ-250	250N	Centor First XZ	Yes
CNR-FTXZ-500	500N	Centor First XZ	Yes

CENTOR EASY – GRAPHICAL FORCE GAUGE

The Centor Easy force gauges are designed to meet the production needs of its users. This group offers several features which are indispensable today for quality control, for example ease of reading with its large backlit graphical display, RS232 output, memory of the last 100 values and ability to set thresholds with visual and sound alarms.

A new STATISTICS feature is available on the new Centor Easy models: the average and standard deviation of the current batch are calculated and displayed after each measurement. All the values of the production batch are kept in the memory and can be sent to a computer by RS232. The operator is spared any data entry, knows his results in real time and saves everything at the end of the tests.

The entirely configurable RS232 output sends the data to a PC



Specifications:
- Accuracy: 0,1 % FS
- Resolution: 1 / 10,000
- Sampling Rate: 1,000 Hz
- Auto-off: Adj 5 to 15min
- Overload Protection: 200%
- Calibration Cert incl.: √
- Bargraph: √
- Units: N, lb, kg, g, oz
- Tare Function: √
- Use of a Foot Pedal: √
- Battery Life: 8 hours

Part No.	Capacity	Model	RS232 Port
CNR-EA-10	10N	Centor Easy	Yes
CNR-EA-25	25N	Centor Easy	Yes
CNR-EA-50	50N	Centor Easy	Yes
CNR-EA-100	100N	Centor Easy	Yes
CNR-EA-250	250N	Centor Easy	Yes
CNR-EA-500	500N	Centor Easy	Yes
CNR-EA-1000	1000N	Centor Easy	Yes

CENTOR STAR TOUCH – ADVANCED TOUCH SCREEN FORCE GAUGE

Centor Touch is designed for manufacturing environments, providing performance and easy operations to use and understand with the addition of the new, colored touch screen technology. Icons guide the operator in the selection of the appropriate measurement technique and method for their application. Setup menus, prompts and results are available in multiple languages.

Specifications:
- Tension and Comp.: √
- Accuracy: 0.1 % FS
- Resolution: 1 / 10,000
- Sampling Rate: 1,000Hz
- Auto-off: Adj – 5 to 15min
- Overload Protection: 200%
- Calib. Certificate incl: √
- Bargraph: √
- Units: N, lb, kg, g, oz
- Tare Function: √
- Use of a Foot Pedal: √
- Internal Memory: √
- Statistics on 100 Tests: √
- Backlight Display: √
- Display Curve (force/time): √
- Automatic Calculations: √
- Memory Card Comp.: √
- Simultaneous Reading of two Channels: √
- Recognition of Displacement Sensors: √
- Battery Life: 8 hours



Part No.	Capacity	Model	RS232 Port
CNR-CT-5	5N	Centor Star Touch	Yes
CNR-CT-10	10N	Centor Star Touch	Yes
CNR-CT-25	25N	Centor Star Touch	Yes
CNR-CT-50	50N	Centor Star Touch	Yes
CNR-CT-100	100N	Centor Star Touch	Yes
CNR-CT-250	250N	Centor Star Touch	Yes
CNR-CT-500	500N	Centor Star Touch	Yes
CNR-CT-1000	1000N	Centor Star Touch	Yes

CENTOR DUAL – 2 CHANNEL FORCE GAUGE

Thanks to its ability to read two sensors simultaneously with a 500 Hertz sampling rate per chanel, the Centor Dual is a true test console designed for advanced force testing. It offers all of the functionality of an efficient force gauge and its calculating power enables it to save values from two different sensors simultaneously and perform calculations on each channel.

It also traces an F1/F2 graphs on its display or even a force / displacement graph, as well as read potentiometric rules and incremental encoders.

Specifications:
- Tension / Comp.: √
- Accuracy: 0.1 % FS
- Resolution: 1 / 10,000
- Sampling Rate: 1000 Hz
- Auto-off: Adj - 5 to 15
- Bargraph: min
- Units: √
- Use of a Foot Pedal: N, lb, kg, g, oz
- Internal Memory: √
- Statistics on 100 Tests: √
- Display Curve (force/time):
- Automatic calc.: √
- Memory Card comp.: √



Part No.	Capacity	Model	RS232 Port
CNR-DL-5	5N	Centor Dual	Yes
CNR-DL-10	10N	Centor Dual	Yes
CNR-DL-25	25N	Centor Dual	Yes
CNR-DL-50	50N	Centor Dual	Yes
CNR-DL-100	100N	Centor Dual	Yes
CNR-DL-250	250N	Centor Dual	Yes
CNR-DL-500	500N	Centor Dual	Yes
CNR-DL-1000	1000N	Centor Dual	Yes

STAHLWILLE AUTOMATIC CALIBRATION AND ADJUSTMENT DEVICE 7794-3

Controlled tightening of fasteners is becoming increasingly important and is a must for safety and quality assurance. As clear confirmation of its expertise in the field of controlled tightening, STAHLWILLE is accredited by the DAkkS accreditation authority (Deutsche Akkreditierungsstelle) as an approved calibration laboratory for »torque«.

- Automatically calibrates electronic torque and angle-controlled wrenches made by STAHLWILLE
- From 1 to 400 N·m
- Design patent
- Other patents applied for
- Model is the same as perfectControl No 7794-2, except it is additionally suited to calibrating angle-controlled wrenches. Optimum adaptation to working height with motorised height adjustment
- Calibration up to 1000 N m is possible using the easily attached expansion unit No 7791-1 and set of adapter plates No 7791-4, Code 52110491

Contents:

- 6 calibrating square drive insert tools No 734K (sizes 4, 5, 12, 20, 40, 100)
- 6 square drive adaptors (No 409M, No 7787, No 7788, No 7789, No 7789-4, No 7789-5)
- 1 USB adaptor No 7757-1
- 1 software Torkmaster 7731-1
- 1 jack cable No 7751
- 1 spiral cable No 7752
- 1 spiral cable No 7751-2 with jack plug and self-locking precision plug
- 1 low-temperature cable connector
- 1 hexagon key wrench No 10760CV size 2 mm are included
- Supplied without torque wrench, transducer or notebook



Part No.	Capacity N·m	for Transducer	for torque wrenches with functional length (LF) max. mm	Profile width mm	Dimensions (W x H x L)	Weight (kg)
96521094	1-400	110/240V	815	180	640 x 884-1134 x 1060	230

STAHLWILLE TRANSDUCERS

- For calibration of torque wrenches and torque screwdrivers
- High degree of accuracy thanks to conversion and digitization of readings within the transducer itself
- Not susceptible to lateral forces due to low-profile construction
- Can also be used as part of a calibration system (see p. 241, 245)
- With certificate
- Supplied in sturdy plastic box
- Measuring ranges by deviation of indication



[1] for calibrating torque screwdrivers
[2] for use with mechanical loader No 7792 and 7792-1

Part No.	Model	Display deviation value ± 1% of the reading			Display deviation value ± 0.5% of the reading			Display deviation value ± 0.25% of the reading			Dia (mm)	Drive Size (in)	Weight (g)
		N m	ft lb	in lb	N m	ft lb	in lb	N m	ft lb	in lb			
96521021	7721 [1]	0,2-10	0,15-7,4	1,8-88,5	1-10	0,74-7,4	8,9-88,5	2-10	1,5-7,4	17,7-88,5	120	1/4	1735
96521000	7721-0	0,2-10	0,15-7,4	1,8-88,5	1-10	0,74-7,4	8,9-88,5	2-10	1,5-7,4	17,7-88,5	120	1/4	1735
96521026	7721-1	0,4-20	0,3-15	3,5-177	2-20	1,5-15	18-177	4-20	3-15	35-177	120	1/4	1735
96521022	7722	2-100	1,5-74	18-885	10-100	7-74	89-885	12-100	9-74	106-885	120	3/8	2486
96521023	7723-1	4-200	3-148	35-1770	20-200	15-148	177-1770	40-200	30-148	354-1770	120	1/2	2983
96522023	7723-2	8-400	6-295	71-3540	40-400	30-295	354-3540	80-400	59-295	708-3540	120	3/4	3134
96521028	7723-3	25-1100	18-812	221-9736	110-1100	81-812	974-9736	220-1100	162-812	1947-9736	120	3/4	2998
96521029	7724-1 [2]	150-3000	111-2214	1328-26553	300-3000	221-2214	2655-26553	600-3000	443-2214	5311-26553	195	1 1/2	10500

STAHLWILLE ELECTRONIC TORQUE TESTER FOR TORQUE WRENCHES SENSOTORK® 7707 W

- compact torque tester for easy adaptation by replacement of the transducers
- high degree of accuracy thanks to flat transducer and conversion and digitalisation of readings within the transducer)
- high degree of safety through display showing actual torque read-off where clicking torque wrenches are used
- for clockwise and anticlockwise use
- units of measurement: N·m, ft·lb, in·lb
- the easily interchangeable transducers are attached to the holder by means of a QuickRelease safety lock
- Interchangeable square drive adapters: A set of interchangeable square drive adapters are conveniently stored in the mounting block for a range of different drive sizes.
- low lateral forces thanks to low-profile transducers
- automatic detection of the transducer
- flexible and user friendly because the unit can be used horizontally or vertically and the display unit can be placed in many positions
- additional tripod with 1.5 m cable for mounting the display unit to facilitate visual monitoring when using longer torque wrenches
- especially broad measuring range from approx. 2 % to 100 % of rated value
- the software No 7759-4, including USB hub and jack cable, enables readings to be transferred to the PC for documenting (no separate power supply needed, power comes from PC)
- while individual transducers are being recalibrated, the torque tester itself remains on-site for further use
- wide range of application (-20°C to +60°C)
- complies with DIN 51309: 2005, Class 2 and DKD-R 3-8: 2003
- with certificate

Contents:

- Electronic torque tester for torque wrenches, consisting of:
- transducer (patent)
- holder
- display unit (registered design)
- tripod for display unit (with 1.5 m cable)
- spiral cable
- mains adaptor (110 V–230 V with interchangeable socket adaptors) or direct connection to 12 V in-car supply is possible
- square drive adaptor (No 7707-2W, No 7707-2-1W, No 7707-2-2W, No 7707-3W)
- kit for attaching the unit to a workbench or wall in a horizontal or vertical testing position
- supplied in sturdy plastic box



Part No.	Model	Capacity N m	Capacity ft lb	Capacity in lb	Drive Size	Width (mm)	Base Height (mm)	Total Height (mm)	Depth (mm)	Weight (g)
96521086	7707-1-3W [1]	0.2-10	0.15-7.4	1.8-88.5	1/4	180	79	215	180	6255
96521085	7707-1-2W	0.2-10	0.15-7.4	1.8-88.5	1/4	180	79	215	180	6255
96521080	7707-1W	0.4-20	0.3-15	3.5-177	1/4	180	79	215	180	6255
96521072	7707-2W [2]	2-100	1.5-74	18-885	3/8	180	79	215	180	7025
96521083	7707-2-1W [3]	4-200	3-148	35-1770	1/2	180	79	215	180	7511
96521084	7707-2-2W [4]	8-400	6-295	71-3540	3/4	180	79	215	180	7654
96521082	7707-3W [4]	25-1100	18-812	221-9736	3/4	180	79	215	180	7495

STAHLWILLE TESTER FOR TORQUE WRENCHES AND TORQUE SCREWDRIVERS SMARTCHECK

- compact construction
- for horizontal or vertical mounting
- display, display mount and base body can be rotated through 180°
- three operating modes (track, first peak, peak hold)
- three measuring units (N·m, ft·lb, in·lb)
- the target torque and tolerances can be set individually to evaluate the readings
- operating mode using a mains adapter or battery (4 x AAA or 1 x 9 V block, adapter included)
- with integrated visual and audible overload protection mechanism
- the display and keypad are splash-proof, and the housing is made of impact-resistant plastic
- with certificate
- supplied in sturdy plastic box
- display deviation value ± 1%









Part No.	Model	Capacity N m	Capacity ft lb	Capacity in lb	Drive Size	Width (mm)	Height (mm)	Depth (mm)	Weight (g)
96521201	SmartCheck 10S *	1-10	0.74-7.4	8.9-88.5	1/4	120	124	167	5210
96521202	SmartCheck 10	1-10	0.74-7.4	8.9-88.5	1/4	120	124	167	5210
96521203	SmartCheck 100	10-100	7-74	89-885	3/8	120	124	167	5310
96521204	SmartCheck 400	40-400	30-295	354-3540	3/4	120	124	167	5690
96521205	SmartCheck 800	80-800	59-590	708-7081	3/4	120	124	167	5690

[1] for calibrating torque screwdrivers
[2] with square drive adaptor No 409M (1/4" a x 3/8" D)
[3] with square drive adaptors No 7789-4 (1/4" a x 1/2" D). No 7789-5 (3/8" a x 1/2" D)
[4] with square drive adaptors No 7787 (1/4" a x 3/4" D). No 7788 (3/8" a x 3/4" D). No 7789 (1/2" a x 3/4" D)

DESOUTTER DELTA TORQUE ANALYZERS

DELTA 1D



Torque measurement ideal for torque wrench or pulse tool test together with DRT or DST transducers. Delta 1D doesn't require any programming, it's ready to test the selected tool showing in real time Mins, Max and Average. Complete results and XLS reports are available to be exported from Delta QC Free version software.

DELTA 6D



DELTA 6D reads Angle from DRT transducer, ideal to test advanced electric nutrunner T&A strategies. DELTA 6D introduces Tool and PSet and definition with Route management, Statistic (ISO, CNOMO or NF standards), Curve and serial communication to CVI controller or Barcode.
SPC analysis, curve overlay and off-line programming are available in combination with Delta QC Licensed version

DELTA 7D



DELTA 7D combines all DELTA 6D features with DWTA wrench communication for Residual Torque check available with Torque plus Angle strategy. Thanks to the new joint analysis strategy the Delta 7D in combination with DWTA becomes the perfect measurement instrument to characterise the real joint in the line, a key feature to:

- find real joint yield point
- set the production tightening tool with the correct torque and angle values increasing the quality in the overall production process.

	Main Function		
	DELTA 1D	DELTA 6D	DELTA 7D
TRANSDUCER			
Connection to DRT4, DRT5, DST	•	•	•
Connection to DWT, DWTA			•
Angle Measurement		•	•
ON BOARD FUNCTIONALITY			
Wrench Test	•	•	•
Nutrunner Test	•	•	•
Pulse Tool Test	•	•	•
Tools	1	1000	1000
Pset		1000	1000
Integrated Statistic	Min, Max Avg	Cm, Cmk (ISO, NF and CNOMO standards)	Cm, Cmk (ISO, NF and CNOMO standards) + SPC
Quality Strategy			•
Results	1000	5000	5000
Curve		10	10
CVI Autocalibration		•	•
External Barcode connectivity		•	•

Part No.	Model No	Battery hours	Charger Volts	Depth mm	Depth in.	Width mm	Width in.	Height mm	Height in.	Weight kg	Weight lb
615 935 101 0	Delta 1D	16	110/240 V	45	1,77	95	3,74	192	7,56	0.5	1,10
615 935 102 0	Delta 6D	16	110/240 V	45	1,77	95	3,74	192	7,56	0.5	1,10
615 935 103 0	Delta 7D	16	110/240 V	45	1,77	95	3,74	192	7,56	0.5	1,10

Part No.	Description
615 936 141 0	Rubber Protection
615 917 671 0	CMD & ST 4000 Adapter
615 917 672 0	CMD 5000 Adapter
615 917 670 0	RS232 Adapter

Part No.	Description
615 917 674 0	GSE 2500 Adapter
615 917 675 0	GSE 8500T Adapter
615 917 676 0	GSE 8500T/A Adapter
615 936 140 0	Delta Demo Case (Empty)

Part No.	Description
615 927 651 0	Delta QC Licensed 1 User
615 927 652 0	Delta QC Licensed 5 Users
615 927 653 0	Delta QC Advanced 1 User
615 927 654 0	Delta QC Advanced 5 Users

DESOUTTER ALPHA LOW TORQUE ANALYZER

Dedicated torque analyzers for the setting and static test checks of low torque screwdrivers, either pneumatic or electric.

Specifications:

- Torque Transducer: Embedded
- Torque Accuracy: +/-1 % of readings
- Tools Testing: Torque Wrench, Nutrunner or Pulse Tools
- Statistic: Min. Max, Average, Standard Deviation
- Results Storage: 1000 + 10 curves with DeltaQC Licenced
- Multi-units: N.m, Kg.m, Kg.cm, Oz.in, Lb.in, Lb.ft, N.cm
- Display: Red, Green, Blue blacklight
- Power Supply: Embedded Battery External power supply
- Battery Autonomy: Up to 12 hours
- Languages: French, English, Spanish, Italian, Deutsch, Portuguese
- Software: Free Delta QC Software to export by USB result



Backlight RGB color display with acoustic buzzer



Features:

- Alpha D Series is designed to monitor and collect torque check results from screwdrivers, torque wrenches or click wrenches.
- Ideal to tune the tools thanks to real time statistics on color display and high capacity torque results storage.
- Traceability with included software result acquisition with time stamp, including PDF or XLS reports.
- Three models with embedded transducer to cover torque range from 0,1 to 16 Nm. All models are provided with two included joint simulators to test nutrunner according to different joint stiffness condition.
- All models are supplied with external power supply, suitable hard and soft joint simulators and Delta QC Software

Part No.	Model	P. Charger	Torque Range		Dimensions (mm) Depth		Width		Height		Weight	
		V	Nm	in.lb	mm	in	mm	in	mm	in	kg	lb
615 935 140 0	Alpha D1	110/240V	0.1 - 1	0.88 - 8.85	106	4.17	180	7.09	70	2.76	0.95	2.1
615 935 141 0	Alpha D5	110/240V	0.5 - 5	4.42 - 44.25	106	4.17	180	7.09	70	2.76	0.95	2.1
615 935 142 0	Alpha D16	110/240V	1.6 - 16	14.1 - 141.6	106	4.17	180	7.09	70	2.76	0.95	2.1

DESOUTTER DIGITAL ROTARY TRANSDUCERS & ACCESSORIES – TORQUE AND ANGLE

The DRT5 series associated with a Delta 6D or Delta 7D are including an Angle measurement encoder to allow both Torque AND Angle quality controls (preferred series in case you are using Angle strategies and/or monitoring).

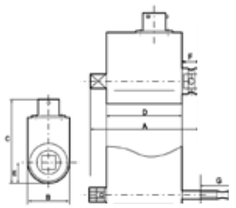
Features:

- Built-in smart chip memory with calibration features : - type of transducer - sensitivity nominal load - serial number.
- Torque range from 0.2 to 5000 Nm (0.15 to 3685 ft.lb).
- Angle counting system 0.35° resolution.
- Strain gauges transducer : - sensitivity 2mV/V - accuracy +/-0.35% of max. torque.

Benefits:

- Automatic recognition thanks to internal memory chip storing main data values eliminating any setting mistakes and time losses.
- High reliability due to immunity from external noise thanks to digital communication.
- Communication to data analyzer not sensitive to the cable length.
- Long life durability thanks to industrial design from transducer to housing.





Output	A mm	A in	B mm	B in	C mm	C in	E mm	E in	H mm	H in	F mm	F in	G mm	G in
Hex 1/4"	116	4.56	31	1.22	71.9	2.83	56	2.2	15.5	0.61	39	1.53	25.5	1
Sq 1/4"	71.5	2.81	31	1.22	71.9	2.83	56	2.2	15.5	0.61	6	0.24		
Sq 3/8"	77	3.03	31	1.22	71.9	2.83	56	2.2	15.5	0.61	8	0.31		
Sq 1/2"	87	3.42	42	1.65	82.9	3.26	58	2.28	21	0.83	12	0.47		
Sq 3/4"	106	4.17	52	2.05	92.9	3.66	66	2.60	26	1.02	21	0.83		
Sq 1	125	4.92	65	2.56	104.9	4.13	73	2.87	32.5	1.28	29	1.14		
Sq 1-1/2"	165	6.5	106	4.17	148.5	5.85	88	3.46	53	2.09	35.2	1.39		

Part No.	Model	Torque Range Nm	Torque Range ft.lb	Output lb
615 165 218 0	DRT 5 H 2	0.2 - 2	0.15 - 1.5	Hex 1/4"
615 165 219 0	DRT 5 H 5	0.5 - 5	0.37 - 3.7	Hex 1/4"
615 165 220 0	DRT 5 H 20	2 - 20	1.47 - 14.7	Hex 1/4"
615 165 221 0	DRT 5 Sq 20	2 - 20	1.47 - 14.7	Sq 1/4"
615 165 222 0	DRT 5 Sq 25	2.5 - 25	1.84 - 18.4	Sq 3/8"
615 165 223 0	DRT 5 Sq 75	7.5 - 75	5.53 - 55.3	Sq 3/8"
615 165 224 0	DRT 5 Sq 180	18 - 180	13.2 - 132	Sq 1/2"
615 165 225 0	DRT 5 Sq 500	50 - 500	36.8 - 368	Sq 3/4"
615 165 226 0	DRT 5 Sq 1400	140 - 1400	103.2 - 1032	Sq 1"
615 165 780 0	DRT 5 Sq 5000	500 - 5000	368.5 - 3685	Sq 1-1/2"

Note: The DRT shall not be used with pulse tools over 50 % of the transducer nominal torque.

DESOUTTER DIGITAL ROTARY TRANSDUCERS – TORQUE

The DRT4 rotary transducer series are designed to measure torque output (Only) of any non-impact assembly tool, directly on your application in dynamic mode.

Features:

- Torque range from 0,2 to 10000 Nm (0.15 to 7375 ft.lb).
- Strain gauges transducer: - sensitivity 2mV/V - accuracy +/-0.35% of max. torque.
- Built-in smart chip memory with calibration features: - type of transducer - sensitivity nominal load - serial number.

Note: The DRT shall not be used with pulse tools over 50 % of the transducer nominal torque



Part No.	Model	Torque Range		Output
	DRT4	Nm	ft.lb	lb
615 165 209 0	DRT 4 H 2	0.2 - 2	0.15 - 1.5	Hex 1/4"
615 165 210 0	DRT 4 H 5	0.5 - 5	0.37 - 3.7	Hex 1/4"
615 165 211 0	DRT 4 H 20	2 - 20	1.47 - 14.7	Hex 1/4"
615 165 212 0	DRT 4 Sq 20	2 - 20	1.47 - 14.7	Sq 1/4"
615 165 213 0	DRT 4 Sq 25	2.5 - 25	1.84 - 18.4	Sq 3/8"
615 165 214 0	DRT 4 Sq 75	7.5 - 75	5.53 - 55.3	Sq 3/8"
615 165 215 0	DRT 4 Sq 180	18 - 180	13.2 - 132	Sq 1/2"
615 165 216 0	DRT 4 Sq 500	50 - 500	36.8 - 368	Sq 3/4"
615 165 217 0	DRT 4 Sq 1400	140 - 1400	103.2 - 1032	Sq 1"
615 165 536 0	DRT 4 Sq 3000	300 - 3000	221.1 - 2211	Sq 1-1/2"
615 165 540 0	DRT 4 Sq 1400	500 - 5000	368.5 - 3685	Sq 1-1/2"
615 935 164 0	DRT4 Sq 10000	1000 - 10000	736.6 - 7375	Sq 1-1/2"

DESOUTTER PST PULSE STATIC TRANSDUCER

Designed for testing hand wrenches, click wrenches, Pneumatic Pulse tools and electric nutrunners, the Pulse Static Transducer is the ideal solution to provide a periodic and static mean of control for audit at the station and will cover all your assembly tools in the production area.

Features:

- Torque accuracy +/-0.35% of torque max.
- Built-in smart chip memory with calibration features: - type of transducer - sensitivity nominal load - serial number
- Lever to clamp the Joint simulator firmly for impulse tools
- Recommended for Pulse tools

(Reminder: the joint simulator is required accessory in the case of a shut-off pulse or nutrunner tool test).





Part No.	Model	Torque Range		Dimensions (mm)								Input	Weight	
		Nm	in.lb	A	B	C	D	E	F	G	H		kg	lb
615 935 220 0	PST 2 Nm - 13	0.2 - 2	0.15-1.5	83	39	80	69	45	64	4x Ø 6.5	/	Sq 1/2"	1.4	3.1
615 935 221 0	PST 5 Nm - 13	0.5 - 5	0.37 - 3.7	83	39	80	69	45	64	4x Ø 6.5	/	Sq 1/2"	1.4	3.1
615 935 222 0	PST 10 Nm - 13	1-10	0.74-7.4	83	39	80	69	45	64	4x Ø 6.5	/	Sq 1/2"	1.4	3.1
615 935 223 0	PST 25 Nm - 36	2.5-25	1.8-18	134	50	106	96	70	89	4x Ø 8.5	123	Hex 36"	4	8.8
615 935 224 0	PST 50 Nm - 36	5-50	3.7-37	134	50	106	96	70	89	4x Ø 8.5	123	Hex 36"	4	8.8
615 935 225 0	PST 100 Nm - 36	10-100	7.4-74	134	50	106	96	70	89	4x Ø 8.5	123	Hex 36"	4	8.8
615 935 226 0	PST 250 Nm - 36	25-250	18.4-184	134	50	106	96	70	89	4x Ø 8.5	123	Hex 36"	4	8.8
615 935 227 0	PST 500 Nm - 50	50 - 500	36.9-369	170	50	148	136	108	125	6x Ø 8.5	180	Hex 50"	10.1	22.3
615 935 228 0	PST 1000 Nm - 50	100-1000	73.8-738	170	50	148	136	108	125	6x Ø 8.5	180	Hex 50"	10.1	22.3
615 935 229 0	PST 2000 Nm - 50	200-2000	147.5-1475	170	50	148	136	108	125	6x Ø 8.5	180	Hex 50"	10.1	22.3

DESOUTTER JOINT SIMULATOR

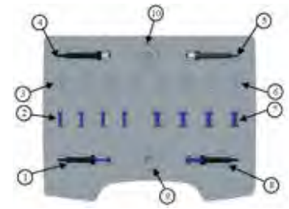
A wide range of mechanical joint simulators are available to reproduce the joint behavior; installing the joint simulator on a transducer allows you to test a tool in the same repeatable working conditions. Each joint simulator reproduces a specific stiffness as described in its torque/angle characteristics. For each capacity, there are two versions: one reproducing a softer joint and one reproducing a harder joint.



Part No.	Model	Color	Dimensions (mm)						
			A	B	C	D	E	F	G
615 165 529 0	DJS for DST and PST 2 Nm SOFT	YW – YW	HEX 1/4"	14	24	Sq. ½"	8	50	71,5
615 165 530 0	DJS for DST and PST 2 Nm HARD	YW – BK	HEX 1/4"	14	24	Sq. ½"	8	50	71,5
615 165 531 0	DJS for DST and PST 5 Nm SOFT	GR – YW	HEX 1/4"	14	24	Sq. ½"	8	50	71,5
615 165 571 0	DJS for DST and PST 5 Nm HARD	GR – BK	HEX 1/4"	14	24	Sq. ½"	8	50	71,5
615 936 377 0	DJS for PST 10 Nm SOFT	RD - YW	HEX 1/4"	14	24	Sq. ½"	8	50	71,5
615 936 378 0	DJS for PST 10 Nm HARD	RD - BK	HEX 1/4"	14	24	Sq. ½"	8	50	71,5
615 936 379 0	DJS for PST 25 Nm SOFT	RD – YW	Sq. 3/8"	11	34	Hex 36"	16,5	70	120,5
615 936 380 0	DJS for PST 25 Nm HARD	RD – BK	Sq. 3/8"	11	34	Hex 36"	16,5	70	120,5
615 936 381 0	DJS for PST 50 Nm SOFT	BL – YW	Sq. 1/2"	15	41	Hex 36"	18	84	133,5
615 936 382 0	DJS for PST 50 Nm HARD	BL – BK	Sq. 1/2"	15	41	Hex 36"	18	84	133,5
615 936 365 0	DJS for PST 100 Nm SOFT	VL – YW	Sq. 1/2"	15	41	Hex 36"	18	84	133,5
615 936 366 0	DJS for PST 100 Nm HARD	VL – BK	Sq. 1/2"	15	41	Hex 36"	18	84	133,5
615 936 384 0	DJS for PST 250 Nm SOFT	GY – YW	Sq. 1/2"	15	41	Hex 36"	18	84	133,5
615 936 385 0	DJS for PST 250 Nm HARD	GY – BK	Sq. 1/2"	15	41	Hex 36"	18	84	133,5
615 936 369 0	DJS for PST 500 Nm SOFT	BK – YW	Sq. 3/4"	22	59	Hex 50"	30	141	224
615 936 370 0	DJS for PST 500 Nm HARD	BK – BK	Sq. 3/4"	22	59	Hex 50"	30	141	224
615 936 386 0	DJS for PST 1000 Nm	no color	Sq. 1"	28	90	Hex 50"	30	179	273
615 936 393 0	DJS for PST 2000 Nm	no color	Sq. 1"	28	90	Hex 50"	30	179	273

DESOUTTER JOINT SIMULATOR KITS

Soft / Hard joints – Min / Max Torques





Contents:

1. DJSxs assembly - min. torque - Soft joint x1
2. Spare compression spacer - min. torque - Soft x4
3. Spare compression spacer - min. torque - Hard x1
4. DJSxs assembly - min. torque - Hard joint x1
5. DJSxs assembly - nominal torque - Hard joint x1
6. Spare compression spacer - nominal torque - Hard joint x1
7. Spare compression spacer - nominal torque - Soft joint x4
8. DJSxs assembly - nominal torque - Soft joint x1
9. DJSxs20 assembly - min./nominal torque - Soft joint - spacer for DSTxs adapter
10. DJSxs20 assembly - min./nominal torque - Hard - spacer for DSTxs adapter

Part No.	Model	Joints covered				Adapter	Screw Size
	DSTxs	Hard / mini	Soft / mini	Hard / max	Soft / max		metric
615 936 445 0	DJSxs 20	2-6 cNm	2-6 cNm	20 cNm	20 cNm	dia 3mm	M2
615 936 446 0	DJSxs 50	5-15 cNm	5-15 cNm	50 cNm	50 cNm	Hex 1/4	M2 & M3
615 936 447 0	DJSxs 80	8-24 cNm	8-24 cNm	80 cNm	80 cNm	Hex 1/4	M3

DESOUTTER ADAPTER

Direct adapter for Non shut-off pulse tools and click wrenches (without DJS).



Part No.	Model
615 936 399 0	HEX 36 M-1/2" F
615 936 431 0	HEX 50 M-1/2" F
615 936 432 0	HEX 50 M-3/4" F
615 936 433 0	HEX 50 M-1" F
615 936 118 0	HEX 1/4" M-1/4" F
615 936 119 0	HEX 1/4" M-3/8" F

DESOUTTER TRANSDUCER CABLES



Part No.	Model	Description
615 917 430 0	2m (78.7") - 10 pins	For DRT / PST / DSTxs / FCT - all Delta Models
615 917 432 0	2m (78.7") spiral - 10 pins	For DRT / PST / DSTxs / FCT - all Delta Models
615 917 433 0	5m (196.8") - 10 pins	For DRT / PST / DSTxs / FCT - all Delta Models

DESOUTTER CLAMP FORCE TRANSDUCERS – FCT

Measure Pulse Tools repeatability in tension

The purpose of the FCT is to measure the repeatability of a pulse tool in achieving a constant tension independently from the friction effects and detect a deviation over time. Delta 6D/7D can display both the load and equivalent torque.

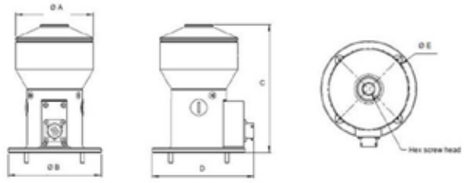
Features:

- Accuracy +/-0,5% of Applied Force Reading Value.
- Built-in Load Cell.
- Used with Delta xD data collectors and cables.
- Battery powered with up to 12 hours autonomy.
- Allows a display of both Clamping Force and Torque (K factor)
- Up to 2000 Hz filter selection
- RS-232 interface to download readings in “real time”
- Large screen and easy to use menus (5 languages)
- Supplied with screw kit and 3/8” socket SW13

Benefits:

- Measures the repeatability of pulse tools to achieve a target clamping force.
- By measuring the clamp force instead of the torque delivered, the adverse effects of adding an in-line torque transducer are eliminated.
- As most design offices specify a clamping force, measuring the actual clamping force allows to eliminate the uncertitude linked to the translation in torque of a clamping value.





Ø A		Ø B		C		D		Ø E	
mm	in	mm	in	mm	in	mm	in	mm	in
96	3.779	115	4.779	157.8	6.21	125.8	4.952	98	3.858

Part No.	Model	Torque Range		Load Range		Overload Force		Overload Torque		Weight	
		cNm	ft.lbs	N	lbf	mm	in	mm	in	kg	lb
615 935 249 0	FCT30	10-30	7.38-22.13	1800-18000	405-4050	23400	5260	39	28.7	2.4	5.3
615 935 250 0	FCT60	20-60	14.75-44.25	2700-27000	607-6070	35100	7890	78	57.5	2.4	5.3

DESOUTTER DIGITAL STATIC TRANSDUCERS – DSTXS

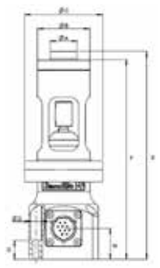
Nano-torques applications (< 1 Nm)

Features:

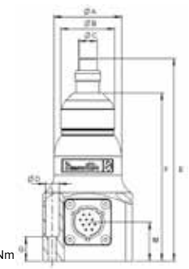
- Accuracy from 10% to 100% of the nominal torque : +/-0,5% FSD (Full Scale Deviation) - Overload at 120% of nominal capacity.
- Stability of Zero offset with temperature: < ±0.1% FSD/°C - Operating temperature: 5 to 40°C.
- Built-in memory with calibration features: Serial Number, Transducer Type, Sensitivity, Nominal Load, Calibration / Maintenance date, Tightening counter, Damage limit.

Benefits:

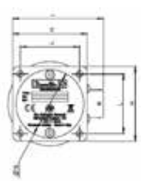
- Automatic recognition thanks to internal memory chip storing main data values eliminating any setting mistakes and time losses.
- High reliability due to immunity from external noise thanks to digital communication.
- Communication to data analyzer not sensitive to the cable length.



DSTxs 20



DSTxs 50-80 cNm





Part No.	Model	Torque Range		Square Drive	Dimensions (mm) Ø A		Ø B		Ø C		L		H		Weight	
		cNm	in.lbs	in	mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb
615 165 752 0	DSTxs 20 cNm	2-20	0.17-1.77	dia 3mm	20	0.787	39	1.535	58	2.283	41	1.614	51.5	2.027	0.56	1.2
615 165 754 0	DSTxs 50 cNm	5-50	0.44-4.42	Hex 1/4	39	1.535	32	1.259	10.5	0.413	41	1.614	51.5	2.027	0.42	0.9
615 165 764 0	DSTxs 80 cNm	8-80	0.70-7.08	Hex 1/4	39	1.535	32	1.259	10.5	0.413	41	1.614	51.5	2.027	0.42	0.9

DESOUTTER COUPLINGS

Accessories for Static transducers & Joint simulators



Part No.	Model
615 397 205 0	3/4” M-1/4” F
615 397 206 0	3/4” M-3/8” F
615 397 207 0	1” M-1/2 ” F
615 397 208 0	1”1/4 M-1/2 ” F
615 397 209 0	1” 1/4 M-3/4”F
615 397 210 0	1/4” F-1/4” F
615 397 211 0	3/8” F-3/8” F
615 936 110 0	1” M-3/4” F

Part No.	Model
615 936 111 0	1/2 ” M -3/8” F
615 936 112 0	1/2 ” F-3/8” F
615 936 113 0	1/2 ” M-1/2 ”F
615 936 114 0	1”1/4 M-3/4” F
615 936 115 0	1/4” F-3/8” F
615 936 116 0	1” 1/4 M-1” F
615 936 117 0	1” F-1” F

Part No.	Model
615 936 118 0	HEX 1/4” M-1/4”F
615 936 119 0	HEX 1/4” M-3/8”F
615 936 126 0	1” F-3/4” F
615 936 130 0	3/4” F-1/2 ” F
615 936 131 0	1” 1/2 F-1” 1/2 F
615 165 573 0	1/2 ” F-1/2 ” F
615 165 576 0	3/4” F-3/4” F

DESOUTTER CALIBRATION BENCH

Embedded transducers :

Assembly tools calibration process requires a flexible and versatile solution, high quality performance even in production lines. Desoutter Tools is proud to present the Delta Cart, an ergonomic and attractive solution to improve quality in assembly processes.

- Delta Cart offers a wide torque range since it can be configured up to 4 static transducers to cover from 0.2 Nm to 1 000 Nm (0.15 to 738 ft.lb) in a very compact dimensions (510mm width), making the Delta Cart the ideal solution for tool testing in assembly production lines.
- PST High accuracy static transducers with locking system specially designed for pulse tool calibration
- ISO RIG (mandatory over 200Nm) System for torque wrench calibration
- Embedded PC equipped with wide 12” color touch screen lets operators to start tool testing in a few seconds and few steps.
- Delta Cart includes all adapters, reaction bars and suitable joint similators. Optional ISO RIG for torque wrench to eliminate operator influence during calibration, reducing efforts for high torque range.



DESOUTTER CART TOOL CALIBRATION

Embedded transducers :

Assembly tools calibration process requires a flexible and versatile solution, high quality performance even in production lines Desoutter Tools is proud to present the Delta Cart, an ergonomic and attractive solution to improve quality in assembly processes.

The Delta Cart is able to follow your tools during the complete life span : by performing capacity test (Cm/Cmk) before tool is introduced into production, or monitoring tool performance during production assembly process by performing Statistic Process Control (SPC) test

Features:

- Configurable torque range from 1 Nm to 2000Nm
- Torque reaction bar and joint simulator included
- External DRT communication for in-line calibration
- Angle Strategy with external DRT5
- CVI2 and CVI3 autocalibration
- Double reading calibration with automatic deviation check

For more information on custom-built calibration benches please contact us.







Electric and Pneumatic Nutrunner



Shut off and non shut off Pulse Tool



Torque wrench



Click wrench

Tensiometers

The familiar T5 Tensiometer is a low cost, highly accurate, precision instrument giving cable tension readings covering a wide range. In use, each T5 instrument is calibrated at the factory and is provided with its own calibration chart for the simple conversion of readings into pounds- tension. The charts shown, indicate the riser which must be used to accommodate the various cable sizes and tensions.

The T5 is a small, lightweight, precision instrument, durably constructed for long accurate service.

T5-2000 SERIES TENSIOMETER

This durable instrument may be used continuously without resetting or checking. Extreme heat or cold does not affect the accuracy of indicator readings. One instrument is usable on many cable sizes with absolute accuracy. The small size of this instrument permits entry through small openings, and permit accurate readings on cables located in confined areas difficult to reach.





Part No.	Range	Cable Selection	Riser
T5-2000-101-00	10 - 100lbs 15 - 150lbs 25 - 150 lbs	1/16, 3/32, 1/8 5/32, 3/16 7/32, 1/4	No. 1 No. 2C No. 3
T5-2002-103-00	30 - 160lbs 30 - 200lbs 30 - 150lbs	1/16, 3/32, 1/8 5/32, 3/16 7/32, 1/4	No. 1 No. 2C No. 3
T5-2002-104-00	30 - 200lbs 30 - 300lbs 30 - 300lbs	1/16, 3/32, 1/8 5/32, 3/16 7/32, 1/4	No. 1 No. 2C No. 3
T5-2002-104A-00	30 - 300lbs 30 - 300lbs 30 - 300lbs	1/16, 3/32 5/32, 3/16, 1/8 7/32, 1/4	No. 1 No. 2C No. 3
T5-2002-105-00	30 - 200lbs 30 - 400lbs 30 - 400lbs	1/16, 3/32, 1/8 5/32, 3/16 7/32, 1/4	No. 1 No. 2C No. 3
T5-2002-301-00	10 - 100lbs 15 - 150lbs 25 - 150lbs	3, 5, 10 (CWT) 15 , 25 (CWT) 35, 45 (CWT	No. 1 No. 2C No. 3

T5-8000 SERIES TENSIOMETER

This durable instrument may be used continuously without resetting or checking. Extreme heat or cold does not affect the accuracy of indicator readings. One instrument is usable on many cable sizes with absolute accuracy. The small size of this instrument permits entry through small openings, and permit accurate readings on cables located in confined areas difficult to reach.



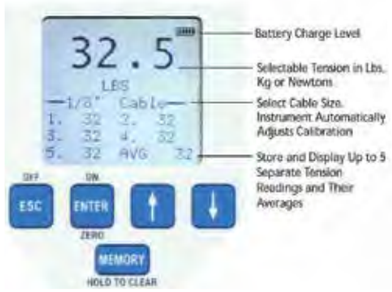


Part No.	Range	Cable Selection	Riser
T5-8002-104B-00	10 - 100lbs 15 - 150lbs 25 - 150 lbs	1/16, 3/32, 1/8 5/32, 3/16 7/32, 1/4	No. 1 No. 2C No. 3
T5-8002-105-00	30 - 200lbs 30 - 400lbs 30 - 400lbs	1/16, 3/32, 1/8 5/32, 3/16 7/32, 1/4	No. 1 No. 2C No. 3A
T5-8002-211-00	35 - 350lbs	1/16, 3/32, 1/8	No. 2
T5-8002-401-00	10 - 100lbs 15 - 150lbs 25 - 150lbs 10 - 100lbs 15 - 150lbs 15 - 150lbs 25 - 150lbs	1/16, 3/32, 1/8 5/32, 3/16 7/32, 1/4 10, 15 (CWT) 15 (CWT) 20, 25 (CWT) 70 (CWT)	No. 1 No. 2C No. 3 No. 1 No. 2C No. 2C No. 3
T5-8003-106-00	40 - 600lbs 40 - 600lbs	3/16, 7/32, 1/4 5/16	No. 2C No. 3A
T5-8003-107-00	100 - 800lbs 100 - 800lbs	3/16, 7/32, 1/4 5/16	No. 2C No. 3A
T5-8003-108-00	200 - 1000lbs 200 - 1000lbs	3/16, 7/32, 1/4 5/16	No. 2C No. 3A

DIGITAL CABLE TENSIOMETER

- Digital cable tensiometer with backlight
- Select lbs, kg or newtons
- Accuracy is ±2% full scale for all menu selectable calibrations
- Up to 10 calibrations can be programmed into the instrument, password protected
- Rechargeable NIMH batteries provide 6 hours of operation





Part No.	Range	Resolution	Cable Selection
ACX-250	20-250lbs	0.5lb	1/16, 3/32, 1/8, 5/32
ACX-500	40-500lbs	1lb	3/32, 1/8, 5/32

SAFETY WIRE DRILL JIG – AERO SAFTBLOK

- Precise cross drilling of bolts for safety wire
- Bolt Sizes 8-32, 10-32, 1/4-20 & 5/16-24



Part No.	Description
HM-MTE-1	Safety Wire Drill Jig – cross thread

SAFETY WIRE DRILL JIG – NUT SAFTBLOK

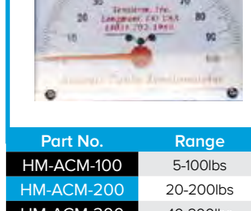
- For clamping hexagonal bolt heads or nuts for cross drilling
- Accepts up to 3/4" diameter nuts or bolt heads
- Recommend use of 1/16" or 5/64" cobalt drill



Part No.	Description
HM-MTE-2	Safety Wire Drill Jig – cross hex

MECHANICAL CABLE TENSIOMETER

- Easy one-handed operation
- "Memory Lock" pointer holds reading till cleared
- Compact design allows use in confined areas
- Supplied in heavy duty padded bag

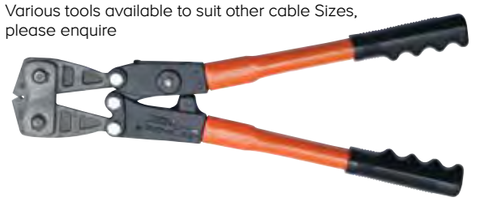




Part No.	Range	Cable Selection
HM-ACM-100	5-100lbs	1/16, 3/32, 1/8, 5/32
HM-ACM-200	20-200lbs	1/16, 3/32, 1/8, 5/32, 3/16
HM-ACM-300	40-300lbs	3/32, 1/8, 3/16, 1/4
HM-ACM-400	40-400lbs	3/32, 1/8, 5/32, 3/16
HM-ACM-600	40-600lbs	1/8, 5/32, 3/16, 1/4

SWAGING TOOL

- Swaging Tool for oval copper sleeves
- Various tools available to suit other cable Sizes, please enquire



Part No.	Description	OAL
51B4887	Swaging Tool for 3/64" cable	475mm

SWAGING TOOL

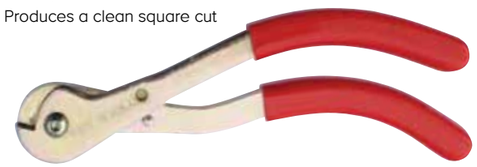
Swages 1/16", 3/32" and 1/8" oval sleeves



Part No.	Description
SF-002	Swaging Tool

CABLE CUTTER

- Cuts up to 3/16" Diameter cable
- Produces a clean square cut



Part No.	Description	OAL
SF316	Cable Cutter	200mm

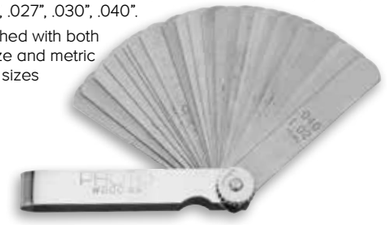


Inspect, Measure & Lighting

Feeler Gauges 652
Measuring 654
Pin Gauges 657
Inspection 658
Magnifying 659
Lighting 660
Hawkeye Precision Borescope 664
Optical Micrometer 665

PROTO® 25 BLADE MASTER FEELER GAUGE SET

- Sizes .0015", .002", .003", .004", .005", .006", .007", .008", .009", .010", .011", .012", .013", .014", .015", .016", .017", .018", .019", .020", .021", .025", .027", .030", .040".
- Blades etched with both decimal size and metric equivalent sizes



Part No.	Description	Length
J000AA	25 Blade Master Feeler Gauge Set	3" Blades

35 BLADE MASTER FEELER GAUGE SET

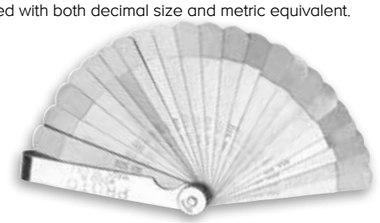
- Sizes: .0015", .002", .003", .004", .005", .006", .007", .008", .009", .010", .011", .012", .013", .014", .015", .016", .017", .018", .019", .020", .021", .022", .023", .024", .025", .026", .027", .028", .029", .030", .031", .032", .033", .034", .035"



Part No.	Description	Length
H75-035	35 Blade Master Feeler Gauge Set	3" Blades

PROTO® 22 BLADE STEP CUT FEELER GAUGE SET

- Go-No-Go 1/2" wide blades in steel holder.
- Each blade has two different thicknesses.
- Sizes: .004/.006", .005/.007", .006/.008", .007/.009", .008/.010, .009/.011", .010/.012", .011/.013", .012/.014", .013/.015", .014/.016", .015/.017", .016/.018", .017/.019", .018/.020", .019/.021", .020/.022", .021/.023", .022/.024", .023/.025", .024/.026", .025/.027" inch
- Blades etched with both decimal size and metric equivalent.



Part No.	Description	Length
J000N	22 Blade Step Cut Feeler Gauge Set	3-5/16" Blades

PROTO® 9 BLADE STANDARD FEELER GAUGE SET

- Contains 9 blades in steel holder.
- Sizes: .003", .004", .005", .006", .008", .010", .012", .015", .018" inch
- Blades etched with both decimal size and metric equivalent.



Part No.	Description	Length
J000A	9 Blade Standard Feeler Gauge	3" Blades

PROTO® 15 BLADE FEELER GAUGE SET

MM

- 1/2" wide blades in steel holder
- Sizes: 0.06, 0.07, 0.08, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.70 mm



Part No.	Description	Length
J00MM15	15 Blade Feeler Gauge Set Metric	3" Blades

PROTO® 25 BLADE FEELER GAUGE SET

MM

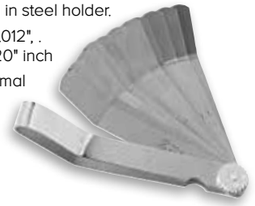
- 1/2" wide blades in steel holder.
- Sizes: 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00 mm



Part No.	Description	Length
J00MM25	25 Blade Feeler Gauge Set Metric	3" Blades

PROTO® 11 BLADE BENT FEELER GAUGE SET

- 1/2" x 4" blades with a 1" bend in steel holder.
- Sizes: .006", .008", .010", .011", .012", .013", .014", .015", .018", .019", .020" inch
- Blades etched with both decimal size and metric equivalent.
- Blades are offset at a right angle to help protect hands from a hot manifold while setting an overhead value.



Part No.	Description	Length
J000M	11 Blade Bent Feeler Gauge Set	0.13

PROTO® 12 BLADE LONG FEELER GAUGE SET

- 1/2" wide blades in steel holder.
- Sizes: .0015", .002", .003", .004", .005", .006", .008", .010", .012", .014", .015", .020".
- Blades etched with both decimal size and metric equivalent.



Part No.	Description	Length
J000SL	12 Blade Long Feeler Gauge Set	12" Blades

PROTO® 25 BLADE LONG FEELER GAUGE SET

- 1/2" wide blades in steel holder
- Sizes: .0015", .002", .003", .004", .005", .006", .007", .008", .009", .010", .011", .012", .013", .014", .015", .016", .017", .018", .019", .020", .021", .025", .027", .030", .040" inch
- Blades etched with both decimal size and metric equivalent



Part No.	Description	Length
J000TL	25 Blade Long Feeler Gauge Set	12" Blades

PROTO® 6 BLADE NON-MAGNETIC FEELER GAUGE SET

- Contains non-magnetic brass feeler blades for checking the air gap in electronic ignition systems for all weather conditions
- 1/2" x 3" blades in steel holder
- Sizes: .006", .008", .010", .012", .014", .016"
- Blades etched with both decimal size and metric equivalent



Part No.	Description	Weight (lbs)
J000BR	6 Blade Non-Magnetic Feeler Gauge	0.08

PROTO® SHORT BLADE FEELER GAUGES



Part No.	Blade Thickness (in)	Weight (lbs)
J0015	0.0015	0.01
J002	0.002	0.01
J003	0.003	0.01
J004	0.004	0.04
J005	0.005	0.01
J006	0.006	0.01
J007	0.007	0.01
J008	0.008	0.02
J009	0.009	0.01
J010	0.010	0.02

PROTO® SHORT BLADE HOLDER

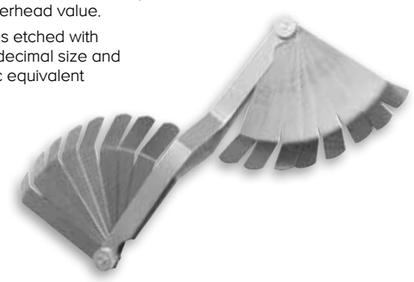
Large enough to accommodate all 26 short blades.



Part No.	Description	Weight (lbs)
J000C	Short Blade Holder - empty	0.05

PROTO® 16 BLADE OVERHEAD VALVE FEELER GAUGE SET

- 1/2" wide bent gauges for setting overhead valves.
- Sizes: .009", .010", .011", .014", .015", .016", .017", .018", .019", .020", .021", .023", .024" .025" .026", .027".
- Blades are bent at a 45° angle to help protect hands from a hot manifold while setting an overhead value.
- Blades etched with both decimal size and metric equivalent



Part No.	Description	Weight (lbs)
J000R	16 Blade Overhead Valve Gauge Set	0.25

PROTO® LONG BLADE FEELER GAUGES



Part No.	Blade Thickness (in)	Weight (lbs)
J0015L	0.0015	0.01
J002L	0.002	0.01
J003L	0.003	0.03
J004L	0.004	0.01
J005L	0.005	0.01
J006L	0.006	0.02
J008L	0.008	0.02
J010L	0.010	0.02
J015L	0.015	0.03

PROTO® 10 BLADE IGNITION FEELER GAUGE SET

- 1/4" x 1-3/4" blades in steel holder.
- Sizes: .013", .015", .017", .018", .020", .025", .030", .032", .035" .040".
- Blades etched with both decimal size and metric equivalent.



Part No.	Description	Weight (lbs)
J000D	10 Blade Ignition Feeler Gauge Set	0.06

PROTO® SPARK PLUG GAP GAUGE SET

- Spark plug electrode bender and eight bent wire gauges in sizes .020", .022", .025", .027", .028", .030", .035" .040".
- Gauges marked with both decimal size and metric equivalent.



Part No.	Description	Weight (lbs)
J000K	Spark Plug Gap Gauge Set	0.07

STAHLWILLE SCREW PITCH GAUGE

MM

0.25 to 6 mm and 4 to 62 t.p.i. (metric/Whitworth threads)



Part No.	Description	Weight (g)
77270003	Screw Pitch Gauge	70

TAPE MEASURE – METRIC/IMPERIAL



- Premium rubber grip
- Double sided blade printing
- High impact resistant ABS casing with non-slip grip
- Reinforced 4 rivet dual-hook
- 25mm wide blade for super standout
- Superior internal mechanism for smooth operation
- Layered nylon blade for maximum durability

Part No.	Description	Length
TMX 8025I	Ultimax Tape Met/Imp	8m / 26ft
589i	Sterling Tape Met/Imp	5m / 16ft

TYLON TAPE – 3M



- Blade widths: 13mm
- Corrosion resistant long life nylon coated blade
- Compact and ergonomic bi material case for comfort and ease of use
- Positive blade lock for accurate measurements
- Belt Clip for ease of storage
- 3-rivet tru-zero hook, reduces risk of breakage

Part No.	Description	Length
30-686	Tylon Short Tape	3m / 10 in

STANLEY TYLON TAPE – 8M/26'



- Blade widths: 25mm
- Tough rubber / plastic case
- Tru-Zero™ hook for accurate inside and outside measure-ments
- Tylon™ coated blade

Part No.	Description	Length
30-394	Tylon Short Tape	8m / 26 in

CLOSED REEL TAPE MEASURE – 30M

Impact resistant, rubber grip, steel tape measure with 10mm abrasion resistant blade.



Part No.	Description	Length
TLR 3095	Closed Reel Tape	30m

CLOSED STEEL REEL TAPE MEASURE – 30M

Blade width : 9,5mm
Barbed folding hook, class II accuracy, easy storage and easy to read the graduations, folding crank, hook store conveniently in case, new yellow ABS case, protected blade from corrosion, steel blade with coating, yellow tape colour 1mm graduation



Part No.	Description	Length
0-34-107	Closed Steel Reel Tape	30m / 100ft

STEEL RULES METRIC/IMPERIAL

- Hardened stainless steel rules with etched markings
- Graduations 32nds, 64ths, 10ths and 100ths



Part No.	Description		Length
1521	Steel Rule	Metric/Imperial	150mm
3021	Steel Rule	Metric/Imperial	300mm
4521	Steel Rule	Metric/Imperial	450mm
6021	Steel Rule	Metric/Imperial	600mm
10021	Steel Rule	Metric/Imperial	1000mm
15021	Steel Rule	Metric/Imperial	1500mm
20021	Steel Rule	Metric/Imperial	2000mm

6 INCH RIGID SCALE RULEL

Graduations in 50ths, 100ths, 32nds & 64th (16R)



Part No.	Description	Size
H75-006	Rigid Scale Rule	6 x 3/4"

MACHINIST SCALES EZ READ

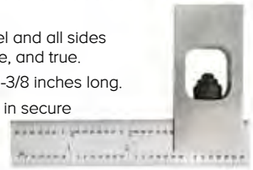
10ths, 100ths graduations one side and 32nds, 64ths the other



Part No.	Description	Length
WB06	White on Black Machinist Scales 5R	6"
WB12	White on Black Machinist Scales 5R	12"
WB18	White on Black Machinist Scales 5R	18"
WB24	White on Black Machinist Scales 5R	24"

MINIATURE DOUBLE SQUARE 4 INCH

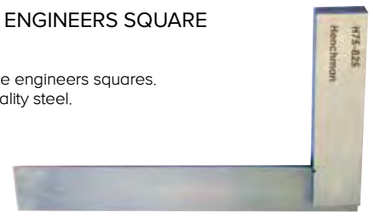
- Ideal for high precision miniature machine tool set-up and accurate layout work.
- Graduated in 32nds and 64ths on one side and 8ths and 16ths on the other.
- Head block made of tool steel and all sides are accurately ground, square, and true.
- 1/2 inch thick x 1 inch wide x 2-3/8 inches long.
- Thumb nut holds 4 inch scale in secure position end-to-end.



Part No.	Description	Size
H75-920	Miniature Double Square	100mm / 4"

HENCHMAN ENGINEERS SQUARE

Precision A grade engineers squares.
Made of high quality steel.



Part No.	Description	Size
H75-805	Engineers Square	50mm / 2"
H75-810	Engineers Square	100mm / 4"
H75-815	Engineers Square	150mm / 6"
H75-820	Engineers Square	200mm / 8"
H75-825	Engineers Square	250mm / 10"

MINIATURE METRIC SQUARE

- Simple and light "L" squares
- Manufactured from quality stainless steel
- Graduation front: 1mm
- Graduation rear upper: 1mm
- Graduation rear lower: 10mm
- Width: 10mm
- Thickness: 1.2mm



Part No.	Description	Size
H75-920	Miniature Metric Square	100 x 50mm

COMBINATION SQUARES

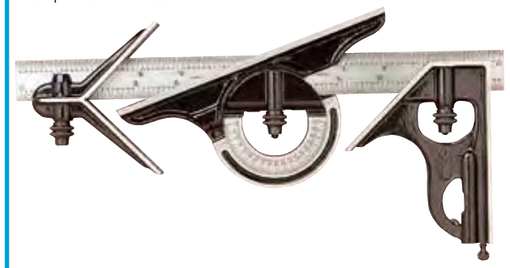
Fisco combination square of reliable quality



Part No.	Description	OAL
RFF485ME	Combination Square	300mm

COMBINATION SET

Combination square with square, centre head and non-reversible 180° protractor head



Part No.	Description	OAL
9ME300	Combination Se	300mm

MITUTOYO VERNIER CALIPERS

Mitutoyo offer a wide range of precision measuring instruments. The range is not limited to the items depicted below, please enquire for more details.



Part No.	Description	Type
530 312	150mm Vernier, 0.02mm	Scale
505 671	150mm Vernier, 0.02mm	Dial
500 196 30	150mm Vernier, 0.01mm	Digital
500 197 30	200mm Vernier, 0.01mm	Digital

DIAL INDICATOR

- Graduation: 0.01mm,
- Range 10mm
- Range 10mm
- Dial Reading 0-100



Part No.	Description
3025-481	Dial Indicator

STARRETT OUTSIDE MICROMETERS



Part No.	Description	Size
436MXRL-25	Micrometer	0 - 25mm
734MXFL-25	Digital Micrometer	0 - 25mm

SCRIBER PEN TYPE CARBIDE TIP



Part No.	Description
433ASB	Scriber Pen Type Carbide Tip

SCRIBER



Part No.	Description	OAL
433ASB	Scriber	218mm

SPRING-TYPE CALIPERS

- Made from a high-grade steel and are well finished
- The legs are made of flat stock and are very durable



Part No.	Description	Length
01452	Inside Caliper	150mm
01442	Outside Caliper	150mm
01432	Divider	150mm

TRAMMELS

- Rigid trammel for layout, scribing, measuring of distances and circles
- Top of beam is flattened to prevent trams from rotating when clamped



Part No.	Description	Max. Scribe Size
C251A-9	Trammel, Steel Beam	450mm
C251A-13	Trammel, Steel Beam	650mm
C251A-18	Trammel, Steel Beam	900mm
251F	Additional Caliper Points	-

TELESCOPING GAUGE SET

- 5/16" -6" (8 - 150mm) range
- Set of 6 gages in protective case
- Handle is automatically self centering
- Constant spring tension gives uniform contact pressure and both plugers are easily locked at any desired setting



Part No.	Description
S579HZ	Telescoping Gauge Set

V – BLOCK SET

Pair of V-Blocks with clamps



Part No.	Description	Dimension of Block
278	V-Block (pair)	32(H) x 32(W) x40mm(L)

SHEET GAUGE

U.S. Standard guage for non-ferrous metals to guage sheet, plate and wire in materials like copper, brass, aluminium etc.



Part No.	Description	Range
281	Sheet Gauge	.325" - .005"

RADIUS GAUGES

Set of 25 gages 1/64" - 1/2" and a holder, set out in a wallet



Part No.	Description
S167CHZ	Radius Gauge Set

SMALL HOLE GAUGES

- 0.125" - 0.500" (3.2 - 12.7mm) range
- Half-ball, FLat-bottom gaging surface permits use in even the most shallow holes, slots and recesses



Part No.	Description
S831EZ	Small Hole Gauge Set

STEEL PARALLELS

Special grade tool steel, hardened and accurately ground on four sides



Part No.	Description	Size
384F	Steel Parallel	6 x 25 x 150mm
384R	Steel Parallel	10 x 25 x 150mm
384W	Steel Parallel	13 x 25 x 150mm
384	Steel Parallel	13 x 31 x 150mm

DIGITAL LEVEL, INCLINOMETER

- Measuring accuracy: ±0.1°
- Measuring unit: Switch-able between angle and grade
- Measuring range: 0°~ 360°continuous measuring

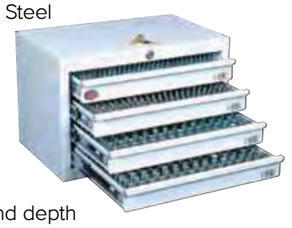


Part No.	Description
LS160-2	600mm Digital Level

Pin Gauges

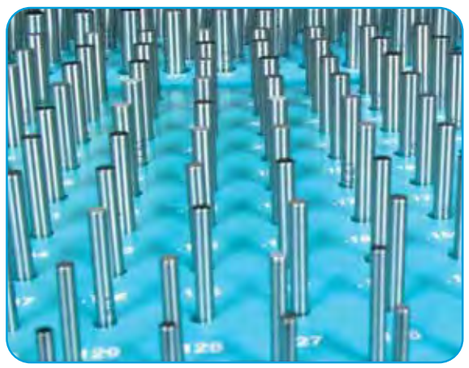
Meyer Pin Gauge Sets

- All gages and sets are traceable to N.I.S.T.
- Boxes and gages both marked
- Size and serial number laser etched on each piece (M-O not etched)
- Material: 52100 Bearing Steel
- No sharp edges
- All members 2" long



Uses:

- Checking locations
- Measuring hole sizes and depth
- GO & NO/GO gaging
- Setting micrometers
- Checking distances between holes

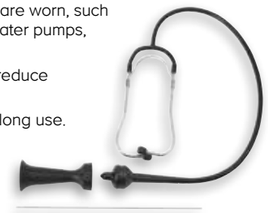


Part No.	Gauge Size	No of PCS	Weight (lbs)
M0M – MINUS	0.0110" to 0.0600"	50	1
M0P – PLUS	0.0110" to 0.0600"	50	1
M05M – MINUS	0.0115" to 0.0605"	50	1
M05P – PLUS	0.0115" to 0.0605"	50	1
C10M – MINUS	0.0110" to 0.2500"	240	8
C10P – PLUS	0.0110" to 0.2500"	240	8
C105M – MINUS	0.0115" to 0.2505"	240	8
C105P – PLUS	0.0115" to 0.2505"	240	8
M1M – MINUS	0.0610" to 0.2500"	190	8
M1P – PLUS	0.0610" to 0.2500"	190	8
M15M – MINUS	0.0615" to 0.2505"	190	8
M15P – PLUS	0.0615" to 0.2505"	190	8
M2M – MINUS	0.2510" to 0.5000"	250	23
M2P – PLUS	0.2510" to 0.5000"	250	23
M25M – MINUS	0.2515" to 0.5005"	250	23
M25P – PLUS	0.2515" to 0.5005"	250	23
M3M – MINUS	0.5010" to 0.6250"	125	24
M3P – PLUS	0.5010" to 0.6250"	125	24
M35M – MINUS	0.5015" to 0.6255"	125	24
M35P – PLUS	0.5015" to 0.6255"	125	24
M4M – MINUS	0.6260" to 0.7500"	125	33
M4P – PLUS	0.6260" to 0.7500"	125	33
M45M – MINUS	0.6265" to 0.7505"	125	33
M45P – PLUS	0.6265" to 0.7505"	125	33
M5M – MINUS	0.7510" to 0.8320"	82	29
M5P – PLUS	0.7510" to 0.8320"	82	29
M55M – MINUS	0.7515" to 0.8325"	82	29
M55P – PLUS	0.7515" to 0.8325"	82	29
M6M – MINUS	0.8330" to 0.9160"	84	35
M6P – PLUS	0.8330" to 0.9160"	84	35
M65M – MINUS	0.8335" to 0.9165"	84	35
M65P – PLUS	0.8335" to 0.9165"	84	35
M7M – MINUS	0.9170" to 1.0000"	84	41
M7P – PLUS	0.9170" to 1.0000"	84	41
M75M – MINUS	0.9175" to 1.0005"	84	41
M75P – PLUS	0.9175" to 1.0005"	84	41

Inspection

PROTO® STETHOSCOPE

- Fast, accurate method for locating trouble in engines.
- Determines if moving parts are worn, such as pistons, gears, valves, water pumps, gaskets, bearings, etc.
- Plastic ear protectors help reduce shop noise.
- Spring steel diaphragm for long use.
- Shock resistant handle.



Part No.	Height (in)	OAL (in)	Weight (lbs)
JFP500A	2-3/32	14-29/32	0.47

MAGNETIC PICK-U WITH POWERCAP

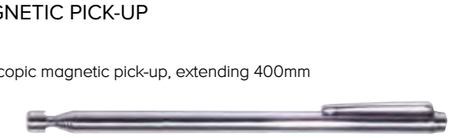
- Telescopic magnetic pick-up, extending from 168mm to 845mm
- Extends from 6-5/8" to 33-1/4"



Part No.	Description	OAL (mm)
HT-1	Magnetic Pick-up	168

MAGNETIC PICK-UP

Telescopic magnetic pick-up, extending 400mm



Part No.	Description	OAL (mm)
70166	Magnetic Pick-up	143

LED ROUND TELESCOPIC MIRROR

- Telescopic LED Mirror, extending from 165mm to 889mm
- Extends from 6-1/2" to 35"



Part No.	Diameter (mm)	Diameter (in)	OAL (mm)
HTE-2LT	36	1-3/8"	165

PROTO® FLEXIBLE RETRIEVING AND HOLDING TOOLS

- Designed to position or retrieve small objects.
- Spring-loaded plunger actuates jaws at end of flexible casing.



Part No.	OAL (in)	Weight (lbs)
J2344	13-1/2	0.19
J2345	23-1/2	0.26

PROTO® FLEXIBLE MAGNETIC RETRIEVING TOOLS

- Retrieves small objects from hard-to-reach places.
- Push button allows reaching an object before energizing the magnet.



Part No.	Lift Power (lbs)	OAL (in)	Weight (lbs)
J2378	3.0	24-1/2	0.37

PROTO® POCKET MAGNETIC RETRIEVING TOOLS

- J2375 includes versatile telescoping handle and all-angle ball joint.
- J2376A has an aluminum head that contains a neodymium magnet that can lift up to 1-1/2 lbs., all angle ball joint, and a pocket clip.



Part No.	OAL (in)	Weight (lbs)
J2375	16-3/4 to 26-3/4	0.40
J2376A	8	0.08

PROTO® INSPECTION MIRRORS

- Versatile all-angle ball joint.
- Features telescoping handle (J2372 and J2373).
- With pocket clip (J2373).



Part No.	Mirror Shape	Mirror Size (L x W in)	Mirror Diameter (in)	Overall Length (in)	Weight (lbs)
J2370	Circular	–	7/8	7-1/2	0.08
J2374	Circular	–	1-1/4	8	0.09
J2371	Oval	1 x 2	–	8-3/4	0.08
J2372	Circular	–	2-1/4	10 to 14	0.25
J2373	Rectangular	2-1/8 x 3-1/2	–	11-1/4 to 15-1/2	0.30

TORQUE SEAL INSPECTION LACQUER

- Detection of vibration-loosening or tampering of fasteners and parts
- Excellent adhesion to all metals and dries quickly
- Becomes brittle showing a crack/s if fastener has moved



Part No.	Description	Size
83315	Torque Seal green	1 oz / 29ml
83316	Torque Seal red	1 oz / 29ml
83317	Torque Seal yellow	1 oz / 29ml
83318	Torque Seal blue	1 oz / 29ml
83319	Torque Seal white	1 oz / 29ml
83320	Torque Seal pink	1 oz / 29ml

Magnifying

MAGNIFYING LAMP

- Economy version, LED illumination
- 130mm lens diameter
- 3 dioptre



Part No.	Description
ML610	LED Magnifyng Lamp

POCKET FOLDING MAGNIFIER

- Size 10 x 21mm
- Magnification: 10X



Part No.	Description
H71-872	Pocket Folding Magnifier

ILLUMINATED MAGNIFYING GLASS

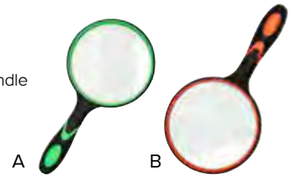
- Simple to use – large, easy to operate light switch
- Choice of 3 different lights colours via included filters.
- Scratch-proof lens with high visual (and wearing) comfort.
- Includes protective case for lens.



Part No.	Illumination	Lens Diameter	Magnification
15112	LED	60 mm	x3
15115	LED	58 mm	x5
15117	LED	35 mm	x7
151110	LED	35 mm	x10

MAGNIFYING GLASS

- Scratch Resistant
- Ergonomic Non-Slip Handle
- 3x Magnification



Part No.	Description	Dia (mm)
H71-065	Precision Magnifier	65
H71-100	Precision Magnifier	100

PRECISION MAGNIFIER

- Adjustable focus
- Comes with precision 0.1mm scale (0.005")
- Provides sharp image
- Magnification x100



Part No.	Description
CE 119-529	Precision Magnifier

EYELOUPE

- Includes an air hole to prevent condensation and fogging of the lens
- Fits comfortably to the eye



Part No.	Description	Magnification
11243	Eyeloupe	x3
11245	Eyeloupe	x5
11247	Eyeloupe	x7
112410	Eyeloupe	x10

DICATA™ USB INTRINSICALLY SAFE RECHARGEABLE DUAL-LIGHT™ HEADLAMP

- Li-Ion Rechargeable battery (included)
- MagMate™ Magnetic USB Recharge Technology
- cULus, ATEX and IECEx listed Intrinsically Safe
- LED technology
- Focused high/low-brightness spotlight beam for distance illumination
- Unfocused high/low-brightness wide-beam floodlight for close-up illumination
- Dual-Light™ (spotlight and floodlight on at the same time) for maximum versatility
- Engineered polymer housing
- (TIR) Total Internal Reflection lens designed to optimize lumen output and beam pattern
- Dual switches located on the front of the light
- Adjustable tilt head
- Heavy-duty rubber strap for fire helmets and hard hat applications
- IP-67 Dustproof / Waterproof
- Impact & chemical resistant
- Spotlight 275 / 100 Lumen
- Floodlight 250 / 100 Lumen
- Dual-Light 300 Lumen
- Beam Distance 120 meters



Part No.	Description
XPR-5562GX	DICATA™ USB Intrinsically Safe Dual-Light™ Headlamp

INTRINSICALLY SAFE DUAL-LIGHT™ HEADLAMP

- cETLus, ATEX, IECEx and MSHA Intrinsically Safe Permissible
- LED technology
- Spotlight: High/Low-brightness white floodlight, green floodlight
- Focused spotlight beam for distance illumination
- Unfocused wide-beam floodlight for close-up illumination
- Green colored floodlight for preservation of night vision
- Dual-Light™ (spotlight & white floodlight mode at same time) for maximum versatility
- Engineered polymer housing
- Dual switches located on top of light
- Adjustable ratchet tilt head
- Non-slip elastic head strap
- Heavy-duty rubber strap for hard hat applications
- IP-67 Dustproof / Waterproof
- Impact & chemical resistant
- 3x AA alkaline batteries (included)
- Spotlight 130 Lumen
- Floodlight 100 / 25 / 21 Lumen
- Dual-Light 190 Lumen
- Beam Distance 120 meters



Part No.	Description
XPP-5458G	Dual-Light™ Headlamp Intrinsically Safe

INTRINSICALLY SAFE HEADLAMP IECEX/ATEX

- cETLus, ATEX and IECEx listed Intrinsically Safe
- LED technology
- High-brightness spotlight, low-brightness spotlight
- Focused spotlight beam for distance illumination
- Heavy-duty rubber strap for hard hat applications
- Non-slip elastic head strap
- Engineered polymer housing
- Single switch located on top of light
- Adjustable ratchet tilt head
- IP-67 Dustproof / Waterproof
- Impact & chemical resistant
- 3x AAA batteries (included)
- Spotlight 180 / 90 Lumen



Part No.	Description
XPP-5452G	Dual Function Headlamp Intrinsically Safe

INTRINSICALLY SAFE HEADLAMP IECEX/ATEX

- cETLus, ATEX and IECEx listed Intrinsically Safe
- LED technology
- High-brightness spotlight, low-brightness spotlight
- Focused spotlight beam for distance illumination
- Engineered polymer housing
- Single switch located on top of light
- Adjustable ratchet tilt head
- Non-slip elastic head strap
- Heavy-duty rubber strap for hard hat applications
- IP-67 Dustproof / Waterproof
- Impact & chemical resistant
- 3x AAA batteries (included)
- Spotlight 115 / 60 Lumen
- Floodlight 120 / 60 Lumen
- Dual-Light 160 Lumen



Part No.	Description
XPP-5454G	Multi Function Headlamp Intrinsically Safe

INTRINSICALLY SAFE MULTI FUNCTION HEADLAMP

- ATEX, IECEx and MSHA listed Intrinsically Safe for use in both above and below ground hazardous locations where explosive gases and dusts may be present
- Body: Engineered Polymer Housing
- Switch: Two Switches
  - Right: Spotlight
  - Left: Full/Half-Power White Floodlight & Green Floodlight
- Control: Dual switch, Flashlight to Floodlight
- Size: 84mm x 84mm x 89mm
- 100/25/21 Lumens (Dual 190)
- 14 hours (Spot) 12.5/70/37 (Flood)
- Beam Distance 120 meters
- 3x AA Alkaline batteries (included)



Part No.	Description
XPP-5456G	IEC EX HeadLamp

INTRINSICALLY SAFE MINI TORCH

- Body: Engineered Polymer Housing
- Switch: Tail Cap Switch
- Control: Momentary or Constant On
- Beam non adjustable, 40 meters
- Size: 147mm x 23mm diameter
- 30 Lumens
- 18 hours
- 2x AAA Alkaline batteries



Part No.	Description
XPP-5410G	Mini Torch Intrinsically Safe

INTRINSICALLY SAFE DUAL BEAM TORCH

- ATEX, IECEx and MSHA listed Intrinsically Safe
- Body: Engineered Polymer Housing
- Switch: Metal button with Touch function at rear
- Control: Dual switch, Flashlight to Floodlight
- Beam: Two beams, flood from side and spot from front
- OAL: 178 mm
- Diameter: 46 mm
- Flashlight / Fllodlight: 120 Lumen
- 30 hours
- Beam Distance 170 meters
- 3x AA Alkaline batteries



Part No.	Description
X2-2Y	IEC EX Dual Beam Torch Intrinsically Safe

METAL TACTICAL LED FLASHLIGHT RECHARGEABLE

- Aircraft-grade 6061-T6 aluminum housing, bezel & tail-cap
- TAC-460XL: Momentary or constant-on flashlight
- TAC-560XL: Momentary or constant-on plus 3 brightness levels & strobe
- Effective beam distance of 205 meters (over 672 feet)
- Sharp focused flashlight beam
- High-efficiency deep parabolic reflector
- Type III hard anodized finish
- Non-slip grip
- Large textured tail-switch
- 1" Handle diameter fits most 3rd party scope/flash-light mounts
- 1.25" Head diameter accepts 3rd party filters
- IP-X7 Waterproof
- Impact & chemical resistant
- Serialized for personal identification
- Rechargeable Lithium-ion battery (included)
- Can also be powered by 2 CR123 batteries (not included) using the CR123 Battery Carrier (included)



Part No.	Description
TAC-460XL	Metal Tactical LED Flashlight Rechargeable
TAC-560XL	Metal Tactical LED Flashlight Recharge. Multi-Function

X-SERIES INTRINSICALLY SAFE DUAL-LIGHT™ FLASHLIGHT W/DUAL MAGNETS

- cETLus, ATEX, IECEx and INMETRO listed Intrinsically Safe
- LED technology
- Momentary or constant-on flashlight
- Sharp focused flashlight beam for distance illumination
- Unfocused wide-beam floodlight for close-up illumination
- Dual-light (flashlight & floodlight at same time) for maximum versatility
- Powerful integrated magnets built into the base and pocket clip for multiple hands-free options
- Engineered polymer housing
- Non-slip grip
- Dual body switches
- IP-67 Dustproof / Waterproof
- Impact & chemical resistant
- Built-in pocket/belt clip
- Includes removable lanyard
- 3 AA (not included)
- Flashlight 210 Lumen
- Floodlight 130 Lumen
- Dual-Light 285 Lumen
- Beam Distance 187 meters



Part No.	Description
XPP-5422GMX	Dual-Light™ Flashlight w/Dual Magnets Intrinsically Safe

INTRINSICALLY SAFE DUAL-LIGHT™ ANGLE LIGHT

- Glass-filled Nylon Polymer housing
- 8 User-selectable brightness settings
- Head pivots 90 degrees up and down with a 45 degree downward angled floodlight.Beam non adjustable, 40 meters
- IP-67 Dustproof/Waterproof
- Flashlight selectable brightness settings of 200, 110, and 60 lumens
- Floodlight selectable brightness settings of 100, 40, and a Survival Mode of 20 lumens
- Limited Lifetime Warranty
- 3 AA batteries (included)



Part No.	Description
XPP-5566GX	Intrinsically Safe Dual-Light™ Angle Light

POLYMER TACTICAL LED FLASHLIGHT – 2 CR123

- Momentary or constant-on flashlight
- Sharp focused beam
- High-efficiency deep parabolic reflector
- Glass-filled nylon polymer housing - Black
- Aircraft-grade 6061-T6 aluminum tail-cap with Type III hard anodized finish
- Non-slip grip with removable pocket clip
- Large textured tail-switch
- 1" Handle diameter fits most scope/flashlight mounts
- 1.25" Head diameter accepts 3rd party filters
- IP-X7 Waterproof
- Impact & chemical resistant
- 2 CR123 batteries (included)
- Flashlight 180 Lumen
- Beam Distance 190 m



Part No.	Description
TAC-300B	Polymer Tactical Flashlight 2 CR123

INSPECT, MEASURE & LIGHTING

LED LENSER P7 CORE TORCH

- Power - high light output for every situation
- Mid Power - medium light output for every situation
- Low Power - economical light for long battery life, glare-free reading and working
- Advanced Focus System (AFS) - for efficient, precise flood and spot lighting
- Rapid Focus - for fast change of light cone
- Outstanding Light Quality - with brightness, beam range and run time ideally matched to the energy source
- Tail Switch - a single switch on the base of the torch
- IP54 - Protection against water projected in powerful spray
- Luminosity: 40-450 lm
- Lighting Range: 100-300 m
- Battery Duration: 1-25 h
- 4x AAA Alkaline batteries



Part No.	Description
ZL502180	P7 Core LED Lenser

LED LENSER P7 CORE TORCH RECHARGEABLE

- Power, Mid Power, Low Power, Boost, Advanced Focus System (AFS), Intuitive Operation, Multifunctional Switch, IP67
- Boost - short-duration maximum power for more brightness
- Blink - automatic emission of light impulses at regular intervals
- Position - two short pulses of light, repeated three times, to alert others of your location
- S.O.S - the distress signal the light emits is SOS in Morse code (3 x short, 3 x long, 3 x short)
- Strobe - flashes of light with a confusing blinding effect for, among other things, self-defence
- Front Switch - a switch on the front of the torch so you can use one hand
- IP68 - Protection for submersion in water up to 1.5m deep for up to 30 mins.
- Luminosity: 15-1400 lm
- Lighting Range: 15-300 m
- Battery Duration: 2-90 h
- 1 x Li-ion 3.7V rechargeable battery



Part No.	Description
ZL502181	P7R Core LED Lenser

LED LENSER H7R CORE HEADLAMP RECHARGEABLE

- Power, Low Power, Boost, Advanced Focus System (AFS), Intuitive Operation, Multifunctional Switch, IP67
- Strobe - flashes of light with a confusing blinding effect for, among other things, self-defence
- 130 Degrees - of lamp head rotation
- Flex Sealing Technology - provides superior protection against dust and water (IP67)
- Luminosity: 15-1000 lm
- Lighting Range: 25-250 m
- Battery Duration: 4-65 h
- 1 x Li-ion 3.7V rechargeable battery



Part No.	Description
ZL502122	LED Lenser

You couldn't find what you were looking for? Contact us about other models.

LED LENSER H5R CORE HEADLAMP RECHARGEABLE

- Power, Low Power, Boost, Advanced Focus System (AFS), Intuitive Operation, Multifunctional Switch, IP67
- 160 Degrees - of lamp head rotation
- Ledlenser Connector - new standardised interface that offers connection to various accessories
- Luminosity: 15-500 lm
- Lighting Range: 30-200 m
- Battery Duration: 2-50 h
- 1 x Li-ion 3.7V rechargeable battery



Part No.	Description
ZL502121	LED Lenser H5 Core Headlamp Rechargeable

LED LENSER H5 CORE HEADLAMP

- Power, Low Power, Boost, Advanced Focus System (AFS), Intuitive Operation, Multifunctional Switch, IP67
- 160 Degrees - of lamp head rotation
- Ledlenser Connector - new standardised interface that offers connection to various accessories
- Luminosity: 15-350 lm
- Lighting Range: 30-160 m
- Battery Duration: 2-20 h
- 2x AA Alkaline 1.5V batteries



Part No.	Description
ZL502193	LED Lenser H5 Core Headlamp

PORTABLE LED LEAD-LIGHT

- Highly reliable, long life LED
- Durable, low maintenance construction with non-metallic external materials
- Integrated power switch and LED power indicator
- IP65 rated enclosure
- Oil, petrol and corrosion resistant
- UV protected
- 6m lead with moulded plug (AC models)
- 6m lead with lighter plug (DC models)
- Polycarbonate outer case with internal prisms and opal diffuser
- Versatile cable configurations
- Removable hanging hooks



Part No.	Description	Output
174044	Portable LED Light	20 W / 240V

INTRINSICALLY SAFE TANK LIGHT

The X8 Series are IECEx (Zones 1, 2, 21 & 22) approved worklights suited for use in the aerospace industry, mining, oil & gas and other hazardous locations. Both the LED versions and Cold Cathode versions, are extremely high power units having a much longer service life compared to typical flourescent worklights found in the industry. The long life LED version along with its lightweight, robust and ergonomic design make it the best worklight in it's class.

- Made in Germany
- Strong aluminium housing with polycarbonate tube
- Anti-roll rubber grip handle and adjustable hook
- Optional LED or Cold Cathode versions
- IECEx Certificate: IECEx PTB 07.0018
- Voltage 24-48VAC/DC
- Light output 600 - 800 lumens
- Water Resistant to IP66/IP67
- 15m Cable (no plug)
- Custom cable lengths available



Part No.	Description
X8-LED-1	IEC Ex WorkLight

SCANGRIP NOVA MINI

- Ultra-slim and compact design
- Extremely powerful illumination, up to 1000 lumen
- SMART GRIP 4-in-1 system for a comfortable, firm hand grip and flexible positioning
- Stepless dimmer function
- Charging indicator
- Dimensions L x W x H: 104 x 96 x 38 mm



Part No.	Description
03.6010	Scangrip NOVA MINI

SCANGRIP NOVA R

- Ultra-slim and compact design
- Extremely powerful illumination, up to 2000 lumen
- Integrated magnets for flexible mounting.
- Designed for direct mounting on the TRIPOD or the SCAFFOLDING BRACKET.
- Built-in power bank with USB outlet to charge mobile devices
- Dimensions L x W x H: 185 x 170 x 70 mm



Part No.	Description
03.5456	Scangrip NOVA R

SCANGRIP NOVA 4K C+R

- Waterproof (IP67) for all kinds of weather conditions and working environments
- DUAL SYSTEM both rechargeable and with cable
- Display showing both battery capacity and the remaining operating time
- Light adjustable in five different levels
- Robust housing of diecasted aluminum
- Dimensions L x W x H: 240 x 240 x 95 mm



Part No.	Description
03.5441	Scangrip NOVA 4K C+R

SCANGRIP NOVA 6K C+R

- Work light with DUAL SYSTEM providing up to 5000-6000 lumen
- DUAL SYSTEM both rechargeable and with cable
- Light adjustable in five different levels
- Robust housing of diecasted aluminum
- Dimensions L x W x H: 267 x 262 x 88 mm



Part No.	Description
03.5443	Scangrip NOVA 6K C+R

Hawkeye Precision Borescope

HAWKEYE® V3 VIDEO BORESCOPE

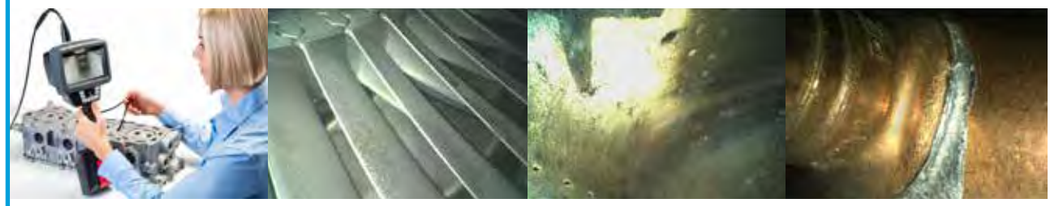
Excellent Image Quality, At Half The Cost Of Comparable Videoscopes

Hawkeye® V3 HD Video Borescopes simply deliver the best image quality of any borescope on the market today! The V3 HD features a new Micro HD video camera, (6x better resolution than the V2), 4-way articulation, HD daylight readable color touchscreen display, integrated adjustable LED illumination and WI-FI Connection.

The V3 Deluxe Kit also includes the 90 degree tip, Close Focus Tip, Neck Strap, Tripod and extra battery.

- New Micro HD video camera and custom-engineered image processor. Video footage and still images captured by the V3 appear crystal clear and with vibrant, lifelike colors
- Large, 5.5-inch HD, daylight readable, touch-screen display
- Can operate continuously for 6 hours without the need for recharging
- Contains an integrated, high-efficiency Micro LED light source
- Standard Kits include V3 Video Borescope, Battery Charger, 16GB USB Flash Drive and Rugged Carrying Case





Part No.	Description	Probe	Function
V3 040 1500 4	Video Borescope	1.5m x 4.0mm	4 way articulation
V3 040 3000 4	Video Borescope	3.0m x 4.0mm	4 way articulation
V3 060 3000 4	Video Borescope	3.0m x 6.0mm	4 way articulation
V3 060 1500 4	Video Borescope	1.5m x 6.0mm	4 way articulation

Optical Micrometer

DIGITAL OPTICAL MICROMETER KIT

Exact and repeatable.

Very specific tolerances often apply to surface damage and exact measurements are essential to determine if a part should remain in service. The 8400K allows "repair or replace" maintenance decisions to be made with absolute certainty, and backed up with precise measurement data.

Eliminate Guesswork.

Quickly and confidently perform visual inspections and make real assessments of damage severity. Avoid using substandard parts or scrapping parts that are still within safety and tolerance limits.

Portable and Versatile.

The kit has interchangeable bases and lenses for use on almost any surface, including transparencies and composites. Use one tool to inspect many types of damage; corrosion pitting, scribe lines, bubbles, crazing, and scratches on parts.

Simple Operation.

Unlike analog models, the 8400K is repeatable and requires no manual calculations. The digital LCD display is easy to read and toggles between inches and millimeters.



Applications:

Inspect Damage on

- Mechanical Parts
- Leading Edges
- Propellers
- Composites
- Windshields
- Canopies
- Fuselage Skins
- Shafts, Masts, Rotors

And many other applications.

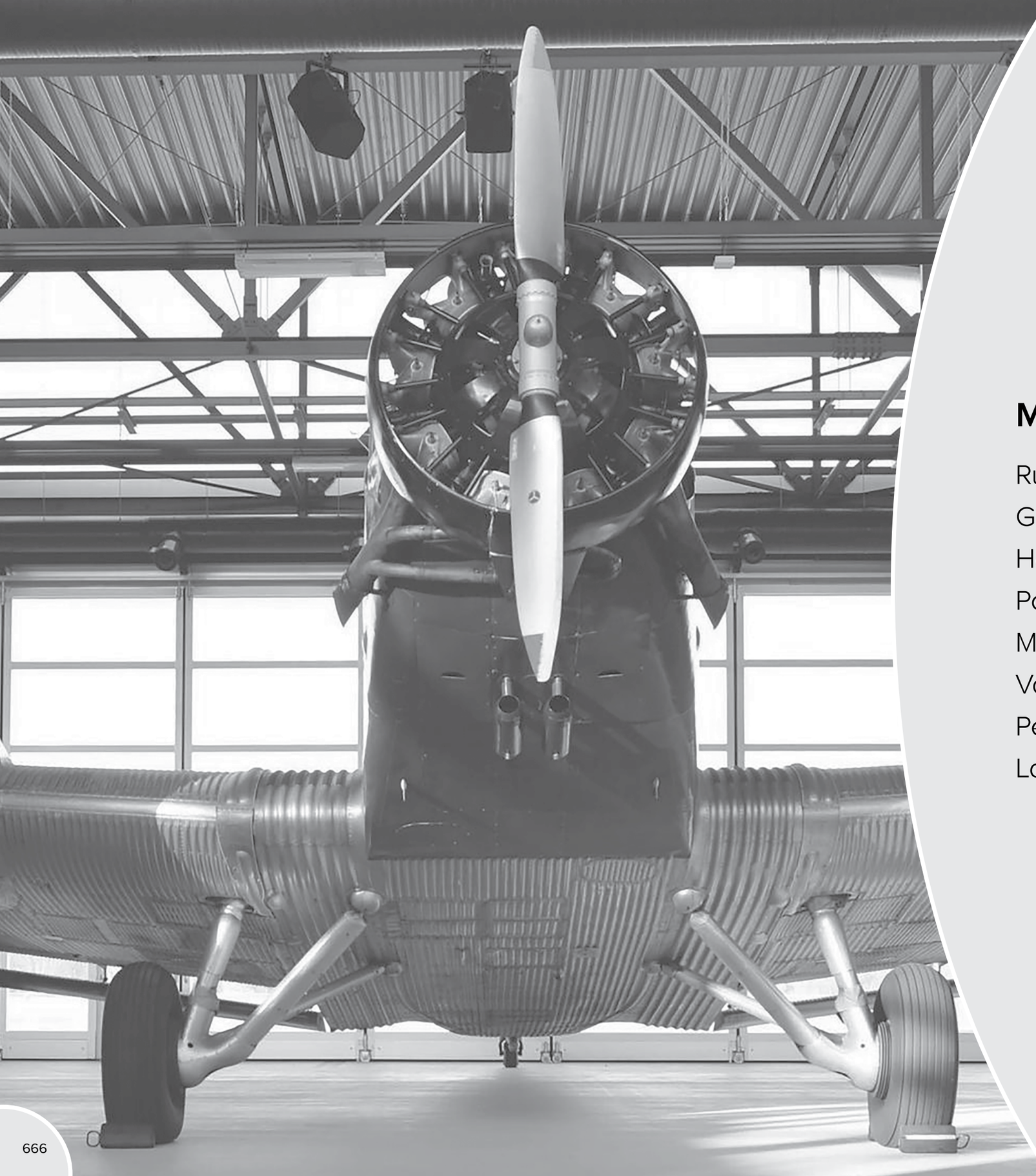
Repair or Replace

- Fast, accurate and repeatable measurements of surface damage to parts.
- Replace the "fingernail test" with a precise tool and make maintenance decisions with confidence.
- Save Time and Money. Quickly determine the severity of damage. Avoid scrapping parts that are still within tolerance limits.
- Read and record results easily from clear digital LCD display, or export directly to a PC.
- Improve traceability, quality control and monitor trends over time.





Part No.	Description
8400K	Digital Optical Micrometer in Case



Miscellaneous

Ruggedized Industrial PC's 668
Glue Guns 670
Heat Guns 671
Power Tools 672
Milwaukee Tools 674
Vacuum Cleaners 676
Permaswage 680
Latchways 682

Ruggedized Industrial PC's

RUGGED FOR THE REAL WORLD

Some environments require rugged products that can literally take a beating. When you need mobile computing solutions they can depend on in extreme environments, rugged is a must. Getting durability, performance and reliability in any environment and any condition is crucial. Built to meet the heightened needs of industry clients, DURABOOK's unmatched rugged product lineup has everything you need.

Why DURABOOK:

- State-of-the-art Technology: Durabook offers latest Intel® generation processors, packed with great performance and visuals into a compact form.
- Compact Built for all Purposes: Compact design and rich range of built-in connectivity options to maximize the efficiency for those who work in extreme conditions.
- DynaVue® – Detail at a Glance: Best screen visibility that enhance viewing clarity even from different angles, and in bright sunshine or low light conditions.
- Built for all Environments: Certified for MIL-STD-810G and IP ratings, as well as ANSI/ISA 12.12.01 and MIL-STD-416G/416F. Experience peak performance in dust, humidity and extreme temperatures – whether in freezing cold -30°C or hot temperatures of 60°C.
- Faster Lead Time and flexible Customization: Committed to excellent service, offering fast delivery time, flexible customization service and a complete warranty package to ensure user satisfaction.

Please contact us for information on all available customisation options.



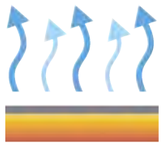
Certied by independent third-parties for MIL-STD-810G and IP ratings, as well as ANSI/ISA 12.12.01 and MIL-STD-416G/416F.



Leading rugged design to increase productivity and efficiency for any conditions.



Survived drop tests up to 6 feet (182 cm), rigorous vibration and impact protection tests.



Unsurpassed thermal solution for continuous work in mission-critical situations.



Experience peak performance in extreme temperatures, whether in freezing cold up to -30°C or extreme hot temperatures of 60°C.



Designed from the ground up with high-performance materials for full protection.



DynaVue® technology improves display clarity and 23% widerviewing angle, while the screen is designed and built at industrial class for outdoor weather and light conditions.



Webcams with physical privacy shutters for additional protection, opened and closed with just one simple finger movement.



DURABOOK
Prepared for the Unexpected

DURABOOK R11 RUGGED TABLET

- MIL-STD-810G Certified for 4ft drop 26 faces, drop, shock, vibration, altitude, freeze/thaw, high/low temperature, temperature shock, humidity, MIL-STD 461F Certified for Electromagnetic Requirements
- IP65 Certified Water and Dust Resitance
- Core I5 Processor, Core I7 available on request
- ANSI C1D2 12.12.01 Certified for Hazardous Environments
- Display: 11.6 inch FHD (1920 x1080) 1000 nits
- Field with DynaVue sunlight readable display with capacitive multi-touch screen



Part No.	Description
R11-S-I5-8GB	R11 Rugged Tablet 8GB
R11-S-I5-16GB	R11 Rugged Tablet 16GB
R11-F-I5-8GB	R11 Rugged Tablet Field 8GB
R11-F-I5-16GB	R11 Rugged Tablet Field 16BG

DURABOOK S15AB RUGGED LAPTOP THIN

- MIL-STD-810G Certified for 3ft drop 26 faces, drop, shock, vibration, dust, altitude, high/low temperature, humidity
- IP5X Certified Water and Dust Resitance
- Core I5 Processor, Core I7 available on request
- Port Covers, quick-release batteru, aluminium-magnesium alloy chassis
- Display: 15.6 inch FHD (1920 x1080) 400 nits sunlight readable display



Part No.	Description
S15AB-I5-8GB	S15AB Rugged Laptop Thin 8GB
S15AB-I5-16GB	S15AB Rugged Laptop Thin 16GB

DURABOOK R11L RUGGED TABLET LIGHT

- MIL-STD-810G Certified for 4ft drop 26 faces, drop, shock, vibration, altitude, freeze/thaw, high/low temperature, temperature shock, humidity, MIL-STD 461F Certified for Electromagnetic Requirements
- IP65 Certified Water and Dust Resitance
- 128GB SSD
- ANSI C1D2 12.12.01 Certified for Hazardous Environments
- Display: 11.6 inch FHD (1920 x1080) 1000 nits DynaVue multi-touch sunlight readable display



Part No.	Description
R11L-4GB	R11L Rugged Tablet Light 4GB

DURABOOK S14I RUGGED LAPTOP

- MIL-STD-810G Certified for 4ft drop 26 faces, drop, shock, vibration, altitude, freeze/thaw, high/low temperature, temperature shock, humidity
- IP53 Certified Water and Dust Resitance
- Core I5 Processor, Core I7 available on request
- Display: 14.0 inch FHD (1920 x1080) 1000 nits DynaVue sunlight readable display with capacitive multi-touch screen User selectable touch mode for Finger/ Water, Glove, or Stylus programmable function



Part No.	Description
S14I-I5-8GB	S14I Rugged Laptop 8GB
S14I-I5-16GB	S14I Rugged Laptop 16GB

DURABOOK U11I RUGGED TABLET

- MIL-STD-810G Certified for 6ft drop 26 faces, drop, shock, vibration, altitude, freeze/thaw, high/low temperature, temperature shock, humidity, MIL-STD 461G Certified for Electromagnetic Requirements
- IP65 Certified Water and Dust Resitance
- ANSI C1D2 12.12.01 Certified for Hazardous Environments
- Display: 11.6 inch FHD (1920 x1080) 1000 nits DynaVue sunlight readable display with capacitive multi-touch screen User selectable touch mode for Finger/Water, Glove, or Stylus programmable function





Part No.	Description
U11I-S-I5-8GB	U11I Rugged Tablet 8GB
U11I-S-I5-16GB	U11I Rugged Tablet 16GB
U11I-S-BUNDLE	U11I Rugged Tablet 8GB with detachable Keyboard
U11I-F-I5-8GB	U11I Rugged Tablet Field 8GB
U11I-F-I5-16GB	U11I Rugged Tablet Field 16GB

DURABOOK Z14I RUGGED LAPTOP

- MIL-STD-810H Certified for 6ft drop 26 faces, shock, vibration, rain, dust, altitude, freeze/thaw, high/low temperature, temperature shock, humidity, explosive atmosphere, solar radiation, salt fog, fungus resistance, MIL-STD 461G Certified for Electromagnetic Requirements
- IP65 Certified Water and Dust Resitance
- ANSI C1D2 12.12.01 Certified for Hazardous Environments
- Core I5 Processor, Core I7 available on request
- Display: 14.0 inch FHD (1920 x1080) 1000 nits DynaVue sunlight readable display with capacitive multi-touch screen User selectable touch mode for Finger/ Water, Glove, or Stylus programmable function
- Intel 11th generation Tiger Lake available on request



Part No.	Description
Z14I-I5-8GB	Z14I Rugged Laptop 8GB
Z14I-I5-16GB	Z14I Rugged Laptop 16GB

Glue Guns

STEINEL GLUE GUN

Specifications:

- Dimensions 185 x 32 x 180 mm
- Weight: 330 g (without stand)
- Output:
- Idle: 20W
- In use: 120W
- Warming-up: 500W
- Warm-up time: 3–5 min.
- Glue sticks: Ø 11 mm dia.
- Melt temperature: 210° – 220°C
- Delivery rate: approx. 22 g/min.



Part No.	Description	Voltage
GLM 3002	Mains Glue Gun	220-240VAC 50Hz
GF 3002	Mains Glue Gun	120VAC 60Hz

"CORDLESS" GLUE GUN

- Cordless thanks to heat storage capability.
- On placing the unit on the charging station it automatically connects to power and starts heating the adhesive.
- Electronic temperature control with PTC heating technology.
- Power cord simply plugs into unit for continuous operation.
- Energy-saving standby mode and electronically controlled dual heating system for short warm-up times. Mechanical glue stick feeder for a speedy, well-metred flow of glue

Specifications:

- Dimensions (L x W x H): 185 x 32 x 180mm
- Warm-up time: 3-5min
- Melt temperature: 210°-220°C
- Glue sticks: Ø 11mm dia
- Output (approx.):
- Idle: 20W
- In use: 120W
- Warming-up: 500W
- Voltage: 220-240V
- Warm-up time: 3-5min
- Glue sticks: Ø 11mm dia
- Melt temperature: 210°-220°C
- Delivery Rate: approx. 22g/min



Part No.	Description
GLM 5000	Cordless Glue Gun

HOT MELT GLUE GUN NOZZLES

Replacement nozzles for Steinel 3002/5000 series



Part No.	Description
076160	Replacement Glue Nozzle 1.0mm Fine Nozzle
075965	Replacement Glue Nozzle 2.8mm, Long Nozzle

GLUE GUN NEO 3 CORDLESS LI-ION 7.2V

- Ready to glue in 15 seconds
- Switches off automatically after use
- Cordless operation with rechargeable lithium-ion battery
- Set and capable of withstanding loads after 2 minutes
- Electronic temperature control through modern PTC heating technology.

Specifications:

- Dimensions (L x W x H): 140 x 50 x 180mm without charging station
- Weight: 260g
- Voltage: 7.2V rechargeable lithium-ion battery
- Battery run-time: approx. 45 minutes of continuous use
- Battery charge time: 90% in 1.5h
- Voltage: 230-240V, 50/60Hz
- Warm-up time: under 15sec
- Glue Sticks: Ultra power cristal sticks (150mm length x Ø 7mm, 60g); Melting temperature approx. 190°C; The clear craft glue for invisible bonds; Transparent and low-drip.



Part No.	Description
NEO 3	Rechargeable Glue Gun

3M EPX-PLUS-II-APPLICATOR

3M Scotch-Weld EPX (Exact Proportioning and mixing) manual applicators make dispensing our two-component 3M Scotch-Weld Structural Adhesives clean, easy and with minimal waste. Manual hand motion drives the dual pistons directly into the Duo-Pak cartridge, applying equal pressure and feeding the two components of the adhesive directly into the mixing nozzle (sold separately).

Supplied with two plungers to mix the adhesive to the correct ratios, plunger sizes are - 10:1 & 2:1 mixing ratios.



Part No.	Description
62-9170-9913-7	3M EPX APPLICATOR (Includes 2 x Plungers)

Heat Guns

PISTOL HEAT GUN 1600W

- Ideal for drying plaster, shrinking cable sleeves and stripping paint
- Fatigue-free working due to optimised centre
- Prevents overheating with integrated thermal cut-ou

Specifications:

- Airflow Rate: 240 or 450l/min
- Heating Element: Micanite
- Temperature: 300° or 500°C
- Weight: 670g



Part No.	Description
HL1620S	Pistol Heat Gun 2 Spd 1600W

DIGITAL PISTOL HEAT GUN 2000W

- Ideal for removing and welding sheetings, welding plastics, shrinking on cable sleeves, shaping, soldering, drying, stripping paint
- Electronically controlled, continuously adjustable
- Fatigue-free working due to optimised centre
- Prevents over-heating with inte-grated thermal cut-out

Specifications:

- Airflow Rate: 150, 150-300 or 300-500l/min
- Heating Element: Ceramic
- Temperature: 80-600°C
- Weight: 840g



Part No.	Description
HL1920E	Digital Pistol Heat Gun 2000W

STEINEL LCD VARIABLE SPEED HEAT GUN

Variable temperature model with both adjustable air speed of 150-500l/min and temperature of 50°-650°C. A second position is for cooling.

Specifications:

- 2300 Watts.
- LCD Display for precise heat setting.
- Variable blower settings.
- Continuously adjustable.
- Heat warning LED.



Part No.	Description
HG2320E	LCD Heat Gun

STEINEL NOZZLES



1 2 3 4 5

Part No.	Figure	Description
070519	1	Large reflector nozzle
074616	2	Reflector nozzle
070618	3	Reduction nozzle 9mm
070717	4	Reduction nozzle 14mm
074715	5	Wide slit nozzle (mounts on 070717)

LEISTER HOT-JET-S AIR GUN

- Industrial version 460W hot air gun
- Range: 20 - 600 °C / 68.0 - 1112.0 °F
- Airflow 20 - 80 l/min (0.7 - 2.82 cfm)
- Nozzle diameter 21.3 mm / 0.85 in.



Part No.	Description
L100 854	Leister Hot Jet S
L107 144	Reduction Nozzle

LEISTER TRIAC ST HOT AIR GUN

- Powerful, heavy duty 1500 - 1600 W hot air gun
- Range: 40 - 700 °C / 104.0 - 1292.0 °F
- Airflow 240 l/min (8.47 cfm)
- 31.5 mm / 1.25 in
- More than 80 attachment nozzles available



Part No.	Description
104.310 TRIAC	Leister Triac ST Hot Air Gun

Power Tools

PANASONIC CORDLESS SCREWDRIVER 3.6V LI-ION

- Converts from straight to pistol shape
- Ease of use especially in tight areas or working overhead
- Compact size & light weight for overhead work
- Advanced ergonomic design, well balanced, easy to operate for extended periods of time without fatigue
- LED light to support work in dark areas
- Variable speed control/reversible
- With an extra battery pack as standard equipment

Specifications:

- Battery: 1.5Ah Li-ion
- Charging Time: 30min
- 1/4" Hex quick connect chuck
- Torque: 1.5-4.4Nm
- Speed: 200-600rpm (no load)
- Auto shut-off clutch
- 21 stage clutch control



Part No.	Description
EY7410LA2S	Panasonic Screwdriver 3.6V
EY9L10B	Replacement Rechargeable Battery

PANASONIC CORDLESS IMPACT DRIVER 18V LI-ION DUAL VOLTAGE

- Advanced ergonomics
- Multiple Modes for all applications
- Robust build for heavy-duty use
- Ideal for working long periods and overhead work
- Variable speed control/reversible
- LED light to support work in dark areas
- Electric brake for added safety
- With an extra battery pack as standard equipment

Specifications:

- Torque: 26-160Nm
- Speed: 950-2500rpm (no load)
- Impact: 1200-3100ipm
- Charging Time: Usable 45min / Full 80min
- Battery: 5.0Ah Li-ion
- 3 work modes (low/med/high) plus self-drilling screw mode



Part No.	Description
EY75A7LJ2G57	Panasonic Impact Driver 18V

PANASONIC CORDLESS HAMMER DRILL & DRIVER 14.4V LI-ION DUAL VOLTAGE

- High power drilling with extreme durability
- Hybrid switch
- Precision variable speed control/reversible
- Optimum rotation speed control
- LED light to support work in dark areas
- Electric brake for added safety
- With an extra battery pack as standard equipment

Specifications:

- Torque: 12-50Nm
- Speed: 30-1580rpm (no load)
- Charging Time: Usable 45min / Full 80min
- Battery: 4.2Ah Li-ion
- 13mm heavy duty keyless chuck
- 18 stage clutch control
- 2 work modes (low/high)



Part No.	Description
EY79A2LS2F57	Panasonic Hammer Drill & Driver 14.4V

PANASONIC CORDLESS DRILL & DRIVER 14.4V DUAL VOLTAGE

- IP56 rated for the ultimate in toughness
- Dual voltage for use with either a 14.4V or 18V battery
- Overheat Protection System (OPS)
- 2 x 14.4V 4.2Ah Li-Ion batteries, 1 x charger and hard case
- High power: 37.5Nm
- 50min. charging system
- Variable speed control, reversible
- 18-stage clutch plus drill position
- 13mm heavy duty keyless chuck
- LED light for support
- Belt hook
- Electric brake
- With an extra battery pack as standard equipment



Part No.	Description
EY74A1LS2F57	Panasonic Drill 14.4V
EY9L45B57	Replacement 14.4V Battery 4.2Ah

EY79A2LJ2G57 CORDLESS HAMMER DRILL & DRIVER 18V LI-ION DUAL VOLTAGE

- High power drilling with extreme durability
- Hybrid switch
- Precision variable speed control/reversible
- Optimum rotation speed control
- LED light to support work in dark areas
- Electric brake for added safety
- With an extra battery pack as standard equipment

Specifications:

- Torque: 12-50Nm
- Speed: 30-1580rpm (no load)
- Charging Time: Usable 45min / Full 80min
- Battery: 5.0Ah Li-ion
- 2 work modes (low/high)
- 13mm heavy duty keyless chuck
- 18 stage clutch control



Part No.	Description
EY79A2LJ2G57	Panasonic Hammer Drill & Driver 18V

DREMEL® 7750 KIT – RECHARGEABLE

- The easiest tool for mobile use
- Engraving, cutting, sanding, grinding, sharpening, polishing and cleaning
- Comfortably get into tight spaces both indoor and outdoor
- EZ Twist accessory quick change system
- 8,000-20,000rpm variable speed

Included:

- Multi-Tool and 10 accessories
- 1 hour battery charger



Part No.	Description
DRM 7750-10	Dremel Kit

DREMEL® 300 SERIES KIT

- This kit includes the Dremel® 300 Series Multi-Tool and 25 accessories in a convenient case for storage of accessories and attachments.
- 10,000-37,000 RPM variable speed, 125W motor



Part No.	Description
DRM 300-25	Dremel Kit

DREMEL® 8220 KIT – RECHARGEABLE

- Detailed indoor and outdoor use
- Cordless, but as powerful as corded Multi-Tools
- Cutting, grinding, sanding and polishing with the greatest precision
- Motor brake stops the accessory from spinning right after switching off
- EZ Twist accessory quick change system
- 5,000-33,000rpm variable speed

Included:

- Multi-Tool and 28 accessories
- Cutting Guide
- 1 hour battery charger



Part No.	Description
DRM 8220-1/28	Dremel Kit

DREMEL® 3000 KIT – CORDED

- Detailed indoor and outdoor use
- Corded Multi-Tool
- From cutting to trimming to polishing
- Cool-running tool with low noise and vibration, even under high load
- Strong and fitted grip for high maneuverability and no fatigue
- 10,000-33,000rpm variable speed

Included:

- Multi-Tool and 30 accessories
- Flexshaft attachment (225)
- Instruction manual
- Sanding / Grinding Guide (A576)
- Storage Case



Part No.	Description
DRM 3000-2/30	Dremel Kit

DREMEL® 300 SERIES KIT

This kit comes with a clip on accessory set of 55 pcs and a flexible shaft for the more demanding user.



Part No.	Description
DRM 300-1/55	Dremel Kit

Milwaukee® Tools

NOTHING BUT HEAVY DUTY

Milwaukee® Tool is an industry-leading manufacturer of heavy-duty power tools, accessories and hand tools for professional users worldwide.

Since the company began in 1924, Milwaukee® Tool has led the industry in both durability and performance. With an unwavering commitment to the trades, Milwaukee® continues to lead with a focus on providing innovative, trade-specific solutions. Whether it is through their leadership in LITHIUM-ION technology, as seen in the M12™, M18™ & M28™ Systems, time-saving accessories or innovative hand tool products, Milwaukee® is dedicated to delivering a steady stream of advanced solutions for the trades that offer increased productivity and unmatched durability.

To do this, Milwaukee® takes the time to work side by side with real craftsman to understand the demands of a constantly changing workplace and how they can best deliver solutions that help the user work both faster and smarter. Milwaukee® knows that professional users sweat the small stuff, and so do they. They pay attention to the small details that that make a big difference. This user focus not only leads to solutions for real jobsite challenges, but fuels the disruptive innovation seen across all product lines.

Browse the range:

BY THE TRADE, FOR THE TRADE

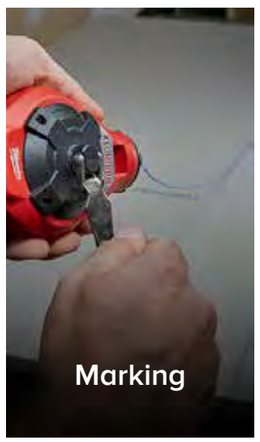
Milwaukee® is dedicated to designing tools for professional users to maximise productivity while minimising downtime on the job site. From impact wrenches, hammer drills and circular saws to lighting, chargers and jobsite clean up, Milwaukee® Power Tools will help you get the job done. Many Milwaukee® power tools are NSN codified which simplifies the order process by the military.


Soft Storage


Hard Storage


Packout™


Steel Storage


Marking


Instruments


Lasers



Batteries & Chargers

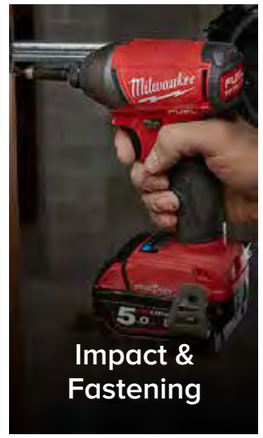
M12 & M18 FUEL™ – ENGINEERED FOR THE MOST DEMANDING JOBS.

The FUEL™ 12 volt and 18 volt Cordless Power Tools are engineered for the most demanding tradesmen in the world. Delivering unrivaled performance in a compact structure, all FUEL™ products feature three Milwaukee®-exclusive innovations that deliver unmatched power, run-time and durability on the jobsite:

- The POWERSTATE™ Brushless Motor: Deliver more application speed, torque and durability in a smaller size. Additionally, they reduce noise and cool more rapidly to deliver years of maintenance-free performance.
- REDLITHIUM™ Battery Pack: Lasts longer, thinks faster and works harder than all other professional lithium-ion batteries. Built to withstand the harshest environments, delivering more work over the course of your day and over the life of the battery.
- REDLINK PLUS™ Intelligence Hardware and Software: Enables advanced communication between your batteries and tools, allowing for unmatched levels of performance, protection and productivity.

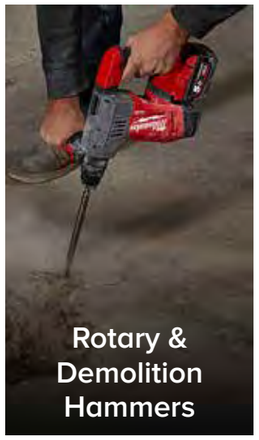

Power Packs

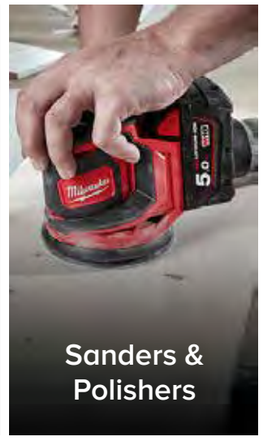

Drills


Impact & Fastening


Saws & Cutting


Grinders

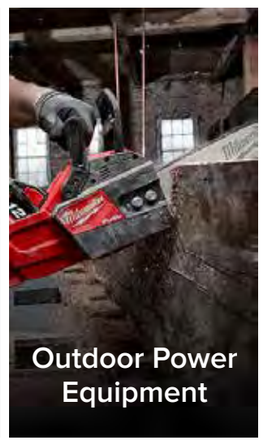

Rotary & Demolition Hammers


Sanders & Polishers


Jobsite Cleanup


Lighting


Radios & Speakers

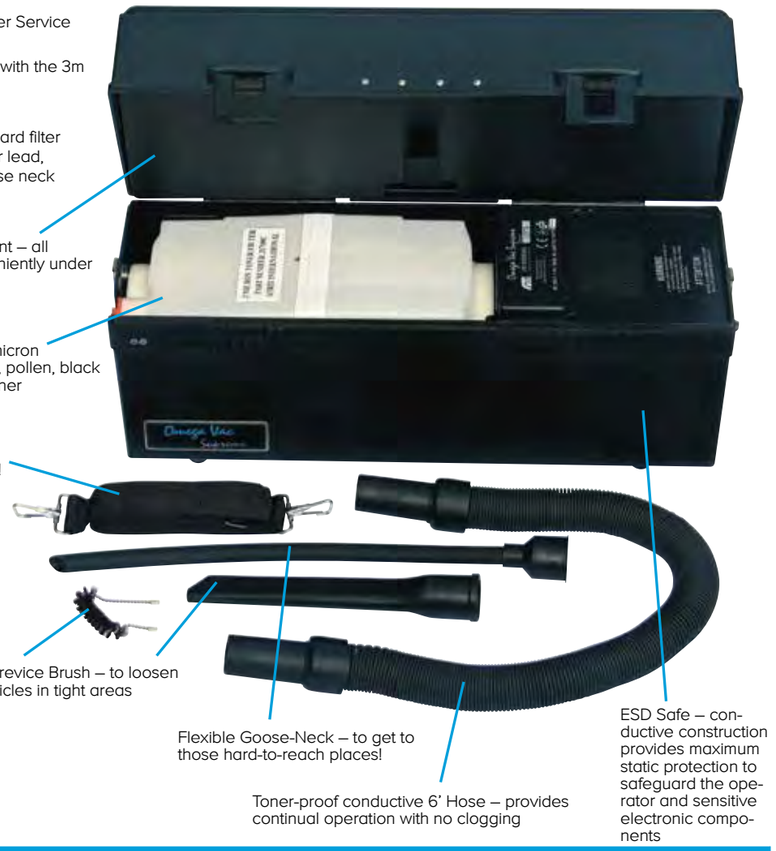

Outdoor Power Equipment


Electrical

Vacuum Cleaners

OMEGA SUPREME PLUS VACUUM CLEANER KIT – ESD SAFE

- Way quieter than any other Toner Service Vacuum at 69.6db
- Filter cartridges are compatible with the 3m vacuum
- Three year warranty!
- Kit contains: Vacuum, one standard filter cartridge, 1.5m ESD hose, power lead, crevice tool, crevice brush, goose neck and shoulder strap



Part No.	Description
VACOMEGA220	Omega Supreme Plus Vacuum Kit
VACOMEGAS2ECRH	Omega CleanVac (Cleanroom)

BACKPACK

Backpack for the Omega Supreme and Cleanroom Vacuums



Part No.	Description
AVAP-014	Backpack for Vacuums

REPLACEMENT FILTER – OMEGA SUPREME

- Replacement filters for the Omega Supreme and Cleanroom Vacuums
- Fits the 3M and Katun Vacuums



Part No.	Description
31700C	Standard Filer (0.3 micron retention)
OF612HE-1P	Genuine HEPA Filter (0.3 micron retention)

AVIATION CABIN 400HZ ELECTRIC BACKPACK VACUUM

Designed for aircraft application, - 110V 400Hz . The perfect solution for quick and effective aircraft cabin vacuuming, being a powerful, lightweight backpack vacuum.

Features

- Quickly Converts from Vacuum to Blower
- Adapts to Left or Right Hand Operation
- 4 Stage High Efficiency Filtration
- Air Powered Turbo Floor Brush
- Comfortable Ergonomic Fit
- Telescopic Metal Wand
- Powerful and Quiet
- HEPA Filter
- Lightweight

Specifications

- Voltage 110V
- Hz 400Hz
- CFM 76
- dBA 72

Fig 1



Fig 2



Fig 3





Part No.	Description	Fig
VACBP400	Cabin Vacuum Kit Complete	-
BPFILPACK	Exhaust & Pre-Motor Combopack	1
VACBP6-5P	Replacement Hepa Bags (Pack of 5)	2
BP200	Carrybag (optional extra)	3

MINI-VAC ALUMINIM

- The ultimate Mini-Vac of die cast aluminium
- Lock-on trigger
- 300mm Flexible hose



Part No.	Description
MV1560	Aluminium Mini Vacuum

MINI-VAC PLASTIC

- The "original" Mini-Vac in plastic version - high quality
- Lock-on trigger
- 300mm Flexible hose



Part No.	Description
MV1561	Plastc Mini Vacuum

MINI-VAC METAL

- Lock-on trigger
- 300mm Flexible hose



Part No.	Description
MV1562	Metal Mini Vacuum

For Clayton Vacuums and Dust Extraction

PAGE NO

GRYPMAT NON-SLIP TOOL TRAY

- Grips on to whatever surface it is placed on without sliding or falling, while still allowing for easy placement and removal.
- Have your tools where you need them, when you need them.
- Prevents Tool loss / FOD
- Flame res
- Antistatic
- Non-magi



Part No.	Figure	Description	Size (in)
RFGM-CR03S	A	Grypmat Small	11.75 x 5.75 x 1
RFGM-CR02S	B	Grypmat Medium	11.75 x 8.25 x 1
RFGM-CR01S	C	Grypmat Large	22 x 12 x 1
RFGM-TP3		Set of 3	

MECHANIC KNEE PADS CAMO PRINT

Cushioning made of high density strengthened foam keeping your knees comfortable for extended periods of time.

The fabric is extremely breathable and keeps your skin dry, great elasticity for your comfort.



Part No.	Description	Size
H95-999	Mechanic Knee Pads Camo Print	Unisize

AIRCRAFT MATS

- Closed cell, nitrile rubber mats designed specifically for Aircraft Mechanics
- Designed specifically for Aircraft Mechanics!
- Will not compression set
- Built-in handle
- Hangs up, easy to store
- Full 1 inch thick
- Will not absorb liquids, including Skydrol
- Light-weight
- Insulative and non-conductive
- Protects sensitive surfaces and equipment
- Conforms to irregular surfaces
- Does not disintegrate and cause FOD
- Non-skid surface, keeps your tools in place
- Extremely durable



Part No.	Description	Size
4117	Aircraft Mat	1041 x 431mm
4135	Aircraft Mat	1041 x 890 mm

MCNAUGHT AVIATION LUBE KIT

Contents:

- 1 x KDN right angle needlepoint coupler
- 1 x KDR right angle coupler
- 1 x KDE8 rigid extension
- 1 x KDF21 533mm (21") push-on flexible extension
- 1 x KY SUPERGRIP coupler
- 1 x KZDXL straight needlepoint coupler
- 1 x KZHY hypodermic needlepoint coupler
- 1 x KZLNJ 300mm J needlepoint coupler
- 1 x KZLNS 300mm straight coupler
- 1 x KZLNR 300mm right angle needlepoint coupler
- 1 x KZLN45 300mm 45 degree needlepoint coupler
- 1 x KZSNR short right angle coupler
- 1 x J65 adaptor assembly



Part No.	Description
ACK2-02	McNaught Aviation Lube Kit

TRIFLOW OIL

Tri-Flow Lubricant is recommended in the Aircraft Industry for lubricating the Variable Stator Mechanism of the IAE V2500 turbofan engines. A superior, light viscosity lubricant that allows for deep penetration into hard to reach moving parts.

The drip bottle with its convenient straw reaches internal components and lubricates parts that are not directly accessible from the outside due to its exceptional penetration and lubricating performance. High-grade petroleum oils provide optimum lubrication under extreme temperatures (-60 to +475°F) and humidity. Formulated with P.T.F.E.



Part No.	Description	Size
TRI-2	Triflow Oil	59 ml

BOELUBE® 90 LIQUID LUBRICANT

Non toxic, non polluting and non irritating liquid version of Boelube®



Part No.	Description	Size
BOE-90-4OZ	Boelube® Liquid Lubricant	4 oz

BOELUBE® LUBRICANT PASTE

- Boelube® Paste is perfect for drilling, cutting and reaming applications, extending tool life.
- Suitable for use with metals, plastics and graphite



Part No.	Description	Size
70307	Boelube® Lubricant Paste	12 oz
BOE-001	Boelube® Lubricant Paste	1.6 oz

BORE SAFE VALVE CORE REMOVAL TOOL

Safely deflate aircraft tires without turning the valve core into a missile



Part No.	Description
968RB	Bore Safe Valve Core Removal Tool
968RB-1	Bore Safe Valve Core Removal Tool Large

GREASE GUN PISTOL GRIP

- Delivery pressure up to 68,900kPa (10,000psi)
- Flexible 300mm (12") high pressure extension hose



Part No.	Description
K29	Grease Gun Pistol Grip

GREASE GUN SIDE LEVER

- Delivery pressure up to 82,750kPa (12,000psi)
- Rigid 150mm(6") high pressure extension hose



Part No.	Description
K45-01	Grease Gun Side Lever

SMALL OILER BOTTLE

Convenient small refillable oiler bottle with extending 60mm brass stem and shut-off nozzle., ideal for confined areas.



Part No.	Description	Size
418-30	Oiler bottle (empty)	30 ml

Permaswage

World Leader in Aerospace Fluid Fittings

Henchman is the exclusive Australian & New Zealand agent for Permaswage fittings and tooling. Permaswage is the technology leader in the fluid fitting industry providing proprietary and standard components, tooling, and training to all major aerospace companies globally.

Permaswage System

Permaswage is a tube connecting system that mechanically attaches a Permaswage fitting to a tube by radial swaging. The system is used to make permanent connections between metal tubes.

It works by deforming the metal fitting onto a tube radially, 360° around the circumference using the Permaswage Lightweight Tool (DLT). The interference between the fitting and tube produces a leak resistant seal that is structurally sound. This system can be used to produce new tubing systems, or to repair existing ones. Because the system is portable, it can be used in the field as well as at the user's facility

Permalite as System

Permalite/AS is a tube fitting that is mechanically attached to the tube by axial swaging. Permalite works by deforming the fitting into the tube being joined by moving a ring, a component of the Permalite fitting, axially along the fitting length using a Permaswage Axial swage Tool (DAT). The Permalite system is used on the A380 and Boeing 787





180° TRIPLE HEAD TUBE BENDER

- Cushion grip handles for comfort
- Makes tight-radius 180o bends with ease
- Graduated markings for accurate L/H or R/H and offset bends



Part No.	Description	Suits Tube Sizes
370-FH	Tube Bender	3/16", 1/4", 3/8"

LEVER TYPE TRIPLE HEAD TUBE BENDERS

- Suitable for for copper, aluminium,brass, steel and stainless
- Does the work of three conventional type tube benders
- Graduated markings for accurate L/H or R/H and offset bends



Part No.	Description	Suits Tube Sizes
367-FH	Lever Tube Benders	1/8", 3/16", 1/4"
368-FH	Lever Tube Benders	1/4", 5/16", 3/8"

180° TRIPLE HEAD TUBE BENDER – HEAVY DUTY

- Cushion grip handles for comfort
- Makes tight-radius 180o bends with ease
- Quick action indexing lever reposition of two-stage handles midway through a bend when both handles meet.
- Graduated markings for accurate L/H or R/H and offset bends



Part No.	Description	Suits Tube Sizes
470-FH	Tube Bender Heavy Duty	3/16", 1/4", 5/16", 3/8"

37° FLARING TOOL

- Suitable for copper, aluminium and brass
- Slip on yoke for use in tight areas



Part No.	Description	Suits Tube Sizes
507-FB	Flaring Tool	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"

PROTO® RATCHET-STYLE TUBING CUTTER

- High-impact fiberglass handle is lightweight and durable.
- Cuts copper, plastic, and PVC pipe from 1/8" to 3/8" (3.2 mm to 9.5 mm).
- Easily adjusts to fit pipe.



Part No.	Capacity (in)	OAL (in)	Weight (lbs)
JFF375	3/8	6	0.27

PROTO® TUBING CUTTER

- Cuts metal tubing from 1/8" through 1-1/8" O.D. quickly and cleanly.
- Features heat-treated alloy steel cutting blade, special rollers, and heavy-duty screw mounted in durable steel frame.
- Large screw-knob and retractable tubing reamer.



Part No.	Description	Weight (lbs)
J350	Tubing Cutter	0.82

Latchways

The WinGrip Anchor System

The WinGrip All in One Anchor System is for use by personnel working on aircraft during manufacture or routine maintenance operations, providing both fall arrest and fall re-straint capabilities. This product has been developed to greatly increase the efficiency of workers during short duration work, primarily used for light maintenance whether inside the hanger or out on the apron and in varying weather conditions. The WinGrip AIO System is an easily installed and highly portable single-user system that provides a fall protection anchor point for a single worker on wings, fuselage or stabilizers

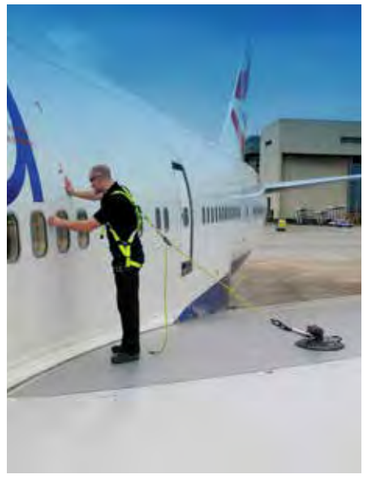
Please contact us for Pricing and a Demonstration!

Specifications

The WinGrip AIO vacuum pad is powered by compressed air or nitrogen, without the need for batteries, electrical cables or large equipment. Being completely non-electrical and with no metal on metal moving contact, the system is inherently safe with fuel tanks open. If the air/nitrogen supply should fail, an audible alarm sounds and the WinGrip AIO vacuum pad will maintain a safe working vacuum for at least 20 minutes. The WinGrip AIO is suitable for wet or dry surfaces and can be used inside hangars or outside. Installation and removal are safe and straightforward for a single worker to carry out, and is suitable for use in all temperatures from freezing Arctic conditions through to high desert temperatures.

Technical Data

- For use as a single point anchor for 1 user
- Air supply pressure 80 to 125 PSI
- Temperature ranges: -30°C to 60°C.
- Aircraft skin temperature: -40°C to +100°C
- 120 Decibel non electrical warning alarm with two alarm functions to indicate air pressure loss/vacuum pressure leak.
- Provides 20 minutes of safety in the event of an air pressure loss.
- Vacuum leak test button ensures the vacuum anchor is placed on a non-porous/non-leaking surface.
- Independent visual indicators to show correct air pressure/vacuum pressure.
- Fitted with a double action vacuum safety release switch to prevent un-intentional deactivation.





Please contact us for our range of Proto Tethered Tools.

WINGRIP SINGLE USER SYSTEM

The Wingrip vacuum anchor has provided a single fall protection anchor point for one worker on wings, fuselage or stabilisers. Quickly and easily installed, the highly portable single-user system is particularly suited to line maintenance and other short-term, temporary work. The anchor is positioned and vacuum locked in place, then used by a worker wearing a full body harness with a safety lanyard and work positioning rope, connected to the vacuum anchor. The adjustable work positioning rope provides a safe working radius of 3 m and is particularly helpful to locate the worker for comfortable hands-free working.

Two vacuum anchors can be used to triangulate and fi x the worker's position.



Part No.	Description
TBA	Wingrip Single User System

WINGRIP BARRIER SYSTEM

The Wingrip barrier system was developed to provide a collective solution to working at height on aircraft during manufacture and maintenance. The system can be installed by one operative in complete safety and once set up will provide an enclosed safe working environment for an unlimited number of workers for any duration of time. The Wingrip barrier system provides the ultimate in work at height safety by eliminating all fall risks. Workers require only basic training to work within the system without the need to use harnesses and lanyards. The system consists of upright stanchions connected at the base to a Wingrip vacuum pad. The interface of the stanchion is fully adjustable and ensures a perfect installation can be achieved on any undulating surface. Horizontal rails are adjustable in length and angle which allows any shape of system to be installed and adjustment of the layout at any time. Systems can be supplied to enclose any size area from 1 m2 to the entire upper surface of an aircraft.



Part No.	Description
TBA	Wingrip Barrier System

WINGRIP LIFELINE SYSTEM

The Wingrip horizontal lifeline system was introduced to allow for safe, hands-free access for up to four workers along the entire length of a wing or fuselage and is used ideally for heavier maintenance or longer operations. The system consists of two end-anchor vacuum pads with cables spanning between them and intermediate anchors as needed to suit System benefits. Each anchor is positioned and vacuum locked in place, then the stainless steel safety cables connected and tensioned at one end. Workers connect to the cable using the unique Latchways' shuttle. Up to four workers can use the system, wearing full body harnesses and work positioning ropes. This system allows hands-free movement along the whole cable length, with shuttles gliding over intermediate anchors.

- Available in any length to suit any wing
- Ideal for heavy maintenance / longer access requirements
- Up to 4 users per system
- Fall arrest rated
- Safe method of installation and strip down
- Provides full access to any wing without needing to disconnect
- Hands-free operation
- Engineered system
- The Wingrip range



Part No.	Description
TBA	Wingrip Lifeline System

Note: Part Number dependant on aircraft type

INDEX

1	Page
1" Dr Extension	366-367
1" Dr Inhex	368
1" Dr Ratchet	366-367
1" Dr Socket Sets	370-371
1" Dr Sockets Shallow	368-369
1" Dr Sockets Spline	370
1" Dr T-Handle	367
1" Dr Universal Joint	366
1/2 - 3/8" Dr Adaptor	325
1/2 - 3/4" Dr Adaptor	325
1/2 - 3/8" Dr Adaptor	287
1/2" Dr Adapter Set	346
1/2" Dr Crow Ring	343
1/2" Dr Crow Ring Sets	352
1/2" Dr Crows Foot	343-345
1/2" Dr Crows Foot Sets	352
1/2" Dr Extensions	324, 328
1/2" Dr Flex Ratchet	323
1/2" Dr Inhex Sets	349
1/2" Dr Inhex Sockets	340, 342
1/2" Dr Ratchet	320, 323, 326-327
1/2" Dr Ratchet Flex	328
1/2" Dr Ratchet Repair Kits	329
1/2" Dr Ratchetor	329
1/2" Dr Socket Inhex Sets	352
1/2" Dr Socket Sets	346 355
1/2" Dr Sockets Deep	331-332, 336-337
1/2" Dr Sockets Shallow	330-331, 334-336, 338
1/2" Dr Sockets Spline	333, 338
1/2" Dr Speedbrace	323-324
1/2" Dr T Handle	324, 328
1/2" Dr Torx Bit Sockets	341
1/2" Dr Torx Bits Sockets	341
1/2" Dr Torx Sockets	333
1/2" Dr Universal Joint	325; 329
1/2" Dr Universal Sockets	339
1/2" Dr Wobble Extension	324, 328
1/4" Dr 3/8" Dr Adaptor	257
1/4" Dr Bit Holder	254
1/4" Dr Bits Sockets	269
1/4" Dr Breaker Bar	252
1/4" Dr Crow Ring	270
1/4" Dr Crows Foot	271
1/4" Dr Driver Handle	252
1/4" Dr Extension	253, 257
1/4" Dr Extension with Thru-Hole	230
1/4" Dr Flexible Driver	252
1/4" Dr Flexible Extension	253, 257
1/4" Dr Hi-Lok Ratchet	254
1/4" Dr Inhex Sockets	268-269
1/4" Dr Phillips Bits Sockets	268-269
1/4" Dr Ratchet	250-251, 255-256
1/4" Dr Ratchet Flex	252, 255-256
1/4" Dr Ratchet Repair Kits	253, 256
1/4" Dr Slotted Bits Sockets	268-269
1/4" Dr Sockets Deep	259-260, 263-264
1/4" Dr Sockets Sets	272-277
1/4" Dr Sockets Shallow	258-259, 262-263
1/4" Dr Speed Brace Stahlwille	252
1/4" Dr Spline Sockets	260, 265
1/4" Dr Spline Sockets Deep	261, 265
1/4" Dr T Handle	252
1/4" Dr Torx Bits Sockets	268-269

1	Page
1/4" Dr Torx Sockets	260
1/4" Dr Universal Sockets	266-267
1/4" Dr Wobble Extension	253, 257
1/4" Dr-1/2" Dr Adaptor	253
1/4" Dr-3/8" Dr Adaptor	253
1/4" Drive Finger Ratchet	254
1/4" Drive Hi-Lok Extensions	254
1/4" Drive Ratchetor	254
1/4" Drive Socket Rail	261
1/4" Drive Universal Joint	253, 257
1/4" Shank Burr	86
1/4-28 Collet Chuck	77
1/4-28 Countersink Holders	91
1/4-28 Drill	61
1/4-28 Drill, Desoutter	48
1/4-28 Drill, Dotco	59
1/4-28 Drill,Taylor	61
1/4-28 Drills, Long	65
1/4-28 Drills, Short	65
1/4-28 Drills, Stubby	64
1/4-28 Reamers	99
1/4-28 Threaded Holder	64, 91-92
1/8" Shank Burr	87
10X Magnifier	659

3	Page
3/4 - 1/2" Adaptor	358-359
3/4" Dr Breaker Bar	359
3/4" Dr Extension	358-359
3/4" Dr Inhex Sockets	361
3/4" Dr Ratchet	358-359
3/4" Dr Ratchetor	358-359
3/4" Dr Socket Sets	364-365
3/4" Dr Sockets Deep	361-362
3/4" Dr Sockets Shallow	360-363
3/4" Dr Sockets Spline	363
3/4" Dr Universal Joint	358-359
3/8 - 1/2" Dr Adaptor	282, 287
3/8 - 1/4" Dr Adaptor	282
3/8 Dr-1/4" Dr Adaptor	257
3/8 Drive Ratchetor	286
3/8" Dr Bit Socket	283
3/8" Dr Breaker Bar	287
3/8" Dr Crow Ring	303, 306
3/8" Dr Crow Ring Set 3/8 Dr	316
3/8" Dr Crows Foot	304-307
3/8" Dr Crows Foot Set 3/8" Dr	317
3/8" Dr Extension	287
3/8" Dr Extensions	282
3/8" Dr Flex Ratchet	281
3/8" Dr Flex Ratchets	285-286
3/8" Dr Flexible Extension	282, 287
3/8" Dr Hinged Handle	287
3/8" Dr Inhex Sockets	300-302
3/8" Dr Phillips Bits Sockets	302
3/8" Dr Ratchet	280
3/8" Dr Ratchet Repair Kit	283, 287
3/8" Dr Ratchets	284-286
3/8" Dr Slotted Bits Sockets	302
3/8" Dr Socket Set	309
3/8" Dr Socket Sets	310-311, 318-319
3/8" Dr Socket Sets Deep	313-314
3/8" Dr Socket Sets Inhex	314-315
3/8" Dr Socket Sets Shallow	312-313
3/8" Dr Socket Sets Torx	316
3/8" Dr Socket Sets Universal	314
3/8" Dr Sockets Deep	289, 294-295

3	Page
3/8" Dr Sockets Shallow	288, 290-293, 296
3/8" Dr Sockets Torx	291
3/8" Dr Speed Brace	281, 286
3/8" Dr T Handle	287
3/8" Dr T-Handle	281
3/8" Dr Torque Adaptors	308
3/8" Dr Torx Bits Sockets	302
3/8" Dr Torx Socket Set	309
3/8" Dr Universal Joint	282, 287
3/8" Dr Universal Sockets	297-299
3/8" Dr Wobble Extension	282
30 Deg Drill, Desoutter	48, 52
360 Deg Drill	52-53, 61
360 Deg Drill Attachment	63
360 Deg Drill, Desoutter	48
360 Deg Drill, Dotco	59
360 Deg Drill, Taylor	61
3M Radial Bristle Discs	186

4	Page
45 Deg Drill	61
45 Deg Drill Attachment	63
45 Deg Drill, Desoutter	48, 52
45 Deg Drill, Dotco	59
45 Deg Drill, Taylor	61

9	Page
9/32 Threaded Collet Holder	77
90 Deg Die Grinder	110, 113, 122
90 Deg Drill	61
90 Deg Drill Attachment	62-63
90 Deg Drill, Desoutter	48, 52-53, 55
90 Deg Drill, Dotco	59
90 Deg Drill, Taylor	61

A	Page
Abranet	179
Abrasive Combi Discs	185
Abrasive Cone	188
Abrasive Discs, Friction Pads	151-152
Abrasive Screen Disks	179
Abrasive Sticks	181
Abrasive Wheels	181
Abrasive, Spiral Band	187
Accessories Test Leads	580
Adapter 1" Dr	366-367
Adapter Set	309
Adapters Set 1/2" Dr	346
Adaptor Set	272
Adaptor Threaded Drills	64-65
Adaptors 1/2" Dr	329
Adhesive Applicator	246
Adhesive Applicator Gun	670
Adhesive Dispensing Gun	246
Adjustable Crows Foot	305
Adjustable Face Spanner	446
Adjustable Hook Spanners	446
Adjustable Squeezer Set Holder	211
Adjustable Wrench	443-446
Adjustable Wrench, Sets	445
Air Duster	178
Air Fittings	176-177
Air Hose, Spiral	178
Air Line, Clayton	174-175
Air Manifold	178
Air Nibbler	106

A	Page
Air Pencil	122
Air Scriber	123
Air Tool Oil	141
Airbus Crimp Tool	530
Airbus Scrapers	244
Aircraft Drills HSS	66-67
Aircraft Drills HSSCO	68-69
Aircraft Drills, Extension	70-71
Aircraft Grounding Cable	165, 167
Aircraft Mats	680
Airframe Kit	32
Aligning Punch	466
Allen Key Sets	450-453
Alligator Clips	581
Alligator Waterpump Pliers	509
Alligator Yoke Squeezer	208, 210
Aluminium Face Rivet Set	200
Aluminium Punch	467
Anchor Nut Plate	80-81
Andilog Centormeter	638
Angle Adapters	622
Angle Drill	61
Angle Drill, Desoutter	48, 52-53, 55
Angle Drill, Dotco	59
Angle Drill, Taylor	61
Angle Grinder, Electric	120-121
Angle Grinder, Pneumatic	116-119
Angle Sanders, Desoutter	133-134
Anti Vibration Gloves	196
Antistatic Wrist Straps	585
Apex Bits	478
App - Tool Control	17
Arbor, Cut-Off Wheel	187
Arbor, Holesaw	105
Arch Punch Set	473
Art Knife	521
Astro Crimp Tool	530-37, 545-546
Auto Retract Knife	520
Auto-loading Knife	520
Automated Tool Control	12-13, 41
Automatic Centre Punch	466
Automatic Drilling	44-45
Aviation Shears	518
Avionics Wiring Tool Kit	38-39

B	Page
B1 Tool Kit	29, 31
BAC Modified Rivet Set	202
Backing Pads	184
Backpack, Vacuum	678-679
Backup Pads	184
Backup Pads, Clayton	144
Ball Joint Vice	554
Ball Pein Hammer	460
Ball Point Hex Keys	451-453
Ball Valves	178
Band-It Banding Tool	528
Bar Clamps	552
Barracuda Filter Pack	173
Barracuda Filters	173
Barracuda Vacuum	172
Battery Screwdriver	672
Bearing Pullers	555
Beehive Retainer Spring	196
Belt Punch	473
Belt Sander	124
Belt Sander Shroud, Dustless	154

B	Page
Belt Sander, Desoutter	124
Belt Sander, Dotco	124
Belt Sander, Talyor	124
Belt, Sanding Abrasive	180
Bench Ground	585
Bent Nose Electronic	515
Bent Nose Plier	502
Bent Nose Pliers	508
Bit Holder 1/4" Dr	254
Bit Holder Roller Ratchet	227
Bit Holders	482
Bit Socket, 3/8" Dr	283
Bits Ratchet	252
Bits Sockets 1/2" Dr	341-342
Bits Sockets 1/4" Dr	268-269
Bits Sockets 3/8 Dr	302
Bits Torx	480
Bits, Apex	478
Bits, Extension	484
Bits, Hex	481
Bits, Mototorque	479
Bits, Nutdriver	483
Bits, Phillips	480
Bits, Pozi Drive	481
Bits, Slotted	481
Bits, Torq Set	483
Bits, Torq-Set	479
Bits, Torx Plus	480
Bits, Tri Wing	482
Blind Bolt Riveting	219
Blind Hole Spotters	83
Blind Riveting Tool	214, 218
Block, Sanding	124, 143
Blow Gun	178
Boeing Scrapers	244
Boelube	681
Bolt Cutter	524
Bolt Cutters	504
Bolt Extractor	499
Bonding Brush Set	189
Bonding Tester	579
Borescope	664
Box Wrenches Ratcheting	433-437
Brass Face Rivet Set	200
Brass Hammer	461, 464
Brass Pin Punch Set	470
Brass Punch	466-467
Breaker Bar 1/4" Dr	252
Breaker Bar 3/4" Dr	359
Breaker Bar 3/8" Dr	287
Bronze Drift Punch	467
Bucking Bars, Steel	206-207
Bucking Bars, Tungsten	204-206
Bull Nose Pliers	502, 507
Burnishing Tool	83
Burr Sets	87
Burraway	84
Burraway Set	85
Burr-Off	84
Burrs, Carbide	86-87

C	Page
C Clamps Vise Grips	551
C Rivet Set	200
C- Yoke Squeezer	208, 210
Cabin Tool Kit	27
Cabin Vacuum	679

C	Page
Cable Cutter	524, 649
Cable Knife	521
Cable Tie Gun	529
Cable Ties	529
Calibration Torque Bench	640, 647
Callipers	655
Calyton Filter Bags	161
Camloc Plier	234
Canon Pliers	509
Cantilever Tool Kit	28
Cape Chisel	468
Caps, Rivet Sets	203
Carbide Burr Sets	87
Carbide Burrs	86-87
Carbide Countersinks	91
Carbide Drills	72
Carbide Rivet Shaver	92
Carpet Knife	520
Centre Punch	466
Chairs, ESD	587
Chatterless Countersink	85
Cherry Flush Nipper	235
Cherrymax Grip Gage	233
Cherrymax Riveter	214-215
Chip Chaser	78
Chisel Holder	473
Chisel Rivet Set	200
Chisel Set	471
Chisel set, Plastic	245
Chisel, Cape	468
Chisel, Cold	468
Chuck, Mini	78
Chucking Reamer	100
Circlip Plier Set	512
Circlip Pliers	510-511
Clamp Meters	574-578
Clamp, Bar	552
Clamp, G Type	553
Clamp, Kant	553
Clamp, Quick Grip	552
Clamps Quick Grip	552
Claw Grabber	658
Clayton Tent	163
Clayton Vaccum	159-160
Clayton Vacuum	158
Cleanroom Vacuum	586
Cleco Drill	59
Cleco Holder	234
Cleco No-Mar Caps	236
Cleco Pliers	235
Cleco Tool, Pneumatic	236
Cleco's	236
Club Hammer	459-460
Coax Crimper	528-529
Coaxial Torque Wrench	604
Coaxial Wire Stripper	525
Cobalt Gun Barrel Drills	73
Cobalt Jobber Drills	68-69
Cobra Waterpump Pliers	510
Cold Chisel	468
Coldworking Tools	240-241
Collar Claw Pliers	235
Collar Removal Socket	222
Collar Removal Sockets	223
Collar Removal Tools	221
Collet Chucks	77
Collet Drill, Desoutter	48

C	Page
Collets, Desoutter	51
Collets, Drill	77
Combi Discs	184
Combination Pliers	502, 507
Combination Ratcheting Wrench	413-418, 422-425
Combination Spanner Sets	384-388
Combination Spanners	374-383
Combination Square	655
Combination Wrench Sets	384-388
Combination Wrenches	374-383
Composite Cutting Tools	97
Composite Kit	38
Compothane Hammer	463-464
Compression Router Bit	98
Conductive Brush	589
Conductive Floor Paint	587
Conductive Storage Bins	587
Conductive Tool Box	587
Cone Abrasive Kit	182
Cone Holder	188
Connector Tooling Kit	39-40
Connector Wiring Kit	40
Contact Installation Removal Tooling	542-543
Controlled Drilling	56
Controllers, Desoutter	637
Convertible Circlip Pliers	511-512
Copper Safety Lock Wire	517
Cordless Blind Riveter	217
Cordless Torque Drivers	624
Cordless Torque Screwdrivers	626, 628
Cotter Pin Puller	474
Counterbores	89
Countersing Chatterless	85
Countersink Cage	89-90
Countersink Kit	89
Countersink Pilots	91
Countersink Threaded	85
Countersink, Microstop	89-90
Countersinks, Piloted	90
Cratex Abrasive Kit	182-183
Cratex Abrasive Points	181-182
Cratex Rotary Handpiece	122
Crimp Frame, Hex	544, 546
Crimp Tool	528-529
Cross Pein Hammer	459, 461
Cross-Hole Countersink	85
Crow Ring 1/2" Dr	343
Crow Ring 1/4" Dr	270
Crow Ring 3/8" Dr	303, 306
Crow Ring Set 3/8" Dr	316
Crow Ring Sets 1/2" Dr	352
Crows Foot 1/2" Dr	343-344
Crows Foot 1/4" Dr	271
Crows Foot 1/4" Dr Sets	276
Crows Foot 3/8" Dr	304-307
Crows Foot Adjustable	305
Crows Foot Set 3/8" Dr	317
Crows Foot Sets 1/2 Dr	352
Cupped Squeezer Set	213
Current Clamps	574-578
Custom Stripmaster	526-527
Cutoff Saw Shroud, Dustless	149
Cut-Off Wheel Arbor	187
Cut-Off Wheels	187
Cutter, Reverse Spotface	88
Cutter, Taper-Lok	75

C	Page
Cutters, Reverse Countersink	88
Cutters, sealant	246
Cutting Mat	521
Cyclonic Pre-Separator	159
Cylindrical Body Temporary Fasteners	239
Cylindrical Temporary Fastener Runner	239
C-Yoke Jaw	211

D	Page
Dagger Drill	97
Dead Blow Hammer	459, 463-464
Deburring Set	85
Deburring Tools	83-84
Deep Reach Wire Twister	516
Deep Sockets 3/8" Dr	289, 294-295
Delta Torque Wrench	618-619
Dental Probes	474
Desoldering Station	592, 595
Desoldering Wick	596
Desoutter Angle Grinders	114-119, 133-134
Desoutter Collets	51
Desoutter Controllers	637
Desoutter Die Grinders	110-113
Desoutter Drills	44-56
Desoutter Insert Fittings, Torque	620-621
Desoutter Nutrunners	626-627, 630
Desoutter Rivet Gun	194-195
Desoutter Rivet Shavers	93
Desoutter Rivet Squeezers	208
Desoutter Router	95
Desoutter Selection Guide	47
Desoutter Straight Sanders	132
Desoutter Tappers	57
Desoutter Torque Drivers	624
Desoutter Torque Screwdrivers	626, 628
Desoutter Torque Wrenches	618-619
Diagonal Cutters	505-506
Dial Indicator	655
Dial Torque Wrenches	607-608
Diamond Coated Drills	97
Diamond Core Drill	97
Diamond Cut Router	98
Diamond Saw	97
Diamond Taper Hone	97
Die Grinder Shrouds	147-149
Die Grinders	122
Die Grinders, Desoutter	110-115
Digital Multimeter	559-567
Digital Optical Micrometer	665
Digital Sprit Level	657
Dimple Die Sets	212
Disc Sander, Desoutter	137
Dispensing Gun, Adhesive	246
Dispensing Nozzles	247
Disposable Heel Straps	586
Dividers	655
DOE Wrench Sets	405-406
DOE Wrenches	399-404
Dotco Drills	59
Dotco Panel Saw	106
Dotco Rivet Shaver	94
Double Box Wrench Sets	397-398
Double Box Wrenches	389-396
Double Ended Roller Ratchet	226
Drag Link Socket 1/2 Dr	342
Dremel Engraver	673

D	Page
Drift Punch	467-468
Drift Punch Sets	470
Drill Block	76
Drill Bushings	76
Drill Chuck	78
Drill Collets	51, 77
Drill Diamond Core	97
Drill Driver	672-673
Drill Gages	78
Drill Guides, Dustless	154
Drill Motors, Desoutter	48
Drill Sets	74
Drill Shroud, Dustless	153
Drill Snake	63
Drill Stand Egg Cup	78
Drill Stand Kit Egg Cup	79
Drill Stops	76
Drill, Dagger	97
Drilling, Automatic	44-45
Drills Diamond Coated	97
Drills, Carbide	72
Drills, Gun Barrel	73
Drills, HSS Jobber	66-69
Drills, Left Hand	72
Drills, Stove Burner	72
Drills, Threaded, Long	65
Drills, Threaded, Short	65
Drills, Threaded, Stubby	64
Driver Handle 1/4" Dr	257
Drum Holders	187
Drum Sander Shroud, Dustless	150
Duckbill Plier	503
Durabook	669
Dust Extraction Desoutter	138
Dustless Shrouds	147-149, 151, 156
Dustmaster Covers	161
Dustmaster Filters & Bags	161
Dustmaster Pneumatic Vacuum	158, 160
Dustmaster Screen Abrasives	180
Dustmaster Toolkit & Hose Reel	159
Dynobrade Pencil Grinder	123

E	Page
Ear Muffs	196
Economy Rivnut Tool	234
Edge Breaker	83
Egg Cup Drill Stand	78
EL Brutus Extractor	499
Electric Nutrunners	632-633
Electronic Series Screwdrivers	495
Electronic Tool Control	Oct-13
Electronic Tool Kit	41
Electronics Pliers	513-514
Elephant Leg Rivet Set	201
Embossing Hammer	459
End Cutter Electronic	515
End Cutters	506
Engineers Square	654
ESD Brushes	589
ESD Feld Service Kit	584
ESD Flooring	587
ESD Footwear Tester	588
ESD Smocks	586
ESD Wrist Straps	585
Extended Countersink Cage	90
Extension 1" Dr	366-367
Extension 3/4 Dr	358-359

E	Page
Extension Drills	70-71
Extension with Thru-Hole	230
Extension, Threaded	78
Extensions 1/2 Dr	328
Extra Long Screwdrivers	492
Extractor Set, Screw	498
Eyeloupe	659
EZ Outs	497

F	Page
Fall Arrest System	684
Fan Grinder	187
Feeler Gauges	652-653
File Set	191
Files	190
Fine Tooth Holesaws	106
Finger Bits Holder	487
Flap Wheel Sanding	132
Flare Nut Spanners	409-411
Flare Nut Wrench Ratcheting	421
Flare Nut Wrench Set	411-412
Flare Nut Wrenches	409-411
Flaring Tool, Pipe	683
Flashlight	661-662
Flat Nose Plier	503-504
Flex Head Wrench	407-408
Flex Ratchet 3/8 Dr	285-286
Flex Ratcheting Wrench	424-425
Flex Ratcheting Wrenches	420
Flexible Driver 1/4" Dr	257
Flexible Driver 3/8 Dr	286
Flexible Extension 3/8 Dr	287
Flexible Grabber	658
Flexible Nutdriver	489
Flightline Toolboard	26
Fluke Clamp Meters	574-578
Fluke Insulation Testers	572-573
Fluke Multimeter	559-567
Fluke Thermometers	568-571
Flush Cutter	514
Flush Cutters	505
Flush Rivet Set	199
Flush Squeezer Set	213
Fluted Diamond Router	97
Fluting Pliers	517
FOD Wand, Vacuum	174
Folding Hex Keys	451, 453
Foot Control, Squeezer	211
Force Gauges	639
Force Transducer	646
Forceps	517
Fractional Drill Set	74
Fractional Size Drills HSS	67
Fractional Size Drills HSSCO	69
Fractional Size Extension Drills	71
Fume Extraction Accessories	590
Fumecube	591

G	Page
G Clamps	553
Gage Bilt Blind Riveter	218-219
Gage Bilt Cordless Riveters	217
Gage Bilt Pneumatic Riveter	216
Gage Bilt Riveter	214
Gage Rivet	203
Gage, Drill	78
Gage, Grip	233

G	Page
Gage, Pin Protrusion	233
GearWrench Combination Wrench	422-425
Gedore Torque Screwdrivers	602
General Pneumatic Rivet Squeezers	210
Glenair Strap Wrench	447
Gloves, Anti Vibration	196
Gloves, ESD	586
Glue Applicator	246
Glue Gun	670
Go-No Go Gage, Contacts	532
Go-No-Go Gage	542
Gooseneck Rivet Set	198
Grease Gun	681
Grinder, Die	110-115, 122
Grinder, Pneumatic	114
Grip Gage	233
Grounding, ESD	584
GrypMats	680
Gun Barrel Drills	73

H	Page
Hacksaw Blades	107
Hacksaws	107
Haemostat	517
Hakko Soldering	594
Half Moon Ratcheting Wrench	438
Half Moon Sets Ratcheting	441
Half Moon Spanners	392, 396
Half Round File	190
Hammer Dead Blow	459, 463-464
Hammer, Ball Pein	460
Hammer, Brass	461
Hammer, Club	460
Hammer, Embossing	459
Hammer, Rubber	458
Hammer, Sledge	460
Hammer, Tap	98, 461
Hammers, Nylon Face	458
Hand File	190
Hand Ratchet, Hi-Lok One-hand	228
Hand Sanding Blocks	124, 143
Hand Seamer	517
Handi Clamps	553
Handi Hex Keys	230-231
Handi Retainer Spring	196
Handle, Scraper	244
HawkEye Borescope	664
Headlamp	660, 662
Heat Guns	671
Heel Straps, ESD	586
Henchman Die Grinders	122
Henchman Drill	60-61
Henchman Rivet Gun	195
Henchman Rivet Shavers	94
Hex Body Temporary Fastener	237
Hex Bolster Screwdrivers	491
Hex Die Set Crimper	544
Hex Die Set Pneumatic Crimper	545
Hex Driver	490
Hex Insert Bits	481-482
Hex Key Sets	450-453
Hex Keys	455
Hex Keys, Hi-Lok	230-231
Hex Screwdriver Set	496
Hig Voltage Probe	581
High Leverage Cutters	505-506

H	Page
High Torque Nutrunner	634-635
Hi-Lite Collar Removal Sockets	222-223
Hi-Lite Collar Removal Tools	221
Hi-Lok Assembly Sets	229-230
Hi-Lok Box Ratchets	225
Hi-Lok Collar Removal Sockets	222-223
Hi-Lok Collar Removal Tools	221
Hi-Lok Collar Remover	202
Hi-Lok Extensions	254
Hi-Lok Installation Tool Kit	37, 232
Hi-Lok Pliers	235
Hi-Lok Ratchet	254
Hi-Lok Ratchets	228
Hi-Lok Roller Ratchets	226
Hi-Lok Socket Set	232
Hinded Handle 3/4" Dr	359
Hinged Handle 3/8" Dr	287
Hi-Shear Gage	233
Hi-Torque Bits	478
Hogs Bristle Brushes	589
Holder, 1/4-28	64
Holder, Temporary Fasteners	234
Hole Finders	82
Hole Gauges	656
Hole Punch Set	472
Holesaws	105-106
Hollow Cutter	92
Hollow Cutter, Hi-Lok	233
Honeycomb Core Knife	98
Hook & Pick Set	474
Hook Clips	581
Hook Spanner	446
Hornet Filter Pack	165
Hornet Filters	165
Hornet Vacuum	164
Hose Clamps Pliers	507
Hoses, Air - Clayton	174-175
Hot Air Guns	671
Hot Air Nozzles	671
Hot Melt Glue Guns	670
HSS Jobber Drills	66-67
HSS Piloted Reamer	99-103
HSSCO Jobber Drills	69
Huck Collar Remover	202

I	Page
Ideal Wire Stripper	526-527
Ignition File	191
Ignition Wrenches	399-404
Illuminated Magnifier	659
Impact Driver	672
Impact Driver Set	316, 499
Inclinometer	657
Infrared Thermometers	568-570
Inhex 1" Dr	368
Inhex Sets 1/2" Dr	352
Inhex Sets 1/4" Dr	277
Inhex Socket Sets 3/8" Dr	314-315
Inhex Sockets 3/8" Dr	300-302
Insert Bits	478, 480
Insert Bits Set	484
Insertion/Extraction Tooling	543
Inspection Mirror	658
Insulation testers	572-573
Integral Pilot Countersinks	90-91
Internal Pipe Wrench Set	447
Intrinsically Safe Flashlight	661

I	Page
Intrinsically Safe Headlamp	660
Intrinsically Safe Torch	661
Intrinsically Safe Worklight	663
Iononizer	586
Irwin Vise Grips	550
Isopropanol	597

J	Page
JBC Soldering	592
Jewellers Snips	519
Jiffy Gun	195
Jiffy Short Rivet Sets	201
Jobber Drills Cobalt	68
Jobber Drills HSS	66-69
Jo-Bolt Grip Gage	233
Joint Simulator	645
Jumbo Countersink Cage	90
Jumbo Pilot Countersinks	91
Junior Hacksaw	107
Junior Hacksaw	107

K	Page
KabTRAK	12-13, 41
Kant Twist Clamp	553
Kett Panel Saw	106
Knee Pads	680
Knife, Cable	521
Knife, Honeycomb Core	98
Knipex Pliers	502-505
Knives	520
Knock Out Punches	201

L	Page
L Keys	450-455
Lavatory Screwdriver	491
Lavatory Tool Kit	27
Leatherman Tool	521
LED Lenser	662
Left Hand Drills	72
Leister Heat Gun	671
Letter Size Drills HSS	67
Letter Size Drills HSSCO	69
Lever	475
Liberator Ratchet Set	231
Line Engineers Tool Kit	27-28
Linesmans Plier	502
Linesmans Pliers	507
Lint Free Wipes	589
Locators, Contacts	530-541
Lockbolt Riveter	217
Locker Cabinet	16
Locker Module	15
Locking Chain Vise grip	551
Locking Sheetmetal Vise Grip	551
Lockwire	517
Lockwire Pliers	516
LokkaTRAK	16
Long Nose Plier	503
Long Nose Plier Electronic	513, 515
Long Nose Vise Grips	550
Long reach Cutters	506
Long Reach Pliers	503, 508
Long Threaded Drills	65
Low Profile Roller Ratchet	227
Lube Kit	680
Lubricant	681

M	Page
Magnetic Bit Holder	489
Magnetic Nutdriver Bits	483
Magnetic Pick Up	658
Magnetizer, Demagnetizer	491
Magnifying Glass	659
Magnifying Lamp	659
Mandrel, Cratex	183
Mandrels, Rivnut	234
Manifold, Air	178
Manual Squeezers	212
Mechanical Tool Kit	30, 32
MegaPro Screwdriver	485
Metal Oxide Sanding Belt	180
Metric Drill Set	74
Micrometer Torque Wrenches	605-606
Micrometer, Outside	655
Microstop Countersink	89-90
Microstop Countersink Shroud	152
Milliohmeter	579
Mil-Spec Crimp Tool	530
Mil-Spec Stripper	526
Milwaukee Tools	674-675
Mini Chuck	78
Miniature Countersink Cage	90
Mini-Vac	679
Mirka Screen Abrasive	179
Mirror, Inspection	658
Mitutoyo Vernier	655
Mobile App	17
Motorq Bits	479
Mounted Pencil Brush	189
Multi Grip Pliers	509-510
Multimeter	559-567
Multipurpose Shears	519
Multispline , Screw Extractor	497
Multitool, Dremel	673
Mushroom Rivet Set	199

N	Page
Needle Files	191
Needle Nose Pliers	503, 507-508
Nibbler, Hand	518
Nibbler, Sheet Metal	106
Nitto Air Fittings	176
No-Mar Back Rivet Shooter	202
No-Mar Cleco Caps	236
No-Mar Countersink Cage	90
No-Mar Drill Stop	76
No-Mar Punch Set	471
No-Mar Rivet Set	200
No-Mar Temporary Fastener Caps	238
No-Mar Temporary Fasteners	237
Non Contact Volt Alert	579
Nose Assemblies Cherry Max	215
Number Size Drills HSS	66
Number Size Drills HSSCO	68
Number Size Extension Drills	70
Nut Driver Metric	489
Nut Plate Drill Jigs	80-81
Nutdriver Bits	483
Nutdriver Set	490, 496
Nutdriver Set SAE	492
Nutdrivers Small	496
Nutrunner, Desoutter	626-627, 630
Nutrunner, Electric	632-633
Nutrunner, High Torque	634-635
Nutrunners, Transducerized	631

N	Page
Nylon Drift Punch	467
Nylon Face Hammers	458, 462-463
Nylon Face Rivet Set	200
Nylon Tube Brush	189

O	Page
Oblique Cutter	513, 515
Obstruction Ratcheting Wrench	438
Obstruction Wrenches	392
Obstruction Wrenches; Proto	396
Offset Bits Holder	487
Offset Drilling Heads	50
Offset Rivet Set	198
Offset Screwdrivers	491
Oil	681
Oiler Bottle	681
One-Shot Reamer	98
Open End Service Wrench	442
Open End Spanner Sets	405-406
Open End Spanners	399-404
Open End Wrench Sets	405-406
Open End Wrenches	399-404
Optical Hole Locator	79
Optical Micrometer	665
Orbital Sander	124-125, 141-142
Orbital Sander, Desoutter	125-129, 130-131
Orbital Sanders	143
O-Ring Pick Set	474
Outside Micrometer	655
Oxy Tool Kit	37

P	Page
Pads, Sanding - Clayton	145
Paint Cutter	77
Palm Grip Sander	124-125
Panasonic Driver	672
Panavice	554
Pancake Drill	62
Pancake Drill Attachments	62
Pancake Drilling Heads	50
Panduit Cable Tie Gun	529
Panel Saw, Dotco	106
Panel Saw, Kett	106
Parallel Grips	509
Parallels	657
Pencil Brushes, Mounted	189
Pencil Grinder	122-123
Permaswage	682
Pferd File	190
Phenolic Scraper	202
Phillips Bits	478
Phillips Screwdriver	488, 495
Picks	474
Picofinish Screwdrivers	495
Pilot Countersinks	90
Pilot, Counterbore	89
Piloted Reamers	100-103
Pin Gauges	657
Pin Protrusion Gage	233
Pin Punch Set, Brass	470
Pin Punch Sets	469
Pin Punches	465
Pinch-Off Tool Vise Grip	551
Pinking Shears	98
Pipe Flaring Tool	683
Pipe Wrench	447
Pistol Drill	60

P	Page
Pistol Drill, Desoutter	48, 54
Pistol Drill, Dotco	59
Pistol Drill, Sioux	58
Pistol Sealant Gun	247
Pizza Wheels	478
Plastic Chisel set	245
Plastic cutter	505
Plastic Face Hammers	458, 462-463
Plastic Insertion/Extraction Tools	542
Plier, Long Nose	502-503
Plier, Slip Joint	502
Plier, Wire Twisting	516
Pliers Combination	502
Pliers Round Nose	504
Pliers, Circlip	510-513
Pliers, Cleco	235
Pliers, Duckbill	503
Pliers, Flat Nose	503
Pliers, Fluting	517
Pliers, Hi-Lok	235
Pliers, Needle Nose	503
Pliers, Stork Nose	503, 508, 517
Plunger, Sealant	247
Pneumatic Cleco Tool	236
Pneumatic Collar Removal Tool	224
Pneumatic Crimp Tool	534, 541-542
Pneumatic Fittings	176
Pneumatic Hex Crimper	545
Pneumatic Hi-Lok Kit	232
Pneumatic Rivet Squeezers	208, 210-211
Pneumatic Rivnut Gun	234
Pneumatic Shears	106
Pneumatic Temporary Fastener Tool	237
Pneumatic Vacuums	679
Points, Abrasive	181
Policaps	188
Polishing Sander	136
PortaTRAK	14-15
Positioners, Contacts	530-537, 541
Pozi Drive Bits	480-481
Pozi Screwdriver	489
Pre-Insulated Crimp Tool	528-529
Pressmaster Crimp Tool	529
Pressure Roller	98
Prick Punch	466
Proto Pliers	506-508
Proto Torque Screwdrivers	603
Proto Torque Wrenches	605-608, 612
Pry Bar	475
Pullers, Bearing	555
Pulse Static Transducer	644
Punch & Chisel Sets	469-471
Punch sets	469
Punch, Arch	473
Punch, Belt	473
Punch, Brass	466
Punch, Bronze	467
Punch, Centre	466
Punch, Drift	467
Punch, Roll Pin	466

Q	Page
Quick Grip Clamps	552
Quick Release Drill Heads	49

R	Page
Radial Shrouds, Dustless	150
Radius Guage Set	656
Ratchet 1" Dr	366-367
Ratchet 1/2" Dr	320, 323, 326-327
Ratchet 1/4" Dr	255-256
Ratchet 3/4" Dr	358-359
Ratchet 3/8" Dr	280
Ratchet Box Wrench	433-437
Ratchet Collar Removal Tool	224
Ratchet Flex 1/2" Dr	328
Ratchet Repair Kit	283
Ratchet Repair Kit 3/4" Dr	359
Ratchet Repair Kit 3/8" Dr	287
Ratchet Repair Kits 1/2" Dr	329
Ratchet Repair Kits 1/4" Dr	253, 256
Ratchet Wrench, Hi-Lok	225
Ratcheting Bit Holder	434
Ratcheting Bits Holder	487
Ratcheting Box Wrench Sets	439-440
Ratcheting Flare Nut Wrench	421
Ratcheting Flex Wrenches	420
Ratcheting Half Moon Wrenches	438
Ratcheting Screwdriver	485-486
Ratcheting Wrench Adaptor Set	395, 421
Ratcheting Wrench Sets	426-433, 441
Ratcheting Wrenches	413-418, 438
Ratchetor 1/2" Dr	329
Ratchetor 1/4" Dr	254, 257
Ratchetor 3/4" Dr	358-359
Ratchetor 3/8 Dr	281, 286
Ratchets 3/8" Dr	284-286
Ratchets Flex 3/8" Dr	285-286
Razor Blade Scraper	245
Reamer Kit	104
Reamer Set, Chucking	100
Reamer, Taper-Lok	75
Reamers, Piloted	99-103
Rechargeable Flashlight	662
Rechargeable Torch	662
Retainer Springs, Rivet Gun	196
Retainer, Sealant Gun	247
Retaining Ring Pliers	510-513
Retractable Air Hose	178
Retractable Test Leads	581
Retrieving Tool	658
Reverse Countersink Kit	88
Reverse Spotface Cutter	88
Reversible Blade Screwdriver	493-494
Reversible Lockwire Plier	516
Reversible Ratcheting Wrench	414
RFID Cabinet	16
Ring/Ring Spanner Sets	397-398
Ring/Ring Spanners	389-396
Rivet Cutter	235
Rivet Fan Spacing Tool	76
Rivet Gage	203
Rivet Gun	195
Rivet Gun Kit	197
Rivet Gun, Desoutter	194
Rivet Hole Brush	189
Rivet Removal Kit	89
Rivet Set Caps	203
Rivet Set Extender	202
Rivet Set, Elephant Leg	201
Rivet Sets	198-199
Rivet Shaver	92
Rivet Shaver Kits	94

R	Page
Rivet Shaver Shroud, Dustless	155
Rivet Shavers	93
Rivet Stem Catching Bag	214
Rivet Tape	203
Rivnut Gun	234
Robotic Drilling	46
Roll Cab	24
Roll Cab Heavy Duty	22-23
Roll Crimp Crimp Tool	528
Roll Pin Punch	466
Roller Ratchet Set	231
Roller Ratchet, Hi-Lok	226
Roller, Fibreglass	98
Roller, Pressure	98
Roller, Sealant	246
Rolling Head Pry Bar	475
Rosebud Deburring	83
Rotary Transducer	643-644
Rotocut Holesaw Kit	105
Round File	191
Round Nose Plier	515
Round Nose Pliers	504
Router Desoutter	95
Router Shroud, Dustless	155
Router Sioux	96
Router Template Guide	96
Rubber Abrasive Points	181
Rubber Mallet	458, 463
Ruggedized Laptops	669
Ruggedized Tablets	669
Rule	654
Rundown Adapters	638

S	Page
Safe-T-Cable	528
Safety Couplers, Air	177
Safety Knife	520
Safety Wire Twister	516
Safewash	597
Sander Bags	141
Sander, Palm Grip	124
Sanding Belt	180
Sanding Block	124
Savi Sockets	222
Saw Blades	107
Saw Diamond	97
Scalpel	521
ScanGrip Light	663
Scissors	519
Scorpion Filter Pack	166
Scorpion Filters	166
Scorpion Vacuum	166
Scraper Handle	244
Scraper Kit	245
Scraper Sharpener	245
Scraper, Razor Blade	245
Scraper, Seat Track	245
Scrapers, Sealant	244
Scratch Brush	589
Screw Extractor	497-498
Screw Extractor, EL Brutus	499
Screw Holding Driver	490
Screw Knocker	202, 498
Screw Pitch Guage	653
Screw Removal Tool	202
Screw Starters	492
Screwdriver Bits	478

S	Page
Screwdriver Interchangeable Blades	493-494
Screwdriver Ratcheting	485
Screwdriver Sets	490
Screwdriver Shafts, Ratcheting	486
Screwdriver Toilet, Lavatory	491
Screwdriver, Bit Holding	483
Screwdriver, Hex Bolster	491
Screwdriver, Wiha	488
Screwdrivers Extra Long	492
Screwdrivers Strikeable	491
Screwdrivers, Electronic Series	495
Screwdrivers, Offset	491
Screwdrivers, Picofinish	495
Scriber	655
Sealant Cartridges	247
Sealant Cutters	246
Sealant Gun	247
Sealant Mixer	247
Sealant Removal Kit	246
Sealant Roller	246
Sealant Scrapers	244
Seat Track Scraper	245
Seat Track Shroud, Dustless	148
Seat-Track Countersink Cage	90
Security Torx Bits	482
Security Torx Driver	489
Semco Sealant Gun	247
Set of Drills	74
Shadow Board	26
Shaft Reducer, Rivet Gun	196
Sharpener, Scrapers	245
Shears, Aviation	518
Sheath Stripper	525
Sheet Guage	656
Sheet Metal Nibbler	106
Sheetmetal Kit	34-36
Sheetmetal Shears	518
Shifter	443-446
Shifter, Sets	445
Short Threaded Drills	65
Shrouds, Die Grinders	147-149
Side Cutter Electronic	513-514
Side Cutters	505-506
Side Grip Clamps	236
Side Grip Holder	234
Single Open End Wrench	442-443
Sioux Drills	58
Sioux Rivet Shaver	94
Sioux Rivnut Gun	234
Sioux Router	96
Sioux Temporary Fastener Tool	237
Skin Wedge	475
Sledge Hammer	460
Slip Bushing Bar	79
Slip Bushing Drill Kit	78
Slip Bushing Stand	78
Slip Bushings	79
Slip Joint Plier	502
Slip Joint Pliers	507
Slotted Bits	481
Slotted dScrewdriver	495
Slotted Screwdriver	488
Smart Tool Box	12-13, 41
Smartcheck Torque Tester	641
Smoke Absorber	590
Smoke Extractor	590

S	Page
Snake, Drill Accessory	63
Snap-Off Knife	520
Snatch Block	79
Snipe Nose Plier	502
Snips, Sheetmetal	518
Socket Rail 1/2 Dr	333
Socket Rail 1/4" Dr	261
Socket Rail 3/8 Dr	291
Socket Set, Hi-Lok	232
Socket Sets 1/2" Dr	346-355
Socket Sets 1/4" Dr	272-277
Socket Sets 3/8" Dr	309-311, 318-319
Socket Sets Deep 3/8" Dr	313-314
Socket Sets Shallow 3/8" Dr	312-313
Socket Wrench	407-408
Sockets 1/4" Dr Deep	259
Sockets 1/4" Dr Shallow	258-259
Sockets Deep 1/2" Dr	331-332, 336-337
Sockets Deep 3/4" Dr	361-362
Sockets Inhex 1/2" Dr	340-342
Sockets Inhex 3/4" Dr	361
Sockets Inhex 3/8" Dr	300-302
Sockets Sets 1" Dr	370-371
Sockets Sets 3/4" Dr	364-365
Sockets Shallow 1" Dr	368-369
Sockets Shallow 1/2" Dr	330-338, 360-363
Sockets Shallow 3/8 Dr	296
Sockets Shallow 3/8" Dr	288-293
Sockets Spline 1" Dr	370
Sockets Spline 3/8" Dr	290, 296
Sockets Torx 3/8" Dr	291
Sockets Torx Bit 1/2" Dr	341
Sockets Universal 3/8" Dr	297-299
Sockets Universal Sets 3/8" Dr	314
Soft Jaw Plier	542
Soft Jaw Pliers	509
Soft-Face Punch set	471
Solder	596
Solder Braid	596
Solder Fume Extraction	591
Solder Station	592, 594
Solder Sucker	596
Solder Wick	596
Soldering Cartridges	593
Soldering Tips	593
Spanner, Flex Socket	407-408
Spanners Combination	374-383
Spanners Flare Nut	409-411
Spanners Open End	399-404
Spanners Ring/Ring	389-394
Spark Gap Set	653
Spark Plug Socket, 1/2 Dr	338
Spatula Set	246
Speed Brace 3/8 Dr	286
Speed Brace 3/8" Dr Stahlwille	281
Speed Brace, 1/4" Dr Stahlwille	252
Speedbrace 1/2 dr	323
Speedbrace 1/2" Dr	324
Spiral Band Abrasive	187
Spline Deep Sockets 1/4" Dr	261, 265
Spline Ratcheting Wrench	416-417
Spline Ring Spanner	391, 395
Spline Sockets 1" Dr	370
Spline Sockets 1/2" Dr	333, 338, 260-265
Spline Sockets 3/4" Dr	363

S	Page
Spline Sockets 3/8 Dr	290
Spline Sockets 3/8" Dr	296
Spline Stubby Ratcheting Wrench	419
Spline Universal Sockets 1/4" Dr	266
Sponges, Solder Cleaning	592
Spotface Cutter Kit	88
Spring Clamps	552
Spring Hook	474
Spring Tension Clamp	235
Square File	190
Square, Combination	655
Square, Engineers	654
Squeezer Kit	213
Squeezer Manual	212
S-Shape Wrench Ratcheting	438
S-Shape Wrench Sets	441
Stahlwille Insert Fittings, Torque	616-617
Stahlwille Torque Screwdrivers	603-604, 609-615
Stainless Tube Brush	189
Starter Screwdriver	490
Starting Punch	466
Static Dust coats	586
Static Floor Finish	587
Static Mats	584
Static Transducer	646
Steel Bucking Bars	206-207
Steel Rule	654
Steinel Heat Gun	671
Step Drills	85
Stethoscope	658
Sticky Floor Mats	587
Stingray Filter Pack	167
Stingray Filters	167
Stingray Vacuum	167
Stop Latches	527
Stork Nose Pliers	503, 508, 517
Stove Burner Drills	72
Straight Drill	61
Straight Drill, Desoutter	48, 56
Straight Drill, Sioux	58
Straight Rivet Gun	195
Straight Shank Reamer	100-103
Strap Duplicators	82
Strap Wrench	447
Strikeable Screwdrivers	491
Stripmaster	526
Strippax Stripper	524
Stripper, Outer Sheath	525
Structures Kit	36
Stubby Bit Holders	483
Stubby Flex Head Wrench Ratcheting	425
Stubby Phillips	488
Stubby Ratcheting Screwdriver	485-486
Stubby Ratcheting Wrench	419
Stubby Slotted	488
Stubby Threaded Drills	64
Stubby Wrench Ratcheting	423
Stud Remover	497
Surface Conditioning Discs	184-186
Surface Prep Kit	185
Surface Resistance Tester	588
Swaging Tool	649
Swivel Air Fitting	178
Swivel Dimpling Tools	201
Swivel Rivet Set	199

T	Page
Table Mats, ESD	584
Tailors Shears	519
Tamper Seal	659
Tank Light	663
Tap & Die Set	448-449
Tap Adapter	448
Tap Hammer	98, 461
Tap Wrench	448
Tape Measure	654
Taper Hone Diamond	97
Taper Router bit	96
Taper Sockets	223
Taper-Lok Cutters	75
Tappers, Desoutter	57
Taps	448
Tatco Squeezer	212
Tatco Squeezer Kit	213
Taylor Die Grinders	122
Taylor Drill	61
Taylor Rivet Gun	195
Taylor Rivet Squeezers	211
Taylor Shears, Pneumatic	106
Taylors Shears	98
Telesoping Guage set	656
Template Router Guides	96
Temporary Fastener Holder	234
Temporary Fastener Installation Tool	238
Temporary Fastener Runner	239
Temporary Fastener, Hex Body	237
Temporary Fasteners	236
Temporary Fasteners, Cylindrical	239
Temporary Fasteners, Wing Nut	238
Tensiometers	648-649
Tent, Clayton	163
Test Leads	580
Tester, Heel Straps	588
T-Handle 1" Dr	367
T-Handle 1/2" Dr	324, 328
T-Handle 1/4" Dr	252
T-Handle 3/4 Dr	359
T-Handle 3/8	281
T-Handle 3/8" Dr	287
T-Handle Hex Key Sets	454
T-Handle Hex Keys	451, 454, 486-487
T-Handle Torque Screwdrivers	602
Thermometers	568-571
Threaded Collet Chuck	77
Threaded Countersink	85
Threaded Drill Bits, Long	65
Threaded Drill Bits, Short	65
Threaded Drill Bits, Stubby	64
Threaded Drill Stand	79
Threaded Extension	78
Threaded Gun Barrel Drills	73
Threaded Reamer	99
Threaded Shank Reamers	99-103
Through-Hole Extension 1/4" Dr	230
Thumbwheel, Cylindrical Temp Fastener	239
Tin Snips	518
Tips, Soldering	593
Toilet Screwdriver	491
Toilet Tool Kit	27
Tommy Bar	444
Tool Cabinet	22-24
Tool Kits	27-40

T	Page
Tool Makers Parallel Clamp	553
Tool Tray, Non Slip	680
Toolboard	26
Toolwagon	25
Torch	661-662
Torq-Set Bits	478-479, 481, 483
Torque Adapter Set 3/8" Dr	316
Torque Adapters 3/8" Dr	308
Torque Analyzer	642-643
Torque Calibration Bench	640, 647
Torque Driver, Cordless	624
Torque Multipliers	622-623
Torque Screwdrivers	600-604
Torque Screwdrivers Cordless	626, 628
Torque Testers	638, 641-643
Torque Verification	638, 641-643
Torque Wrench Insert Fittings	616-617, 620-621
Torque Wrench, Coaxial	604
Torque Wrenches	605-615
Torque, Transducers	640
TorqueFix	600
TorqueVario	600
Torx Bit Set	315
Torx Bits	480, 482
Torx Driver	489
Torx Plus Bits	480
Torx Screwdriver	495
Torx Socket Set 1/2" Dr	349
Torx Socket Set 3/8" Dr	309, 316
Torx Sockets 1/2" Dr	333
Torx Sockets 1/4" Dr	260
Torx Sockets 3/8" Dr	291
Torx Wrench	392
Trammels	656
Transducerized Nutrunners	631
Transducers, Torque	640
Transfer Punches	82
Transfer Screw Set	82
Triangular File	190
Tri-Wing Bits	482
Tr-Wing Bits	478
T-Stripper	524
Tsunoda Pliers	513
Tube Benders	683
Tube Brush	189
Tube Cutter	683
Tube Spanner	444
Tube Spanner Set	447
Tungsten Bucking Bars	204-206
Turret, Contacts	531-533
Tweezer, Soldering	592
Tweezers, Contact Removal	543

U	Page
Ultrasonic Cleaning Baths	597
Unibit Step Drills	85
Universal Joint 1" dr	366
Universal Joint 1/2" Dr	325, 329
Universal Joint 3/4 Dr	358-359
Universal Joint 3/8 Dr	287
Universal Socket Sets 1/4" Dr	272, 276
Universal Socket sets 3/8 Dr	314
Universal Sockets 1/2" Dr	339
Universal Sockets 1/4" Dr	266-267
Universal Sockets 1/4" Dr Spline	266
Universal Sockets 3/8" Dr	297-299

U	Page
Universal Spline Sockets 1/4" Dr	266
Upholstery Pliers	504
Utility Knife	520
Utility Saw	107

V	Page
Vacuum Accessories	174-175
Vacuum Base Vice	554
Vacuum Cartridge	678
Vacuum Cleaner	678-679
Vacuum Distribution Rover	163
Vacuum Dustmaster	158
Vacuum Filters & Bags	161
Vacuum Port Distribution	162
Vacuum WorkCentre, Clayton	171
Vacuum, Barracuda	172
Vacuum, Clayton	164
Vacuum, Hornet	164
Vacuum, Scorpion	166
Vacuum, Stingray	167
Vacuum, Warthog	168-171
Valve Feeler Guage	653
Variable Speed Drill	59
V-Block Set	656
VDE Insulated Screwdriver Set	490
Vibration Reduced Rivet Gun	194
Vice	553
Vise Grips	550
Visual Tool Control	18
Volt Stick	579

W	Page
Wagon	25
Warthog Filter Pack	169
Warthog Filters	169
Warthog Vacuum	168-171
Waterpump Pliers	509-510
Wave Plus Multi-Tool	521
Wedge-Proof Extractors	497
Welding Clamp Vise Grip	551
Weller Soldering Iron	596
Wheel Change Kit	33
Wiha Bits	480
Wiha Pliers	510, 514-515
Wiha Screwdriver	488
Wiha Torque Screwdrivers	600-602
Wing Nut Temporary Fasteners	238
WinGrip	684
Wipes	589
Wire Drill Jig	649
Wire Rope Cutter	524
Wire Stripper	524-525
Wire Stripper, Coaxial	525
Wire Twisting Pliers	516
Wire Wrap Stripper	525
Wiss Scissors	98
Witches Finger Rivet Sets	201
Work Light	663
Wrench DOE Sets	405-406
Wrench, Hook	446
Wrench, Pipe	447
Wrench, Strap	447
Wrenches Combination	374-383
Wrenches Double Box	389-394
Wrenches Flare Nut	409-411
Wrenches Flex Ratcheting	420
Wrenches Open End	399-404

W	Page
Wrenches Ratcheting	413-418
Wrenches Ratcheting Stubby	419
Wrist Straps, ESD	585
Wrist Straps, Esd	585

X-Z	Page
Yokes Squeezer, Stainless	212
Zip Tie Gun	529
Zip Ties	529

If you did not find what you were looking for, please contact us!

BOLT SIZING CHART

Nominal opening sizes of Proto® wrenches or sockets in inches to fit standard bolt heads, nuts and screwheads.

Locate thread diameter of bolt, nut or screw in extreme left or right column. Then move across to box which has proper identification of bolt, nut or screwat top of vertical column. The size in this particular box is the nominal opening size in inches of the Proto® wrench and sockets that will fit.

*Regular Square Bolts only.

Nuts – Wrench or Socket Size				
Thread Diameter Of Nut	Finished Series & Finished Thick Nuts	Regular Series Hex & Square Nuts	Heavy Series Hex & Square Nuts	Machine Screw Nuts & Stove Bolt Nuts
#0 & 1				5/32"
#2 & 3				3/16"
#4				1/4"
#5 & 6				5/16"
#8				11/32"
#10				3/8"
#12				7/16"
1/4"	7/16"	7/16"	1/2"	7/16"
5/16"	1/2"	9/16"	9/16"	9/16"
3/8"	9/16"	5/8"	11/16"	5/8"
7/16"	11/16"	3/4"	3/4"	
1/2"	3/4"	13/16"	7/8"	
9/16"	7/8"	7/8"	15/16"	
5/8"	15/16"	1"	1-1/16"	
3/4"	11/8"	11/8"	1-1/4"	
7/8"	15/16"	15/16"	1-7/16"	
1"	1-1/2"	1-1/2"	1-5/8"	
1-1/8"	1-11/16"	1-11/16"	1-13/16"	
1-1/4"	1-7/8"	1-7/8"	2"	
1-3/8"	2-1/16"	2-1/16"	2-3/16"	
1-1/2"	2-1/4"	2-1/4"	2-3/8"	
1-5/8"	2-7/16"	2-7/16"	2-9/16"	
1-3/4"	2-5/8"	2-5/8"	2-3/4"	
1-7/8"	2-13/16"	2-13/16"	2-15/16"	
2"	3"	3"	3-1/8"	
2-1/4"	3-3/8"	3-3/8"	3-1/2"	
2-1/2"	3-3/4"	3-3/4"	3-7/8"	
2-3/4"	4-1/8"	4-1/8"	4-1/4"	
3"	4-1/2"	4-1/2"	4-5/8"	
3-1/4"			5"	
3-1/2"			5-3/8"	
3-3/4"			5-3/4"	
4"			6-1/2"	
4-1/4"			6-1/2"	
4-1/2"			6-7/8"	
4-3/4"			7-1/4"	
5"			7-5/8"	
5-1/4"			8"	
5-1/2"			8-3/8"	
5-3/4"			8-3/4"	
6"			9"	

Bolts & Screws – Wrench or Socket Size				
Regular & Finished Series Hex & Square Head Bolts	Heavy Series Hex & Square Head Bolts	Lag Screws	Square Head	Set Screws Thread Diameter Of Bolt Of Screw
			#0 & 1	
			#2 & 3	
			#4	
			#5 & 6	
			#8	
	5/16"	3/16"	#10	
		7/32"	#12	
*3/8"-1/4"		3/8"	1/4"	1/4"
1/2"		1/2"	5/16"	5/16"
9/16"		9/16"	3/8"	3/8"
5/8"		5/8"	7/16"	7/16"
3/4"	7/8"	3/4"	1/2"	1/2"
13/16"			9/16"	9/16"
15/16"	11/16"	15/16"	5/8"	5/8"
1-1/8"	1-1/4"	1-1/8"	3/4"	3/4"
1-5/16"	1-7/16"	1-5/16"	7/8"	7/8"
1-1/2"	1-5/8"	1-1/2"	1"	1"
1-11/16"	1-13/16"	1-11/16"	1-1/8"	1-1/8"
1-7/8"	2"	1-7/8"	1-1/4"	1-1/4"
2-1/16"	2-3/16"		1-3/8"	1-3/8"
2-1/4"	2-3/8"		1-1/2"	1-1/2"
2-7/16"	2-9/16"			1-5/8"
2-5/8"	2-3/4"			1-3/4"
2-13/16"	2-15/16"			1-7/8"
3"	3-1/8"			2"
3-3/8"	3-1/2"			2-1/4"
3-3/4"	3-7/8"			2-1/2"
4-1/8"	4-1/4"			2-3/4"
4-1/2"	4-5/8"			3"
4-7/8"				3-1/4"
5-1/4"				3-1/2"
5-5/8"				3-3/4"
6"				4"

DECIMAL EQUIVALENTS OF MILLIMETER, FRACTIONAL AND NUMBER DRILL SIZES

1 mm = 0.03937 in.
1 cm = 0.3937 in.
1 dm = 3.937 in.
1 m = 39.37 in.
1 in. = 25.4 mm

1 foot = 0.3048 m
1 yd = 0.9144 m
1 sq. in. = 6.452 sq. cm
1 sq. ft = 929 sq. cm
1 sq. yd = 0.8361 sq. m

1 sq. cm = 0.155 sq. in.
1 sq. dm = 15.5 sq. in.
1 sq. m = 1.196 sq. yd
1 oz - 31.1035 grams

1 lb = 373.24 grams
1 qt = 0.9463 liters (liquid)
1 gal. = 3.7853 liters (liquid)
1 liter = 1.0567 liquid qt

mm	Dec. In. Equ.	in	mm	Dec. In. Equ.	in	mm	Dec. In. Equ.	in	mm	Dec. In. Equ.	in	mm	Dec. In. Equ.	in
0.10	.0039		1.75	.0689		-	.1570		6.80	.2677		10.72	.4219	27/64"
0.15	.0059		-	.0700		4.00	.1575		6.90	.2716		11.00	.4330	
0.20	.0079		1.80	.0709		-	.1590		-	.2720		11.11	.4375	7/16"
0.25	.0098		1.85	.0728		-	.1610		7.00	.2756		11.50	.4528	
0.30	.0118		-	.0730		4.10	.1614		-	.2770		11.51	.4531	29/64"
-	.0135		1.90	.0748		4.20	.1654		7.10	.2795		11.91	.4687	15/32"
0.35	.0138		-	.0760		-	.1660		-	.2811		12.00	.4724	
-	.0145		1.95	.0767		4.25	.1673		7.14	.2812	9/32"	12.30	.4843	31/64"
0.39	.0156	1/64"	1.98	.0781	5/64"	4.30	.1693		7.20	.2835		12.50	.4921	
0.40	.0157		-	.0785		-	.1695		7.25	.2854		12.70	.5000	1/2"
-	.0160		2.00	.0787		4.37	.1719	11/64"	7.30	.2874	1"	3.00	.5118	
0.45	.0177		2.05	.0807		-	.1730		-	.2900		13.10	.5156	33/64"
-	.0180		-	.0810		4.40	.1732		7.40	.2913		13.49	.5312	17/32"
0.50	.0197		-	.0820		-	.1770		-	.2950		13.50	.5315	
-	.0200		2.10	.0827		4.50	.1771		7.50	.2953		13.89	.5469	35/64"
-	.0210		2.15	.0846		-	.1800		7.54	.2968	19/64"	14.00	.5512	
0.55	.0217		-	.0860		4.60	.1811		7.60	.2992		14.29	.5625	9/16"
-	.0225		2.20	.0866		-	.1820		-	.3020		14.50	.5709	
0.60	.0236		2.25	.0885		4.70	.1850		7.70	.3031		14.68	.5781	37/64"
-	.0240		-	.0890		4.75	.1870		7.75	.3051		15.00	.5906	
-	.0250		2.30	.0905		4.76	.1875	3/16"	7.80	.3071		15.08	.5937	19/32"
0.65	.0256		2.35	.0925		4.80	.1890		7.90	.3110		15.48	.6094	39/64"
-	.0260		-	.0935		-	.1910		7.94	.3125	5/16"	15.50	.6102	
-	.0280		2.38	.0937	3/32"	4.90	.1929		8.00	.3150		15.88	.6250	5/8"
0.70	.0286		2.40	.0945		-	.1935		-	.3160		16.00	.6299	
-	.0292		-	.0960		-	.1960		8.10	.3189		16.27	.6406	41/64"
0.75	.0295		2.45	.0964		5.00	.1968		8.20	.3228		16.50	.6496	
-	.0310		-	.0980		-	.1990		-	.3230		16.67	.6562	21/32"
0.79	.0312	1/32"	2.50	.0984		5.10	.2008		8.25	.3248		17.00	.6693	
0.80	.0315		-	.0995		-	.2010		8.30	.3268		17.06	.6719	43/64"
-	.0320		-	.1015		5.16	.2031	13/64"	8.33	.3281	21/64"	17.46	.6875	11/16"
-	.0330		2.60	.1024		-	.2040		8.40	.3307		17.50	.6890	
0.85	.0335		-	.1040		5.20	.2047		-	.3320		17.86	.7031	45/64"
-	.0350		2.70	.1063		-	.2055		8.50	.3346		18.00	.7087	
0.90	.0354		-	.1065		5.25	.2067		8.60	.3386		18.26	.7187	23/32"
-	.0360		2.75	.1082		5.30	.2086		-	.3390		18.50	.7283	
-	.0370		2.78	.1094	7/64"	-	.2090		8.70	.3425		18.65	.7344	47/64"
0.95	.0374		-	.1100		5.40	.2126		8.73	.3437	11/32"	19.00	.7480	
-	.0380		2.80	.1102		-	.2130		8.75	.3445		19.05	.7500	3/4"
-	.0390		-	.1110		5.50	.2165		8.80	.3465		19.45	.7656	49/64"
1.00	.0394		-	.1130		5.56	.2187	7/32"	-	.3480		19.50	.7677	
-	.0400		2.90	.1141		5.60	.2205		8.90	.3504		19.84	.7812	25/32"
-	.0410		-	.1160		-	.2210		9.00	.3543		20.00	.7874	
1.05	.0413		3.00	.1181		5.70	.2244		-	.3580		20.24	.7969	51/64"
-	.0420		-	.1200		5.75	.2263		9.10	.3583		20.50	.8071	
-	.0430		3.10	.1220		-	.2280		9.13	.3594	23/64"	20.64	.8125	13/16"
1.10	.0433		3.18	.1250	1/8"	5.80	.2283		9.20	.3622		21.00	.8268	
1.15	.0452		3.20	.1260		5.90	.2323		9.25	.3641		21.03	.8281	53/64"
-	.0465		3.25	.1279		-	.2340		9.30	.3661		21.43	.8437	27/32"
1.19	.0469	3/64"	-	.1285		5.95	.2344	15/64"	-	.3680		21.50	.8465	
1.20	.0472		3.30	.1299		6.00	.2362		9.40	.3701		21.83	.8594	55/64"
1.25	.0492		3.40	.1338		-	.2380		9.50	.3740		22.00	.8661	
1.30	.0512		-	.1360		6.10	.2401		9.53	.3750	3/8"	22.23	.8750	7/8"
-	.0520		3.50	.1378		-	.2420		-	.3770		22.50	.8858	
1.35	.0531		-	.1405		6.20	.2441		9.60	.3780		22.62	.8906	57/64"
-	.0550		3.57	.1406	9/64"	6.25	.2460		9.70	.3819		23.00	.9055	
1.40	.0551		3.60	.1417		6.30	.2480		9.75	.3838		23.02	.9062	29/32"
1.45	.0570		-	.1440		6.35	.2500	1/4"	9.80	.3858		23.42	.9219	59/64"
1.50	.0591		3.70	.1457		6.40	.2520		-	.3860		23.50	.9252	
-	.0595		-	.1470		6.50	.2559		9.90	.3898		23.81	.9375	15/16"
1.55	.0610		3.75	.1476		-	.2570		9.92	.3906	25/64"	24.00	.9449	
1.59	.0625	1/16"	-	.1495		6.60	.2598		10.00	.3937		24.21	.9531	61/64"
1.60	.0629		3.80	.1496		-	.2610		-	.3970		24.50	.9646	
-	.0635		-	.1520		6.70	.2638		-	.4040		24.61	.9687	31/32"
1.65	.0649		3.90	.1535		6.75	.2656	17/64"	10.32	.4062	13/32"	25.00	.9843	
1.70	.0669		-	.1540		6.75	.2657		-	.4130		25.03	.9844	63/64"
-	.0670		3.97	.1562	5/32"	-	.2660		10.50	.4134		25.40	1.0000	1"

CONVERSION FROM FRACTIONAL INCHES TO MILLIMETERS

NOTE: All values in this table are exact.

inch		mm	inch		mm
1/64	0.0156	0.3968	33/64	0.5156	13.0968
1/32	0.0312	0.7937	17/32	0.5312	13.4937
3/64	0.0468	1.1906	35/64	0.5468	13.8906
1/16	0.0625	1.5875	9/16	0.5625	14.2875
5/64	0.0781	1.9843	37/64	0.5781	14.6843
3/32	0.0937	2.3812	19/32	0.5937	15.0812
7/64	0.1093	2.7781	39/64	0.6093	15.4781
1/8	0.1250	3.1750	5/8	0.6250	15.8750
9/64	0.1406	3.5718	41/64	0.6406	16.2718
5/32	0.1562	3.9687	21/32	0.6562	16.6687
11/64	0.1718	4.3656	43/64	0.6718	17.0656
3/16	0.1875	4.7625	11/16	0.6875	17.4625
13/64	0.2031	5.1593	45/64	0.7031	17.8593
7/32	0.2187	5.5562	23/32	0.7187	18.2562
15/64	0.2343	5.9531	47/64	0.7343	18.6531
1/4	0.2500	6.3500	3/4	0.7500	19.0500
17/64	0.2656	6.7468	49/64	0.7656	19.4468
9/32	0.2812	7.1437	25/32	0.7812	19.8437
19/64	0.2968	7.5406	51/64	0.7968	20.2406
5/16	0.3125	7.9375	13/16	0.8125	20.6375
21/64	0.3281	8.3343	53/64	0.8281	21.0343
11/32	0.3437	8.7312	27/32	0.8437	21.4312
23/64	0.3593	9.1281	55/64	0.8593	21.8281
3/8	0.3750	9.5250	7/8	0.8750	22.2250
25/64	0.3906	9.9218	57/64	0.8906	22.6218
13/32	0.4062	10.3187	29/32	0.9062	23.0187
27/64	0.4218	10.7156	59/64	0.9218	23.4156
7/16	0.4375	11.1125	15/16	0.9375	23.8125
29/64	0.4531	11.5093	61/64	0.9531	24.2093
15/32	0.4687	11.9062	31/32	0.9687	24.6062
31/64	0.4843	12.3031	63/64	0.9843	25.0031
1/2	0.5000	12.7000	1	1.0000	25.4000

CONVERSION FROM MILLIMETERS TO INCHES

NOTE: All values in this table are rounded off.

inch	mm	inch	mm	inch	mm
1	0.0393	36	1.4173	71	2.7952
2	0.0787	37	1.4566	72	2.8346
3	0.1181	38	1.4960	73	2.8740
4	0.1574	39	1.5354	74	2.9133
5	0.1968	40	1.5748	75	2.9527
6	0.2362	41	1.6141	76	2.9921
7	0.2755	42	1.6535	77	3.0314
8	0.3149	43	1.6929	78	3.0708
9	0.3543	44	1.7322	79	3.1102
10	0.3937	45	1.7716	80	3.1496
11	0.4330	46	1.8110	81	3.1889
12	0.4724	47	1.8503	82	3.2283
13	0.5118	48	1.8897	83	3.2677
14	0.5511	49	1.9291	84	3.3070
15	0.5905	50	1.9685	85	3.3464
16	0.6299	51	2.0078	86	3.3858
17	0.6692	52	2.0472	87	3.4251
18	0.7086	53	2.0866	88	3.4645
19	0.7480	54	2.1259	89	3.5039
20	0.7874	55	2.1653	90	3.5433
21	0.8267	56	2.2047	91	3.5826
22	0.8661	57	2.2440	92	3.6220
23	0.9055	58	2.2834	93	3.6614
24	0.9448	59	2.3228	94	3.7007
25	0.9842	60	2.3622	95	3.7401
26	1.0236	61	2.4015	96	3.7795
27	1.0629	62	2.4409	97	3.8188
28	1.1023	63	2.4803	98	3.8582
29	1.1417	64	2.5196	99	3.8976
30	1.1811	65	2.5590	100	3.9370
31	1.2204	66	2.5984		
32	1.2598	67	2.6377		
33	1.2992	68	2.6771		
34	1.3385	69	2.7165		
35	1.3779	70	2.7559		

CONVERSION FROM FT-LBS TO METER-KILOGRAMS

The chart below can be used to convert foot pounds to meter-kilograms. The foot-pound column at the left increases in 10 ft-lb increments from 0 to 110 ft-lbs For each additional ft-lb, read the top row of numbers.

Example: If you desire 45 ft-lbs, you would look to the number 40 in the left column and the number 5 in the top row. The conversion to meter-kilograms would be 6.22 m-kgs. For your use, the conversion formula is:

FT-LBS x .1383 = METER-KILOGRAMS

ft-lbs	0 m-kg	1 m-kg	2 m-kg	3 m-kg	4 m-kg	5 m-kg	6 m-kg	7 m-kg	8 m-kg	9 m-kg
0	0	0.14	0.28	0.42	0.55	0.69	0.83	0.97	1.11	1.25
10	1.38	1.52	1.66	1.80	1.94	2.07	2.21	2.35	2.49	2.63
20	2.77	2.90	3.04	3.18	3.32	3.46	3.60	3.73	3.87	4.01
30	4.15	4.29	4.43	4.56	4.70	4.84	4.98	5.12	5.26	5.39
40	5.53	5.67	5.81	5.95	6.09	6.22	6.36	6.50	6.64	6.78
50	6.92	7.05	7.19	7.33	7.47	7.61	7.75	7.88	8.02	8.16
60	8.30	8.44	8.57	8.71	8.85	8.99	9.13	9.27	9.40	9.54
70	9.68	9.82	9.96	10.09	10.23	10.37	10.51	10.65	10.79	10.92
80	11.06	11.20	11.34	11.48	11.62	11.75	11.89	12.03	12.17	12.31
90	12.45	12.59	12.73	12.86	13.00	13.14	13.28	13.42	13.55	13.69
100	13.83	13.97	14.11	14.25	14.38	14.52	14.66	14.80	14.94	15.08
110	15.21	15.35	15.49	15.63	15.76	15.90	16.04	16.18	16.32	16.46

CONVERSION FROM DECIMAL INCH TO MM

NOTE: All values in this table are exact.

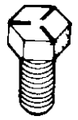
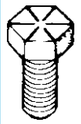
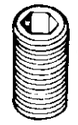
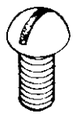
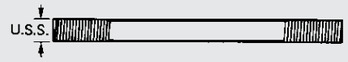
inch	mm	inch	mm	inch	mm
1	25.4	36	914.4	71	1,803.4
2	50.8	37	939.8	72	1,828.8
3	76.2	38	965.2	73	1,854.2
4	101.6	39	990.6	74	1,879.6
5	127.0	40	1,016.0	75	1,905.0
6	152.4	41	1,041.4	76	1,930.4
7	177.8	42	1,066.8	77	1,955.8
8	203.2	43	1,092.2	78	1,981.2
9	228.6	44	1,117.6	79	2,006.6
10	254.0	45	1,143.0	80	2,032.0
11	279.4	46	1,168.4	81	2,057.4
12	304.8	47	1,193.8	82	2,082.8
13	330.2	48	1,219.2	83	2,108.2
14	355.6	49	1,244.6	84	2,133.6
15	381.0	50	1,270.0	85	2,159.0
16	406.4	51	1,295.4	86	2,184.4
17	431.8	52	1,320.8	87	2,209.8
18	457.2	53	1,346.2	88	2,235.2
19	482.6	54	1,371.6	89	2,260.6
20	508.0	55	1,397.0	90	2,286.0
21	533.4	56	1,422.4	91	2,311.4
22	558.8	57	1,447.8	92	2,336.8
23	584.2	58	1,473.2	93	2,362.2
24	609.6	59	1,498.6	94	2,387.6
25	635.0	60	1,524.0	95	2,413.0
26	660.4	61	1,549.4	96	2,438.4
27	685.8	62	1,574.8	97	2,463.8
28	711.2	63	1,600.2	98	2,489.2
29	736.6	64	1,625.6	99	2,514.6
30	762.0	65	1,651.0	100	2,540.0
31	787.4	66	1,676.4		
32	812.8	67	1,701.8		
33	838.2	68	1,727.2		
34	863.6	69	1,752.6		
35	889.0	70	1,778.0		

STANDARD TORQUE VALUE CHART

There is no difference in the above chart between the torque figures for fine or coarse threads. The torque figures for a finely-threaded fastener as compared to a coarsely-threaded fastener of the same diameter may be slightly higher but hardly worth mentioning.

CAUTION:

There are many varying factors which affect torque. The above estimated torque calculations are only offered as a guide. Use of its content by anyone is the sole responsibility of that person and they assume all the risk. Refer to fastener manufacturers recommendations for proper use and application.

Fastener Type	Min Tensile Strength (PSI)	Material	Body Size or Outside Diameter of Fastener																						
			2	3	4	5	6	8	10	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1	1-1/8	1-1/4	1-3/8	1-1/2
	SAE 2	74,000	Low Carbon Steel (ft-lb)							6	12	20	32	47	69	96	155								
	SAE 5	120,000	Medium Carbon Heat Treat Steel (ft-lb)							10	19	33	54	78	114	154	257	382	587	794	1105	1500	1775		
	SAE 7	133,000	Medium Carbon Alloy Steel (ft-lb)				13	25 44	71 110	154 215	360 570	840 1325	1825	2500	3000										
	SAE 8	150,000	Medium Carbon Alloy Steel (ft-lb)		14	29 47 78 119	169 230 380 600	900 1430 1975	2650 3200																
	Socket Head Cap Screw	160,000	High Carbon Case Hardened Steel (ft-lb)				16	33 54	84 125	180 250	400 640	970 1520	2130	2820 3450											
	Socket Set Screw	212,000	High Carbon Case Hardened Steel (in-lb)					9	16	30	70	140	18	29	43	63	100	146							
	Machine Screw Yellow Brass	60,000	Copper (Cu) 63% Zinc (Zn) 37% (in-lb)	2	3.3	4.4	6.4	8	16	20	65	110	17	27	37	49	78	104	160	215	325	400		595
	Silicone Bronze Type "B"	70,000	Copper (Cu) 96% Zinc (Zn) 2% Silicon (Si) 2% (in-lb)	2.3	3.7	4.9	7.2	10	19	22	70	125	20	30	41	53	88	117	180	250	365	450		655
Studs			Use SAE 2, 5 or 8 values when grade is known, with a nut of sufficient strength 																						

INDEX

STANDARD WRENCH SIZING CHART – BOLTS/SCREWS

Nominal opening sizes of Proto® wrenches or sockets in inches to fit standard bolt heads, nuts and screwheads.

Wrench or Socket Size		Square & Hex Bolts, Cap Screws & Square & Hex Lag Screws	Heavy Hex Bolts & Screws	Hex Flange Screws	Tapping Screws	Hex Washer Head Tapping Screws	Hex Head Machine Screws	Hex Washer Head Machine Screws	Square Head Set Screws
Imperial	Metric								
1/8"	0.1250	-	-	-	#1 & 2	#2 & 3	#1 & 2	#2 & 3	-
5/32"	0.1562	-	-	-	-	-	-	-	-
3/16"	0.1875	-	-	-	#3,4,5	#4 & 5	#3,4,5	#4 & 5	#10
1/4"	0.2500	-	-	-	#6,7,8	#6,7,8	#6 & 8	#6 & 8	1/4"
9/32"	0.2812	#10	-	-	-	-	-	-	-
5/16"	0.3125	-	-	-	#10 & 12	#10 & 12	#10 & 12	#10 & 12	5/16"
11/32"	0.3438	-	-	-	-	-	-	-	-
3/8"	0.3750	1/4"	-	1/4"	1/4"	1/4"	1/4"	1/4"	3/8"
7/16"	0.4375	1/4"	-	-	-	-	-	-	7/16"
1/2"	0.5000	5/16"	-	5/16"	5/16"	5/16"	5/16"	5/16"	1/2"
9/16"	0.5625	3/8"	-	3/8"	3/8"	3/8"	3/8"	3/8"	9/16"
5/8"	0.6250	7/16"	-	7/16"	-	-	-	-	5/8"
11/16"	0.6875	-	-	-	-	-	-	-	-
3/4"	0.7500	1/2"	-	1/2"	-	-	-	-	3/4"
13/16"	0.8125	9/16"	-	9/16"	-	-	-	-	-
7/8"	0.8750	-	1/2"	-	-	-	-	-	7/8"
15/16"	0.9375	5/8"	-	5/8"	-	-	-	-	-
1"	1.0000	-	-	-	-	-	-	-	1"
1-1/16"	1.0625	-	5/8"	-	-	-	-	-	-
1-1/8"	1.1250	3/4"	-	3/4"	-	-	-	-	1-1/8"
1-1/4"	1.2500	-	3/4"	-	-	-	-	-	1-1/4"
1-5/16"	1.3125	7/8"	-	-	-	-	-	-	-
1-3/8"	1.3750	-	-	-	-	-	-	-	1-3/8"
1-7/16"	1.4375	-	7/8"	-	-	-	-	-	-
1-1/2"	1.5000	1"	-	-	-	-	-	-	1-1/2"
1-5/8"	1.6250	-	1"	-	-	-	-	-	-
1-11/16"	1.6875	1-1/8"	-	-	-	-	-	-	-
1-13/16"	1.8125	-	1-1/8"	-	-	-	-	-	-
1-7/8"	1.8750	1-1/4"	-	-	-	-	-	-	-
2"	2.0000	-	1-1/4"	-	-	-	-	-	-
2-1/16"	2.0625	1-3/8"	-	-	-	-	-	-	-
2-3/16"	2.1875	-	1-3/8"	-	-	-	-	-	-
2-1/4"	2.2500	1-1/2"	-	-	-	-	-	-	-
2-3/8"	2.3750	-	1-1/2"	-	-	-	-	-	-
2-7/16"	2.4375	1-5/8"	-	-	-	-	-	-	-
2-9/16"	2.5625	-	1-5/8"	-	-	-	-	-	-
2-5/8"	2.6250	1-3/4"	-	-	-	-	-	-	-
2-3/4"	2.7500	-	1-3/4"	-	-	-	-	-	-
2-13/16"	2.8125	1-7/8"	-	-	-	-	-	-	-
2-15/16"	2.9375	-	1-7/8"	-	-	-	-	-	-
3"	3.0000	2"	-	-	-	-	-	-	-
3-1/8"	3.1250	-	2"	-	-	-	-	-	-
3-3/8"	3.3750	2-1/4"	-	-	-	-	-	-	-
3-1/2"	3.5000	-	2-1/4"	-	-	-	-	-	-
3-3/4"	3.7500	2-1/2"	-	-	-	-	-	-	-
3-7/8"	3.8750	-	2-1/2"	-	-	-	-	-	-
4-1/8"	4.1250	2-3/4"	-	-	-	-	-	-	-
4-1/4"	4.2500	-	2-3/4"	-	-	-	-	-	-
4-1/2"	4.5000	3"	-	-	-	-	-	-	-
4-5/8"	4.6250	-	3"	-	-	-	-	-	-
4-7/8"	4.8750	3-1/4"	-	-	-	-	-	-	-
5"	5.0000	-	3-1/4"	-	-	-	-	-	-
5-1/4"	5.2500	3-1/2"	-	-	-	-	-	-	-
5-3/8"	5.3750	-	3-1/2"	-	-	-	-	-	-
5-5/8"	5.6250	3-3/4"	-	-	-	-	-	-	-
5-3/4"	5.7500	-	3-3/4"	-	-	-	-	-	-
6"	6.0000	4"	-	-	-	-	-	-	-
6-1/8"	6.1250	-	4"	-	-	-	-	-	-
6-1/2"	6.5000	-	4-1/4"	-	-	-	-	-	-
6-7/8"	6.8750	-	4-1/2"	-	-	-	-	-	-
7-1/4"	7.2500	-	4-3/4"	-	-	-	-	-	-
7-5/8"	7.6250	-	5"	-	-	-	-	-	-
8"	8.0000	-	5-1/4"	-	-	-	-	-	-
8-3/8"	8.3750	-	5-1/2"	-	-	-	-	-	-
8-3/4"	8.7500	-	5-3/4"	-	-	-	-	-	-
9-1/8"	9.1250	-	6"	-	-	-	-	-	-

STANDARD WRENCH SIZING CHART – NUTS

Nominal opening sizes of Proto® wrenches or sockets in inches to fit standard bolt heads, nuts and screwheads.

Wrench or Socket Size		Square Nuts & Heavy Square Nuts	Track, Heavy Hex & Square, Flat & Jam Nuts	Square Machine Screw Nuts	Hex Nuts & Flat Castle, Slotted & Ham Hex Nuts	Hex Flange Nuts	Track Bolt Nuts	Hex Lock Nuts
Imperial	Metric							
1/8"	0.1250	-	-	-	-	-	-	-
5/32"	0.1562	-	-	#0 & 1	-	-	-	-
3/16"	0.1875	-	-	#2 & 3	-	-	-	-
1/4"	0.2500	-	-	#4	-	-	-	#4
9/32"	0.2812	-	-	-	-	-	-	-
5/16"	0.3125	-	-	#5 & 6	-	#6	-	#6
11/32"	0.3438	-	-	#8	-	#8	-	#8
3/8"	0.3750	-	-	#10	-	#10	-	#10
7/16"	0.4375	1/4"	-	#12 & 14	1/4"	#12 & 14	-	#12 & 14
1/2"	0.5000	1/4"	1/4"	-	5/16"	5/16"	-	5/16"
9/16"	0.5625	5/16"	5/16"	5/16"	3/8"	3/8"	-	3/8"
5/8"	0.6250	3/8"	-	3/8"	-	-	-	-
11/16"	0.6875	3/8"	3/8"	-	7/16"	7/16"	-	7/16"
3/4"	0.7500	7/16"	7/16"	-	1/2"	1/2"	-	1/2"
13/16"	0.8125	1/2"	-	-	-	-	-	-
7/8"	0.8750	1/2"	1/2"	-	9/16"	9/16"	-	9/16"
15/16"	0.9375	-	9/16"	-	5/8"	5/8"	-	5/8"
1"	1.0000	5/8"	-	-	-	-	-	-
1-1/16"	1.0625	5/8"	5/8"	-	-	-	-	-
1-1/8"	1.1250	3/4"	-	-	3/4"	3/4"	-	3/4"
1-1/4"	1.2500	3/4"	3/4"	-	-	-	3/4" & 13/16"	-
1-5/16"	1.3125	7/8"	-	-	7/8"	-	-	7/8"
1-3/8"	1.3750	-	-	-	-	-	-	-
1-7/16"	1.4375	7/8"	7/8"	-	-	-	7/8"	-
1-1/2"	1.5000	1"	-	-	1"	-	15/16" & 1"	1"
1-5/8"	1.6250	1"	1"	-	-	-	1" & 1-1/16"	-
1-11/16"	1.6875	1-1/8"	-	-	1-1/8"	-	1-1/8"	1-1/8"
1-13/16"	1.8125	1-1/8"	1-1/8"	-	-	-	1-1/8"	-
1-7/8"	1.8750	1-1/4"	-	-	1-1/4"	-	-	
2"	2.0000	1-1/4"	1-1/4"	-	-	-	-	-
2-1/16"	2.0625	1-3/8"	-	-	1-3/8"	-	-	
2-3/16"	2.1875	1-3/8"	1-3/8"	-	-	-	-	-
2-1/4"	2.2500	1-1/2"	-	-	1-1/2"	-	-	
2-3/8"	2.3750	1-1/2"	1-1/2"	-	-	-	-	-
2-7/16"	2.4375	-	-	-	-	-	-	-
2-9/16"	2.5625	-	1-5/8"	-	-	-	-	-
2-5/8"	2.6250	-	-	-	-	-	-	-
2-3/4"	2.7500	-	1-3/4"	-	-	-	-	-
2-13/16"	2.8125	-	-	-	-	-	-	-
2-15/16"	2.9375	-	1-7/8"	-	-	-	-	-
3"	3.0000	-	-	-	-	-	-	-
3-1/8"	3.1250	-	2"	-	-	-	-	-
3-3/8"	3.3750	-	-	-	-	-	-	-
3-1/2"	3.5000	-	2-1/4"	-	-	-	-	-
3-3/4"	3.7500	-	-	-	-	-	-	-
3-7/8"	3.8750	-	2-1/2"	-	-	-	-	-
4-1/8"	4.1250	-	--	-	-	-	-	-
4-1/4"	4.2500	-	2-3/4"	-	-	-	-	-
4-1/2"	4.5000	-	-	-	-	-	-	-
4-5/8"	4.6250	-	3"	-	-	-	-	-
4-7/8"	4.8750	-	-	-	-	-	-	-
5"	5.0000	-	3-1/4"	-	-	-	-	-
5-1/4"	5.2500	-	3-1/2"	-	-	-	-	-
5-3/8"	5.3750	-	3-1/2"	-	-	-	-	-
5-5/8"	5.6250	-	3-3/4"	-	-	-	-	-
5-3/4"	5.7500	-	3-3/4"	-	-	-	-	-
6"	6.0000	-	4"	-	-	-	-	-
6-1/8"	6.1250	-	4"	-	-	-	-	-
6-1/2"	6.5000	-	-	-	-	-	-	-
6-7/8"	6.8750	-	-	-	-	-	-	-
7-1/4"	7.2500	-	-	-	-	-	-	-
7-5/8"	7.6250	-	-	-	-	-	-	-
8"	8.0000	-	-	-	-	-	-	-
8-3/8"	8.3750	-	-	-	-	-	-	-
8-3/4"	8.7500	-	-	-	-	-	-	-
9-1/8"	9.1250	-	-	-	-	-	-	-

METRIC WRENCH SIZING CHART

Nominal opening sizes of Proto® wrenches or sockets in inches to fit standard bolt heads, nuts and screwheads.

Locate thread diameter of bolt, nut or screw in extreme left or right column. Then move across to box which has proper identification of bolt, nut or screw at top of vertical column. The size in this particular box is the nominal opening size in inches of the Proto® wrench and sockets that will fit.

American Standards Association—ASA B18.2, Appendix I

BOLTS: Use Wrench or Socket Size Shown Below			
Wrench or Socket Size Across Flats	Hex Bolts	Heavy Hex Bolts	Heavy Hex Structural Bolts
3.20	—	—	—
4.00	—	—	—
5.00	—	—	—
5.50	—	—	—
6.00	—	—	—
7.00	—	—	—
8.00	M5 x 0.8	—	—
10.00	M6 x 1	—	—
13.00	M8 x 1.25	—	—
15.00	M10 x 1.5	—	—
16.00	M10 x 1.5	—	—
18.00	M12 x 1.75	—	—
21.00	M14 x 2	M12 x 1.75	—
24.00	M16 x 2	M14 x 2	—
27.00	—	M16 x 2	M16 x 2
30.00	M20 x 2.5	—	—
34.00	—	M20 x 2.5	M20 x 2.5
36.00	M24 x 3	—	M22 x 2.5
41.00	—	M24 x 3	M24 x 3
46.00	M30 x 3.5	—	M27 x 3
50.00	—	M30 x 3.5	M30 x 3.5
55.00	M36 x 4	—	—
60.00	—	M36 x 4	M36 x 4
65.00	M42 x 4.5	—	—
70.00	—	—	—
75.00	M48 x 5	—	—
80.00	—	—	—
85.00	M56 x 5.5	—	—
90.00	—	—	—
95.00	M64 x 6	—	—
100.00	—	—	—
105.00	M72 x 6	—	—
110.00	—	—	—
115.00	M80 x 6	—	—
120.00	—	—	—
130.00	M90 x 6	—	—
135.00	—	—	—
145.00	M100 x 6	—	—
150.00	—	—	—

NUTS: Use Wrench or Socket Size Shown Below				
Hex Nuts Style 1	Hex Nuts Style 1	Slotted & Ham Hex Nuts	Heavy Hex Nuts	Wrench or Socket Size Across Flats
M1.6 x 0.35	-	-	-	3.20
M2 x 0.4	-	-	-	4.00
M2.5 x 0.45	-	-	-	5.00
M3 x 0.5	M3 x 0.5	-	-	5.50
M3.5 x 0.6	M3.5 x 0.6	-	-	6.00
M4 x 0.7	M4 x 0.7	-	-	7.00
M5 x 0.8	M5 x 0.8	M5 x 0.8	-	8.00
M6 x 1	M6 x 1	M6 x 1	-	10.00
M8 x 1.25	M8 x 1.25	M8 x 1.25	-	13.00
M10 x 1.5	M10 x 1.5	M10 x 1.5	-	15.00
M10 x 1.5	M10 x 1.5	M10 x 1.5	-	16.00
M12 x 1.75	M12 x 1.75	M12 x 1.75	-	18.00
M14 x 2	M14 x 2	M14 x 2	M12 x 1.75	21.00
M16 x 2	M16 x 2	M16 x 2	M14 x 2	24.00
-	-	-	M16 x 2	27.00
M20 x 2.5	M20 x 2.5	M20 x 2.5	-	30.00
-	-	-	M20 x 2.5	34.00
M24 x 3	M24 x 3	M24 x 3	M22 x 2.5	36.00
-	-	-	M24 x 3	41.00
M30 x 3.5	M30 x 3.5	M30 x 3.5	M27 x 3	46.00
-	-	-	M30 x 3.5	50.00
M36 x 4	M36 x 4	M36 x 4	-	55.00
-	-	-	M36 x 4	60.00
-	-	-	-	65.00
-	-	-	M42 x 4.5	70.00
-	-	-	-	75.00
-	-	-	M48 x 5	80.00
-	-	-	-	85.00
-	-	-	M56 x 5.5	90.00
-	-	-	-	95.00
-	-	-	M64 x 6	100.00
-	-	-	-	105.00
-	-	-	M72 x 6	110.00
-	-	-	-	115.00
-	-	-	M80 x 6	120.00
-	-	-	-	130.00
-	-	-	M90 x 6	135.00
-	-	-	-	145.00
-	-	-	M100 x 6	150.00

STANDARD TORQUE VALUE CHART FOR METRIC FASTENERS (TORQUE—KILO-NEWTON) CONVERSION GUIDANCE

Class 4.6 is approximately equal to SAE Grade 1, and ASTM A307, Grade A.

Class 5.8 is approximately equal to SAE Grade 2.

Class 8.8 is approximately equal to SAE Grade 5, and ASTM A449.

Class 9.8 has properties approximately 9 percent stronger than SAE Grade 5, and ASTM A449.

Class 10.9 is approximately equal to SAE Grade 8, and ASTM A354, Grade BD.

Class	4.6	4.8	5.8	8.8	9.8	10.9	12.9
Proof Load MPA	225	310	380	600	650	830	970
M1.6x0.35 (0.063)		0.39			0.83		1.23
M2x0.4 (0.079)		0.64			1.35		2.01
M2.5x0.45 (0.098)		1.05			2.20		3.29
M3x0.5 (0.118)		1.56			3.27		4.88
M3.4x0.6 (0.138)		2.10			4.41		6.58
M4x0.7 (0.157)		2.72			5.71		8.52
M5x0.8 (0.197)	3.20	4.40	5.40		9.23	11.80	13.80
M6.3x1 (0.248)	2.09	7.01	8.59		14.70	18.80	21.90
M8x1.25 (0.315)	8.24	11.30	13.90		23.80	30.40	35.50
M10x1.5 (0.394)	13.10	18.00	22.00		37.70	48.10	56.30
M12x1.75 (0.472)	19.00	26.10	32.00		54.80	70.00	81.80
M14x2 (0.551)	25.90	35.70	43.70		74.80	95.40	112.00
M16x2 (0.630)	35.30	48.70	59.70	94.20	120.00	130.00	152.00
M20x2.5 (0.787)	55.10		93.10	147.00		203.00	238.00
M24x3 (0.945)	79.40		134.00	212.00		293.00	342.00
M30x3.5 (1.181)	126.00			337.00		466.00	544.00
M36x4 (1.417)	184.00			490.00		478.00	792.00

INDEX

NEWTON METER TORQUE VALUE CONVERSIONS

NOTE: The International Metric System measures torque in Newton meters (Nm).
A Newton is defined as the force necessary to move one kilogram one meter per second.

From ft-lb to Nm – ft-lb x 1.3558 = Nm

ft-lb	0 Nm	1 Nm	2 Nm	3 Nm	4 Nm	5 Nm	6 Nm	7 Nm	8 Nm	9 Nm
0	0	1.36	2.71	4.07	5.42	6.78	8.13	9.49	10.84	12.20
10	13.56	14.91	16.27	17.62	18.98	20.33	21.69	23.05	24.40	25.76
20	27.11	28.47	29.83	31.18	32.54	33.89	35.25	36.61	37.97	39.32
30	40.67	42.02	43.38	44.73	46.09	47.45	48.80	50.16	51.51	52.87
40	54.22	55.58	56.94	58.29	59.65	61.00	62.36	63.71	65.07	66.42
50	67.78	69.14	70.49	71.85	73.20	74.56	75.91	77.27	78.62	79.98
60	81.33	82.69	84.05	85.40	86.76	88.11	89.47	90.83	92.18	93.54
70	94.89	96.25	97.60	98.96	100.31	101.67	103.03	104.38	105.74	107.09
80	108.45	109.80	111.16	112.51	113.87	115.23	116.58	117.94	119.29	120.65
90	122.00	123.36	124.72	126.07	127.43	128.78	130.14	131.49	132.85	134.20
100	135.58									

From Nm to ft-lb – Nm x 0.73756 = ft-lb

Nm	0 ft-lb	1 ft-lb	2 ft-lb	3 ft-lb	4 ft-lb	5 ft-lb	6 ft-lb	7 ft-lb	8 ft-lb	9 ft-lb
0	0	0.74	1.48	2.21	2.95	3.69	4.43	5.16	5.90	6.64
10	7.38	8.11	8.85	9.59	10.33	11.06	11.80	12.54	13.28	14.01
20	14.75	15.49	16.23	16.96	17.70	18.44	19.18	19.91	20.65	21.39
30	22.13	22.86	23.60	24.34	25.08	25.81	26.55	27.29	28.03	28.76
40	29.50	30.24	30.98	31.72	32.45	33.19	33.93	34.67	35.40	36.14
50	36.88	37.62	38.35	39.09	39.83	40.57	41.30	42.04	42.78	43.52
60	44.25	44.99	45.73	46.47	47.20	47.94	48.68	49.42	50.15	50.89
70	51.63	52.37	53.10	53.84	54.58	55.32	56.05	56.79	57.53	58.27
80	59.00	59.74	60.48	61.22	61.96	62.69	63.43	64.17	64.91	65.64
90	66.38	67.12	67.86	68.59	69.33	70.07	70.81	71.54	72.28	73.02
100	73.76									

From in-lb to Nm – in-lb x .1130 = Nm

in-lb	0 Nm	1 Nm	2 Nm	3 Nm	4 Nm	5 Nm	6 Nm	7 Nm	8 Nm	9 Nm
0	0	0.11	0.22	0.33	0.45	0.56	0.67	0.79	0.90	1.02
10	1.13	1.24	1.36	1.47	1.58	1.70	1.81	1.92	2.03	2.15
20	2.26	2.37	2.49	2.60	2.71	2.83	2.94	3.05	3.16	3.28
30	3.39	3.50	3.62	3.73	3.84	3.96	4.07	4.18	4.29	4.41
40	4.52	4.63	4.75	4.86	4.97	5.09	5.20	5.31	5.42	5.54
50	5.65	5.76	5.88	5.99	6.10	6.22	6.33	6.44	6.55	6.67
60	6.78	6.89	7.01	7.12	7.23	7.35	7.46	7.57	7.68	7.80
70	7.91	8.02	8.14	8.25	8.36	8.48	8.59	8.70	8.81	8.93
80	9.04	9.15	9.27	9.38	9.49	9.61	9.72	9.83	9.94	10.06
90	10.17	10.28	10.40	10.51	10.62	10.74	10.85	10.96	11.07	11.19
100	11.30									

From Nm to in-lb – Nm x 8.8507 = in-lb

Nm	0 in-lb	1 in-lb	2 in-lb	3 in-lb	4 in-lb	5 in-lb	6 in-lb	7 in-lb	8 in-lb	9 in-lb
0	0	8.85	17.70	26.55	35.40	44.25	53.10	61.95	70.81	79.66
10	88.51	97.36	106.21	115.06	123.91	132.76	141.61	150.46	159.31	168.16
20	177.01	185.86	194.72	203.57	212.42	221.27	230.12	238.98	247.82	256.67
30	265.52	274.38	283.22	292.07	300.92	309.77	318.62	327.48	336.33	345.18
40	354.03	362.88	371.73	380.58	389.43	398.28	407.13	415.98	424.83	433.68
50	442.53	451.36	460.24	469.09	477.94	486.79	495.64	504.49	513.34	522.19
60	531.04	539.89	548.74	557.59	566.44	575.30	584.15	593.00	601.85	610.70
70	619.55	628.40	637.25	646.10	654.95	663.80	672.65	681.50	690.35	699.20
80	708.06	716.91	725.76	734.61	743.46	752.31	761.16	770.01	778.86	787.72
90	796.56	805.41	814.26	823.12	831.97	840.82	849.67	858.52	867.37	876.22
100	885.07									

From in-oz to Nm – in-oz x .00706 = Nm

in-oz	0 Nm	1 Nm	2 Nm	3 Nm	4 Nm	5 Nm	6 Nm	7 Nm	8 Nm	9 Nm
0	0	.007	.014	.021	.028	.035	.042	.049	.056	.064
10	.071	.078	.085	.092	.098	.106	.113	.120	.127	.134
20	.141	.148	.155	.162	.169	.177	.184	.191	.198	.205
30	.212	.219	.226	.232	.240	.247	.254	.261	.268	.275
40	.282	.289	.297	.304	.312	.318	.324	.332	.339	.346
50	.353	.360	.367	.374	.381	.388	.395	.402	.409	.417
60	.424	.431	.438	.445	.452	.459	.466	.473	.480	.487
70	.494	.501	.508	.515	.522	.530	.537	.544	.551	.558
80	.565	.572	.579	.586	.593	.600	.607	.614	.621	.628
90	.635	.642	.650	.657	.664	.671	.678	.685	.692	.699
100	.706									

From Nm to in-oz – Nm x 141.6119 = in-oz

Nm	0 in-oz	1 in-oz	2 in-oz	3 in-oz	4 in-oz	5 in-oz	6 in-oz	7 in-oz	8 in-oz	9 in-oz
0.0	0	1.42	2.83	4.25	5.66	7.08	8.50	9.91	11.33	12.74
0.1	14.16	15.58	16.99	18.41	19.83	21.24	22.66	24.07	25.49	26.91
0.2	28.32	29.74	31.15	32.57	33.99	35.40	36.82	38.23	39.65	41.07
0.3	42.48	43.90	45.32	46.73	48.15	49.56	50.98	52.40	53.81	55.23
0.4	56.64	58.06	59.48	60.89	62.31	63.72	65.14	66.56	67.97	69.39
0.5	70.81	72.22	73.64	75.05	76.47	77.89	79.30	80.72	82.13	83.55
0.6	84.97	86.41	87.80	89.21	90.63	92.05	93.46	94.88	96.30	97.71
0.7	99.13	100.54	101.96	103.38	104.79	106.21	107.62	109.04	110.46	111.87
0.8	113.29	114.70	116.12	117.54	118.95	120.37	121.79	123.20	124.62	126.03
0.9	127.45	128.87	130.28	131.70	133.11	134.53	135.95	137.36	138.78	140.19
1.0	141.61									

From m-kg to Nm – m-kg (or kpm) x 9.80665 = Nm

m-kg	0 Nm	1 Nm	2 Nm	3 Nm	4 Nm	5 Nm	6 Nm	7 Nm	8 Nm	9 Nm
0	0	9.81	19.61	29.42	39.23	49.03	58.84	68.65	78.45	88.26
10	98.07	107.87	117.68	127.49	137.30	147.10	156.90	166.71	176.52	186.33
20	196.13	205.94	215.75	225.55	235.36	245.17	254.98	264.78	274.59	284.40
30	294.20	304.00	313.81	323.62	333.43	343.23	353.04	362.85	372.65	382.46
40	392.27	402.07	411.88	421.69	431.49	441.30	451.11	460.91	470.72	480.53
50	490.33	500.14	509.95	519.75	529.56	539.37	549.17	558.95	568.79	578.60
60	588.40	598.21	608.01	617.82	627.63	637.43	647.24	657.05	666.86	676.66
70	686.47	696.27	706.08	715.89	725.70	735.50	745.30	755.11	764.92	774.73
80	784.53	794.34	804.15	813.95	823.76	833.57	843.37	853.18	862.99	872.79
90	882.60	892.41	902.21	912.02	921.83	931.63	941.44	951.25	961.05	970.86
100	980.67									

From Nm to m-kg – Nm x .10197 = m-kg (or kpm)

Nm	0 m-kg	1 m-kg	2 m-kg	3 m-kg	4 m-kg	5 m-kg	6 m-kg	7 m-kg	8 m-kg	9 m-kg
0	0	0.102	0.204	0.306	0.408	0.510	0.611	0.714	0.816	0.918
10	1.020	1.122	1.224	1.326	1.428	1.530	1.632	1.733	1.835	1.937
20	2.039	2.141	2.243	2.345	2.447	2.549	2.651	2.753	2.855	2.957
30	3.059	3.161	3.263	3.365	3.467	3.569	3.671	3.773	3.875	3.977
40	4.079	4.181	4.283	4.385	4.487	4.589	4.691	4.793	4.895	4.997
50	5.099	5.200	5.302	5.404	5.506	5.608	5.710	5.812	5.914	6.016
60	6.118	6.220	6.322	6.424	6.526	6.628	6.730	6.832	6.934	7.036
70	7.138	7.240	7.342	7.444	7.546	7.648	7.750	7.852	7.954	8.056
80	8.158	8.260	8.362	8.464	8.565	8.667	8.769	8.871	8.973	9.075
90	9.177	9.279	9.381	9.483	9.585	9.687	9.789	9.891	9.993	10.095
100	10.197									

TORQUE VALUE CONVERSIONS

NOTE: One meter kilogram is equal to one meter kilopond (expressed as: 1 m-kg - 1kpm)

From in-lb to in-oz – in-lb x 16 = in-oz

in-lb	0 in-oz	1 In-oz	2 In-oz	3 In-oz	4 In-oz	5 In-oz	6 In-oz	7 In-oz	8 In-oz	9 In-oz
0	0	16	32	48	64	80	96	112	128	144
10	160	176	192	208	224	240	256	272	288	304
20	320	336	352	368	384	400	416	432	448	464
30	480	496	512	528	544	560	576	592	608	624
40	640	656	672	688	704	720	736	752	768	784
50	800	816	832	848	864	880	896	912	928	944
60	960	976	992	1008	1024	1040	1056	1072	1088	1104
70	1120	1136	1152	1168	1184	1200	1216	1232	1248	1264
80	1280	1296	1312	1328	1344	1360	1376	1392	1408	1424
90	1440	1456	1472	1488	1504	1520	1536	1552	1568	1584
100	1600									

From in-oz to in-lb – in-oz ÷ 16 = in-lb

in-oz	0 in-lb	1 in-lb	2 in-lb	3 in-lb	4 in-lb	5 in-lb	6 in-lb	7 in-lb	8 in-lb	9 in-lb
0	0	0.063	0.125	0.188	0.250	0.313	0.375	0.438	0.500	0.563
10	0.625	0.688	0.750	0.813	0.875	0.938	1.000	1.063	1.125	1.188
20	1.250	1.313	1.375	1.438	1.500	1.563	1.625	1.688	1.750	1.813
30	1.875	1.938	2.000	2.063	2.125	2.188	2.250	2.313	2.375	2.438
40	2.500	2.563	2.625	2.688	2.750	2.813	2.875	2.938	3.000	3.063
50	3.125	3.188	3.250	3.313	3.375	3.438	3.500	3.563	3.625	3.688
60	3.750	3.813	3.875	3.938	4.000	4.063	4.125	4.188	4.250	4.313
70	4.375	4.438	4.500	4.563	4.625	4.688	4.750	4.813	4.875	4.938
80	5.000	5.063	5.125	5.188	5.250	5.313	5.375	5.438	5.500	5.563
90	5.625	5.688	5.750	5.813	5.875	5.938	6.000	6.063	6.125	6.188
100	6.250									

From ft-lb to in-lb – ft-lb x 12 = in-lb

ft-lb	0 In-lb	1 In-lb	2 In-lb	3 In-lb	4 In-lb	5 In-lb	6 In-lb	7 In-lb	8 In-lb	9 In-lb
0	0	12	24	36	48	60	72	84	96	108
10	120	132	144	156	168	180	192	204	216	228
20	240	252	264	276	288	300	312	324	336	348
30	360	372	384	396	408	420	432	444	456	468
40	480	492	504	516	528	540	552	564	576	588
50	600	612	624	636	648	660	672	684	696	708
60	720	732	744	756	768	780	792	804	816	828
70	840	852	864	876	888	900	912	924	936	948
80	960	972	984	996	1008	1020	1032	1044	1056	1068
90	1080	1092	1104	1116	1128	1140	1152	1164	1176	1188
100	1200									

From in-lb to ft-lb – in-lb ÷ 12 = ft-lb

in-lb	0 ft-lb	1 ft-lb	2 ft-lb	3 ft-lb	4 ft-lb	5 ft-lb	6 ft-lb	7 ft-lb	8 ft-lb	9 ft-lb
0	0	0.083	0.167	0.250	0.333	0.417	0.500	0.583	0.667	0.750
10	0.833	0.917	1.000	1.083	1.167	1.250	1.333	1.417	1.500	1.583
20	1.667	1.750	1.833	1.917	2.000	2.083	2.167	2.250	2.333	2.417
30	2.500	2.583	2.667	2.750	2.833	2.917	3.000	3.083	3.167	3.250
40	3.333	3.417	3.500	3.583	3.667	3.750	3.833	3.917	4.000	4.083
50	4.167	4.250	4.333	4.417	4.500	4.583	4.667	4.750	4.833	4.917
60	5.000	5.083	5.167	5.250	5.333	5.417	5.500	5.583	5.667	5.750
70	5.833	5.917	6.000	6.083	6.167	6.250	6.333	6.417	6.500	6.583
80	6.667	6.750	6.833	6.917	7.000	7.083	7.167	7.250	7.333	7.417
90	7.500	7.583	7.667	7.750	7.833	7.917	8.000	8.083	8.167	8.250
100	8.333									

From in-lb to cm-kg – in-lb x 1.152 = cm-kg

in-lb	0 cm-kg	1 cm-kg	2 cm-kg	3 cm-kg	4 cm-kg	5 cm-kg	6 cm-kg	7 cm-kg	8 cm-kg	9 cm-kg
0	0	1.15	2.30	3.45	4.60	5.76	6.91	8.06	9.21	10.36
10	11.52	12.67	13.83	14.97	16.13	17.28	18.43	19.59	20.74	21.89
20	23.04	24.19	25.35	26.49	27.65	28.80	29.96	31.07	32.26	33.41
30	34.56	35.71	36.87	38.02	39.17	40.32	41.47	42.62	43.77	44.93
40	46.09	47.23	48.39	49.54	50.69	51.85	52.99	54.14	55.29	56.45
50	57.61	58.75	59.90	61.06	62.21	63.37	64.51	65.66	66.81	67.96
60	69.13	70.27	71.42	72.57	73.73	74.89	76.03	77.18	78.33	79.49
70	80.65	81.79	82.94	84.05	85.21	86.41	87.58	88.75	89.91	91.00
80	92.17	93.32	94.49	95.66	96.83	97.93	99.08	100.20	101.40	102.60
90	103.70	104.90	106.10	107.20	108.30	109.50	110.70	111.80	112.90	114.10
100	115.20									

From cm-kg to in-lb – cm-kg x .8677 = in-lb

cm-kg	0 ft-lb	1 ft-lb	2 ft-lb	3 ft-lb	4 ft-lb	5 ft-lb	6 ft-lb	7 ft-lb	8 ft-lb	9 ft-lb
0	0	.868	1.735	2.603	3.471	4.339	5.206	6.074	6.942	7.809
10	8.677	9.545	10.412	11.280	12.148	13.016	13.883	14.751	15.619	16.486
20	17.354	18.222	19.089	19.957	20.825	21.693	22.560	23.428	24.296	25.163
30	26.031	26.899	27.766	28.634	29.502	30.370	31.237	32.105	32.973	33.840
40	34.708	35.576	36.443	37.311	38.179	39.047	39.914	40.782	41.650	42.517
50	43.385	44.253	45.120	45.988	46.856	47.724	48.591	49.459	50.327	51.194
60	52.062	52.930	53.797	54.665	55.533	56.401	57.268	58.136	59.004	59.871
70	60.739	61.607	62.474	63.342	64.010	65.078	65.945	66.813	67.681	68.548
80	69.416	70.284	71.151	72.019	72.887	73.754	74.622	75.490	76.358	77.225
90	78.093	78.961	79.828	80.670	81.564	82.432	83.299	84.167	85.035	85.902
100	86.770									

From ft-lb to m-kg – ft-lb x .1383 = m-kg

ft-lb	0 m-kg	1 m-kg	2 m-kg	3 m-kg	4 m-kg	5 m-kg	6 m-kg	7 m-kg	8 m-kg	9 m-kg
0	0	0.138	0.277	0.415	0.553	0.691	0.830	0.968	1.106	1.245
10	1.383	1.521	1.660	1.798	1.936	2.074	2.212	2.351	2.489	2.628
20	2.766	2.904	3.043	3.181	3.319	3.457	3.596	3.734	3.872	4.011
30	4.149	4.287	4.426	4.564	4.702	4.840	4.979	5.117	5.255	5.394
40	5.532	5.670	5.809	5.947	6.085	6.223	6.362	6.500	6.638	6.777
50	6.915	7.053	7.191	7.330	7.468	7.606	7.745	7.883	8.021	8.159
60	8.298	8.436	8.574	8.713	8.851	8.989	9.128	9.266	9.404	9.543
70	9.681	9.819	9.957	10.09	10.23	10.37	10.51	10.65	10.79	10.92
80	11.06	11.20	11.34	11.48	11.62	11.75	11.89	12.03	12.17	12.31
90	12.45	12.59	12.73	12.86	13.00	13.14	13.28	13.42	13.55	13.69
100	13.83									

From m-kg to ft-lb – m-kg x 7.233 = ft-lb

m-kg	0 ft-lb	1 ft-lb	2 ft-lb	3 ft-lb	4 ft-lb	5 ft-lb	6 ft-lb	7 ft-lb	8 ft-lb	9 ft-lb
0	0	7.23	14.47	21.70	28.93	36.17	43.40	50.63	57.86	65.10
10	72.40	79.6	86.8	94.0	101.3	108.5	115.7	123.0	130.2	137.4
20	144.70	151.9	159.1	166.4	173.6	180.8	188.1	195.3	202.5	209.8
30	217.0	224.2	231.5	238.7	245.9	253.2	260.4	267.6	274.9	282.1
40	289.3	296.6	303.9	311.0	318.3	325.5	332.7	340.0	347.2	354.4
50	361.7	368.9	376.1	383.3	390.6	397.8	405.0	412.3	419.2	426.7
60	434.0	441.2	448.4	455.7	462.9	470.1	477.7	484.6	491.8	499.1
70	506.3	513.5	520.8	528.0	535.2	542.5	549.7	556.9	564.2	571.4
80	578.6	585.9	593.1	600.3	607.6	614.8	622.0	629.3	636.5	643.7
90	651.0	658.2	665.4	672.7	679.9	687.1	694.4	701.6	708.8	716.1
100	723.3									

CONVERSION CHARTS

Torque Conversion Chart

Units to be Converted	Imperial		
	ozf-in	lbf-in	lbf-ft
1 OZF-IN.=	1	0.0625	0.005
1LBF-IN.=	16	1	0.083
1LPF-FT.	192	12	1
1MN-M+	0.142	0.009	0.0007
1CN-M=	1.416	0.088	0.007
1N-M.	141.6	8.851	0.738

Units to be Converted	INTERNATIONAL SYSTEM -S.I.		
	mN-m	cN-m	N-m
1 OZF-IN.=	7.062	0.706	0.007
1LBF-IN.=	113	11.3	0.113
1LPF-FT.	1356	135.6	1.356
1MN-M+	1	0.1	0.001
1CN-M=	10	1	0.01
1N-M.	1000	100	1

Torque Conversion Chart

N.m		lbf. ft
1.2	1	0.7
2.7	2	1.5
4.0	3	2.2
5.4	4	3.0
6.8	5	3.7
8.1	6	4.4
9.5	7	5.1
10.9	8	5.9
12.2	9	6.6
13.6	10	7.4
15.0	11	8.1
16.3	12	8.9
17.6	13	9.6
19.0	14	10.3
20.3	15	11.0
21.7	16	11.8
23.0	17	12.5
24.0	18	13.2
25.8	19	14.0
27.1	20	14.8
28.5	21	15.5
29.5	22	16.2
31.5	23	17.0
32.5	24	17.7
33.9	25	18.4

Wire Sizes

AWG	mm^2	Ø mm
30	0.05	0.25
28	0.08	0.30
26	0.12	0.40
24	0.22	0.50
22	0.35	0.60
20	0.5	0.80
18	1.0	1.00
16	1.5	1.30
14	2.5	1.63
12	4.0	2.00
10	6.0	2.60

Temperature Conversion

Celsius	Fahrenheit
°C = (°F - 32) ÷ 1.8	°F = (°C x 1.8) + 32

Hex Versus Thread Size

mm	Germany (FRG) metric as per DIN and ISO	France NFE 27-311(69) 27-411(69)	Sweden SMS 2164-1967 2175-1971	Metric for high-strength bolts as per DIN 6914-6915
4	2		2u. 2.2	
4.5	2.3			
5	2.5		2.5	
5.5	3	3	3u. 4.5	
6	3.5	3.5		
7	4	4	4u. 3.5	
8	5	5	5	
9	5	5	5	
10	6	6	6	
11	7	7	7	
12				
13	8	8	8	
14				
15	10			
16	(garage)			
17	10	10	10	
18				
19	12	12	12	
20				
21				
22	14	14	14	12
23				
24	16	16	16	

Area

To convert	Multiply by
square inches into square millimetres	645.16
square inches into square centimetres	6.4516
square feet into square centimetres	929.0304
square feet into square metres	0.092903
square yards into square metres	0.836127

Volume and Capacity

To convert	Multiply by
cubic inches into cubic centimetres	16.387064
cubic inches into litres	0.016387
cubic feet into cubic metres	0.0283168
cubic feet into litres	28.316847
cubic yards into cubic metres	0.7645549

Mass

To convert	Multiply by
ounces into grams	28.349523
ounces into kilograms	0.0283495
pounds into kilograms	0.4535924

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The manufacturers of the products catalogued reserve the right to alter specifications and designs without prior notification.

NOTES

henchman

/’hɛn(t)ʃmən/

> A squire or page of honour to a person of rank.

Noun: henchman; plural noun: henchmen

Similar: Follower, supporter, assistant, aide, helper, adjutant, right-hand man, minder, protector

Opposite: Leader

Origin: Middle English, from Old English hengest ‘male horse’ + man, the original sense being probably ‘groom’

henchman



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