

Desoutter



Industrial Tools



More Than Productivity

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Unless specified all inlet threads are BSP or NPT dependent on market

More Than Productivity

Desoutter is your single source of electric and pneumatic tool solutions, covering a wide range of assembly and manufacturing processes in the motor vehicle, aerospace, general industry and light assembly sectors.

Desoutter has a long history of producing high-quality industrial tools. Today, the scope of the activity combines a global offering with a widespread local presence.

The reason behind this approach is simple: our customers, who include many of the world's largest and most successful manufacturers, want worldwide access to a global portfolio of assembly and manufacturing solutions.

With Desoutter, we provide you a world of industrial possibilities.



Focused on your objectives...

Industry hates risk. And so do we.

So we work with you to eliminate cost, quality and performance risks from your production lines.

Optimize your investments

Your production lines are some of your company's most important investments. The quality and performance of **Desoutter** industrial tool solutions enable you to optimize your return on investments by producing more in the same cycle time. **Our air-line systems, for instance, keep our pneumatic nutrunners spinning at exactly the right speed and power, saving you precious seconds for each operation.**

Increase revenues

Production line efficiency is worthless if the quality of your final goods generates costly recalls and after-sales support. With our industrial tool solutions, you produce consistently at high quality levels. **For example, our tightening control units enable you to error-proof complex assembly tasks and provide full traceability on the quality and sequence of operations.**

Raise productivity

Good ergonomics makes good economic sense. Not only are **Desoutter** tools designed to reduce operator stress factors, such as vibration and noise, they also take into account the relationship between the operator, the tool and the process. **Our experts work with you to obtain long-term gains in productivity and safety, while improving cost, quality and cycle times.**

Global solutions you can build on...

We know that finding the best solution is about much more than just picking a new tool.

That is why we start every project by opening our ears, not our catalog.

Process optimization

Producing high-quality products requires high-quality processes. That is why many of the world's major motor vehicle, aerospace and appliance manufacturers rely on **Desoutter**. Each **Desoutter** solution is tailored to your exact needs. **Our experts propose solutions that deliver a quantifiable return on investment, whether in terms of productivity improvements, quality gains or safety improvements.**

Production transplantations

We believe firmly in the adage: "don't reinvent the wheel". Our customer service teams are experts at replicating best processes around the world. **When a major European car maker wanted to duplicate a highly efficient wheel assembly solution in two new factories, it entrusted the project to Desoutter.** Deployed in two factories to two very

different markets, the replicated processes operate at the same speed and with the same quality as the original, despite sizeable differences in operator expertise.

Worldwide coverage

Desoutter combines global reach with local expertise. To ensure the smooth running of **Desoutter** solutions in your factories, all our local teams are trained to the same high level of expertise and service. Each team is in direct contact with the **Desoutter** area application and customer care center for your region. Together they ensure that **solutions are implemented to worldwide standards, but in compliance with local criteria.**





Expertise you can grow on...

From vehicles to chemicals, appliances to metal, planes to power, electronics to energy, ships to buildings – there is a Desoutter air powered and electric tool solution for you.

Covering all segments

Motor vehicle industry

Desoutter provides a wide range of tool solutions for vehicle makers, tier one suppliers and linebuilders. Solutions include fixed systems for engine and powertrain assembly, and handheld solutions for final assembly processes.

General industry

Desoutter solutions can be found in industrial fastening, assembly and material removal processes. Solutions include heavy-duty assembly systems, powerful material removal solutions and high torque off-road applications.

Aerospace

Desoutter has a long history of providing tools solutions to aero-space companies. We cover a wide range of their needs, from airframe and engine construction to system and furnishing assembly.

Light assembly

In their quest for ever higher quality levels, many major appliance and electronic manufacturers rely on **Desoutter** tools for error-proofed fastening and other business critical industrial processes.

Complete systems

Each **Desoutter** tool is designed as a full system, complete with its own accessories. **Taking a system-based approach has a dramatic effect on the productivity and longevity of your investment.** For example, our airline systems regulate and lubricate the air supply for pneumatic tools. Air quality is important, when you realize that a drop of just 8% in air pressure can slow drilling operations by nearly 40% (2 seconds per operation instead of 3.2 seconds).

Customized solutions

Our Applications Centers are the symbol of our renowned flexibility. As comprehensive as our catalog is, we know that sometimes you need a tailored solution. **Our Application Center engineers adapt existing solutions to your requirements and develop your own solutions.** They are experts at developing Six Sigma tools and error proofing.



Peace of mind you can count on...

Our support services keep your processes operating at maximum levels – and leave you to focus on your core business.

Maintenance contracts

Our maintenance contracts make **unexpected downtime a thing of the past.** They provide budget predictability and fixed price costs. Contracts are tailored to your needs and are available globally, regionally or for individual plants. By performing regular preventive maintenance you will experience less downtime and fewer emergency repairs. Maintenance contracts also lower your administrative and logistics costs.

Proactive logistics

When your operations are global, it is essential that your logistics are too. Our centralized inventory and warehousing system is highly responsive. We proactively manage our production to ensure a reliable supply of the products and parts you need. **The majority of the solutions in our catalog can be shipped to you in three days,** no matter where you are located. Next-day service is available in many markets.

Genuine Desoutter parts

Genuine **Desoutter** parts are the only parts designed and engineered specifically for **Desoutter** tools. They ensure that our tools always operate at their best. Moreover, for a lifetime of satisfaction, we always use genuine **Desoutter** spare parts when performing maintenance and repairs.

Accessories

In addition to providing you with the highest quality tools we also have an excellent range of accessories including balancers, hoses, torque arms and consumables. Like all **Desoutter** tools these accessories are designed to offer the maximum productivity for all our customer applications.





Unlock the power
to transform your
processes



Tool systems play a vital role in the performance of your production lines, the quality of your final products, and ultimately customer satisfaction. But managing your current tool systems while making sure they are ready for the future can be a formidable challenge.

Now there's Desoutter RightWay, a new way to turn tool systems into a source of competitiveness instead of a source of headaches.



The key to finding a better way



**WE BEGIN
BY LISTENING**

***Desoutter RightWay** focuses on six key areas that play an important part in the performance of your production lines.*

Understanding your needs and your expectations on these points will contribute to significant process improvements.

■ **PRODUCTIVITY**

Remove bottlenecks to raise workstation productivity and overall line performance.

■ **QUALITY**

Improve the quality of final goods and reduce quality-related costs by implementing advanced error-proofing solutions that detect and fix defects at the workstation.

■ **ERGONOMICS**

Reduce work-related musculoskeletal disorders to improve operator morale, cut absenteeism and minimize operator turnover.

■ **SAFETY**

Fewer on-the-job injuries and the costs associated with lost time and medical costs.

■ **ENERGY**

Fight rising energy costs by adopting energy-efficient best practices and technologies.

■ **PLANNING**

Help you accelerate process improvement projects by providing your planning department with valuable resources and expertise.





PUTTING OUR BRAINPOWER TO WORK

*Desoutter RightWay uses a unique **4-step methodology** to identify workable improvements to your production line. Our solutions combine real-world insights gathered directly from your production line with our unmatched expertise in tool systems for your industry.*

4-STEP METHODOLOGY

Analyse

ON THE FACTORY FLOOR

Desoutter RightWay begins with a 6-point on-site audit of your entire line, workstations and operator ergonomics. Our expert visits the line with you gathering information and observations about your requirements in the six key domains: productivity, quality, ergonomics, safety, energy consumption and process planning.

Follow-up

IMPLEMENTATION AND SUPPORT

Finally, we work with your line engineers to organize the smooth and timely deployment of the new tool system. Over the life of the system, we will continue to monitor performance and use this feedback to make any adjustments that may be required as your line evolves. We also provide all the preventive maintenance and fixed-price servicing called for in the ROI calculations.

Desoutter
RIGHTWAY

Propose

DEMONSTRATING FEASIBILITY

Using the results of our Desoutter RightWay audit, the data you provide and our best practices in similar applications, we design and test a custom solution that is perfectly suited to your requirements. In addition, we demonstrate the solution in real-world conditions to show you first-hand how it resolves your issues and concerns.

Prove

PROVE THE PAYBACK

Based on the proposed solution, we calculate the return on investment and the payback in terms of the six domains mentioned earlier. We also propose error-proofing solutions, calculate duty cycles and analyze joint quality for assembly applications.



Ensuring a lifetime of optimal tool performance:

Whether you are expanding your capacity or seeking to improve overall efficiency, Desoutter Services is the right place to start. With a global network that covers all the major markets of the world, and with over 100 years of experience, Desoutter Service is able to deliver a lifetime of "Peace of Mind™" and optimal operation.

Reduce downtime

The performance of your production lines depends largely on the uninterrupted operations of your tool systems. Emergency repairs and unplanned maintenance can generate costly downtime as well as lost production, and are more expensive than planned maintenance. By performing preventive maintenance and planning service intervention, we can optimize operational uptime.

Optimize productivity

Our training programs teach our operators how to get the most out of their tools while benefiting from optimal ergonomics. They also enable your line managers and process engineers to optimize applications, by providing reliable metrics.

Ensure quality

Too little maintenance can cause tool systems to under perform, increasing rejects, recalls and warranty claims. By servicing tools to operate at their best we can help you avoid defects caused by malfunctioning equipment. By identifying your precise calibration and maintenance needs, you avoid unnecessary reworking costs, not to mention costly tool repairs.

Control Costs

After performance, quality and productivity, the final hallmark of excellent tool maintenance is budget predictability. All our tool and account services are available with a fixed cost per tool, per system or per period. This gives you full control over your operating budget. In addition, our parts inventory management lowers administrative costs and capital expenditure.

Tool Services

Our experts can keep your tools running at their best, reducing downtime and helping in making costs more predictable. Thanks to our experience in power tools running in demanding applications all over the world, we can optimize the maintenance for each tool based on your application.



Check-up & calibration

To enable you to meet quality system criteria and pass audits, we offer a complete calibration service. With it you get scheduling, full management and traceable documentation. Properly calibrated equipment provides confidence that your products meet their highest performance and specifications.

Installation & set-up

Get new tools up and running faster with our installation and set-up services. A qualified Desoutter service engineer commissions new tools to specification. To save time, tools are optimized through simulation before they are shipped out for installation. They are then tested and their performance verified on-line. Based on application and joint analysis, the engineer tunes each tool for maximum reliability. Depending on the customer's need, our engineers can then provide a follow up of the production during the ramp up and final line speed. This ensures that the highest tightening capability is achieved at mass production levels.

Repairs

We reduce the administrative hassle of managing repairs, thanks to fixed price repair service and rapid tool turnaround. We always take advantage of the repair time to perform a complete overhaul, which helps tools to last longer on the production line, ensuring high uptime. For even faster turnaround, we can keep exchange parts in stock as part of your service contract. We can track the repair history of all tools, and we can provide extensively analysis report of the services provided, throughout the life of the tools.

Preventive maintenance

We customize, through our dedicated software, our preventive maintenance plan to your application requirements, taking into account parameters such as annual cycles, cycle times, torque settings and joint quality. This reduces ownership costs and keeps tools working at their best. Preventive maintenance is available with fixed pricing to help you manage your budget better. In some cases, tools maintained by us are eligible for extended warranties. We offer Extended Warranty Programs that provide a comprehensive service/support program for new tool purchases. Please consult us on the Tool Care™ and extended warranty program.

Account Services

In addition to optimizing the individual tool performance, we also help you simplify tool management and ownership.



Training

To improve the performance of your operators and the expertise of your line managers, we provide comprehensive training and seminar programs. We offer hands-on training at your plant or at one of our training centres. Training covers tool function and handling and includes torque adjustment, case studies and the basics of threaded fastener assembly. By improving the knowledge and skills of your operators, you will increase operator job satisfaction and productivity.

Full service plans

When managing a wide range of tool systems, it is important to keep costs under control. Our full service plans are tailored to your needs. They reduce spare part inventory, lower administration costs and provide budget predictability. Full service plans are available for single facilities or for multiple plants, whether in a single country, region or around the world. Desoutter will provide you with a full cost analysis and return of investment to ensure that you get the best optimization in caring for your equipment. Take the challenge and let us demonstrate it to you! Check out the new Peace of Mind™ service. With this offer the customer pays a fixed amount and gets three years of full repairs including spare parts, labor, preventive maintenance, calibration and management.

Extended Warranty Tool Care™

With this offer you need to follow all the recommended service intervals, and send the tools to our service center for the warranty extension preventive maintenance. We will then register and keep track of the tool, as well as inform you of the next due date, to keep the warranty period valid for the next extended period.

In-plant support

We provide dedicated customer service programs with in-plant technicians, which leaves you free to concentrate on your business. Our specialists handle the commissioning and calibration of equipment as well as process optimization, servicing and on-site joint analysis. We aim to keep all your tools running efficiently and smoothly, whether they are Desoutter tools or those of other manufacturers.

Assembly Tools - Selection Guide

TOOL TYPE

PAGE

PLUG & TIGHTEN - DTU - BATTERY TOOLS

10-15



ELECTRIC TRANSDUCERIZED EB TOOLS - PC & Networks/Software

16-33



ELECTRIC CURRENT CONTROLLED EB TOOLS - POSCO

34-51



ELECTRIC FASTENING TOOLS

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PNEUMATIC FASTENING TOOLS

64-93



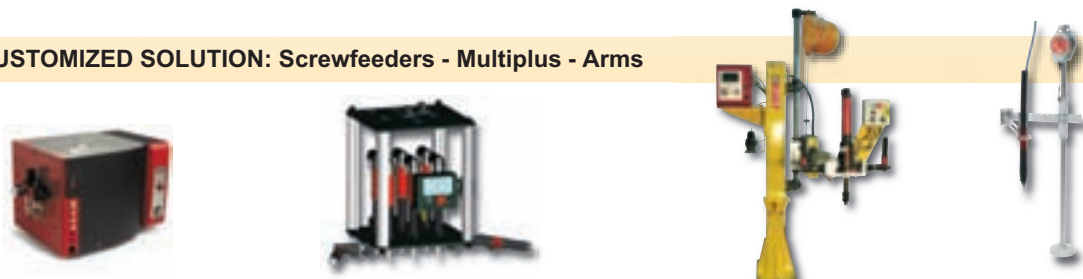
TORQUE MEASUREMENT SYSTEMS - Software

94-105



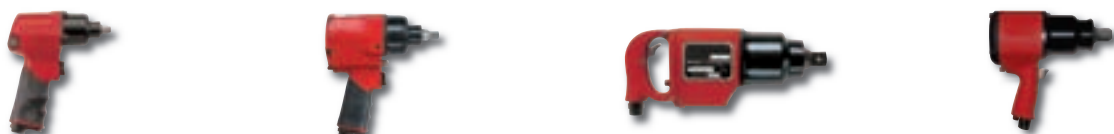
CUSTOMIZED SOLUTION: Screwfeeders - Multiplus - Arms

106-123



PNEUMATIC IMPACT WRENCHES

124-129







Plug & Tighten series

A unique assembly solution

EASY TO INSTALL

Directly connected to the mains

HIGH ACCURACY

Transducer tool

EASY TO USE

Set-up your cycle directly on the tool



PLUG & TIGHTEN



TFLEX

PLUG & TIGHTEN

- Easy to program 1 cycle
- Torque + Angle strategy capable
- DTU connection (DTU hardware required)
 - PLC external control
 - OK/NOK reporting and batch count

TFLEX

- Easy to change torque
- Up to 5 torques memorized
- Download tightening results on your PC (CVIP Flex software required)



Production line
With high duty cycle

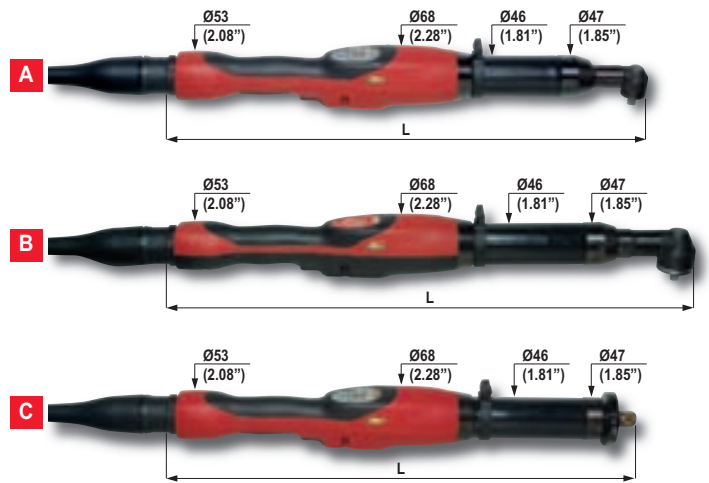
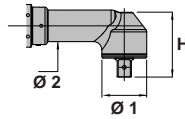


Prototyping
Quality department
Reworking/Backup tool

CVIP

3 to 65 Nm (2.2 to 47.9 ft.lb.)

MODEL	Ø1		Ø2		H	
	mm	in.	mm	in.	mm	in.
EAP1.5-15-	28	1.10	27	1.06	45.5	1.79
EAP1.5-20-	28	1.10	27	1.06	45.5	1.79
EAP1.5-26-	28	1.10	27	1.06	45.5	1.79
EAP2-20-	28	1.10	27	1.06	45.5	1.79
EAP2-30-	28	1.10	27	1.06	45.5	1.79
EAP2-40-	35	1.38	27	1.06	51.5	2.03
EAP2-65-	40	1.57	30.5	1.20	57.5	2.26



PIC REF	MODEL	PART NUMBER	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE RANGE		ROTATIONAL SPEED	LENGTH L		WEIGHT	
						in.	Nm		ft.lb.	mm	in.	kg

Torque					Torque + Angle					rpm 230V			
Right angle tools - 230V Models													
A	EAP1.5-15-T-2	615 165 312 0	EAP1.5-15-TA-2	615 165 323 0	Sq. 3/8	3-15	2.2-11.0	1020	534.5	21.0	1.85	4.1	
A	EAP1.5-20-T-2	615 165 313 0	EAP1.5-20-TA-2	615 165 324 0	Sq. 3/8	5-20	3.7-14.7	740	534.5	21.0	1.85	4.1	
A	EAP1.5-26-T-2	615 165 314 0	EAP1.5-26-TA-2	615 165 325 0	Sq. 3/8	7-26	5.2-19.2	570	534.5	21.0	1.85	4.1	
A	EAP2-20-T-2	615 165 315 0	EAP2-20-TA-2	615 165 326 0	Sq. 3/8	5-20	3.7-14.7	1320	559.5	22.0	2.0	4.4	
A	EAP2-30-T-2	615 165 316 0	EAP2-30-TA-2	615 165 327 0	Sq. 3/8	7-30	5.2-22.1	1020	559.5	22.0	2.0	4.4	
A	EAP2-40-T-2	615 165 317 0	EAP2-40-TA-2	615 165 328 0	Sq. 3/8	10-40	7.4-29.5	800	570.0	22.4	2.1	4.6	
A	EAP2-65-T-2	615 165 318 0	EAP2-65-TA-2	615 165 329 0	Sq. 3/8	15-65	11-47.9	510	581.5	22.9	2.2	4.8	

Right angle Tflex tools - 230V Models												
B	EAP2-30-TF2	615 165 404 0			Sq. 3/8	6-30	4.4-22.1	1020	559.5	22.0	2.0	4.4
B	EAP2-65-TF2	615 165 405 0			Sq. 3/8	15-65	11-47.9	510	581.5	22.9	2.2	4.8

Right angle tools - 110V Models												
rpm 110V												
A	EAP1.5-15-T-1	615 165 334 0	EAP1.5-15-TA-1	615 165 345 0	Sq. 3/8	3-15	2.2-11.0	1200	534.5	21.0	1.85	4.1
A	EAP1.5-20-T-1	615 165 335 0	EAP1.5-20-TA-1	615 165 346 0	Sq. 3/8	5-20	3.7-14.7	740	534.5	21.0	1.85	4.1
A	EAP1.5-26-T-1	615 165 336 0	EAP1.5-26-TA-1	615 165 347 0	Sq. 3/8	7-26	5.2-19.2	570	534.5	21.0	1.85	4.1
A	EAP2-20-T-1	615 165 337 0	EAP2-20-TA-1	615 165 348 0	Sq. 3/8	5-20	3.7-14.7	1320	559.5	22.0	2.0	4.4
A	EAP2-30-T-1	615 165 338 0	EAP2-30-TA-1	615 165 349 0	Sq. 3/8	7-30	5.2-22.1	1020	559.5	22.0	2.0	4.4
A	EAP2-40-T-1	615 165 339 0	EAP2-40-TA-1	615 165 350 0	Sq. 3/8	10-40	7.4-29.5	800	570.0	22.4	2.1	4.6
A	EAP2-65-T-1	615 165 340 0	EAP2-65-TA-1	615 165 351 0	Sq. 3/8	15-65	11-47.9	510	581.5	22.9	2.2	4.8

Right angle Tflex tools - 110V Models												
B	EAP2-30-TF1	615 165 402 0			Sq. 3/8	6-30	4.4-22.1	1020	559.5	22.0	2.0	4.4
B	EAP2-65-TF1	615 165 403 0			Sq. 3/8	15-65	11-47.9	510	581.5	22.9	2.2	4.8

Torque					Torque + Angle					rpm 230V			
In-line tools - 230V Models													
C	EDP1.5-15-T-2	615 165 319 0	EDP1.5-15-TA-2	615 165 330 0	Hex. 1/4F	3-15	2.2-11.0	1010	491.5	19.3	1.7	3.7	
C	EDP2-24-T-2	615 165 320 0	EDP2-24-TA-2	615 165 331 0	Hex. 1/4F	5-24	3.7-17.7	1390	516.5	20.3	1.8	3.9	
C	EDP2-33-T-2	615 165 321 0	EDP2-33-TA-2	615 165 332 0	Sq. 3/8	7-33	5.2-24.3	1010	508.5	20.0	1.85	4.1	
C	EDP2-43-T-2	615 165 322 0	EDP2-43-TA-2	615 165 333 0	Sq. 3/8	8-43	5.9-31.7	780	508.5	20.0	1.85	4.1	

In-line tools - 110V Models												
rpm 110V												
C	EDP1.5-15-T-1	615 165 341 0	EDP1.5-15-TA-1	615 165 352 0	Hex. 1/4F	3-15	2.2-11.0	1010	491.5	19.3	1.7	3.7
C	EDP2-24-T-1	615 165 342 0	EDP2-24-TA-1	615 165 353 0	Hex. 1/4F	5-24	3.7-17.7	1390	516.5	20.3	1.8	3.9
C	EDP2-33-T-1	615 165 343 0	EDP2-33-TA-1	615 165 354 0	Sq. 3/8	7-33	5.2-24.3	1010	508.5	20.0	1.85	4.1
C	EDP2-43-T-1	615 165 344 0	EDP2-43-TA-1	615 165 355 0	Sq. 3/8	8-43	5.9-31.7	780	508.5	20.0	1.85	4.1

ACCESSORIES INCLUDED

PART NO.

- Horizontal bail **615 396 562 0**
- Reaction bar ring **615 396 551 5**

OPTIONAL ACCESSORIES

ITEM PART NO.

- 1 Mounting plate with telescopic spindle **615 396 547 0**
- 2 2nd lever start (except Tflex tools) **615 396 553 0**
- 3 Reaction handle **615 396 554 0**
- 4 Horizontal bail, swivel **615 396 529 0**
- 5 Vertical bail **467003**
- 6 Plastic protective cover EAP. -15/20/30 **615 573 064 0**
- 6 Plastic protective cover EAP 2-40 **615 573 065 0**
- 6 Plastic protective cover EAP 2-65 **615 573 066 0**
- Plastic protective cover EDP **615 573 067 0**

OPTIONAL ACCESSORIES

PART NO.

- Power cable EU 230V - 5m (16.4ft) **615 917 470 0**
- Power cable EU 230V - 5m (16.4ft) with GFI **615 917 476 0**
- Power cable UK 230V - 5m (16.4ft) **615 917 472 0**
- Power cable UK 230V - 5m (16.4ft) with GFI **615 917 478 0**
- Power cable US 110V - 5m (16.4ft) with GFI **615 917 479 0**
- Power cable without plug 230V - 5m (16.4ft) **615 917 474 0**
- Power cable without plug 230V - 5m (16.4ft) with GFI **615 917 477 0**
- Power cable without plug 110V - 5m (16.4ft) **615 917 475 0**
- Power cable without plug 110V - 5m (16.4ft) with GFI **615 917 498 0**

A GFI (Ground Fault Interruptor) is an additional user safety protection. It is strongly recommended to have one if your line is not already protected

Data Transfer Unit

Quality Insurance for Plug & Tighten tools

(not compatible with Plug & Tighten TFlex)

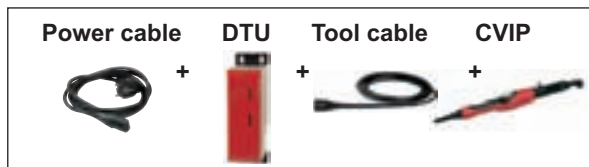
The DTU (Data Transfer Unit) is a reporting box and power tool supply for Plug & Tighten tools.

- **PLC External control** : The tool can be controlled by an external system for automatic solutions.
- **OK / NOK reporting** : Results outputs are available to ensure a perfect quality process.
- **Batch count** : Completed number of OK fastening (with a good result) are counted and reported. This ensures a complete and high quality assembly (setup by pocket PC).



MODEL	PART NUMBER	DIMENSIONS					
		WIDTH		HEIGHT		DEPTH	
		mm	in.	mm	in.	mm	in.
DTU Basic	615 936 045 0	90	3.5	250	9.8	190	7.5

Please also specify **TOOL CABLE** and **POWER CABLE**



TOOL CABLE	PART NO.
• Tool cable 110V 5m (16.4ft)	615 917 485 0
• Tool cable 110V 10m (32.8ft)	615 917 486 0
• Tool cable 110V 15m (49.2ft)	615 917 487 0
• Tool cable 230V 5m (16.4ft)	615 917 480 0
• Tool cable 230V 10m (32.8ft)	615 917 481 0
• Tool cable 230V 15m (49.2ft)	615 917 482 0



POWER CABLE	PART NO.
A European 2.5m (8.2ft)	615 917 201 0
B UK 2.5m (8.2ft)	615 917 202 0
C US 2.5m (8.2ft)	615 917 203 0

OPTIONAL EXTENSION CABLE	PART NO.
• Extension tool cable 10m (32.8ft)	615 917 483 0
• Extension tool cable 20m (65.6ft)	615 917 484 0

CVIP Flex software

Up to 30 tightening results transfer to your PC

(only compatible with Tflex Tools)

CVIP Flex is a simple PC software that will help you to download the first 30 readings via Bluetooth.



MODEL	PART NUMBER
CVIP Flex	615 929 024 0

E-LIT series

An innovative battery tool

1000 tightening autonomy in 1.1 kg (2.4 lb)



2 MODELS TO CHOOSE FROM	 BRUSHLESS MOTOR	 LI-ION BATTERY	 SPEED MODULE
E-LIT premium Electronic brushless speed control (ELS) 	✓	✓	✓
E-LIT plus Electronic brushless (ELB) 	✓	✓	✗

Always the right speed

120 to 1550 rpm



MVI/MVIC

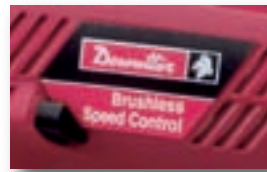
- Body shop assembly
- Final assembly

GI

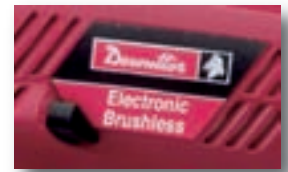
- Any standard joints < 12 Nm

E-LIT series - Brushless versions

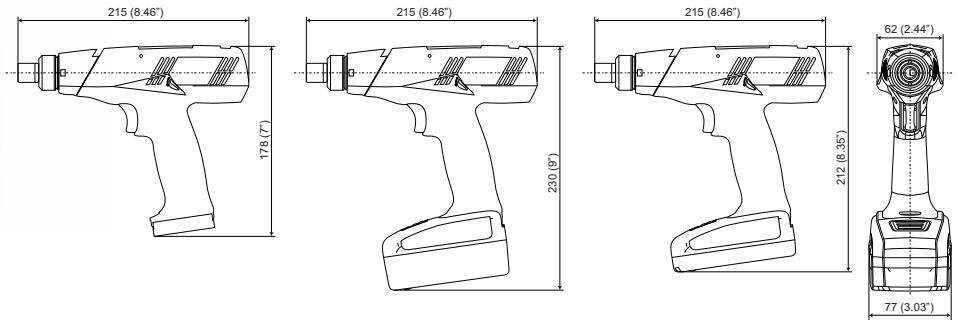
0.4 to 12 Nm (0.3 to 8.8 ft.lb) - 120 to 1550 rpm



A



B



PIC REF	MODEL	PART NUMBER	TORQUE RANGE		ROTATIONAL SPEED*	OUTPUT DRIVE	HEIGHT WITHOUT BATTERY		WEIGHT WITHOUT BATTERY	
			Nm	ft.lb			mm	in.	kg	lb
E-LIT premium - Electronic brushless speed control (ELS)										
A	ELS2.5-1550-P	615 165 419 0	0.4-2.5	0.3-1.8	500-1550	Hex. 1/4 F	178	7	0.8	1.76
A	ELS6-1000-P	615 165 420 0	0.8-6.0	0.6-4.4	300-1000	Hex. 1/4 F	178	7	0.8	1.76
A	ELS8-400-P	615 165 605 0	1.5-8.0	1.1-5.9	120-400	Hex. 1/4 F	178	7	0.8	1.76
A	ELS8-800-P	615 165 421 0	1.5-8.0	1.1-5.9	300-800	Hex. 1/4 F	178	7	0.8	1.76
A	ELS12-600-P	615 165 422 0	3.0-12.0	2.2-8.8	250-600	Hex. 1/4 F	178	7	0.8	1.76
E-LIT plus - Electronic brushless motor (ELB)										
B	ELB2.5-1250-P	615 165 415 0	0.4-2.5	0.3-1.8	1260	Hex. 1/4 F	178	7	0.8	1.76
B	ELB6-900-P	615 165 416 0	0.8-6.0	0.6-4.4	910	Hex. 1/4 F	178	7	0.8	1.76
B	ELB2.5-670-P	615 165 439 0	0.4-2.5	0.3-1.8	670	Hex. 1/4 F	178	7	0.8	1.76
B	ELB6-670-P	615 165 440 0	0.8-6.0	0.6-4.4	670	Hex. 1/4 F	178	7	0.8	1.76
B	ELB8-670-P	615 165 417 0	1.5-8.0	1.1-5.9	670	Hex. 1/4 F	178	7	0.8	1.76
B	ELB12-600-P	615 165 418 0	3.0-12.0	2.2-8.8	600	Hex. 1/4 F	178	7	0.8	1.76

*Contact your local supplier for specific speed requests

Accessories

ACCESSORIES INCLUDED

PART NO.

- Adjustment screwdriver **205 050 785 3**

OPTIONAL ACCESSORIES

ITEM

PART NO.

Battery type

- 1 Li-ion Battery 18V 1.3 Ah - 0.35 kg (0.77lb) **615 397 298 0**
- 2 Li-ion Battery 18V 2.6 Ah - 0.60 kg (1.32lb) **615 397 299 0**

Charger

- 3 Charger for Li-ion 230V - Europe **615 397 300 0**
- 3 Charger for Li-ion 120V - USA **615 397 301 0**
- 3 Charger for Li-ion 230V - UK **615 397 302 0**

Miscellaneous

- 4 Speed setting module (ELS version only) **615 396 829 0**
- 5 Side handle **615 396 757 0**
- 6 Cover protection **615 396 870 0**
- 7 Battery cover protection for battery 18V 1.3 Ah **615 396 871 0**
- 7 Battery cover protection for battery 18V 2.6 Ah **615 396 872 0**
- Suspension bail **443 703**
- 8 Kit Colour rings (7) **615 396 742 5**
- 9 Pistol tool holster **615 804 914 0**
- Aluminium case **615 995 630 0**





CVI II Range Electric transducerized

Tools



- Wide range of torque, high speed for productivity, precision in high torque and low speeds
- Brushless AC motor : virtually maintenance free
 - Resolver : smooth angle control at any speed
 - 6 leds OK / NOK signals
 - Easy and quick maintenance

Easy to integrate



I/O management, sequencing and positioning for error-proofing scenario

Controllers



From a simple run down up to complex sequence applications, with up to 20 phases and 250 cycles to optimize speed, accuracy and operator comfort on every joint.

Tightening strategies

- Torque + angle monitoring
- Angle + torque monitoring
- Torque + angle + torque rate
- Prevailing torque
- Yield point
- Stall torque
- Torque & angle
- Detection of plastic zone area of the joint
- Additional torque + angle transducers
- Self tapping
- Current monitoring

Communication



CVIPC2000:

- common software to all controllers for easy programming
- statistics screens
- full traceability and networking capabilities
- up to 11600 results stored in the controller

Peripherals and accessories



POSCO positioning system allows quick sequencing with X and Y encoders to respect your batch order

Technical features

CVI II Range

FUNCTION	CVIS II	CVI II MODCVI-1	TWINCVI II MODCVI-2
Number of channels	1	1	2
Number of cycles	15	250	250
Number of phases	8	20	20
Batch count	999	999	999
Real time statistics (ISO.CNOMO)		✓	✓
Synchronization of spindles			✓
TIGHTENING RESULTS			
Torque + Angle + Date + Time + Report	up to 5000	up to 8500	up to 11600
Number of curves	2	4	8
TIGHTENING STRATEGIES			
Torque control + angle monitoring	✓	✓	✓
Angle control + torque monitoring	✓	✓	✓
Torque and Angle control		✓	✓
Torque control + (Angle + torque Rate) monitoring		✓	✓
Angle control + (Torque + torque Rate) monitoring		✓	✓
Yield point strategy		✓	✓
Stall torque		✓	✓
Prevailing torque	✓	✓	✓
Current monitoring	✓	✓	✓
Self-tapping		✓	✓
EXTERNAL CONNECTIVITY			
Input	8	26	26
Output	8	32	32
RS232/422 port (RSPC)	✓	✓	✓
Parallel printer port	✓	✓	✓
High speed RS232/485/20mA (RSB) port		✓	✓
RS232 port (RSA)		✓	✓
ADVANCED OPTIONS			
Ethernet - 3 port socket		✓	✓
Fieldbus: Profibus, modbus+, interbusS, devicenet		✓	✓
SFP Basic cycle sequencing		✓	✓
SFP Advanced station management		✓	✓
MAINTENANCE			
Access to all tools parameters	✓	✓	✓
Autotest of the complete system	✓	✓	✓
Automatic calibration with Delta		✓	✓
PROGRAMMING			
8 keys + LCD screen	✓		
Full keypad + large LCD screen		✓	✓
CVIPC2000 point to point or via networking	✓	✓	✓

Example order for 1 complete Assembly System

	PART NO.
1 Tool portable angle nutrunner ERAL-2-80	615 165 365 0
1 Cable length 15m	615 917 495 0
1 Controller CVI II	615 932 617 0
1 Start-up kit (UK)	615 928 071 0



Controllers

CVIS II -CVI II -TWINCVI II -MODCVI -CPUCVI



A



B



C



D



E

MODCVI-2
Is the modular version
of TWINCVI II

CPUCVI
The CPUCVI is the system control for a multi spindle unit.
It fully controls the assembly sequence, controls
the MODCVI-M and centralizes the command and results.

PIC REF	MODEL	PART NUMBER	AVERAGE POWER	ELECTRICAL SUPPLY	WIDTH		DIMENSIONS HEIGHT		DEPTH		WEIGHT	
			kVA	115/230 V	mm	in.	mm	in.	mm	in.	kg	lb.
A	CVIS II	615 932 618 0	0.5	Single-phase	280	11.0	345	13.6	385	15.2	17.0	37.5
A	CVIS II US	615 932 642 0	0.5	Single-phase	280	11.0	345	13.6	385	15.2	17.0	37.5
B	CVI II	615 932 617 0	0.5	Single-phase	280	11.0	345	13.6	385	15.2	18.5	40.8
B	CVI II US	615 932 641 0	0.5	Single-phase	280	11.0	345	13.6	385	15.2	18.5	40.8
B	CVI II PROFIBUS	615 932 620 0	0.5	Single-phase	280	11.0	345	13.6	385	15.2	18.5	40.8
B	CVI II ETHERNET	615 932 664 0	0.5	Single-phase	280	11.0	345	13.6	385	15.2	18.5	40.8
B	CVI II US ETHERNET	615 932 666 0	0.5	Single-phase	280	11.0	345	13.6	385	15.2	18.5	40.8
C	TWINCVI II	615 932 619 0	1.0	Single-phase	400	15.7	345	13.6	400	15.7	26.0	57.3
C	TWINCVI II 1 SERVO	615 932 626 0	0.5	Single-phase	400	15.7	345	13.6	400	15.7	24.0	52.8
C	TWINCVI II US	615 932 640 0	1.0	Single-phase	400	15.7	345	13.6	400	15.7	26.0	57.3
C	TWINCVI II PROFIBUS	615 932 621 0	1.0	Single-phase	400	15.7	345	13.6	400	15.7	26.0	57.3
C	TWINCVI II ETHERNET	615 932 665 0	1.0	Single-phase	400	15.7	345	13.6	400	15.7	26.0	57.3
C	TWINCVI II US ETHERNET	615 932 667 0	1.0	Single-phase	400	15.7	345	13.6	400	15.7	26.0	57.3
D	MODCVI-1	615 932 501 0	0.5	Single or Three-phase	230	9.0	355	14.0	360	14.2	11.0	24.3
D	MODCVI-2	615 932 521 0	1.0	Single or Three-phase	230	9.0	355	14.0	360	14.2	13.6	30.0
D	MODCVI-M1	615 932 541 0	0.5	1 or 2 spindles	230	9.0	355	14.0	360	14.2	11.0	24.3
D	MODCVI-M2	615 932 542 0	1.0	1 or 2 spindles	230	9.0	355	14.0	360	14.2	13.6	30.0
E	CPUCVI	615 932 561 0	0.2	Single-phase	108	4.3	375	14.7	360	14.2	6.6	14.5

START-UP KIT to be ordered with the controller
Including: **Plug + Literature**

PLUG	LITERATURE	CVIS II	TWINCVI II /CVI II
A	French	615 928 090 0	615 928 070 0
A	German	615 928 092 0	615 928 072 0
A	Spanish	615 928 093 0	615 928 073 0
A	Italian	615 928 094 0	615 928 074 0
A	English	615 928 095 0	615 928 075 0
A	Dutch	615 928 098 0	
A	Portuguese	615 928 096 0	615 928 076 0
B	English	615 928 099 0	615 928 079 0
C	English	615 928 091 0	615 928 071 0

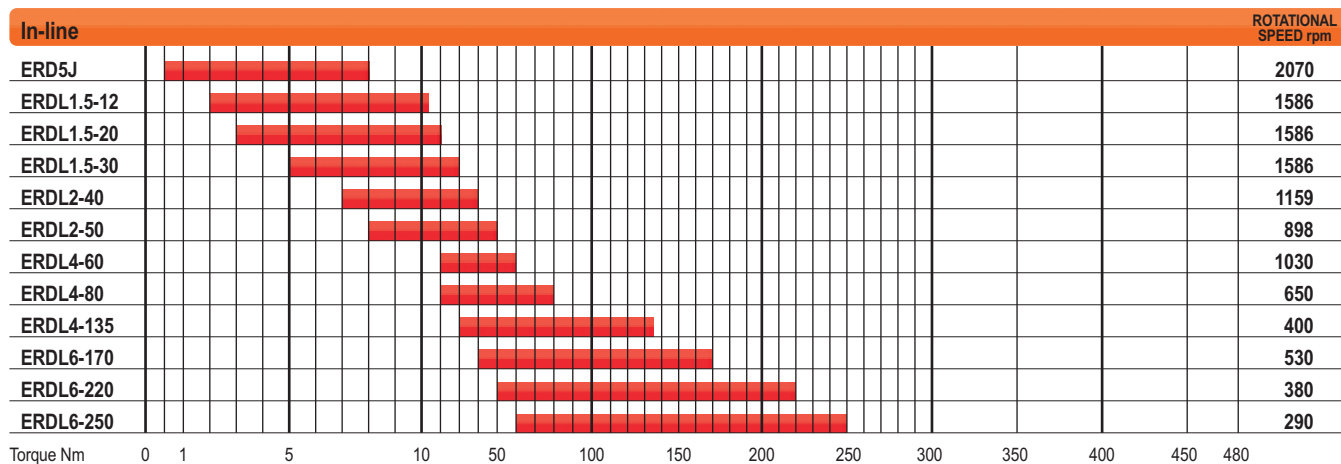
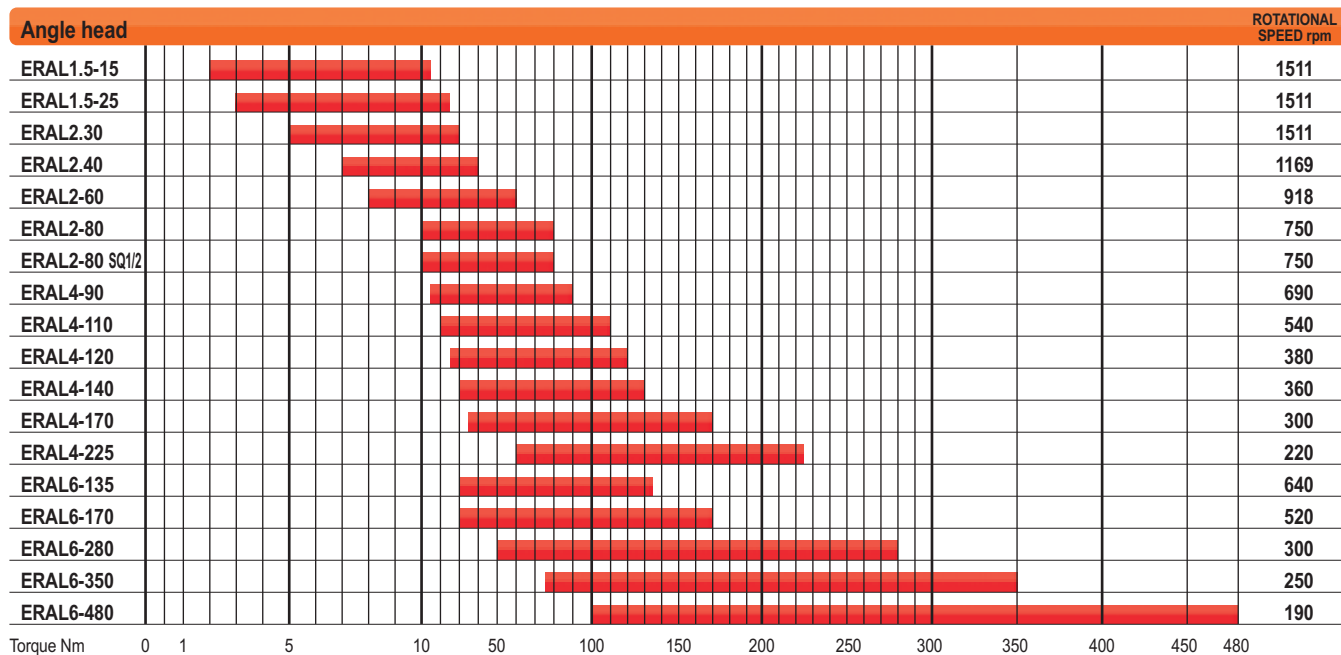
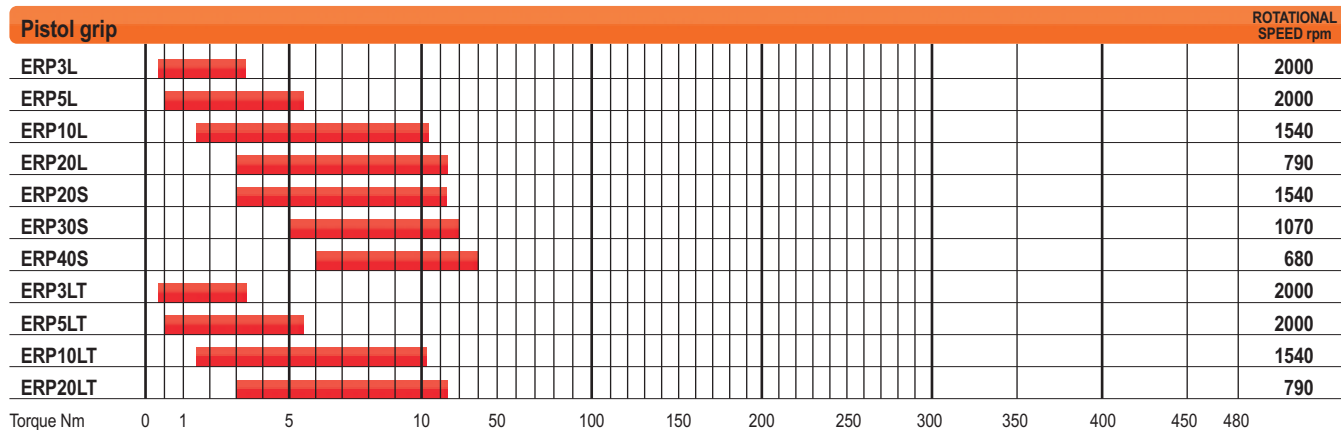


OPTIONAL ACCESSORIES

	PART NO.
PC cable, length 2m (78.7")	615 917 047 0
Printer cable, length 2m (78.7")	615 917 057 0
Wall hanging system	615 930 519 0
Power supply 400 Volts	615 932 460 0
BRD 'Backup Rescue Device'	615 936 026 0
SFP Basic	615 927 527 0
SFP Advanced	615 927 528 0
CVIPC2000 for CVIS/CVIC	1 Installation
CVIPC2000 Standard	1 Installation
CVIPC2000 Advanced	1 Installation
CVIPC2000 for CVIS/CVIC	5 Installations
CVIPC2000 Standard	5 Installations
CVIPC2000 Advanced	5 Installations
CVIPC2000 Standard	25 Installations
CVIPC2000 Advanced	25 installations

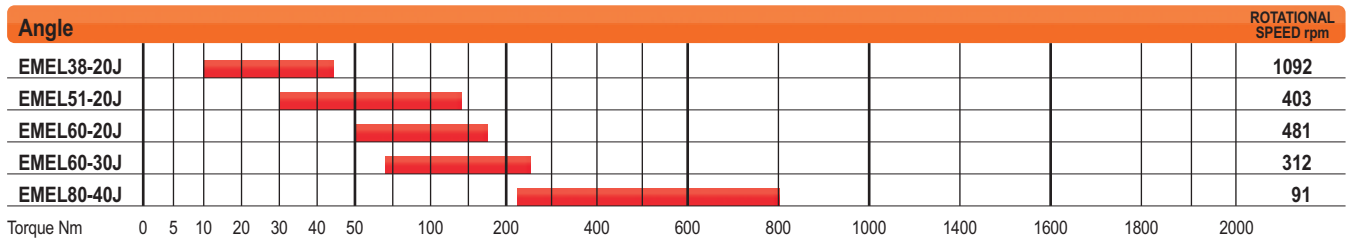
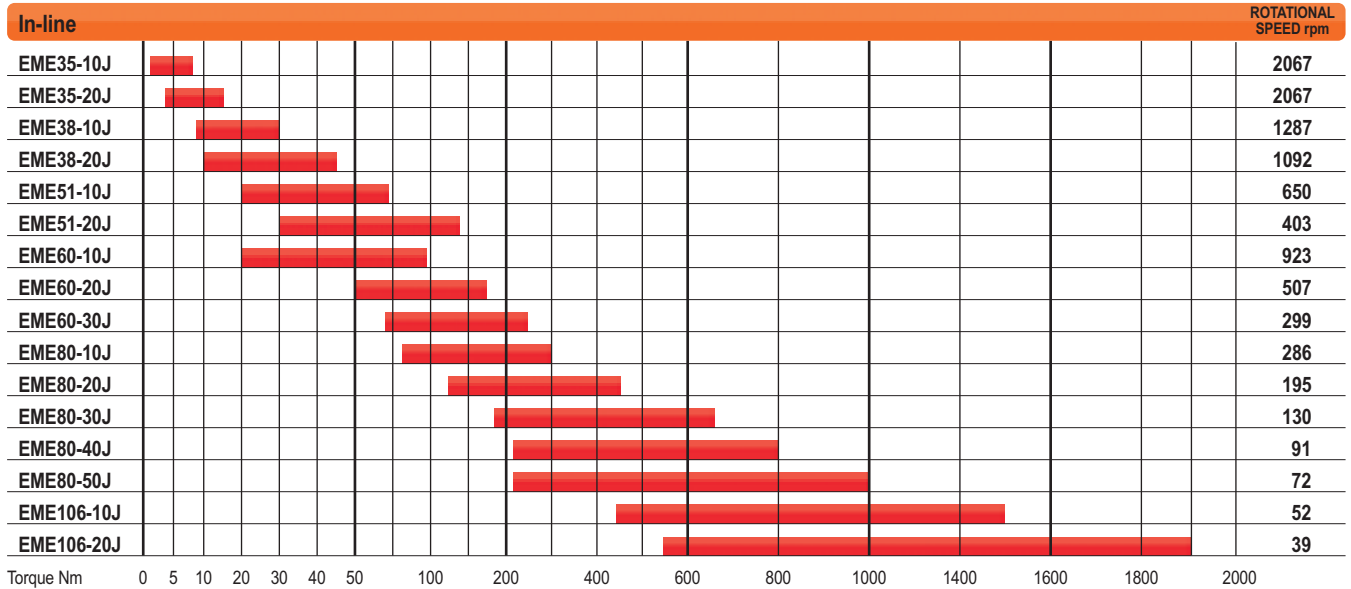
Torque Range - Portable electric nutrunners

Performance of Portable electric nutrunners Series ERP, ERAL, ERD and ERDL

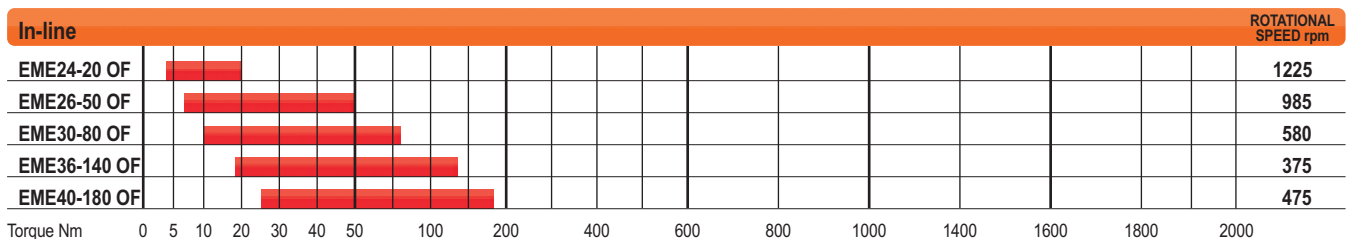


Torque Range - Fixtured electric spindles

Performance of Fixtured electric spindles Series EME and EMEL



Performance of Fixtured electric spindles with Offset Series EME.OF



Pistol grip electric nutrunners - CVI II

0.35 to 42 Nm (0.26 to 31 ft.lb) - 680 to 2000 rpm



A



B



C



D

Accessories: see page 29 

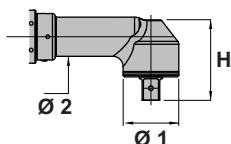
PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE						ROTATIONAL SPEED	LENGTH		WEIGHT	
				MIN.	RECOM-MENDED	MAX.	MIN.	RECOM-MENDED	MAX.		mm	in.	kg	lb.
			in.	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	rpm	mm	in.	kg	lb.
A	ERP3L	615 165 193 0	Hex. 1/4 F	0.35	3	3.3	0.26	2.2	2.4	2000	196	7.7	1.0	2.2
A	ERP5L	615 165 194 0	Hex. 1/4 F	0.5	5	5.5	0.37	3.7	4.0	2000	196	7.7	1.0	2.2
A	ERP10L	615 165 195 0	Hex. 1/4 F	1.5	10	12.0	1.10	7.4	8.8	1540	196	7.7	1.1	2.4
A	ERP20L	615 165 196 0	Hex. 1/4 F	3.0	20	23.0	2.20	14.7	17.0	790	196	7.7	1.1	2.4
A	ERP20S	615 165 197 0	Hex. 1/4 F	3.0	20	23.0	2.20	14.7	17.0	1540	221	8.7	1.2	2.6
B	ERP30S	615 165 198 0	Sq. 3/8	5.0	30	30.0	3.70	22.1	22.0	1070	217	8.5	1.2	2.6
C	ERP40S	615 165 263 0	Sq. 3/8	6.0	40	42.0	4.40	29.5	31.0	680	274	10.8	1.7	3.7
D	ERP3LT	615 165 227 0	Hex. 1/4 F	0.35	3	3.3	0.26	2.2	2.4	2000	196	7.7	1.0	2.2
D	ERP5LT	615 165 228 0	Hex. 1/4 F	0.5	5	5.5	0.37	3.7	4.0	2000	196	7.7	1.0	2.2
D	ERP10LT	615 165 229 0	Hex. 1/4 F	1.5	10	12.0	1.10	7.4	8.8	1540	196	7.7	1.1	2.4
D	ERP20LT	615 165 230 0	Hex. 1/4 F	3.0	20	23.0	2.20	14.7	17.0	790	196	7.7	1.1	2.4

Angle head electric nutrunners - CVI II

2 to 480 Nm (1.5 to 354 ft.lb) - 190 to 1511 rpm



MODEL	H		Ø1		Ø2	
	mm	in.	mm	in.	mm	in.
ERAL1.5-15/25	45.0	1.77	28.0	1.10	23.0	0.91
ERAL2-30/40	45.0	1.77	28.0	1.10	23.0	0.91
ERAL2-60	51.0	2.01	35.0	1.36	25.2	1.00
ERAL2-80	57.0	2.24	40.0	1.57	28.4	1.12
ERAL2-80SQ1/2	61.0	2.40	40.0	1.57	28.4	1.12
ERAL4-90/110/120	66.0	2.60	45.0	1.77	37.0	1.46
ERAL4-140/170	69.0	2.70	50.0	1.97	37.0	1.46
ERAL4-225	86.0	3.36	60.0	2.36	42.0	1.65
ERAL6-135/170	69.0	2.72	50.0	1.97	37.0	1.46
ERAL6-280	86.0	3.38	60.0	2.36	42.0	1.65
ERAL6-350/480	90.5	3.56	73.5	2.89	45.0	1.77



Accessories: see page 29

PIC REF	MODEL	PART NUMBER	SQUARE DRIVE	TORQUE						ROTATIONAL SPEED	LENGTH		WEIGHT	
				MIN.	RECOM-MENDED	MAX.	MIN.	RECOM-MENDED	MAX.		mm	in.	kg	lb.
			in.	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	rpm				
A	ERAL1.5-15	615 165 356 0	3/8	2	15	18	1.5	11.0	13.3	1511	408	16.1	1.35	3.0
A	ERAL1.5-25	615 165 357 0	3/8	3	20	25	2.2	14.7	18.4	1511	408	16.1	1.35	3.0
A	ERAL2.30	615 165 362 0	3/8	5	20	30	3.7	14.7	22.0	1511	433	17.0	1.55	3.4
A	ERAL2.40	615 165 363 0	3/8	7	30	40	5.2	22.0	29.5	1169	433	17.0	1.6	3.5
A	ERAL2-60	615 165 364 0	3/8	8	45	60	5.9	33.0	44.0	918	443	17.4	1.7	3.7
A	ERAL2-80	615 165 365 0	3/8	10	65	80	7.4	48.0	59.0	750	455	17.9	1.8	4.0
A	ERAL2-80 SQ1/2	615 165 406 0	1/2	10	65	80	7.4	48.0	59.0	750	455	17.9	1.8	4.0
B	ERAL4-90	615 165 384 0	1/2	15	70	90	11.0	51.6	66.0	690	552	21.7	3.5	7.7
B	ERAL4-110	615 165 385 0	1/2	20	90	110	14.7	66.0	81.0	540	552	21.7	3.5	7.7
B	ERAL4-120	615 165 386 0	1/2	25	115	120	18.4	85.0	88.4	380	552	21.7	3.5	7.7
B	ERAL4-140	615 165 387 0	1/2	30	125	140	22.0	92.0	103.0	360	554	21.8	3.7	8.1
B	ERAL4-170	615 165 388 0	1/2	35	150	170	26.0	110.5	125.0	300	554	21.8	3.7	8.1
B	ERAL4-225	615 165 389 0	3/4	60	200	225	44.0	147.0	166.0	220	604	23.8	3.9	8.6
C	ERAL6-135	615 165 390 0	1/2	30	125	135	22.0	92.0	100.0	640	639	25.2	6.2	13.7
C	ERAL6-170	615 165 441 0	1/2	30	150	170	22.0	110.0	125.0	520	639	25.2	6.2	13.7
C	ERAL6-280	615 165 391 0	3/4	50	250	280	37.0	184.0	206.0	300	661	26.0	6.3	13.9
D	ERAL6-350	615 165 392 0	3/4	75	300	350	55.0	221.0	258.0	250	702	27.6	8.0	17.6
D	ERAL6-480	615 165 393 0	3/4	100	400	480	73.0	295.0	354.0	190	702	27.6	8.0	17.6

Offset crowfoot and Offset tube nut tools

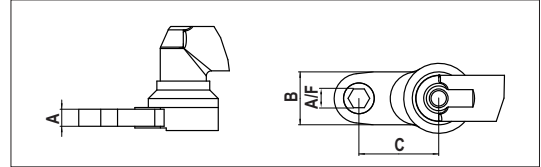


Offset crowfoot tools

For restricted access applications.



Examples of applications

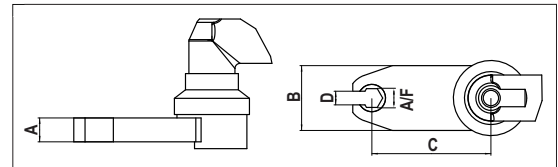


MODEL	PART NUMBER	TORQUE RANGE		FREE SPEED	WEIGHT		LENGHT		DIMENSIONS								
		Nm	ft.lb		rpm	kg	lb	mm	in.	A/F	A		B		C		
									mm	mm	in.	mm	in.	mm	in.	mm	in.
ERAL2-80 CE10 CC50	615 165 592 0	10-60	7.4-44	750	2.3	5.1	500	19.7	10	24	0.94	30	1.18	50.0	1.97		
ERAL2-80 CE10 CC76	615 165 593 0	8-60	5.9-44	750	2.7	5.9	526	20.7	10	24	0.94	30	1.18	76.5	3.01		
ERAL2-80 CE13 CC50	615 165 594 0	10-60	7.4-44	750	2.3	5.1	500	19.7	13	24	0.94	30	1.18	50.0	1.97		
ERAL2-80 CE13 CC76	615 165 595 0	8-60	5.9-44	750	2.7	5.9	526	20.7	13	24	0.94	30	1.18	76.5	3.01		



Offset tube nut tools

For application requires assembly of a hose, pipe or cable.



MODEL	PART NUMBER	TORQUE RANGE		FREE SPEED	WEIGHT		LENGHT		DIMENSIONS										
		Nm	ft.lb		rpm	kg	lb	mm	in.	A/F	A		B		C		D		
									mm	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
ERAL2-60 OE11 CC53	615 165 596 0	6.0-42	4.4-31	918	2.2	4.8	503	19.8	11	18	0.71	40	1.57	52.9	2.08	10.4	0.41		
ERAL2-60 OE11 CC75	615 165 597 0	5.2-39	3.8-29	918	2.3	5.1	526	20.7	11	18	0.71	40	1.57	75.3	2.96	10.4	0.41		
ERAL2-60 OE12 CC53	615 165 598 0	6.0-42	4.4-31	918	2.2	4.8	503	19.8	12	18	0.71	40	1.57	52.9	2.08	10.4	0.41		
ERAL2-60 OE12 CC75	615 165 599 0	5.2-39	3.8-29	918	2.3	5.1	526	20.7	12	18	0.71	40	1.57	75.3	2.96	10.4	0.41		
ERAL2-60 OE13 CC53	615 165 600 0	6.0-42	4.4-31	918	2.2	4.8	503	19.8	13	18	0.71	40	1.57	52.9	2.08	10.4	0.41		
ERAL2-60 OE13 CC75	615 165 601 0	5.2-39	3.8-29	918	2.3	5.1	526	20.7	13	18	0.71	40	1.57	75.3	2.96	10.4	0.41		

Hold and Drive tools

Used for car and truck shock absorber assembly amongst others. Combine two tightening operations in one cycle:

- internal blade holds the stud
- external socket drives the nut



Contact your Desoutter representative for assistance in specifying the correct head for your application. We can supply standard products or, if the application requires, we can customize a tool, complete with a drawing and parts list.

Flush Socket tools

The height of an angle head tool with a socket is crucial for some applications. The solution: use a flush socket tool where the socket is integrated with the angle head housing.



In-line electric Nutrunners- CVI II

0.5 to 250 Nm (0.37 to 184 ft.lb) - 290 to 2070 rpm



A



B



C



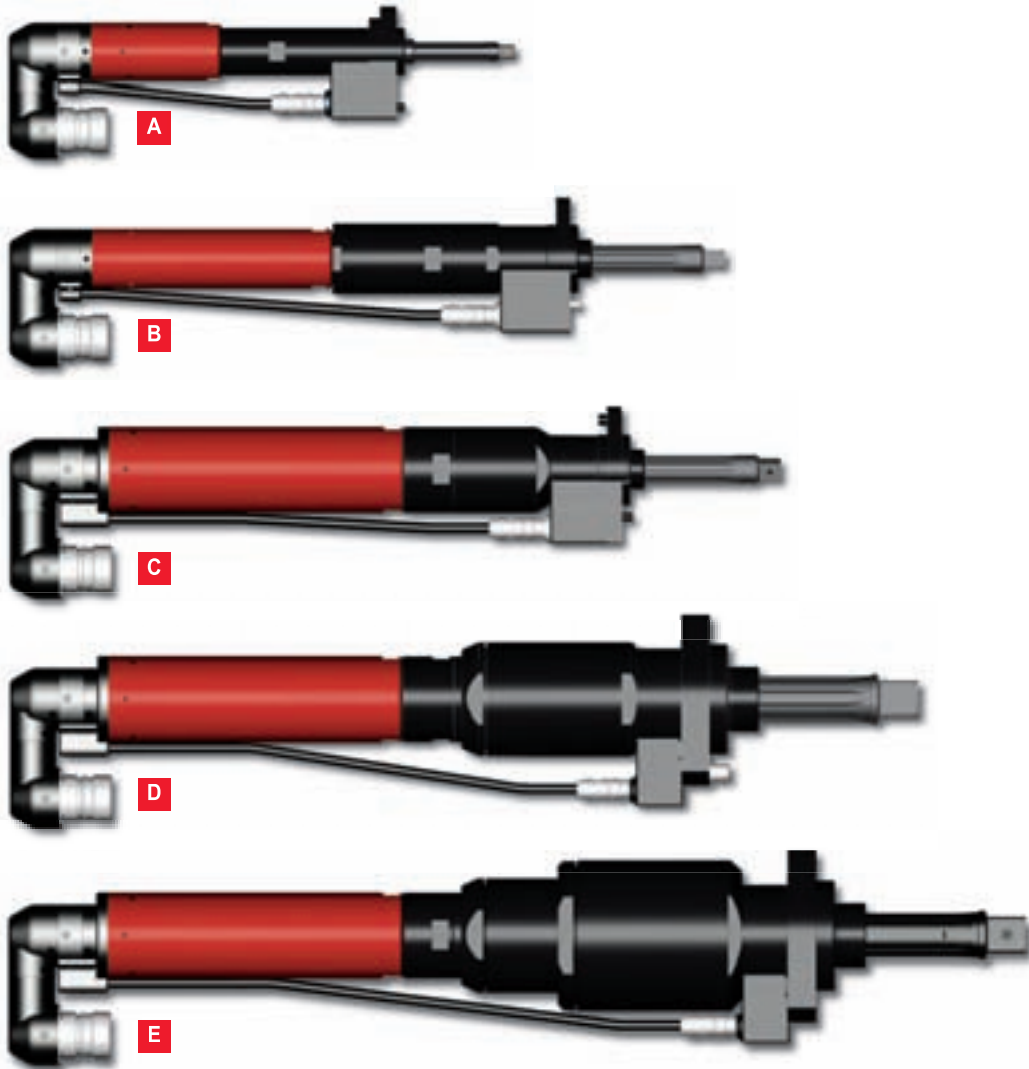
D

Accessories: see page 29

PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE						ROTATIONAL SPEED	LENGTH		WEIGHT	
				MIN.	RECOM-MENDED	MAX.	MIN.	RECOM-MENDED	MAX.		mm	in.	kg	lb.
			in.	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	rpm	mm	in.	kg	lb.
•	ERD5J	615 165 060 0	Hex. 1/4 F	0.5	6	8	0.37	4.4	5.9	2070	379	14.9	1.3	2.9
A	ERDL1.5-12	615 165 366 0	Hex. 1/4 F	2	10	12	1.5	7.4	8.8	1586	365	14.4	1.3	2.9
A	ERDL1.5-20	615 165 367 0	Hex. 1/4 F	3	15	20	2.2	11.0	14.7	1586	365	14.4	1.3	2.9
B	ERDL1.5-30	615 165 368 0	Sq. 3/8	5	20	30	3.7	14.7	22.0	1586	357	14.0	1.3	2.9
B	ERDL2-40	615 165 369 0	Sq. 3/8	7	30	40	5.2	22.0	29.5	1159	382	15.0	1.5	3.3
B	ERDL2-50	615 165 370 0	Sq. 3/8	8	40	50	5.9	29.5	36.9	898	382	15.0	1.5	3.3
C	ERDL4-60	615 165 407 0	Sq. 3/8	20	50	60	14.7	36.8	44.2	1030	475	18.7	2.8	6.2
C	ERDL4-80	615 165 394 0	Sq. 1/2	20	70	80	14.7	51.6	59.0	650	475	18.7	2.8	6.2
C	ERDL4-135	615 165 395 0	Sq. 1/2	30	120	135	22.1	88.4	99.6	400	502	19.8	3.3	7.3
D	ERDL6-170	615 165 396 0	Sq. 1/2	40	150	170	29.5	110.5	125.3	530	590	23.2	5.9	13.0
D	ERDL6-220	615 165 397 0	Sq. 3/4	50	200	220	36.8	147.4	162.0	380	597	23.5	5.9	13.0
D	ERDL6-250	615 165 398 0	Sq. 3/4	60	250	250	44.2	184.0	184.0	290	597	23.5	5.9	13.0

Fixtured electric spindles - CVI II

1 to 1900 Nm (0.7 to 1400 ft.lb) - 39 to 2067 rpm



Accessories: see page 28 

PIC REF	MODEL	PART NUMBER	SQUARE DRIVE		TORQUE RANGE		ROTATIONAL SPEED	TELESCOPIC		MIN. CENTRE DISTANCE		LENGTH		WEIGHT	
			in.	Nm	ft.lb	rpm	mm	in.	mm	in.	mm	in.	kg	lb.	
A	EME35-10J	615 165 423 0	3/8	1-8	0.7-5.9	2067	50	2.0	43.2	1.7	283	11.1	1.7	3.7	
A	EME35-20J	615 165 424 0	3/8	4-15	2.1-11	2067	50	2.0	43.2	1.7	308	12.1	2.0	4.4	
A	EME38-10J	615 165 425 0	3/8	9-30	6.6-22.1	1287	50	2.0	43.2	1.7	355	14.0	2.0	4.4	
A	EME38-20J	615 165 426 0	3/8	10-45	7.4-33.2	1092	50	2.0	43.2	1.7	355	14.0	2.0	4.4	
B	EME51-10J	615 165 427 0	1/2	20-70	14.7-51.6	650	50	2.0	51.2	2.0	374	14.7	2.9	6.4	
B	EME51-20J	615 165 428 0	1/2	30-135	22.1-99.5	403	50	2.0	51.2	2.0	401	15.8	3.5	7.7	
C	EME60-10J	615 165 429 0	1/2	20-95	14.7-70	923	50	2.0	60.2	2.4	431	16.9	4.8	10.6	
C	EME60-20J	615 165 430 0	3/4	50-175	36.8-129	507	50	2.0	60.2	2.4	431	16.9	4.8	10.6	
C	EME60-30J	615 165 431 0	3/4	70-250	51.6-184.2	299	50	2.0	60.2	2.4	467	18.4	5.2	11.5	
D	EME80-10J	615 165 432 0	3/4	80-300	59-221	286	60	2.4	80.2	3.2	494	19.5	9.8	21.6	
D	EME80-20J	615 165 433 0	3/4	120-450	88-221	195	60	2.4	80.2	3.2	494	19.5	9.8	21.6	
D	EME80-30J	615 165 434 0	1	180-650	133-479	130	60	2.4	80.2	3.2	494	19.5	9.8	21.6	
D	EME80-40J	615 165 435 0	1	220-800	162-590	91	60	2.4	80.2	3.2	494	19.5	9.8	21.6	
D	EME80-50J	615 165 436 0	1	220-1000	162-737	72	60	2.4	80.2	3.2	494	19.5	9.8	21.6	
E	EME106-10J	615 165 437 0	1	430-1500	317-1105	52	60	2.4	106.2	4.2	564	22.2	15.0	33.1	
E	EME106-20J	615 165 438 0	1	540-1900	398-1400	39	60	2.4	106.2	4.2	564	22.2	15.0	33.1	

Fixtured electric spindles - CVI II

10 to 800 Nm (7.4 to 590 ft.lb) - 91 to 1092 rpm

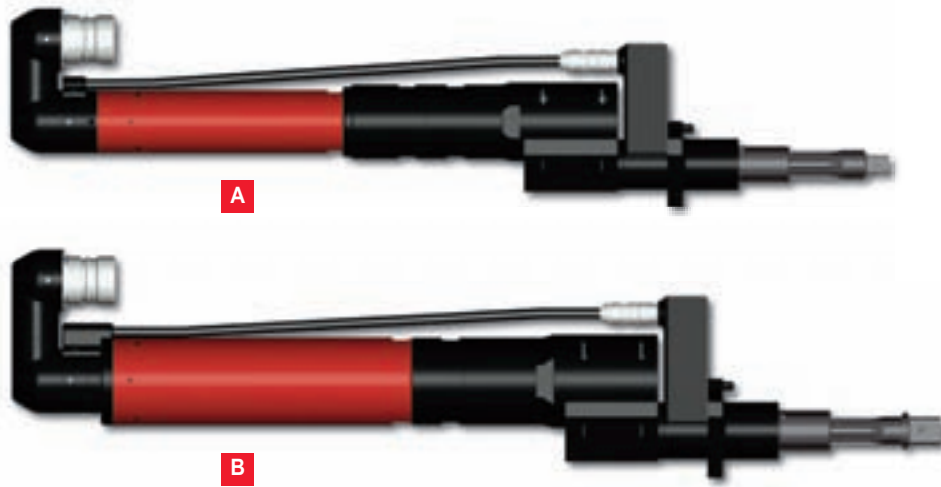


Accessories: see page 28 

PIC REF	MODEL	PART NUMBER	SQUARE DRIVE		TORQUE RANGE		ROTATIONAL SPEED	TELESCOPIC		MIN. CENTRE DISTANCE		LENGTH L		WEIGHT	
			in.		Nm	ft.lb	rpm	mm	in.	mm	in.	mm	in.	kg	lb.
A	EMEL38-20J	615 165 517 0	3/8		10-45	7.4-33.2	1092	50	2.0	43.2	1.7	140.5	5.5	3.0	6.6
A	EMEL51-20J	615 165 518 0	1/2		30-135	22-99.5	403	50	2.0	51.2	2.0	166	6.5	4.0	8.8
B	EMEL60-20J	615 165 519 0	3/4		50-175	37-129	481	50	2.0	60.2	2.4	178	7.0	6.0	13.2
B	EMEL60-30J	615 165 520 0	3/4		70-250	52-184	312	50	2.0	60.2	2.4	178	7.0	6.0	13.2
C	EMEL80-40J	615 165 521 0	1		220-800	162-590	91	60	2.4	80.2	3.2	241	9.5	11.0	24.2

Fixtured electric spindles with Offset end - CVI II

4 to 850 Nm (2.9 to 626 ft.lb) - 89 to 1225 rpm



PIC REF	MODEL	PART NUMBER	SQUARE DRIVE		TORQUE RANGE		ROTATIONAL SPEED	TELESCOPIC		MIN. CENTRE DISTANCE		LENGTH		WEIGHT	
			in.	Nm	ft.lb	rpm		mm	in.	mm	in.	mm	in.	kg	lb.
A	EME24-20 OF	615 165 512 0	3/8	4-20	2.9-14.7	1225	50	2.0	24	0.95	375.2	14.8	2.7	5.9	
A	EME26-50 OF	615 165 513 0	3/8	7-50	5.2-36.8	985	50	2.0	26	1.02	387.5	15.2	2.7	5.9	
A	EME30-80 OF	615 165 514 0	1/2	10-80	7.4-59.0	580	50	2.0	30	1.18	414.3	16.3	3.9	8.6	
A	EME36-140 OF	615 165 515 0	1/2	19-140	14.0-103	375	50	2.0	36	1.42	454.4	17.7	4.7	10.4	
B	EME40-180 OF	615 165 516 0	3/4	25-180	18.4-133	475	50	2.0	40	1.57	481.7	18.9	6.4	14.1	
	• EME44-350 OF*	615 165 602 0	3/4	80-350	59-258	217	50	2.0	45	1.77	632.5	24.9	11.0	24.2	
	• EME54-600 OF*	615 165 603 0	1	150-600	110-442	125	50	2.0	55	2.17	653.5	25.7	13.0	28.6	
	• EME60-850 OF*	615 165 604 0	1	200-850	147-626	89	50	2.0	61	2.40	666.5	26.2	15.0	33.0	

*For these models, please contact your local Desoutter sales engineer for more information.

Accessories

EME / EMEL

OPTIONAL ACCESSORIES

Transducer-holder from EME tool

	PART NO.
• 3/8" square drive EME35/EME38	615 396 426 0
• 1/2" square drive EME51/EME60.10	615 396 427 0
• 3/4" square drive EME60.20/EME60.30	615 396 428 0
• 3/4" square drive EME80.10/EME80.20	615 396 429 0
• 1" square drive EME80.30/40/50 / EME106	615 396 430 0

EME adaptation on existing application (separated cable torque + motor cable)

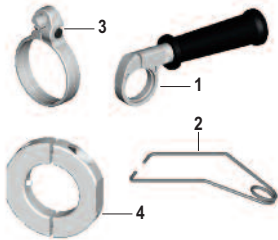
	PART NO.
• EME adaptation on old cable	615 917 539 0

Cable for EME tools

Cable length:	MODCVI					
	5m (16.4ft)	10m (32.8ft)	15m (49.2ft)	20m (65.6ft)	25m (82ft)	30m (98.4ft)
• Tool cable	615 917 552 0	615 917 554 0	615 917 555 0			
• Extension cable		615 917 154 0	615 917 155 0	615 917 156 0	615 917 157 0	615 917 158 0

Cable length:	TWINCVI II					
	5m (16.4ft)	10m (32.8ft)	15m (49.2ft)	20m (65.6ft)	25m (82ft)	30m (98.4ft)
• Tool cable	615 917 541 0	615 917 542 0	615 917 543 0			
• Extension cable		615 917 611 0	615 917 612 0	615 917 613 0	615 917 614 0	615 917 615 0

ERP / ERAL / ERDL



ITEM	PART NO.	
	ERP	ERAL / ERDL
1 Side handle	467033	
2 Suspension bail	467003	
3 Horizontal Bail ERAL - ERDL1.5 / 2		615 396 562 0
4 Reaction bar ring ERDL1.5 / 2		615 396 551 5
4 Reaction bar ERDL4		615 595 259 0
4 Reaction bar ERDL6		615 396 297 0
4 Reaction bar ERAL6-350 / -480		615 396 302 0

OPTIONAL ACCESSORIES

ITEM	PART NO.	
	ERP	ERAL / ERDL
5 Long lever start (included with ERD5J)		615 396 584 0
6 2nd lever start ERAL-ERDL1.5 / 2		615 396 553 0
7 High resistance side handle ERP	615 397 012 0	
7 Side reaction handle ERAL-ERDL1.5 / ERDL2		615 396 554 0
8 Suspension ring ERAL1.5-2		615 571 063 0
8 Suspension ring ERAL4		615 571 070 0
8 Suspension ring ERAL6		615 571 064 0
9 Reaction bar ring for angle heads		615 396 622 0
9 Reaction bar ring ERAL4-90 to ERAL6-135 / 170		615 396 227 0
9 Reaction bar ring ERAL4-225 / ERAL6-135 / 170		615 396 230 0
10 Rotary connector 90° ER		615 396 299 0
• Extension 200mm ERA(D)L1.5-2		615 396 865 0
• Extension 200mm ERA(D)L 4		615 396 866 0
11 Mounting plate with telescopic spindle ERDL1.5 / ERDL2		615 396 547 0
12 Plastic cover ERP.S	615 573 074 0	
12 Plastic cover ERP.L	615 573 075 0	
12 Plastic cover ERP.LT	615 573 076 0	
13 Plastic cover AH1 for ERAL1.5-15 / 25 / ERAL2-30 / 40		615 573 064 0
13 Plastic cover AH2 for ERAL2-60		615 573 065 0
13 Plastic cover AH3 for ERAL2-80		615 573 066 0
14 Plastic cover AH4 for ERAL4-90 / 110 / 120		615 573 069 0
14 Plastic cover AH5 for ERAL4-140 / 170 / ERAL6-135		615 573 070 0
15 Plastic cover AH6 for ERAL4-225		615 573 071 0
15 Plastic cover for ERDL1.5 / 2		615 573 067 0



Cable for ERP / ERAL / ERDL

Cable length:	2.5m (8.2ft)	5m (16ft)	10m (32.8ft)	15m (49.2ft)	20m (65.6ft)	25m (82ft)	30m (98ft)
• Nutrunners cable		615 917 492 0	615 917 494 0	615 917 495 0			
• Heavy duty nutrunner cable	615 917 570 0	615 917 571 0	615 917 572 0				
• Heavy duty extension cable		615 917 083 0	615 917 084 0	615 917 085 0	615 917 086 0	615 917 087 0	615 917 088 0



Socket Tray

- Socket tray (sockets not included) 615 936 005 0

Cable length:	1m (3.3ft)	5m (16ft)	10m (32.8ft)	15m (49.2ft)
• Cable for sockets tray	615 917 241 0	615 917 242 0	615 917 244 0	615 917 245 0



Reporting Box

- Reporting Box 615 936 001 0



Networks



**Master your
production
process**

Desoutter CVI Communication protocols

Ethernet

Fieldbus

Description

- For data reporting
- Large amount data
- Star topology

- For production control
- Small amount of data
- Ring topology

- For data reporting
- For production control
- Star and/or ring topology

Applications

- Data storage / traceability
- Remote programming
- HMI screens

- Station or line control
- Data storage
- HMI screens

- Data storage
- Station or line control
- HMI screens

Desoutter

- CVINet, CVIPC2000
- CVI open protocol, DLL, API
- HMI screens

- Standard fieldbus modules
- ProfiBus, DeviceNet
- HMI screens

- Now available in CVI range
- ProfiNet, EtherNetIP
- Ability to use one drop for Ethernet and e.g EtherNetIP



Master your production process

- Production system
- Server
- PC
- PLC

Ethernet

Fieldbus

- CVIPC2000
- CVINet
- Open Protocol
- ToolsNet reporting
- IPM protocol
- Ford PPCS protocol
- GM protocol
- Chrysler PFCS
- LandRover protocol
- Volvo Station Controller
- Volvo MONT
- VW XML
- Etc ...

- ProfiBus DP
- DeviceNet
- ModBus/RTU
- CC-Link

- ProfiNet
- EtherNet/IP
- ModBus/TCP



CVI





HMI



MODEL	PART NUMBER
Reporting to TOOLSNET OPEN PROTOCOL 5 licences	615 927 577 0
Reporting to TOOLSNET OPEN PROTOCOL 10 licences	615 927 578 0
Reporting to TOOLSNET OPEN PROTOCOL 25 licences	615 927 579 0
Reporting to TOOLSNET OPEN PROTOCOL 50 licences	615 927 580 0

MODEL	PART NUMBER
OPEN PROTOCOL 5 licences	615 927 581 0
OPEN PROTOCOL 10 licences	615 927 582 0
OPEN PROTOCOL 25 licences	615 927 583 0
OPEN PROTOCOL 50 licences	615 927 584 0

TWINCVI II CVI II	KIT	PART NUMBER
	PROFIBUS DP	615 929 008 0
	DEVICENET	615 929 014 0
	COMBOX	615 929 029 0

MODCVI	KIT	PART NUMBER
	PROFIBUS DP	615 929 009 0

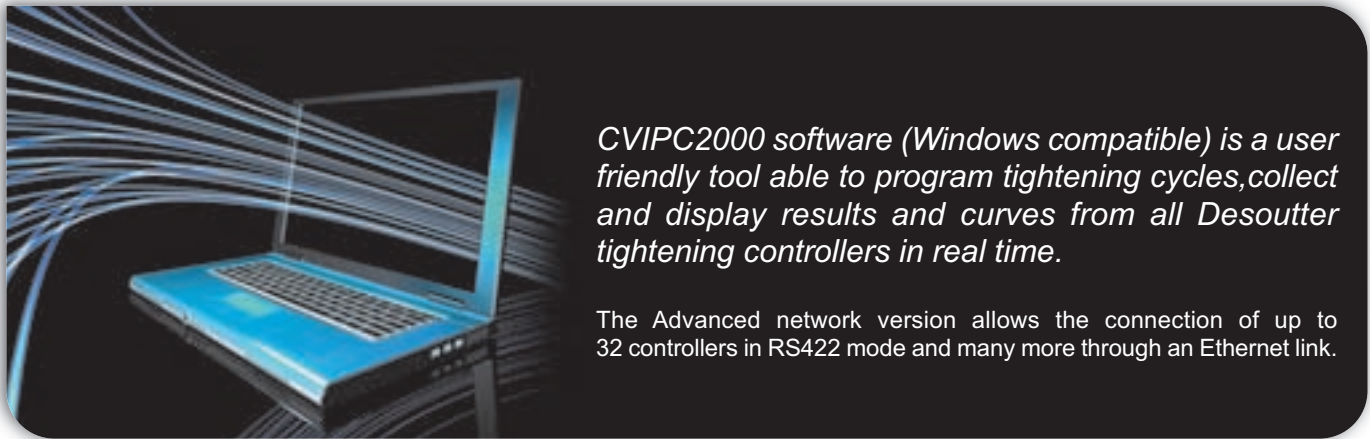
MODEL	PART NUMBER
Ethernet CVI KIT	615 929 018 0
Cable for TWINCVI controller	615 917 409 0
Smart Ethernet Interface*	615 936 040 0

* for CVIS and CVIC only



CVIPC2000 software

Program Parameters and Monitor Data



CVIPC2000 software (Windows compatible) is a user friendly tool able to program tightening cycles, collect and display results and curves from all Desoutter tightening controllers in real time.

The Advanced network version allows the connection of up to 32 controllers in RS422 mode and many more through an Ethernet link.

Real time control mode

- Display all stations connected
- Display and save results
- Display tightening reports
- Print results after each tightening or from date to date

Programming mode

- General parameters of controllers: peripherals, fieldbuses, Ethernet,
- Tightening cycles, up to 250
- Electric brushless tool features
- Downloading of all parameters to stations

Statistical analysis mode

- Standards: ISO, CNOMO
- Display and print:
 - Histograms
 - SPC
 - Control charts, mean, range, standard deviation

Maintenance mode

- Access to tool counters, partial number of cycles and total number of cycles performed by the tool
- Test mode to check torque transducer, angle encoder, brushless motor, etc...
- Complete backup/restore of stations



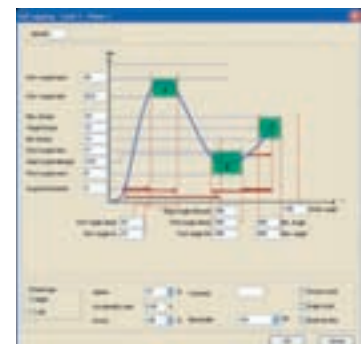
Displaying of all stations programmed
Access to main functions with soft key

Friendly Interface



Cycles and phases programming mode

Easy Control



From torque control up to yield point strategy

Complete Statistical Package



MODEL	PART NUMBER
CVIS/CVIC PC2000 1 install	615 927 521 0
CVIS/CVIC PC2000 5 install	615 927 534 0

MODEL	PART NUMBER
CVI PC2000 standard 1 install	615 927 522 0
CVI PC2000 standard 5 install	615 927 526 0
CVI PC2000 standard 25 install	615 927 537 0

MODEL	PART NUMBER
CVI PC2000 advanced 1 install	615 927 523 0
CVI PC2000 advanced 5 install	615 927 535 0
CVI PC2000 advanced 25 install	615 927 538 0

CVI-net software

Secure Info into Databases



*Through Ethernet and in real time; CVI-net is a unique simple software to collect and save tightening results and curves into a SQL DataBase.**

*CVI-NET is a multilingual windows software, compatible with the most common databases, **SQL server, Interbase, Oracle, ACCESS, etc...**

CVI-NET software includes two applications software: CVI-Collector and CVI-Viewer.

CVI-Collector

- Single software installation on the main server
- Data collection linked to Identification Number as station number / part number / tools number/ a free field for special needs
- Auto uploading of missing data (FIFO inside controllers)
- Overview of all controllers connected

CVI-Viewer

- Multi-user installation
 - View tightening results
 - View tightening curves
 - Customized report:
 - Date range filtering
 - Data linked to an Identification Number
 - View of maintenance information
- CVI-Net saves more than 40 parameters plus the results at the end of each tightening.

Real time quality control of the network

Alarm in case of disconnection and FIFO inside controllers.
Automatic uploading of missing data from controllers.

Traceability

All results with Identification Number can be exported to another database for long time saving. The display of one or more curves allows you to analyse and make tightening comparisons.

Printing report

Printing of all tightening of a vehicle or a component by scanning the bar code number.

Easy Control



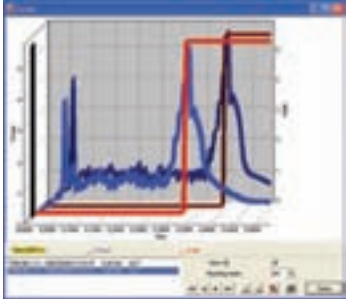
Ethernet connection manager

Friendly Interface



Filtering of results, per VIN number, per date, type of results, etc...

100% Traceability



3D Curves screen, display of one or several curves

MODEL	PART NUMBER
CVI-net 1 controller	615 927 555 0
CVI-net 10 controllers	615 927 549 0
CVI-net 25 controllers	615 927 550 0
CVI-net 50 controllers	615 927 551 0
CVI-net 200 controllers	615 927 560 0





CVIC Range

Current controlled



Easy to integrate

Small size and smooth design.
Communicate with your existing network
via ethernet protocol.



Quality of tightening

Control torque and angle with multi phase strategies.
Get tightening reports, store results.

Advanced ergonomics

Maximize your operators' comfort with ergo stop.



Low life-cycle cost solution

Optimize your energy consumption.
Benefit from a low frequency maintenance & calibration.

Open to peripherals

Increase your assembly quality with barcode reader
and socket tray.
Control tightening order with our positioning system.



Technical features

CVIC Range

MAIN FUNCTIONS	NORMAL		ECP HIGH TORQUE	
	L STANDARD	H ADVANCED	L STANDARD	H ADVANCED
Quick cycle with self-learning of the joint	✓	✓		
Number of cycles in the controller	1	15	1	15
Number of phases	15	15	15	15
Batch count (999 OK reports)	✓	✓	✓	✓

TIGHTENING RESULTS				
Torque + Angle + Date + Time + Report	Up to 2 000	Up to 2 000	Up to 2 000	Up to 2 000

TYPES OF PHASES IN A CYCLE				
Search Sequence	✓	✓		
Run Down speed	✓	✓	✓	✓
Final speed	✓	✓	✓	✓
Run reverse	✓	✓		
Action or NOK	✓	✓		
Prevailing torque monitoring	✓	✓		

FINAL SPEED STRATEGIES				
Torque control + angle monitoring	✓	✓	✓	✓
Angle control + torque monitoring	✓	✓	✓	✓

DISPLAY AND PROGRAMMING				
Display				
LCD display	✓	✓	✓	✓
Keyboard				
8 button keypad	✓	✓	✓	✓
Reports				
LEDs	6	6	6	6
PC Software Windows				
CVIPC2000*: program cycles, collect, display and save results, run statistics, curves				
Connection 'point to point' (RS232)	✓	✓	✓	✓
Connection through ethernet	✓	✓	✓	✓

**All CVIPC2000 versions are compatible with CVICs*

MAINTENANCE				
Access to all tool parameters (tool memory)	✓	✓	✓	✓
Autotest of the complete system	✓	✓	✓	✓
Spindle rotation test	✓	✓	✓	✓
Input/Output selection	✓	✓	✓	✓
Date of the last maintenance operation	✓	✓	✓	✓
Total and partial cycle counters	✓	✓	✓	✓

PERIPHERALS				
Input/Output	8/8	8/8	8/8	8/8
Serial port RS232 (PC transfer, Bar code, Report output)	✓	✓	✓	✓
Ethernet connection (CVIPC2000 / CVInet)	✓	✓	✓	✓

MODEL				
CONTROLLER for low torque tools	CVIC II L-2	CVIC II H-2		
CONTROLLER for the other tools	CVIC II L-4	CVIC II H-4	CVIC II L-4	CVIC II H-4

MAINS SUPPLY				
Single-phase, automatic switching 110V/230V	✓	✓	✓	✓



MODEL	PART NUMBER	TOOLS	CONSUMPTION (current)		MAINS SUPPLY	WIDTH		DIMENSIONS HEIGHT		DEPTH		WEIGHT	
			115V	230V		50/60 hertz	mm	in.	mm	in.	mm	in.	kg

CVIC II CONTROLLERS

CVICII-L2	615 932 676 0	ECS / ECPL(T) / ECD5 / MC35-10 / ECA15	4A	2A	Single-phase	130	5.1	278	10.9	291	11.5	5	11
CVICII-H2	615 932 677 0	ECS / ECPL(T) / ECD5 / MC35-10 / ECA15	4A	2A	100 to 250 V	130	5.1	278	10.9	291	11.5	5	11
CVICII-L4	615 932 678 0	Other tools	8A	4A	Single-phase	130	5.1	278	10.9	291	11.5	5	11
CVICII-H4	615 932 679 0	Other tools	8A	4A	100 to 250 V	130	5.1	278	10.9	291	11.5	5	11

START-UP KIT to be ordered with the controller
Including: **Power cable and plug**

PLUG	DESCRIPTION	PART NO.
A	UK	615 917 202 0
B	USA	615 917 203 0
C	European	615 917 201 0

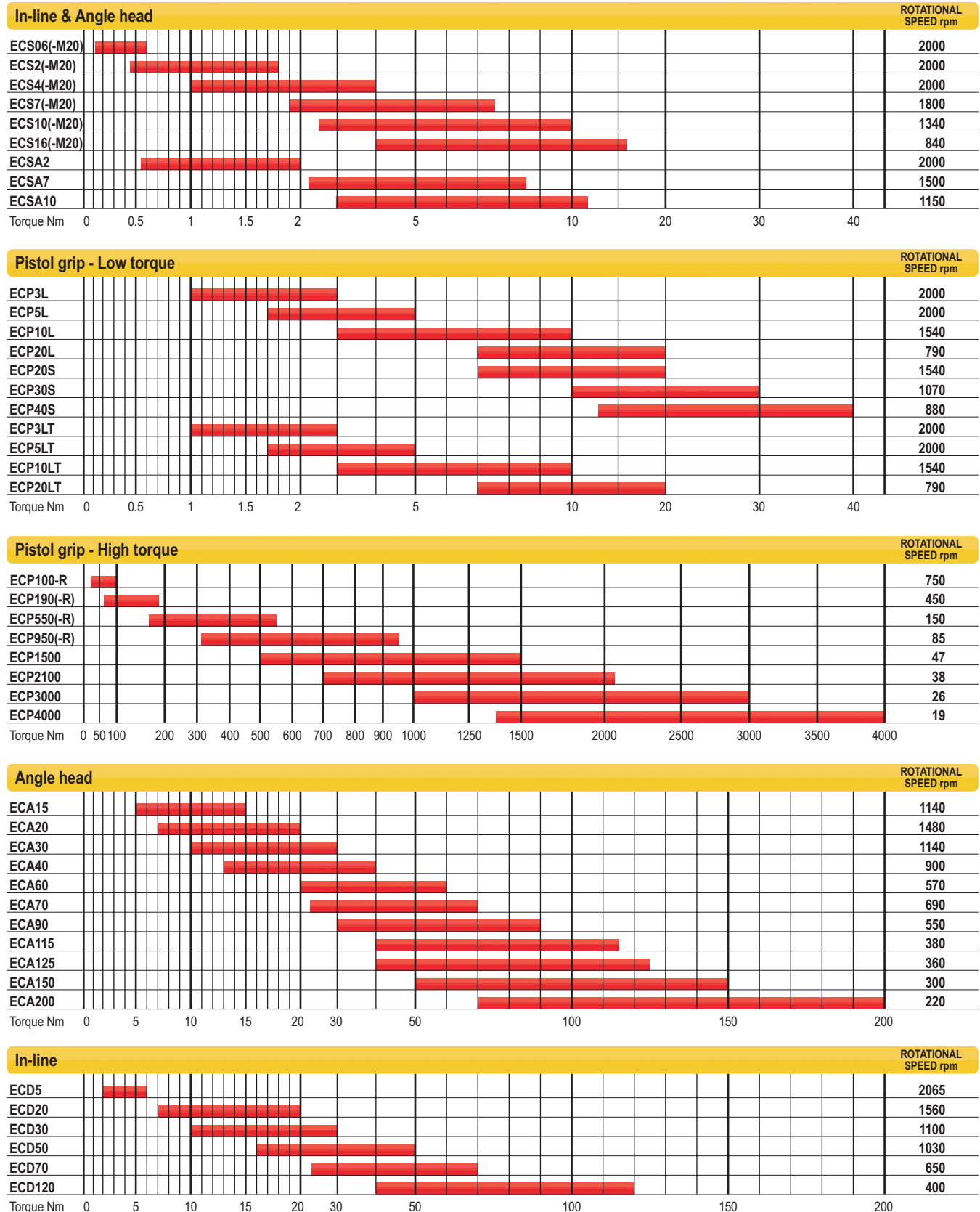


OPTIONAL ACCESSORIES

	PART NO.
• PC cable Length 2m (78.7")	615 917 047 0
• Printer cable Length 2m (78.7")	615 917 011 0
• CVIPC2000 for CVIS/CVIC 1 Installation	615 927 521 0
• CVIPC2000 for CVIS/CVIC 5 Installations	615 927 534 0

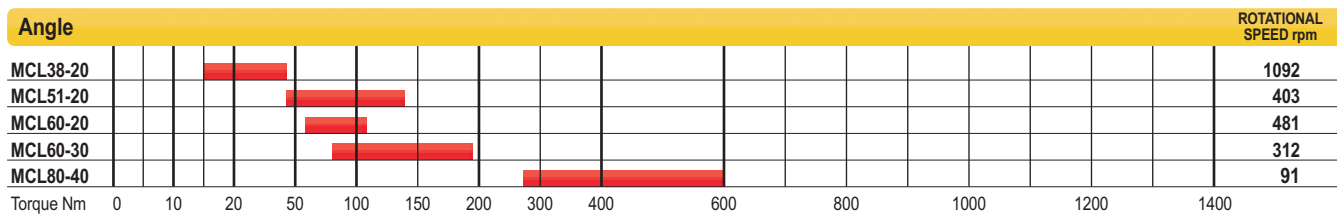
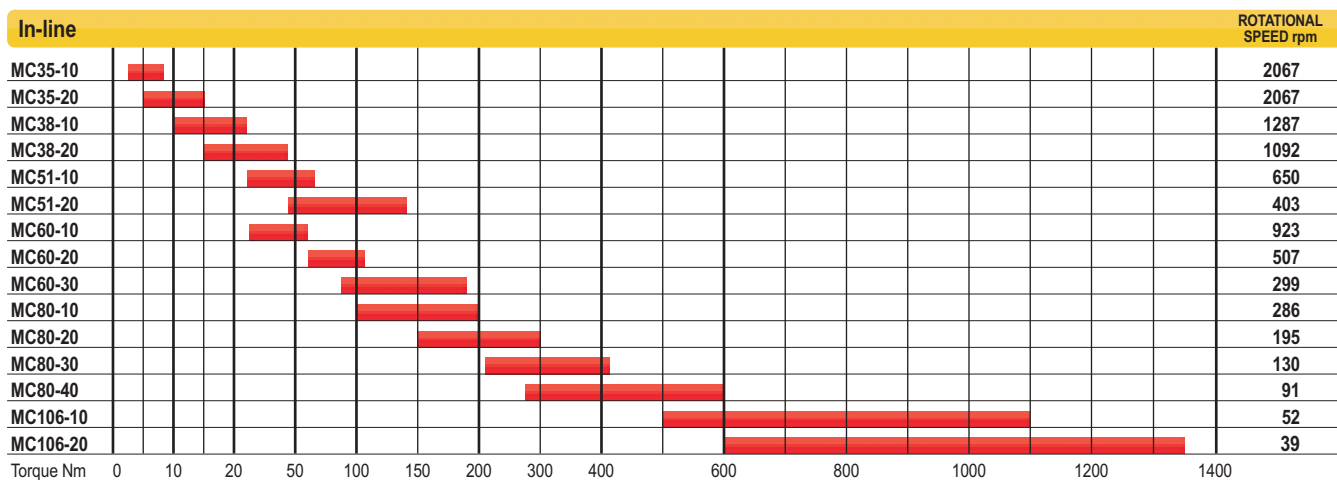
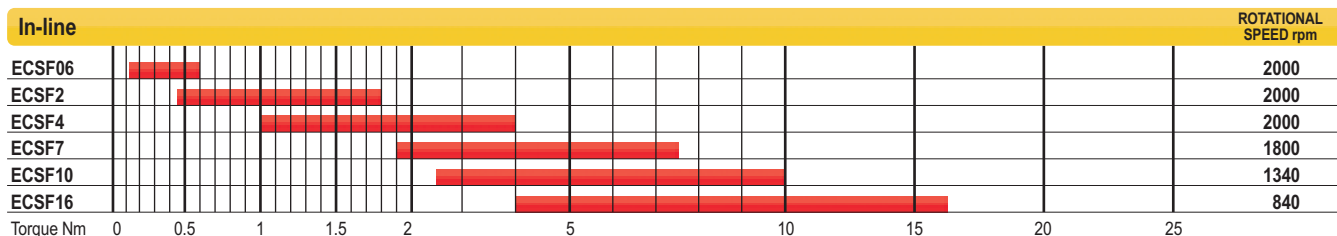
Torque Range

Performances of Portable electric nutrunners ECS, ECSA, ECP, ECA and ECD Series



Torque Range

Performances of Fixtured electric spindles ECSF, MC and MCL Series



Electric Screwdrivers - CVIC

0.12 to 16 Nm (1.1 to 141.6 in.lb) - 840 to 2000 rpm

The ECS series offers outstanding torque accuracy and operator ergonomics, making it the ideal choice for assembly operations that require a high level of quality



Improve your joint visibility



Adapt your tool with accessories



Get the best tightening feedback directly on the tool

Accessories: see page 50

PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE RANGE				ROTATIONAL SPEED	LENGTH		WEIGHT	
				MIN.	MAX.	MIN.	MAX.		mm	in.	kg	lb.
			in.	Nm	Nm	in.lb	in.lb	rpm				
ELECTRIC SCREWDRIVERS - IN-LINE												
A	ECS06	615 165 442 0	Hex. 1/4 F	0.12	0.6	1.1	5.3	2000	285	11.2	0.6	1.3
A	ECS2	615 165 443 0	Hex. 1/4 F	0.45	1.8	4.0	15.9	2000	285	11.2	0.6	1.3
A	ECS4	615 165 445 0	Hex. 1/4 F	1.00	4.0	8.8	35.4	2000	285	11.2	0.6	1.3
A	ECS7	615 165 446 0	Hex. 1/4 F	1.90	7.5	16.8	66.4	1800	285	11.2	0.7	1.5
A	ECS10	615 165 444 0	Hex. 1/4 F	2.50	10.0	22.1	88.5	1340	285	11.2	0.7	1.5
A	ECS16	615 165 459 0	Hex. 1/4 F	4.00	16.0	35.4	141.6	840	285	11.2	0.7	1.5
ELECTRIC SCREWDRIVERS - IN-LINE												
B	ECS06-M20	615 165 454 0	Hex. 1/4 F	0.12	0.6	1.1	5.3	2000	285	11.2	0.6	1.3
B	ECS2-M20	615 165 455 0	Hex. 1/4 F	0.45	1.8	4.0	15.9	2000	285	11.2	0.6	1.3
B	ECS4-M20	615 165 456 0	Hex. 1/4 F	1.00	4.0	8.8	35.4	2000	285	11.2	0.6	1.3
B	ECS7-M20	615 165 457 0	Hex. 1/4 F	1.90	7.5	16.8	66.4	1800	285	11.2	0.7	1.5
B	ECS10-M20	615 165 458 0	Hex. 1/4 F	2.50	10.0	22.1	88.5	1340	285	11.2	0.7	1.5
B	ECS16-M20	615 165 460 0	Hex. 1/4 F	4.00	16.0	35.4	141.6	840	285	11.2	0.7	1.5
ELECTRIC SCREWDRIVERS - ANGLE HEAD												
C	ECSA2	615 165 447 0	Hex. 1/4 F	0.55	2.2	4.9	19.5	2000	329	12.9	0.6	1.3
C	ECSA7	615 165 448 0	Hex. 1/4 F	2.20	8.5	19.5	75.2	1500	329	12.9	0.7	1.5
C	ECSA10	615 165 449 0	Hex. 1/4 F	3.00	11.5	26.6	101.8	1150	329	12.9	0.7	1.5

Pistol grip electric nutrunners - CVIC

1 to 40 Nm (0.7 to 29.1 ft.lb) - 790 to 2000 rpm



A



B



C



D

Accessories: see page 50 

PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE RANGE		ROTATIONAL SPEED AT		LENGTH		WEIGHT	
				in.	Nm	ft.lb	rpm/230 V	rpm/110 V	mm	in.	kg
A	ECP3L	615 165 199 0	Hex 1/4 F	1.0-3.0	0.7-2.2	2000	2000	196	7.7	1.0	2.2
A	ECP5L	615 165 200 0	Hex 1/4 F	1.7-5.0	1.3-3.7	2000	1515	196	7.7	1.0	2.2
A	ECP10L	615 165 201 0	Hex 1/4 F	3.0-10	2.2-7.4	1540	1000	196	7.7	1.1	2.4
A	ECP20L	615 165 202 0	Hex 1/4 F	7.0-20	5.2-15	790	515	196	7.7	1.1	2.4
A	ECP20S	615 165 203 0	Hex 1/4 F	7.0-20	5.2-15	1540	1000	221	8.7	1.2	2.6
B	ECP30S	615 165 204 0	Sq 3/8	10-30	7.4-22	1070	700	217	8.5	1.2	2.6
C	ECP40S	615 165 262 0	Sq 3/8	13-40	9.6-29	880	575	263	10.4	2.1	4.5
D	ECP3LT	615 165 231 0	Hex 1/4 F	1.0-3	0.7-2.2	2000	2000	196	7.7	1.0	2.2
D	ECP5LT	615 165 232 0	Hex 1/4 F	1.7-5	1.3-3.7	2000	1960	196	7.7	1.0	2.2
D	ECP10LT	615 165 233 0	Hex 1/4 F	3.0-10	2.2-7.4	1540	1515	196	7.7	1.1	2.4
D	ECP20LT	615 165 234 0	Hex 1/4 F	7.0-20	5.2-15	790	515	196	7.7	1.1	2.4

Electric High Torque Pistol Grip - CVIC

30 to 4000 Nm (22 to 2950 ft.lb) - 19 to 750 rpm

For your quality-critical applications
 Impact and impulse tools have been a production favourite for many years. This innovative electric pistol tool allows you to have total quality control without sacrificing productivity.

Offering all benefits of Electric Brushless Tools

- Maintenance free motor
- Less than 70 dB(A)
- Environment friendly (no air, no oil)
- Repeatability and no need to re-torque
- One Tool = up to 15 different torque settings



PIC REF	MODEL	PART NUMBER	SQUARE DRIVE	TORQUE RANGE				ROTATIONAL SPEED	LENGTH		WEIGHT	
				MIN.	MAX.	MIN.	MAX.		mm	in.	kg	lb.
			in.	Nm	Nm	ft.lb	ft.lb	rpm				
NON REVERSIBLE												
A	ECP190	615 165 399 0	1/2	60	190	44	140	450	314	12.4	3.0	6.6
A	ECP550	615 165 400 0	3/4	175	550	129	405	150	351	13.8	3.7	8.1
A	ECP950	615 165 401 0	1	310	950	228	700	85	379	14.9	4.0	8.8
B	ECP1500	615 165 524 0	1	500	1500	368	1105	47	413	16.3	6.9	15.2
C	ECP2100	615 165 525 0	1 1/2	700	2100	516	1548	38	485	19.1	14.2	31.3
C	ECP3000	615 165 526 0	1 1/2	1000	3000	737	2212	26	485	19.1	14.2	31.3
C	ECP4000	615 165 527 0	1 1/2	1330	4000	980	2950	19	485	19.1	14.2	31.3
REVERSIBLE												
D	ECP100-R	615 165 523 0	1/2	30	100	22	73	750	328	12.9	3.4	7.5
D	ECP190-R	615 165 451 0	1/2	60	190	44	140	450	328	12.9	3.4	7.5
D	ECP550-R	615 165 452 0	3/4	175	550	129	405	150	365	14.4	4.3	9.5
D	ECP950-R	615 165 453 0	1	310	950	228	700	85	395	15.6	4.6	10.2

Electric High Torque Pistol Grip - CVIC



	615 596 014 0 mm (in.)	615 596 018 0 mm (in.)	615 596 111 0 mm (in.)
C min	76 (3)	73.5 (2.9)	80 (3.15)
C max	126 (4.96)	126.5 (4.98)	150 (5.9)

For item 7 - ECP950 with extended reaction arm please contact your local Desoutter sales engineer.



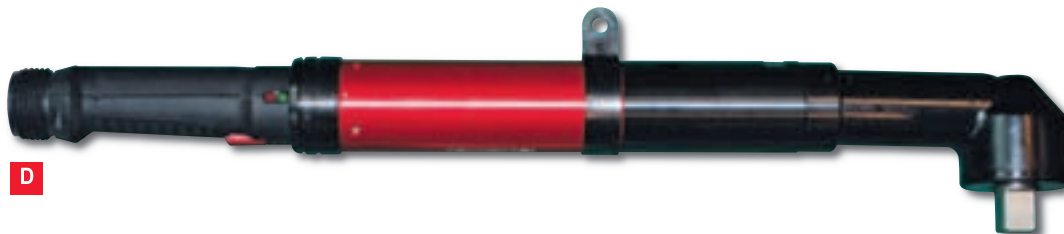
OPTIONAL ACCESSORIES

	1 STRAIGHT REACTION BAR	2 BLANK REACTION BAR	3 S TYPE REACTION BAR	4 SLIDING DRIVE REACTION BAR	5 SUSPENSION BAIL	6 PROTECTION SLEEVE
ECP100-R / ECP190 / ECP190-R	615 596 009 5	615 596 010 0	615 596 011 0	N/A	615 571 072 0	615 573 131 5
ECP550 / ECP550-R	615 596 012 5	615 596 013 0	615 596 015 0	615 596 014 0	615 571 072 0	615 573 131 5
ECP950 / ECP950-R	615 596 016 5	615 596 017 0	615 596 019 0	615 596 018 0	615 571 072 0	615 573 131 5
ECP1500	615 596 109 5	615 596 110 0	615 596 112 0	615 596 111 0	615 571 072 0	615 573 131 5
ECP2100 / ECP3000 / ECP4000	N/A	INCLUDED	N/A	N/A	N/A	615 573 131 5

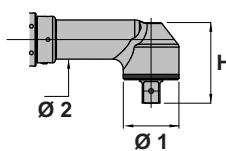


Angle head electric nutrunners - CVIC

5 to 200 Nm (3.7 to 147.5 ft.lb) - 200 to 1480 rpm



MODEL	H		Ø1		Ø2	
	mm	in.	mm	in.	mm	in.
ECA15	45.5	1.8	28	1.10	27.0	1.06
ECA20 - ECA30	45.5	1.8	28	1.10	27.0	1.06
ECA40	51.5	2.0	35	1.40	27.0	1.06
ECA60	57.5	2.3	40	1.60	30.5	1.20
ECA70- ECA90 - ECA115	66.0	2.6	45	1.77	37.0	1.46
ECA125 - ECA150	69.0	2.7	50	1.97	42.0	1.65
ECA200	86.0	3.4	60	2.36	42.0	1.65



Accessories: see page 50

PIC REF	MODEL	PART NUMBER	SQUARE DRIVE	TORQUE RANGE			ROTATIONAL SPEED AT		LENGTH		WEIGHT	
				in.	Nm	ft.lb	rpm/230 V	rpm/110 V	mm	in.	kg	lb.
A	ECA15	615 165 192 0	3/8	5-15	3.7-11	1140	855	406	16.0	1.3	2.9	
A	ECA20	615 165 100 0	3/8	7-20	5.2-15	1480	1110	431	16.9	1.7	3.7	
A	ECA30	615 165 101 0	3/8	10-30	7.4-22	1140	855	431	16.9	1.7	3.7	
B	ECA40	615 165 102 0	3/8	13-40	9.6-29	900	675	441	17.4	1.8	4.0	
B	ECA60	615 165 103 0	3/8	20-60	14.7-44	570	427	453	17.8	1.9	4.2	
C	ECA70	615 165 104 0	1/2	23-70	16.9-52	690	517	538	21.2	3.3	7.3	
C	ECA90	615 165 105 0	1/2	30-90	22.1-66	550	412	538	21.2	3.3	7.3	
C	ECA115	615 165 106 0	1/2	39-115	28.7-85	380	285	538	21.2	3.3	7.3	
C	ECA125	615 165 188 0	1/2	40-125	29.5-92	360	270	541	21.3	3.6	7.9	
C	ECA150	615 165 189 0	1/2	50-150	36.8-111	300	225	541	21.3	3.6	7.9	
D	ECA200	615 165 190 0	3/4	70-200	51.6-147	200	165	591	23.3	3.8	8.4	

In-line electric Nutrunners - CVIC

2 to 120 Nm (1.5 to 88.5 ft.lb) - 400 to 2065 rpm



Accessories: see page 50 

PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE RANGE		ROTATIONAL SPEED AT		LENGTH		WEIGHT	
				in.	Nm	ft.lb	rpm/230 V	rpm/110 V	mm	in.	kg
A	ECD5	615 165 068 0	Hex. 1/4	2-6	1.5-4.4	2065	1548	346	13.6	1.0	2.4
B	ECD20	615 165 093 0	Hex. 1/4	7-20	5.2-15	1560	1170	388	15.3	1.5	3.3
B	ECD30	615 165 094 0	Sq 3/8	10-30	7.4-22	1100	825	380	15.0	1.5	3.3
C	ECD50	615 165 095 0	Sq 3/8	16-50	11.8-37	1030	300	456	17.9	2.6	5.7
C	ECD70	615 165 096 0	Sq 1/2	23-70	16.9-52	650	487	461	18.1	2.6	5.7
C	ECD120	615 165 097 0	Sq 1/2	40-120	29.5-88	400	772	488	19.2	3.1	6.8

Fixtured electric spindles - CVIC

0.12 to 16 Nm (1.1 to 141.6 in.lb) - 840 to 2000 rpm



A



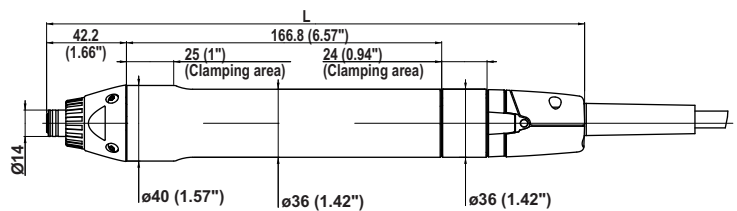
Offset head for application with close centers (minimum 19mm)



Automatically adjust the stroke for multispindle applications with spring loaded shafts



Mount your spindle easily on a support using the adapted flange

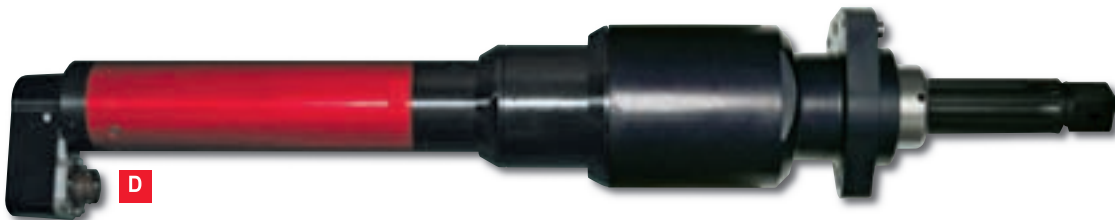


Accessories: see page 50

PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE		TORQUE RANGE		ROTATIONAL SPEED	LENGTH L		WEIGHT	
			in.	Nm	in.lb	rpm		mm	in.	kg	lb.
A	ECSF06	615 165 501 0	Hex. 1/4 F	0.12-0.6	1.1-5.3	2000	285	11.2	0.6	1.3	
A	ECSF2	615 165 502 0	Hex. 1/4 F	0.45-1.8	4.0-15.9	2000	285	11.2	0.6	1.3	
A	ECSF4	615 165 503 0	Hex. 1/4 F	1.0-4.0	8.8-35.4	2000	285	11.2	0.6	1.3	
A	ECSF7	615 165 504 0	Hex. 1/4 F	1.9-7.5	16.8-66.4	1800	285	11.2	0.7	1.5	
A	ECSF10	615 165 505 0	Hex. 1/4 F	2.5-10	22.1-88.5	1340	285	11.2	0.7	1.5	
A	ECSF16	615 165 506 0	Hex. 1/4 F	4.0-16	35.4-141.6	840	285	11.2	0.7	1.5	

Fixtured electric spindles - CVIC

2.5 to 1350 Nm (1.8 to 995 ft.lb) - 39 to 2067 rpm



Accessories: see page 51 

For MC.. tools with Offset heads, please contact your local Desoutter sales engineer for more information.

PIC REF	MODEL	PART NUMBER	SQUARE DRIVE	TORQUE RANGE		ROTATIONAL SPEED AT		TELESCOPIC		MIN. CENTRE DISTANCE		LENGTH		WEIGHT	
				in.	Nm	ft.lb	rpm/230 V	rpm/110 V	mm	in.	mm	in.	mm	in.	kg
A	MC35-10	615 165 107 0	3/8	2.5-8	1.8-5.9	2067	1344	50	1.97	43.2	1.7	276	10.9	1.7	3.7
A	MC35-20	615 165 108 0	3/8	5-15	3.7-11	2067	1344	50	1.97	43.2	1.7	301	11.8	2.0	4.4
A	MC38-10	615 165 109 0	3/8	10-30	7.4-22	1287	837	50	1.97	43.2	1.7	347	13.7	2.0	4.4
A	MC38-20	615 165 110 0	3/8	15-45	11-33	1092	710	50	1.97	43.2	1.7	347	13.7	2.0	4.4
B	MC51-10	615 165 111 0	1/2	25-70	18-52	650	423	50	1.97	51.2	2.0	366	14.4	2.9	6.4
B	MC51-20	615 165 112 0	1/2	45-135	33-99	403	262	50	1.97	51.2	2.0	393	15.4	3.5	7.7
B	MC60-10	615 165 113 0	1/2	30-60	22-44	923	600	50	1.97	60.2	2.4	417	16.4	4.8	10.6
B	MC60-20	615 165 114 0	3/4	60-110	44-81	507	330	50	1.97	60.2	2.4	417	16.4	4.8	10.6
B	MC60-30	615 165 115 0	3/4	80-190	59-140	299	195	50	1.97	60.2	2.4	453	17.8	5.2	11.5
C	MC80-10	615 165 116 0	3/4	100-195	74-144	286	186	60	2.36	80.2	3.2	480	18.9	9.8	21.6
C	MC80-20	615 165 117 0	3/4	150-300	110-221	195	127	60	2.36	80.2	3.2	480	18.9	9.8	21.6
C	MC80-30	615 165 118 0	1	220-420	162-309	130	85	60	2.36	80.2	3.2	480	18.9	9.8	21.6
C	MC80-40	615 165 119 0	1	270-550	199-405	91	59	60	2.36	80.2	3.2	480	18.9	9.8	21.6
D	MC106-10	615 165 120 0	1	500-1100	368-811	52	34	60	2.36	106.2	4.2	556	21.9	15.0	33.1
D	MC106-20	615 165 121 0	1	600-1350	442-995	39	25	60	2.36	106.2	4.2	556	21.9	15.0	33.1

Fixtured electric spindles - CVIC

15 to 550 Nm (11 to 405 ft.lb) - 91 to 1092 rpm



Accessories: see page 51 

PIC REF	MODEL	PART NUMBER	SQUARE DRIVE	TORQUE RANGE		ROTATIONAL SPEED AT		TELESCOPIC		MIN. CENTRE DISTANCE		LENGTH L		WEIGHT	
				in.	Nm	ft.lb	rpm/230 V	rpm/110 V	mm	in.	mm	in.	mm	in.	kg
A	MCL38-20	615 165 124 0	3/8	15-45	11-33	1092	710	50	1.97	43.2	1.7	140.5	5.5	3	6.6
B	MCL51-20	615 165 125 0	1/2	45-135	33-99	403	262	50	1.97	51.2	2.0	166.0	6.5	4	8.8
B	MCL60-20	615 165 126 0	3/4	60-110	44-81	481	313	50	1.97	60.2	2.4	178.0	7.0	6	13.2
B	MCL60-30	615 165 127 0	3/4	80-190	59-140	312	203	50	1.97	60.2	2.4	178.0	7.0	6	13.2
C	MCL80-40	615 165 128 0	1	270-550	199-405	91	59	60	2.40	80.2	3.2	241.0	9.5	11	24.2

Posco 500 Positioning System

Cost effective error proofing

Comprised of a control unit and encoder equipped tool stand, the Posco 500 system ensures that operators perform tightening operations in the right sequence at the right torque, with the right tool in the right position.

Increased operator versatility

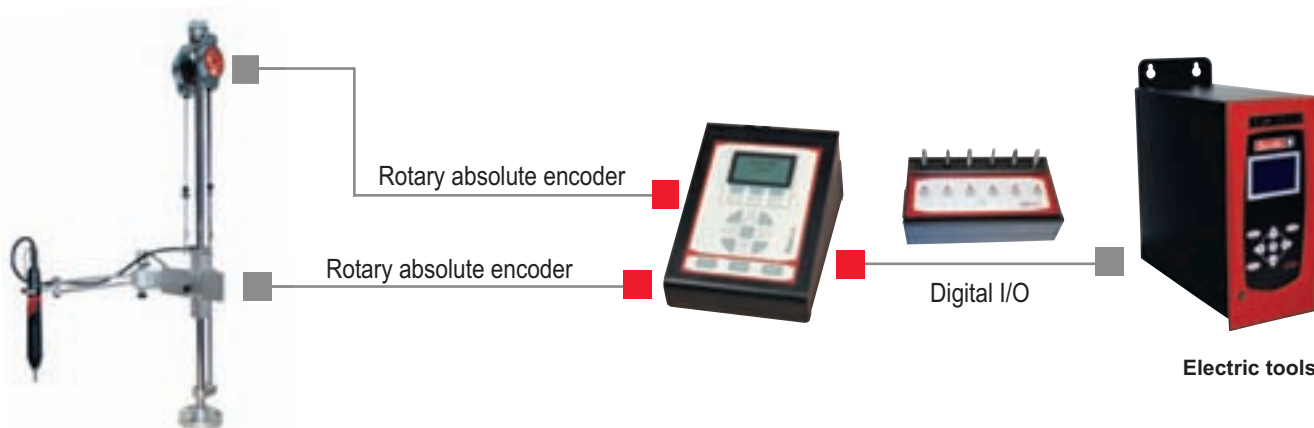
Because it guides the operator step by step, it reduces the amount of training each operator requires and allows operators to move between operations without impacting the level of quality.

Flexibility and control

Used in conjunction with an encoder equipped tool stand, the system ensures that the tool is positioned properly during the operation. The ability to use digital input and output signals will confirm to your PLC that the job is done.

Easy programming

The Posco 500 system lets you program a sequence of operations by "self learning mode" and ensures that the steps are completed in the right order and in the right conditions.



Tool stand with X/Y encoders with an x-y-axis as an option

TOOL STANDS	PART NO.
D53-20S X/Y	615 397 018 0
D53-20 X/Y	615 396 933 0
D53-20 X	615 396 931 0
D53-20 Y	615 396 932 0
D53-70 X/Y	615 396 936 0
D53-70 X	615 396 934 0
D53-70 Y	615 396 935 0

TOOL HOLDERS Up to 20Nm	PART NO.
Tool holder Ø25-41mm (1-1.6")	615 396 616 0
Tool holder Ø40-50mm (1.57-1.97")	615 396 628 0

CABLES	PART NO.
Cable Posco 500 / Bit-Tray	615 917 533 0
Cable Posco 500 / I-O CVI	615 917 534 0
Cable Y RS232	615 917 536 0

LICENCES	PART NO.
Barcode license	615 927 571 0
Advanced programming license	615 927 572 0
PC connection - 1 licence	615 927 573 0
PC connection - 5 licences	615 927 574 0
PC connection - 10 licences	615 927 575 0
FAS support license	615 936 048 0

POSCO 500	PART NO.
Posco 500 controller desk	615 932 656 0
Posco 500 controller desk with I/O ext	615 932 658 0
Posco 500 controller wall with I/O ext	615 932 659 0

OTHERS	PART NO.
Bit-Tray module	615 929 025 0
Mounting SET	615 930 777 0
AC/DC adapter 90-260V/24V 30W	615 936 047 0
I/O add-on board	615 929 026 0

Accessories

ECS / ECP / ECA / ECD

ACCESSORIES INCLUDED

ITEM	PART NO.
1 Side handle for ECP L/S/LT versions	467033
2 Fixed suspension bail for ECPLT	467003
2 Fixed suspension bail for ECS	205 049 537 3
3 Stationary suspension bail for ECA15/20/30/40/60 / ECD	615 571 056 0
3 Stationary suspension bail for ECA90/115/125/150/200	615 571 050 0
• Socket ball retainer 3/8" for ECA15/20/30/40/60	615 770 028 0
4 Reaction bar for ECD20/30	615 396 191 0
4 Reaction bar for ECD50/70/120	615 595 259 0
5 Long lever start for ECD5	615 396 584 0

OPTIONAL ACCESSORIES

ITEM	PART NO.
6 Reaction handle for ECS	615 397 016 0
7 High resistance Side handle for ECP L/S/LT versions	615 397 012 0
8 Rotary right angle tool connector for EC	615 396 300 0
9 Stationary suspension bail for ECSA	615 571 080 0
• Suspension bail on a swivel for ECP L/S	615 396 121 0
9 Suspension bail on a swivel for ECP HT	615 571 072 0
10 Suspension bail on a swivel for ECA20/30/40/60 / ECD5/20/30	615 396 228 0
10 Suspension bail on a swivel for ECA70/90/115/125/150/200 / ECD506	615 396 229 0
• Top cable length 4m for ECP.LT	615 917 420 0
• Reaction bar ring for ECD20/30	615 396 191 0
11 Reaction bar ring for ECA60	615 396 226 0
11 Reaction bar ring for ECA70/90/115/125/150	615 396 227 0
• Reaction bar ring for ECA200	615 396 230 0
12 Long lever start for ECA / ECD	615 396 584 0
• Tool clamp for ECD5	615 396 616 0
• Tool clamp for ECS	615 396 616 0
13 Protection sleeve for ECP HT	615 573 131 5

Spring Loaded Shafts and Bearings Support for ECS-M20/ECSF

14 Bit Adaptor	103782
15 Spring Loaded Shaft 25mm (1") stroke, 3/8" Sq Drive	108352
16 Shaft Support and Nose Mount	108412

Nose Mounts for ECS-M20/ECSF

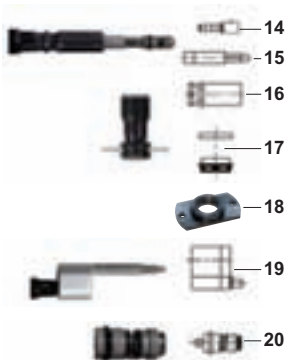
17 Nose Mount	205 052 876 3
18 Flange	205 052 875 3

Offset Head and Spring Loaded Shaft for ECS-M20/ECSF

15 Spring loaded shaft 25mm (1") stroke, 3/8" square drive	108352
19 Offset Head, Offset 30mm (1.18")	384993

Screwdriver Bit Adaptor for ECS/ECSA/ECS-M20/ECSF

20 3/8" Square to 1/4" Hex Power Adaptor	108322
--	--------



ECS / ECP / ECA / ECD



Cable for ECP / ECA / ECD

Cable length:	3m (9.8ft)	5m (16ft)	10m (32.8ft)	15m (49.2ft)	20m (65.6ft)	25m (82ft)	30m (98ft)
• Nutrunners cable	615 917 461 0	615 917 462 0	615 917 464 0	615 917 465 0			
• Extension cable for ECS also	615 917 222 0	615 917 224 0	615 917 225 0	615 917 226 0	615 917 227 0	615 917 228 0	

Sockets Tray & Bits Tray

• Socket tray (sockets not supplied)	615 936 005 0
• Bit tray (bits not included)	615 929 025 0

Cable length:	1m (3.3ft)	2m (6.4ft)	5m (16ft)	10m (32.8ft)	15m (49.2ft)
• Cable for socket tray	615 917 241 0		615 917 242 0	615 917 244 0	615 917 245 0
• Cable for bit tray		615 917 535 0			

Reporting Box

• Reporting Box	615 936 001 0
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MC / MCL

OPTIONAL ACCESSORIES

	PART NO.
• Motor/In-line connector assembly kit for MC35-10 to MC51-20 / MCL38-20/MCL51-20	615 396 198 0
• Motor/In-line connector assembly kit for MC60-10 to MC106-20 / MCL60-20/30/MCL80-40	615 396 199 0

Transducer-holder from MC tool

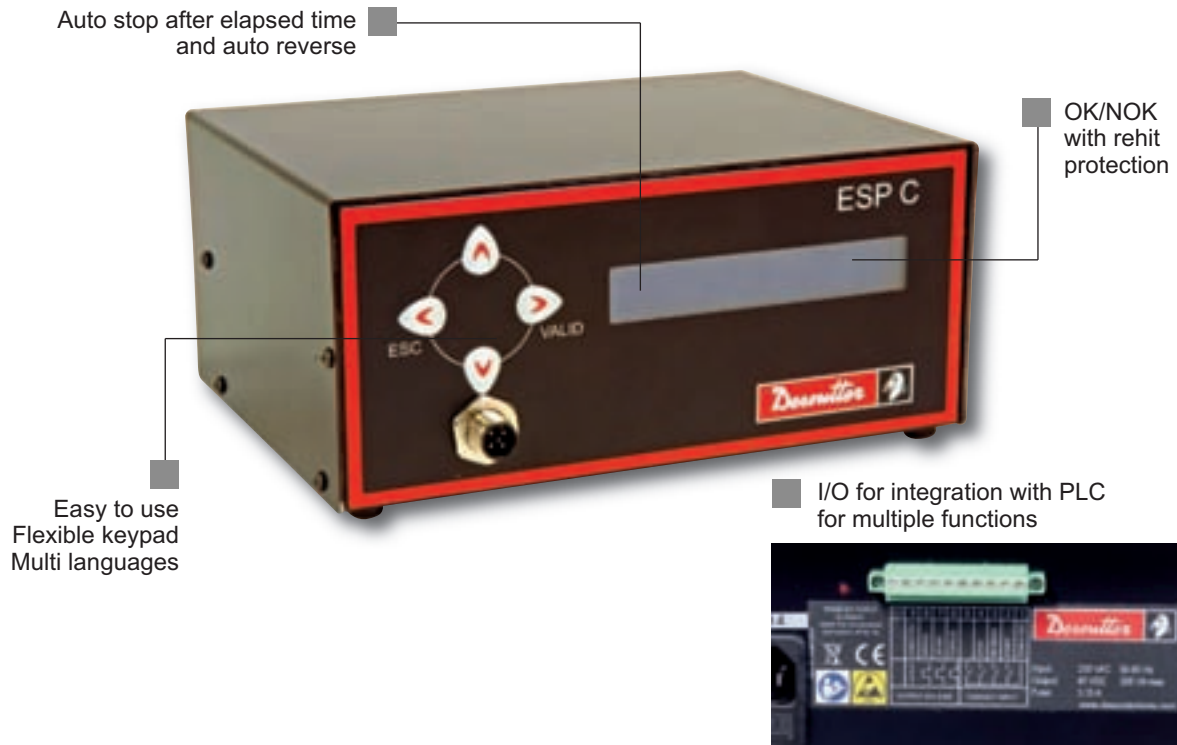
• 3/8" square drive MC35/MC38	615 396 426 0
• 1/2" square drive MC51/MC60.10	615 396 427 0
• 3/4" square drive MC60.20/MC60.30	615 396 428 0
• 3/4" square drive MC80.10/MC80.20	615 396 429 0
• 1" square drive MC80.30/40/MC106	615 396 430 0

Cable for MC & MCL tools

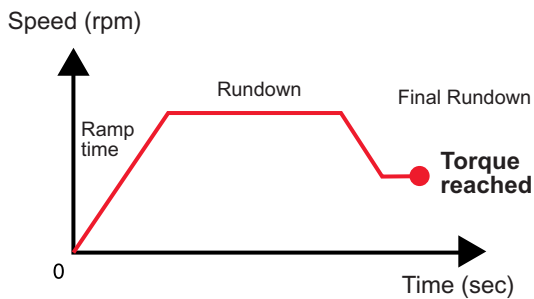
Cable length:	5m (16ft)	10m (32.8ft)	15m (49.2ft)	20m (65.6ft)	25m (82ft)	30m (98ft)
• Tool cable	615 917 232 0	615 917 234 0	615 917 235 0	615 917 236 0	615 917 237 0	615 917 238 0
• Tool extension cable	615 917 222 0	615 917 224 0	615 917 225 0	615 917 226 0		



Total and flexible control



Speed control at all steps of operation: start, rundown and final phase



Parameters Torque adjustment, Ramp time adjustment, rundown speed, rundown and final time in hard joint, automatic reverse, rehit protection, timeout, language selection (FR,EN,D,P,ESP and I)

Outputs Torque reached, Tool in cycle, Error signal

Inputs External start, external reverse and external stop

MODEL	PART NUMBER	TORQUE RANGE		SUPPLY VOLTAGE	WIDTH		DIMENSIONS HEIGHT		DEPTH		WEIGHT	
		Nm	In.lb		mm	in.	mm	in.	mm	in.	kg	lb
ESP C 220 V	615 165 480 0	0.5-15	4.4-132.7	AC 230 50Hz	195	7.7	89	3.5	154	6.0	3.4	7.4
ESP C 110 V	615 165 484 0	0.5-15	4.4-132.7	AC120 60Hz	195	7.7	89	3.5	154	6.0	3.4	7.4
ESP C LT 220 V	615 165 481 0	0.5-7.0	4.4-61.9	AC230 50Hz	195	7.7	89	3.5	154	6.0	3.4	7.4
ESP C LT 110 V	615 165 485 0	0.5-7.0	4.4-61.9	AC120 60Hz	195	7.7	89	3.5	154	6.0	3.4	7.4

START-UP KIT to be ordered with the controller
Including: **Power cable and plug**

PLUG	DESCRIPTION	PART NO.
A	UK	615 917 202 0
B	USA	615 917 203 0
C	European	615 917 201 0



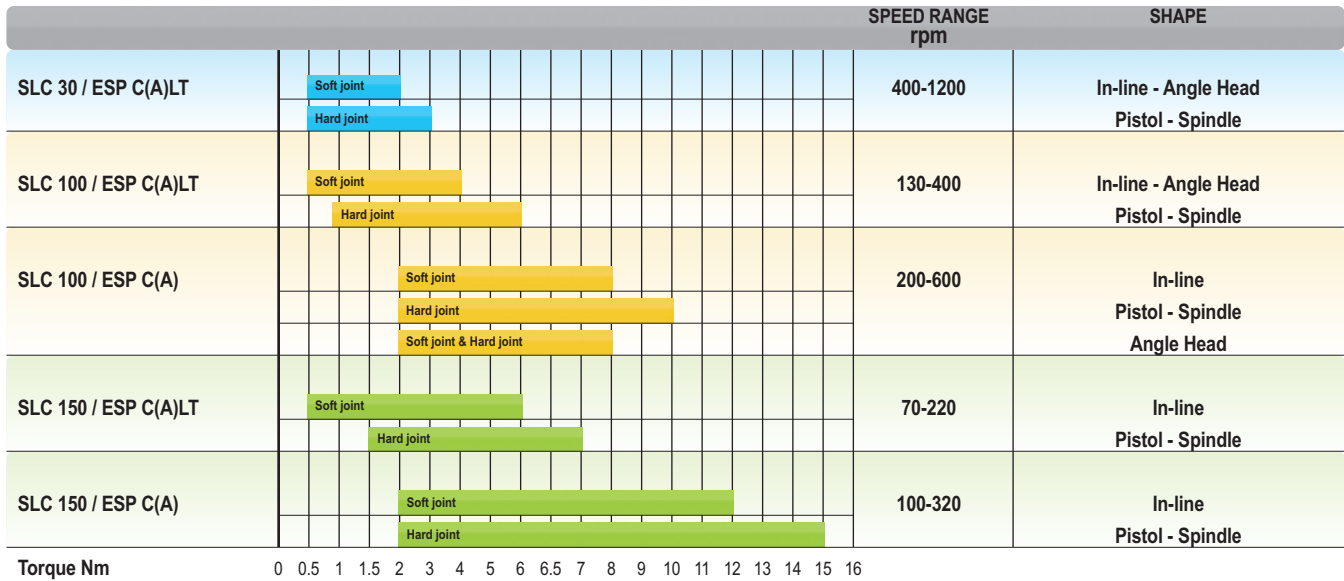
Example of order

		PART NO.
Tool	SLC030-P1200-C4Q	615 165 488 0
Programmable controller	ESP C LT 220V	615 165 481 0
Start-up kit	UK	615 917 202 0

High power screwdrivers

Torque Range

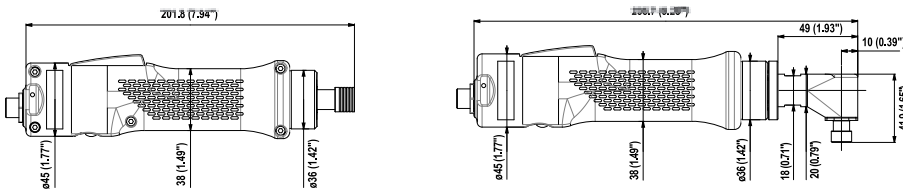
Performance of Electric Screwdrivers - Series SLC



SLC - In-line and Angle head screwdrivers



0.5 to 15 Nm (4.4 to 132.7 in.lb) - 70 to 1200 rpm



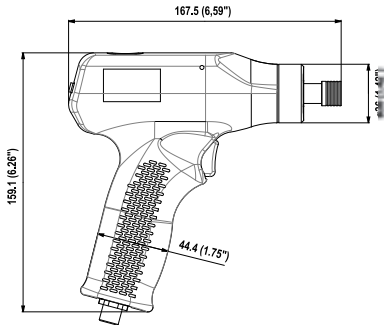
Accessories: see page 63

PIC REF	MODEL	PART NUMBER	OUTPUT HEX	FREE SPEED	TORQUE RANGE				WEIGHT		CONTROLLER
					Soft	Soft	Hard	Hard	kg	lb	
			in.	rpm	Nm	in.lb	Nm	in.lb	kg	lb	
IN-LINE - LOW VOLTAGE - CURRENT CONTROL - SHUT OFF											
A	SLC030-L1200-C4Q	615 165 500 0	1/4	400-1200	0.5-2	4.4-17.7	0.6-3	5.3-26.5	0.5	1.1	ESP C(A) LT
A	SLC100-L600-C4Q	615 165 466 0	1/4	130-400	0.5-4	4.4-35.4	0.8-6	7.1-53.1	0.5	1.1	ESP C(A) LT
			1/4	200-600	2.0-8	17.7-70.8	2.0-10	17.7-88.5	0.5	1.1	ESP C(A)
A	SLC150-L320-C4Q	615 165 467 0	1/4	70-220	0.5-6	4.4-53.1	1.5-7	13.3-61.9	0.5	1.1	ESP C(A) LT
			1/4	100-320	2.0-12	17.7-106.2	2.0-15	17.7-132.7	0.5	1.1	ESP C(A)
ANGLE HEAD - LOW VOLTAGE - CURRENT CONTROL - SHUT OFF											
B	SLC030-L1200-C90A4H	615 165 478 0	1/4	400-1200	0.5-2	4.4-17.7	0.6-3	5.3-26.5	0.7	1.5	ESP C(A) LT
B	SLC100-L600-C90A4H	615 165 479 0	1/4	130-400	0.5-4	4.4-35.4	0.8-6	7.1-53.1	0.7	1.5	ESP C(A) LT
			1/4	200-600	2.0-8	17.7-70.8	2.0-10	17.7-88.5	0.7	1.5	ESP C(A)



SLC - Pistol grip screwdrivers

0.5 to 15 Nm (4.4 to 132.7 in.lb) - 70 to 1200 rpm



A



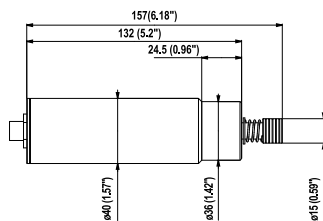
B

Accessories: see page 63

PIC REF	MODEL	PART NUMBER	OUTPUT HEX	FREE SPEED	TORQUE RANGE				WEIGHT		CONTROLLER
					Soft	Soft	Hard	Hard	kg	lb	
			in.	rpm	Nm	in.lb	Nm	in.lb			
PISTOL GRIP - LOW VOLTAGE - CURRENT CONTROL - SHUT OFF											
A	SLC030-P1200-C4Q	615 165 488 0	1/4	400-1200	0.5-2	4.4-17.7	0.6-3	5.3-26.5	0.6	1.3	ESP C(A) LT
A	SLC100-P600-C4Q	615 165 462 0	1/4	130-400	0.5-4	4.4-35.4	0.8-6	7.1-53.1	0.6	1.3	ESP C(A) LT
			1/4	200-600	2.0-8	17.7-70.8	2.0-10	17.7-88.5	0.6	1.3	ESP C(A)
A	SLC150-P320-C4Q	615 165 463 0	1/4	70-220	0.5-6	4.4-53.1	1.5-7	13.3-61.9	0.6	1.3	ESP C(A) LT
			1/4	100-320	2.0-12	17.7-106.2	2.0-15	17.7-132.7	0.6	1.3	ESP C(A)
PISTOL GRIP WITH TOP CONNECTOR - CURRENT CONTROL - SHUT OFF											
B	SLC030-T1200-C4Q	615 165 489 0	1/4	400-1200	0.5-2	4.4-17.7	0.6-3	5.3-26.5	0.6	1.3	ESP C(A) LT
B	SLC100-T600-C4Q	615 165 464 0	1/4	130-400	0.5-4	4.4-35.4	0.8-6	7.1-53.1	0.6	1.3	ESP C(A) LT
			1/4	200-600	2.0-8	17.7-70.8	2.0-10	17.7-88.5	0.6	1.3	ESP C(A)
B	SLC150-T320-C4Q	615 165 465 0	1/4	70-220	0.5-6	4.4-53.1	1.5-7	13.3-61.9	0.6	1.3	ESP C(A) LT
			1/4	100-320	2.0-12	17.7-106.2	2.0-15	17.7-132.7	0.6	1.3	ESP C(A)

SLC - Automation - Remote start

0.5 to 15 Nm (4.4 to 132.7 in.lb) - 70 to 1200 rpm



A

Accessories: see page 63

PIC REF	MODEL	PART NUMBER	OUTPUT HEX	FREE SPEED	TORQUE RANGE				WEIGHT		CONTROLLER
					Soft	Soft	Hard	Hard	kg	lb	
			in.	rpm	Nm	in.lb	Nm	in.lb			
AUTOMATION - REMOTE START											
A	SLC030-F1200-C4Q	615 165 490 0	1/4	400-1200	0.5-2	4.4-17.7	0.6-3	5.3-26.5	0.5	1.1	ESP C(A) LT
A	SLC100-F600-C4Q	615 165 468 0	1/4	130-400	0.5-4	4.4-35.4	0.8-6	7.1-53.1	0.5	1.1	ESP C(A) LT
			1/4	200-600	2.0-8	17.7-70.8	2.0-10	17.7-88.5	0.5	1.1	ESP C(A)
A	SLC150-F320-C4Q	615 165 469 0	1/4	70-220	0.5-6	4.4-53.1	1.5-7	13.3-61.9	0.5	1.1	ESP C(A) LT
			1/4	100-320	2.0-12	17.7-106.2	2.0-15	17.7-132.7	0.5	1.1	ESP C(A)

SLK: High value, simple solution

Flexible

- Integrated ring for quick installation of vertical suspension bail.
- Tool-free torque adjustment.
- Reverse action switch with stop position.

Productive

- Ventilation slots for cool operation.
- Linear torque adjustment with external chuck.

Easy to maintain

- Simple maintenance thanks to quick brush replacement.
- Spare brushes included.

Comfortable

- Long, rounded trigger with easy access for operator's hand.
- Soft rubber grip provides non-slip operation.
- Flared shape and conical cross section give superior hand comfort during operation.
- Finger stop reduces risk of hand slip off and allows the operator to quickly position hand on the tool and remain focussed on the application.



ESD CERTIFIED



Adapted to electronics and appliance assembly, SLK Series low-voltage screwdrivers are ESD certified to ensure protection of electronic components.

SLK - Low Voltage screwdrivers

0.02 to 4.7 Nm (0.18 to 41.6 in.lb) - 530 to 1000 rpm



Power Controllers

PIC REF	MODEL	PART NUMBER	DESCRIPTION	WIDTH		DIMENSIONS HEIGHT		DEPTH		WEIGHT	
				mm	in.	mm	in.	mm	in.	kg	lb
E	ESP1	615 932 635 0	1 screwdriver - Input 100-240V	75	2.95	55	2.17	160	6.30	0.5	1.1
F	ESP2	615 932 636 0	2 screwdrivers - Input 100-240V	118	4.65	85	3.35	210	8.27	2.5	5.5

START-UP KIT to be ordered with the controller
Including: **Power cable and plug**

PLUG	DESCRIPTION	PART NO.
A	UK	615 917 202 0
B	USA	615 917 203 0
C	European	615 917 201 0



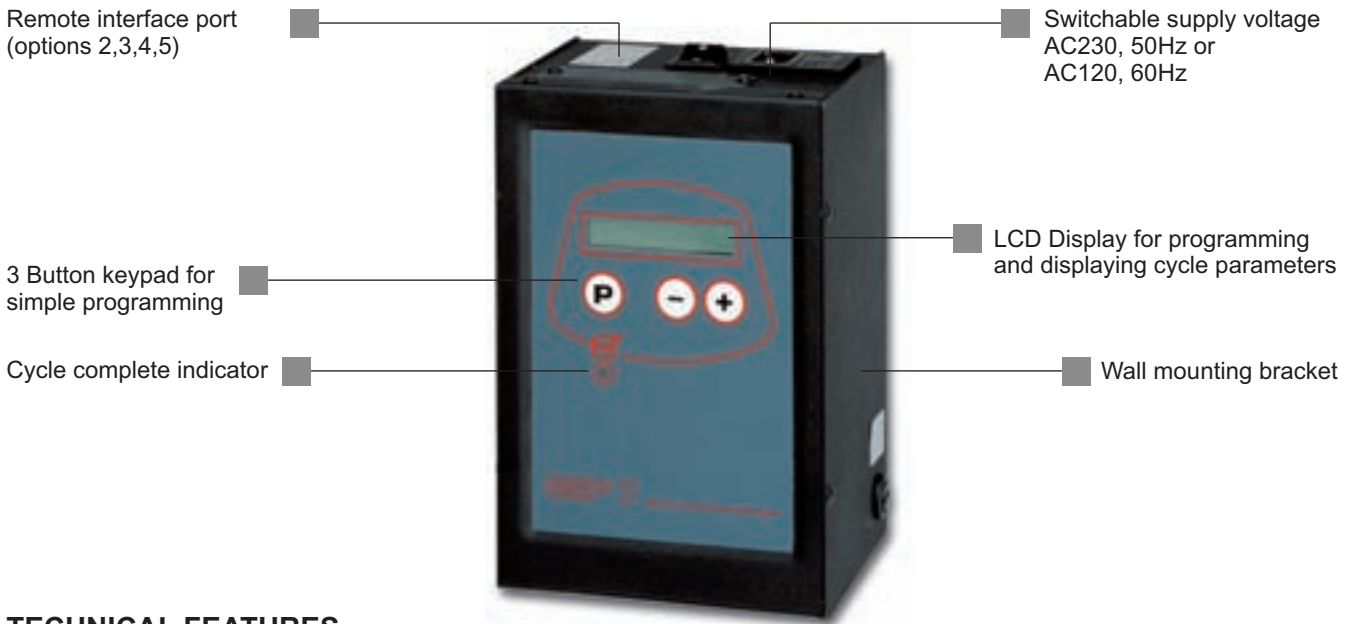
Recommended duty cycle, maximum 15 screws per minute

Accessories: see page 63

PIC REF	MODEL	PART NUMBER	OUTPUT HEX	FREE SPEED		TORQUE RANGE		LENGTH		WEIGHT		VOLTAGE VDC	CONTROLLER
				Hi rpm	Lo rpm	Nm	in.lb	mm	in.	kg	lb		
PUSH START - LOW VOLTAGE - CLUTCH CONTROL - SHUT OFF													
A	SLK011-A1000-S4Q	615 165 257 0	1/4	1000	700	0.10-1.18	0.88-10.4	218	8.6	0.48	1.06	24 or 32	ESP1 or 2
A	SLK015-A1000-S4Q	615 165 258 0	1/4	1000	700	0.29-1.57	2.57-13.9	218	8.6	0.48	1.06	24 or 32	ESP1 or 2
•	SLK017-A1000-S4Q	615 165 562 0	1/4	1000	700	0.39-1.76	3.45-15.6	260	10.2	0.60	1.32	24 or 32	ESP1 or 2
B	SLK022-A1000-S4Q	615 165 473 0	1/4	1000	700	0.60-2.25	5.31-19.9	308	12.1	0.69	1.52	24 or 32	ESP1 or 2
•	SLK023-A750-S4Q	615 165 563 0	1/4	750	520	0.59-2.35	5.22-20.8	260	10.2	0.60	1.32	24 or 32	ESP1 or 2
•	SLK029-A530-S4Q	615 165 564 0	1/4	530	370	0.78-2.94	6.9-26.0	260	10.2	0.60	1.32	24 or 32	ESP1 or 2
B	SLK031-A750-S4Q	615 165 474 0	1/4	750	500	1.00-3.14	8.85-27.8	308	12.1	0.69	1.52	24 or 32	ESP1 or 2
B	SLK047-A530-S4Q	615 165 475 0	1/4	530	350	1.50-4.70	13.28-41.6	308	12.1	0.69	1.52	24 or 32	ESP1 or 2
LEVER START - LOW VOLTAGE - CLUTCH CONTROL - SHUT OFF													
C	SLK003-L1000-S4Q	615 165 252 0	1/4	1000	700	0.02-0.34	0.18-3.01	224	8.8	0.27	0.59	24 or 32	ESP1 or 2
C	SLK007-L1000-S4Q	615 165 253 0	1/4	1000	700	0.05-0.69	0.44-6.11	224	8.8	0.27	0.59	24 or 32	ESP1 or 2
C	SLK010-L670-S4Q	615 165 254 0	1/4	670	470	0.10-0.98	0.88-8.67	224	8.8	0.27	0.59	24 or 32	ESP1 or 2
•	SLK011-L1000-S4Q	615 165 255 0	1/4	1000	700	0.10-1.18	0.88-10.4	239	9.4	0.48	1.06	24 or 32	ESP1 or 2
•	SLK015-L1000-S4Q	615 165 256 0	1/4	1000	700	0.29-1.57	2.57-13.9	239	9.4	0.48	1.06	24 or 32	ESP1 or 2
E	SLK017-L1000-S4Q	615 165 559 0	1/4	1000	700	0.39-1.76	3.45-15.6	260	10.2	0.60	1.32	24 or 32	ESP1 or 2
D	SLK022-L1000-S4Q	615 165 470 0	1/4	1000	700	0.60-2.25	5.31-19.9	308	12.1	0.70	1.55	24 or 32	ESP1 or 2
E	SLK023-L750-S4Q	615 165 560 0	1/4	750	520	0.59-2.35	5.22-20.8	260	10.2	0.60	1.32	24 or 32	ESP1 or 2
E	SLK029-L530-S4Q	615 165 561 0	1/4	530	370	0.78-2.94	6.9-26.0	260	10.2	0.60	1.32	24 or 32	ESP1 or 2
D	SLK031-L750-S4Q	615 165 471 0	1/4	750	500	1.00-3.14	8.85-27.8	308	12.1	0.70	1.55	24 or 32	ESP1 or 2
D	SLK047-L530-S4Q	615 165 472 0	1/4	530	350	1.50-4.70	13.28-41.6	308	12.1	0.70	1.55	24 or 32	ESP1 or 2

ESP Range

ESP7 controller for SLE screwdrivers



TECHNICAL FEATURES

MAIN FUNCTIONS	VERSIONS				
	OPTION 1	OPTION 2	OPTION 3	OPTION 4	OPTION 5
PROGRAMMABLE CONTROLLER					
Password protected programming	✓	✓	✓	✓	✓
Automatic tool recognition	✓	✓	✓	✓	✓
Factory default reset facility	✓	✓	✓	✓	✓
Auto Start	✓	✓	✓	✓	✓
Left/Right hand rotation	✓	✓	✓	✓	✓
Tool running indicator	✓	✓	✓	✓	✓
Counting function	✓	✓	✓	✓	✓
CONTROL CARDS					
Slow start speed control		✓	✓	✓	✓
Rundown speed control		✓	✓	✓	✓
Final speed control		✓	✓	✓	✓
Reverse speed control		✓	✓	✓	✓
Auto reverse			✓	✓	✓
Current control				✓	✓
4 Parameter groups			✓	✓	✓
FAS capability (lever and push start tool)				✓	✓
Remote interface port		✓	✓	✓	✓



MODEL	PART NUMBER	FOR TOOLS	SWITCHABLE SUPPLY VOLTAGE		WIDTH		DIMENSIONS HEIGHT		DEPTH		WEIGHT	
			AC230	AC120	mm	in.	mm	in.	mm	in.	kg	lb

PROGRAMMABLE CONTROLLER												
ESP7	111362	SLE	50Hz	60Hz	143	5.6	212	8.3	115	4.5	5	11.3

CONTROL CARDS												
OPTION 2	108242										0.21	0.46
OPTION 3 & 4	108252										0.25	0.55
OPTION 5	108262										0.34	0.75

START-UP KIT to be ordered with the controller
Including: **Power cable and plug**

PLUG	DESCRIPTION	PART NO.
A	UK	615 917 202 0
B	USA	615 917 203 0
C	European	615 917 201 0



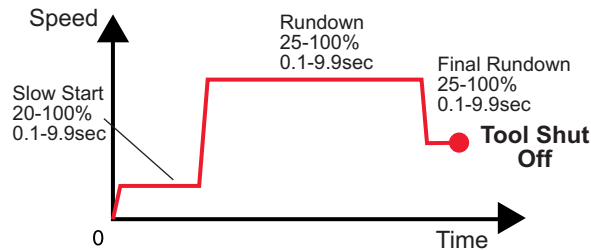
Example of order

	PART NO.
Tools - Clutch controlled types only	SLE017-A1500-S4Q
Programmable controller	ESP7
Control Card	Option 2
Start-up kit	UK
	1464864
	111362
	108242
	615 917 202 0

Electric fastening tools

Control Options

OPTION 2 – Clutch Controlled Shut Off with Speed Control

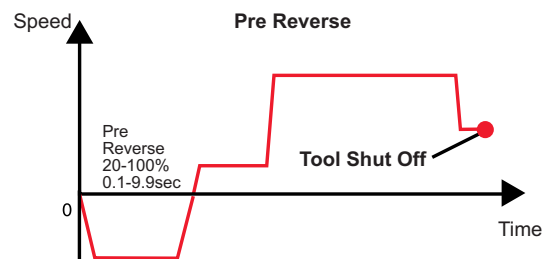
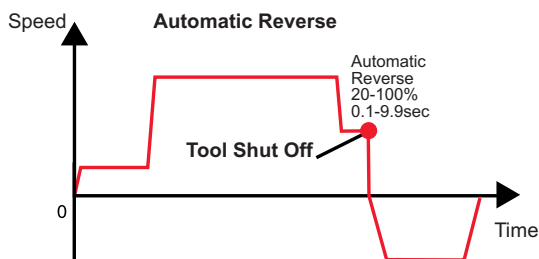


Parameters Tool start mode, external forward, reverse or stop signal functions, slow start time and speed, rundown time and speed, final rundown time and speed, reverse speed

Outputs Cycle finished, cycle not finished, ground 24V DC

Inputs External forward, external reverse, external stop, +24V DC

OPTION 3 – Clutch Controlled Shut Off with Speed Control and Automatic Reverse Options OPTION 4 – Current Controlled Shut Off with Speed Control and Automatic Reverse Options



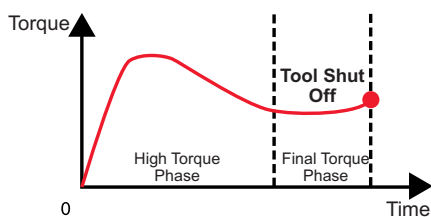
Parameters As per Option 2 plus program selection (maximum of 4), pre reverse time, automatic reverse time after shut off, current percentage (current control only)

Outputs Cycle finished, cycle not finished, ground 24V DC

Inputs External forward, external reverse, external stop, program selection, +24V DC

OPTION 5 – Clutch or Current Controlled Shut Off with Speed Control and Automatic Reverse Option, High Torque Current Control and Fastening Assurance

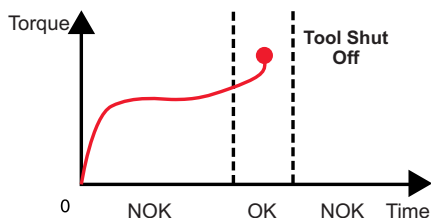
This option has all the features of Options 3 and 4 plus:



High Torque Current Control

This function permits the current control tools to operate at a higher torque level during the rundown than the torque required at shut off.

Applications include those with thread forming screws, self tapping screws in thin materials or soft plastics, self lock nuts and screws, misaligned holes and fragile components.



Fastening Assurance System

The fastening assurance system provides the ability to verify that all the fasteners in an assembly have been correctly fastened. By comparing the timing of electrical signals from the screwdriver with set parameters, the fastening cycle can be monitored and output signals generated for OK and NOK assembly confirmation. The output signals can then be combined to indicate that all the fasteners on the component have been tightened correctly.

Parameters As per Option 2, 3 and 4 plus enable FAS, enable high current, time limits for FAS, number of screws in a group (FAS), group start (FAS), NOK receipt to disable tool (FAS), permit sequencing of groups

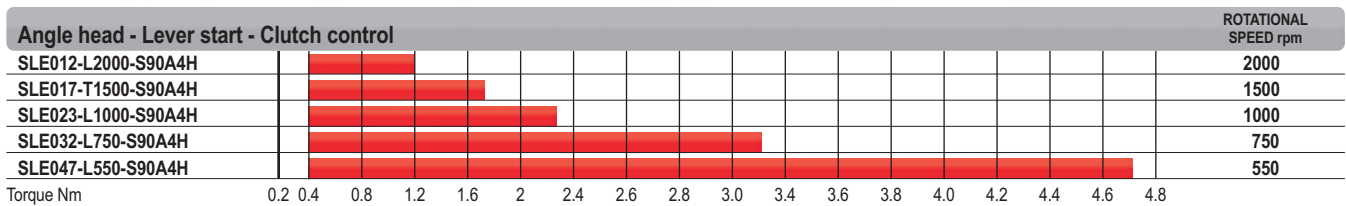
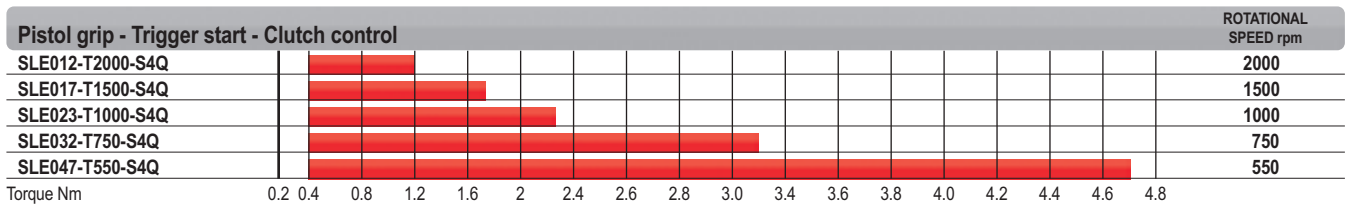
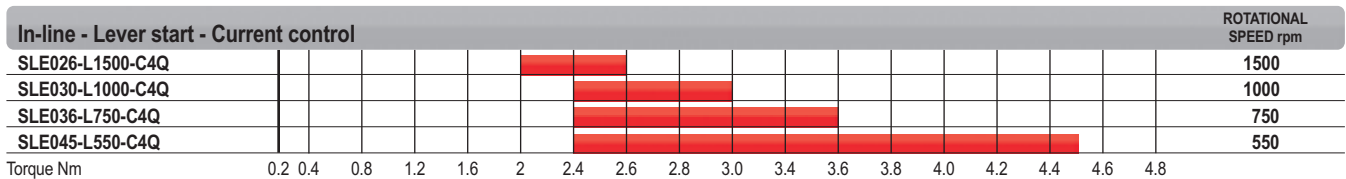
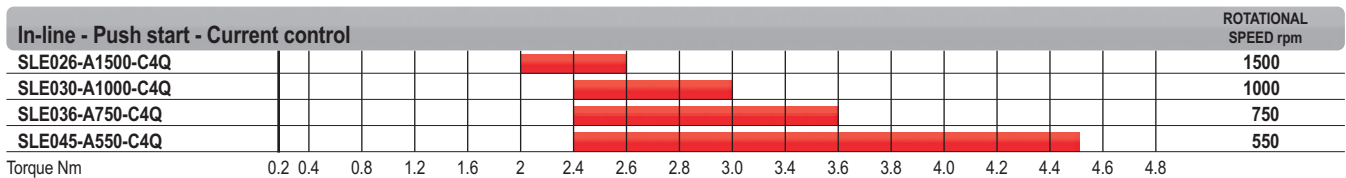
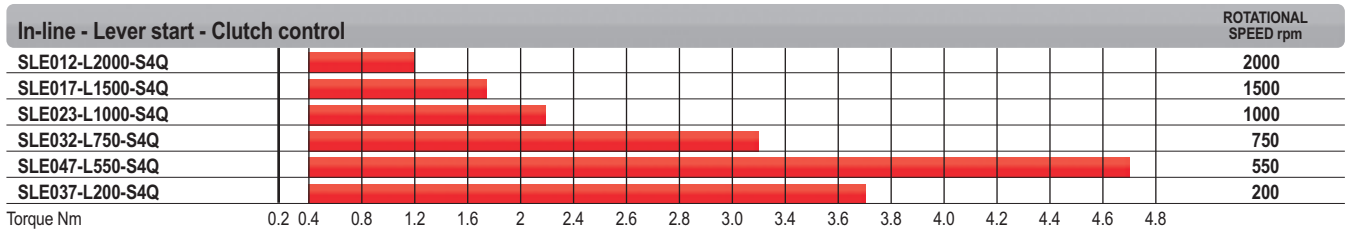
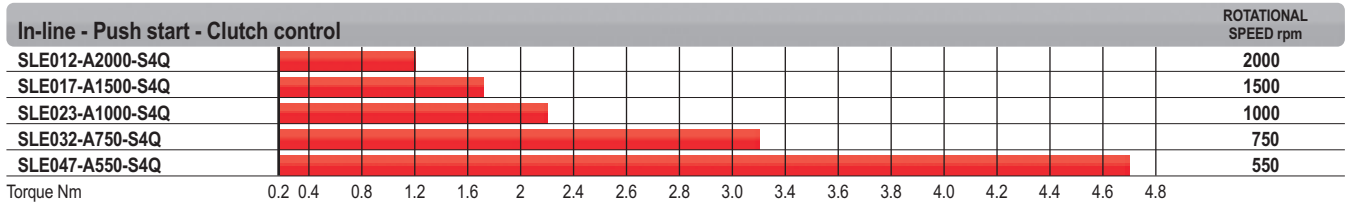
Outputs As per Option 2, 3 and 4 plus n screws OK, n screws NOK

Inputs As per Option 2, 3 and 4 plus reset last, reset all, NOK receipt to acknowledge NOK, group start (maintained during cycle)

High power screwdrivers

Torque Range

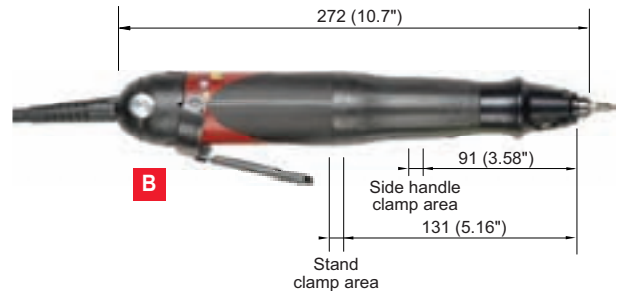
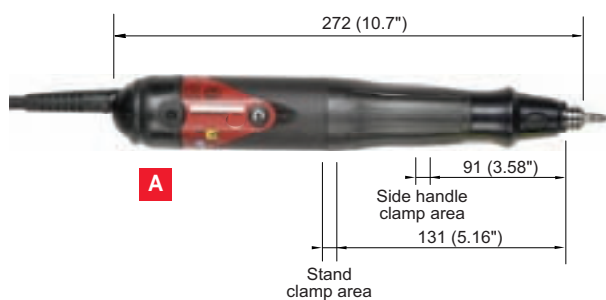
Performance of Electric Screwdrivers - series SLE





SLE - In-line screwdrivers

0.2 to 4.7 Nm (1.8 to 41.6 in.lb) - 200 to 2000 rpm



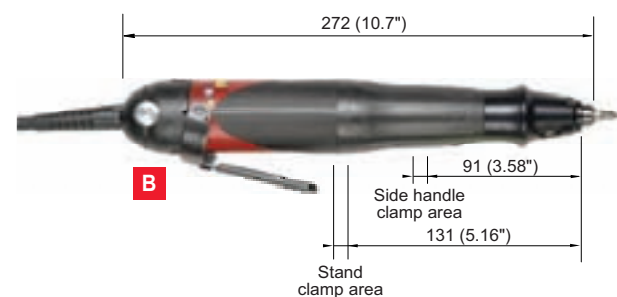
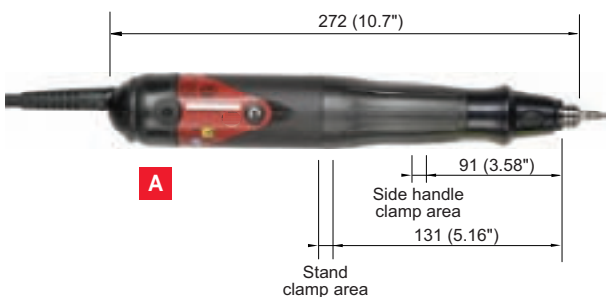
Accessories: see page 63

PIC REF	MODEL	PART NUMBER	OUTPUT HEX	FREE SPEED	TORQUE RANGE		FITTED SPRING		WEIGHT		VOLTAGE	CONTROLLER
			in.	rpm	Nm	in.lb	Nm	in.lb	kg	lb	VDC	
PUSH START - LOW VOLTAGE - CLUTCH CONTROL - SHUT OFF												
A	SLE012-A2000-S4Q	1464854	1/4	2000	0.2-1.2	1.8-10.6	0.4-1.2	3.5-10.6	0.64	1.4	40	ESP7
A	SLE017-A1500-S4Q	1464864	1/4	1500	0.2-1.7	1.8-15.0	0.4-1.7	3.5-15.0	0.64	1.4	40	ESP7
A	SLE023-A1000-S4Q	1464874	1/4	1000	0.2-2.3	1.8-20.3	0.4-2.3	3.5-20.3	0.64	1.4	40	ESP7
A	SLE032-A750-S4Q	1464884	1/4	750	0.2-3.2	1.8-28.3	1.5-3.2	13.3-28.3	0.64	1.4	40	ESP7
A	SLE047-A550-S4Q	1464894	1/4	550	0.2-4.7	1.8-41.6	1.5-4.7	13.3-41.6	0.64	1.4	40	ESP7
LEVER START - LOW VOLTAGE - CLUTCH CONTROL - SHUT OFF												
B	SLE012-L2000-S4Q	1464904	1/4	2000	0.4-1.2	3.5-10.6	0.4-1.2	3.5-10.6	0.68	1.5	40	ESP7
B	SLE017-L1500-S4Q	1464914	1/4	1500	0.4-1.7	3.5-15.0	0.4-1.7	3.5-15.0	0.68	1.5	40	ESP7
B	SLE023-L1000-S4Q	1464924	1/4	1000	0.4-2.3	3.5-20.3	0.4-2.3	3.5-20.3	0.68	1.5	40	ESP7
B	SLE032-L750-S4Q	1464934	1/4	750	0.4-3.2	3.5-28.3	1.5-3.2	13.3-28.3	0.68	1.5	40	ESP7
B	SLE047-L550-S4Q	1464944	1/4	550	0.4-4.7	3.5-41.6	1.5-4.7	13.3-41.6	0.68	1.5	40	ESP7
B	SLE037-L200-S4Q	615 165 373 0	1/4	200	0.4-3.7	3.5-32.3	1.1-3.7	9.7-32.8	0.68	1.5	40	ESP7



SLE - In-line screwdrivers

2.0 to 4.5 Nm (17.7 to 39.8 in.lb) - 550 to 1500 rpm



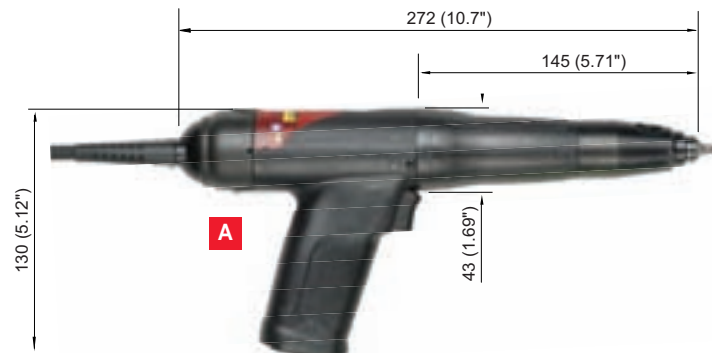
Accessories: see page 63

PIC REF	MODEL	PART NUMBER	OUTPUT HEX	FREE SPEED	TORQUE RANGE		FITTED SPRING		WEIGHT		VOLTAGE	CONTROLLER
			in.	rpm	Nm	in.lb	Nm	in.lb	kg	lb	VDC	
PUSH START - LOW VOLTAGE - CURRENT CONTROL - SHUT OFF												
A	SLE026-A1500-C4Q	1465414	1/4	1500	2.0-2.6	17.7-23.0	1.4-1.6	12.3-14.1	0.6	1.3	40	ESP7
A	SLE030-A1000-C4Q	1465424	1/4	1000	2.4-3.0	21.2-26.5	1.8-2.1	15.9-18.5	0.6	1.3	40	ESP7
A	SLE036-A750-C4Q	1465434	1/4	750	2.4-3.6	21.2-31.8	1.8-2.8	15.9-24.7	0.6	1.3	40	ESP7
A	SLE045-A550-C4Q	1465444	1/4	550	2.4-4.5	21.2-39.8	1.9-3.8	16.8-33.6	0.6	1.3	40	ESP7
LEVER START - LOW VOLTAGE - CURRENT CONTROL - SHUT OFF												
B	SLE026-L1500-C4Q	1465884	1/4	1500	2.0-2.6	17.7-23.0	1.4-1.6	12.3-14.1	0.64	1.4	40	ESP7
B	SLE030-L1000-C4Q	1465894	1/4	1000	2.4-3.0	21.2-26.5	1.8-2.1	15.9-18.5	0.64	1.4	40	ESP7
B	SLE036-L750-C4Q	1465904	1/4	750	2.4-3.6	21.2-31.8	1.8-2.8	15.9-24.7	0.64	1.4	40	ESP7
B	SLE045-L550-C4Q	1465914	1/4	550	2.4-4.5	21.2-39.8	1.9-3.8	16.8-33.6	0.64	1.4	40	ESP7

SLE - Pistol grip screwdrivers



0.4 to 4.7 Nm (3.5 to 41.6 in.lb) - 550 to 2000 rpm



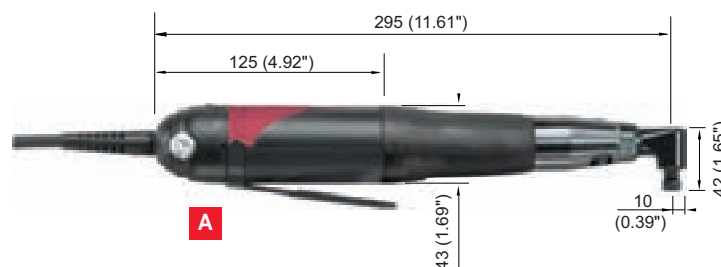
Accessories: see page 63

PIC REF	MODEL	PART NUMBER	OUTPUT HEX	FREE SPEED	TORQUE RANGE		FITTED SPRING		WEIGHT		VOLTAGE	CONTROLLER
			in.	rpm	Nm	in.lb	Nm	in.lb	kg	lb	VDC	
TRIGGER START - LOW VOLTAGE - CLUTCH CONTROL - SHUT OFF												
A	SLE012-T2000-S4Q	1465004	1/4	2000	0.4-1.2	3.5-10.6	0.4-1.2	3.5-10.6	0.71	1.6	40	ESP7
A	SLE017-T1500-S4Q	1465014	1/4	1500	0.4-1.7	3.5-15.0	0.4-1.7	3.5-15.0	0.71	1.6	40	ESP7
A	SLE023-T1000-S4Q	1465024	1/4	1000	0.4-2.3	3.5-20.3	0.4-2.3	3.5-20.3	0.71	1.6	40	ESP7
A	SLE032-T750-S4Q	1465034	1/4	750	0.4-3.2	3.5-28.3	1.5-3.2	13.3-28.3	0.71	1.6	40	ESP7
A	SLE047-T550-S4Q	1465044	1/4	550	0.4-4.7	3.5-41.6	1.5-4.7	13.3-41.6	0.71	1.6	40	ESP7

SLE - Angle head screwdrivers



0.4 to 4.7 Nm (3.5 to 41.6 in.lb) - 550 to 2000 rpm



Accessories: see page 63

PIC REF	MODEL	PART NUMBER	OUTPUT HEX	FREE SPEED	TORQUE RANGE		FITTED SPRING		WEIGHT		VOLTAGE	CONTROLLER
			in.	rpm	Nm	in.lb	Nm	in.lb	kg	lb	VDC	
LEVER START - LOW VOLTAGE - CLUTCH CONTROL - SHUT OFF												
A	SLE012-L2000-S90A4H	1464954	1/4	2000	0.4-1.2	3.5-10.6	0.4-1.2	3.5-10.6	0.81	1.8	40	ESP7
A	SLE017-L1500-S90A4H	1464964	1/4	1500	0.4-1.7	3.5-15.0	0.4-1.7	3.5-15.0	0.81	1.8	40	ESP7
A	SLE023-L1000-S90A4H	1464974	1/4	1000	0.4-2.3	3.5-20.3	0.4-2.3	3.5-20.3	0.81	1.8	40	ESP7
A	SLE032-L750-S90A4H	1464984	1/4	750	0.4-3.2	3.5-28.3	1.5-3.2	13.3-28.3	0.81	1.8	40	ESP7
A	SLE047-L550-S90A4H	1464994	1/4	550	0.4-4.7	3.5-41.6	1.5-4.7	13.3-41.6	0.81	1.8	40	ESP7

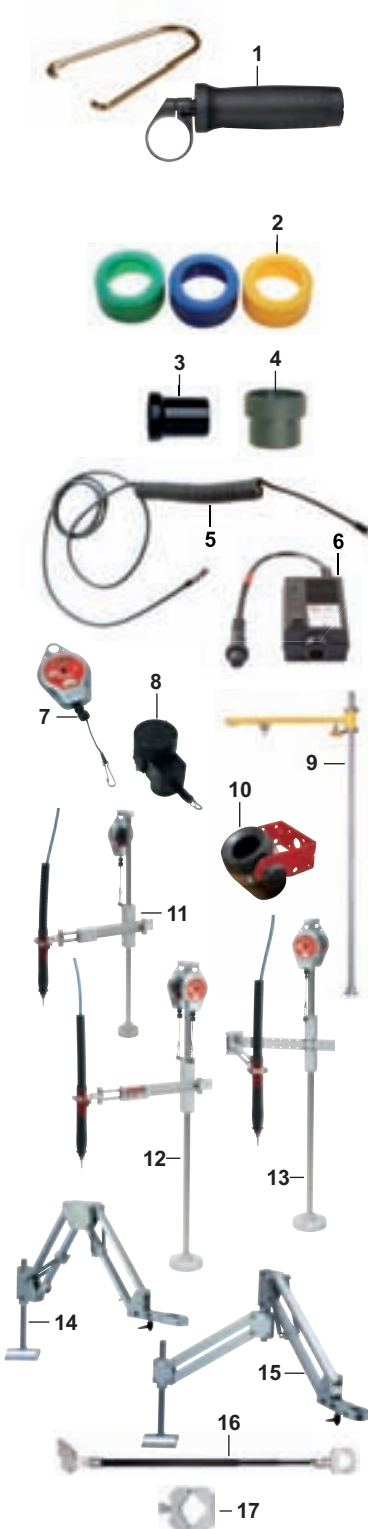
SLC / SLK / SLE

ACCESSORIES INCLUDED

ITEM	SLC	SLK	SLE
• Suspension bail	615 360 222 0		443703
1 Side handle for 550rpm			467033
• Clutch Adjustment Keys			69773/443713
• Tool / Controller cable L = 2.5m (8.2ft)	615 360 223 0		
• Cable L = 1.83m (6ft)		615 360 001 0	

OPTIONAL ACCESSORIES

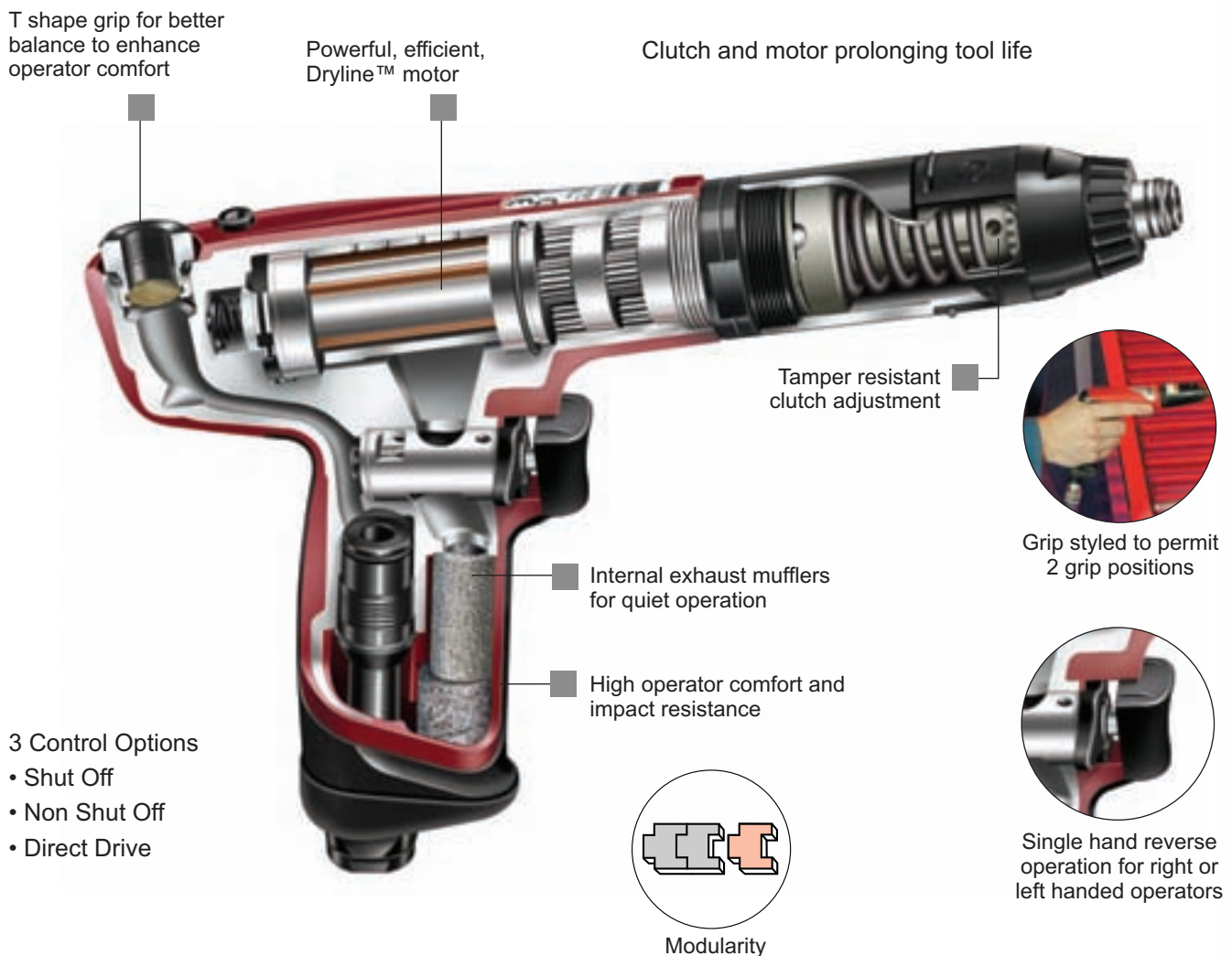
ITEM	SLC	SLK	SLE
1 Side Handle	615 397 016 0	615 396 861 0	467033
• Clutch cover for angle head			443863
2 Color ring (3)	615 397 008 5		
3 Torque fixing ring for SLK003 / 007 / 010		615 225 053 0	
3 Torque fixing ring for SLK011 / 015		615 225 054 0	
3 Torque fixing ring for SLK017 / 023 / 029		615 225 096 0	
3 Torque fixing ring for SLK022 / 031 / 047		615 225 090 0	
4 Adaptor for SLK003 / 007 / 010		615 225 065 0	
4 Adaptor for SLK011 / 015		615 225 066 0	
4 Adaptor for SLK022 / 031 / 047		438963	
• Kit of 3 color fixing ring for SLK022 / 031 / 047		615 225 091 0	
• Cable extension L = 2m (6.6ft)	615 917 593 0		
5 Spiral cable L = 2m (6.6ft)	615 917 594 0		
• M20 adaptor	615 567 132 0		
• Cable L = 2.74m (9ft)		615 360 217 0	
6 Slow-start control module - SSCM1		615 932 644 0	
• Lever Conversion Kit			467853
Trigger Conversion Kit (4 parts required)			
• Pistol Grip			473803
• Switch Assembly			473743
• Trigger Assembly			473843
• Spring			473923
Clutch Spring for SLE In-line model, Push start - Clutch control			
• Clutch Spring for low torque, 0.2-0.4 Nm (1.8-3.5 in.lb)			179923
Balancers and Holster			
7 Spring Suspension Balancer	50522	50522	50522
8 Reaction Free Self Lock Balancer	54422	54422	54422
• Suspension Shackle			615 571 056 0
• Suspension Shackle Rotary			615 396 228 0
9 Bench Mounted Swing Arm	66542	66542	66542
10 Tool Holster DTH-42	107892	107892	107892
Bench Stands (for more information see pages 114-117)			
11 D53-10 Stand	615 804 571 0	615 804 571 0	615 804 571 0
12 D53-20 Stand	388163	388163	388163
12 D53-20X Stand extended reach	388173	388173	388173
13 D53-20S Swivel stand	615 804 572 0	615 804 572 0	615 804 572 0
• Tool clamp (nose mount)	615 396 616 0		615 396 616 0
• Tool clamp (top mount)	615 396 628 0		615 396 628 0
14 D57 Balancing Arm	408903	408903	408903
14 D57X Balancing Arm, extended reach	408913	408913	408913
15 D58 Balancing Arm with Swivel	408923	408923	408923
• Tool clamp (nose mount)	615 396 614 0	615 396 614 0	
• Tool clamp (top mount)	615 396 629 0		615 396 629 0
Telescopic Reaction Arm (for more information see page 117)			
16 TRA12 Telescopic Reaction Arm	615 396 532 0	615 396 532 0	615 396 532 0
16 TRA25 Telescopic Reaction Arm	615 396 533 0	615 396 533 0	615 396 533 0
17 TRA Circular adaptor for stand	615 595 380 0	615 595 380 0	615 595 380 0
Vacuum Pick Up - Order Pick Up kit, Finder Sleeve and Vacuum Source			
• Clutch cover threaded			443833
• Vacuum Pick Up Kit			108892
• Finder Sleeve Blank - Plastic			464103
• Finder Sleeve Blank - Steel			464093
• Vacuum Source for use with DU Balancer. Reporting box			51482
• Vacuum Source AV201 for use with Filter/Regulator Unit			112063





Pneumatic fastening tools

Shut Off, Non Shut Off, Direct Drive, Automatic Reverse

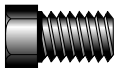

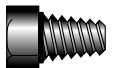
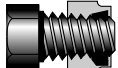

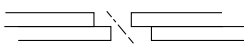







Tool Selection

Criteria

- Type of Fastener/Component
- Joint integrity
- Torque Required
- Tool Orientation and Operator Reference
- Productivity
- Access

Type of Fastener/Component

FASTENER/COMPONENT	RECOMMENDED TOOL TYPE	FASTENER/COMPONENT	RECOMMENDED TOOL TYPE
Machine Screw / Nut 	Shut Off / Impulse / Non Shut Off	Screws with Adhesive 	HLT / Non Shut Off / Impulse
Thread Rolling / Forming 	Shut Off / HLT / Impulse / Direct Drive	Self Lock Nuts 	HLT / Non Shut Off / Impulse
Self Tapping 	Non Shut Off / HLT / Direct Drive	Misaligned Holes 	HLT
Self Tapping in Plastic / Thin Materials 	Shut Off / HLT	Variable Size Holes 	HLT
Self Drilling 	Non Shut Off / HLT / Direct Drive	Fragile Components 	HLT / Low Voltage Screwdrivers
Wood Screws 	Non Shut Off / Direct Drive		



Fastener Torque Values

	MACHINE SCREWS					THREAD FORMING/ ROLLING SCREWS
ISO	4.6	5.8	8.8	10.9	12.9	8.8
THREAD SIZE	RECOMMENDED TORQUE (Nm)					RECOMMENDED TORQUE (Nm)
M1.6	0.07	0.12	0.19	–	–	–
M2	0.15	0.24	0.38	–	–	0.5
M2.2	0.19	0.31	0.51	–	–	–
M2.5	0.28	0.48	0.77	–	–	–
M3	0.51	0.85	1.4	1.9	2.3	1.4
M3.5	0.8	1.34	2.2	3.0	3.6	–
M4	1.2	2.0	3.2	4.5	5.4	3.2
M5	2.4	4.0	6.4	9.0	10.7	6.5
M6	4.1	6.8	10.9	15.3	18.3	11
M8	9.8	16.3	26.1	36.8	44.1	26
M10	19.3	32.2	51.5	72	86.9	52
M12	33.6	56	90	126	151	91
M14	53	89	142	200	239	–
M16	82	136	218	307	368	–
M18	114	190	304	428	513	–
M20	160	266	426	598	718	–
M22	215	358	573	806	967	–

SELF TAPPING/DRILLING SCREWS	
THREAD SIZE	RECOMMENDED TORQUE (Nm)
ST2.2 (B2)	0.2
ST2.9 (B4)	1.0
ST3.5 (B6)	1.8
ST4.2 (B8)	2.9
ST4.8 (B10)	4.2
ST5.5 (B12)	6.7
ST6.3 (B14)	9.1

Conversion Factors

Nm x 141.6 = oz in
 Nm x 8.851 = in lb
 Nm x 0.73756 = ft lb
 Nm x 0.102 = kgf m/kpm
 Nm x 10.2 = kgf cm

Torque figures should be used as a guide only
 Table assumes fasteners are new, lightly lubricated and of a standard finish
 For lock nuts with a nylon insert, +10%

For non metric threads please use the following data as a guide.

Recommended Maximum Torque Values – UNC Threads

THREAD SIZE	QUALITY P		QUALITY S		QUALITY T	
	Nm	ft.lb	Nm	ft.lb	Nm	ft.lb
1/4	5.43	4.00	10.3	7.60	11.1	8.19
5/16	11.2	8.26	21.3	15.71	23.0	16.96
3/8	19.9	14.68	37.9	27.95	40.9	30.17
7/16	31.9	23.53	60.7	44.77	65.5	48.31
1/2	48.8	36.00	92.7	68.37	100	73.76
9/16	70.4	51.92	134	98.83	144	106
5/8	97.4	71.84	185	136.45	200	147.5
3/4	178	131.3	338	249.3	364	268.5
7/8	279	205.8	530	391	572	422
1	418	308.3	795	586	858	633
1 1/8	593	437.4	1126	830	1216	897
1 1/4	837	617.3	1591	1173	1717	1266
1 3/8	1096	808.4	2083	1536	2248	1658
1 1/2	1456	1074	2767	2041	2987	2203

Recommended Maximum Torque Values – UNF Threads

THREAD SIZE	QUALITY P		QUALITY S		QUALITY T	
	Nm	ft.lb	Nm	ft.lb	Nm	ft.lb
1/4	6.28	4.63	11.9	8.78	12.9	9.51
5/16	12.5	9.22	23.8	17.55	25.7	18.96
3/8	22.7	16.74	43.2	31.9	46.6	34.4
7/16	35.9	26.5	68.2	50.3	73.6	54.3
1/2	55.4	40.9	105	77.4	114	84.0
9/16	79.0	58.3	150	111	162	119
5/8	111	81.9	210	155	227	167
3/4	195	144	370	273	399	294
7/8	309	228	587	433	634	468
1	459	339	873	644	942	695
1 1/8	667	492	1267	934	1368	1009
1 1/4	925	682	1757	1296	1896	1398
1 3/8	1252	923	2378	1754	2567	1893
1 1/2	1642	1211	3119	2300	3367	2482

Quality P = approximately ISO 4.6

Quality S/T = approximately ISO 8.8

Quality S = ANSI Grade 5



Productivity and Ergonomics

Access



90° Angle Heads



45° Angle Heads



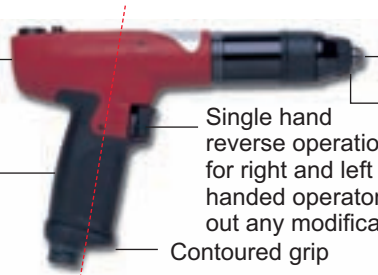
Crowfoot
Open Ended Wrenches

Ergonomic Benefits

- Lightweight
- Short Length
- Light Start Load

Pistol options of 'P' or 'T' style to suit the application and operator preference

'Warm feel' friction grip



Single hand reverse operation for right and left handed operators without any modification

Contoured grip

Correct grip orientation

Tapered nose for improved visibility

Tamper resistant clutch adjustment

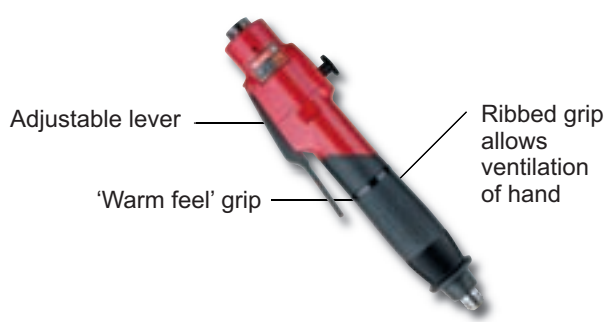


Contoured grip

Friction grip

Thrust bump

Tamper resistant clutch adjustment



Adjustable lever

'Warm feel' grip

Ribbed grip allows ventilation of hand

For low vibration exposure and high productivity, select shut off tools where possible

Tool orientation and Operator preference



P Shape

Self Tapping/Forming/Cutting Screws
Multi orientation
Top air inlet
Requires balanced tool

Use P Shape - arm in line with body of tool for thrust
Use P Shape - allows wrist to rotate into position
Can only use T Shape
Use T Shape - especially with screwfeeder

Button Reverse versus Rotary Reverse

Rapid Reverse Required
Thread Chasing Cleaning
Rivnuts/Threaded Fasteners
Long Periods in Reverse

Use button reverse
Use button reverse (auto reverse for blind holes)
Use auto reverse tools
Use rotary reverse

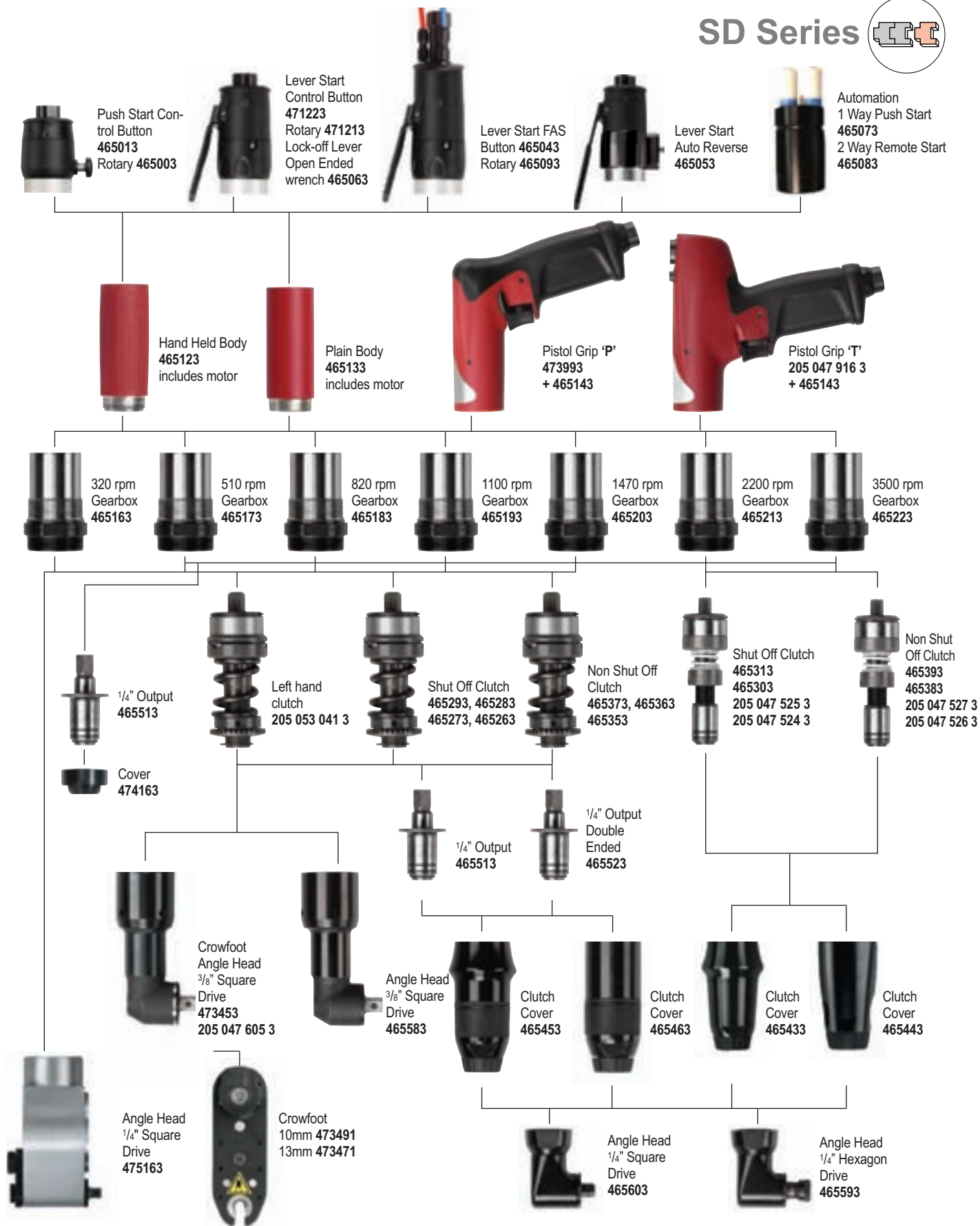
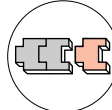
Push Start versus Lever Start

Fast Cycle Rate
Single Hand Operation Required
Need to Align/Position Components First

Use push start
Use push start
Use lever start or push + trigger start (SBP/SDP only)

Modularity

SD Series

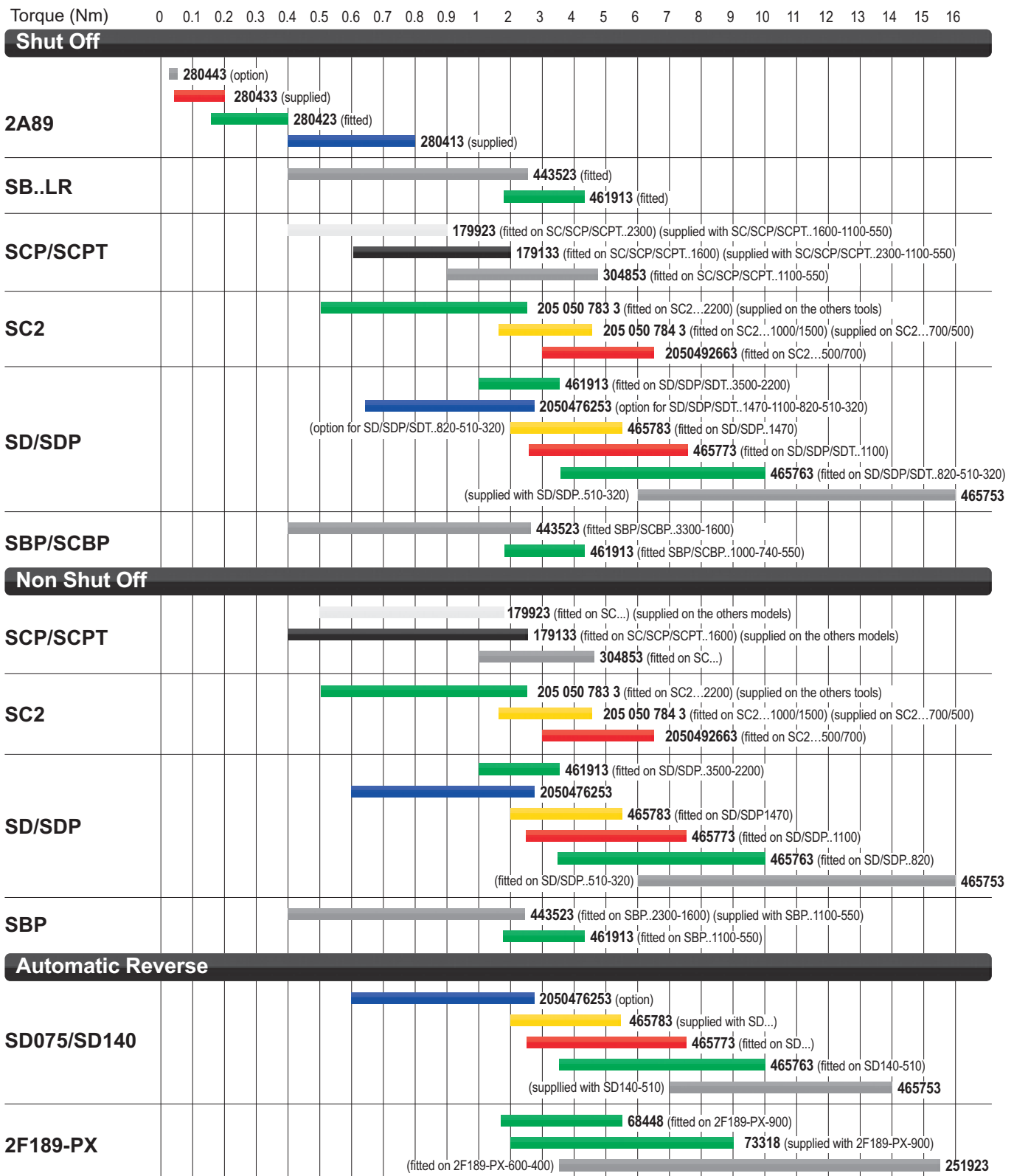


Modularity, a concept for all Desoutter pneumatic screwdrivers range

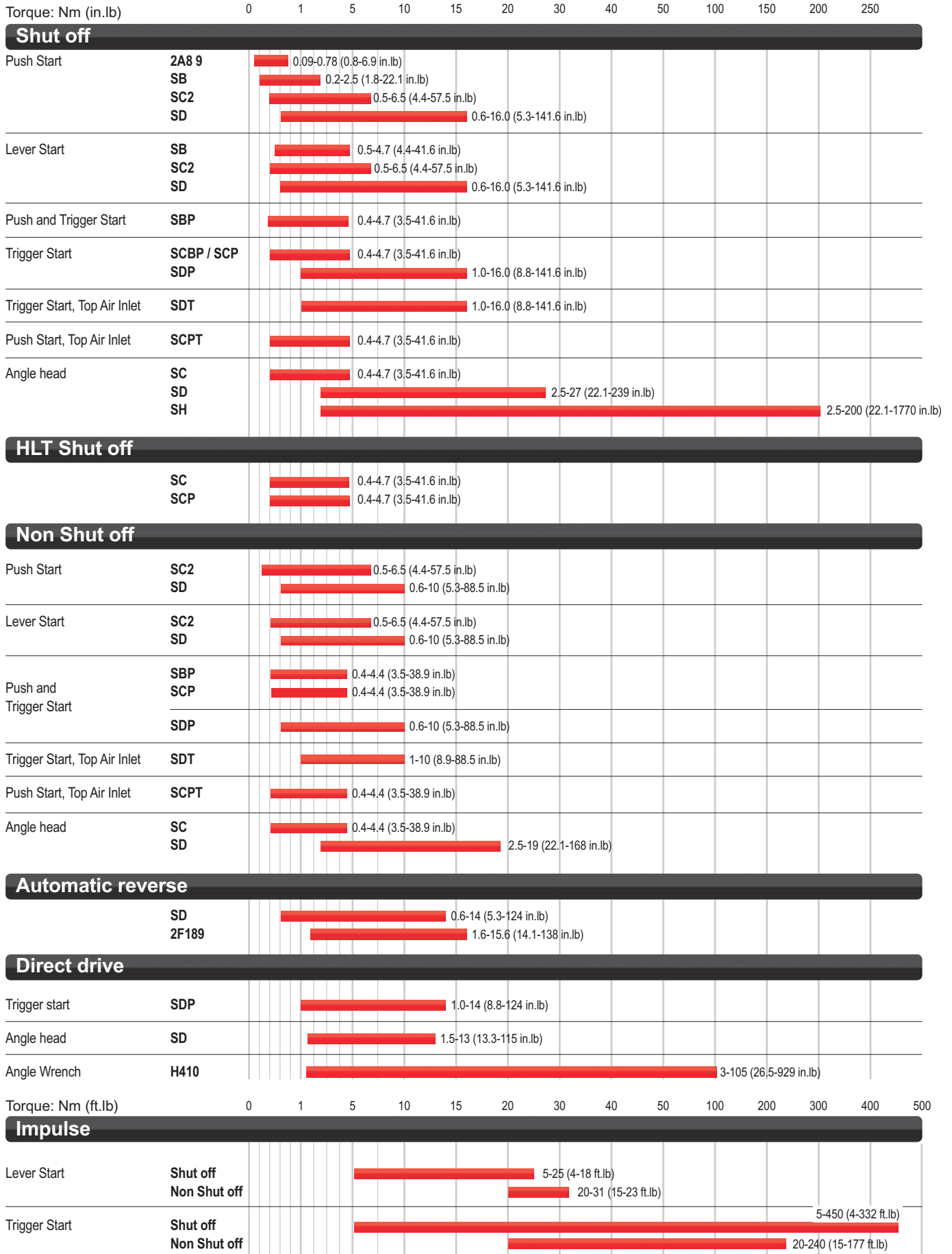
Screwdriver Torque Ranges

Torque output of the range of shut off and non shut off screwdrivers is controlled by the type of spring in the clutch assembly. The overall torque range, together with that of the factory fitted spring on a soft joint to ISO5393 are listed in the tables on the following pages. The chart below provides an indication of the torque ranges for the optional colour coded clutch springs together with their respective part numbers (some are included with certain tools). As a general rule, the tool should be fitted with a spring which ensures the torque required falls within 20 to 80% of the operating range.

Please note that the torque range of specific speed tools may alter slightly from that shown below and for this reason the chart should be used as a guide only.



Tool Types and Torque Ranges



Screwdrivers - Shut off - Push start

0.09 to 16 Nm (0.8 to 142 in.lb) - 320 to 3500 rpm



Model	ø A mm (in.)	ø B mm (in.)	L mm (in.)
2A89..	27 (1.06")		178 (7")
SB..	32 (1.26")		197 (7.76")
SC2		37.4 (1.47")	245 (9.65")
SD023..3500	38.7 (1.52")	44 (1.73")	227 (8.94")
SD035..2200	38.7 (1.52")	44 (1.73")	227 (8.94")
SD055..1470	38.7 (1.52")	44 (1.73")	253 (10")
SD075..1100	38.7 (1.52")	44 (1.73")	253 (10")
SD100..820	38.7 (1.52")	44 (1.73")	253 (10")
SD140..510	38.7 (1.52")	44 (1.73")	253 (10")
SD160..320	38.7 (1.52")	44 (1.73")	253 (10")

Types B to C, 1/4" double ended and 5mm bit holder optional

Accessories: see page 88

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT HEX	TORQUE RANGE		FITTED SPRING		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
					Nm	in.lb	Nm	in.lb	kg	lb.	l/s	cfm	in.	mm	in.
A	2A89-A-1300	1225434	1300	3mm	0.09-0.56	0.8-4.9	0.15-0.43	1.3-3.8	0.21	0.62	2.2	4.7	M5	3	1/8
A	2A89-A-700	1225514	700	3mm	0.09-0.75	0.8-6.6	0.15-0.43	1.3-3.8	0.21	0.62	2.2	4.7	M5	3	1/8
A	2A89-A-400	1225694	400	3mm	0.09-0.78	0.8-6.9	0.15-0.43	1.3-3.8	0.21	0.62	2.2	4.7	M5	3	1/8
A	2A89-A-1300	1223154	1300	1/4	0.09-0.56	0.8-4.9	0.15-0.43	1.3-3.8	0.21	0.62	2.2	4.7	M5	3	1/8
A	2A89-A-700	1223234	700	1/4	0.09-0.75	0.8-6.6	0.15-0.43	1.3-3.8	0.21	0.62	2.2	4.7	M5	3	1/8
A	2A89-A-400	1223314	400	1/4	0.09-0.78	0.8-6.9	0.15-0.43	1.3-3.8	0.21	0.62	2.2	4.7	M5	3	1/8
B	SB011-AB1600-S4Q	1460644	1600	1/4	0.4-1.1	3.5-9.7	0.4-1.1	3.5-9.7	0.42	0.93	4.1	8.7	1/8	5	3/16
B	SB015-AB1100-S4Q	1460634	1100	1/4	0.4-1.5	3.5-13	0.4-1.5	3.5-13	0.42	0.93	4.1	8.7	1/8	5	3/16
B	SB025-AB750-S4Q	1460624	750	1/4	0.4-2.5	3.5-22	0.4-2.5	3.5-22	0.42	0.93	4.1	8.7	1/8	5	3/16
B	SB025-AB500-S4Q	1460684	500	1/4	0.4-2.5	3.5-22	0.4-2.5	3.5-22	0.42	0.93	4.1	8.7	1/8	5	3/16
C	SB011-AR1600-S4Q	1460524	1600	1/4	0.4-1.1	3.5-9.7	0.4-1.1	3.5-9.7	0.42	0.93	4.1	8.7	1/8	5	3/16
C	SB015-AR1100-S4Q	1460514	1100	1/4	0.4-1.5	3.5-13	0.4-1.5	3.5-13	0.42	0.93	4.1	8.7	1/8	5	3/16
C	SB025-AR750-S4Q	1460504	750	1/4	0.4-2.5	3.5-22	0.4-2.5	3.5-22	0.42	0.93	4.1	8.7	1/8	5	3/16
C	SB025-AR500-S4Q	1460564	500	1/4	0.4-2.5	3.5-22	0.4-2.5	3.5-22	0.42	0.93	4.1	8.7	1/8	5	3/16
D	SC2-025-A2200-S4Q	205 147 269 4	2200	1/4	0.5-2.5	4.4-22	0.5-2.5	4.4-22.1	0.69	1.52	7.0	14.8	1/4	6	1/4
D	SC2-035-A1500-S4Q	205 147 268 4	1450	1/4	0.5-3.5	4.4-30.8	1.7-3.5	15.0-30.9	0.69	1.52	7.0	14.8	1/4	6	1/4
D	SC2-045-A1000-S4Q	205 147 267 4	1000	1/4	0.5-4.5	4.4-39.6	1.7-4.5	15.0-39.8	0.69	1.52	7.0	14.8	1/4	6	1/4
D	SC2-055-A700-S4Q	205 147 266 4	700	1/4	0.5-5.5	4.4-48.4	3.0-5.5	26.5-48.6	0.69	1.52	7.0	14.8	1/4	6	1/4
D	SC2-065-A500-S4Q	205 147 265 4	480	1/4	0.5-6.5	4.4-57.2	3.0-6.5	26.5-57.5	0.69	1.52	7.0	14.8	1/4	6	1/4
E	SD023-AB3500-S4Q	1462834	3500	1/4	1.0-2.3	8.9-20.3	1.0-2.3	8.9-20.3	0.73	1.61	8.7	18.4	1/4	10	3/8
E	SD035-AB2200-S4Q	1462824	2200	1/4	1.0-3.5	8.9-31	1.0-3.5	8.9-31	0.73	1.61	8.7	18.4	1/4	10	3/8
E	SD055-AB1470-S4Q	1462814	1470	1/4	0.6-5.5	5.3-48.7	2.0-5.5	17.7-48.7	0.89	1.96	8.7	18.4	1/4	10	3/8
E	SD075-AB1100-S4Q	1462804	1100	1/4	0.6-7.5	5.3-66.4	2.5-7.5	22.0-66.4	0.89	1.96	8.7	18.4	1/4	10	3/8
E	SD100-AB820-S4Q	1462794	820	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	0.89	1.96	8.7	18.4	1/4	10	3/8
E	SD140-AB510-S4Q	1462784	510	1/4	0.6-14	5.3-124	3.5-10	31.0-88.5	0.89	1.96	8.7	18.4	1/4	10	3/8
E	SD160-AB320-S4Q	1462774	320	1/4	0.6-16	5.3-142	3.5-10	31.0-88.5	0.89	1.96	8.7	18.4	1/4	10	3/8
F	SD023-AR3500-S4Q	1462764	3500	1/4	1.0-2.3	8.9-20.4	1.0-2.3	8.9-20.4	0.73	1.61	8.7	18.4	1/4	10	3/8
F	SD035-AR2200-S4Q	1462754	2200	1/4	1.0-3.5	8.9-31	1.0-3.5	8.9-31	0.73	1.61	8.7	18.4	1/4	10	3/8
F	SD055-AR1470-S4Q	1462744	1470	1/4	0.6-5.5	5.3-48.7	2.0-5.5	17.7-48.7	0.89	1.96	8.7	18.4	1/4	10	3/8
F	SD075-AR1100-S4Q	1462734	1100	1/4	0.6-7.5	5.3-66.4	2.5-7.5	22.1-66.4	0.89	1.96	8.7	18.4	1/4	10	3/8
F	SD100-AR820-S4Q	1462724	820	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	0.89	1.96	8.7	18.4	1/4	10	3/8
F	SD140-AR510-S4Q	1462714	510	1/4	0.6-14	5.3-124	3.5-10	31.0-88.5	0.89	1.96	8.7	18.4	1/4	10	3/8
F	SD160-AR320-S4Q	1462704	320	1/4	0.6-16	5.3-142	3.5-10	31.0-88.5	0.89	1.96	8.7	18.4	1/4	10	3/8

Screwdrivers - Shut off - Lever start

0.4 to 16 Nm (3.5 to 142 in.lb) - 320 to 3500 rpm



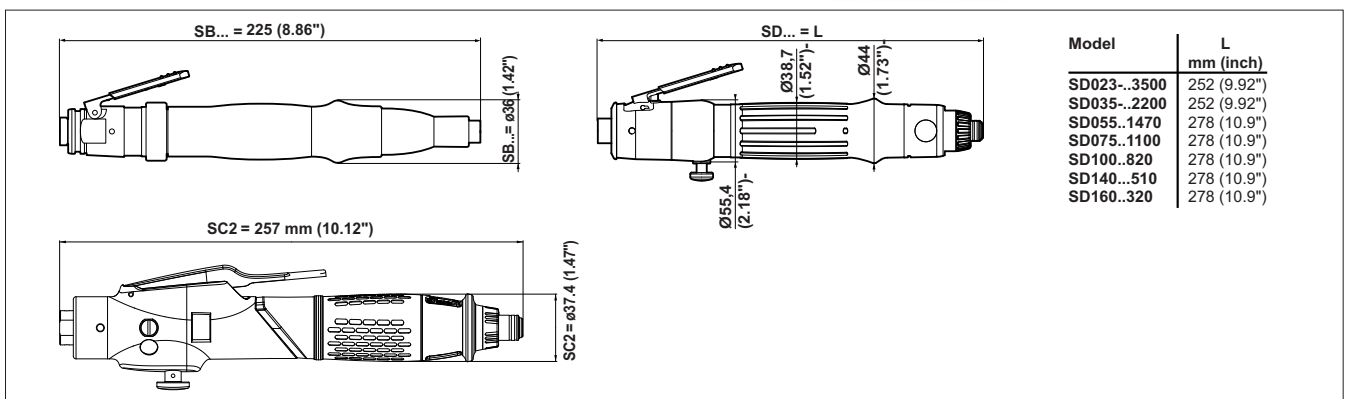
Easy integration with FAS3000 or POSCO



See page 49



See page 76



Model	L mm (inch)
SD023...3500	252 (9.92")
SD035...2200	252 (9.92")
SD055...1470	278 (10.9")
SD075...1100	278 (10.9")
SD100...820	278 (10.9")
SD140...510	278 (10.9")
SD160...320	278 (10.9")

Accessories: see page 88

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT HEX	TORQUE RANGE		FITTED SPRING		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
					Nm	in.lb	Nm	in.lb	kg	lb.	l/s	cfm	in.	mm	in.
A	SB021-LR2000-S4Q	205 147 509 4	2000	1/4	0.5-2.1	4.4-18.6	0.5-2.1	4.4-18.6	0.61	1.34	7.3	15.5	1/8	6	1/4
A	SB021-LR1400-S4Q	205 147 508 4	1400	1/4	0.5-2.1	4.4-18.6	0.5-2.1	4.4-18.6	0.61	1.34	7.3	15.5	1/8	6	1/4
A	SB043-LR1050-S4Q	205 147 507 4	1050	1/4	0.4-4.3	3.5-38	0.4-2.1	3.5-18.6	0.61	1.34	7.3	15.5	1/8	6	1/4
A	SB047-LR500-S4Q	205 147 506 4	500	1/4	0.4-4.7	3.5-41.6	0.4-2.1	3.5-18.6	0.61	1.34	7.3	15.5	1/8	6	1/4
B	SC2-025-L2200-S4Q	205 147 283 4	2200	1/4	0.5-2.5	4.4-22	0.5-2.5	4.4-22.1	0.69	1.52	7.0	14.8	1/4	6	1/4
B	SC2-035-L1500-S4Q	205 147 282 4	1450	1/4	0.5-3.5	4.4-30.8	1.7-3.5	15.0-30.9	0.69	1.52	7.0	14.8	1/4	6	1/4
B	SC2-045-L1000-S4Q	205 147 281 4	1000	1/4	0.5-4.5	4.4-39.6	1.7-4.5	15.0-39.8	0.69	1.52	7.0	14.8	1/4	6	1/4
B	SC2-055-L700-S4Q	205 147 280 4	700	1/4	0.5-5.5	4.4-48.4	3.0-5.5	26.5-48.6	0.69	1.52	7.0	14.8	1/4	6	1/4
B	SC2-065-L500-S4Q	205 147 279 4	480	1/4	0.5-6.5	4.4-57.2	3.0-6.5	26.5-57.5	0.69	1.52	7.0	14.8	1/4	6	1/4
C	SD023-LB3500-S4Q	1463094	3500	1/4	1.0-2.3	8.9-20.4	1.0-2.3	8.9-20.4	0.76	1.67	8.7	18.4	1/4	10	3/8
C	SD035-LB2200-S4Q	1463084	2200	1/4	1.0-3.5	8.9-31	1.0-3.5	8.9-31	0.76	1.67	8.7	18.4	1/4	10	3/8
C	SD055-LB1470-S4Q	1463074	1470	1/4	0.6-5.5	5.3-48.7	2.0-5.5	17.7-48.7	0.92	2.03	8.7	18.4	1/4	10	3/8
C	SD075-LB1100-S4Q	1463064	1100	1/4	0.6-7.5	5.3-66.4	2.5-7.5	22.1-66.4	0.92	2.03	8.7	18.4	1/4	10	3/8
C	SD100-LB820-S4Q	1463054	820	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	0.92	2.03	8.7	18.4	1/4	10	3/8
C	SD140-LB510-S4Q	1463044	510	1/4	0.6-14	5.3-124	3.5-10	31.0-88.5	0.92	2.03	8.7	18.4	1/4	10	3/8
C	SD160-LB320-S4Q	1463034	320	1/4	0.6-16	5.3-142	3.5-10	31.0-88.5	0.92	2.03	8.7	18.4	1/4	10	3/8
D	SD023-LR3500-S4Q	1463024	3500	1/4	1.0-2.3	8.9-20.4	1.0-2.3	8.9-20.4	0.76	1.67	8.7	18.4	1/4	10	3/8
D	SD035-LR2200-S4Q	1463014	2200	1/4	1.0-3.5	8.9-31	1.0-3.5	8.9-31	0.76	1.67	8.7	18.4	1/4	10	3/8
D	SD055-LR1470-S4Q	1463004	1470	1/4	0.6-5.5	5.3-48.7	2.0-5.5	17.7-48.7	0.92	2.03	8.7	18.4	1/4	10	3/8
D	SD075-LR1100-S4Q	1462994	1100	1/4	0.6-7.5	5.3-66.4	2.5-7.5	22.1-66.4	0.92	2.03	8.7	18.4	1/4	10	3/8
D	SD100-LR820-S4Q	1462984	820	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	0.92	2.03	8.7	18.4	1/4	10	3/8
D	SD140-LR510-S4Q	1462974	510	1/4	0.6-14	5.3-124	3.5-10	31.0-88.5	0.92	2.03	8.7	18.4	1/4	10	3/8
D	SD160-LR320-S4Q	1462964	320	1/4	0.6-16	5.3-142	3.5-10	31.0-88.5	0.92	2.03	8.7	18.4	1/4	10	3/8

Screwdrivers - Shut off - Pistol grip

0.4 to 16 Nm (3.5 to 142 in.lb) - 180 to 3500 rpm



Model	ØA mm (in.)	L mm (in.)	Model	L mm (in.)
SBP..	31 (1.22")	182 (7.17")	SDT023..3500	212 (8.35")
SCBP..	31 (1.22")	182 (7.17")	SDT035..1100	212 (8.35")
SCP...	34 (1.34")	228 (8.97")	SDT035..2200	212 (8.35")
SCPT...	34 (1.34")	230 (9.06")	SDT055..1470	238 (9.37")
SDP023..3400	36 (1.42")	194 (7.64")	SDT075..1100	238 (9.37")
SDP035..2100	36 (1.42")	194 (7.64")	SDT100..800	238 (9.37")
SDP055..1400	36 (1.42")	220 (8.66")	SDT140..510	238 (9.37")
SDP075..1050	36 (1.42")	220 (8.66")	SDT160..320	238 (9.37")
SDP100..780	36 (1.42")	220 (8.66")		
SDP140..490	36 (1.42")	220 (8.66")		
SDP160..300	36 (1.42")	220 (8.66")		
SDP045..180	36 (1.42")	220 (8.66")		

Types D and E, Top air inlet

Accessories: see page 88

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT HEX	TORQUE RANGE		FITTED SPRING		WEIGHT		AIR FLOW		AIR INLET		HOSE INT. Ø	
			rpm	in.	Nm	in.lb	Nm	in.lb	kg	lb.	l/s	cfm	in.	mm	in.	

PUSH AND TRIGGER START

A	SBP021-T2300-S4Q	1462144	2300	1/4	0.4-2.1	3.5-18.6	0.4-2.1	3.5-18.6	0.82	1.81	6.5	13.8	1/8	6	1/4
A	SBP021-T1600-S4Q	1462154	1600	1/4	0.4-2.1	3.5-18.6	0.4-2.1	3.5-18.6	0.82	1.81	6.5	13.8	1/8	6	1/4
A	SBP043-T1100-S4Q	1462164	1100	1/4	0.4-4.3	3.5-38	1.8-4.3	15.9-38.0	0.82	1.81	6.5	13.8	1/8	6	1/4
A	SBP047-T550-S4Q	1462174	550	1/4	0.4-4.7	3.5-41.6	1.8-4.7	15.9-41.5	0.82	1.81	6.5	13.8	1/8	6	1/4

TRIGGER START

A	SCBP021-T2300-S4Q	1466374	2300	1/4	0.4-2.1	3.5-18.6	0.4-2.1	3.5-18.6	0.82	1.81	6.5	13.8	1/8	6	1/4
A	SCBP021-T1600-S4Q	1466364	1600	1/4	0.4-2.1	3.5-18.6	0.4-2.1	3.5-18.6	0.82	1.81	6.5	13.8	1/8	6	1/4
A	SCBP043-T1100-S4Q	1466354	1100	1/4	0.4-4.3	3.5-38	1.8-4.3	15.9-38	0.82	1.81	6.5	13.8	1/8	6	1/4
A	SCBP044-T740-S4Q	1466344	740	1/4	0.4-4.4	3.5-39	1.8-4.4	15.9-39	0.82	1.81	6.5	13.8	1/8	6	1/4
A	SCBP047-T550-S4Q	1466334	550	1/4	0.4-4.7	3.5-41.6	1.8-4.7	15.9-41.6	0.82	1.81	6.5	13.8	1/8	6	1/4
B	SCP021-T2300-S4Q	1456734	2300	1/4	0.4-2.1	3.5-18.6	0.4-0.9	3.5-7.9	0.86	1.89	6.5	13.8	1/8	6	1/4
B	SCP021-T1600-S4Q	1456744	1600	1/4	0.4-2.1	3.5-18.6	0.6-2.1	5.3-18.6	0.86	1.89	6.5	13.8	1/8	6	1/4
B	SCP043-T1100-S4Q	1456754	1100	1/4	0.4-4.3	3.5-38	0.9-4.3	7.9-38	0.86	1.89	6.5	13.8	1/8	6	1/4
B	SCP047-T550-S4Q	1456764	550	1/4	0.4-4.7	3.5-41.6	0.9-4.7	7.9-41.6	0.86	1.89	6.5	13.8	1/8	6	1/4
C	SDP023-T3400-S4Q	1465574	3400	1/4	1.0-2.3	8.9-20.3	1.0-2.3	8.9-20.3	0.9	1.98	9.0	19.1	1/4	10	3/8
C	SDP035-T2100-S4Q	1465564	2100	1/4	1.0-3.5	8.9-31	1.0-3.5	8.9-31	0.9	1.98	9.0	19.1	1/4	10	3/8
C	SDP055-T1400-S4Q	1465554	1400	1/4	1.0-5.5	8.9-48.7	1.0-5.5	8.9-48.7	1.0	2.20	9.0	19.1	1/4	10	3/8
C	SDP075-T1050-S4Q	1465544	1050	1/4	0.6-7.5	5.3-66.4	2.5-7.5	22.1-66.4	1.0	2.20	9.0	19.1	1/4	10	3/8
C	SDP100-T780-S4Q	1465534	780	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	1.0	2.20	9.0	19.1	1/4	10	3/8
C	SDP140-T490-S4Q	1465524	490	1/4	0.6-14	5.3-124	3.5-10	31.0-88.5	1.0	2.20	9.0	19.1	1/4	10	3/8
C	SDP160-T300-S4Q	1465514	300	1/4	0.6-16	5.3-142	3.5-10	31.0-88.5	1.0	2.20	9.0	19.1	1/4	10	3/8
C	SDP045-T180-S4Q	205 146 706 4	180	1/4	1.5-4.5	13.3-39.8	1.5-4.5	13.3-39.8	1.0	2.20	9.0	19.1	1/4	10	3/8
D	SDT023-T3500-S4Q	1465784	3500	1/4	1.0-2.3	8.9-20.3	1.0-2.3	8.9-20.3	1.1	2.42	9.0	19.1	1/4	10	3/8
D	SDT035-T1100-S4Q	205 147 623 4	1100	1/4	1.0-3.5	8.9-31	1.0-3.5	8.9-31	1.0	2.20	9.0	19.1	1/4	10	3/8
D	SDT035-T2200-S4Q	1465774	2200	1/4	1.0-3.5	8.9-31	1.0-3.5	8.9-31	1.1	2.42	9.0	19.1	1/4	10	3/8
D	SDT055-T1470-S4Q	1465764	1470	1/4	2.0-5.5	17.7-48.7	2.0-5.5	17.7-48.7	1.1	2.42	9.0	19.1	1/4	10	3/8
D	SDT075-T1100-S4Q	1465754	1100	1/4	2.5-7.5	22.1-66.4	2.5-7.5	22.1-66.4	1.1	2.42	9.0	19.1	1/4	10	3/8
D	SDT100-T820-S4Q	1465744	820	1/4	3.5-10	31.0-88.5	3.5-10	31.0-88.5	1.1	2.42	9.0	19.1	1/4	10	3/8
D	SDT140-T510-S4Q	1465734	510	1/4	3.5-14	31.0-124	3.5-10	31.0-88.5	1.1	2.42	9.0	19.1	1/4	10	3/8
D	SDT160-T320-S4Q	1465724	320	1/4	3.5-16	31.0-142	3.5-10	31.0-88.5	1.1	2.42	9.0	19.1	1/4	10	3/8

PUSH START, TOP AIR INLET

E	SCPT021-A2300-S4Q	1458974	2300	1/4	0.4-2.1	3.5-18.6	0.4-0.9	3.5-7.9	0.86	1.89	6.5	13.8	1/8	6	1/4
E	SCPT021-A1600-S4Q	1458934	1600	1/4	0.4-2.1	3.5-18.6	0.6-2.1	5.3-18.6	0.86	1.89	6.5	13.8	1/8	6	1/4
E	SCPT043-A1100-S4Q	1458894	1100	1/4	0.4-4.3	3.5-38	0.9-4.3	7.9-38.0	0.86	1.89	6.5	13.8	1/8	6	1/4
E	SCPT047-A550-S4Q	1458854	550	1/4	0.4-4.7	3.5-41.6	0.9-4.7	7.9-41.6	0.86	1.89	6.5	13.8	1/8	6	1/4

Screwdrivers - Shut off HLT

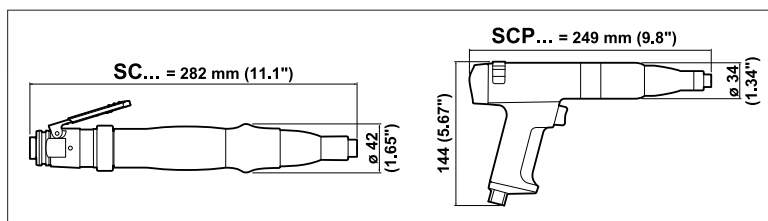
0.4 to 4.7 Nm (3.5 to 41.6 in.lb) - 550 to 1600 rpm



A

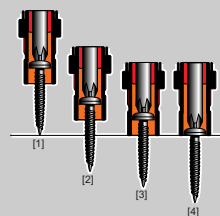


B

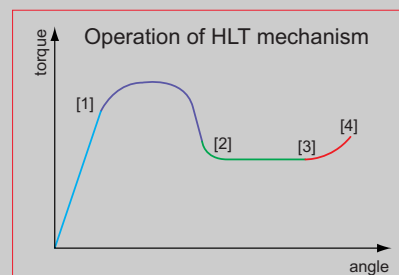


TYPICAL HLT CYCLE

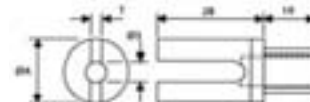
- 1 Tool starts to cut/form thread – direct drive
- 2 Thread is cut/formed, rundown continues – direct drive
- 3 Depth stop touches component, drive engages clutch
- 4 Final torque achieved, clutch operates and air supply is shut off



Depth stop changes tool from direct drive to clutch operation



C



D

DEPTH STOPS

PIC REF	PART NUMBER	LENGTH
		mm
C	440833	28
C	440843	48
C	440853	127

PIC REF	PART NUMBER	T	ØA
		mm	mm
D	440863*	5	25

* Supplied with tools

Accessories: see page 88

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT HEX	TORQUE RANGE		FITTED SPRING		WEIGHT		AIR FLOW	AIR INLET	HOSE INT. Ø		
			rpm	in.	Nm	in.lb	Nm	in.lb	kg	lb.	l/s	cfm	in.	mm	in.
A	SC009-L1600-HLT4M	1459644	1600	1/4	0.4-0.9	3.5-7.9	0.4-0.9	3.5-7.9	0.79	1.74	7	15.4	1/8	6	1/4
A	SC021-L1600-HLT4M	1459614	1600	1/4	0.6-2.1	5.3-18.6	0.6-2.1	5.3-18.6	0.79	1.74	7	15.4	1/8	6	1/4
A	SC022-L1100-HLT4M	1459654	1100	1/4	0.6-2.1	5.3-18.6	0.6-2.1	5.3-18.6	0.79	1.74	7	15.4	1/8	6	1/4
A	SC022-L550-HLT4M	1459664	550	1/4	0.6-2.1	5.3-18.6	0.6-2.1	5.3-18.6	0.79	1.74	7	15.4	1/8	6	1/4
A	SC043-L1100-HLT4M	1459624	1100	1/4	0.9-4.3	7.9-38.0	0.9-4.3	7.9-38.0	0.79	1.74	7	15.4	1/8	6	1/4
A	SC047-L550-HLT4M	1459634	550	1/4	0.9-4.7	7.9-41.6	0.9-4.7	7.9-41.6	0.79	1.74	7	15.4	1/8	6	1/4
B	SCP009-T1600-HLT4M	1459704	1600	1/4	0.4-0.9	3.5-7.9	0.4-0.9	3.5-7.9	1.00	2.20	7	15.4	1/8	6	1/4
B	SCP021-T1600-HLT4M	1459714	1600	1/4	0.6-2.1	5.3-18.6	0.6-2.1	5.3-18.6	1.00	2.20	7	15.4	1/8	6	1/4
B	SCP022-T1100-HLT4M	1459724	1100	1/4	0.6-2.1	5.3-18.6	0.6-2.1	5.3-18.6	1.00	2.20	7	15.4	1/8	6	1/4
B	SCP043-T1100-HLT4M	1459734	1100	1/4	0.9-4.3	7.9-38.0	0.9-4.3	7.9-38.0	1.00	2.20	7	15.4	1/8	6	1/4
B	SCP047-T550-HLT4M	1459754	550	1/4	0.9-4.7	7.9-41.6	0.9-4.7	7.9-41.6	1.00	2.20	7	15.4	1/8	6	1/4

FAS3000 – Fastening Assurance System

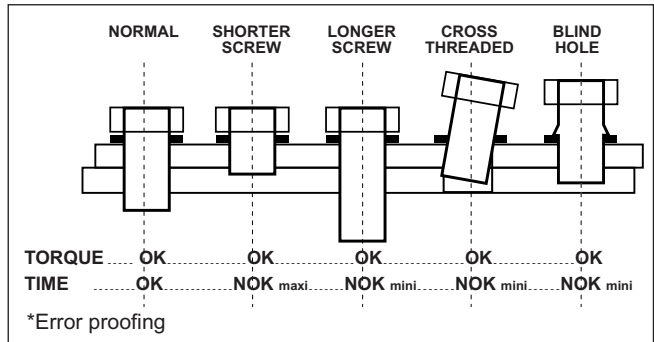
The FAS3000 – Fastening Assurance System provides the ability to verify that all the fasteners in an assembly have been correctly fastened without the level of investment usually associated with assembly control systems and additional inspection.

Features

- Automatic and quick calibration.
- 8 programs for different fastener profiles.
- Up to 250 fasteners per program.
- OK and Not OK visual indicators for each fastener.
- Audible error warning for Not OK.
- ‘Group Cycle Complete’ visual indicator.
- Manual lockable reset switch.
- Password protection of parameters.
- 4 output sockets for interfacing with other equipment including inputs as well as output signals.
- EMC approved.



Coded error messages



START-UP KIT

to be ordered with the FAS3000

PART NO.

POWER CABLE AND PLUG

		LENGTH	
A	Power Cable European	2m (78")	615 917 201 0
B	Power Cable USA	2m (78")	615 917 203 0
C	Power Cable English	2m (78")	615 917 202 0

ACCESSORIES INCLUDED

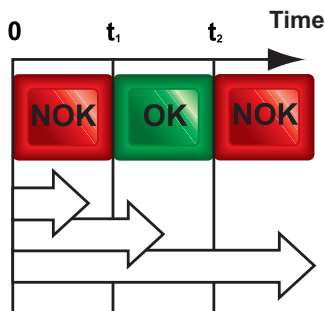
ITEM	LENGTH	PART NO.	
D	Sensor Assembly	2m (78")	205 047 908 3
E	Sensor electric cord	5m (197")	205 047 964 3

OPTIONAL ACCESSORIES

ITEM	PART NO.
1 Male Stud Elbow M5-D4	615 746 083 0
2 Male Stud M5-D4	615 746 144 0
3 Tube connector D4-D4	615 746 145 0
• M5 Straight Fitting	444973
• M5 Elbow Fitting	444983

MODEL	PART NUMBER	LENGTH		DIMENSIONS WIDTH		HEIGHT		WEIGHT		SUPPLY VOLTAGE
		mm	in.	mm	in.	mm	in.	kg	lb.	
FAS3000	205 146 677 4	317	12.5	161	6.4	87	3.4	3	6.6	AC220-240V, 50Hz & AC110-120V, 60Hz

By comparing the timing of pneumatic signals from a shut off screwdriver with set parameters, the fastening cycle can be monitored and output signals generated for OK and NOK.



OPERATING SEQUENCE

t_1 = Minimum time

t_2 = Maximum time

Clutch operated before minimum time, lever/trigger released before minimum time.

Indicates crossed thread, screw too short, thread too short, too many washers. Clutch operated within time limits - OK.

Clutch operated after maximum time. Screw too long, no thread in component, stripped thread, no washers on assembly.

Screwdrivers - Fastening Assurance System

0.4 to 27 Nm (3.5 to 239 in.lb) - 320 to 3500 rpm

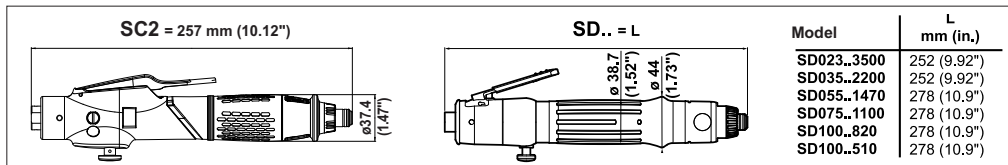


For using D and E tools
with FAS3000, order
FAS control top devices :
FAS Control Top Rotary
Reverse P.N. **465093**
FAS Control Top Button
Reverse P.N. **465043**

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT HEX	TORQUE RANGE		FITTED SPRING		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
					rpm	in.	Nm	in.lb	Nm	in.lb	kg	lb.	l/s	cfm	in.
PISTOL GRIP															
A	SCP021-T2300-FAS4Q	1461124	2300	1/4	0.4-2.1	3.5-18.6	0.4-0.9	3.5-7.9	0.93	2.0	6.0	12.6	1/8	6	1/4
A	SCP021-T1600-FAS4Q	1461134	1600	1/4	0.4-2.1	3.5-18.6	0.6-2.1	5.3-18.6	0.93	2.0	6.0	12.6	1/8	6	1/4
A	SCP043-T1100-FAS4Q	1461144	1100	1/4	0.4-4.3	3.5-38	0.9-4.3	7.9-38	0.93	2.0	6.0	12.6	1/8	6	1/4
A	SCP047-T550-FAS4Q	1461154	550	1/4	0.4-4.7	3.5-41.6	0.9-4.7	7.9-41.6	0.93	2.0	6.0	12.6	1/8	6	1/4
T SHAPE TOOLS															
B	SDT023-T3500-S4Q	1465784	3500	1/4	1.0-2.3	8.9-20.4	1.0-2.3	8.9-20.3	1.10	2.4	9.0	19.1	1/4	10	3/8
B	SDT035-T1100-S4Q	205 147 623 4	1100	1/4	1.0-3.5	8.9-31	1.0-3.5	8.9-31	1.00	2.2	9.0	19.1	1/4	10	3/8
B	SDT035-T2200-S4Q	1465774	2200	1/4	1.0-3.5	8.9-31	1.0-3.5	8.9-31	1.10	2.4	9.0	19.1	1/4	10	3/8
B	SDT055-T1470-S4Q	1465764	1470	1/4	2.0-5.5	17.7-48.7	2.0-5.5	17.7-48.7	1.10	2.4	9.0	19.1	1/4	10	3/8
B	SDT075-T1100-S4Q	1465754	1100	1/4	2.5-7.5	22.1-66.4	2.5-7.5	22.1-66.4	1.10	2.4	9.0	19.1	1/4	10	3/8
B	SDT100-T800-S4Q	1465744	820	1/4	3.5-10	31.0-88.5	3.5-10	31.0-88.5	1.10	2.4	9.0	19.1	1/4	10	3/8
B	SDT140-T510-S4Q	1465734	510	1/4	3.5-14	31.0-124	3.5-10	31.0-88.5	1.10	2.4	9.0	19.1	1/4	10	3/8
B	SDT160-T320-S4Q	1465724	320	1/4	3.5-16	31.0-142	3.5-10	31.0-88.5	1.10	2.4	9.0	19.1	1/4	10	3/8
IN-LINE TOOLS															
C	SC2-025-L2200-S4Q	205 147 283 4	2200	1/4	0.5-2.5	4.4-22	0.5-2.5	4.4-22.1	0.69	1.5	7.0	14.8	1/4	6	1/4
C	SC2-035-L1500-S4Q	205 147 282 4	1450	1/4	0.5-3.5	4.4-30.8	1.7-3.5	15-30.9	0.69	1.5	7.0	14.8	1/4	6	1/4
C	SC2-045-L1000-S4Q	205 147 281 4	1000	1/4	0.5-4.5	4.4-39.6	1.7-4.5	15-39.8	0.69	1.5	7.0	14.8	1/4	6	1/4
C	SC2-055-L700-S4Q	205 147 280 4	700	1/4	0.5-5.5	4.4-48.4	3-5.5	26.5-48.6	0.69	1.5	7.0	14.8	1/4	6	1/4
C	SC2-065-L500-S4Q	205 147 279 4	480	1/4	0.5-6.5	4.4-57.2	3-6.5	26.5-57.5	0.69	1.5	7.0	14.8	1/4	6	1/4
D	SD023-LB3500-S4Q	1463094	3500	1/4	1-2.3	8.9-20.4	1-2.3	8.9-20.4	0.76	1.7	8.7	18.4	1/4	10	3/8
D	SD035-LB2200-S4Q	1463084	2200	1/4	1-3.5	8.9-31	1-3.5	8.9-31	0.76	1.7	8.7	18.4	1/4	10	3/8
D	SD055-LB1470-S4Q	1463074	1470	1/4	0.6-5.5	5.3-48.7	2-5.5	17.7-48.7	0.92	2.0	8.7	18.4	1/4	10	3/8
D	SD075-LB1100-S4Q	1463064	1100	1/4	0.6-7.5	5.3-66.4	2.5-7.5	22.1-66.4	0.92	2.0	8.7	18.4	1/4	10	3/8
D	SD100-LB820-S4Q	1463054	820	1/4	0.6-10	5.3-88.5	3.5-10	31-88.5	0.92	2.0	8.7	18.4	1/4	10	3/8
D	SD140-LB510-S4Q	1463044	510	1/4	0.6-14	5.3-124	3.5-10	31-88.5	0.92	2.0	8.7	18.4	1/4	10	3/8
D	SD160-LB320-S4Q	1463034	320	1/4	0.6-16	5.3-142	3.5-10	31-88.5	0.92	2.0	8.7	18.4	1/4	10	3/8
D	SD023-LR3500-S4Q	1463024	3500	1/4	1-2.3	8.9-20.4	1-2.3	8.9-20.4	0.76	1.7	8.7	18.4	1/4	10	3/8
D	SD035-LR2200-S4Q	1463014	2200	1/4	1-3.5	8.9-31	1-3.5	8.9-31	0.76	1.7	8.7	18.4	1/4	10	3/8
D	SD055-LR1470-S4Q	1463004	1470	1/4	0.6-5.5	5.3-48.7	2-5.5	17.7-48.7	0.92	2.0	8.7	18.4	1/4	10	3/8
D	SD075-LR1100-S4Q	1462994	1100	1/4	0.6-7.5	5.3-66.4	2.5-7.5	22.1-66.4	0.92	2.0	8.7	18.4	1/4	10	3/8
D	SD100-LR820-S4Q	1462984	820	1/4	0.6-10	5.3-88.5	3.5-10	31-88.5	0.92	2.0	8.7	18.4	1/4	10	3/8
D	SD140-LR510-S4Q	1462974	510	1/4	0.6-14	5.3-124	3.5-10	31-88.5	0.92	2.0	8.7	18.4	1/4	10	3/8
D	SD160-LR320-S4Q	1462964	320	1/4	0.6-16	5.3-142	3.5-10	31-88.5	0.92	2.0	8.7	18.4	1/4	10	3/8
ANGLE TOOLS															
E	SD070-LB1100-S90-A4H	1463254	1100	1/4	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.12	2.5	8.7	18.4	1/4	10	3/8
E	SD070-LB820-S90-A4H	1463244	820	1/4	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.12	2.5	8.7	18.4	1/4	10	3/8
E	SD070-LB510-S90-A4H	1463234	510	1/4	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.12	2.5	8.7	18.4	1/4	10	3/8
E	SD070-LB320-S90-A4H	1463224	320	1/4	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.12	2.5	8.7	18.4	1/4	10	3/8
E	SD070-LR1100-S90-A4H	1463294	1100	1/4	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.12	2.5	8.7	18.4	1/4	10	3/8
E	SD070-LR820-S90-A4H	1463284	820	1/4	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.12	2.5	8.7	18.4	1/4	10	3/8
E	SD070-LR510-S90-A4H	1463274	510	1/4	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.12	2.5	8.7	18.4	1/4	10	3/8
E	SD070-LR320-S90-A4H	1463264	320	1/4	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.12	2.5	8.7	18.4	1/4	10	3/8
E	SD070-LB1100-S90-A4S	1463374	1100	1/4 sq	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.11	2.4	8.7	18.4	1/4	10	3/8
E	SD070-LB820-S90-A4S	1463364	820	1/4 sq	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.11	2.4	8.7	18.4	1/4	10	3/8
E	SD070-LB510-S90-A4S	1463354	510	1/4 sq	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.11	2.4	8.7	18.4	1/4	10	3/8
E	SD070-LB320-S90-A4S	1463344	320	1/4 sq	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.11	2.4	8.7	18.4	1/4	10	3/8
E	SD070-LR1100-S90-A4S	1463414	1100	1/4 sq	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.11	2.4	8.7	18.4	1/4	10	3/8
E	SD070-LR820-S90-A4S	1463404	820	1/4 sq	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.11	2.4	8.7	18.4	1/4	10	3/8
E	SD070-LR510-S90-A4S	1463394	510	1/4 sq	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.11	2.4	8.7	18.4	1/4	10	3/8
E	SD070-LR320-S90-A4S	1463384	320	1/4 sq	2.5-7	22.1-61.9	2.5-7	22.1-61.9	1.11	2.4	8.7	18.4	1/4	10	3/8
E	SD072-LB1080-S90-A10S	1463504	1080	3/8 sq	2.5-7.2	22.1-63.7	2.5-7.2	22.1-63.7	1.41	3.1	8.7	18.4	1/4	10	3/8
E	SD095-LB800-S90-A10S	1463494	800	3/8 sq	3-9.5	26.5-84.0	3-9.5	26.5-84.0	1.41	3.1	8.7	18.4	1/4	10	3/8
E	SD130-LB600-S90-A10S	1463484	600	3/8 sq	4.5-12	39.8-106	4.5-12	39.8-106	1.41	3.1	8.7	18.4	1/4	10	3/8
E	SD209-LB370-S90-A10S	1463474	370	3/8 sq	6-19	53.1-168	6-19	53.1-168	1.50	3.3	8.7	18.4	1/4	10	3/8
E	SD300-LB250-S90-A10S	1463464	250	3/8 sq	11-27	97.3-239	11-27	97.3-239	1.50	3.3	8.7	18.4	1/4	10	3/8
E	SD072-LR1080-S90-A10S	1463554	1080	3/8 sq	2.5-7.2	22.1-63.7	2.5-7.2	22.1-63.7	1.41	3.1	8.7	18.4	1/4	10	3/8
E	SD095-LR800-S90-A10S	1463544	800	3/8 sq	3-9.5	26.5-84	3-9.5	26.5-84	1.41	3.1	8.7	18.4	1/4	10	3/8
E	SD130-LR600-S90-A10S	1463534	600	3/8 sq	4.5-12	39.8-106	4.5-12	39.8-106	1.41	3.1	8.7	18.4	1/4	10	3/8
E	SD209-LR370-S90-A10S	1463524	370	3/8 sq	6-19	53.1-168	6-19	53.1-168	1.50	3.3	8.7	18.4	1/4	10	3/8
E	SD300-LR250-S90-A10S	1463514	250	3/8 sq	11-27	97.3-239	11-27	97.3-239	1.50	3.3	8.7	18.4	1/4	10	3/8

Screwdrivers - Non Shut off - Push and Lever start

0.4 to 10 Nm (3.5 to 88.5 in.lb) - 510 to 3500 rpm



Types A, B and F - 5/16" hex bit holder optional

Accessories: see page 88

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT HEX	TORQUE RANGE		FITTED SPRING		WEIGHT		AIR FLOW		AIR INLET		HOSE INT. Ø	
					Nm	in.lb	Nm	in.lb	kg	lb.	l/s	cfm	in.	mm	in.	

PUSH START

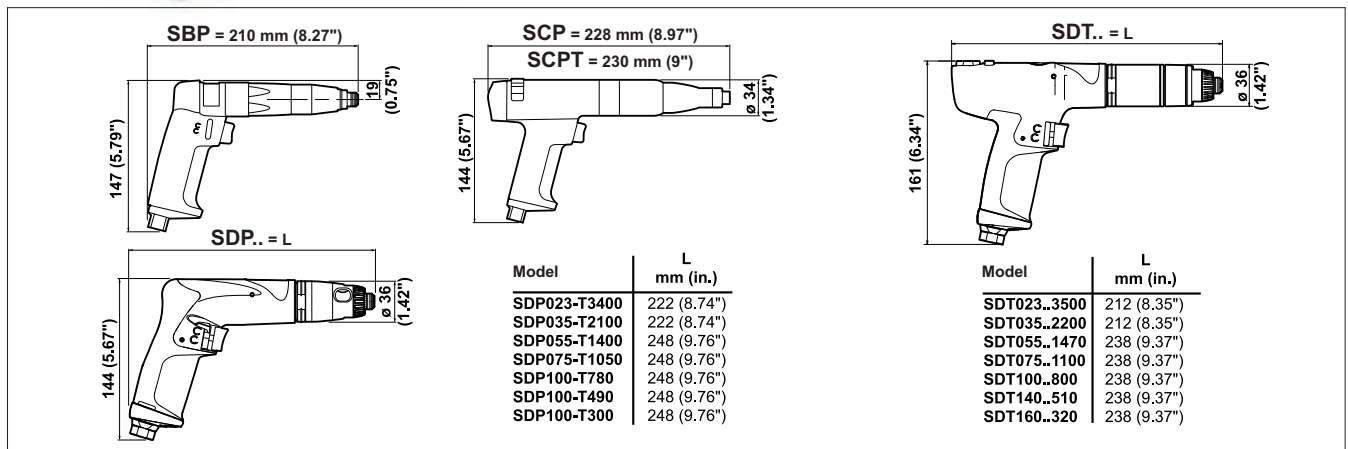
A	SC2-025-A2200-R4Q	205 147 276 4	2200	1/4	0.5-2.5	4.4-22.0	0.5-2.5	4.4-22.1	0.69	1.52	7.0	14.8	1/4	6	1/4
A	SC2-035-A1500-R4Q	205 147 275 4	1450	1/4	0.5-3.5	4.4-30.8	1.7-3.5	15.0-30.9	0.69	1.52	7.0	14.8	1/4	6	1/4
A	SC2-045-A1000-R4Q	205 147 274 4	1000	1/4	0.5-4.5	4.4-39.6	1.7-4.5	15.0-39.8	0.69	1.52	7.0	14.8	1/4	6	1/4
A	SC2-055-A700-R4Q	205 147 273 4	700	1/4	0.5-5.5	4.4-48.4	3.0-5.5	26.5-48.6	0.69	1.52	7.0	14.8	1/4	6	1/4
A	SC2-065-A500-R4Q	205 147 272 4	480	1/4	0.5-6.5	4.4-57.2	3.0-6.5	26.5-57.5	0.69	1.52	7.0	14.8	1/4	6	1/4
B	SD023-AB3500-R4Q	1462954	3500	1/4	1.0-2.3	8.9-20.3	1.0-2.3	8.9-20.3	0.73	1.61	8.7	18.4	1/4	10	3/8
B	SD035-AB2200-R4Q	1462944	2200	1/4	1.0-3.5	8.9-31.0	1.0-3.5	8.9-31.0	0.73	1.61	8.7	18.4	1/4	10	3/8
B	SD055-AB1470-R4Q	1462934	1470	1/4	0.6-5.5	5.3-48.7	2.0-5.5	17.7-48.7	0.89	1.96	8.7	18.4	1/4	10	3/8
B	SD075-AB1100-R4Q	1462924	1100	1/4	0.6-7.5	5.3-66.4	2.5-7.5	22.1-66.4	0.89	1.96	8.7	18.4	1/4	10	3/8
B	SD100-AB820-R4Q	1462914	820	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	0.89	1.96	8.7	18.4	1/4	10	3/8
B	SD100-AB510-R4Q	1462904	510	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	0.89	1.96	8.7	18.4	1/4	10	3/8
C	SD023-AR3500-R4Q	1462894	3500	1/4	1.0-2.3	8.9-20.3	1.0-2.3	8.9-20.3	0.73	1.61	8.7	18.4	1/4	10	3/8
C	SD035-AR2200-R4Q	1462884	2200	1/4	1.0-3.5	8.9-31.0	1.0-3.5	8.9-31.0	0.73	1.61	8.7	18.4	1/4	10	3/8
C	SD055-AR1470-R4Q	1462874	1470	1/4	0.6-5.5	5.3-48.7	2.0-5.5	17.7-48.7	0.89	1.96	8.7	18.4	1/4	10	3/8
C	SD075-AR1100-R4Q	1462864	1100	1/4	0.6-7.5	5.3-66.4	2.5-7.5	22.1-66.4	0.89	1.96	8.7	18.4	1/4	10	3/8
C	SD100-AR820-R4Q	1462854	820	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	0.89	1.96	8.7	18.4	1/4	10	3/8
C	SD100-AR510-R4Q	1462844	510	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	0.89	1.96	8.7	18.4	1/4	10	3/8

LEVER START

D	SC2-025-L2200-R4Q	205 147 290 4	2200	1/4	0.5-2.5	4.4-22.0	0.5-2.5	4.4-22.1	0.69	1.52	7.0	14.8	1/4	6	1/4
D	SC2-035-L1500-R4Q	205 147 289 4	1450	1/4	0.5-3.5	4.4-30.8	1.7-3.5	15.0-30.9	0.69	1.52	7.0	14.8	1/4	6	1/4
D	SC2-045-L1000-R4Q	205 147 288 4	1000	1/4	0.5-4.5	4.4-39.6	1.7-4.5	15.0-39.8	0.69	1.52	7.0	14.8	1/4	6	1/4
D	SC2-055-L700-R4Q	205 147 287 4	700	1/4	0.5-5.5	4.4-48.4	3.0-5.5	26.5-48.6	0.69	1.52	7.0	14.8	1/4	6	1/4
D	SC2-065-L500-R4Q	205 147 286 4	480	1/4	0.5-6.5	4.4-57.2	3.0-6.5	26.5-57.5	0.69	1.52	7.0	14.8	1/4	6	1/4
E	SD023-LB3500-R4Q	1463214	3500	1/4	1.0-2.3	8.9-20.3	1.0-2.3	8.9-20.3	0.76	1.67	8.7	18.4	1/4	10	3/8
E	SD035-LB2200-R4Q	1463204	2200	1/4	1.0-3.5	8.9-31.0	1.0-3.5	8.9-31.0	0.76	1.67	8.7	18.4	1/4	10	3/8
E	SD055-LB1470-R4Q	1463194	1470	1/4	0.6-5.5	5.3-48.7	2.0-5.5	17.7-48.7	0.92	2.03	8.7	18.4	1/4	10	3/8
E	SD075-LB1100-R4Q	1463184	1100	1/4	0.6-7.5	5.3-66.4	2.5-7.5	22.1-66.4	0.92	2.03	8.7	18.4	1/4	10	3/8
E	SD100-LB820-R4Q	1463174	820	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	0.92	2.03	8.7	18.4	1/4	10	3/8
E	SD100-LB510-R4Q	1463164	510	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	0.92	2.03	8.7	18.4	1/4	10	3/8
F	SD023-LR3500-R4Q	1463154	3500	1/4	1.0-2.3	8.9-20.3	1.0-2.3	8.9-20.3	0.76	1.67	8.7	18.4	1/4	10	3/8
F	SD035-LR2200-R4Q	1463144	2200	1/4	1.0-3.5	8.9-31.0	1.0-3.5	8.9-31.0	0.76	1.67	8.7	18.4	1/4	10	3/8
F	SD055-LR1470-R4Q	1463134	1470	1/4	0.6-5.5	5.3-48.7	2.0-5.5	17.7-48.7	0.92	2.03	8.7	18.4	1/4	10	3/8
F	SD075-LR1100-R4Q	1463124	1100	1/4	0.6-7.5	5.3-66.4	2.5-7.5	22.1-66.4	0.92	2.03	8.7	18.4	1/4	10	3/8
F	SD100-LR820-R4Q	1463114	820	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	0.92	2.03	8.7	18.4	1/4	10	3/8
F	SD100-LR510-R4Q	1463104	510	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	0.92	2.03	8.7	18.4	1/4	10	3/8

Screwdrivers - Non Shut Off - Pistol Grip

0.4 to 10 Nm (3.5 to 88.5 in.lb) - 300 to 3500 rpm



Accessories: see page 88

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT HEX	TORQUE RANGE		FITTED SPRING		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
			rpm	in.	Nm	in.lb	Nm	in.lb	kg	lb.	l/s	cfm	in.	mm	in.

PUSH AND TRIGGER START

A	SBP024-T2300-R4Q	1462184	2300	1/4	0.5-2.4	4.4-21.2	0.5-2.4	4.4-21.2	0.82	1.81	6.5	13.8	1/8	6	1/4
A	SBP022-T1600-R4Q	1462194	1600	1/4	0.5-2.2	4.4-19.4	0.5-2.2	4.4-19.4	0.82	1.81	6.5	13.8	1/8	6	1/4
A	SBP044-T1100-R4Q	1462204	1100	1/4	0.4-4.4	3.5-38.9	1.8-4.4	15.9-38.9	0.82	1.81	6.5	13.8	1/8	6	1/4
A	SBP044-T550-R4Q	1462214	550	1/4	0.4-4.4	3.5-38.9	1.8-4.4	15.9-38.9	0.82	1.81	6.5	13.8	1/8	6	1/4

TRIGGER START

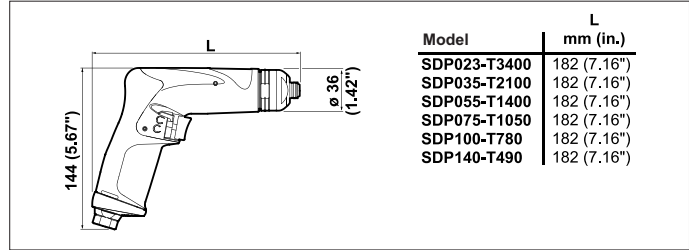
B	SCP024-T2300-R4Q	1456774	2300	1/4	0.5-2.4	4.4-21.2	0.5-1.8	4.4-15.9	0.86	1.89	6.5	13.8	1/8	6	1/4
B	SCP022-T1600-R4Q	1456784	1600	1/4	0.5-2.2	4.4-19.4	0.8-2.2	7.1-19.4	0.86	1.89	6.5	13.8	1/8	6	1/4
B	SCP044-T1100-R4Q	1456794	1100	1/4	0.4-4.4	3.5-38.9	1.3-4.4	11.5-38.9	0.86	1.89	6.5	13.8	1/8	6	1/4
B	SCP044-T550-R4Q	1456804	550	1/4	0.4-4.4	3.5-38.9	1.0-4.4	8.9-38.9	0.86	1.89	6.5	13.8	1/8	6	1/4
C	SDP023-T3400-R4Q	1465644	3400	1/4	1.0-2.3	8.8-20.3	1.0-2.3	8.9-20.3	0.90	1.98	9.0	19.1	1/4	10	3/8
C	SDP035-T2100-R4Q	1465634	2100	1/4	1.0-3.5	8.8-31.0	1.0-3.5	8.9-31.0	0.90	1.98	9.0	19.1	1/4	10	3/8
C	SDP055-T1400-R4Q	1465624	1400	1/4	1.0-5.5	8.8-48.6	1.0-5.5	8.9-48.6	1.00	2.20	9.0	19.1	1/4	10	3/8
C	SDP075-T1050-R4Q	1465614	1050	1/4	0.6-7.5	5.3-66.3	2.5-7.5	22.1-66.3	1.00	2.20	9.0	19.1	1/4	10	3/8
C	SDP100-T780-R4Q	1465604	780	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	1.00	2.20	9.0	19.1	1/4	10	3/8
C	SDP100-T490-R4Q	1465594	490	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	1.00	2.20	9.0	19.1	1/4	10	3/8
C	SDP100-T300-R4Q	1465584	300	1/4	0.6-10	5.3-88.5	3.5-10	31.0-88.5	1.00	2.20	9.0	19.1	1/4	10	3/8
D	SDT023-T3500-R4Q	205 147 635 4	3500	1/4	1.0-2.3	8.9-20.3	1.0-2.3	8.9-20.3	1.10	2.42	9.0	19.1	1/4	10	3/8
D	SDT035-T2200-R4Q	205 147 636 4	2200	1/4	1.0-3.5	8.9-31	1.0-3.5	8.9-31.0	1.10	2.42	9.0	19.1	1/4	10	3/8
D	SDT055-T1470-R4Q	205 147 637 4	1470	1/4	2.0-5.5	17.7-48.7	2.0-5.5	17.7-48.7	1.10	2.42	9.0	19.1	1/4	10	3/8
D	SDT075-T1100-R4Q	205 147 638 4	1100	1/4	2.5-7.5	22.1-66.4	2.5-7.5	22.1-66.4	1.10	2.42	9.0	19.1	1/4	10	3/8
D	SDT100-T820-R4Q	205 147 639 4	820	1/4	3.5-10	31.0-88.5	3.5-10	31.0-88.5	1.10	2.42	9.0	19.1	1/4	10	3/8
D	SDT100-T510-R4Q	205 147 644 4	510	1/4	3.5-10	31.0-88.5	3.5-10	31.0-88.5	1.10	2.42	9.0	19.1	1/4	10	3/8
D	SDT100-T320-R4Q	205 147 641 4	320	1/4	3.5-10	31.0-88.5	3.5-10	31.0-88.5	1.10	2.42	9.0	19.1	1/4	10	3/8

PUSH START, TOP AIR INLET

E	SCPT024-A2300-R4Q	1458994	2300	1/4	0.5-2.4	4.4-21.2	0.5-1.8	4.4-15.9	0.86	1.89	6.5	13.8	1/8	6	1/4
E	SCPT022-A1600-R4Q	1458954	1600	1/4	0.5-2.2	4.4-19.4	0.8-2.2	7.1-19.4	0.86	1.89	6.5	13.8	1/8	6	1/4
E	SCPT044-A1100-R4Q	1458914	1100	1/4	0.4-4.4	3.5-38.9	1.3-4.4	11.5-38.9	0.86	1.89	6.5	13.8	1/8	6	1/4

Screwdrivers - Direct drive Pistol grip

1 to 14 Nm (8.9 to 124 in.lb) - 490 to 3400 rpm



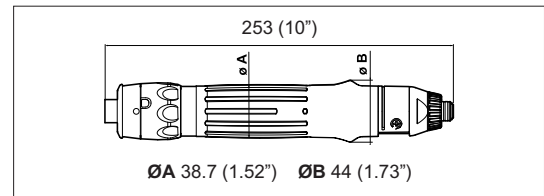
Accessories: see page 89

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT HEX	TORQUE RANGE		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
			rpm	in.	Nm	in.lb	kg	lb.	l/s	cfm	in.	mm	in.
A	SDP023-T3400-D4Q	1465714	3400	1/4	1.0-2.3	8.9-20.3	0.8	1.76	9.0	19.1	1/4	10	3/8
A	SDP035-T2100-D4Q	1465704	2100	1/4	1.0-3.5	8.9-31.0	0.8	1.76	9.0	19.1	1/4	10	3/8
A	SDP055-T1400-D4Q	1465694	1400	1/4	1.0-5.5	8.9-48.6	0.8	1.76	9.0	19.1	1/4	10	3/8
A	SDP075-T1050-D4Q	1465684	1050	1/4	3.5-7.5	31.0-66.3	0.8	1.76	9.0	19.1	1/4	10	3/8
A	SDP100-T780-D4Q	1465674	780	1/4	3.5-10.0	31.0-88.5	0.8	1.76	9.0	19.1	1/4	10	3/8
A	SDP140-T490-D4Q	1465664	490	1/4	3.5-14.0	31.0-124	0.8	1.76	9.0	19.1	1/4	10	3/8

Screwdrivers - Left hand tightening

Shut off - Push start

0.6 to 16 Nm (5.3 to 142 in.lb) - 320 rpm



Accessories: see page 88

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT HEX	TORQUE RANGE		FITTED SPRING		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
			rpm	in.	Nm	in.lb	Nm	in.lb	kg	lb.	l/s	cfm	in.	mm	in.
A	SD160L-AR320-S4Q	205 147 799 4	320	1/4	0.6-16.0	5.3-142	3.5-10.0	31.0-88.5	0.89	1.96	8.7	18.4	1/4	10	3/8

Screwdrivers - Automatic reverse

0.6 to 15 Nm (5.3 to 138 in.lb) - 400 to 1100 rpm



A

Tool shown with optional clutch HSG and bit adaptor



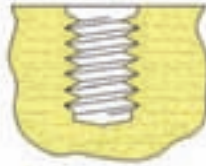
B

Applications

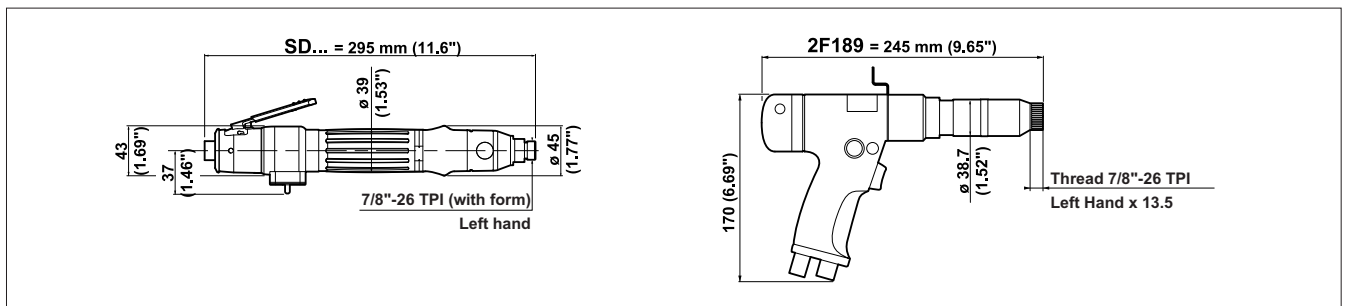
Placement of
Threaded
Fasteners



Tapping in
Blind Holes



Clearing Tapped
Holes after
Painting or Coating



Accessories: see page 88

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT HEX	TORQUE RANGE		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
			rpm	in.	Nm	in.lb	kg	lb.	l/s	cfm	in.	mm	in.
A	SD140-LA510-S4	1464584	510	See	0.6-14	5.3-124	1.0	2.2	8.7	18.4	1/4	10	3/8
A	SD075-LA1100-S4	1464604	1100	Accessories	0.6-7.5	5.3-66.4	1.0	2.2	8.7	18.4	1/4	10	3/8
B	2F189-PX-900	1240584	900	Table	1.8-8.9	15.9-78.8	1.6	3.5	9.4	19.9	1/4	10	3/8
B	2F189-PX-600	1240744	600		1.6-14	14.1-124	1.6	3.5	9.4	19.9	1/4	10	3/8
B	2F189-PX-400	1240904	400		1.6-15	14.1-138	1.6	3.5	9.4	19.9	1/4	10	3/8

Angle Head - Shut off

0.4 to 27 Nm (3.5 to 239 in.lb) - 160 to 2200 rpm



See page 76

Accessories: see page 90 

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT DRIVE	TORQUE RANGE		FITTED SPRING		LENGTH		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
					Nm	in.lb	Nm	in.lb	mm	in.	kg	lb.	l/s	cfm	in.	mm	in.
TWO WAY																	
A	SC021-L2000-S90A4S	1459154	2000	1/4 sq	0.4-2.1	3.5-18.6	0.4-0.9	3.5-7.9	275	10.8	0.84	1.85	6.5	13.8	1/8	6	1/4
A	SC021-L1400-S90A4S	1459144	1400	1/4 sq	0.4-2.1	3.5-18.6	0.6-2.1	5.3-18.6	275	10.8	0.84	1.85	6.5	13.8	1/8	6	1/4
A	SC043-L950-S90A4S	1459134	950	1/4 sq	0.4-4.3	3.5-38	0.9-4.3	7.9-38	275	10.8	0.84	1.85	6.5	13.8	1/8	6	1/4
A	SC047-L500-S90A4S	1459124	500	1/4 sq	0.4-4.7	3.5-41.5	0.9-4.7	7.9-41.5	275	10.8	0.84	1.85	6.5	13.8	1/8	6	1/4
B	SC021-L2200-S45A4S	1459574	2200	1/4 sq	0.4-2.1	3.5-18.6	0.4-0.9	3.5-7.9	339	13.3	0.85	1.87	6.5	13.8	1/8	6	1/4
B	SC021-L1500-S45A4S	1459584	1500	1/4 sq	0.4-2.1	3.5-18.6	0.6-2.1	5.3-18.6	339	13.3	0.85	1.87	6.5	13.8	1/8	6	1/4
B	SC043-L1050-S45A4S	1459594	1050	1/4 sq	0.4-4.3	3.5-38	0.9-4.3	7.9-38	339	13.3	0.85	1.87	6.5	13.8	1/8	6	1/4
B	SC047-L520-S45A4S	1459604	520	1/4 sq	0.4-4.7	3.5-41.5	0.9-4.7	7.9-41.5	339	13.3	0.85	1.87	6.5	13.8	1/8	6	1/4
B	SC021-L2200-S45A4H	1459484	2200	1/4 hex	0.4-2.1	3.5-18.6	0.4-0.9	3.5-7.9	339	13.3	0.84	1.85	6.5	13.8	1/8	6	1/4
B	SC021-L1500-S45A4H	1459494	1500	1/4 hex	0.4-2.1	3.5-18.6	0.6-2.1	5.3-18.6	339	13.3	0.84	1.85	6.5	13.8	1/8	6	1/4
B	SC043-L1050-S45A4H	1459504	1050	1/4 hex	0.4-4.3	3.5-38	0.9-4.3	7.9-38	339	13.3	0.84	1.85	6.5	13.8	1/8	6	1/4
B	SC047-L520-S45A4H	1459514	520	1/4 hex	0.4-4.7	3.5-41.5	0.9-4.7	7.9-41.5	339	13.3	0.84	1.85	6.5	13.8	1/8	6	1/4
C	SC021-L2000-S90A4H	1459074	2000	1/4 hex	0.4-2.1	3.5-18.6	0.4-0.9	3.5-7.9	275	10.8	1.12	2.47	6.5	13.8	1/8	6	1/4
C	SC021-L1400-S90A4H	1459064	1400	1/4 hex	0.4-2.1	3.5-18.6	0.6-2.1	5.3-18.6	275	10.8	1.12	2.47	6.5	13.8	1/8	6	1/4
C	SC043-L950-S90A4H	1459054	950	1/4 hex	0.4-4.3	3.5-38	0.9-4.3	7.9-38	275	10.8	1.12	2.47	6.5	13.8	1/8	6	1/4
C	SC047-L500-S90A4H	1459044	500	1/4 hex	0.4-4.7	3.5-41.5	0.9-4.7	7.9-41.5	275	10.8	1.12	2.47	6.5	13.8	1/8	6	1/4
D	SD070-LB1100-S90-A4H	1463254	1100	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.12	2.47	8.7	18.4	1/4	10	3/8
D	SD070-LB820-S90-A4H	1463244	820	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.12	2.47	8.7	18.4	1/4	10	3/8
D	SD070-LB510-S90-A4H	1463234	510	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.12	2.47	8.7	18.4	1/4	10	3/8
D	SD070-LB320-S90-A4H	1463224	320	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.12	2.47	8.7	18.4	1/4	10	3/8
D	SD070-LR1100-S90-A4H	1463294	1100	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.11	2.45	8.7	18.4	1/4	10	3/8
D	SD070-LR820-S90-A4H	1463284	820	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.11	2.45	8.7	18.4	1/4	10	3/8
D	SD070-LR510-S90-A4H	1463274	510	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.11	2.45	8.7	18.4	1/4	10	3/8
D	SD070-LR320-S90-A4H	1463264	320	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.11	2.45	8.7	18.4	1/4	10	3/8
D	SD070-LB1100-S90-A4S	1463374	1100	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.11	2.45	8.7	18.4	1/4	10	3/8
D	SD070-LB820-S90-A4S	1463364	820	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.11	2.45	8.7	18.4	1/4	10	3/8
D	SD070-LB510-S90-A4S	1463354	510	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.11	2.45	8.7	18.4	1/4	10	3/8
D	SD070-LB320-S90-A4S	1463344	320	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.11	2.45	8.7	18.4	1/4	10	3/8
D	SD070-LR1100-S90-A4S	1463414	1100	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.11	2.45	8.7	18.4	1/4	10	3/8
D	SD070-LR820-S90-A4S	1463404	820	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.11	2.45	8.7	18.4	1/4	10	3/8
D	SD070-LR510-S90-A4S	1463394	510	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.11	2.45	8.7	18.4	1/4	10	3/8
D	SD070-LR320-S90-A4S	1463384	320	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	305	12.0	1.11	2.45	8.7	18.4	1/4	10	3/8
D	SD070-LR160-S90-A4S	205 146 705 4	160	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	306	12.0	1.11	2.45	8.7	18.4	1/4	10	3/8
D	SD072-LB1080-S90-A10S	1463504	1080	3/8 sq	2.5-7.2	22-63.7	2.5-7.2	22-63.7	353	13.9	1.41	3.11	8.7	18.4	1/4	10	3/8
E	SD095-LB800-S90-A10S	1463494	800	3/8 sq	3-9.5	26.6-84.1	3-9.5	26.6-84.1	353	13.9	1.41	3.11	8.7	18.4	1/4	10	3/8
E	SD130-LB600-S90-A10S	1463484	600	3/8 sq	4.5-12	39.8-106	4.5-12	39.8-106	353	13.9	1.41	3.11	8.7	18.4	1/4	10	3/8
E	SD209-LB370-S90-A10S	1463474	370	3/8 sq	6-19	53.1-168	6-19	53.1-168	376	14.8	1.50	3.31	8.7	18.4	1/4	10	3/8
E	SD300-LB250-S90-A10S	1463464	250	3/8 sq	11-27	97.3-239	11-27	97.3-239	376	14.8	1.50	3.31	8.7	18.4	1/4	10	3/8
E	SD072-LR1080-S90-A10S	1463554	1080	3/8 sq	2.5-7.2	22-63.7	2.5-7.2	22-63.7	376	14.8	1.41	3.11	8.7	18.4	1/4	10	3/8
E	SD095-LR800-S90-A10S	1463544	800	3/8 sq	3-9.5	26.6-84.1	3-9.5	26.6-84.1	376	14.8	1.41	3.11	8.7	18.4	1/4	10	3/8
E	SD130-LR600-S90-A10S	1463534	600	3/8 sq	4.5-12	39.8-106	4.5-12	39.8-106	376	14.8	1.41	3.11	8.7	18.4	1/4	10	3/8
E	SD209-LR370-S90-A10S	1463524	370	3/8 sq	6-19	53.1-168	6-19	53.1-168	376	14.8	1.41	3.11	8.7	18.4	1/4	10	3/8
E	SD300-LR250-S90-A10S	1463514	250	3/8 sq	11-27	97.3-239	11-27	97.3-239	376	14.8	1.50	3.31	8.7	18.4	1/4	10	3/8
E	SD300-LR180-S90-A10S	205 146 704 4	180	3/8 sq	11-27	97.3-239	11-27	97.3-239	375	14.8	1.50	3.30	8.7	18.4	1/4	10	3/8

SH range - Angle head - Shut off

2.5 to 200 Nm (22.1 to 1770 in.lb) - 80 to 1100 rpm

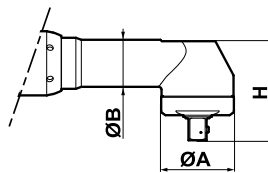


Option:

Reaction bar for SH850/1200/2000



FAS3000 (optional): PLC External control
OK / NOK reporting Batch count



• PRODUCTIVITY

- High speed with joint stiffness capability

• QUALITY

- High accuracy with immediate shut off
- Improve your process quality with FAS3000

• ERGONOMY

- Low reaction force on hard joint

• DURABILITY

- Low frequency maintenance
- Quick service time



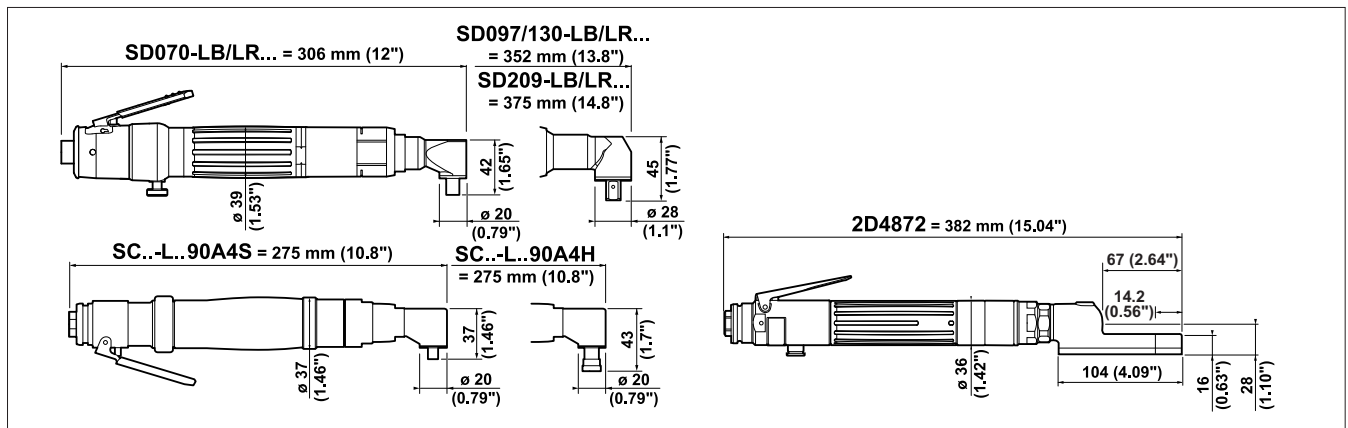
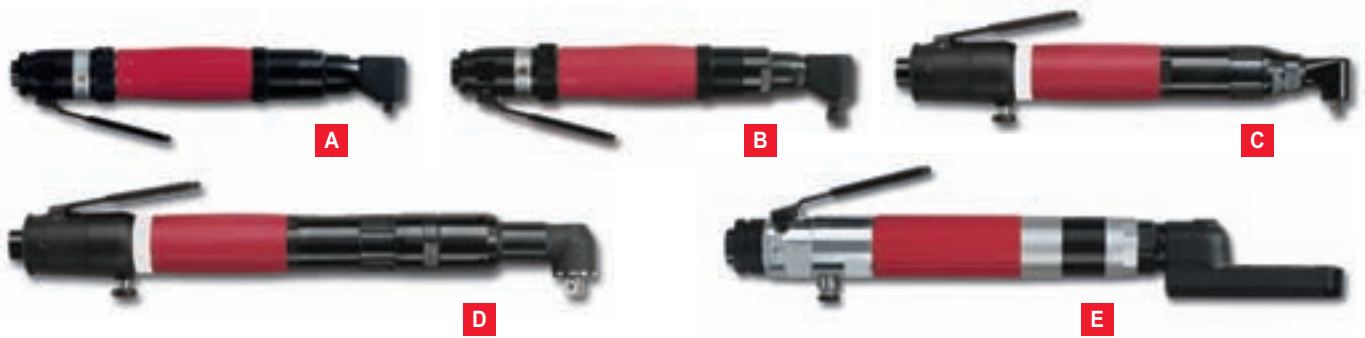
MODEL	ANGLE HEAD DIMENSIONS					
	ØA		ØB		H	
	mm	in.	mm	in.	mm	in.
SH70	20	0.79	20	0.79	36.6	1.44
SH150	22	0.87	21	0.83	35.2	1.38
SH200	27	1.06	27	1.06	45.5	1.79
SH280	27	1.06	24	0.94	41.5	1.63
SH420	40	1.57	29	1.10	56.5	2.20
SH500	40	1.57	29	1.10	56.5	2.20
SH700	40	1.57	29	1.10	56.5	2.20
SH850	51	2.00	33	1.30	69.5	2.70
SH1200	51	2.00	33	1.30	69.5	2.70
SH2000	51	2.00	33	1.30	69.5	2.70

Accessories: see page 90

PIC REF	MODEL	PART NUMBER	BOLT SIZE	FREE SPEED	SQUARE DRIVE	TORQUE RANGE		LENGTH		WEIGHT		AIR FLOW	AIR INLET	HOSE INT. Ø		
				rpm	in	Nm	in.lb	mm	in.	kg	lb.	l/s	cfm	in.	mm	in.
A	SH70-LR1100-S90-A4S	205 147 628 4	M5	1100	1/4	2.5-7	22.1-61.9	334	13.1	1.3	2.9	8	17	1/4	8	5/16
B	SH150-LR580-S90-A10S	205 147 629 4	M6	560	3/8	7-15	61.9-44.2	349	13.7	1.4	3.1	10	21	1/4	10	3/8
B	SH200-LR550-S90-A10S	205 147 630 4	M6	530	3/8	10-19	88.5-168	355	14.0	1.4	3.1	10	21	1/4	10	3/8
B	SH280-LR350-S90-A10S	205 147 631 4	M8	340	3/8	14-28	124-248	350	13.8	1.4	3.1	10	21	1/4	10	3/8
B	SH280-LR80-S90-A10S	205 147 632 4	M8	80	3/8	14-28	124-248	350	13.8	1.4	3.1	10	21	1/4	10	3/8
C	SH420-LR400-S90-A10S	205 147 800 4	M10	400	3/8	20-42	177-372	436	17.2	2.0	4.4	16	34	1/4	10	3/8
C	SH500-LR330-S90-A13S	205 147 473 4	M10	330	1/2	25-50	221-442	453	17.8	2.2	4.8	16	34	1/4	10	3/8
D	SH700-LR225-S90-A13S	205 147 474 4	M10-M12	225	1/2	34-70	301-619	487	19.2	2.4	5.3	16	34	1/4	10	3/8
D	SH850-LR190-S90-A13S	205 147 475 4	M12	190	1/2	40-85	354-752	530	20.8	2.8	6.1	16	34	1/4	10	3/8
E	SH1200-LR215-S90-A13S	205 147 476 4	M12-M14	215	1/2	70-120	354-1062	590	23.2	3.5	7.6	28	59	1/2	13	1/2
E	SH2000-LR100-S90-A13S	205 147 801 4	M12-M14	100	1/2	115-200	1018-1770	608	23.9	4.4	9.7	28	59	1/2	13	1/2

Angle head - Non Shut off

0.4 to 19 Nm (3.5 to 168 in.lb) - 320 to 2000 rpm

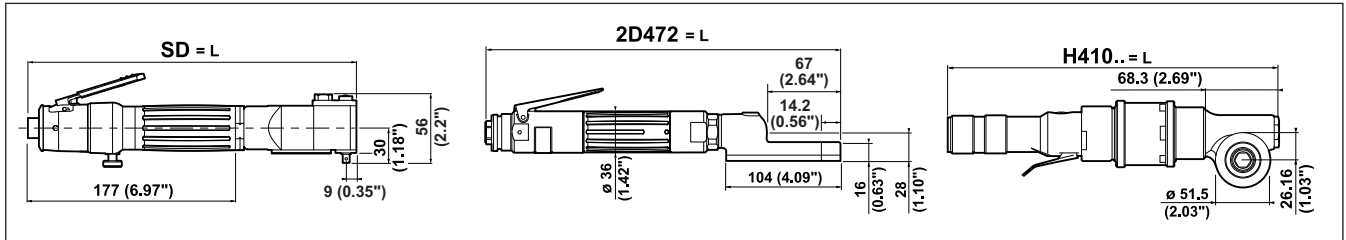


Accessories: see page 90

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT DRIVE	TORQUE RANGE		FITTED SPRING		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
					Nm	in.lb	Nm	in.lb	kg	lb.	l/s	cfm	in.	mm	in.
A	SC024-L2000-R90A4S	1459194	2000	1/4 sq	0.5-2.4	4.4-21.2	0.5-1.8	4.4-15.9	0.84	1.85	6.5	13.8	1/8	6	1/4
A	SC022-L1400-R90A4S	1459184	1400	1/4 sq	0.5-2.2	4.4-19.5	0.8-2.2	7.1-19.5	0.84	1.85	6.5	13.8	1/8	6	1/4
A	SC044-L950-R90A4S	1459174	950	1/4 sq	0.4-4.4	3.5-38.9	1.3-4.4	11.5-38.9	0.84	1.85	6.5	13.8	1/8	6	1/4
A	SC044-L500-R90A4S	1459164	500	1/4 sq	0.4-4.4	3.5-38.9	1-4.4	8.9-38-9	0.84	1.85	6.5	13.8	1/8	6	1/4
B	SC024-L2000-R90A4H	1459114	2000	1/4 hex	0.5-2.4	4.4-21.2	0.5-1.8	4.4-15.9	0.84	1.85	6.5	13.8	1/8	6	1/4
B	SC022-L1400-R90A4H	1459104	1400	1/4 hex	0.5-2.2	4.4-19.5	0.8-2.2	7.1-19.5	0.84	1.85	6.5	13.8	1/8	6	1/4
B	SC044-L950-R90A4H	1459094	950	1/4 hex	0.4-4.4	3.5-38.9	1.3-4.4	11.5-38.9	0.84	1.85	6.5	13.8	1/8	6	1/4
B	SC044-L500-R90A4H	1459084	500	1/4 hex	0.4-4.4	3.5-38.9	1-4.4	8.9-38-9	0.84	1.85	6.5	13.8	1/8	6	1/4
C	SD070-LB1100-R90-A4H	1463334	1100	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	1.12	2.47	8.7	18.4	1/4	10	3/8
C	SD070-LB820-R90-A4H	1463324	820	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	1.12	2.47	8.7	18.4	1/4	10	3/8
C	SD070-LB510-R90-A4H	1463314	510	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	1.12	2.47	8.7	18.4	1/4	10	3/8
C	SD070-LB320-R90-A4H	1463304	320	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	1.12	2.47	8.7	18.4	1/4	10	3/8
C	SD070-LR1100-R90-A4H	1463654	1100	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	1.12	2.47	8.7	18.4	1/4	10	3/8
C	SD070-LR820-R90-A4H	1463644	820	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	1.12	2.47	8.7	18.4	1/4	10	3/8
C	SD070-LR510-R90-A4H	1463634	510	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	1.12	2.47	8.7	18.4	1/4	10	3/8
C	SD070-LR320-R90-A4H	1463624	320	1/4 hex	2.5-7	22-61.9	2.5-7	22-61.9	1.12	2.47	8.7	18.4	1/4	10	3/8
C	SD070-LB1100-R90-A4S	1463454	1100	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	1.11	2.45	8.7	18.4	1/4	10	3/8
C	SD070-LB820-R90-A4S	1463444	820	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	1.11	2.45	8.7	18.4	1/4	10	3/8
C	SD070-LB510-R90-A4S	1463434	510	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	1.11	2.45	8.7	18.4	1/4	10	3/8
C	SD070-LB320-R90-A4S	1463424	320	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	1.11	2.45	8.7	18.4	1/4	10	3/8
C	SD070-LR1100-R90-A4S	1463694	1100	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	1.11	2.45	8.7	18.4	1/4	10	3/8
C	SD070-LR820-R90-A4S	1463684	820	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	1.11	2.45	8.7	18.4	1/4	10	3/8
C	SD070-LR510-R90-A4S	1463674	510	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	1.11	2.45	8.7	18.4	1/4	10	3/8
C	SD070-LR320-R90-A4S	1463664	320	1/4 sq	2.5-7	22-61.9	2.5-7	22-61.9	1.11	2.45	8.7	18.4	1/4	10	3/8
D	SD097-LB1080-R90-A10S	1463584	1080	3/8 sq	3-9.7	26.5-85.8	3-9.7	26.5-85.8	1.41	3.11	8.7	18.4	1/4	10	3/8
D	SD130-LB600-R90-A10S	1463574	600	3/8 sq	4.5-12	39.8-106	4.5-12	39.8-106	1.41	3.11	8.7	18.4	1/4	10	3/8
D	SD209-LB370-R90-A10S	1463564	370	3/8 sq	6-19	53.1-168	6-19	53.1-168	1.50	3.31	8.7	18.4	1/4	10	3/8
D	SD097-LR1080-R90-A10S	1463724	1080	3/8 sq	3-9.7	26.5-85.8	3-9.7	26.5-85.8	1.41	3.11	8.7	18.4	1/4	10	3/8
D	SD130-LR600-R90-A10S	1463714	600	3/8 sq	4.5-12	39.8-106	4.5-12	39.8-106	1.41	3.11	8.7	18.4	1/4	10	3/8
D	SD209-LR370-R90-A10S	1463704	370	3/8 sq	6-19	53.1-168	6-19	53.1-168	1.50	3.31	8.7	18.4	1/4	10	3/8
E	2D4872-LX-550	1388614	550	0.445" hex	3.6-6.8	31.9-60.2	3.6-6.8	31.9-60.2	1.10	2.42	8.5	18.0	1/4	10	3/8

Angle Head - Direct drive

1.2 to 105 Nm (10.6 to 929 in.lb) - 60 to 800 rpm



SD - Stall Torque (Nm) Setting using Regulator Part No. 81223

Accessories: see page 89

MODEL	REGULATOR POSITION						
	1	2	3	4	5	6	Open
Inlet Pressure - 6.3 bar							
SD130-LB500-D90-A4S	3.2	3.5	5.3	7.0	10.0	12.5	13.0
SD096-LB800-D90-A4S	2.6	2.8	4.0	5.5	7.3	9.0	9.6
Inlet Pressure - 4.0 bar							
SD130-LB500-D90-A4S	2.0	2.7	3.0	4.2	6.0	8.2	9.0
SD096-LB800-D90-A4S	1.5	1.7	2.5	3.0	4.5	5.5	6.0

H410 - Stall Torque (Nm) Setting using a Typical Regulator

MODEL	REGULATOR POSITION									
	10%	20%	30%	40%	50%	60%	70%	80%	90%	Open
Inlet Pressure - 6.3 bar										
H410-N-500	3	6	9	12	15	18	21	24	27	30
H410-N-350	5	9	14	18	23	27	32	36	41	45
H410-N-150	8	16	24	32	40	48	56	64	72	80
H410-N-90	16	32	48	63	79	95	-	-	-	-
H410-N-60	20	40	60	80	-	-	-	-	-	-
Inlet Pressure - 4.0 bar										
H410-N-500	2	4	6	8	9	11	13	15	17	19
H410-N-350	3	6	9	11	14	17	20	23	26	28
H410-N-150	5	10	15	20	25	30	35	40	45	50
H410-N-90	10	20	30	40	50	60	70	80	90	100
H410-N-60	4	30	45	60	75	90	105	-	-	-

Maximum stall torque 105Nm.

Performance will differ from the figures above depending on the regulator used.

Data obtained from a lubricated air line.
Torque figures are to be used as a guide only.

* Must never be used without regulator with a pressure higher than 4 bars

** Must never be used without regulator with a pressure higher than 2 bars

H410-N – When using direct drive screw-drivers, it is strongly advised to equip the machines with a reaction bar to compensate against potentially high torque reaction and avoid operator injury.

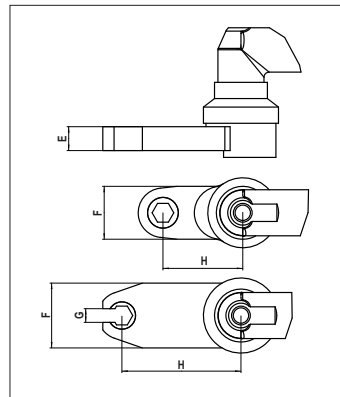
PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT DRIVE	TORQUE RANGE		LENGTH L		WEIGHT		AIR FLOW	AIR INLET	HOSE INT. Ø		
			rpm	in.	Nm	in.lb	mm	in.	kg	lb.	l/s	cfm	in.	mm	in.
A	SD130-LB500-D90-A4S	1465974	500	1/4 sq	2-13	17.7-115	326	12.8	1.08	2.38	8.7	18.4	1/4	10	3/8
A	SD096-LB800-D90-A4S	1465984	800	1/4 sq	1.5-9.6	13.3-85	326	12.8	1.08	2.38	8.7	18.4	1/4	10	1/4
B	2D472-LX-550	1388534	550	0.445 hex	1.2-12.6	10.6-111	316	12.4	1.0	2.20	8.5	18.0	1/4	10	1/4
C	H410-N-500	1302374	500	0.525 hex	3-30	26.6-265	319	12.6	1.70	3.74	17.9	37.9	3/8	12	1/2
C	H410-N-350	1302454	350	0.525 hex	4.5-45	39.8-398	319	12.6	1.70	3.74	17.9	37.9	3/8	12	1/2
C	H410-N-150	1302534	150	0.525 hex	8-80	70.8-708	358	14.1	2.00	4.41	17.9	37.9	3/8	12	1/2
C	H410-N-90*	1302614	90	0.525 hex	10-105	88.5-929	358	14.1	2.00	4.41	13.2	27.9	3/8	12	1/2
C	H410-N-60**	1302794	60	0.525 hex	10-105	88.5-929	358	14.1	2.00	4.41	13.2	27.9	3/8	12	1/2

Crowfoot and Tube nut tools - Angle head

4 to 41 Nm (35 to 363 in.lb) - 240 to 430 rpm



MODEL	ACROSS FLATS		E		F		G		H	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
SH330-LB430-CE13-CC53	13	0.75	19	0.75	32	1.26	N/A		52.8	2.07
SH410-LB400-CE17-CC68	17	0.75	19	0.75	39	1.54	N/A		67.6	2.66
SH330-LB330-OE11-CC53	11	0.71	18	0.71	40	1.57	10.4	0.41	52.9	2.08
SH330-LB330-OE11-CC75	11	0.71	18	0.71	40	1.57	10.4	0.41	75.3	2.96
SH330-LB330-OE13-CC53	13	0.71	18	0.71	40	1.57	10.4	0.41	52.9	2.08
SH330-LB330-OE13-CC75	13	0.71	18	0.71	40	1.57	10.4	0.41	75.3	2.96
SD160-LB240-S-OE17-CC92	17	0.55	14	0.55	48	1.89	12	0.47	91.5	3.60
SD160-LB240-S-OE13-CC80	13	0.47	12	0.47	38	1.49	7	0.27	79.6	3.13
SD160-LB240-S-OE12-CC80	12	0.47	12	0.47	38	1.49	7	0.27	79.6	3.13
SD160-LB240-S-OE10-CC80	10	0.47	12	0.47	38	1.49	7	0.27	79.6	3.13
SD120-LB320-S-OE08-CC80	8	0.47	12	0.47	38	1.49	7	0.27	79.6	3.13
SD120-LB320-S-OE07-CC80	7	0.47	12	0.47	38	1.49	7	0.27	79.6	3.13



- * Up to 14mm sockets possible as an option.
- * Possibility to have extension drive sockets.
- * Contact your local Desoutter sales engineer for all other requests.

Accessories: see page 90

PIC REF	MODEL	PART NUMBER	FREE SPEED	ACROSS FLATS	TORQUE RANGE		LENGTH		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
					Nm	in.lb	mm	in.	kg	lb.	l/s	cfm		mm	in.

Offset crowfoot tools - Shut Off

A	SH330-LB430-CE13-CC53	205 147 815 4	430	13	16-33	142-212	508	20.0	2.6	5.7	18	38.1	1/4	10	3/8
A	SH410-LB400-CE17-CC68	205 147 817 4	400	17	18-41	159-363	600	23.6	3.9	8.6	28	59.3	1/2	10	3/8

Offset tube nut tools - Shut Off

B	SH330-LB330-OE11-CC53	205 147 818 4	330	11	16.5-33	146-292	498.3	19.6	2.7	5.9	18	38.1	1/4	10	3/8
B	SH330-LB330-OE11-CC75	205 147 819 4	330	11	16.5-33	146-292	498.3	19.6	2.7	5.9	18	38.1	1/4	10	3/8
B	SH330-LB330-OE13-CC53	205 147 820 4	330	13	16.5-33	146-292	520.7	20.5	2.8	6.2	18	38.1	1/4	10	3/8
B	SH330-LB330-OE13-CC75	205 147 821 4	330	13	16.5-33	146-292	520.7	20.5	2.8	6.2	18	38.1	1/4	10	3/8

Offset tube nut tools - Shut Off

C	SD160-LB240-S-OE17-CC92	1463594	240	17	7-16	62-142	453	17.8	1.9	4.2	8.7	18.4	1/4	10	3/8
C	SD160-LB240-S-OE13-CC80	1463604	240	13	7-16	62-142	453	17.8	1.8	4.0	8.7	18.4	1/4	10	3/8
C	SD160-LB240-S-OE12-CC80	1463614	240	12	7-16	62-142	453	17.8	1.8	4.0	8.7	18.4	1/4	10	3/8
C	SD160-LB240-S-OE10-CC80	1463734	240	10	7-16	62-142	453	17.8	1.8	4.0	8.7	18.4	1/4	10	3/8
C	SD120-LB320-S-OE08-CC80	1463744	320	8	4-12	35-106	453	17.8	1.8	4.0	8.7	18.4	1/4	10	3/8
C	SD120-LB320-S-OE07-CC80	1463754	320	7	4-12	35-106	453	17.8	1.8	4.0	8.7	18.4	1/4	10	3/8
•	SD160-LB240-S-OE	1464474	240	3/8" sq.	7-16	62-142			1.5	3.3	8.7	18.4	1/4	10	3/8
•	SD120-LB320-S-OE	1464484	320	3/8" sq.	4-12	35-106			1.5	3.3	8.7	18.4	1/4	10	3/8

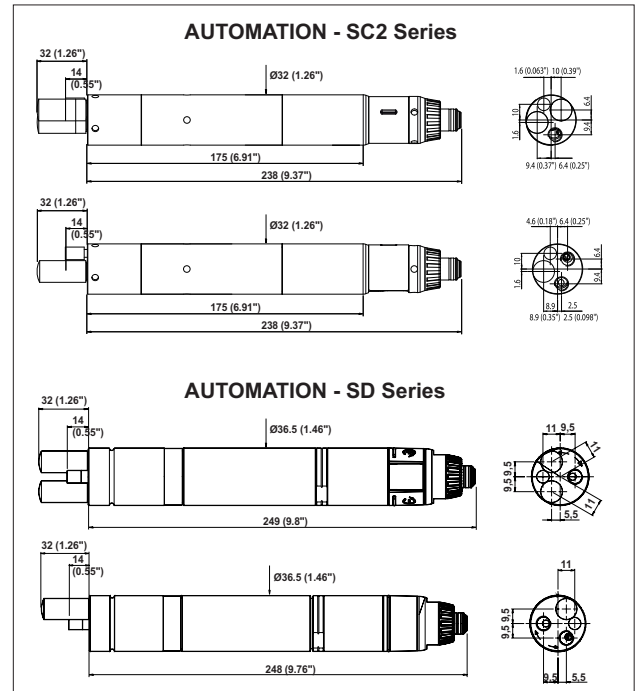
Torque Controlled - Shut Off



Signal

0.5 to 16 Nm (4.4 to 142 in.lb) - 320 to 3500 rpm

M5 Port provides signal while tool is running.
The signal stops when the clutch operates.



Accessories: see page 91

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT HEX	TORQUE RANGE		FITTED SPRING		WEIGHT		AIR FLOW		AIR INLET		HOSE INT. Ø	
					Nm	in.lb	Nm	in.lb	kg	lb.	l/s	cfm	in.	mm	in.	
			rpm	in.	Nm	in.lb	Nm	in.lb	kg	lb.	l/s	cfm	in.	mm	in.	
Automation - Push start - Shut off - 1 way																
A	SC2-025-1AM2200-S4Q	205 147 426 4	2150	1/4	0.5-2.5	4.4-22	0.5-2.5	4.4-22.1	0.64	1.41	7	14.8	1/8	4	5/32	
A	SC2-035-1AM1500-S4Q	205 147 425 4	1450	1/4	0.5-3.5	4.4-30.8	1.7-3.5	15-30.9	0.64	1.41	7	14.8	1/8	4	5/32	
A	SC2-045-1AM1000-S4Q	205 147 424 4	1000	1/4	0.5-4.5	4.4-39.6	1.7-4.5	15-39.8	0.64	1.41	7	14.8	1/8	4	5/32	
A	SC2-055-1AM700-S4Q	205 147 423 4	670	1/4	0.5-5.5	4.4-48.4	3-5.5	26.5-48.6	0.64	1.41	7	14.8	1/8	4	5/32	
A	SC2-065-1AM500-S4Q	205 147 422 4	470	1/4	0.5-6.5	4.4-57.2	3-6.5	26.5-57.5	0.64	1.41	7	14.8	1/8	4	5/32	
Automation - Remote start - Shut off - 2 way																
B	SC2-025-2RM2200-S4Q	205 147 440 4	2150	1/4	0.5-2.5	4.4-22	0.5-2.5	4.4-22.1	0.64	1.41	7	14.8	1/8	4	5/32	
B	SC2-035-2RM1500-S4Q	205 147 439 4	1450	1/4	0.5-3.5	4.4-30.8	1.7-3.5	15-30.9	0.64	1.41	7	14.8	1/8	4	5/32	
B	SC2-045-2RM1000-S4Q	205 147 438 4	1000	1/4	0.5-4.5	4.4-39.6	1.7-4.5	15-39.8	0.64	1.41	7	14.8	1/8	4	5/32	
B	SC2-055-2RM700-S4Q	205 147 437 4	670	1/4	0.5-5.5	4.4-48.4	3-5.5	26.5-48.6	0.64	1.41	7	14.8	1/8	4	5/32	
B	SC2-065-2RM500-S4Q	205 147 436 4	470	1/4	0.5-6.5	4.4-57.2	3-6.5	26.5-57.5	0.64	1.41	7	14.8	1/8	4	5/32	
Automation - Push start - Shut off - 1 way																
C	SD023-1AM3500-S4Q	1464254	3500	1/4	1.0-2.3	8.8-20.4	1.0-2.3	8.8-20.4	0.92	2.03	8.7	18.4	1/8	6	1/4	
C	SD035-1AM2200-S4Q	1464244	2200	1/4	1.0-3.5	8.8-31	1.0-3.5	8.8-30.9	0.92	2.03	8.7	18.4	1/8	6	1/4	
C	SD055-1AM1470-S4Q	1464234	1470	1/4	2.0-5.5	18-48.7	2.0-5.5	18-48.7	0.92	2.03	8.7	18.4	1/8	6	1/4	
C	SD075-1AM1100-S4Q	1464224	1100	1/4	2.5-7.5	22-66.4	2.5-7.5	22-66.4	0.92	2.03	8.7	18.4	1/8	6	1/4	
C	SD100-1AM820-S4Q	1464214	820	1/4	3.5-10	31-88.5	3.5-10	31-88.5	0.92	2.03	8.7	18.4	1/8	6	1/4	
C	SD140-1AM510-S4Q	1464204	510	1/4	3.5-14	31-124	3.5-10	31-88.5	0.92	2.03	8.7	18.4	1/8	6	1/4	
C	SD160-1AM320-S4Q	1464194	320	1/4	3.5-16	31-142	3.5-10	31-88.5	0.92	2.03	8.7	18.4	1/8	6	1/4	
Automation - Remote start - Shut off - 2 way																
D	SD023-2RM3500-S4Q	1464324	3500	1/4	1.0-2.3	8.8-20.4	1.0-2.3	8.8-20.4	0.92	2.03	8.7	18.4	1/8	6	1/4	
D	SD035-2RM2200-S4Q	1464314	2200	1/4	1.0-3.5	8.8-31	1.0-3.5	8.8-30.9	0.92	2.03	8.7	18.4	1/8	6	1/4	
D	SD055-2RM1470-S4Q	1464304	1470	1/4	2.0-5.5	18-48.7	2.0-5.5	18-48.7	0.92	2.03	8.7	18.4	1/8	6	1/4	
D	SD075-2RM1100-S4Q	1464294	1100	1/4	2.5-7.5	22-66.4	2.5-7.5	22-66.4	0.92	2.03	8.7	18.4	1/8	6	1/4	
D	SD100-2RM820-S4Q	1464284	820	1/4	3.5-10	31-88.5	3.5-10	31-88.5	0.92	2.03	8.7	18.4	1/8	6	1/4	
D	SD140-2RM510-S4Q	1464274	510	1/4	3.5-14	31-124	3.5-10	31-88.5	0.92	2.03	8.7	18.4	1/8	6	1/4	
D	SD160-2RM320-S4Q	1464264	320	1/4	3.5-16	31-142	3.5-10	31-88.5	0.92	2.03	8.7	18.4	1/8	6	1/4	

Accessories

STRAIGHT - PUSH START & LEVER START

ACCESSORIES INCLUDED

ITEM	2A89	SB	SC2	SD
• Suspension bail(s)	280903	443703	205 049 537 3	467003
• Suspension bail internal			205 051 289 3	
• Exhaust hose	280913	443723	205 049 584 3	467073
• Clutch adjustment keys	292583	446583	205 050 785 3	29932
1 Short lever (lever start model)			205 052 020 3	
2 Rings identification			205 049 590 3	
3 Side handle assembly				467033

OPTIONAL ACCESSORIES

ITEM	2A89	SB	SC2	SD
3 Side handle assembly			205 052 175 3	
• Double-ended bit holder			205 052 883 3	465523

Balancers & Tool Holster

4 Spring suspension balancer	52542	50522	50522	52862
5 Hose reel balancer	52552	50552	50552	50562
6 Reaction free self-lock balancer			54422	54432
7 Tool holster DTH-42	107892	107892	107892	107892

Bench Stands

8 D53-20 Stand, (see pages 114-115)		388163	388163	388163
• Tool clamp	615 396 616 0	615 396 616 0	615 396 616 0	615 396 616 0
8 D53-20X Stand Extended reach, (see pages 114-115)		388173	388173	388173
• Tool clamp	615 396 616 0	615 396 616 0	615 396 616 0	615 396 616 0
9 D53-20S Swivel stand, (see pages 114-115)		615 804 572 0	615 804 572 0	615 804 572 0
• Tool clamp	615 396 616 0	615 396 616 0	615 396 616 0	615 396 616 0
10 D57 Balancing arm, (see pages 116-117)		408903	408903	408903
• Tool clamp	615 396 614 0	615 396 614 0	615 396 614 0	615 396 614 0
10 D57X Balancing arm, (see pages 116-117)		408913	408913	408913
• Tool clamp	615 396 614 0	615 396 614 0	615 396 614 0	615 396 614 0
11 D58 Balancing arm, (see pages 116-117)		408923	408923	408923
• Tool clamp	615 396 614 0	615 396 614 0	615 396 614 0	615 396 614 0
12 Bench mounted swinging arm for use with balancer		66542	66542	66542
13 TRA12 Telescopic reaction arm		615 396 532 0	615 396 532 0	
13 TRA25 Telescopic reaction arm				615 396 533 0

Vacuum Pick Up - Order Pick Up kit, Finder Sleeve & Vacuum Source

14 Vacuum pick up kit (spring only for 2A89)	280443	108892		108892
15 Finder sleeve blank - plastic		464093		464093
• Finder sleeve blank - steel	88992	464103		464103
16 Vacuum source for use with DU balancer (lever start model)				51482
17 Vacuum source AV201 for use with filter/regulator unit				112063

Miscellaneous

18 Offset exhaust				205 047 623 3
• Clutch case $\frac{7}{8}$ " LH thread 320-1470 rpm				205 047 478 3
• Clutch case $\frac{7}{8}$ " LH thread 2200-3500 rpm				205 047 479 3
• Clutch case without thrust bump, M20x1.0LH thread 320-1470 rpm				465463
• Clutch case without thrust bump, M20x1.0LH thread 32200-3500 rpm				465443

PISTOL GRIP & HLT

ACCESSORIES INCLUDED

	SCBP	SBP	SCP SCPT	SDP SDT
• Suspension bail(s)	307683	307683	307683	473153
• Side handle (320 & 1470 rpm)				467033
• Clutch adjustment keys (320 - 1470 rpm)	205 047 988 3	446583	29932	29932
• Clutch adjustment keys (2200 - 3500 rpm)				467293

OPTIONAL ACCESSORIES

	SBP SCBP	SCP SCPT	SDP SDT
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Balancers & Holster

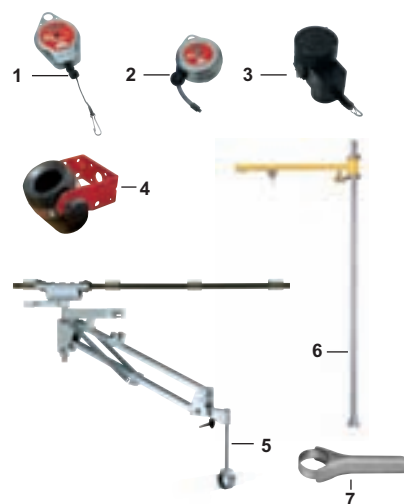
1 Spring suspension balancer	52862	52862	52862
2 Hose reel balancer	50552	50552	50562
• Hose reel balancer conversion kit	107403	107403	115193
3 Reaction free self-lock balancer	54422	54422	54432
4 Tool holster DTH-42	107892	107892	107892

Bench Stands

5 D59 Pantographic arm (see pages 116-117)	408933	408933	408933
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Miscellaneous

6 Bench mounted swing arm for use with balancer	66542	66542	66542
7 Side handle	70442	70442	467033



DIRECT DRIVE

ACCESSORIES INCLUDED

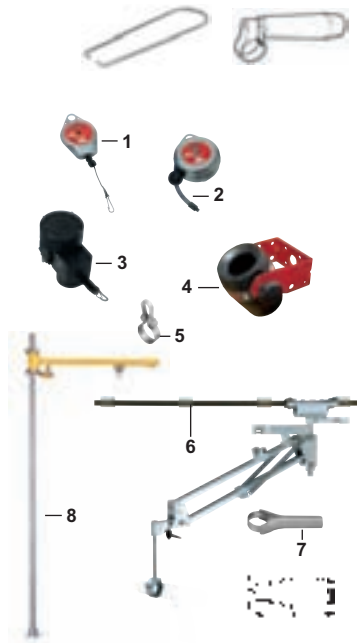
	SDP	SD	H410
• Suspension bail(s)	473153		467003
• Side handle	467033		
• Exhaust hose		467073	

OPTIONAL ACCESSORIES

ITEM	SDP	SD	H410
• Air flow regulator	81223	81223	
Balancers & Holster			
1 Spring suspension balancer	52862	50532	50542
2 Hose reel balancer	50562	50562	
3 Reaction free self-lock balancer	54432	54432	54442
4 Tool holster DTH-42	107892	107892	
Suspension Shackle			
5 Suspension shackle		70082	615 571 050 0
• Swivel suspension shackle			615 396 229 0
Bench Stand			
6 D59 Pantographic arm (see pages 116-117)	408933		

Miscellaneous

7 Side handle	467033		
• Offset exhaust		205 047 623 3	
8 Bench mounted swing arm	66542	66542	66542
• Square drive adaptor 3/8" Square drive, 48mm (1.89") long			14422
• Square drive adaptor 1/2" Square drive, 46mm (1.81") long			14442
• Square drive adaptor 1/2" Square drive, 76mm (2.99") long			14482
• Exhaust collector			72163



AUTO REVERSE

ACCESSORIES INCLUDED

	SD	2F189-PX
• Suspension bail(s)	467003	
• Side handle	467033	
• Clutch adjustment keys	29932	29932

OPTIONAL ACCESSORIES

ITEM	SD	2F189-PX
Placement of Threaded Inserts		
1 M3 x 0.5 Nose kit	76552	76552
1 M4 x 0.7 Nose kit	76562	76562
1 M5 x 0.8 Nose kit	76572	76572
1 M6 x 1.0 Nose kit	76582	76582
1 M8 x 1.25 Nose kit	76592	76592

Blind Hole Tapping/ Cleaning - 3 parts Required

• Bit adaptor*	465513	
• Bit adaptor		370683
2 Thread adaptor	96743	96743
3 Chuck capacity 6.5mm (1/4")	28942	28942

Balancers & Tool Holster

4 Spring suspension balancer	50532	50532
5 Reaction free self-lock balancer	54432	54452
6 Tool holster DTH-42	107892	107892

Bench Stands

7 D57 Balancing arm, (see pages 116-117)	408903	408903
• Tool clamp	615 396 614 0	615 396 614 0
7 D57X Balancing arm, (see pages 116-117)	408913	408913
• Tool clamp	615 396 614 0	615 396 614 0
8 D58 Balancing arm, (see pages 116-117)	408923	408923
• Tool clamp	615 396 614 0	615 396 614 0
9 Bench mounted swinging arm for use with balancer	66542	66542
10 TRA25 Telescopic reaction arm	615 396 533 0	

* To order more clutch cover PN 465453 + washer PN 467113



Accessories

ANGLE HEAD

ACCESSORIES INCLUDED

	2D4872	SC	SD	SH
• Suspension bail(s)		39433/280893	467003	
• Exhaust hose		396553	467073	
• Adjustment keys		29932	29932	205 050 785 3
• Air hose nipple				205 051 239 3

OPTIONAL ACCESSORIES

ITEM	2D4872	SC	SD	SH
• Exhaust hose for SH70/150/200/280/420/500/700/850				459813
• Exhaust hose for SH1200/2000				205 050 181 3

Balancers & Holster

1 Spring suspension balancer	50532	52862	50532	
1 Spring suspension balancer for SH70/150/200/280				52862
2 Spring suspension balancer for SH420 to SH2000				50052
3 Hose reel balancer	50562	50552	50562	
3 Hose reel balancer for SH70/150/200/280				50562
4 Reaction free self-lock balancer	54432	54422	54432	
4 Reaction free self-lock balancer for SH70/150/200/280				54432

Suspension Shackle

• Suspension shackle		95842	70082	
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Suspension bails

5 Suspension bail for SH70/150/200/280				205 051 632 3
5 Suspension bail for SH420/500/700/850				205 051 113 3
5 Suspension bail for SH1200/2000				615 396 562 0

Swiveling bails

6 Swiveling bail for SH420/500/750/850				205 051 115 3
6 Swiveling bail for SH1200/2000				205 051 232 3

Bench Stands

7 D57 Balancing arm, (see pages 116-117)	408903	408903	408903	
• Tool clamp	615 396 614 0	615 396 614 0	615 396 614 0	
7 D57X Balancing arm, (see pages 116-117)	408913	408913	408913	
• Tool clamp	615 396 614 0	615 396 614 0	615 396 614 0	
8 D58 Balancing arm, (see pages 116-117)	408923	408923	408923	
• Tool clamp	615 396 614 0	615 396 614 0	615 396 614 0	

Miscellaneous

• Offset exhaust			205 047 623 3	
• Bench mounted swing arm				66542
9 Protective cover for SH70/150/200/280	66542	66542	66542	205 011 426 2
9 Protective cover for SH420/500				205 050 182 3
9 Protective cover for SH700/850				205 050 235 3
9 Protective cover for SH1200/2000				205 050 252 3
10 Complete reaction bar kit for SH850/1200/2000				205 051 121 3
11 Reporting kit for SH70 (for connexion with FAS)				205 011 424 2
11 Reporting kit for SH150/200/280 (for connexion with FAS)				205 011 425 2
11 Reporting kit for SH420/500/700/850 (for connexion with FAS)				205 050 175 3
11 Reporting kit for SH1200/2000 (for connexion with FAS)				205 050 176 3

OPEN ENDED WRENCHES

ACCESSORIES INCLUDED

	SD
• Suspension bail(s)	467003
• Exhaust hose	467073
• Clutch adjustment keys	29932

OPTIONAL ACCESSORIES

ITEM	SD
Balancers	
1 Spring suspension balancer	50542
2 Hose reel balancer	50562
3 Reaction free self-lock balancer	54442
Suspension Shackle	
4 Suspension shackle	70082
Bench Stands	
5 D57 Balancing arm, (see pages 116-117)	408903
• Tool clamp	615 396 614 0
5 D57X Balancing arm, (see pages 116-117)	408913
• Tool clamp	615 396 614 0
6 D58 Balancing arm, (see pages 116-117)	408923
• Tool clamp	615 396 614 0
Miscellaneous	
• Offset exhaust	205 047 623 3
• Bench mounted swing arm	66542



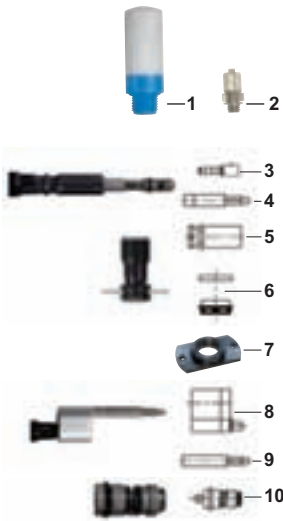
TORQUE CONTROLLED

ACCESSORIES INCLUDED

ITEM	SC2 / SD
1 Muffler	205 045 792 3
2 Straight fitting	205 044 497 3

OPTIONAL ACCESSORIES

ITEM	PART NO.
• Spring Loaded Shats and Bearings Support (including 3, 4, 5)	
3 Bit Adaptor	103782
4 Spring Loaded Shaft 25mm (1")	108342
5 Shaft Support and Nose Mount	108412
6 Nose Mounts	205 052 876 3
7 Flange M20	205 052 875 3
• Offset Head & Spring Loaded shaft (Including 8, 9)	
8 Offset Head , offset 30mm (1.18")	384993
9 Spring Loaded Shaft 25mm (1") stroke	108342
10 3/8" Square to 1/4" Hex Power Adaptor	108322



SFP

NJ Screw Dispenser

- 3 Base models, NJ12, NJ23 and NJ45
- Modular rail system to permit screws of 1.4 to 5.0mm diameter to be fed
- Rail can be changed and the unit set up within 5 minutes
- Simple brush and rail combination to prevent jamming
- 30% faster feed rate due to a number of screws being fed into the rail in a single cycle
- Dispenser has built in height adjustment to allow the screw to be presented to the operator at the correct angle

Capacity

NJ12 Thread Diameter 1.4-1.7mm, Screw Length<10mm
 NJ23 Thread Diameter 1.8-3.0mm, Screw Length<18mm
 NJ45 Thread Diameter 3.1-5.0mm, Screw Length<18mm

Dimensions 130x215x136mm **Weight** 3.2kg
Max Feed Rate 2 screws/second **Bowl Capacity** Approximately 1200pcs (M3)
Power Supply 230/120V **Rated Input** 12V, 500mA

A holding plate will be required for rounded head or countersunk screws to prevent them from climbing on to each other in the rail

How To Order

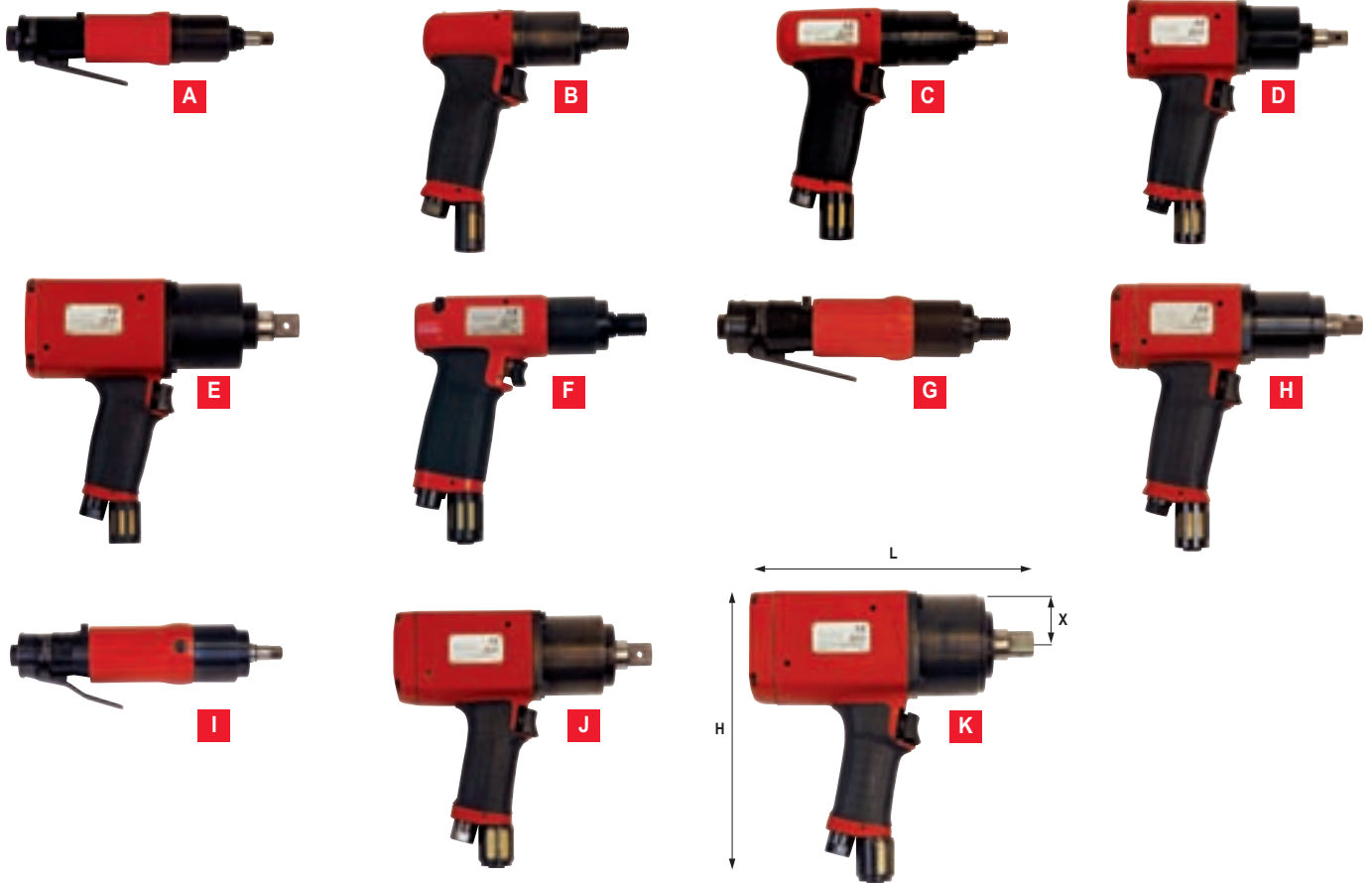
Base model + 1 Rail assembly & holding plate (if required) + Plug 615 937 002 0



MAX SCREW SIZE (mm)	SCREW DISPENSER		RAIL ASSEMBLY STANDARD		HOLDING PLATE SHORT/COUNTERSUNK SCREWS	
	MODEL	PART NO.	MODEL	PART NO.	MODEL	PART NO.
1.4	NJ12	2050111772	R14	2050111802	-	-
1.7	NJ12	2050111772	R17	2050111812	-	-
2	NJ23	2050111782	R20	2050111822	R20-23	2050111892
2.3	NJ23	2050111782	R23	2050111832	R20-23	2050111892
2.6	NJ23	2050111782	R26	2050111842	R26-30	2050111902
3	NJ23	2050111782	R30	2050111852	R26-30	2050111902
3.5	NJ45	2050111792	R35	2050111862	R35-40	2050111912
4	NJ45	2050111792	R40	2050111872	R35-40	2050111912
5	NJ45	2050111792	R50	2050111882	R50	2050111922

Pulse Tools - Shut Off and Non Shut Off range

5 to 450 Nm (4 to 332 ft.lb) - 2800 to 10000 rpm

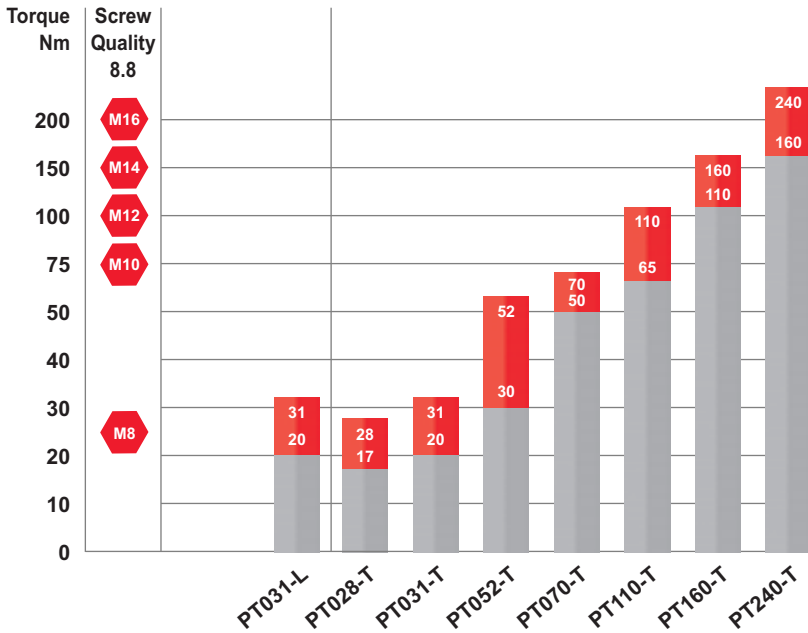


Air Inlet: All models 1/4" BSP, except PT160/240/250/450: 3/8" BSP – NPT optional

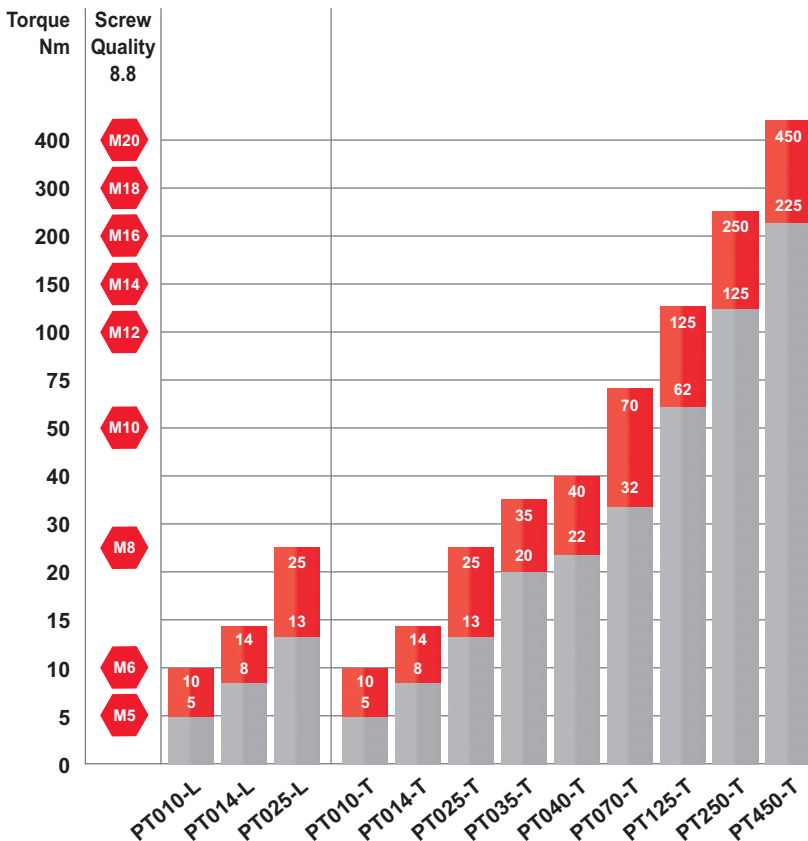
PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT DRIVE	TORQUE RANGE		DIMENSIONS						WEIGHT		AIR FLOW		HOSE INT. Ø	
					rpm	in.	Nm	ft.lb	L	X	H	kg	lb.	l/s	cfm	mm	in.	
NON SHUT OFF																		
A	PT031-L10000-I10S	205 147 466 4	10000	3/8 Sq	20-31	15-23	221	8.7	22	0.87	-	-	0.70	1.5	8	17	8	5/16
B	PT028-T9000-I4Q	205 147 789 4	9000	1/4 Hex	17-28	13-21	150	5.9	22	0.87	175	6.9	0.80	1.8	8	17	8	5/16
C	PT031-T9000-I10S	205 147 467 4	9000	3/8 Sq	20-31	15-23	152	6.0	22	0.87	175	6.9	0.80	1.8	8	17	8	5/16
C	PT052-T7000-I10S	205 147 468 4	7000	3/8 Sq	30-52	22-38	174	6.8	23	0.90	175	6.9	1.00	2.0	9	19	10	3/8
D	PT070-T6000-I13S	205 147 469 4	6000	1/2 Sq	50-70	37-52	168	6.6	26	1.02	190	7.5	1.30	2.9	11	23	10	3/8
D	PT110-T4500-I13S	205 147 470 4	4500	1/2 Hex	65-110	48-81	178	7.0	29	1.14	198	7.8	1.60	3.5	12	25	10	3/8
D	PT160-T3500-I13S	205 147 471 4	3500	1/2 Sq	110-160	81-118	188	7.4	34	1.34	209	8.2	2.40	5.3	14	30	13	1/2
E	PT240-T2800-I19S	205 147 472 4	2800	3/4 Sq	160-240	118-177	205	8.1	37	1.46	212	8.3	3.30	7.3	15	32	13	1/2
SHUT OFF																		
F	PT010-T5500-S4Q	205 146 227 4	5500	1/4 Hex	5-10	4-7	205	8.1	21	0.80	178	7.0	0.95	2.1	6	13	8	5/16
G	PT010-L5000-S4Q	205 146 225 4	5000	1/4 Hex	5-10	4-7	212	8.3	21	0.83	-	-	0.90	1.9	6	13	8	5/16
F	PT014-T6000-S4Q	205 146 228 4	6000	1/4 Hex	8-14	6-10	205	8.1	21	0.83	178	7.0	1.00	2.2	6	13	8	5/16
G	PT014-L6000-S4Q	205 146 226 4	6000	1/4 Hex	8-14	6-10	212	8.3	21	0.83	-	-	0.90	2.0	6	13	8	5/16
H	PT025-T4500-S10S	205 147 462 4	4500	3/8 Sq	13-25	10-18	177	7.0	26	1.02	192	7.6	1.30	2.9	7	15	8	5/16
I	PT025-L4500-S10S	205 147 463 4	4500	3/8 Sq	13-25	10-18	236	9.3	25	0.98	-	-	1.20	2.5	7	15	8	5/16
H	PT035-T6000-S4Q	205 147 790 4	6000	1/4 Hex	20-36	15-26	175	6.9	26	1.02	192	7.6	1.40	3.0	8	17	8	5/16
H	PT040-T6000-S10S	205 146 229 4	6000	3/8 Sq	22-40	16-29	177	7.0	26	1.02	192	7.6	1.40	3.0	8	17	8	5/16
H	PT070-T4000-S13S	205 146 230 4	4000	1/2 Sq	32-70	24-51	192	7.6	29	1.14	200	7.9	1.80	4.0	10	21	10	3/8
H	PT125-T3500-S13S	205 146 231 4	3500	1/2 Sq	62-125	46-92	201	7.9	34	1.34	211	8.3	2.40	5.3	12	25	10	3/8
J	PT250-T4000-S19S	205 147 464 4	4000	3/4 Sq	125-250	92-185	216	8.5	37	1.46	215	8.5	3.30	7.2	20	42	13	1/2
K	PT450-T3000-S19S	205 147 465 4	3000	3/4 Sq	225-450	166-332	202	8.0	42	1.65	229	9.0	4.30	9.5	22	46	13	1/2

Pulse Tools - Tool Selection

Non Shut Off range



Shut Off range



Accessories

ACCESSORIES INCLUDED

	PART NO.
• Air Hose nipple	
• Adjustment screwdriver for all models, except PT031/070/110/PT160/240	205 050 137 3

Pulse Non shut off

• Cover protection for PT031-T9000-I10S	205 051 325 3
• Cover protection for PT052-T7000-I10S	205 051 324 3
• Cover protection for PT070-T6000-I13S	205 051 328 3
• Cover protection for PT110-T4500-I13S	205 051 329 3
• Cover protection for PT160-T3500-I13S	205 051 326 3
• Cover protection for PT240-T2800-I19S	205 051 327 3

Pulse Shut off

• Cover protection for PT014-T6000-S4Q	205 051 331 3
• Cover protection for PT025-T4500-S10S	205 051 328 3
• Cover protection for PT040-T6000-S10S	205 051 328 3
• Cover protection for PT070-T4000-S13S	205 051 323 3
• Cover protection for PT125-T3500-S13S	205 051 464 3
• Cover protection for PT250-T4000-S19S	205 051 308 3
• Cover protection for PT450-T3000-S19S	205 050 929 3

OPTIONAL ACCESSORIES

	PART NO.
• Reporting kit for PT010-T/L.. / PT014-T/L.. / PT025-T/L.. / PT040-T.. / PT070-T.. / PT125-T..	205 011 427 2
• Reporting kit for PT250-T./ PT450-T..	205 011 428 2
• Suspension bail for PT031L/010/014/025L	451463
• Suspension bail for PT010/014/031/052	451393
• Suspension bail for PT025/040/070/110/125T	459843
• Suspension bail for PT160/240/250/450T	205 050 906 3
• Exhaust hose for PT031L	452243
• Exhaust hose for PT010/014/025L	459813

Quality Assurance in Fastening

Sigma 2001/2D / Delta 4000/4D / Delta 5000/5D



Easy-to-use and Versatile

The **SIGMA** and **DELTA** are easy-to-use, versatile systems which allow the measurement of torque values with model **SIGMA 2001/2D**, **DELTA 4000/4D** or torque and angle values with model **DELTA 5000/5D**.

The parameters and features of all the transducers in the range are stored in the SIGMA / DELTA and are automatically set when selecting the type of transducer:

- Digital rotary transducers
- Static transducers
- Hand held torque wrenches
- Torque & Angle rotary transducers

The **memory** stores up to 1000 results (SIGMA 2001/2D), up to 5000 results (DELTA 4000/4D/5000/5D).

Lightweight and self-contained, the SIGMA & DELTA can operate for 14 hours without charge or change of batteries. In addition, there is an easily interchangeable battery block option which doubles this operating time. The data autosave function allows you to perform this operation without the loss of results.

Communication: the **SIGMA / DELTA** have the option to connect various parallel printers. They are fitted with an RS232C serial type PC port.

Designed for your Quality Procedure

Checking operation

Sequence of checking operations throughout the assembly line to verify that the tooling is operating to specified torques.

Each operation setting includes all requisite parameters for its performance (type of transducers used, number of required readings, specified torque, tolerances, etc.)

Manual sequencing

Manual selection of the operation corresponding to the tool being verified.

Automatic sequencing

The selection of the various operations can also be carried out automatically, saving the operator the additional time to manually select the operation.

Number of operations

It is possible to program up to 1000 operations. Each operation can include 4 to 5000 reading results depending on the number of operations stored.

DELTAPC Software

The DELTAPC software allows you to save, control, modify and select all the operations and to define customised quality procedures. Each procedure can then be performed after being downloaded to the SIGMA / DELTA.

Torque measurement systems

Sigma 2001/2D / Delta 4000/4D / Delta 5000/5D

Integrated SPC Calculations

- CAM, CP and CPK calculation and measurement of mean & range on torque or angle values in accordance with ISO, NF, Q544000 and CNOMO standards.
- Calculation of ideal tolerances
- Data screening (date or value interval)
- Tolerance interval selection
- 'Population homogeneity' test
- Normal distribution test
- Exporting the results

The results of the readings can be exported to the **DELTAPC** software in order to:

- store the results and perform statistical calculations
- save and display one or several curves
- display histograms and control charts
- transfer the results and curves to an EXCEL or other type database.

Two Operations Modes

Acquisition Mode

In this mode, SIGMA / DELTA allows the operator to acquire and store torque values or torque and angle values:

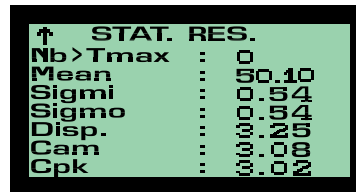
- either automatically, after each tightening operation
- or manually, by pressing the VAL key

In manual mode, 2 types of reading are available:

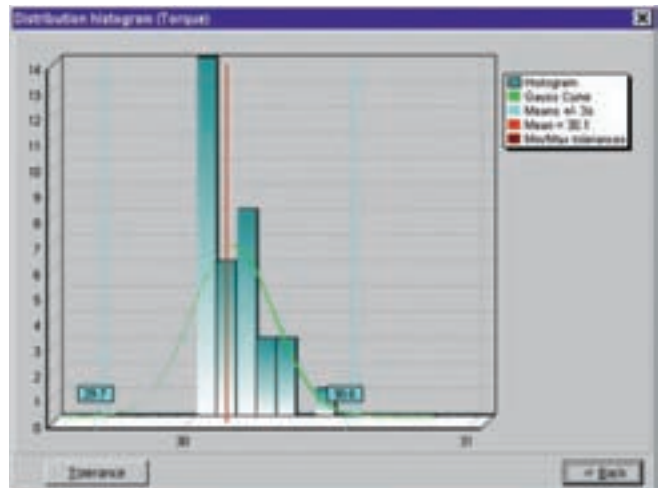
- peak: displays and stores the maximum torque read
- track: the values displayed follow the evolution of the torque in a continuous process.

Examples of application in track mode

- Hand torque measuring wrenches (AWT / DWT)
- Reading the tension in a joint with a force meter
- Calibration of assembly machines in 'static mode'.
In this mode, the values are not stored.



↑ STAT. RES.	
Nb > Tmax	: 0
Mean	: 50,10
Sigma	: 00,054
Sigma	: 00,054
Disp.	: 00,0028
Cam	: 00,008
Cpk	: 00,002



Programming Mode

With its ergonomic design, **SIGMA / DELTA** can be easily programmed by using the 5 browsing and the multifunction alphanumeric keys of the keyboard.

The main parameters that can be programmed are:

- selection of transducer connected to unit
- the torque measuring unit
- the nominal torque
- the nominal torque or torque & angle tolerances
- the number of readings for each operation
- the mode used to start the reading
- the parameters used to save the curves
- etc.

The unit is multilingual: Français, English, Espanol, Deutsch, Italiano, Nederlands, Svenska, Portuguese.

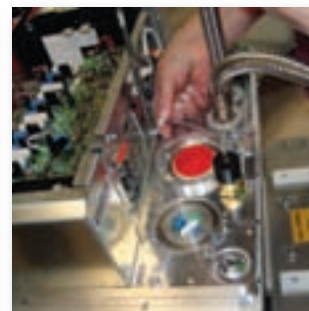
Fields of Application



Car industry



Aeronautics



Medical

Technical features

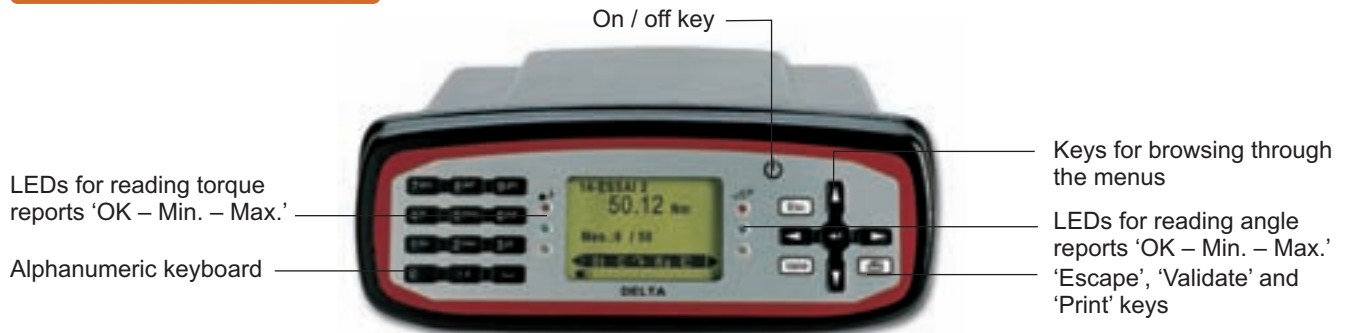
Sigma 2001/2D / Delta 4000/4D / Delta 5000/5D

MAIN FUNCTIONS	SIGMA 2001/2D	DELTA 4000/4D	DELTA 5000/5D
TORQUE			
Connection of strain gauge transducers, ART / AWT type or others (for Sigma2001/Delta4000 & 5000 only)	✓	✓	✓
Connection of digital transducers DRT4, DRT5, DTW and DST	✓	✓	✓
Range changeover: Automatic, depending on the transducer selected	✓	✓	✓
Sensitivity: Automatic selection depending on the transducer selected	✓	✓	✓
Transducer load: Automatic selection depending on the transducer selected	✓	✓	✓
Specific: Torque from 1 to 10 000Nm - up to 20 specific transducers can be defined	✓	✓	✓
Transducers: Force from 1 to 50 000 daN Sensitivity 0.5 to 2.5 Mv/v	✓	✓	✓
Units: Nm - N.cm - kg.cm - kg.m - Ft.lb - In.lb - kg - N - daN - Kn	✓	✓	✓
SETTING			
Joint: Selection of the type of joint and application: Hard - Standard - Soft and filter value (2 to 2048 Hertz)	✓	✓	✓
Measuring mode: Standard - Impulse Wrenches	✓	✓	✓
Display reset: Manual - External - Automatic (programmable)	✓	✓	✓
Operating Mode: Acquisition mode - Programmable mode	✓	✓	✓
INTEGRATED STATISTICAL CALCULATIONS			
CAM, CP and CPK calculation and measurement of mean range on torque or angle values in accordance with ISO, NF, Q544000 and CNOMO standards.		✓	✓
Calculation of ideal tolerances		✓	✓
Data screening (date or value interval)		✓	✓
Tolerance interval selection		✓	✓
Population homogeneity test		✓	✓
Normal distribution test		✓	✓
Exporting the results		✓	✓
COMMUNICATION			
LEDs: Tightening reports		✓	✓
Torque OK - Min. torque - Max torque		✓	✓
Torque OK - Min. torque - Max. torque - Angle OK - Min angle - Max. angle		✓	✓
Inputs: Reset the reading and saving the result - Reset the reading without saving the result		✓	✓
Outputs: 3 torque reports: OK - Min.- Max.		✓	✓
Analog torque output (0-10V)	✓	✓	✓
Memory: Up to 5000 results including, torque, torque & angle, date & time		✓	✓
Up to 5000 results including, torque, date & time		✓	✓
Up to 1000 results including, torque, date & time	✓	✓	✓
Tightening curves		✓	✓
Printer: connected to SubD25 point parallel port with printing: either in order of occurrence (print after each reading, automatically) / parameters / statistics / curves or in increments of N readings starting from a given date.	✓	✓	✓
Tachometer			✓
POWER REQUIREMENTS			
Power supply: Removable and rechargeable battery of 6 x 1.2 V (7.2V) NiMH	✓	✓	✓
Battery life: 1000 Discharging / Recharging cycles	14 hours	14 hours	14 hours
Automatic stop when not used during the selected	✓	✓	✓
Battery control: Low battery indication - Power miser - Charge level test	✓	✓	✓
Global data backup during battery	✓	✓	✓
Charger: Multi-voltage 115/230 Volts with multi-standard mains power cord	✓	✓	✓

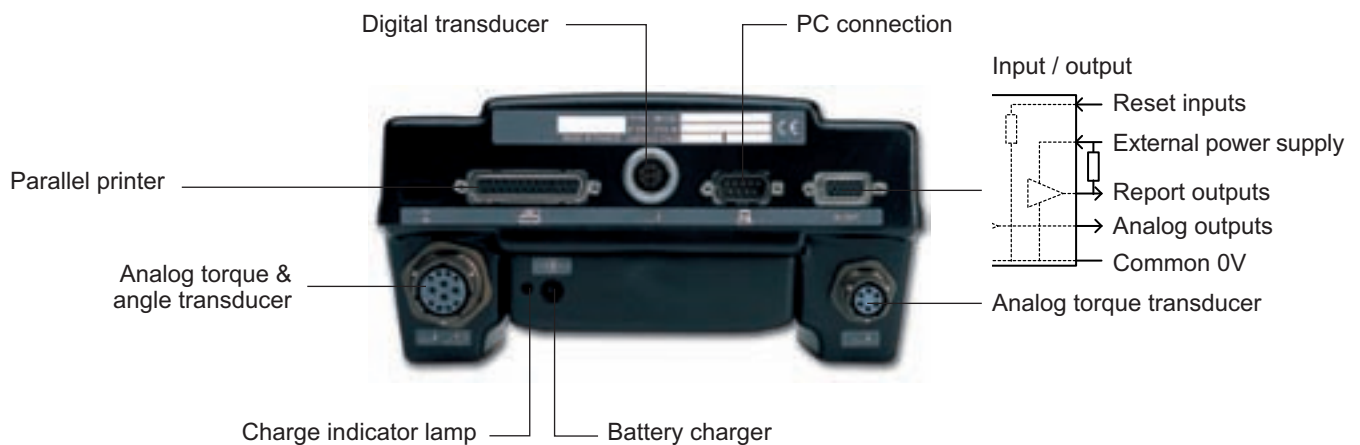
Measuring unit

Sigma 2001/2D / Delta 4000/4D / Delta 5000/5D

OPERATOR INTERFACE



CONNECTIONS



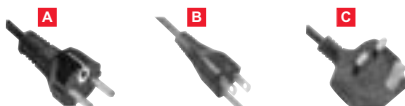
MODEL	PART NUMBER	POWER REQUIREMENTS		DIMENSIONS		DIMENSIONS		DIMENSIONS		WEIGHT	
		BATTERY LIFE	CHARGER	DEPTH	WIDTH	HEIGHT	mm	in.	kg	lb.	
		hours	Volts	mm	in.	mm	in.	mm	in.		
SIGMA2001 unit	615 935 037 0	14	115/230	190	7.48	230	9	100	3.9	1.05	2.3
DELTA4000 unit	615 935 035 0	14	115/230	190	7.48	230	9	100	3.9	1.05	2.3
DELTA5000 unit	615 935 043 0	14	115/230	190	7.48	230	9	100	3.9	1.05	2.3
SIGMA2D unit	615 935 051 0	14	115/230	190	7.48	230	9	100	3.9	1.05	2.3
DELTA4D unit	615 935 052 0	14	115/230	190	7.48	230	9	100	3.9	1.05	2.3
DELTA5D unit	615 935 053 0	14	115/230	190	7.48	230	9	100	3.9	1.05	2.3

ACCESSORIES INCLUDED

	PART NO.
• Universal Charger	615 922 948 0
• Multilingual literature	615 993 801 0

START-UP KIT to be ordered with the unit
Including: **Plug + Cable**

PLUG	PART NO.
A European	615 917 201 0
C English	615 917 202 0
B USA	615 917 203 0



OPTIONAL ACCESSORIES

	PART NO.
• Extra battery block	615 935 042 0
• Unit/PC connection cable, type RS232C	615 917 047 0
• Parallel printer cable	615 917 057 0
• DELTAPC STD 1 Install	615 927 529 0
• DELTAPC STD 5 Install	615 927 530 0
• DELTAPC ADV 1 Install	615 927 520 0
• DELTAPC ADV 5 Install	615 927 532 0
• Demo case Delta (empty)	615 930 725 0

Cable see page 103



Digital Rotary Transducers

Torque or Torque & Angle

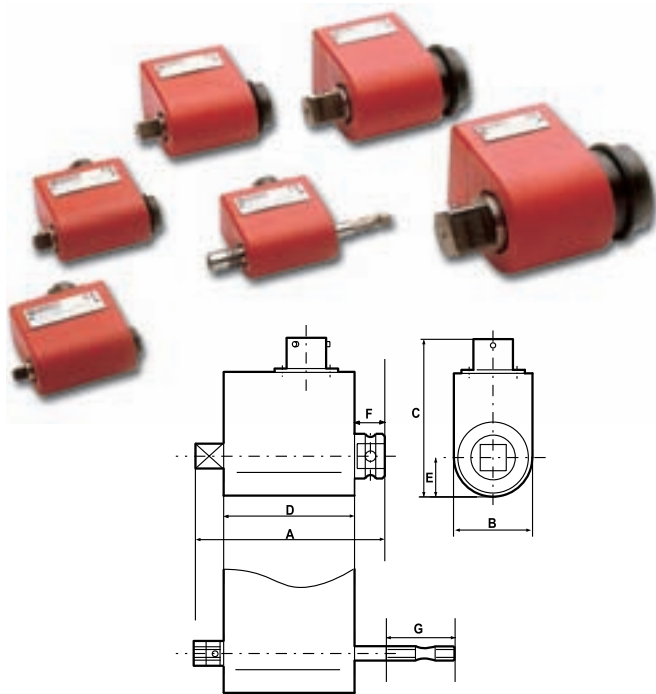
The DRT4 (torque) and DRT5 (torque & angle) transducers cover a torque range from 0.15 to 5000 Nm (0.11 to 3685 ft.lb). DRT5 transducers offer an angle resolution down to 0.5°. The built-in memory provides all transducer calibration data to Sigma or Delta data collector.

Features:

- Torque range from 0.15 to 5000 Nm..... (0.11 to 3685 ft.lb).
- Strain gauges transducer – sensitivity 2mV/V. – accuracy +/-0.35% full scale.
- Built-in smart chip memory with:..... Calibration features: type of transducer – sensitivity – nominal load – serial number. Maintenance information: date of last calibration – maximum torque applied on transducer.
- Unique contact system preventing the common problem of 'brush bounce'.
- Angle counting system 0.5° resolution
- Same size for torque or torque & angle transducers
- Digital connection between data collector and transducer. Torque value converted to a digital signal close to the strain gauges.

Benefits:

- Transducers used in line with screwdrivers – pneumatic tools – impulse tools – electric nutrunners and spindles.
- The most accurate and reliable type of torque transducer.
- No need for transducer selection. The data collector automatically recognises the transducer connected. Avoids risk of operator error in selecting a wrong type of transducer.
- Transducers can be used in line with impulse tools, but not with impact tools.
- Checks all types of joints, hard and soft.
- No problem of accessibility.
- Insensitive to cable length. Reliability of torque values transmitted to the data collector. Only one type of transducer cable needed. Easy to recalibrate by modifying the sensitivity coefficient. No hardware adjustment.



MODEL	PART NUMBER	TORQUE RANGE		OUTPUT
		Nm	ft.lb	

TORQUE TRANSDUCERS DRT4

DRT 4 H 2	615 165 209 0	0.15-2	0.11-1.5	Hex 1/4"
DRT 4 H 5	615 165 210 0	0.3-5	0.22-3.7	Hex 1/4"
DRT 4 H 20	615 165 211 0	1.5-20	1.11-14.7	Hex 1/4"
DRT 4 Sq 20	615 165 212 0	1.5-20	1.11-14.7	Sq 1/4"
DRT 4 Sq 25	615 165 213 0	1.8-25	1.33-18.4	Sq 3/8"
DRT 4 Sq 75	615 165 214 0	5.0-75	3.69-55.3	Sq 3/8"
DRT 4 Sq 180	615 165 215 0	12.0-180	8.85-132	Sq 1/2"
DRT 4 Sq 500	615 165 216 0	35.0-500	25.8-368	Sq 3/4"
DRT 4 Sq 1400	615 165 217 0	95.0-1400	70.0-1032	Sq 1"
DRT 4 Sq 3000	615 165 536 0	200-3000	147-2211	Sq 1-1/2"
DRT 4 Sq 5000	615 165 540 0	350-5000	258-3685	Sq 1-1/2"

TORQUE & ANGLE TRANSDUCERS DRT5

DRT 5 H 2	615 165 218 0	0.15-2	0.11-1.5	Hex 1/4"
DRT 5 H 5	615 165 219 0	0.3-5	0.22-3.7	Hex 1/4"
DRT 5 H 20	615 165 220 0	1.5-20	1.11-14.7	Hex 1/4"
DRT 5 Sq 20	615 165 221 0	1.5-20	1.11-14.7	Sq 1/4"
DRT 5 Sq 25	615 165 222 0	1.8-25	1.33-18.4	Sq 3/8"
DRT 5 Sq 75	615 165 223 0	5.0-75	3.69-55.3	Sq 3/8"
DRT 5 Sq 180	615 165 224 0	12.0-180	8.85-132	Sq 1/2"
DRT 5 Sq 500	615 165 225 0	35.0-500	25.8-368	Sq 3/4"
DRT 5 Sq 1400	615 165 226 0	95.0-1400	70.0-1032	Sq 1"

OPTIONAL ACCESSORIES

Cables, see page 103

OUTPUT	A		B		C		D		E		F		G	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
Hex 1/4"	116.0	4.56	30.0	1.18	68.0	2.68	56.0	2.20	13.0	0.51	39.0	1.53	25.5	1
Sq 1/4"	71.5	2.81	30.0	1.18	71.5	2.81	56.0	2.20	13.0	0.51	6.0	0.24		
Sq 3/8"	77.0	3.03	30.0	1.18	74.0	2.91	56.0	2.20	15.0	0.59	8.0	0.31		
Sq 1/2"	87.0	3.42	42.0	1.65	82.5	3.25	58.0	2.28	21.0	0.83	12.0	0.47		
Sq 3/4"	106.0	4.17	52.0	2.05	93.5	3.68	60.0	2.36	26.0	1.02	21.0	0.83		
Sq 1"	125.0	4.92	63.0	2.48	104.0	4.09	64.5	2.54	31.5	1.24	29.0	1.14		
Sq 1-1/2"	165.0	6.50	106.0	4.17	148.5	5.85	88.0	3.46	53.0	2.09	35.2	1.39		

Analog Rotary Transducers

Torque

The ART4 (torque) transducers cover a torque range from 0.3 to 180 Nm (0.22 to 132 ft.lb).

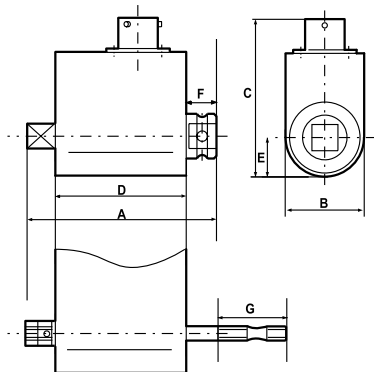
Features:

- Torque range from 0.3 to 180 Nm..... (0.22 to 132 ft.lb).
- Highly accurate strain gauges transducer – sensitivity 2mV/V. – accuracy +/-0.35% full scale.
- Unique contact system preventing the common problem of 'brush bounce'.
- Same size for torque or torque & angle transducers Same as DRT transducers.

Benefits:

- Transducers used in line with screwdrivers – pneumatic tools – impulse tools – electric nutrunners and spindles.
- The most accurate and reliable type of torque transducer.
- Transducers can be used in line with impulse tools, but not with impact tools.
- No problem of accessibility.

**Compatible with Sigma2001, Delta4000 & Delta5000
not with Sigma2D, Delta4D & Delta5D**



OUTPUT	A		B		C		D		E		F		G	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
Hex 1/4"	116.0	4.56	30.0	1.18	68.0	2.68	56.0	2.20	13.0	0.51	39.0	1.53	25.5	1
Sq 3/8"	77.0	3.03	30.0	1.18	74.0	2.91	56.0	2.20	15.0	0.59	8.0	0.31		
Sq 1/2"	87.0	3.42	42.0	1.65	82.5	3.25	58.0	2.28	21.0	0.83	12.0	0.47		

MODEL	PART NUMBER	TORQUE RANGE		OUTPUT
		Nm	ft.lb	

TORQUE TRANSDUCERS ART4

ART4 H 5	615 165 374 0	0.3-5	0.22-3.7	Hex 1/4"
ART4 H 20	615 165 375 0	1.5-20	1.11-14.7	Hex 1/4"
ART4 Sq 25	615 165 376 0	1.8-25	1.33-18.4	Sq 3/8"
ART4 Sq 75	615 165 377 0	5.0-75	3.69-55.3	Sq 3/8"
ART4 Sq 180	615 165 378 0	12.0-180	8.85-132	Sq 1/2"

OPTIONAL ACCESSORIES

Cables, see page 103

Torque wrenches

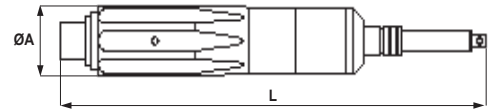
AWT - Analogic Wrench Torque

Torque screwdriver used for Quality control and for precise assembly.

Used with data acquisition unit, Delta4000/5000 & Sigma2001 analogic.

Sliding bush to convert left & right tightening. The very low friction avoids dragging the screws on the return motion.

Precision reversible ratchet consisting of two needle clutches for minimum backlash effect on 15 Nm model.



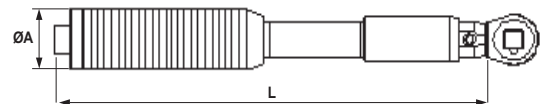
MODEL	PART NUMBER	TORQUE RANGE		ACCURACY	SQUARE DRIVE	DIMENSIONS				WEIGHT	
		Nm	ft.lb			L		ØA		kg	lb.
AWT 1 Nm - 6S	615 165 552 0	0.1-1	0.07-0.74	+/- 0.5% +/- 1 digit	1/4	mm	in.	mm	in.	kg	lb.
AWT 5 Nm - 6S	615 165 554 0	0.5-5	0.37-3.68	+/- 0.5% +/- 1 digit	1/4	143	5.6	35	1.38	0.22	0.48
AWT 15 Nm - 6R	615 165 556 0	1.5-15	1.10-11.0	+/- 0.5% +/- 1 digit	1/4	143	5.6	35	1.38	0.22	0.48
						190	7.5	35	1.38	0.36	0.79

DWT - Digital Wrench Torque

Digital Torque wrench non length dependent

Used for quality control: residual torque check

Used with data acquisition unit, Delta & Sigma



All models supplied with Reversible ratchet: 615 397 126 0 for DWT30/50 - 615 397 127 0 for DWT70/100 - 615 397 200 0 for DWT150/250 - 615 397 201 0 for DWT400 - 615 397 204 0 for DWT1000

MODEL	PART NUMBER	TORQUE RANGE		DRIVE		RATCHET	DIMENSIONS				WEIGHT	
		Nm	ft.lb	mm	in.		L		ØA		kg	lb.
DWT 30 Nm - 10	615 165 544 0	3-30	2.2-22	9x12	0.35x0.47	3/8	mm	in.	mm	in.	kg	lb.
DWT 50 Nm - 10	615 165 545 0	5-50	3.7-37	9x12	0.35x0.47	3/8	220	8.7	40	1.57	0.43	0.95
DWT 70 Nm - 13	615 165 546 0	7-70	5.2-52	9x12	0.35x0.47	1/2	220	8.7	40	1.57	0.44	0.97
DWT 100 Nm - 13	615 165 547 0	10-100	7.4-74	9x12	0.35x0.47	1/2	283	11.1	40	1.57	0.54	1.19
DWT 150 Nm - 13	615 165 548 0	15-150	11.1-110	14x18	0.55x0.71	1/2	363	14.3	40	1.57	0.63	1.39
DWT 250 Nm - 13	615 165 549 0	25-250	18.4-184	14x18	0.55x0.71	1/2	475	18.7	40	1.57	1.38	3.04
DWT 400 Nm - 20	615 165 550 0	40-400	29.5-294	14x18	0.55x0.71	3/4	475	18.7	40	1.57	1.44	3.17
DWT 1000 Nm - 25	615 165 551 0	100-1000	73.7-737	ø28	1.1	1	735	28.9	40	1.57	2.01	4.43
							1102	43.4	56	2.20	6.48	14.3

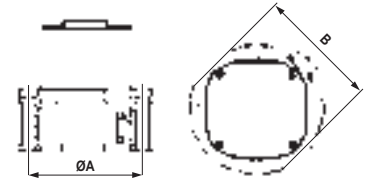
DWA - DIGITAL WRENCH ACCESSORIES

END FITTING TOOLS	PART NUMBER	DRIVE		DIMENSIONS								WEIGHT			
		mm	in.	A		B		H		L		kg	lb		
Open End				mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	kg	lb
A Open End 13mm	615 397 061 0	9x12	0.03x0.47	13	0.51	30	1.18	7	0.28	17.5	0.69	0.048	0.106		
A Open End 17mm	615 397 065 0	9x12	0.03x0.47	17	0.67	38	1.50	8.5	0.33	17.5	0.69	0.060	0.132		
A Open End 22mm	615 397 139 0	14x18	0.55x0.71	22	0.87	50	1.97	11	0.43	25	0.98	0.165	0.363		
A Open End 24mm	615 397 140 0	14x18	0.55x0.71	24	0.94	53	2.09	12	0.47	25	0.98	0.167	0.368		
Ring End															
B Ring End 17mm	615 397 087 0	9x12	0.03x0.47	17	0.67	27.2	1.07	13	0.51	17.5	0.69	0.059	0.130		
B Ring End 22mm	615 397 091 0	9x12	0.03x0.47	22	0.87	34.5	1.36	15	0.59	17.5	0.69	0.074	0.163		
B Ring End 22mm	615 397 181 0	14x18	0.55x0.71	22	0.87	34.5	1.36	15	0.59	25	0.98	0.145	0.319		
B Ring End 24mm	615 397 182 0	14x18	0.55x0.71	24	0.94	37.5	1.48	15	0.59	25	0.98	0.153	0.337		
Flared End															
C Flared End 22mm	615 397 113 0	9x12	0.03x0.47	22	0.87	39	1.54	15	0.59	19	0.75	0.092	0.202		
Reversible Ratchet															
D Reversible Ratchet 1/4"	615 397 125 0	9x12	0.03x0.47		1/4	22	0.87	14.5	0.57	17.5	0.69	0.062	0.137		
D Reversible Ratchet 3/8"	615 397 126 0	9x12	0.03x0.47		3/8	22	0.87	14.5	0.57	17.5	0.69	0.062	0.137		
D Reversible Ratchet 1/2"	615 397 127 0	9x12	0.03x0.47		1/2	22	0.87	14.5	0.57	17.5	0.69	0.062	0.137		
D Reversible Ratchet 1/2"	615 397 200 0	14x18	0.55x0.71		1/2	50	1.97	30.7	1.21	25	0.98	0.467	1.022		
D Reversible Ratchet 3/4"	615 397 201 0	14x18	0.55x0.71		3/4	50	1.97	30.7	1.21	25	0.98	0.467	1.022		
D Reversible Ratchet 1"	615 397 204 0	Ø 28			1	50	1.97	30.7	1.21	25	0.98	0.467	1.022		

DST - Digital Static Transducers

Used for Torque control & Calibration of electric, pneumatic & impulse tools

These transducers have vertical input axis with a female square drive to hold joint simulators (not needed to test non shut off impulse tool)
Used with data acquisition unit, Delta & Sigma



MODEL	PART NUMBER	TORQUE RANGE		SQUARE DRIVE	DIMENSIONS				WEIGHT	
		Nm	ft.lb		ØA	B		kg	lb.	
DST 0.5 Nm - 13	615 165 537 0	0.05-0.5	0.04-0.4	1/2	81	3.19	91	3.58	2.3	5.1
DST 2 Nm - 13	615 165 532 0	0.2-2	0.15-1.5	1/2	81	3.19	91	3.58	2.3	5.1
DST 5 Nm - 13	615 165 533 0	0.5-5	0.37-3.7	1/2	81	3.19	91	3.58	2.3	5.1
DST 10 Nm - 20	615 165 534 0	1-10	0.74-7.4	3/4	86	3.38	93	3.66	3.1	6.8
DST 30 Nm - 20	615 165 535 0	3-30	2.21-22	3/4	89	3.50	96	3.78	3.4	7.5
DST 80 Nm - 25	615 165 538 0	8-80	5.89-59	1	108	4.25	116	4.57	5.8	12.8
DST 200 Nm - 25	615 165 539 0	20-200	14.7-147	1	108	4.25	116	4.57	5.8	12.8
DST 500 Nm - 32	615 165 541 0	50-500	36.8-368	1 1/4	133	5.24	144	5.67	11.8	26.0
DST 1000 Nm - 32	615 165 542 0	100-1000	73.7-737	1 1/4	133	5.24	144	5.67	11.9	26.2
DST 2000 Nm - 32	615 165 543 0	200-2000	147.4-1474	1 1/4	133	5.24	144	5.67	12.0	26.4

DSA - DELTA STATIC TRANSDUCERS ACCESSORIES

MODEL	PART NO.	MODEL	PART NO.
Adaptor SQ 3/4" M - 1/4" F	615 397 205 0	Female 1/4" - Female 1/4"	615 397 210 0
Adaptor SQ 3/4" M - 3/8" F	615 397 206 0	Female 3/8" - Female 3/8"	615 397 211 0
Adaptor SQ 1" M - 1/2" F	615 397 207 0	Female 1/2" - Female 1/2"	615 165 573 0
Adaptor SQ 1-1/4" M - 1/2" F	615 397 208 0	Female 3/4" - Female 3/4"	615 165 576 0
Adaptor SQ 1-1/4" M - 3/4" F	615 397 209 0		

Joint simulators



DJS - Digital Joint Simulator

Joint simulators are used to reproduce normal conditions of use of a power tool so that the calibration of the tool is suited to the resilience of the joint where the tool is used on the line.

The choice of Soft or Hard stiffness is needed as the torque developed by most tools varies with joint stiffness. Each joint simulator is identified by two coloured rings for fast, easy recognition by the operator.

MODEL	PART NUMBER	TORQUE RANGE		COLOR		SQUARE DRIVE		WEIGHT	
		Nm	ft.lb			INSIDE	OUTSIDE	kg	lb.
DJS Soft - 2	615 165 529 0	0.2-1	0.15-0.74	Yellow	Yellow	1/2	Hex 1/4	0.12	0.26
DJS Hard - 2	615 165 530 0	0.3-2	0.22-1.5	Yellow	Black	1/2	Hex 1/4	0.12	0.26
DJS Soft - 5	615 165 531 0	0.6-5	0.44-3.7	Green	Yellow	1/2	Hex 1/4	0.12	0.26
DJS Hard - 5	615 165 571 0	0.6-5	0.44-3.7	Green	Black	1/2	Hex 1/4	0.12	0.26
DJS Soft - 10	615 165 574 0	1-10	0.74-7.4	Red	Yellow	3/4	1/4	0.23	0.51
DJS Hard - 10	615 165 575 0	1-10	0.74-7.4	Red	Black	3/4	3/8	0.41	0.90
DJS Soft - 30	615 165 577 0	1-30	0.74-22	Blue	Yellow	3/4	3/8	0.41	0.90
DJS Hard - 30	615 165 579 0	1-30	0.74-22	Blue	Black	3/4	3/8	0.41	0.90
DJS Soft - 80	615 165 584 0	6-50	4.42-37	Purple	Yellow	1	1/2	0.75	1.65
DJS Hard - 80	615 165 587 0	10-80	7.37-59	Purple	Black	1	1/2	0.75	1.65
DJS Soft - 200	615 165 588 0	10-100	7.37-74	Grey	Yellow	1	1/2	0.75	1.65
DJS Hard - 200	615 165 589 0	20-200	14.7-147	Grey	Black	1	1/2	0.75	1.65
DJS Soft - 500	615 165 590 0	20-320	14.7-236	Black	Yellow	1 1/4	1/2	1.75	3.86
DJS Hard - 500	615 165 591 0	120-500	88.4-368	Black	Black	1 1/4	3/4	3.06	6.74
DJS 1000	615 165 572 0	300-1000	221-737			1 1/4	1	3.20	7.05

Alpha Digital Torque Tester

The ALPHA 1, 5 & 11 are designed for measuring and testing of torque controlled equipment such as wrenches, power tools or hand screwdrivers.

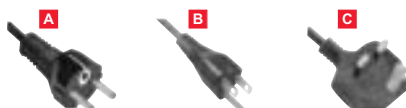
Features Overview

- Accuracy $\pm 1\%$ of reading from 20% to 100% of full scale
- Built-in torque transducer
- For all small hand tools & non impacting power tools
- Selection of two operation modes: (Track, Peak)
- Four units of torque measurements: (lbf.in, cN.m, N.m, kgf.cm)
- Four low-pass filter selections (3000, 1500, 1000 and 500 Hz)
- Battery powered with up to 10 hours of operation
- RS-232 interface to download readings in «real time»
- Large screen and easy to use menus (5 languages)



START-UP KIT to be ordered with the unit
Including: **Plug + Cable**

PLUG	PART NO.
A European	615 917 201 0
C English	615 917 202 0
B USA	615 917 203 0



ACCESSORIES INCLUDED

	PART NO
• Aluminium case	615 936 036 0
• Battery charger	615 936 031 0
• Run down adaptors kit	615 936 033 0
• RS232 cable	615 936 035 0
• Battery pack	615 936 032 0

MODEL	PART NUMBER	TORQUE RANGE		WIDTH		DIMENSIONS HEIGHT		DEPTH		WEIGHT	
		Nm	in.lb	mm	in.	mm	in.	mm	in.	kg	lb.
ALPHA 1	615 935 045 0	0.11 - 1.1	1 - 10	185	7.28	50	1.97	110	4.33	2.0	4.4
ALPHA 5	615 935 046 0	0.56 - 5.65	5 - 50	185	7.28	50	1.97	110	4.33	2.0	4.4
ALPHA 11	615 935 047 0	1.13 - 11.3	10 - 100	185	7.28	50	1.97	110	4.33	2.0	4.4

Measurement Accessories



MODEL	PART NUMBER	TORQUE RANGE		INCREMENTS		OUTPUT	LENGTH		WEIGHT	
		metric	imperial	metric	imperial		mm	in.	kg	lb.
PRESET TORQUE ADJUSTABLE SCREWDRIVERS - FOR TIGHTENING										
AS-120	81892	10-120 cNm		1 cNm		1/4" fem. hex.	168	6.6	0.16	0.35
AS-600 ₁	81922	1-6 Nm		0.1 Nm		1/4" fem. hex.	184	7.2	0.34	0.75
AS-900 ₁	81942	4-9 Nm		0.1 Nm		1/4" fem. hex.	184	7.2	0.34	0.75
AS-07	91902	10-120 ozf in		1 ozf in		1/4" fem. hex.	168	6.6	0.16	0.35
AS-50 ₁	81932	5-50 lbf in		1 lbf in		1/4" fem. hex.	184	7.2	0.34	0.75

1) supplied with T bar



MODEL	PART NUMBER	TORQUE RANGE		INCREMENTS		OUTPUT	LENGTH		WEIGHT	
		metric	imperial	metric	imperial		mm	in.	kg	lb.
DIAL INDICATING TORQUE SCREWDRIVERS - FOR MEASURING + TIGHTENING										
TS-050	81852	0-50 cNm	0.70 ozf in	2 cNm	5 ozf in	3/8" fem. hex.	178	7.0	0.2	0.44
TS-100	81862	0-100 cNm	0.140 ozf in	5 cNm	10 ozf in	3/8" fem. hex.	178	7.0	0.2	0.44
TS-250 ₁	81872	0-250 cNm	0.20 ozf in	10 cNm	1 lbf in	1/2" fem. hex.	250	9.8	0.5	1.10
TS-500 ₁	81882	0-500 cNm	0.40 ozf in	20 cNm	2 lbf in	1/2" fem. hex.	250	9.8	0.5	1.10

1) supplied with T bar



MODEL	PART NUMBER	TORQUE RANGE		INCREMENTS		OUTPUT	LENGTH		WEIGHT	
		metric	imperial	metric	imperial		mm	in.	kg	lb.
DIAL INDICATING TORQUE WRENCHES - FOR MEASURING + TIGHTENING										
TW-4	81962	0.3-4 Nm	3-35 lbf in	0.1 Nm	1 lbf in	1/4" sq.	255	10	0.52	1.15
TW-13	81972	0.5-13.5 Nm	4-120 lbf in	0.5 Nm	2 lbf in	3/8" sq.	255	10	0.52	1.15
TW-27	81982	1-27 Nm	1-20 lbf in	1 Nm	0.5 lbf ft	3/8" sq.	255	10	0.52	1.15
TW-80	81992	6-80 Nm	5-60 lbf ft	2 Nm	1 lbf ft	1/2" sq.	455	18	1.36	3.0
TW-160	82002	10-160 Nm	6-120 lbf ft	2.5 Nm	2 lbf ft	1/2" sq.	535	21	1.36	3.0

Cable for Connecting Measuring Units & Transducers

CABLE TYPE	DATA COLECT SIDE <-> TRANS SIDE	DATA COLLECTOR TYPE	FOR TRANSDUCER	LENGTH	PART NUMBER
Analog	6 pins <-> 6 pins	Sigma 2001, Delta 4/5000	AWT + ART4	2m (78.7") long	615 917 251 0
Analog	6 pins <-> 6 pins	Sigma 2001, Delta 4/5000	AWT + ART4	5m (196.8") long	615 917 252 0
Analog	6 pins <-> 6 pins	Sigma 2001, Delta 4/5000	AWT + ART4	2m (78.7") long, spiral	615 917 253 0
Analog	12 pins <-> 6 pins	Delta 5000	AWT + ART4	2m (78.7") long	615 917 254 0
Analog	12 pins <-> 6 pins	Delta 5000	AWT + ART4	2m (78.7") long, spiral	615 917 255 0
Digital	Push pull <-> 12 pins	All types of Sigma & Delta	DRT / DWT / DST	2m (78.7") long	615 917 430 0
Digital	Push pull <-> 12 pins	All types of Sigma & Delta	DRT / DWT / DST	2m (78.7") long, spiral	615 917 432 0
Digital	Push pull <-> 12 pins	All types of Sigma & Delta	DRT / DWT / DST	5m (196.8") long	615 917 433 0

DeltaPC Software

“to make your monitoring operations easier”

This software, which is compatible with Windows™, enables connection of torque or torque and angle measuring equipment in the Sigma and Delta range.

Its user-friendly design makes it possible to program complete flowcharts of measurement sequences just by copying and pasting or clicking on icons.

Main software functions:



Common to all the Sigma and Delta control boxes

‘Standard’ version of the software

- recovery and display of tightening results
- treatment of results in accordance with ISO, NF, Q544000 and CNOMO standards
- memorising the results and export to databases (ASCII)
- complete recovery of the control box parameters
- multi-language

Specific to Delta control boxes

‘Advanced’ version of the software

- all the functions of the ‘Standard’ version +
- recovery and display of the tightening curves
- management of the periodical control of fastening tools
- programming control operations
- programming control sequences



DESCRIPTION	PART NUMBER	DESCRIPTION	PART NUMBER
Standard version		Advanced version	
1 installation	615 927 529 0	1 installation	615 927 520 0
5 installations	615 927 530 0	5 installations	615 927 532 0

RS232 cable between control box and PC not supplied with the software – Part Number: 615 917 047 0

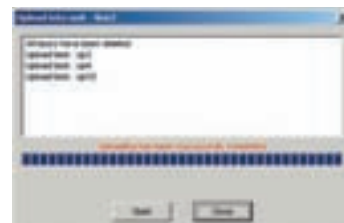
DOWNLOADING between controller and PC:

Controller => PC



With just one click, you can:

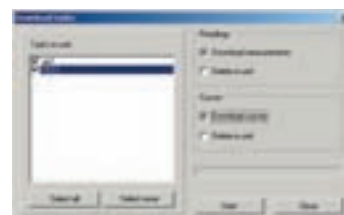
- select one or more operations
- recover the control operations from the control boxes
- recover the results and tightening curves



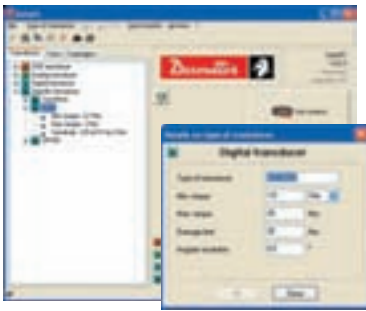
PC => Controller

You can download to the control boxes

- one or more operations
- a control flowchart



Functions



PROGRAMMING

'Torque' or 'torque and angle' transducers for analogue and digital signals

Select the better transducer for your control operation.

- by selecting a standard transducer in the range, you can display all its characteristics
- you can associate the serial numbers of your transducers with the table of parameters
- you can also define your own* 'specific' transducers with their own characteristics

* provided that they are based on a strain gauge technology.



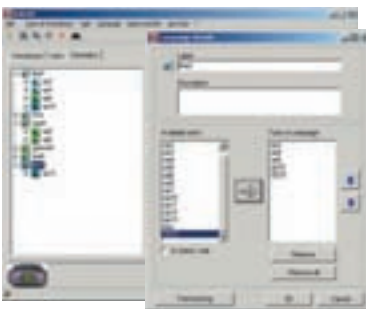
Control operation: 'A checking tool'

To ensure that the fastening tools on the assembly line continue to tighten to the right torque level.

The software makes it easy to programme all the parameters required for the control:

- the type of transducer
- the number of measurements to be made
- the settings and tolerances
- the triggering thresholds for acquisition of the tightening curves
- etc...

With just one click, the operation is downloaded to the control box.



Campaign 'Designed to manage your monitoring operations'

A control campaign is made up of a range of monitoring operations on the assembly line.

With just a click in the list of operations, you can set up your own control campaign.

The Delta control box then manages the sequence of operations.

With another click, the range is downloaded to the measurement control box.

Presentation of RESULTS

Torque or torque and angle results

After each operation or campaign, the operator can transfer all the results.

He or she can display them and select the desired columns, sort them by type of report, and scroll them on the screen.

All the results can be exported to a database; the format is of ASCII type.

Tightening curves

The software can display from ONE to FOUR tightening curves at the same time.

Type of curves:

- torque as a function of time $f(t)$
- torque and angle as a function of time $f(t)$
- torque as a function of angle $f(\text{angle})$

it is possible to:

- zoom in on all or part of one or more curves
- move the curves along the X axis
- calculate a running average for N points (N=3,5,7 or 9)
- archive them
- print them

Statistic

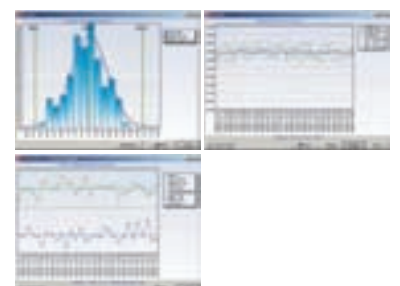
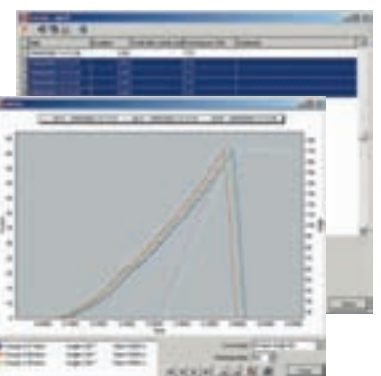
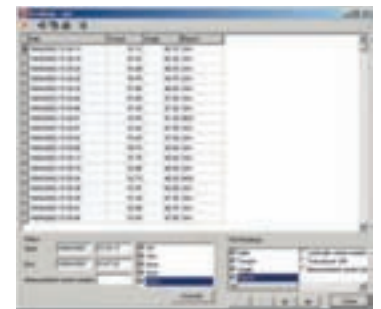
This software could calculate statistics for torque or angle results.

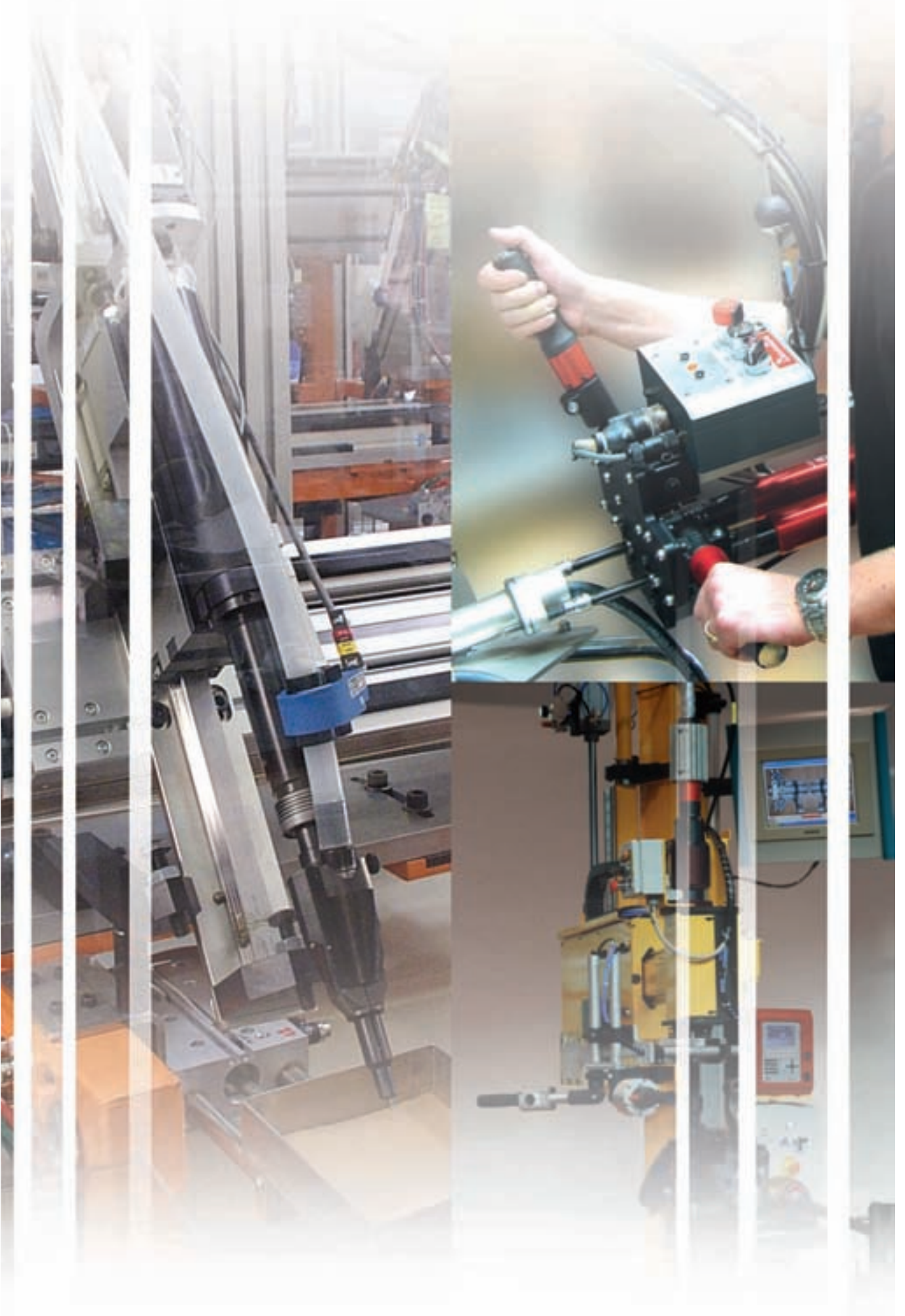
These calculations are carried out under the current standards (ISO, NF, Q544000 and CNOMO).

Results displayed:

- statistical report with CP, CPK, CAM, - ratio of change, average, range deviation...
- display of the scatter diagram
- histogram
- control charts

Printing of the full statistical report.





Screwfeeder Modular Assembly Concept

Our most demanding customers require tightening quality, but also full automated stations.

Our Screwfeeders range is characterised by a modular concept system, easy to integrate in your assembly line and with low maintenance requirement.

Combined with the quality benefits of our CVI and CVIC ranges, we are able to offer a high productivity package.

Ergonomic and handheld solution



Advanced automated solution



Advanced bowl system

Fixtured electric spindles ERF-ECF

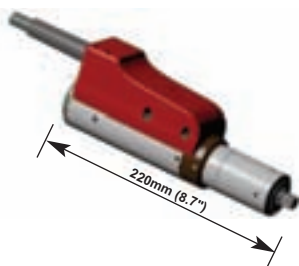
For your assembly applications, Desoutter offers a range of (very short) fixtured electric spindles, transducerized or current controlled and top or in-line cables.

CVI II Range

MODEL	PART NUMBER
ERF3L	615 165 286 0
ERF5L	615 165 287 0
ERF10L	615 165 288 0
ERF20L	615 165 289 0
ERF20S	615 165 290 0
ERF30S	615 165 291 0

CVIC Range

MODEL	PART NUMBER
ECF3L	615 165 292 0
ECF5L	615 165 293 0
ECF10L	615 165 294 0
ECF20L	615 165 295 0
ECF20S	615 165 296 0
ECF30S	615 165 297 0



For further information about the technical data see pages 22 and 41

Multiplus



- Standard build components
- Increased customer configuration
- Simplified maintenance
- Proven solutions
- Shorter lead time
- Improved ergonomics





New features

The EME has one integrated power and transducer cable from tool to controller, no longer separated transducer and motor cables.

The new improved connector allows for full flexibility in cable management with the 360° adjustments in two directions.



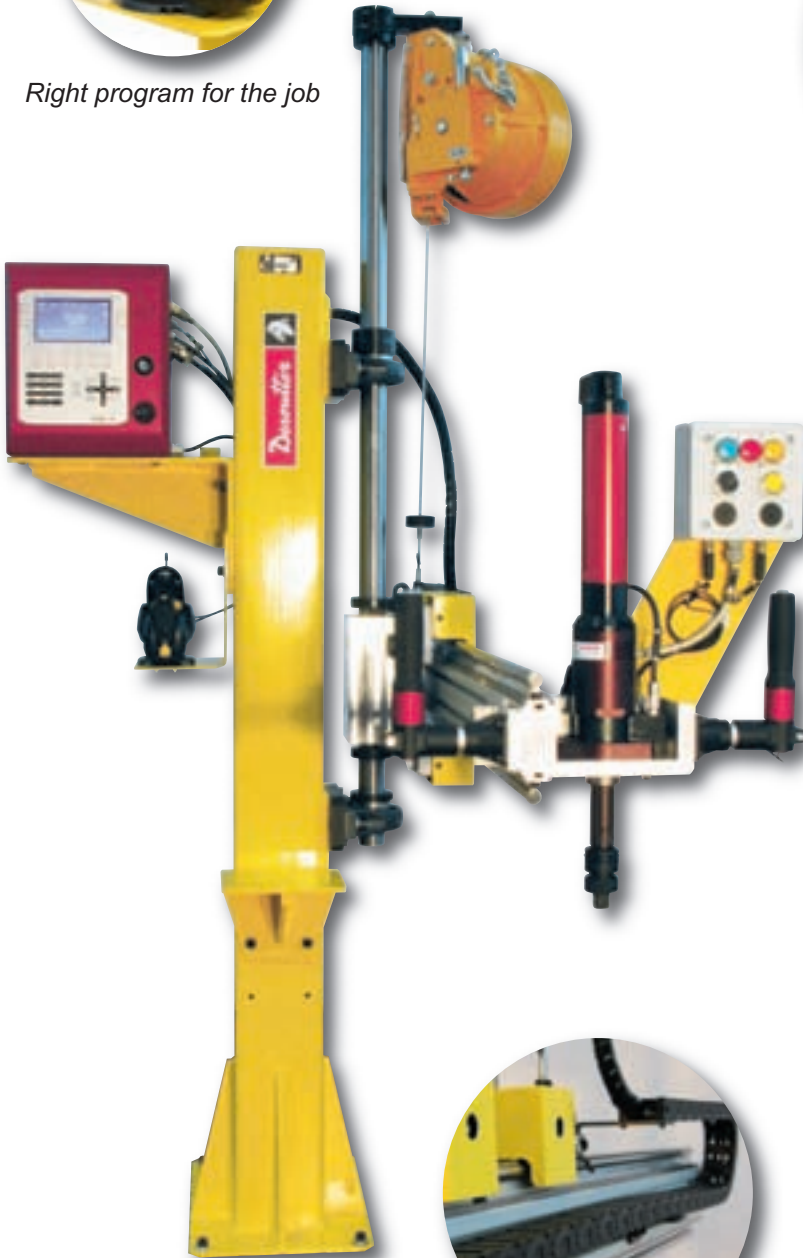
High torque arms - Basic system



Right program for the job



*180° turning
Flexible operation*



*Customized stroke and
length of arm*

Arm configuration - options

Tools

- Torque: Low, Medium, High
- Transducerized, Current controlled
- EME fixtured, ERDL, MC spindles

HMI Positioning - without PLC/PC

- CVI2 X-encoder
- CVI2 Y-encoder
- HMI Positioning display

Socket selectors

- Standard non guiding
- Standard guiding
- Custom heavy duty

Networking and process

- Fieldbus
- Ethernet
- Barcode scanner

Software and data collection

- CVIPC2000 (programming)
- CVINet (data collection)
- SFP and HMI SW for positioning

Arm layout

- Degree of rotation
- X-movement (arm stroke)
- Y-movement
- Pneumatic balancer up/down control for zero gravity

Or

- Spring balancer for torque below 300 Nm

Contact your Desoutter representative for assistance

High torque arms - Advanced system

Full arm system



Easy configurable HMI



Swiveling tool holder

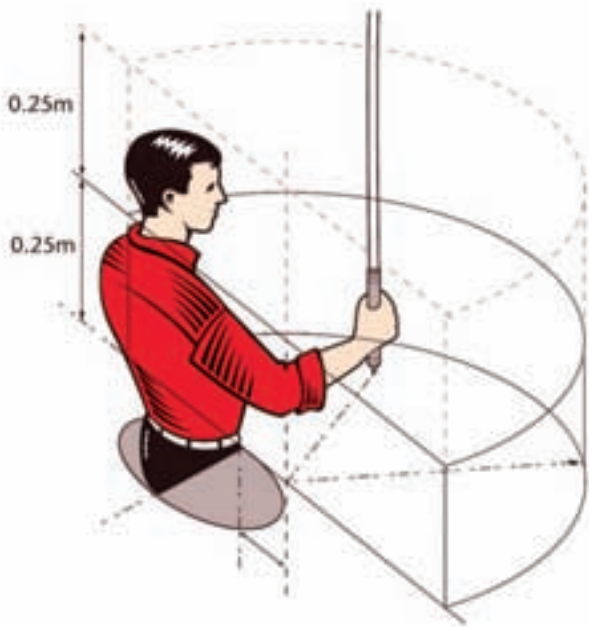
*Ergonomic folding Arm
Spindles or handheld tools
Option: positioning control*







Balancing Arms for increased performance ■



FEATURES

- Easy to position and handle
- Heavy duty
- Modular
- Ensures correct orientation of tool to workpiece

BENEFITS

- Relieves operator stress
- Long term operation and reliability
- Use in large variety of applications and tools
- Prevents damage to assembly and improves quality

The range of modular balancing arms provides a wide operating area with a minimal bench requirement.

The D57, D58 and D59 models complement the D53 range of bench stands by providing greater tool carrying capacity in terms of weight and torque reaction.

A range of tool holders allow the tool to be positioned vertically or at 45° of the work piece thereby avoiding damage and off centre assembly. Hole quality when drilling and tapping is also greatly improved. These balancing arms are designed for heavy-duty operation over a long period of time.

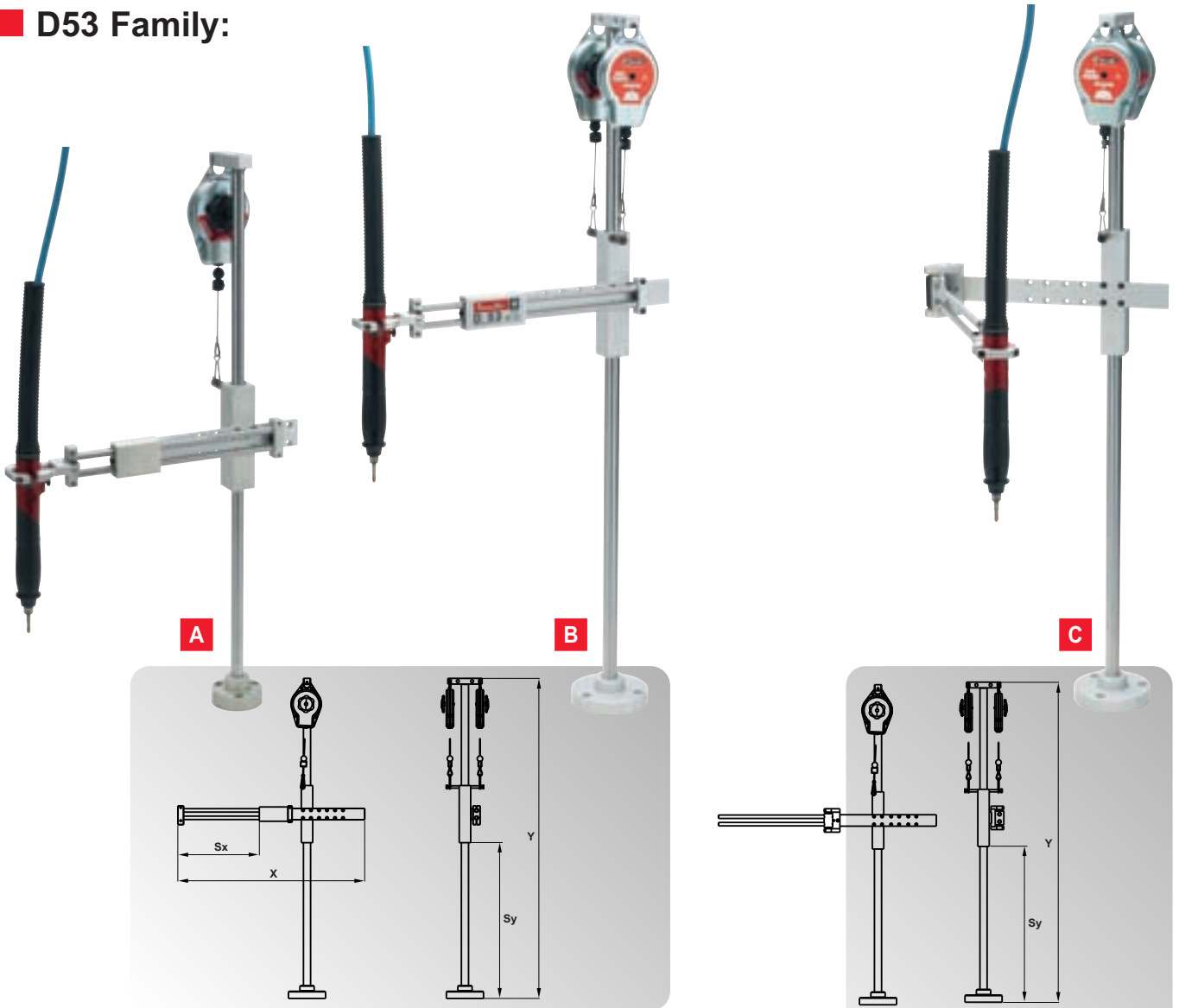
The range of the balancing arm provides assistance to an operator when using hand held tools such as screwdrivers, drills and nutrunners. The operator's arm, wrist and shoulder are relieved of stress from torque, vibration and weight of the tool which means that quality, productivity and operator comfort are greatly improved.





Linear and Swivel Arms

D53 Family:

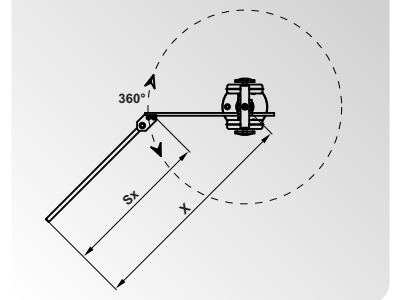


What To Order

- 1 - Basic Stand
- 2 - Tool Holder
- 3 - Clutch Case for Tool (if required)

D53 Tool Holder Selection

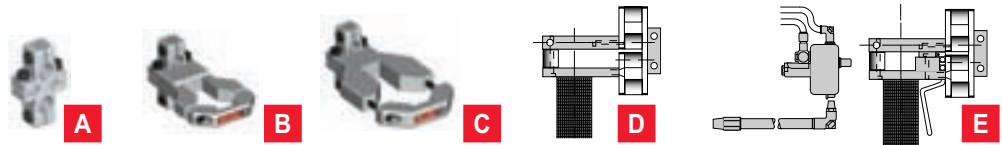
- To select the tool holder:
- 1 - Find the tool type in the left column.
 - 2 - Select the required tool holder from the top row.
 - 3 - Check the comments column.



D53 LINEAR AND SWIVEL STANDS

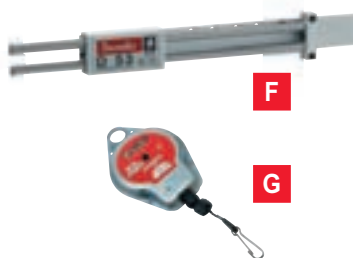
PIC REF.	MODEL	PART NO.	MAXIMUM TORQUE		OVERALL HORIZONTAL (X)		OVERALL VERTICAL (Y)		STROKE HORIZONTAL (Sx)		STROKE VERTICAL (Sy)		TOOL WEIGHT CAPACITY	
			N.m	ft.lb	mm	in.	mm	in.	mm	in.	mm	in.	kg	lb
LINEAR STAND														
A	D53-10	615 804 5710	10	7.37	540	21.2	855	33.66	260	10.2	370	14.6	1.0	2.20
B	D53-20	388163	20	17.75	570	22.4	1120	44.00	285	11.2	600	23.6	2.5	5.50
	D53-20X (extended reach)	388173	20	14.75	650	25.6	1120	44.00	315	12.4	600	23.6	2.2	4.85
SWIVEL STAND														
C	D53-20S	615 804 5720	20	14.75	630	24.8	1120	44.00	530	20.9	600	23.6	2.5	5.50

Linear and Swivel Arms



OPTIONAL ACCESSORIES

ITEM	PART NO.
A Clamp Adaptor - Interface Adaptor D53	615 396 6150
B Standard Tool clamp \varnothing 28.5-41mm (1.12-1.6")	615 396 6160
C Standard Tool clamp \varnothing 40-50mm (1.57-1.97")	615 396 6280
D E2 Comfort Grip for Push Start	388193
E EL Comfort Grip for Lever Start	388203



D53 SPARES

PIC REF.	MODEL	DESCRIPTION	PART NO.
F	SPARE	D53-20 HORIZONTAL SLIDE	615 804 5690
G	5DU	BALANCER 1.4-2.4kg	50542

D53 TOOL CLAMPS	\varnothing 28.5-41mm	\varnothing 40-50mm	E2 Comfort Grip Push Start	EL Comfort Grip Lever Start	Comments
PART NO.	615 396 6160	615 396 6280	388193	388203	
Pneumatic Screwdrivers					
SB	X				
SC2	X		SC2 push start	SC2 lever start	
SD	X		SD push start	SD lever start	For E2 fit clutch case part# 465463 for 320-1470 rpm For E2 fit clutch case part# 465443 for 2200-3500 rpm
Electric Screwdrivers					
SLK 003/007/010	X				SLK adaptor part# 615 225 0650
SLK 011/015	X				SLK adaptor part# 615 225 0660
SLK 022/031/047	X				SLK adaptor part# 438963
SME	X				SME adaptor part# 438963
S4	X				
SLC (nose mount)	X				
SLC (top mount)		X			
SLE (nose mount)	X				Nose mount only, fit clutch case part# 443843
SLE (top mount)		X			
ECS	X				
ECD5	X				
ERD5	X				
Drills					
DR 300	X				
D16S / 16L	X				



Balancing Arms

D57, D58, D59



D57/D57X/D58

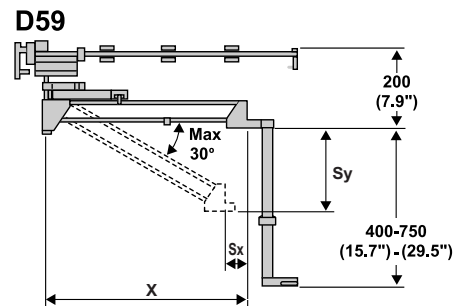
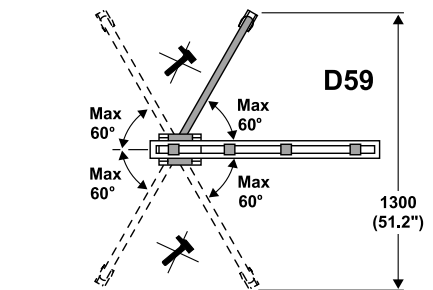
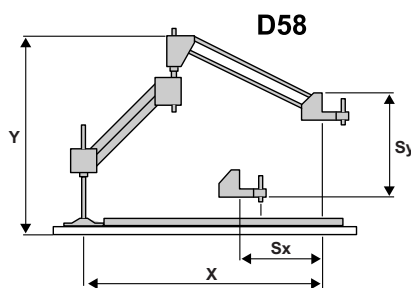
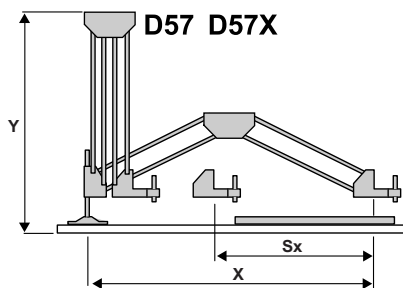
How To Order

1. Basic Stand
2. Tool Holder
3. Optional Accessories

D59

How To Order

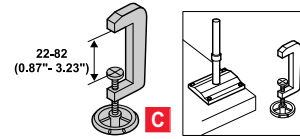
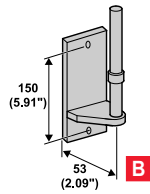
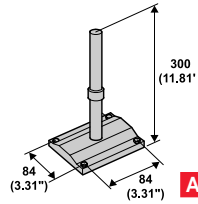
1. Basic Stand
2. Tool Holder
3. Rail (supplied per meter, e.g. for 3m order (3) of PN. 409213)
4. Rail End Stops (2 required per complete rail)
5. Optional Accessories



D57 / 58 / 59 BALANCING ARMS

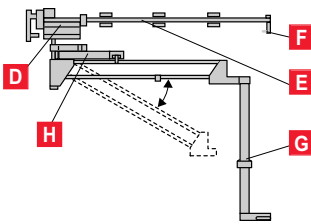
PIC REF.	MODEL	PART NO.	MAXIMUM TORQUE		OVERALL HORIZONTAL (X)		OVERALL VERTICAL (Y)		STROKE HORIZONTAL (Sx)		STROKE VERTICAL (Sy)		TOOL WEIGHT CAPACITY		ACCESSORIES INCLUDED
			N.m	ft.lb	mm	in.	mm	in.	mm	in.	mm	in.	kg	lb	
A	D57	408903	20	14.75	700	25.55	550	21.6	510	20.7	95	3.74	2	4.4	BENCH MOUNT
A	D57X	408913	20	14.75	850	33.46	550	21.6	610	24.0	95	3.74	2	4.4	BENCH MOUNT
B	D58	408923	20	14.75	710	27.95	600	23.6	600	23.6	180	7.08	2	4.4	BENCH MOUNT
C	D59	408933	20	14.75	650	25.60	200	7.87	70	2.75	250	9.84	2	4.4	RAIL CARRIAGE

Balancing Arms



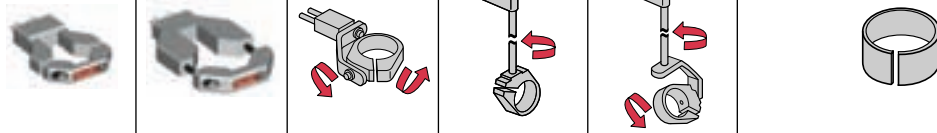
ACCESSORIES

ITEM	PART NO.	DESCRIPTION	D57 / D57X	D58	D59
A	408953	Bench Mount (Included with the stand)	X	X	
B	408963	Wall Mount Bracket	X	X	
C	408973	Table Stand Clamp	X	X	
•	408993	Heavy Duty Spring 1 - 2,5 kg	X		
D	409253	Rail Carriage (Included with the stand)			X
E	409213	Rail Per Meter			X
F	409223	Rail End Stops			X
G	409203	Telescopic Height Adjustments			X
H	409233	Top Arrester / Vertical Lock			X
H	409243	Side Arrester / Horizontal Lock			X



must also order top arrester when using side arrester

D57/58/59 TOOL CLAMPS	Ø28.5-41mm	Ø40-50mm	Vertical 2 Axis Rotation	Horizontal Single Axis Rotation	Horizontal 2 Axis Rotation	Adaptor Sleeve Blank (supplied as standard with tool holders) to be machined to suit the tool
PART NO.	615 396 6140	615 396 6290	409083 Ø36mm (1.42") 409093 Ø46mm (1.8") 409103 Ø56mm (2.2")	409113 Ø36mm (1.42") 409123 Ø46mm (1.8") 409133 Ø56mm (2.2")	409173 Ø36mm (1.42") 409183 Ø46mm (1.8") 409193 Ø56mm (2.2")	409273 Ø46mm (1.8") (outside) Ø30mm (1.18") (inside) 409023 Ø56mm (2.2") (outside) Ø40mm (1.57") (inside)



Pneumatic Screwdrivers						
SB	X		409083	409113	409173	
SC2	X		409083	409113	409173	
SD	X		409093	409123	409183	Ring adaptor part# 409273
Electric Screwdrivers						
SLK 003/007/010	X		409093	409123	409183	SLK adaptor part# 615 225 0650 Ring adaptor part# 409273
SLK 011/015	X		409083	409113	409173	SLK adaptor part# 615 225 0660
SLK 022/031/047	X		409083	409113	409173	SLK adaptor part# 438963
SME	X		409083	409113	409173	SME adaptor part# 438963
S4	X		409083	409113	409173	
SLC (nose mount)	X		409083	409113	409173	
SLC (top mount)		X	409093	409123	409183	
SLE		X	409093	409123	409183	Ring adaptor part# 409273
ECS	X		409083	409113	409173	
ECD5	X		409083	409113	409173	
ERD5	X		409083	409113	409173	
Drills						
DR 300	X		409083	409113	409173	
DR 350				409113	409173	
DR 750				409123	409183	Ring adaptor part# 409273



Telescopic Reaction Arms



Telescopic and extreme lightweight arm for a maximum flexibility of use

- With its aluminium bracket, the telescopic reaction arm can be fitted to all flat surfaces. For fixation on tubes, a circular adaptor is available on request.
- Fitted on a bench mounted swinging arm with a balancer, the telescopic reaction arm offers an innovative and efficient solution to minimise operator fatigue and improve productivity.



C

MODEL	PART NO.	MAXIMUM TORQUE		TOOL CLAMP Ø MIN - MAX		WEIGHT		STROKE MIN-MAX	
		N.m	ft.lb	mm	in.	kg	lb.	mm.	in.
TRA 12	615 396 5320	12	8.8	25-42	0.98-1.65	0.57	1.25	550-1139	21.6 - 44.8
TRA 25	615 396 5330	25	18.4	25-42	0.98-1.65	0.80	1.76	570-1165	22.4 - 45.9
TRA 40	615 804 5700	40	29.5	30-50	1.19-1.96	0.95	2.08	661-1346	25.98 - 52.9

OPTIONAL ACCESSORIES

ITEM	PART NO.
A Adaptor for SLK003 / 007 / 010	615 225 0650
A Adaptor for SLK011 / 015	615 225 0660
A Adaptor for SLK022 / 031 / 047	438963
B Circular Adaptor for Stand	615 595 3800
C Bench Mounted Swinging Arm	66542



A

B



■ Lever Operated Stands

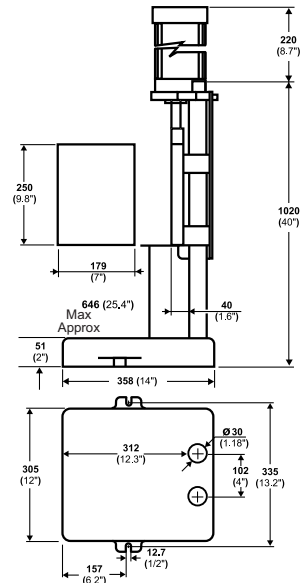
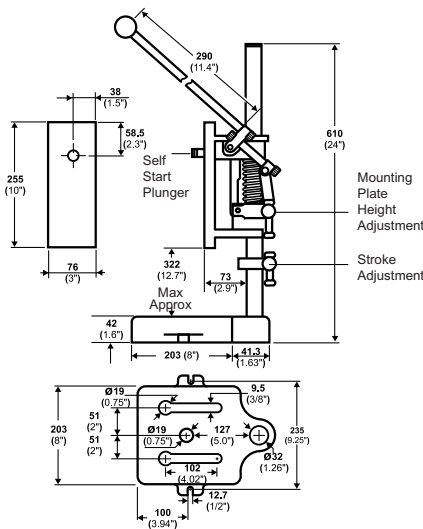
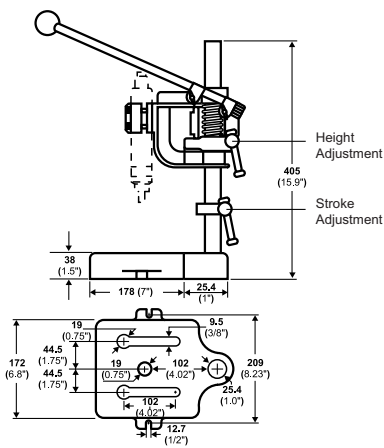
a range of stands for bench mounting
with lever operation:

D54, R55S

■ Cylinder Operated Stands

the MC55 stand for semi-automation
with cylinder operation:

MC55



D54

Tool Types

SC-AB/AR Screwdrivers
SD-1AM Torque Motor
SD-2RM Torque Motor
DM Air Motors

R55S

Tool Types

All types with maximum torque of 16Nm
Mounting bracket required

MC55

Tool Types

All types with maximum torque of 51Nm
Mounting bracket required
Pneumatic circuit required

STANDS - D54 / R55S / MC55

MODEL	PART NO.	MAXIMUM TORQUE		MAXIMUM STROKE		MAXIMUM MOUNTED PLATE LOAD		MAXIMUM WEIGHT	
		N.m	ft.lb	mm	in.	kg	lb	kg	lb
D54	901944	16	11.8	45	1.77			7	3.2
R55S	903644	16	11.8	57	2.24	6	2.7	11.3	5.1
MC55	902914	51	37.6	100	3.93	68	30.4	32	14.5



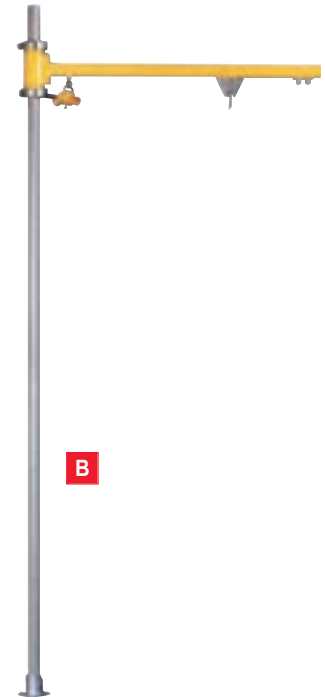
Bench Tidy Kit

& Bench Mounted Swinging Arm

- Three complete Bench Tidy Kits to suit 1.5m, 2m and 2.5m bench widths with flexibility of mounting in height and spacing of upright supports.
- Everything included to set up a simple system within minutes, which can be enhanced with the accessories shown on the accessories page, adding to the versatility.
- Supplied in 2 packs, needing only 10/13/17mm A/F wrenches and standard screwdrivers to assemble.



A



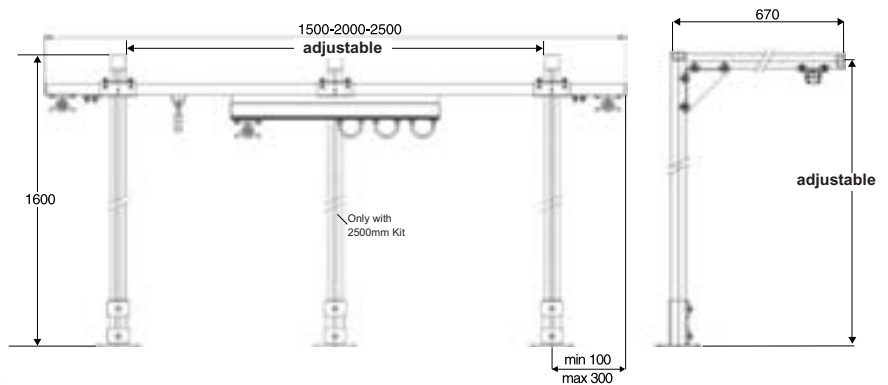
B

COMPLETE BENCH TIDY KIT - READY TO ASSEMBLE

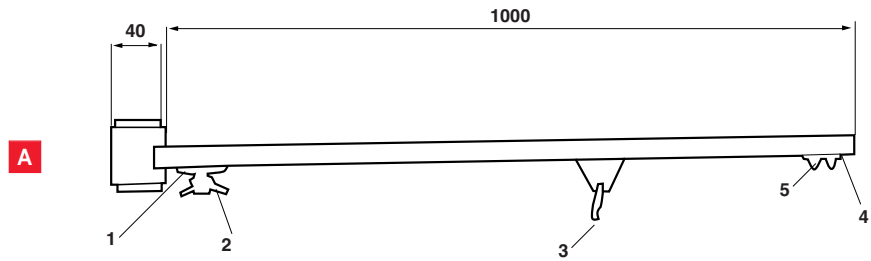
Each kit consist of:

- Tool Suspension Track of specified length
- Hose trolley
- Horizontal outrigger arms
- Hose clamp
- Vertical C-rail uprights with base for benchtop mounting (2 uprights with 1.5m and 2m kits, 3 with 2.5m kits)
- All necessary brackets, fittings and end stops/clamps
- Simple, step by step assembly instructions
- Tool Suspension trolley with 3 suspension rings and hoseclamp

EXAMPLE OF INSTALLATION



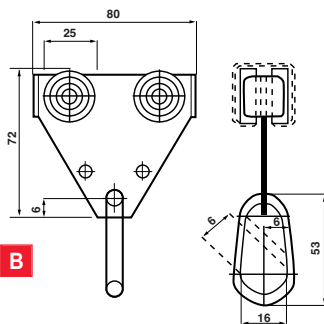
PIC REF	PART NO.	LENGTH OF SUSPENSION TRACK		HEIGHT		HORIZONTAL STROKE		WEIGHT LOAD		
		mm	in.	mm	in.	mm	in.	kg	lb	
BENCH TIDY										
A	111672	1500	59.0	1600	63			22	48.5	
A	111682	2000	78.7	1600	63			24	53.0	
A	111692	2500	98.4	1600	63			26	57.0	
BENCH MOUNTED SWINGING ARM										
B	66542			1600	63	630	24.8	10	22.0	



Bench Tidy Components

OPTIONAL ACCESSORIES

ITEM	PART NO.
Swivel Arm	
A Suitable for suspending equipment	66462
Max. load at 1000mm = 16kg	
Weight: 3kg	
Supplied complete with:	
1 End Clamp	66332
2 Hose Clip	66292
3 Suspension Trolley	66352
4 End Cap	66372
5 End Stop	66422



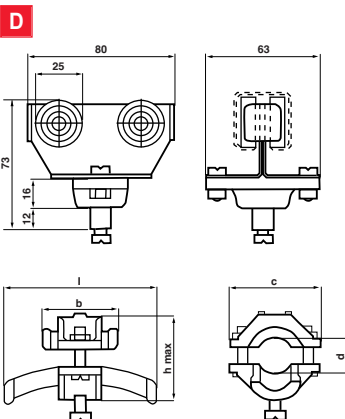
Suspension Trolley

B Suspension trolley	66352
Use for suspending tool balancers, or coiled hoses	
To run in 32 x 30 'C' Rail Track	
Weight: 0.3kg	
Max. load: 20kg	
Materials:	
Chassis: Galvanised steel, plastic / Axles: Galvanised steel / Spring safety hook: Galvanised steel	



Hose Trolley

C Hose Trolley	66282
Used in conjunction with Hose Clip to run in 32 x 30 'C' Rail Track	
Weight: 0.26kg	
Max. load: 20kg	
Materials:	
Bearing part: Steel plate, plastic covered / Rollers (ball bearings): Galvanised steel	
Ball & Socket Joint: Nylon / Small parts: Galvanised steel	



Hose Clip

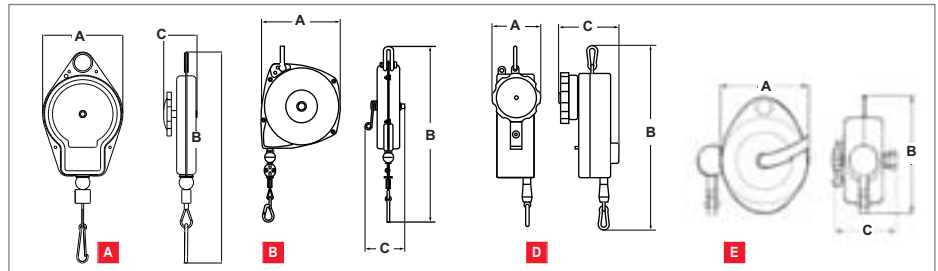
D Hose Clip	
Used to support coils of air hose or electric cable	

d		r		l		h max		b		c		b		PART NO.
mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	
10-16	0.39-0.63	80	3.15	70	2.75	38	1.50	35	1.38	42	1.65	0.04	0.09	66292
17-25	0.67-0.98	125	4.92	100	3.94	47	1.85	50	1.97	50	1.97	0.06	0.13	66302
26-36	1.02-1.42	180	7.08	140	5.51	58	2.58	70	2.75	64	2.52	0.12	0.30	66322



Balancers

Light & Medium



PIC REF.	MODEL	PART NO.	MIN. CAPACITY		MAX. CAPACITY		CABLE TRAVEL		WEIGHT		DIMENSIONS		
			kg	lb	kg	lb	m	ft	kg	lb	A mm (in.)	B mm (in.)	C mm (in.)

Balancers

	1DU	52542	0	0	0.5	1.1	1.5	4.9	0.6	1.3	106 (4.2)	230 (9.1)	43 (1.7)
	2DU	50522	0.5	1.1	1	2.2	1.5	4.9	0.6	1.3	106 (4.2)	230 (9.1)	43 (1.7)
A	2DUS	54532	0.5	1.1	1	2.2	3	9.8	0.6	1.3	106 (4.2)	230 (9.1)	43 (1.7)
	3DU	52862	1	2.2	1.5	3.1	1.5	4.9	0.6	1.3	106 (4.2)	230 (9.1)	43 (1.7)
	4DU	50532	1	2.2	2	4.4	1.5	4.9	0.6	1.3	106 (4.2)	230 (9.1)	43 (1.7)
	5DU	50542	1.4	3.1	2.4	5.3	1.5	4.9	0.6	1.3	106 (4.2)	230 (9.1)	43 (1.7)
B	10D	50052	2	4.4	5	11	2.4	7.8	2.7	6	190 (7.5)	369 (14.5)	77 (3.0)
	15D	50062	5	11	7	15.4	2.4	7.8	3.2	7.1	190 (7.5)	369 (14.5)	77 (3.0)
	22D	50072	6	13.2	10	22	2.4	7.8	3.2	7.1	190 (7.5)	369 (14.5)	77 (3.0)

Balancers with drum lock features

B	10S	50572	2	4.4	5	11	2.4	7.8	2.7	6	190 (7.5)	370 (14.6)	77 (3.0)
	15S	50582	5	11	7	15.4	2.4	7.8	3.2	7.1	190 (7.5)	370 (14.6)	77 (3.0)
	22S	50592	6	13.2	10	22	2.4	7.8	3.2	7.1	190 (7.5)	370 (14.6)	77 (3.0)

Reaction Free Self-Lock Balancers

C	2R	54422	0.7	1.5	1.3	2.9	1.7	5.5	0.5	1.1	72 (2.8)	245 (9.6)	108 (4.3)
	4R	54432	1	2.2	2	4.4	1.7	5.5	0.5	1.1	72 (2.8)	245 (9.6)	108 (4.3)
D	5R	54442	1.7	3.7	3.5	7.7	2.4	7.8	2.3	5.1	116 (4.6)	427 (16.8)	155 (6.1)
	10R	54452	3	6.6	6	13.2	2.4	7.8	2.3	5.1	116 (4.6)	427 (16.8)	155 (6.1)

PIC REF.	MODEL	PART NO.	MIN. CAPACITY		MAX. CAPACITY		FLOW RATE		HOSE TRAVEL		WEIGHT		DIMENSIONS			HOSE ID	
			kg	lb	kg	lb	l/s	cfm	m	ft	kg	lb	A mm (in.)	B mm (in.)	C mm (in.)	mm	in.

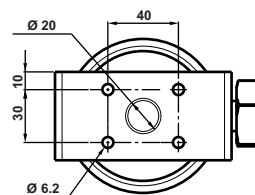
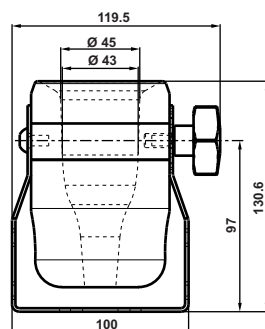
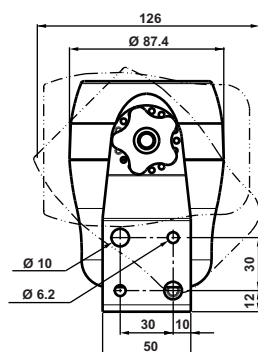
Hose Reel Balancers

E	1HU	52552	0	0	0.5	1.1	7.1	15	1.5	4.9	1.2	2.6	132 (5.2)	173 (6.8)	92 (3.6)	6.5	1/4
	3HU	50552	0.5	1.1	1.4	3.1	7.1	15	1	3.3	1.2	2.6	132 (5.2)	173 (6.8)	92 (3.6)	6.5	1/4
	4HU	50562	0.7	1.5	2	4.4	7.1	15	1	3.3	1.4	3.1	132 (5.2)	173 (6.8)	92 (3.6)	6.5	1/4



Adapted for all straight or pistol grip tools with an outside diameter of maximum 42mm.

The mounting plate can be fastened in several positions and the plastic ring angle can be set at different angles.



PART NO.	DESCRIPTION	MAX. DIAMETER	
		mm	in.
107 892	DTH-42	42	1.65



Impact Wrench Features



Output Options

Ease of service

Simple 3 piece construction for ease and speed of servicing.

Durable steel clutch housings (zinc option on some models).

Clutch Options

Desoutter have developed a range of 7 clutch types to meet the differing demands of our customers applications. No single clutch is perfect for every type of joint.

2 or 3-Jaw - Good on soft or hard joints with high ultimate torques.

Rocking Dog - Good on very soft joints providing high speed rundown.

Single or Double Dog - For soft and hard joints. High power/weight ratio.

Twin Lobe - All round clutch with a high ultimate torque and high power to weight ratio.

Tool Selection

1. APPLICATION TYPE

These tools are Heavy Duty and suitable for high production rates such as those on production/assembly lines, where high durability is used and the tools are used frequently.

2. BOLT SIZE/TORQUE

The table below lists the maximum torques for bolt sizes and different grade fasteners. These torque figures are for guidance only. Always confirm values with the bolt supplier/manufacturer.

BOLT SIZE	METRIC ISO 8.8	METRIC ISO 10.9	METRIC ISO 12.9	BOLT SIZE	SAE GRADE 1 & GRADE 2	SAE GRADE 5	ASTM-UNC GRADE 8/A490
mm	N.m	N.m	N.m	in.	ft lb	ft lb	ft lb
6	10.5	15	17	1/4	3	8	11
8	25	36	43	5/16	6	16	22
10	51	71	86	3/8	11	28	38
12	87	122	146	7/16	18	46	61
14	138	195	234	1/2	28	70	94
16	213	299	359	9/16	43	110	135
18	293	413	495	5/8	55	140	188
20	416	585	702	3/4	97	250	336
22	563	792	950	7/8	155	405	541
24	718	1011	1213	1	230	600	812
27	1060	1491	1789	1 1/8	340	770	1151
30	1440	2025	2430	1 1/4	480	1080	1626
33	1956	2751	3301	1 3/8	660	1470	2130
36	2517	3540	4248	1 1/2	860	1950	2830

3. JOINT TYPE

As a guide use the table to specify a tool for a certain joint. As a rule most joints are 'soft'.

DRIVE	VERY SOFT	SOFT	HARD
3/8"		CP6031	CP6031
	CP6300	CP6300	CP6300
1/2"		CP6041	CP6041
		CP6500	CP6500
	CP6540	CP6540	
3/4"		CP6060	CP6060
		CP6110	CP6110
1"		CP0610	CP0610
	CP0610	CP0611	CP0611
		CP0611	CP0611
1 1/2"		CP0614	CP0614
		CP6120	CP6120

4. HANDLE TYPE



Pistol

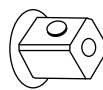


D Handle
Outside Trigger

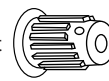


D Handle
Inside Trigger

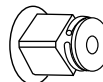
5. SOCKET RETENTION



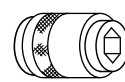
Pin Retainer
for infrequent socket change



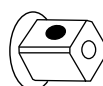
Integral Spline
with integral push button retainer



Friction Ring
for rapid socket change

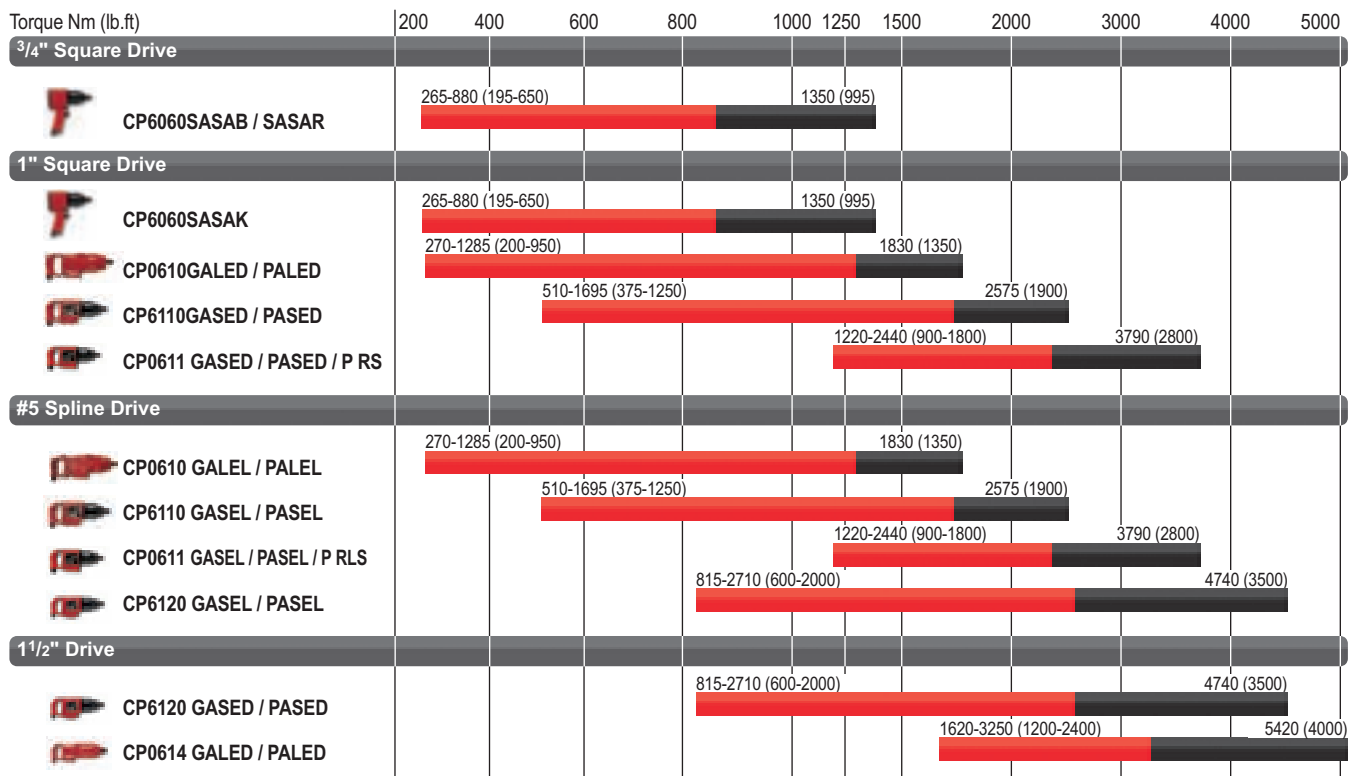
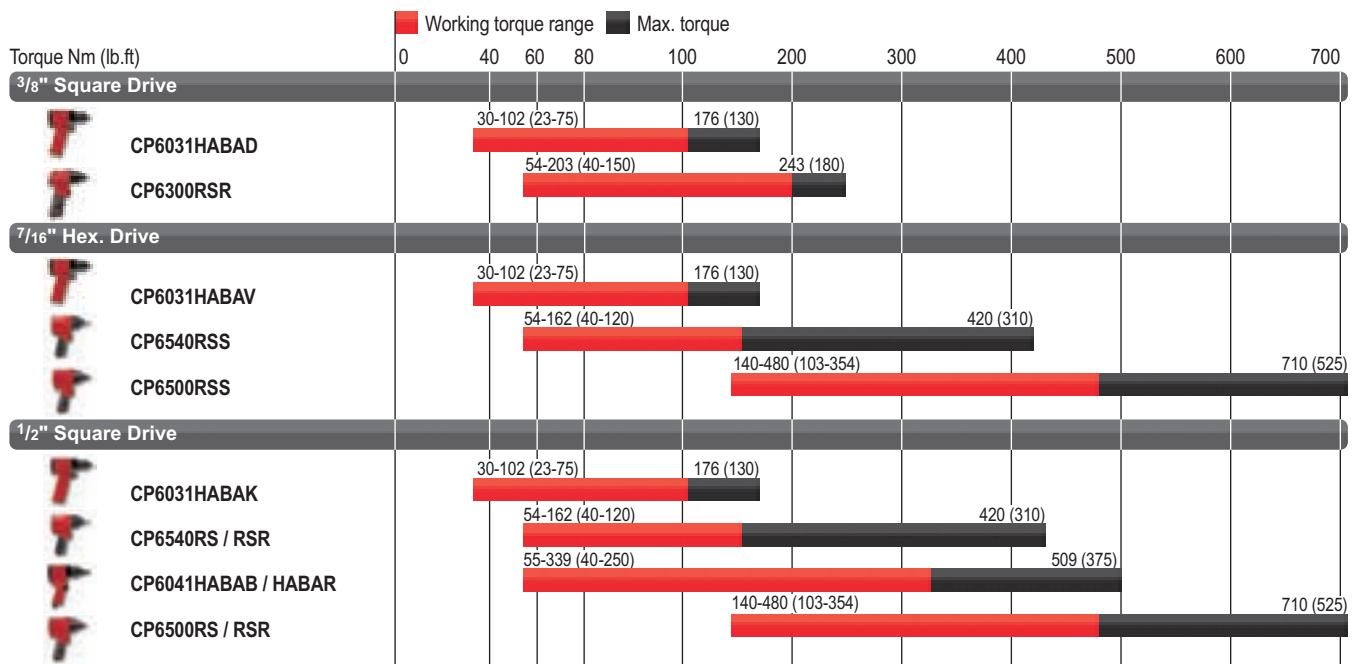


Quick Change
for screwdriver bits or torsion bars



Hole
for pin o-ring type retention

Impact Wrench Torque Ranges



Impact Wrench

30 to 480 Nm (23 to 354 ft.lb)



A



B



C

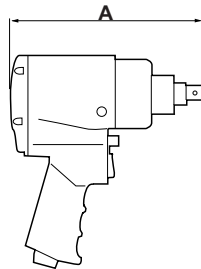


D



E

Model	A		Side to centre	
	mm	in.	mm	in.
CP6031 HABAD	143	5.6	25.4	1
CP6031 HABAK	143	5.6	25.4	1
CP6031 HABAV	146	5.7	25.4	1
CP6300 RSR	152	6.0	31.8	1.25
CP6041 HABAB	173	6.8	31.8	1.25
CP6041 HABAR	173	6.8	31.8	1.25
CP6500 RS	178	7.0	35.8	1.41
CP6500 RSR	178	7.0	35.8	1.41
CP6500 RSS	178	7.0	35.8	1.41
CP6540 RS	188	7.4	35.1	1.38
CP6540 RSR	188	7.4	35.1	1.38
CP6540 RSS	188	7.4	35.1	1.38



OPTIONAL ACCESSORIES

1/2" square drive with 50mm (2") extension, friction ring retainer

CP6500

CA148629

Air inlet: 1/4" NPT

Torque ranges should be used as a guide only. Final torque will depend on the joint, operating pressure and drive accessories.

PIC REF	MODEL	PART NUMBER	DRIVE	CLUTCH TYPE	HANDLE STYLE	BLOWS PER MINUTE	TORQUE WORKING		TORQUE MAX.		WEIGHT		AIR CONSUMPTION	
							N.m	ft lb	N.m	ft lb	kg	lb	l/s	cfm
A	CP6031 HABAD*	T021887	3/8"	2-Jaw	Pistol	2200	30-102	23-75	176	130	1.5	3.3	12.0	25
A	CP6031 HABAK*	T021884	1/2"	2-Jaw	Pistol	2200	30-102	23-75	176	130	1.5	3.3	12.0	25
A	CP6031 HABAV**	T021885	7/16" hex	2-Jaw	Pistol	2200	30-102	23-75	176	130	1.5	3.3	12.0	25
B	CP6300 RSR***	T025285	3/8"	Single-Dog	Pistol	1800	54-203	40-150	243	180	1.6	3.5	6.6	14
C	CP6041 HABAB*	T021888	1/2"	2-Jaw	Pistol	1700	55-339	40-250	509	375	2.80	6.2	18.9	40
C	CP6041 HABAR***	T022331	1/2"	2-Jaw	Pistol	1700	55-339	40-250	509	375	2.80	6.2	18.9	40
D	CP6500 RS*	T025214	1/2"	Double-Dog	Pistol	1320	140-480	103-354	710	525	2.65	5.8	11.8	25
D	CP6500 RSR***	T025216	1/2"	Double-Dog	Pistol	1320	140-480	103-354	710	525	2.65	5.8	11.8	25
D	CP6500 RSS**	T025215	7/16" hex	Double-Dog	Pistol	1320	140-480	103-354	710	525	2.65	5.8	11.8	25
E	CP6540 RS*	T025312	1/2"	Rocking-Dog	Pistol	1320	54-162	40-120	420	310	2.80	6.2	10.4	22
E	CP6540 RSR***	T025313	1/2"	Rocking-Dog	Pistol	1320	54-162	40-120	420	310	2.80	6.2	10.4	22
E	CP6540 RSS**	T025314	7/16" hex	Rocking-Dog	Pistol	1320	54-162	40-120	420	310	2.80	6.2	10.4	22

Socket Retainer: * Pin - ** Quick Change - *** Friction Ring

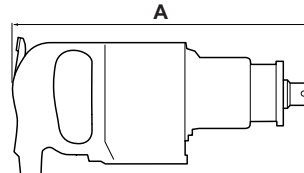
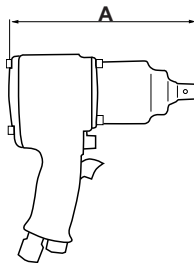
CP6500 - reverse torque 845Nm (625ft.lb)

Impact Wrench

265 to 1695 Nm (195 to 1250 ft.lb)



Model	A		Side to centre	
	mm	in.	mm	in.
CP6060 SASAB	194	7.6	45.2	1.78
CP6060 SASAK	194	7.6	45.2	1.78
CP6060 SASAR	194	7.6	45.2	1.78
CP6110 GASED	330	13.0	44.5	1.75
CP6110 GASEL	330	13.0	44.5	1.75
CP6110 PASED	330	13.0	44.5	1.75
CP0610 GALED	343	13.5	54.1	2.13



ACCESSORIES INCLUDED

	CP0610	CP6110
• Support handle	C039423	C145892
• Support handle mount		C116388
• Support handle screws (4 off)		C127944
• Retainer ring (see page 142)		

Air Inlet: 3/8" NPT for A & B - 1/2" NPT for C & D

Torque ranges should be used as a guide only. Final torque will depend on the joint, operating pressure and drive accessories.

PIC REF	MODEL	PART NUMBER	DRIVE	CLUTCH TYPE	HANDLE STYLE	BLOWS PER MINUTE	TORQUE WORKING		TORQUE MAX.		WEIGHT		AIR CONSUMPTION	
							N.m	ft lb	N.m	ft lb	kg	lb	l/s	cfm
A	CP6060 SASAB*	T024059	3/4"	2-Jaw	Pistol	1000	265-880	195-650	1350	995	5.3	11.7	19.8	42
A	CP6060 SASAK*	T024060	1"	2-Jaw	Pistol	1000	265-880	195-650	1350	995	5.4	11.9	19.8	42
A	CP6060 SASAR**	T024058	3/4"	2-Jaw	Pistol	1000	265-880	195-650	1350	995	5.4	11.9	19.8	42
B	CP6110 GASED*	T024425	1"	Twin Lobe	D Outside Trigger	960	510-1695	375-1250	2575	1900	9.75	21.5	25.0	53
B	CP6110 GASEL***	T024426	#5 Spline	Twin Lobe	D Outside Trigger	960	510-1695	375-1250	2575	1900	9.75	21.5	25.0	53
B	CP6110 PASED*	T025100	1"	Twin Lobe	D Inside Trigger	960	510-1695	375-1250	2575	1900	9.75	21.5	25.0	53
B	CP6110 PASEL***	T025101	#5 Spline	Twin Lobe	D Inside Trigger	960	510-1695	375-1250	2575	1900	9.75	21.5	25.0	53
C	CP0610 GALED*	T018046	1"	3-Jaw	D Outside Trigger	825	270-1285	200-950	1830	1350	9.30	20.5	22.6	48
C	CP0610 GALEL***	T018041	#5 Spline	3-Jaw	D Outside Trigger	825	270-1285	200-950	1830	1350	9.30	20.5	22.6	48
C	CP0610 PALED*	T018253	1"	3-Jaw	D Inside Trigger	825	270-1285	200-950	1830	1350	9.30	20.5	22.6	48
C	CP0610 PALEL***	T018042	#5 Spline	3-Jaw	D Inside Trigger	825	270-1285	200-950	1830	1350	9.30	20.5	22.6	48

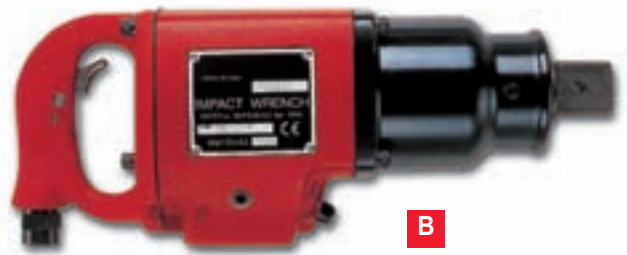
Socket Retainer: * Hole - ** Friction Ring - *** Integral

Impact Wrench

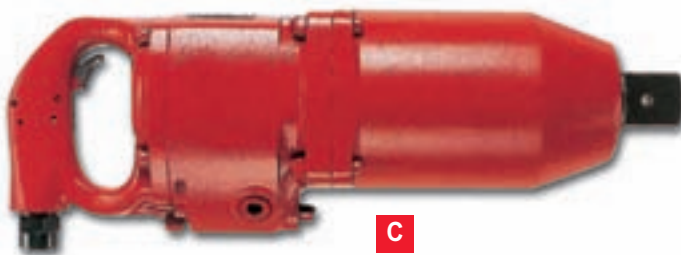
815 to 3250 (600 to 2400 ft.lb)



A



B

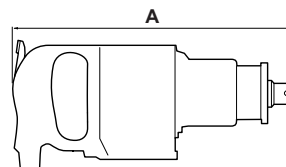
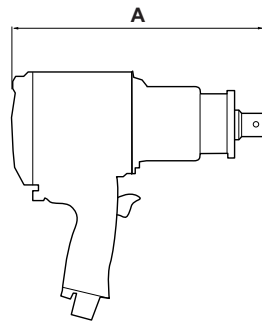


C



D

Model	A		Side to centre	
	mm	in.	mm	in.
CP0611 GASED	318	12.5	57.2	2.25
CP0611 GASEL	318	12.5	57.2	2.25
CP0611 PASED	318	12.5	57.2	2.25
CP0611 PASEL	318	12.5	57.2	2.25
CP6120 GASED	375	14.8	58.7	2.31
CP6120 GASEL	375	14.8	58.7	2.31
CP6120 PASED	375	14.8	58.7	2.31
CP6120 PASEL	375	14.8	58.7	2.31
CP0614 GALED	417	16.4	61.0	2.4
CP0614 PALED	417	16.4	61.0	2.4
CP0611P RS	272	10.7	55.0	2.13
CP0611P RLS	272	10.7	55.0	2.13



ACCESSORIES INCLUDED

	CP0611	CP0614	CP6120
• Support handle	CA048548	C039423	CA048548
• Support handle mount	C116388		C119061
• Support handle screws (4 off)	C064806		P073025
• Retainer ring (see page 142)			

Air inlet: 1/2" NPT

Torque ranges should be used as a guide only. Final torque will depend on the joint, operating pressure and drive accessories.

PIC REF	MODEL	PART NUMBER	DRIVE	CLUTCH TYPE	HANDLE STYLE	BLOWS PER MINUTE	TORQUE WORKING		TORQUE MAX.		WEIGHT		AIR CONSUMPTION	
							N.m	ft lb	N.m	ft lb	kg	lb	l/s	cfm
A	CP0611 GASED*	T022580	1"	2-Jaw	D Outside Trigger	1020	1220-2440	900-1800	3790	2800	10.2	22.5	22.6	48
A	CP0611 GASEL**	T022581	#5 Spline	2-Jaw	D Outside Trigger	1020	1220-2440	900-1800	3790	2800	10.2	22.5	22.6	48
A	CP0611 PASED*	T022578	1"	2-Jaw	D Inside Trigger	1020	1220-2440	900-1800	3790	2800	10.2	22.5	22.6	48
A	CP0611 PASEL**	T022579	#5 Spline	2-Jaw	D Inside Trigger	1020	1220-2440	900-1800	3790	2800	10.2	22.5	22.6	48
B	CP6120 GASED*	T018237	1 1/2"	2-Jaw	D Outside Trigger	960	815-2710	600-2000	4740	3500	15.4	33.9	28.3	60
B	CP6120 GASEL**	T017755	#5 Spline	2-Jaw	D Outside Trigger	960	815-2710	600-2000	4740	3500	15.4	33.9	28.3	60
B	CP6120 PASED*	T018841	1 1/2"	2-Jaw	D Inside Trigger	960	815-2710	600-2000	4740	3500	15.4	33.9	28.3	60
B	CP6120 PASEL**	T018235	#5 Spline	2-Jaw	D Inside Trigger	960	815-2710	600-2000	4740	3500	15.4	33.9	28.3	60
C	CP0614 GALED*	T020021	1 1/2"	2-Jaw	D Outside Trigger	500	1620-3250	1200-2400	5420	4000	14.3	31.5	27.4	58
C	CP0614 PALED*	T020022	1 1/2"	2-Jaw	D Inside Trigger	500	1620-3250	1200-2400	5420	4000	14.3	31.5	27.4	58
D	CP0611P RS*	T025413	1"	2-Jaw	Pistol	1020	1220-2440	900-1800	3790	2800	10.5	23.1	22.6	48
D	CP0611P RLS**	T025414	#5 Spline	2-Jaw	Pistol	1020	1220-2440	900-1800	3790	2800	10.5	23.1	22.6	48

Socket Retainer: * Hole - ** Integral








Fastening accessories



Symbols

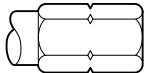
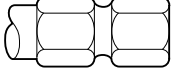
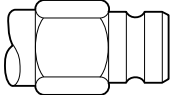
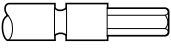

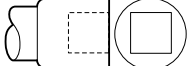
The following symbols are used in this catalogue:

-  Hexagon Across Flat Size
- ID Internal Diameter
- ∅ Diameter
- H Hard
- XH Extra Hard
-  Magnetic
-  Male Square Drive Size
-  Female Square Drive Size
- L Length
- Q/R Quick Release
-  Thread Size

Fastener Head Type

-  Pozidriv/Supadriv
-  Phillips
-  Torx
-  Torx Tamper Proof
-  Torx Plus
-  Internal Hex
-  External Hex
-  Slot

Drives

-  **1/4" Hex* Insert (C6.3)**
(ISO1173/
DIN3126)
-  **1/4" Hex Power Drive (E6.3)**
(ISO1173/
DIN3126)
-  **5/16" Hex Power Drive**
-  **3mm Hex Power Drive (A3)**
(ISO1173)
-  **Thread Drive**
-  **Square Drive**

* **Note:** to be used with a bit holder

Torx®, Torx Plus® are registered trademarks of Camcar Div., Textron Inc.
ACR®, Pozidriv®, Torq-Set®, Tri-Wing® are registered trademarks of Phillips Screw Co.





Screwdriver Bits



Pozidriv/Supadriv

1/4" HEX INSERT (C6.3)

POINT SIZE	L		PART NO. H	PART NO. XH
	mm	in.		
0	25	1	108082	
1	25	1	6158046790	110752
2	25	1	6158046800	110762
3	25	1	6158046810	110772
1	50	2	6158046820	
2	50	2	6158046830	
4	30	1 ³ / ₁₆		110182

3mm HEX POWER (A3)

POINT SIZE	L		PART NO. XH
	mm	in.	
0	50	2	80782
1	50	2	80792

4mm HEX INSERT (C4)

POINT SIZE	L		PART NO. XH
	mm	in.	
0	28	1 ¹ / ₈	80872
1	28	1 ¹ / ₈	80882

THREAD DRIVE

POINT SIZE	L		Ø	THREAD	PART NO. XH
	mm	in.			
1	33	1 ⁵ / ₁₆	6	M4	65422
2	33	1 ⁵ / ₁₆	6	M4	65442
2	33	1 ⁵ / ₁₆	7	M5	65452
2	33	1 ⁵ / ₁₆	8	M6	105732
3	33	1 ⁵ / ₁₆	8	M6	105742

1/4" HEX POWER (E6.3)

POINT SIZE	L		PART NO. H	PART NO. XH
	mm	in.		
1	50	2	6158046840	111162
2	50	2	6158046850	111172
3	50	2	6158046860	111182
1	70	2 ³ / ₄	6158046870	111192
2	70	2 ³ / ₄	6158046880	111202
3	70	2 ³ / ₄	6158046890	111222
1	89	3 ¹ / ₂	6158046900	111232
2	89	3 ¹ / ₂	6158046910	111242
3	89	3 ¹ / ₂	6158046920	111252
1	150	6		110292
2	150	6		110302

Torx

1/4" HEX INSERT (C6.3)

POINT SIZE	L		PART NO. H
	mm	in.	
T6	25	1	6158046930
T7	25	1	6158046940
T8	25	1	6158046950
T9	25	1	6158046960
T10	25	1	111272
T15	25	1	111282
T20	25	1	111292
T25	25	1	111302
T27	25	1	111322
T30	25	1	111332
T40	25	1	111342

1/4" HEX POWER (E6.3)

POINT SIZE	L		PART NO. H
	mm	in.	
T8	50	2	6158046970
T9	50	2	6158046980
T10	50	2	111352
T15	50	2	111372
T20	50	2	111382
T25	50	2	111392
T27	50	2	111402
T30	50	2	111422
T40	50	2	111432
T40	70	2 ³ / ₄	110042
T20	89	3 ¹ / ₂	108912

3mm HEX POWER (A3)

POINT SIZE	L		PART NO. XH
	mm	in.	
T6	50	2	89962
T8	50	2	89972
T10	50	2	89982

4mm HEX INSERT (C4)

POINT SIZE	L		PART NO. XH
	mm	in.	
T6	28	1 ¹ / ₈	99772

THREAD DRIVE

POINT SIZE	L		Ø	THREAD	PART NO. XH
	mm	in.			
T8	33	1 ⁵ / ₁₆	6	M4	105772
T10	33	1 ⁵ / ₁₆	6	M4	105782
T20	33	1 ⁵ / ₁₆	6	M4	105802
T10	33	1 ⁵ / ₁₆	7	M5	105832
T15	33	1 ⁵ / ₁₆	7	M5	105842
T20	33	1 ⁵ / ₁₆	7	M5	105852
T25	33	1 ⁵ / ₁₆	7	M5	105862
T30	33	1 ⁵ / ₁₆	7	M5	105882

1/4" HEX POWER (E6.3)

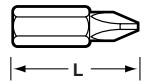
POINT SIZE	L		PART NO. XH
	mm	in.	
IP10	89	3 ¹ / ₂	108132
IP15	89	3 ¹ / ₂	108142

1/4" HEX INSERT (C6.3)

POINT SIZE	L		PART NO. XH
	mm	in.	
TP10	25	1	6158045460
TP20	25	1	6158045470
TP30	25	1	6158045480



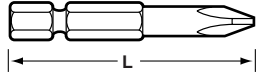
Screwdriver Bits



Phillips

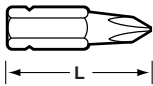


1/4" HEX POWER (E6.3)



POINT SIZE	L		PART NO. H	PART NO. XH	PART NO. ACR
	mm	in.			
0	50	2		110232	
1	50	2	6158047120	111522	111082
2	50	2	6158047130	111532	111092
3	50	2	6158047140	111542	111102
1	70	2 3/4		110242	
2	70	2 3/4		110252	
3	70	2 3/4		110262	
1	89	3 1/2	6158047150	111552	111122
2	89	3 1/2	6158047160	111562	111132
3	89	3 1/2	6158047170		
2	150	6		111152	

ACR® = Anti-Cam-out Ribs



REDUCED NOSE DIAMETER

1/4" HEX INSERT (C6.3)

POINT SIZE	L		PART NO. H	PART NO. XH
	mm	in.		
1	25	1	6158047180	6158047200
2	25	1	6158047190	6158047210



3mm HEX POWER (A3)

POINT SIZE	L		PART NO. XH
	mm	in.	
00	50	2	82102
0	50	2	80762
1	50	2	80772



4mm HEX INSERT (C4)

POINT SIZE	L		PART NO. XH
	mm	in.	
0	28	1 1/8	80852
1	28	1 1/8	80862

For 5/16" Hex Power Accessories see pages 137/138

Internal Hex



1/4" HEX INSERT (C6.3)

HEX	L		PART NO. XH
	mm	in.	
2.0mm	25	1	110782
3/32"	25	1	6158046990
2.5mm	25	1	110792
3.0mm	25	1	110802
1/8"	25	1	6158047000
9/64"	25	1	6158047010
4.0mm	25	1	110822
3/16"	25	1	6158047020
5.0mm	25	1	110832
7/32"	25	1	6158047030
6.0mm	25	1	110842
1/4"	25	1	6158047040
7.0mm	25	1	6158047050
8.0mm	25	1	110852



1/4" HEX POWER (E6.3)

HEX	L		PART NO. XH
	mm	in.	
2.0mm	50	2	110202
2.5mm	50	2	110862
3.0mm	50	2	110872
4.0mm	50	2	110882
5.0mm	50	2	110892
6.0mm	50	2	110902
8.0mm	50	2	110922
10.0mm	50	2	110932



4mm HEX INSERT (C4)

HEX	L		PART NO. XH
	mm	in.	
1.5mm	28	1 1/8	81192
2.0mm	28	1 1/8	81202
2.5mm	28	1 1/8	81222
3.0mm	28	1 1/8	81232

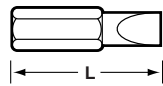


THREAD DRIVE

HEX	L		Ø	THREAD	PART NO. XH
	mm	in.			
3.0mm	33	1 5/16	7	M5	105922
4.0mm	33	1 5/16	7	M5	105932
5.0mm	33	1 5/16	8	M6	105942

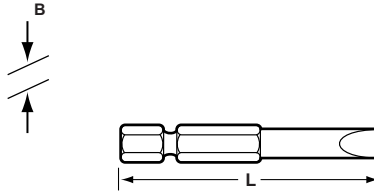
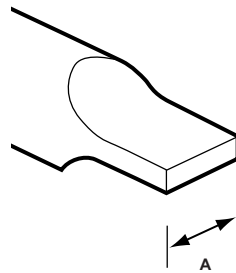


Slot ■



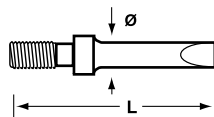
1/4" HEX INSERT (C6.3)

A		B		L		PART NO. H	PART NO. XH
mm	in.	mm	in.	mm	in.		
3.5	0.14	0.7	0.026	25	1	6158047220	6158047240
4.0	0.15	0.8	0.030	25	1		6158047250
4.7	0.17	0.9	0.034	25	1		110662
5.0	0.20	0.8	0.031	25	1	6158047230	
6.3	0.25	1.0	0.042	25	1		615 8047260



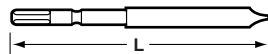
1/4" HEX POWER (E6.3)

A		B		L		PART NO. H	PART NO. XH
mm	in.	mm	in.	mm	in.		
3.2	0.12	0.7	0.026	50	2	6158047270	110642
3.9	0.15	0.8	0.032	50	2	6158047280	110942
4.7	0.19	0.9	0.034	50	2	6158047290	110952
5.4	0.22	0.8	0.032	50	2	6158047300	
6.3	0.25	1.0	0.038	50	2		110962
6.5	0.26	1.2	0.047	50	2		
7.2	0.28	1.1	0.042	50	2	6158047310	110972
7.9	0.31	1.2	0.046	50	2	6158047320	111002
8.0	0.31	1.6	0.063	50	2		
9.1	0.36	1.3	0.050	50	2		111022
3.2	0.12	0.7	0.026	76	3		110652
3.9	0.15	0.8	0.032	76	3		111032
6.3	0.25	1.0	0.038	76	3		111052
8.0	0.31	1.2	0.046	76	3		110082
9.1	0.36	1.3	0.050	76	3		110092
3.2	0.12	0.7	0.026	101	4		6158047340
3.9	0.15	0.8	0.032	101	4		6158047350
4.7	0.19	0.9	0.034	101	4		6158047360
6.3	0.25	1.0	0.038	101	4		6158047370
7.2	0.28	1.1	0.042	101	4		6158047380
7.9	0.31	1.2	0.046	101	4		6158047390
9.1	0.36	1.3	0.050	101	4		6158047400



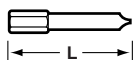
THREAD DRIVE

A	B	L	Ø	THREAD	PART NO. XH	
mm	in.	mm	mm			
4.8	0.19	0.6	33	5.5	M4	105962
6.0	0.24	0.7	33	6.0	M4	105982
7.0	0.28	0.9	33	7.0	M5	106002
7.0	0.28	1.0	33	7.0	M5	106022
8.0	0.32	1.0	33	8.0	M6	106032



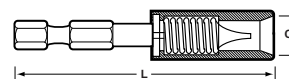
3mm HEX POWER (A3)

A		B		L		PART NO. XH
mm	in.	mm	in.	mm	in.	
2.0	0.08	0.3	0.012	50	2	88962
2.5	0.10	0.4	0.016	50	2	80722
3.0	0.12	0.5	0.020	50	2	80732
4.0	0.16	0.6	0.024	50	2	80742
5.0	0.20	0.8	0.031	50	2	80752



4mm HEX INSERT (C4)

A		B		L		PART NO. XH
mm	in.	mm	in.	mm	in.	
3.0	0.12	0.5	0.020	28	1 1/8	80802
4.5	0.18	0.6	0.024	28	1 1/8	80832
5.5	0.22	0.8	0.031	28	1 1/8	80842



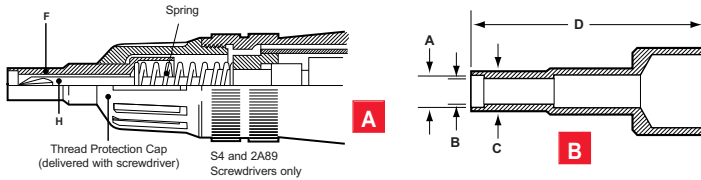
**COMBINED BIT AND FINDER SLEEVES
1/4" HEX POWER (E6.3)**

A		B		L		C		PART NO. XH
mm	in.	mm	in.	mm	in.	mm	in.	
4.9	0.20	0.91	0.04	95	3 13/16	8.0	0.32	111062
6.1	0.24	1.07	0.04	95	3 13/16	9.4	0.38	111072
7.3	0.29	1.07	0.04	95	3 13/16	10.8	0.43	6158047410
8.9	0.36	1.17	0.05	95	3 13/16	11.3	0.45	6158047420
10.0	0.40	1.27	0.05	98	3 59/64	12.6	0.50	6158047430
3.91	0.16	0.6	0.02	53	2 1/8	4.0	0.17	108032
3.91	0.16	0.7	0.03	53	2 1/8	4.0	0.17	108042
7.0	0.28	1.2	0.05	95	3 13/16	9.3	0.37	110222
9.0	0.36	1.6	0.06	95	3 13/16	12.0	0.48	110122
10.0	0.40	1.6	0.06	95	3 13/16	15.0	0.60	110132



Consumables

Screwdriver Bits, Vacuum Systems & Finder Sleeves



FINDER SLEEVES & BITS FOR 3mm HEX POWER (A3) SCREWDRIVERS BITS

To use 3mm Hex Power Bits (A3) with Non Rotating Finder Sleeves spring Part No. 280443 will be required.

PIC REF		ØA		ØB		ØC		D		PART NO. F	PART NO. H	PART NO. H	POINT SIZE	PART NO. H	POINT SIZE	
	ømm	in.	mm	in.	mm	in.	mm	in.	mm	in.	⊖	⊕		⊕		
A & B	3.0	0.12	3.10	0.12	2.4	0.09	3.80	0.15	34	1 3/8	81042	80722	80782	0	82102/80762	000/00/0
A & B	3.8	0.15	3.85	0.15	3.1	0.125	4.75	0.19	34	1 3/8	81052	80732	80782	0	80762	0
A & B	4.3	0.17	4.60	0.18	4.1	0.16	5.45	0.21	34	1 3/8	81062	80742	80792	1	80772	1
A & B	4.7	0.19	4.85	0.19	4.1	0.16	5.70	0.22	34	1 3/8	81072	80742	80792	1	80772	1
A & B	5.6	0.22	5.65	0.22	5.1	0.20	6.60	0.26	34	1 3/8	81082	80752	80792	1	80772	1
B	Finder Sleeve Blank										88992					

Can be used with suction screw pick-up

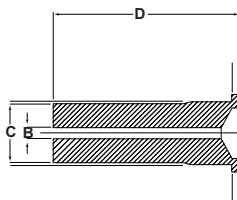
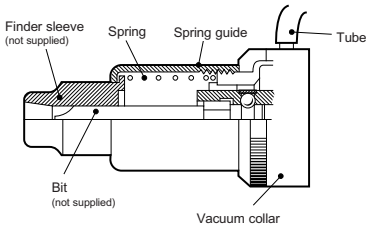
VACUUM CREW PICK-UP KIT FOR SB, SC2, SD & ECS SCREWDRIVERS

DESCRIPTION	PART NO.
ø mm	
Kit (SB) including:	108892
Spring Guide	464213
Spring	464223
Vacuum collar	464233
Vacuum tube (2.3m long)	111223
Blank finder sleeve machining instructions	464183
Kit (SC) 5/16" Hex	74762

NON-ROTATING FINDER SLEEVE KIT FOR SB, SC2, SD & ECS SCREWDRIVERS

DESCRIPTION	PART NO.
ø mm	
Kit including:	108902
Spring	464223
Blank finder sleeve machining instructions	464183

Note: Finder sleeves to suit screw/screwdriver bit must be machined from plastic or steel blanks (see below)



DESCRIPTION	ØB		ØC		D		PART NO.
	mm	in.	mm	in.	mm	in.	
Finder Sleeve Blank – Delrin (SB)	3.0	0.12	14.2	0.6	105	4.1	464103
Finder Sleeve Blank – Steel (SB)	3.0	0.12	14.2	0.6	105	4.1	464093
Finder Sleeve Blank – Steel (SC)	3.35	0.13	15.6	0.6	26	1.0	464753

AIR-POWERED VACUUM ATTACHMENTS FOR BALANCERS

DU Cable Balancers can be simply converted into a vacuum source by fitting a Vacuum Attachment. Vacuum is adjustable and switches off automatically when screwdriver is released.



BALANCER TYPE	VACUUM WATER GAUGE (1mm w.g. = 81.1 mbar)						HOSE LENGTH		HOSE BORE	
	mm	in.	l/s	cfm	dB(A)	part no.	m	ft.	mm	in.
DU	4570	13	0.47	1	64	51482	1.6	5 1/2	4	0.16

AIR-POWERED AV201 VACUUM UNIT

The AV201 is installed into the air line system by screwing into the gauge port of a combination filter/regulator or into a tee piece between a regulator and lubricator.

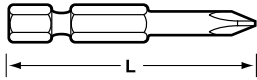


VACUUM MERCURY GAUGE							AIR INLET	HOSE LENGTH		HOSE BORE	
mm	in.	l/s	cfm	dB(A)	part no.		m	ft.	mm	in.	
4570	13	0.7	1.5	54	112063	1/8	2.3	7 1/2	4	0.16	



Impulse/Impact Bits

Designed for use with impact and impulse tools to absorb shock loading



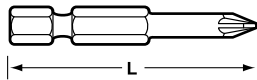
1/4" HEX POWER (E6.3)

POINT OR HEX	L		PART NO.
	mm	in.	
2	49	2	9092012111
3	49	2	9092012141



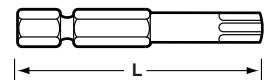
1/4" HEX POWER (E6.3)

POINT OR HEX	L		PART NO.
	mm	in.	
4	49	2	9092012291
5	49	2	9092012321



1/4" HEX POWER (E6.3)

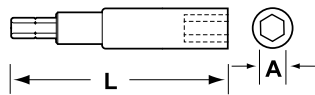
POINT OR HEX	L		PART NO.
	mm	in.	
2	49	2	9092012051
3	49	2	9092012081



1/4" HEX POWER (E6.3)

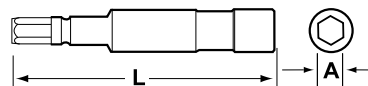
POINT OR HEX	L		PART NO.
	mm	in.	
T25	49	2	9092012201
T30	49	2	9092012231

Bit Holders



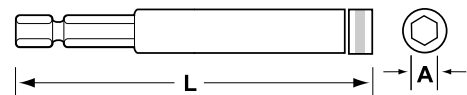
1/4" HEX INSERT (C6.3)

L	A		Q/R	PART NO.	
mm	in.				
43	1.7	1/4" Hex Insert (D6.3)	X	X	22322



3mm HEX POWER (A3)

L	A		Q/R	PART NO.	
mm	in.				
57	2.25	4mm Hex Insert (D4)	✓	X	80892
57	2.25	4mm Hex Insert (D4)	X	X	80902
50	2.0	1/4" Hex Insert (D6.3)	X	X	82322



1/4" HEX POWER (E6.3)

L	A		Q/R	PART NO.	
mm	in.				
50	2.0	1/4" Hex Power (E6.3)	X	✓	75782 ³⁾
50	2.0	5/16" Hex Power	X	X	110622
45	1.8	4mm Hex Insert (D4)	✓	X	97632
50	2.0	1/4" Hex Insert (D6.3)	✓	X	107952
73	2.9	1/4" Hex Insert (D6.3)	✓	X	99752 ¹⁾
75	3.0	1/4" Hex Insert (D6.3)	X	✓	111262 ³⁾
74	2.9	1/4" Hex Insert (D6.3)	✓	X	101252 ²⁾
42	1.6	1/4" Hex Insert (D6.3)	X	X	101282
74	2.9	1/4" Hex Insert (D6.3)	✓	✓	100162
80	3.1	1/4" Hex Insert (D6.3)	✓	X	110362 ³⁾
100	3.9	1/4" Hex Insert (D6.3)	X	X	110342
150	5.9	1/4" Hex Insert (D6.3)	✓	X	110102
150	5.9	1/4" Hex Insert (D6.3)	X	X	110352

For 5/16" Hex. Power Accessories see page 133

¹⁾ Reduced external diameter 9.5mm (3/8"), no retention clip

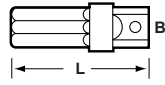
²⁾ Copper beryllium

³⁾ With retaining screw



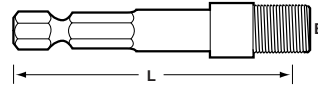
Consumables

Adaptors



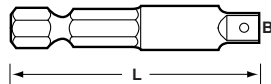
SQUARE DRIVE ADAPTORS 1/4" HEX INSERT (C6.3)

B		L		PART NO.
□		mm	in.	
1/4" Square Drive		39	1.5	14372



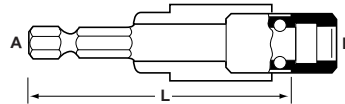
THREAD ADAPTOR 1/4" HEX POWER (E6.3)

B		L		PART NO.
		mm	in.	
3/8" x 24 UNF		45	1.7	96743



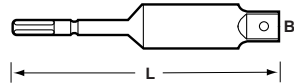
1/4" HEX POWER (E6.3)

B		L		PART NO.
□		mm	in.	
1/4" Square Drive		35	1.4	95352
1/4" Square Drive		50	2.0	97132
3/8" Square Drive		41	1.6	95362



TELESCOPIC SPINDLE EXTENSION ADAPTORS

A		B		L		STROKE		PART NO.
				mm	in.	mm	in.	
5/16" Hex Power		3/8" Square Drive		67	2.6	9.5	0.81	71593
1/4" Hex Power E6.3		1/4" Hex Power E6.3		84	4.2	9.5	0.81	96713
3/8" Square Drive		1/4" Hex Power E6.3		73	3.8	9.5	0.81	96723



3mm HEX POWER (A3)

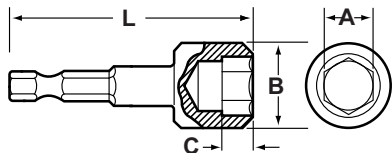
B		L		PART NO.
□		mm	in.	
1/4" Square Drive		50	2.0	82732

Nutrunners



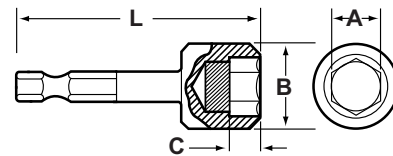
1/4" HEX INSERT (C6.3)

□		A		B		C		L		PART NO.
ISO	UNF/C	mm	in.	mm	in.	mm	in.	mm	in.	
M4		7.0	0.27	11	0.43	2.4	0.09	28	1.1	9092011961
M5		8.0	0.31	13	0.51	2.9	0.11	28	1.1	9092011991
M6		10.0	0.39	14	0.56	5.0	0.20	32	1.25	9092012021



1/4" HEX POWER (E6.3)

□		A		B		C		L		PART NO.
ISO	UNF/C	mm	in.	mm	in.	mm	in.	mm	in.	
M3		5.5	0.21	11	0.43	3.9	0.15	65	2.5	9092011451
M3.5		6.0	0.23	11	0.43	3.9	0.15	65	2.5	9092011511
	4		1/4	11	0.43	4.4	0.17	65	2.5	9092011751
M4		7.0	0.27	12	0.47	4.8	0.19	65	2.5	9092011571
M5		8.0	0.31	13	0.51	5.6	0.22	65	2.5	9092011631
M6		10.0	0.39	14	0.56	6.7	0.26	65	2.5	9092011691
	5/16	13	0.51	5.6	0.22	65	2.5	9092011811		

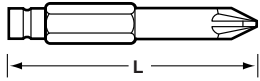


1/4" HEX POWER (E6.3)

□		A		B		C		L		PART NO.
ISO	UNF/C	mm	in.	mm	in.	mm	in.	mm	in.	
M3		5.5	0.22	11	0.43	2.3	0.09	65	2.5	9092011481
M3.5		6.0	0.24	11	0.43	2.4	0.09	65	2.5	9092011541
	4		1/4	11	0.43	2.4	0.09	65	2.5	9092011781
M4		7.0	0.27	12	0.47	2.8	0.11	65	2.5	9092011601
M5		8.0	0.31	13	0.51	2.9	0.11	65	2.5	9092011661
M6		10.0	0.39	14	0.56	5.0	0.19	65	2.5	9092011721
	12 1/4"	11.1	0.44	16	0.63	5.0	0.19	65	2.5	9092011931

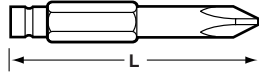


5/16" Hex Power Bits



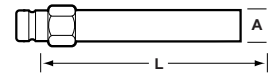
SCREWDRIVER BITS 5/16" HEX POWER

POINT SIZE	L		PART NO. XH
	mm	in.	
1	32	1.3	11642
2	32	1.3	11652
1	52	2.0	11672
2	52	2.0	11682
3	52	2.0	11692
1	92	3.6	11702
2	92	3.6	11722
3	92	3.6	11732



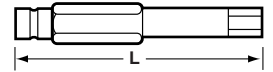
SCREWDRIVER BITS 5/16" HEX POWER

POINT SIZE	L		PART NO. XH
	mm	in.	
1	32	1.3	11532
2	32	1.3	11542
1	44	1.7	13362
1	52	2.0	11562
2	52	2.0	11572
3	52	2.0	11582
1	92	3.6	11602
2	92	3.6	11622
3	92	3.6	11632



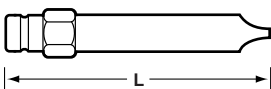
SCREWDRIVER BIT BLANK 5/16" HEX POWER

A		L		PART NO. XH
mm	in.	mm	in.	
10.2	0.40	52	2	10522
10.2	0.40	154	6	10692



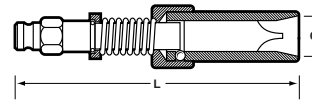
SCREWDRIVER BITS 5/16" HEX POWER

HEX		L		PART NO. XH
mm	in.	mm	in.	
3	0.12	50	2.0	99842
4	0.16	50	2.0	99852
5	0.19	50	2.0	99862
6	0.23	50	2.0	99872
8	0.31	50	2.0	99882



SCREWDRIVER BITS 5/16" HEX POWER

A		B		L		PART NO. XH
mm	in.	mm	in.	mm	in.	
3.1	0.12	0.6	0.023	52	2.04	10082
3.7	0.14	0.8	0.031	52	2.04	10092
5.0	0.19	1.0	0.038	52	2.04	10102
6.2	0.24	1.0	0.038	52	2.04	10122
7.5	0.29	1.2	0.047	52	2.04	10132
8.8	0.34	1.3	0.051	52	2.04	10142
10.2	0.40	1.5	0.059	52	2.04	10152
3.1	0.12	0.6	0.023	78	3.07	10162
3.7	0.14	0.8	0.032	78	3.07	10172
5.0	0.19	1.0	0.038	78	3.07	10182
6.2	0.24	1.0	0.038	78	3.07	10192
7.5	0.29	1.2	0.047	78	3.07	10202
8.8	0.34	1.3	0.051	78	3.07	10222
10.2	0.40	1.5	0.059	78	3.07	10232
3.1	0.12	0.6	0.023	103	4.05	10242
3.7	0.14	0.8	0.032	103	4.05	10252
5.0	0.19	1.0	0.038	103	4.05	10262
6.2	0.24	1.0	0.038	103	4.05	10272
7.5	0.29	1.2	0.047	103	4.05	10282
10.2	0.40	1.5	0.059	103	4.05	10302
5.0	0.19	1.0	0.308	154	6.06	10422



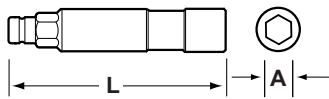
SCREWDRIVER BITS – COMBINED BIT AND FINDER SLEEVES 5/16" HEX POWER

A		B		L		C		PART NO. XH
mm	in.	mm	in.	mm	in.	mm	in.	
3.2	0.12	0.6	0.023	84	3.3	4.2	0.16	10822
3.9	0.15	0.8	0.031	84	3.3	5.7	0.22	10832
5.1	0.20	1.0	0.038	84	3.3	7.2	0.28	10842
6.4	0.25	1.1	0.043	84	3.3	8.6	0.34	10852
7.7	0.30	1.2	0.047	84	3.3	10.1	0.39	10862
8.8	0.34	1.4	0.055	84	3.3	11.6	0.45	10872
11.0	0.42	1.6	0.062	84	3.3	13.0	0.51	10882
3.9	0.15	0.8	0.031	110	4.3	5.7	0.22	10902
5.1	0.20	1.0	0.038	110	4.3	7.2	0.28	10922
6.4	0.25	1.1	0.043	110	4.3	8.6	0.34	10932
7.7	0.30	1.2	0.047	110	4.3	10.1	0.39	10942



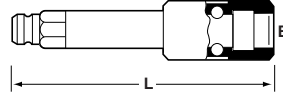
Consumables

5/16" Hex Power Accessories



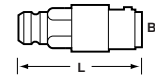
BIT HOLDERS 5/16" HEX POWER

L		A	Q/R	PART NO.
mm	in.			
45	1.77	1/4" Hex Power (F6.3)	X ✓	78882
46	1.81	1/4" Hex Insert (D6.3)	X X	11522
62	2.44	1/4" Hex Insert (D6.3)	✓ X	11502
Replacement Spring Ring for 11522, 11502				260613
70	2.75	1/4" Hex Insert (D6.3)	✓ ✓	100172
55	2.16	1/4" Hex Insert (D6.3)	✓ X	98682
Cap and O Ring for 98682				100132



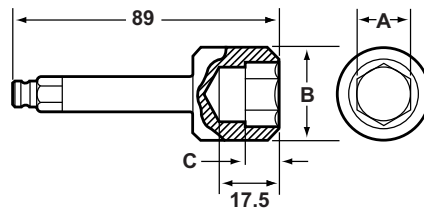
EXTENSION ADAPTORS 5/16" HEX POWER

B	L		PART NO.
	mm	in.	
5/16" Hex Power	51	2.0	10762
5/16" Hex Power	76	2.9	10772
5/16" Hex Power	101	3.9	10782
5/16" Hex Power	126	4.9	10792
5/16" Hex Power	151	5.9	10802



SQUARE DRIVE ADAPTORS 5/16" HEX POWER

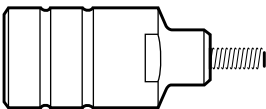
B	L		PART NO.
	mm	in.	
1/4" Square Drive	34	1.3	32962
1/4" Square Drive	75	2.9	23592
1/4" Square Drive	100	3.9	23602
3/8" Square Drive	37	1.4	91772



NUTRUNNERS 5/16" HEX POWER

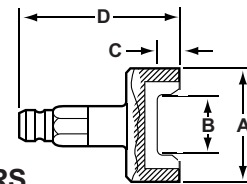
ISO	UNF/C	A		B		C		PART NO.
		mm	in.	mm	in.	mm	in.	
M2.5		5.1	0.20	8.9	0.35	2.3	0.09	7342
M3		5.5	0.21	9.5	0.37	2.4	0.09	61332
M3.5		6.1	0.24	10.4	0.41	3.2	0.12	7372
	4	6.5	0.25	11.4	0.44	3.3	0.13	7392
M4		7.2	0.28	11.9	0.46	3.3	0.13	61342
M5	5-6	8.1	0.31	13.7	0.54	4.1	0.16	7412
		8.3	0.32	13.7	0.54	4.1	0.16	7422
M6		10.1	0.39	16.0	0.63	4.8	0.18	7462
	12 1/4"	11.4	0.44	17.5	0.68	5.6	0.22	7482
	5/16"	13.0	0.51	19.6	0.77	6.4	0.25	7512
M8		13.2	0.52	19.8	0.78	6.4	0.25	752
	3/8"	14.5	0.57	21.3	0.83	7.9	0.31	7552
M10		17.3	0.68	24.6	0.96	9.7	0.38	7582

Bottle Cap Drivers/Nose Attachment Kits



NOSE ATTACHMENT KITS FOR THE ASSEMBLY OF THREADED CAPTIVE FASTENERS, RIVET NUTS, ETC USE WITH TOOLS SB, SC2, SD & ECS

THREAD SIZE	PART NO. ASSEMBLY KIT	THREAD SIZE	PART NO. ASSEMBLY KIT
M3 x 0.5	76552	6 x 32 UNC	77602
M4 x 0.7	76562	8 x 32 UNC	AS50109-04
M5 x 0.8	76572	10 x 24 UNC	AS50109-03
M6 x 1.0	76582	10 x 32 UNF	AS50109-06
M8 x 1.25	76592	1/4"-20 UNC	AS50109-01
		1/4"-28 UNF	AS50109-02
		5/16" UNC	76672
		5/16" UNF	76682

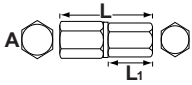


BOTTLE CAP DRIVERS 5/16" HEX POWER

ØA		ØB		C		D		PART NO.
mm	in.	mm	in.	mm	in.	mm	in.	
25.4	1.0	14.3	0.56	6.4	0.25	38.1	1.50	11832
28.6	1.12	17.5	0.68	6.4	0.25	38.1	1.50	11842
31.7	1.24	22.2	0.87	6.4	0.25	38.1	1.50	11852
34.9	1.37	23.8	0.93	6.4	0.25	38.1	1.50	11862
39.7	1.56	27.0	1.06	6.4	0.25	38.9	1.53	11872
42.9	1.68	30.2	1.18	6.4	0.25	38.9	1.53	11882
49.2	1.93	36.5	1.43	7.9	0.31	40.4	1.59	11892
55.6	2.18	42.9	1.68	7.9	0.31	40.4	1.59	11902

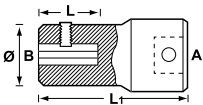


THREAD SIZE	PART NO. A	PART NO. B	PART NO. C	LENGTH D		E A/F SIZE		PART NO.	PART NO. F	PART NO. G
				mm	in.	mm	in.			
M3 x 0.5	273513	273603	273423	35	1.37	279683	2.5 0.09	72362	273613	16313
M4 x 0.7	273533	273603	273443	35	1.37	273643	3.0 0.12	72172		
M5 x 0.8	273563	273603	273473	35	1.37	273653	4.0 0.15	72192		
M6 x 1.0	273573	273603	273483	35	1.37	237893	5.0 0.19	72222		
M8 x 1.25	273593		300383	45	1.77	300393	6.0 0.23	72242		



HEXAGONAL BITS 7/16"

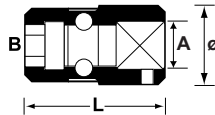
SIZE ON FLATS A		L		HEX LENGTH L1		PART NO.
mm	in.	mm	in.	mm	in.	
8		28	1.10	12	0.47	6158041080
10		28	1.10	12	0.47	6158041090
12		28	1.10	12	0.47	6158041100



POSITIVE RETENTION

A	B	L		Ø		L1		PART NO.
in.		mm	in.	mm	in.	mm	in.	
3/8	1/4" Hex	14	0.55	14	0.55	38	1.49	6158122060
3/8	7/16" Hex	14	0.55	14	0.55	38	1.49	6158041570

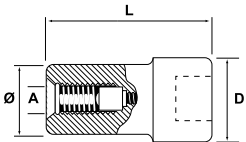
Square Drive Adaptors



SQUARE DRIVE TO SCREWDRIVER BIT ADAPTORS QUICK RELEASE AND CLIP/BALL RETENTION

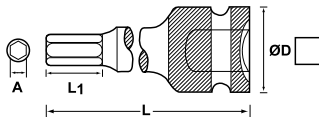
A	B	L		Ø MAX		Q/R	PART NO.
in.		mm	in.	mm	in.		
3/8	1/4" Hex Insert (D6.3)	32	1.26	16	0.62		21792
3/8	1/4" Hex Power (F6.3)	46	1.81	22	0.86	Q/R	108052
3/8	5/16" Hex Power	68	2.67	21	0.82	Q/R	21762
1/2	1/4" Hex Insert (D6.3)	45	1.77	22	0.86		6158123060
1/4	5/16" Hex Power	25	1.0				26892

Sockets 1/2" Drive with Male Hex/Stud Runners



STUD RUNNER

THREAD A	SQUARE DRIVE	Ø		D		L		PART NO.
		in.	mm	mm	in.	mm	in.	
M5 x 80	3/8	15	0.59	19	0.74	55	2.16	6158041530
M6 x 100	3/8	15	0.59	19	0.74	55	2.16	6158041610
M8 x 125	3/8	17	0.66	19	0.74	55	2.16	6158041620
M10 x 150	3/8	19	0.74	24	0.94	55	2.16	6158041540
M6 x 100	1/2	22	0.86	24	0.94	65	2.55	6158041550
M8 x 125	1/2	24	0.94	24	0.94	65	2.55	6158041630
M10 x 150	1/2	24	0.94	24	0.94	65	2.55	6158041640
M12 x 175	1/2	24	0.94	24	0.94	65	2.55	6158041650
M14 x 200	1/2	24	0.94	24	0.94	65	2.55	6158041680
M16 x 200	1/2	24	0.94	24	0.94	65	2.55	6158041580



HEXAGONAL DRIVES WITH PIN AND O-RING RETENTION

A		SQUARE DRIVE		L		L1		ØD		PART NO.
mm	in.	in.	mm	in.	mm	in.	mm	in.		
4	0.15	3/8	50	1.96	16	0.63	19	0.74	9092013781	
5	0.19	3/8	50	1.96	16	0.63	19	0.74	9092013811	
6	0.23	3/8	50	1.96	16	0.63	19	0.74	9092013841	
8	0.31	3/8	50	1.96	16	0.63	19	0.74	9092013871	
10	0.39	3/8	50	1.96	16	0.63	19	0.74	9092013901	
8	0.31	1/2	75	2.95	16	0.63	25	0.98	9092013961	
10	0.39	1/2	75	2.95	16	0.63	25	0.98	9092013991	
14	0.55	1/2	75	2.95	20	0.78	25	0.98	9092014051	

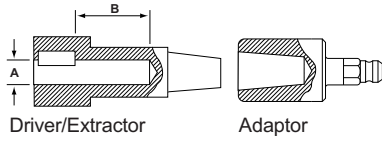
SOCKET 1/2" DRIVE WITH MALE HEX

HEX		L		L1		PART NO.
mm	in.	mm	in.	mm	in.	
4	0.15	44	1.73	6	0.23	6158040400
5	0.19	44	1.73	8	0.31	6158040410
6	0.23	44	1.73	9	0.35	6158040420
8	0.31	44	1.73	12	0.47	6158040430
10	0.39	47	1.85	16	0.63	6158040440
14	0.55	50	1.96	21	0.82	6158040450
17	0.67	50	1.96	26	1.02	6158040460
19	0.74	50	1.96	26	1.02	6158040470
	5/16	44	1.73	12	0.47	6158040490
	3/8	47	1.85	16	0.63	6158040500
	1/2	50	1.96	19	0.74	6158040520



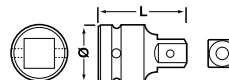
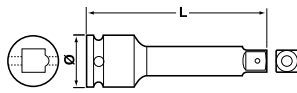


Sockets

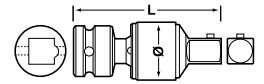


STUD DRIVER/EXTRACTORS 5/16" HEX POWER

A	B		PART NO.	
	mm	in.	ADAPTOR	DRIVER/EXTRACTOR
M4	18.2	0.71		15262
M5	19.8	0.78		15302
M6	12.7	0.50	15502	15332
	14.3	0.56	15502	15342
M7	19.0	0.74	15502	15362
	19.0	0.74	15502	15372



Extensions Universal Joints Adaptors



EXTENSIONS

FEMALE SQ.	SQ. DRIVE	L		Ø		PART NO.
		in.	mm	in.	mm	
1/4	1/4	51	2.0	13	0.51	6158071050
1/4	1/4	75	2.9	13	0.51	6158071070
1/4	1/4	100	3.9	13	0.51	6158071100
1/4	1/4	150	5.9	13	0.51	6158071150
3/8	3/8	76	3.0	19	0.74	6158072070
3/8	3/8	152	5.9	19	0.74	6158072150
1/2	1/2	51	2.0	30	1.18	6158073050
1/2	1/2	127	5.0	30	1.18	6158073130
1/2	1/2	254	10.0	30	1.18	6158073250
3/4	3/4	102	4.0	44	1.73	6158075100
3/4	3/4	178	7.0	44	1.73	6158075170
1	1	178	7.0	54	2.12	6158076180
#5	#5	203	7.9	54	2.12	6158040340

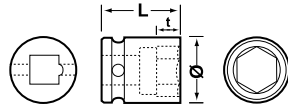
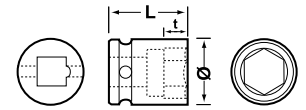
ADAPTORS

FEMALE SQ.	SQ. DRIVE	L		Ø		PART NO.
		in.	mm	in.	mm	
1/4	3/8	32	1.3	12.5	0.49	6158091200
3/8	1/4	31	1.2	22	0.86	6158092100
3/8	1/2	35	1.4	22	0.86	6158092300
1/2	3/8	35	1.4	25	0.98	6158093200
1/2	3/4	43	1.7	30	1.18	6158093500
3/4	1/2	52	2.0	44	1.73	6158095300
3/4	1	60	2.4	44	1.73	6158095600
1	3/4	67	2.6	54	2.12	6158096500
#5	1	90	3.5	60	2.36	6158040130

UNIVERSAL JOINTS

FEMALE SQ.	SQ. DRIVE	L		Ø		PART NO.
		in.	mm	in.	mm	
1/4	1/4	42	1.6	17	0.66	6158081010
3/8	3/8	60	2.3	20	0.78	6158082010
1/2	1/2	76	3.0	32	1.26	6158083010
3/4	3/4	89	3.5	44	1.73	6158085010
1	1	112	4.4	54	2.12	6158086010
#4	#4	132	5.2	86	3.38	6158040320
#5	#5	143	5.6	86	3.38	6158040330

Sockets 1/4" - 3/8" Square Drive

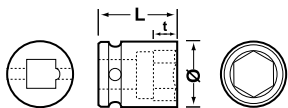


MAGNETIC 1/4" SQUARE DRIVE IMPACT SOCKETS

SIZE ON FLATS	L		Ø		DEPTH t		PART NO.
	mm	in.	mm	in.	mm	in.	
7	25	1	19	0.75	3	0.12	6158040050
8	25	1	19	0.75	4	0.16	6158040060
10	25	1	19	0.75	5	0.20	6158040070

STANDARD 1/4" SQUARE DRIVE IMPACT SOCKETS

SIZE ON FLATS	L		Ø		DEPTH t		PART NO.
	mm	in.	mm	in.	mm	in.	
4.0	25	1	7.5	0.30	4	0.16	6158051040
4.5	25	1	8.0	0.31	4	0.16	6158051450
5.0	25	1	8.5	0.33	4	0.16	6158051050
5.5	25	1	9.0	0.35	4	0.16	6158051550
6.0	25	1	9.5	0.37	5	0.20	6158051060
7.0	25	1	11.0	0.43	5	0.20	6158051070
8.0	25	1	12.0	0.47	6	0.24	6158051080
9.0	25	1	13.0	0.51	7	0.28	6158051090
10.0	25	1	14.5	0.57	7	0.28	6158051100
11.0	25	1	16.0	0.63	8	0.31	6158051110
12.0	25	1	17.0	0.67	8	0.31	6158051120
13.0	25	1	18.0	0.71	9	0.35	6158051130
14.0	25	1	19.0	0.75	9	0.35	6158051140



EXTENDED 3/8" SQUARE DRIVE IMPACT SOCKETS

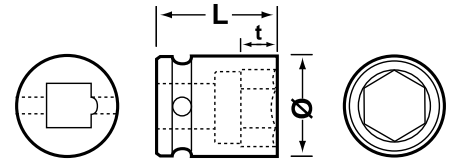
SIZE ON FLATS	L		Ø		DEPTH t		PART NO.
	mm	in.	mm	in.	mm	in.	
8	57	2.24	12.5	0.49	8	0.31	6158062080
10	57	2.24	15.5	0.61	10	0.39	6158062100
11	57	2.24	17.0	0.67	11	0.43	6158062110
12	57	2.24	18.0	0.71	12	0.47	6158062120
13	57	2.24	19.5	0.77	13	0.51	6158062130
15	57	2.24	22.0	0.87	15	0.59	6158062150
16	57	2.24	23.0	0.91	16	0.63	6158062160
17	57	2.24	24.5	0.96	17	0.67	6158062170
18	57	2.24	25.5	1.00	18	0.71	6158062180
19	57	2.24	27.0	1.06	19	0.75	6158062190

STANDARD 3/8" SQUARE DRIVE IMPACT SOCKETS

SIZE ON FLATS	L		Ø		DEPTH t		PART NO.
	mm	in.	mm	in.	mm	in.	
6	34	1.34	10.0	0.39	5.0	0.20	6158052060
7	34	1.34	11.0	0.43	6.5	0.26	6158052070
10	34	1.34	15.0	0.59	8.0	0.31	6158052100
11	34	1.34	16.5	0.65	9.0	0.35	6158052110
12	34	1.34	18.0	0.71	9.0	0.35	6158052120
13	34	1.34	19.5	0.77	10.0	0.39	6158052130
14	34	1.34	20.5	0.81	10.0	0.39	6158052140
15	34	1.34	22.0	0.87	10.0	0.39	6158052150
16	34	1.34	23.0	0.91	10.0	0.39	6158052160
17	34	1.34	24.5	0.96	10.0	0.39	6158052170
18	34	1.34	25.5	1.00	10.0	0.39	6158052180
19	34	1.34	27.0	1.06	11.0	0.43	6158052190
3/8"	30	1.18	14.5	0.57	4.0	0.16	6158042660
1/2"	30	1.18	19.0	0.75	6.0	0.24	6158042680
9/16"	30	1.18	20.0	0.79	7.0	0.28	6158042690
3/4"	30	1.18	24.0	0.94	10.0	0.39	4026091900



■ Sockets 1/2" - 3/4" Square Drive



STANDARD 1/2" SQUARE DRIVE IMPACT SOCKETS

SIZE ON FLATS	L		Ø		DEPTH t		PART NO.
	mm	in.	mm	in.	mm	in.	
10	38	1.50	16.0	0.63	8.0	0.31	6158053100
11	38	1.50	17.5	0.69	9.0	0.35	6158053110
12	38	1.50	19.0	0.75	9.0	0.35	6158053120
13	38	1.50	20.5	0.81	10.0	0.39	6158053130
14	38	1.50	22.0	0.87	10.0	0.39	6158053140
15	38	1.50	23.5	0.93	10.0	0.39	6158053150
16	38	1.50	24.5	0.96	10.0	0.39	6158053160
17	38	1.50	26.0	1.02	10.0	0.39	6158053170
18	38	1.50	27.5	1.08	10.0	0.39	6158053180
19	38	1.50	29.0	1.14	11.0	0.43	6158053190
20	38	1.50	30.0	1.18	12.0	0.47	6158053200
21	38	1.50	31.0	1.22	13.0	0.51	6158053210
22	38	1.50	32.5	1.28	13.0	0.51	6158053220
23	38	1.50	34.0	1.34	15.0	0.59	6158053230
24	45	1.77	35.0	1.38	15.0	0.59	6158053240
26	45	1.77	38.0	1.50	15.0	0.59	6158053260
27	50	1.97	39.0	1.54	16.0	0.63	6158053270
29	50	1.97	41.0	1.61	17.0	0.67	6158053290
30	50	1.97	42.5	1.67	18.0	0.71	6158053300
3/8"	38	1.50	16.0	0.63	4.0	0.16	6158042780
9/16"	38	1.50	22.0	0.87	7.0	0.28	6158042810
3/4"	38	1.50	28.7	1.13	9.5	0.37	6158053190
13/16"	38	1.50	30.0	1.18	11.0	0.43	6158042840
15/16"	38	1.50	34.0	1.34	13.0	0.51	6158042860
1 1/16"	38	1.50	38.7	1.52	13.0	0.51	6158053270
1 3/16"	40	1.57	42.0	1.65	16.5	0.65	6158053300



STANDARD 3/4" SQUARE DRIVE IMPACT SOCKETS

SIZE ON FLATS	L		Ø		DEPTH t		PART NO.
	mm	in.	mm	in.	mm	in.	
19	50	1.97	32	1.26	13	0.51	6158055190
21	50	1.97	35	1.38	13	0.51	6158055210
22	50	1.97	35	1.38	13	0.51	6158055220
24	50	1.97	39	1.54	15	0.59	6158055240
27	54	2.13	42	1.65	16	0.63	6158055270
30	54	2.13	46	1.81	18	0.71	6158055300
32	56	2.20	49	1.93	18	0.71	6158055320
36	56	2.20	54	2.13	20	0.79	6158055360
41	58	2.28	61	2.40	22	0.87	6158055410
3/4"	45	1.77	36	1.42	9.5	0.37	6158055190
1 1/16"	48	1.89	46	1.81	13.0	0.51	6158055270



EXTENDED 1/2" SQUARE DRIVE IMPACT SOCKETS

SIZE ON FLATS	L		Ø		DEPTH t		PART NO.
	mm	in.	mm	in.	mm	in.	
10	78	3.07	17.0	0.67	10.0	0.39	6158063100
11	78	3.07	18.5	0.73	11.0	0.43	6158063110
13	78	3.07	21.5	0.85	13.0	0.51	6158063130
14	78	3.07	23.0	0.91	14.0	0.55	6158063140
15	78	3.07	23.5	0.93	15.0	0.59	6158063150
16	78	3.07	24.5	0.96	16.0	0.63	6158063160
17	78	3.07	26.0	1.02	17.0	0.67	6158063170
18	78	3.07	27.5	1.08	18.0	0.71	6158063180
19	78	3.07	29.0	1.14	19.0	0.75	6158063190
20	78	3.07	30.0	1.18	20.0	0.79	6158063200
22	78	3.07	32.5	1.28	23.0	0.91	6158063220
24	78	3.07	35.0	1.38	25.0	0.98	6158063240
27	78	3.07	39.0	1.54	26.0	1.02	6158063270
30	78	3.07	43.0	1.69	30.0	1.18	6158063300
3/4"	78	3.07	28.7	1.13	9.5	0.37	6158063190
1 1/16"	78	3.07	38.7	1.52	13.0	0.51	6158063270



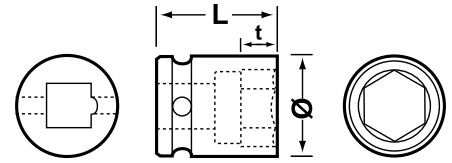
EXTENDED 3/4" SQUARE DRIVE IMPACT SOCKETS

SIZE ON FLATS	L		Ø		DEPTH t		PART NO.
	mm	in.	mm	in.	mm	in.	
24	100	3.94	40	1.57	24	0.94	6158065240
32	100	3.94	49	1.93	32	1.26	6158065320
36	100	3.94	54	2.13	32	1.26	6158065360



Sockets

■ Sockets 1" Square Drive



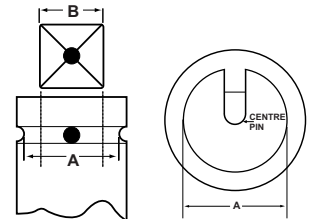
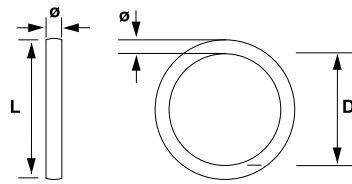
STANDARD 1" SQUARE DRIVE IMPACT SOCKETS

SIZE ON FLATS	L		Ø		DEPTH t		PART NO.
	mm	in.	mm	in.	mm	in.	
24	59	2.32	38	1.50	15.0	0.59	6158056240
27	59	2.32	44	1.73	16.0	0.63	6158056270
30	61	2.40	50	1.97	18.0	0.71	6158056300
32	61	2.40	52	2.05	19.0	0.75	6158056320
33	61	2.40	54	2.13	19.0	0.75	6158056330
36	65	2.56	57	2.24	23.0	0.91	6158056360
41	70	2.76	63	2.48	25.0	0.98	6158056410
42	70	2.76	64	2.52	25.0	0.98	6158056420
46	75	2.95	69	2.72	30.0	1.18	6158056460
55	83	3.27	81	3.19	33.0	1.30	6158056550
65	86	3.39	94	3.70	38.0	1.50	6158056650
15/16"	55	2.17	41	1.61	13.0	0.51	6158043180

EXTENDED 1" SQUARE DRIVE IMPACT SOCKETS

SIZE ON FLATS	L		Ø		DEPTH t		PART NO.
	mm	in.	mm	in.	mm	in.	
24	100	3.94	39	1.54	24.0	0.94	6158066240
30	100	3.94	51	2.01	30.0	1.18	6158066300
32	100	3.94	53	2.09	30.0	1.18	6158066320
33	100	3.94	54	2.13	30.0	1.18	6158066330
38	100	3.94	59	2.32	33.0	1.30	6158066380
41	100	3.94	63	2.48	35.0	1.38	6158066410
46	115	4.53	69	2.72	35.0	1.38	6158066460
50	125	4.92	75	2.95	38.0	1.50	6158066500
60	125	4.92	87	3.43	40.0	1.57	6158066600
23/4"	110	4.33	96	3.78	38.0	1.50	6158043400

■ Socket Retention



PIN AND O-RING RETENTION

HEX SIZE	□	L		Ø		PIN		D		Ø		O RING	
		mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
6-12	3/8	16	0.64	3	0.12	6158043880	13	0.52	3.5	0.14	6158044020		
13-19	3/8	16	0.64	3	0.12	6158043880	16	0.64	3.5	0.14	6158044030		
10-14	1/2	20	0.78	3	0.12	6158043900	19	0.76	4.0	0.16	6158044040		
15-30	1/2	25	0.98	3	0.12	6158043910	24	0.96	4.0	0.16	6158044050		
18-41	3/4	35	1.37	4	0.16	6158043920	36	1.44	5.0	0.19	6158044060		
24-65	1	45	1.77	5	0.19	6158043930	45	1.77	7.0	0.28	6158044070		
50-90	1-1/2						75	2.95	10.0	0.39	6158044080		

SOCKET RETAINERS FOR IMPACT WRENCHES

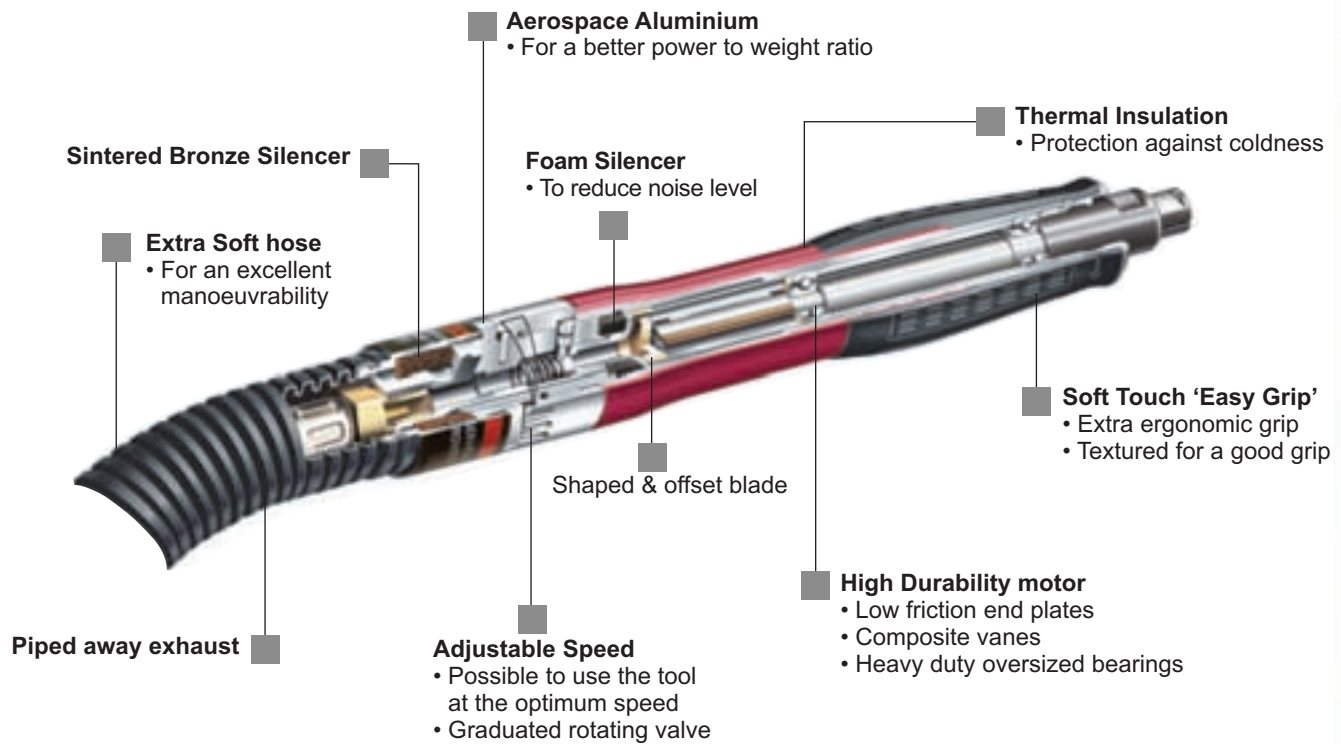
RET. RING PART NO.	INSIDE Ø OF RET. RING	FOR USE ON SQUARE DRIVE
C-155467	1 1/4"	3/4"
C-155468	1 7/16"	3/4"
C-134690	1 5/8"	3/4"
C-134691	1 3/4"	3/4"
C-155585	2"	3/4"
C-155470	1 3/4"	1"
C-155471	2"	1"
C-155472	2 1/8"	1"
C-134692	2 1/4"	1"
C-155473	2 1/2"	1"
C-134693	2 7/8"	1 1/2"
C-134694	3 3/8"	1 1/2"
C-134695	3 7/8"	1 1/2"
C-134696	4 3/8"	1 1/2"

Removal Tools - Selection Guide

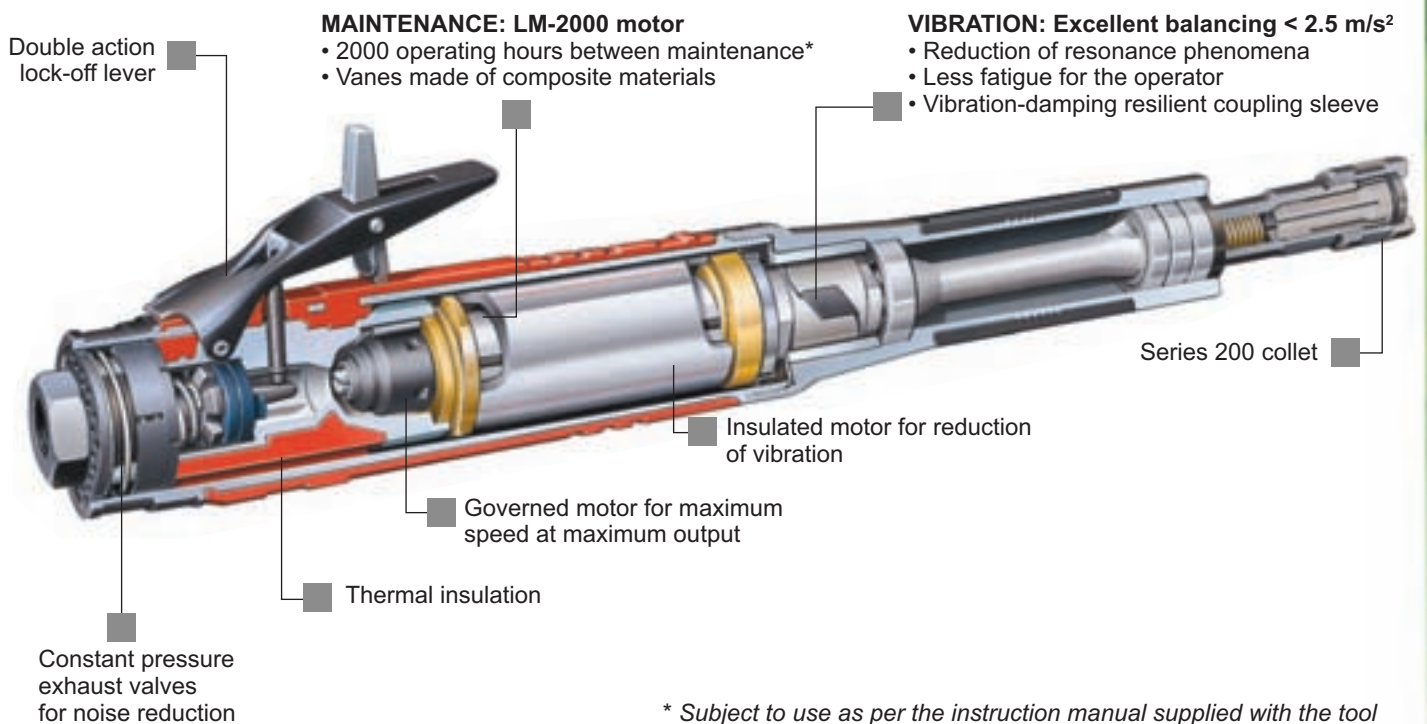
TOOL TYPE	ACCESSORIES	PAGE
GRINDERS: for carbide burrs, mounted points & sanding discs		144-157
		
ROUTERS		158
		
COLLET GRINDER ACCESSORIES		159
		
GRINDERS: for cone wheels, type 1 wheels, depressed centre wheels, cup wheels, cut-off wheels, diamond discs, flap wheels		160-181
		
SANDERS: for expandable wheels, flap wheels, brushes, abrasive discs, sheepskin, water sanding		182-195
		
BRUSHING MACHINES: for cup brushes, radial brushes		196-197
		
DUST EXTRACTION SYSTEMS: for straight and angle grinders for angle and vertical sanders		198-205
		
RANDOM ORBITAL SANDERS AND POLISHERS: for abrasive discs and polishing accessories ORBITAL SANDERS: for abrasive sheets		206-219
		
BELT SANDERS		220-221
		
AIR SCRIBE, CHIPPERS, CHISEL SCALERS, NEEDLE SCALERS		222-231
		



Grinders for carbide burrs, mounted points and sanding discs

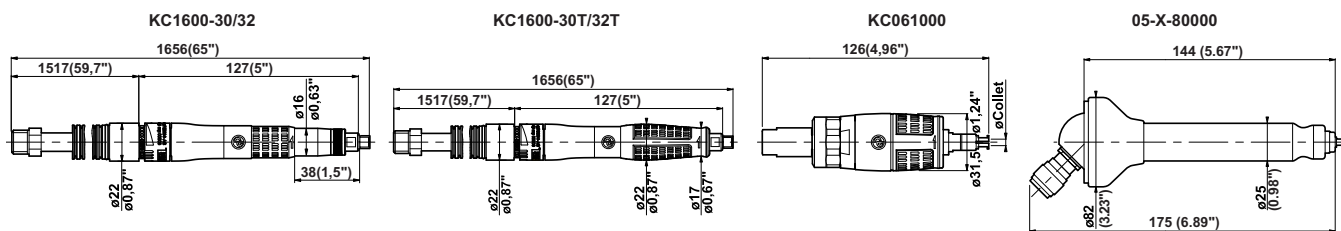


44 to 1600 Watts (0.06 to 2.15 hp) range



* Subject to use as per the instruction manual supplied with the tool

Accessories



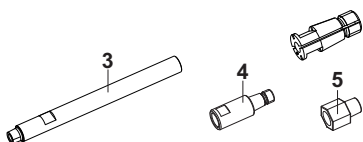
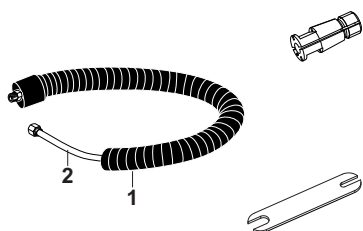
KC1600-30 / KC1600-30T / KC1600-32 / KC1600-32T

ACCESSORIES INCLUDED

ITEM	KC1600-30 KC1600-30T	KC1600-32 KC1600-32T
• Collet ø 3mm	205 047 961 3	
• Collet ø 3.17mm (1/8")		205 047 962 3
1 Exhaust kit - L = 1m (39.4")	615 396 405 0	615 396 405 0
2 Mounted inlet hose 1/4" BSP - ø 6mm (1/4") - L = 1.5m (59")	615 875 119 0	
2 Mounted inlet hose 1/4" NPT - ø 6mm (1/4") - L = 1.5m (59")		615 875 118 0
• Spanner (Qty 2)	205 047 965 3	205 047 965 3
• Carrying case (for T version only)	P137979	P137979

OPTIONAL ACCESSORIES

ITEM	PART NO.
• Collet ø 2.38mm (3/32")	205 048 059 3
3 Machine extension - L = 150mm (5.9")	615 595 330 0
4 Collet extension - L = 20mm (0.79")	615 595 329 0
5 Adaptor 1/4" BSP - 1/4" NPT female	181523



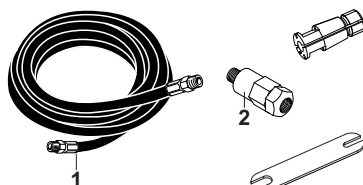
KC061000-30 / KC061000-32 / 05-X-80000

ACCESSORIES INCLUDED

ITEM	KC061000-30	KC061000-32	05-X-80000
• Collet ø 3mm	205 047 961 3		9812
• Collet ø 3.17mm (1/8")		205 047 962 3	9782
1 Complete inlet hose 1/8" M - 1/4" M, ø 5mm (3/16") L = 2.40m (94.5")	P043886	P043886	
2 Filter 1/4" F-1/4" M. NPT	P056381	P056381	
• Spanner (Qty 2)	205 047 965 3	205 047 965 3	

OPTIONAL ACCESSORIES

	KC016000-..	05-X-80000
• Collet ø 2.38mm (3/32")	205 048 059 3	9792



Grinders for carbide burrs and mounted points

44 to 100 Watts (0.06 to 0.13 hp) - 60000 to 100000 rpm



A



B



C



D

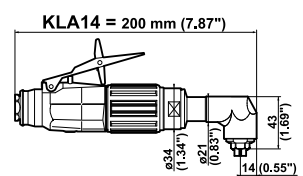
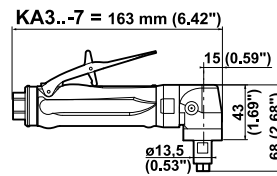
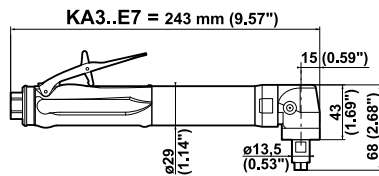
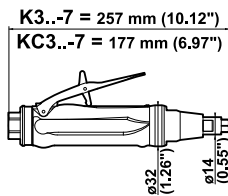


E

Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	COLLET MAX CAPACITY		POWER		WEIGHT		AIR CONSUMPTION		AIR INLET. THREAD	HOSE INT. Ø	
			rpm	mm	in.	W	hp	kg	lb.	l/s	cfm	in.	mm	in.
PENCIL DIE GRINDERS														
A	KC1600-30T	615 170 313 0	60000	3.00		100	0.13	0.15	0.33	4.9	10.4	1/4 BSP	6	1/4
A	KC1600-32T	615 170 314 0	60000	3.17	1/8	100	0.13	0.15	0.33	4.9	10.4	1/4 NPT	6	1/4
B	KC1600-30	615 170 315 0	60000	3.00		100	0.13	0.15	0.33	4.9	10.4	1/4 BSP	6	1/4
B	KC1600-32	615 170 316 0	60000	3.17	1/8	100	0.13	0.15	0.33	4.9	10.4	1/4 NPT	6	1/4
TURBINE GRINDERS														
C	KC061000-30	205 146 638 4	100000	3.00		44	0.06	0.24	0.53	8.5	18.0	1/4	5	3/16
C	KC061000-32	205 146 707 4	100000	3.17	1/8	44	0.06	0.24	0.53	8.5	18.0	1/4	5	3/16
D	05-X-80000	258984	80000	3.17	1/8	75	0.1	0.3	0.66	2.8	5.9	1/8	5	3/16
E	05-X-80000	258564	80000	3.17	1/8	75	0.1	0.3	0.66	2.8	5.9	1/8	5	3/16

Accessories



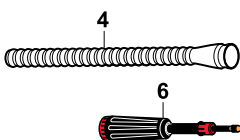
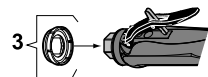
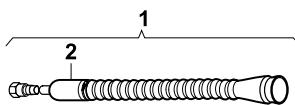
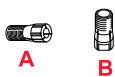
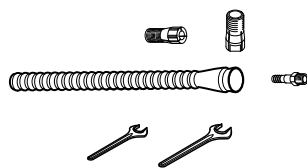
K3..-7 / KC3..-7 / KA3..E7 / KA3..-7 / KLA14

ACCESSORIES INCLUDED

	K3.. / KC3.. KA3..	KLA14
• CNOMO collet \varnothing 6mm	615 526 046 0	615 526 079 0
• Exhaust hose L = 0.8m (31")	615 875 106 0	
• 1/4" air hose nipple for 8mm (5/16") ID hose	615 704 019 0	
• 1/4" air hose nipple for 6mm (1/4") ID hose		615 705 009 0
• Flat wrench, 10mm (25/64")	615 801 002 0	615 801 002 0
• Flat wrench, 11mm (7/16")	615 801 003 0	
• Flat wrench, 14mm		615 801 005 0

OPTIONAL ACCESSORIES

ITEM	A K3.. / KC3.. KA3..	B KLA14
• Collet \varnothing 2mm		615 526 066 0
• CNOMO collet \varnothing 2.5mm	615 526 089 0	615 526 068 0
• CNOMO collet \varnothing 3mm	615 526 044 0	615 526 069 0
• CNOMO collet \varnothing 3.2mm (1/8")	615 526 045 0	
• Collet \varnothing 3.5mm		615 526 070 0
• CNOMO collet \varnothing 4mm (5/32")	615 526 090 0	615 526 071 0
• CNOMO collet \varnothing 4.5mm		615 526 073 0
• CNOMO collet \varnothing 5mm	615 526 092 0	615 526 075 0
• Collet \varnothing 5.5mm		615 526 077 0
• CNOMO collet \varnothing 6.4mm (1/4")	615 526 047 0	
• Collet \varnothing 6.5mm		615 526 081 0
• Collet \varnothing 7mm		615 526 083 0
• Collet \varnothing 7.5mm		615 526 084 0
• Collet \varnothing 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 \varnothing 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	



Grinders for carbide burrs, mounted points and sanding discs

300 - 375 Watts (0.4 - 0.5 hp) - 12000 to 40000 rpm

Supplied with CNOMO collet, ø 6mm



A



B



C



D

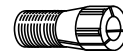


E

K3..-7 / KC3..-7 / KA3..E7 / KA3..-7

CNOMO type collet

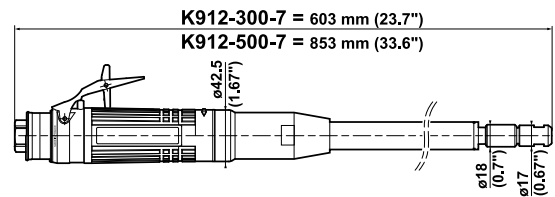
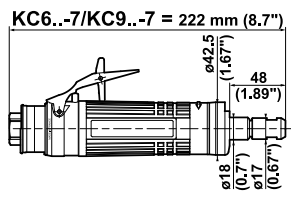
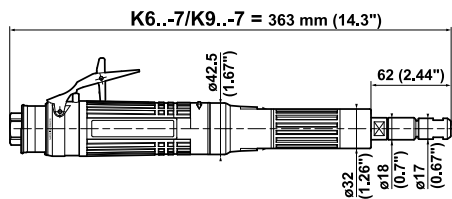
KLA14



Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	COLLET MAX CAPACITY		POWER		WEIGHT		AIR CONSUMPTION				AIR INLET. THREAD		HOSE INT Ø	
				rpm	mm	in.	W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.
STRAIGHT GRINDERS																	
A	K340-7	615 170 036 0	40000	6.4	1/4	375	0.5	0.58	1.28	7.5	16.0	10.0	21	1/4	8	5/16	
A	K331-7	615 170 035 0	31000	6.4	1/4	375	0.5	0.58	1.28	4.5	9.5	9.5	20	1/4	8	5/16	
A	K325-7	615 170 034 0	25000	6.4	1/4	375	0.5	0.58	1.28	3.5	7.5	9.5	20	1/4	8	5/16	
A	K320-7	615 170 033 0	20000	6.4	1/4	375	0.5	0.58	1.28	2.5	5.0	8.0	17	1/4	8	5/16	
B	KC340-7	615 170 032 0	40000	6.4	1/4	375	0.5	0.40	0.88	7.5	16.0	10.0	21	1/4	8	5/16	
B	KC331-7	615 170 031 0	31000	6.4	1/4	375	0.5	0.40	0.88	4.5	9.5	9.5	20	1/4	8	5/16	
B	KC325-7	615 170 030 0	25000	6.4	1/4	375	0.5	0.40	0.88	3.5	7.5	9.5	20	1/4	8	5/16	
B	KC320-7	615 170 029 0	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																	
C	KA320E7	615 170 047 0	20000	6.4	1/4	375	0.5	0.60	1.32	6.5	13.5	10.0	21	1/4	8	5/16	
C	KA312E7	615 170 039 0	12000	6.4	1/4	375	0.5	0.60	1.32	3.0	6.5	9.0	19	1/4	8	5/16	
D	KA320-7	615 170 043 0	20000	6.4	1/4	375	0.5	0.50	1.10	6.5	13.5	10.0	21	1/4	8	5/16	
D	KA312-7	615 170 037 0	12000	6.4	1/4	375	0.5	0.50	1.10	3.0	6.5	9.0	19	1/4	8	5/16	
E	KLA14	615 170 026 0	13500	8.0	5/16	300	0.4	0.75	1.70	8.0	17.0			1/4	6	1/4	

Accessories



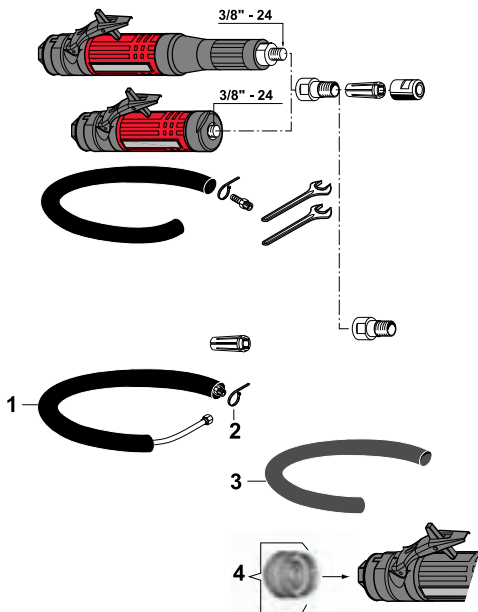
K6..-7 / K9..-7 / KC6..-7 / KC9..-7

ACCESSORIES INCLUDED

	PART NO.
• Collet-holder extension L = 28mm (1.1")	615 523 019 0
• CNOMO collet \varnothing 6mm	615 526 049 0
• Exhaust hose L = 1.5m (60")	615 875 113 0
• Clamp	615 873 415 0
• $\frac{3}{8}$ " air hose nipple for 10mm ($\frac{3}{8}$ " ID) hose	615 704 017 0
• Flat wrench, 14mm (Qty 2)	615 801 005 0

OPTIONAL ACCESSORIES

ITEM	PART NO.
• Collet-holder extension L = 28mm (1.1")	615 523 019 0
• CNOMO collet \varnothing 3mm	615 526 048 0
• CNOMO collet \varnothing 6.35mm ($\frac{1}{4}$ "	615 526 050 0
• CNOMO collet \varnothing 8mm	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



Grinders for carbide burrs and mounted points

600 - 900 Watts (0.8 - 1.21 hp) - 12000 to 28000 rpm

Supplied with CNOMO collet, \varnothing 6mm



A



B

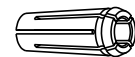


C



D

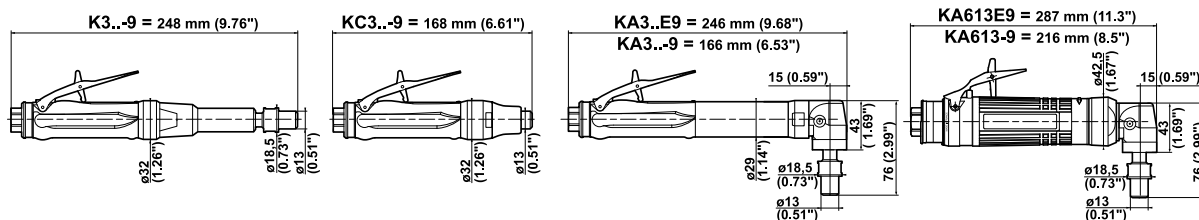
K6..-7 / KC6..-7 / K9..-7 / KC9..-7
CNOMO type collet



Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	COLLET MAX CAPACITY		POWER		WEIGHT		AIR CONSUMPTION				AIR INLET. THREAD		HOSE INT \varnothing	
			rpm	mm	in.	W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.	
A	K628-7	615 170 107 0	28000	8	5/16	600	0.80	1.3	2.9	16	34	15	32	3/8	10	3/8	
A	K624-7	615 170 106 0	24000	8	5/16	600	0.80	1.3	2.9	10	21	15	32	3/8	10	3/8	
A	K922-7	615 170 119 0	22000	8	5/16	900	1.21	1.4	3.1	13	28	18	38	3/8	10	3/8	
A	K619-7	615 170 105 0	19000	8	5/16	600	0.80	1.3	2.9	6	13	15	32	3/8	10	3/8	
A	K918-7	615 170 117 0	18000	8	5/16	900	1.21	1.4	3.1	10	21	18	38	3/8	10	3/8	
A	K615-7	615 170 104 0	15000	8	5/16	600	0.80	1.3	2.9	6	13	15	32	3/8	10	3/8	
A	K915-7	615 170 114 0	15000	8	5/16	900	1.21	1.4	3.1	8	17	17	36	3/8	10	3/8	
A	K912-7	615 170 110 0	12000	8	5/16	900	1.21	1.4	3.1	6	13	16	34	3/8	10	3/8	
B	KC628-7	615 170 126 0	28000	8	5/16	600	0.80	0.9	2.0	16	34	15	32	3/8	10	3/8	
B	KC624-7	615 170 125 0	24000	8	5/16	600	0.80	0.9	2.0	10	21	15	32	3/8	10	3/8	
B	KC922-7	615 170 130 0	22000	8	5/16	900	1.21	1.0	2.2	13	28	18	38	3/8	10	3/8	
B	KC619-7	615 170 124 0	19000	8	5/16	600	0.80	0.9	2.0	6	13	15	32	3/8	10	3/8	
B	KC918-7	615 170 129 0	18000	8	5/16	900	1.21	1.0	2.2	10	21	18	38	3/8	10	3/8	
B	KC615-7	615 170 123 0	15000	8	5/16	600	0.80	0.9	2.0	6	13	15	32	3/8	10	3/8	
B	KC915-7	615 170 128 0	15000	8	5/16	900	1.21	1.0	2.2	8	17	17	36	3/8	10	3/8	
B	KC912-7	615 170 127 0	12000	8	5/16	900	1.21	1.0	2.2	6	13	16	34	3/8	10	3/8	
C	K912-300-7	615 170 108 0	12000	8	5/16	900	1.21	2.1	4.6	6	13	16	34	3/8	10	3/8	
D	K912-500-7	615 170 109 0	12000	8	5/16	900	1.21	2.7	5.9	6	13	16	34	3/8	10	3/8	

Accessories



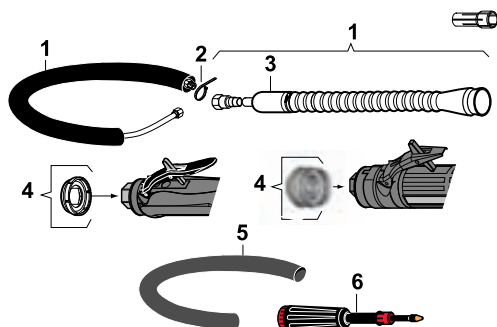
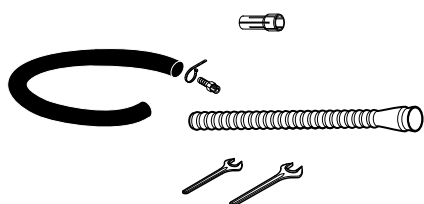
K3..-9 / KC3..-9 / KA3..E9 / KA3..-9 / KA613E9 / KA613-9

ACCESSORIES INCLUDED

	K3../KC3..-9 KA3..E9/KA3..-9	KA613E9 KA613-9
• Series 300 resilient collet, \varnothing 5.55 to 6.35mm (1/4")	615 526 059 0	615 526 059 0
• Exhaust hose L = 0.8m (31")	615 875 106 0	
• Exhaust hose L = 1.5m (60")		615 875 113 0
• Clamp		615 873 415 0
• 1/4" air hose nipple for 8mm (5/16") ID hose	615 704 019 0	
• 3/8" air hose nipple for 10mm (3/8") ID hose		615 704 017 0
• Flat wrench, 11mm (7/16")	615 801 003 0	615 801 003 0
• Flat wrench, 17mm (11/16")	615 801 032 0	615 801 032 0

OPTIONAL ACCESSORIES

ITEM	K3../KC3..-9 KA3..E9/KA3..-9	KA613E9 KA613-9
• Series 300 resilient collet, \varnothing 0.4 to 1.2mm	615 526 052 0	615 526 052 0
• Series 300 resilient collet, \varnothing 1.2 to 2mm	615 526 053 0	615 526 053 0
• Series 300 resilient collet, \varnothing 1.7 to 2.5mm	615 526 054 0	615 526 054 0
• Series 300 resilient collet, \varnothing 2.4 to 3.2mm (1/8")	615 526 055 0	615 526 055 0
• Series 300 resilient collet, \varnothing 3.16 to 3.96mm	615 526 056 0	615 526 056 0
• Series 300 resilient collet, \varnothing 3.95 to 4.75mm	615 526 057 0	615 526 057 0
• Series 300 resilient collet, \varnothing 4.75 to 5.55mm	615 526 058 0	615 526 058 0
1 Complete silencer kit	615 396 101 0	615 396 166 0
2 Clamp		615 873 115 0
3 Silencer	615 574 028 0	
4 Clippable silencer	615 396 124 0	615 396 655 0
5 Reinforced cloth-lined exhaust hose L = 0.75m (30")		615 875 116 0
6 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



PLANING A WELD



SEMI-FINISHING/FINISHING



TRIMMING



CLEANING



TRIMMING - MACHINE



GRINDING

Grinders for carbide burrs, mounted points and sanding discs

375 - 600 Watts (0.5 - 0.8 hp) - 9000 to 40000 rpm

Supplied with series 300 resilient collet, \varnothing 5.55 to 6.35mm (1/4")



A



B



C



D



E



F

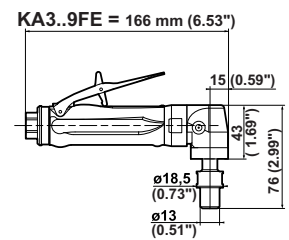
K3...-9 / KC3...-9 / KA3...(E)9 / KA613(E)9
Series 300 collet



Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED		COLLET MAX CAPACITY		POWER		WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR CONSUMPTION AT MAX OUTPUT		AIR INLET THREAD		HOSE INT Ø	
			rpm		mm	in.	W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.	
STRAIGHT GRINDERS																		
A	K340-9	615 170 139 0	40000		6.35	1/4	375	0.5	0.57	1.26	7.5	16.0	10.0	21	1/4	8	5/16	
A	K331-9	615 170 140 0	31000		6.35	1/4	375	0.5	0.57	1.26	4.5	9.5	9.5	20	1/4	8	5/16	
A	K325-9	615 170 141 0	25000		6.35	1/4	375	0.5	0.57	1.26	3.5	7.5	9.5	20	1/4	8	5/16	
A	K320-9	615 170 142 0	20000		6.35	1/4	375	0.5	0.57	1.26	2.5	5.0	8.0	17	1/4	8	5/16	
B	KC340-9	615 170 143 0	40000		6.35	1/4	375	0.5	0.38	0.84	7.5	16.0	10.0	21	1/4	8	5/16	
B	KC331-9	615 170 144 0	31000		6.35	1/4	375	0.5	0.38	0.84	4.5	9.5	9.5	20	1/4	8	5/16	
B	KC325-9	615 170 145 0	25000		6.35	1/4	375	0.5	0.38	0.84	3.5	7.5	9.5	20	1/4	8	5/16	
B	KC320-9	615 170 027 0	20000		6.35	1/4	375	0.5	0.38	0.84	2.5	5.0	8.0	17	1/4	8	5/16	
B	KC318-9	615 170 196 0	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																		
C	KA320E9	615 170 146 0	20000		6.35	1/4	375	0.5	0.61	1.35	6.5	13.5	10.0	21	1/4	8	5/16	
C	KA312E9	615 170 147 0	12000		6.35	1/4	375	0.5	0.61	1.35	3.0	6.5	9.0	9	1/4	8	5/16	
D	KA320-9	615 170 148 0	20000		6.35	1/4	375	0.5	0.51	1.13	6.5	13.5	10.0	21	1/4	8	5/16	
D	KA318-9	615 170 461 0	18000		6.35	1/4	375	0.5	0.51	1.13	6.5	13.5	10.0	21	1/4	8	5/16	
D	KA312-9	615 170 149 0	12000		6.35	1/4	375	0.5	0.51	1.13	3.0	6.5	9.0	19	1/4	8	5/16	
D	KA309-9	615 170 266 0	9000		6.35	1/4	375	0.5	0.50	1.10	3.0	6.5	9.0	19	1/4	8	5/16	
E	KA613E9	615 170 136 0	13000		6.35	1/4	600	0.8	1.40	3.10	10.0	21.0	15.0	32	3/8	10	3/8	
F	KA613-9	615 170 135 0	13000		6.35	1/4	600	0.8	1.10	2.40	10.0	21.0	15.0	32	3/8	10	3/8	

Accessories



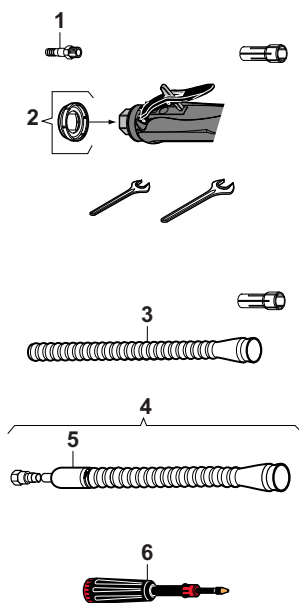
KA320-9FE / KA312-9FE

ACCESSORIES INCLUDED

ITEM	PART NO.
• Series 300 resilient collet, \varnothing 5.55 to 6.35mm ($1/4$ "	615 526 059 0
1 $1/4$ " air hose nipple for 8mm ($5/16$ " ID hose	615 704 019 0
2 Clippable silencer	615 396 124 0
• Flat wrench, 11mm ($7/16$ "	615 801 003 0
• Flat wrench, 17mm ($11/16$ "	615 801 032 0

OPTIONAL ACCESSORIES

ITEM	PART NO.
• Series 300 resilient collet, \varnothing 0.4 to 1.2 mm ($3/64$ "	615 526 052 0
• Series 300 resilient collet, \varnothing 1.2 to 2 mm ($5/64$ "	615 526 053 0
• Series 300 resilient collet, \varnothing 1.7 to 2.5 mm ($3/32$ "	615 526 054 0
• Series 300 resilient collet, \varnothing 2.4 to 3.2 mm ($1/8$ "	615 526 055 0
• Series 300 resilient collet, \varnothing 3.16 to 3.96 mm ($5/32$ "	615 526 056 0
• Series 300 resilient collet, \varnothing 3.95 to 4.75 mm ($3/16$ "	615 526 057 0
• Series 300 resilient collet, \varnothing 4.75 to 5.55 mm ($7/32$ "	615 526 058 0
3 Exhaust hose L = 0.8 m (31")	615 875 106 0
4 Complete silencer kit	615 396 101 0
5 Silencer	615 574 028 0
6 Grease gun (capacity 24g - 0.8 oz.)	615 990 149 0
• Grease for bevel gear (1 kg - 2.2 lb.)	615 990 148 0

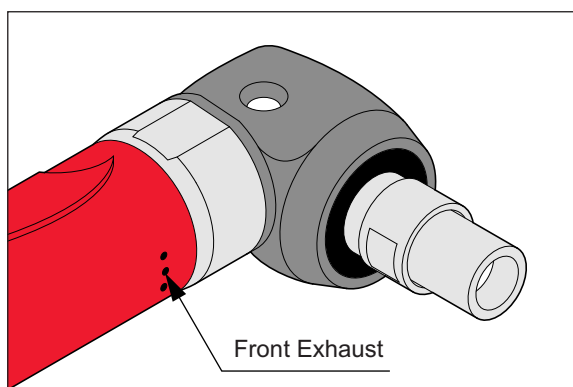


Grinders for carbide burrs, mounted points and sanding discs

375 Watts (0.5 hp) - 12000 - 20000 rpm

Supplied with series 300 resilient collet, \varnothing 5.55 to 6.35 mm (1/4")

Front Exhaust



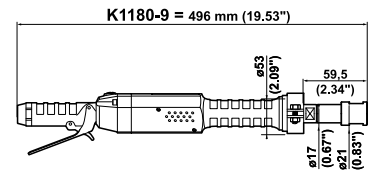
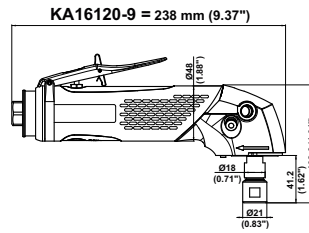
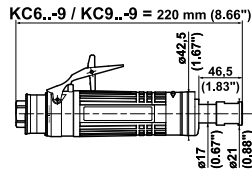
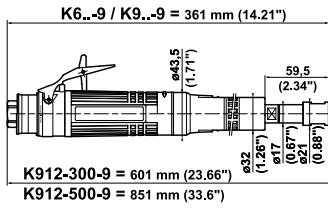
K312-9FE / KA320-9FE
Series 300 collet



Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	COLLET MAX CAPACITY		POWER		WEIGHT		AIR CONSUMPTION				AIR INLET. THREAD			HOSE INT \varnothing		
				rpm	mm	in.	W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.		
A	KA320-9FE	615 170 206 0	20000	6.35	1/4	375	0.5	0.51	1.13	6.5	13.5	10.0	21	1/4	8	5/16			
A	KA312-9FE	615 170 205 0	12000	6.35	1/4	375	0.5	0.51	1.13	3.0	6.5	9.0	19	1/4	8	5/16			

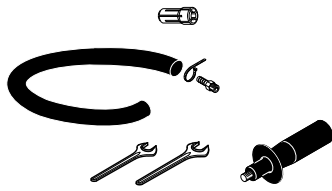
Accessories



K6..-9 / K9..-9 / KC6..-9 / KC9..-9 / KA16120-9 / K1180-9

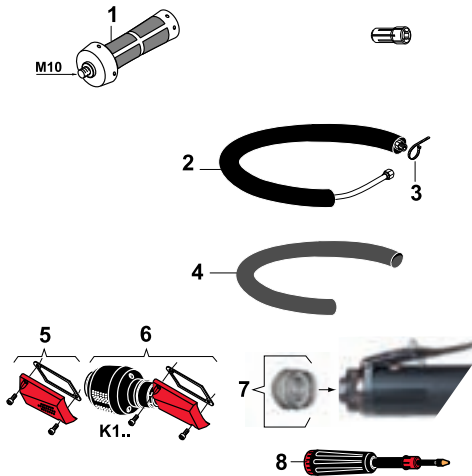
ACCESSORIES INCLUDED

	K/KC6 / K/KC9 KA16120-9	K1180-9
• Series 200 resilient collet, collet \varnothing 5.55 to 6.35mm ($1/4$ "	615 526 063 0	615 526 063 0
• Series 200 resilient collet, collet \varnothing 8.7 to 9.5mm ($3/8$ "		615 526 065 0
• Exhaust hose L = 1.5m (60")	615 875 113 0	
• Clamp	615 873 415 0	
• $3/8$ " air hose nipple for 10mm ($3/8$ " ID hose	615 704 017 0	
• $3/8$ " air hose nipple for 13mm ($1/2$ " ID hose for KA16120-9	615 704 027 0	
• $1/2$ " air hose nipple for 16mm ($3/8$ " ID hose		615 704 014 0
• Flat wrench, 14mm	615 801 005 0	615 801 005 0
• Flat wrench, 19mm ($3/4$ "	615 801 076 0	615 801 076 0
• Side handle for KA16120-9	615 576 038 0	



OPTIONAL ACCESSORIES

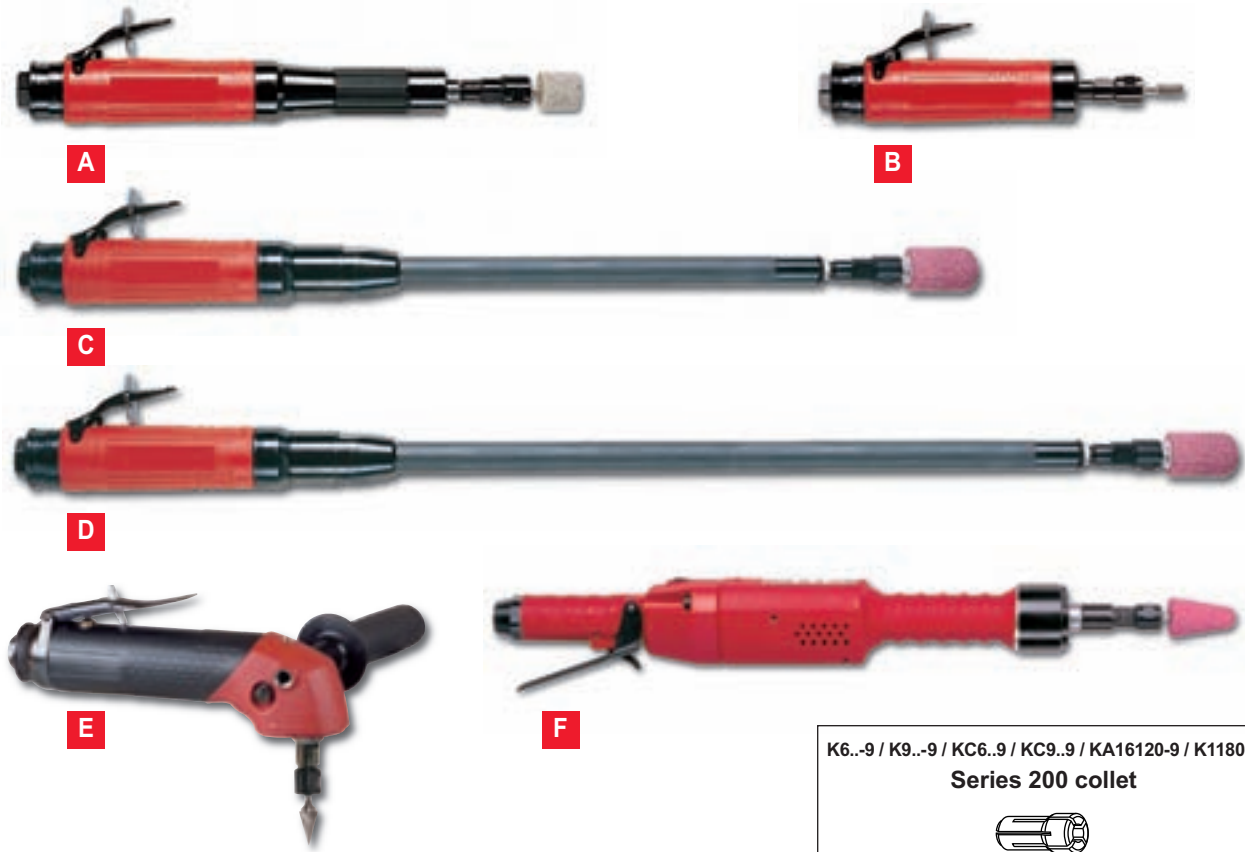
ITEM	K/KC6 / K/KC9 KA16120-9	K1180-9
• Series 200 resilient collet, collet \varnothing 2.4 to 3.2mm ($1/8$ "	615 526 061 0	615 526 061 0
• Series 200 resilient collet, collet \varnothing 5.2 to 6mm	615 526 062 0	615 526 062 0
• Series 200 resilient collet, collet \varnothing 7.2 to 8mm	615 526 064 0	615 526 064 0
• Series 200 resilient collet, collet \varnothing 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		615 399 298 0
6 Silencer kit		615 399 459 0
7 Clippable silencer	615 396 655 0	
7 Clippable silencer for KA16120-9	615 396 957 0	
8 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	



Grinders for carbide burrs, mounted points and sanding discs

600 to 1600 Watts (0.8 to 2.15 hp) - 12000 to 28000 rpm

Supplied with series 200 resilient collet, \varnothing 5.55 to 6.35mm (1/4") & \varnothing 8.7 to 9.5mm (3/8")



K6.-9 / K9.-9 / KC6.-9 / KC9.-9 / KA16120-9 / K1180-9
Series 200 collet



Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	COLLET MAX CAPACITY		POWER		WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR CONSUMPTION AT MAX OUTPUT		AIR INLET THREAD		HOSE INT Ø	
			rpm	mm	in.	W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.	
A	K628-9	615 170 150 0	28000	9.5	3/8	600	0.80	1.3	2.9	16	34	15	32	3/8	10	3/8	
A	K624-9	615 170 151 0	24000	9.5	3/8	600	0.80	1.3	2.9	10	21	15	32	3/8	10	3/8	
A	K922-9	615 170 152 0	22000	9.5	3/8	900	1.21	1.4	3.1	13	28	18	38	3/8	10	3/8	
A	K619-9	615 170 153 0	19000	9.5	3/8	600	0.80	1.3	2.9	6	13	15	32	3/8	10	3/8	
A	K918-9	615 170 154 0	18000	9.5	3/8	900	1.21	1.4	3.1	10	21	18	38	3/8	10	3/8	
A	K615-9	615 170 155 0	15000	9.5	3/8	600	0.80	1.3	2.9	6	13	15	32	3/8	10	3/8	
A	K915-9	615 170 156 0	15000	9.5	3/8	900	1.21	1.4	3.1	8	17	17	36	3/8	10	3/8	
A	K912-9	615 170 157 0	12000	9.5	3/8	900	1.21	1.4	3.1	6	13	16	34	3/8	10	3/8	
B	KC628-9	615 170 158 0	28000	9.5	3/8	600	0.80	0.9	2.0	16	34	15	32	3/8	10	3/8	
B	KC624-9	615 170 159 0	24000	9.5	3/8	600	0.80	0.9	2.0	10	21	15	32	3/8	10	3/8	
B	KC922-9	615 170 160 0	22000	9.5	3/8	900	1.21	1.0	2.2	13	28	18	38	3/8	10	3/8	
B	KC619-9	615 170 161 0	19000	9.5	3/8	600	0.80	0.9	2.0	6	13	15	32	3/8	10	3/8	
B	KC918-9	615 170 162 0	18000	9.5	3/8	900	1.21	1.0	2.2	10	21	18	38	3/8	10	3/8	
B	KC615-9	615 170 163 0	15000	9.5	3/8	600	0.80	0.9	2.0	6	13	15	32	3/8	10	3/8	
B	KC915-9	615 170 164 0	15000	9.5	3/8	900	1.21	1.0	2.2	8	17	17	36	3/8	10	3/8	
B	KC912-9	615 170 165 0	12000	9.5	3/8	900	1.21	1.0	2.2	6	13	16	34	3/8	10	3/8	
C	K912-300-9	615 170 169 0	12000	9.5	3/8	900	1.21	2.1	4.6	6	13	16	34	3/8	10	3/8	
D	K912-500-9	615 170 170 0	12000	9.5	3/8	900	1.21	2.7	5.9	6	13	16	34	3/8	10	3/8	
E	KA16120-9	615 170 443 0	12000	9.5	3/8	1600	2.15	1.4	3.2	20	42	32	68	3/8	13	1/2	
F	K1180-9	615 170 246 0	18000	9.5	3/8	1200	1.61	2.5	5.9	9	19	27	57	1/2	15	5/8	

Routers

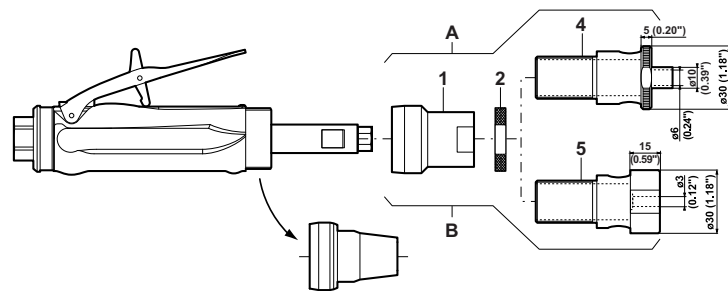
375 to 900 Watts (0.5 to 1.21 hp) - 12000 to 40000 rpm

375 W (0.5hp) - 20000 to 40000 rpm

CNOMO type collet



A



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

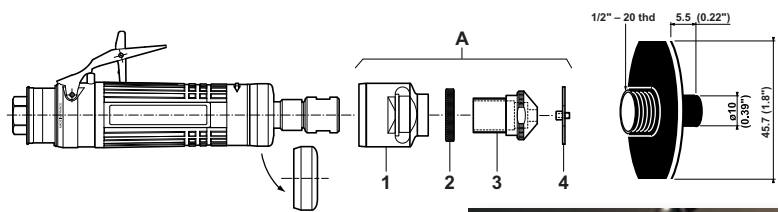
615 396 070 0: Blank routing kit allowing you to adapt the blank to fit the application

600 - 900 W (0.8 - 1.21hp) - 12000 to 28000 rpm

CNOMO type or Series 200 collet



B



615 396 289 0: Machined routing kit for burr, max \varnothing 6.4mm (1/4")



OPTIONAL ACCESSORIES

ITEM	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	

If you need a complete tool use the KC624-9RT (24000 rpm) Part No. 615 170 290 0

If you need a specific speed or a higher power:

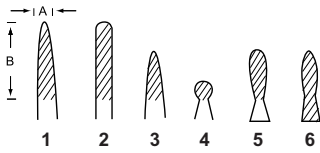
Select the motor, the speed of your choice below then add the routing kit.

For example: Tool with Series 200 collet - 900 W -22000 rpm (KC922-9) + routing kit **Order 615 170 160 0 + 615 396 289 0**

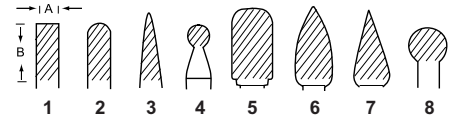
Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	FREE SPEED	POWER		PART NO.		ROUTING KIT		
			W	hp	CNOMO COLLET (-7)	SERIES 200 COLLET (-9)	MACHINED	BLANK	
		rpm							
375 Watts (0.5 hp) - CNOMO type collet									
A	KC340-7	40000	375	0.5	615 170 032 0		+	615 396 069 0	615 396 070 0
A	KC331-7	31000	375	0.5	615 170 031 0		+		
A	KC325-7	25000	375	0.5	615 170 030 0		+		
A	KC320-7	20000	375	0.5	615 170 029 0		+		
600 - 900 Watts (0.8 - 1.21 hp) - CNOMO type or Series 200 collet									
B	KC628-	28000	600	0.80	615 170 126 0	615 170 158 0	+	615 396 289 0	
B	KC624-	24000	600	0.80	615 170 125 0	615 170 159 0	+		
B	KC922-	22000	900	1.21	615 170 130 0	615 170 160 0	+		
B	KC619-	19000	600	0.80	615 170 124 0	615 170 161 0	+		
B	KC918-	18000	900	1.21	615 170 129 0	615 170 162 0	+		
B	KC615-	15000	600	0.80	615 170 123 0	615 170 163 0	+		
B	KC915-	15000	900	1.21	615 170 128 0	615 170 164 0	+		
B	KC912-	12000	900	1.21	615 170 127 0	615 170 165 0	+		

Collet Grinder Accessories



Tungsten Carbide Burrs are suitable for cutting unhardened and hardened steels, stainless, weld seams, steel castings, light and non-ferrous metals, plastics.



TUNGSTEN CARBIDE BURRS 3mm Ø SHANK

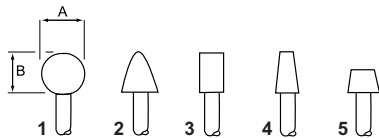
Can also be used with collet type CNOMO or 200 & 300 Series (1/8")

PIC REF	A		B		PART NO.
	mm	in.	mm	in.	
1	3	1/8	13	1/2	38122
2	3	1/8	13	1/2	38132
3	3	1/8	8	5/16	38142
4	3	1/8	3	1/8	38152
5	3	1/8	8	5/16	38162
6	3	1/8	8	5/16	38172

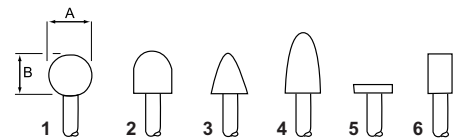
TUNGSTEN CARBIDE BURRS 6mm Ø SHANK

Can also be used with collet type CNOMO or 200 & 300 Series (1/4")

PIC REF	A		B		PART NO.
	mm	in.	mm	in.	
1	6	1/4	13	1/2	38182
2	6	1/4	16	5/8	38192
3	6	1/4	19	3/4	38202
4	6	1/4	6	1/4	38222
5	10	3/8	19	3/4	36122
6	10	3/8	19	3/4	36132
7	10	3/8	19	3/4	36142
8	10	3/8	10	3/8	38232



Aluminium Oxide Mounted Points are available in red grades. Red grades are suitable for grinding high tensile materials such as ordinary and alloy steels, high speed steel and annealed malleable iron.



MOUNTED POINTS 3mm Ø SHANK - RED

Can also be used with collet type CNOMO or 200 & 300 Series (1/8")

PIC REF	MAX SPEED	A		B		PART NO.
		mm	in.	mm	in.	
1	104000	5	0.19	5	0.19	38582
2	104000	5	0.19	8	0.31	38522
3	81000	6	0.25	6	0.25	38632
4	105000	4	0.16	4	0.16	38562
5	81000	6	0.25	6	0.25	38542

MOUNTED POINTS 6mm Ø SHANK - RED

Can also be used with collet type CNOMO or 200 & 300 Series (1/4")

PIC REF	MAX SPEED	A		B		PART NO.
		mm	in.	mm	in.	
1	59000	16	0.62	16	0.62	435983
2	50000	20	0.79	16	0.62	435993
3	45000	20	0.79	28	1.10	436003
4	48000	20	0.79	32	1.26	436013
5	53000	20	0.79	22	0.87	436023
6	40000	13	0.51	25	1.00	436033
6	38000	25	1.00	3	0.11	436043

RECOMMENDED SPEEDS FOR TUNGSTEN CARBIDE BURRS - rpm x 1000

MATERIAL	HEAD DIAMETER				
	3mm (1/8")	6mm (1/4")	10mm (3/8")	13mm (1/2")	16mm (5/8")
Alum, Zinc Base, Plastics	30-90	15-70	10-50	17-38	6-30
Cast Iron, Brass, Copper, Bronze	45-90	23-60	15-40	11-30	9-24
Mild Steel	60-90	45-60	30-40	22-30	18-24
Titanium, Stainless, Hardened Steels, Ceramics	60-90	30-45	19-30	15-22	12-18

BACKING PAD WITH 6mm Ø SHANK



SPEED	Ø		PART NO.
rpm	mm	in.	
25000	50	1.97	615 804 098 0

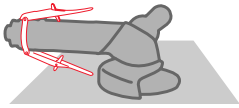


ABRASIVE DISCS

SPEED	GRIT	PART NO.
rpm		
25000	P40	615 804 099 0
25000	P60	615 804 100 0
25000	P80	615 804 101 0
25000	P120	615 804 102 0



Grinders for type 1 wheels, cone wheels, depressed center wheels, cut-off wheels and flap wheels



Comfortable use
Two trigger settings for maneuverability in all work conditions.

Easy Work

1600 Watts at the output spindle giving the best power/weight ratio (890 Watts/kg) in its class.



Minimum Strain

Low vibration models with Autobalancer device and vibration damping side handle set at a 10° angle for comfort on all jobs.

Industrial Strength

With exclusive lubricating technology, Desoutter can provide a maximum uptime with our (MTBM) 2,000 hours Guarantee*.

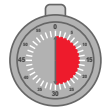
Meantime between Maintenance (MTBM).
* Subject to use following the instruction manual supplied with the tool.

Multi-position grinding
The 270° Multi-Position Guard provides maximum protection and comfort.



Fast disc change

One-key disc changing with spindle lock button.



Specific alloy casing with excellent impact strength

MAINTENANCE: LM-2000 motor

- 2,000 operating hours between maintenance*
- Integral motor for better impact strength
- Vanes made of composite material

Stainless steel governor

Governed motor for maximum speed at maximum output

Double row ball bearing for increased life

Vibration reducer

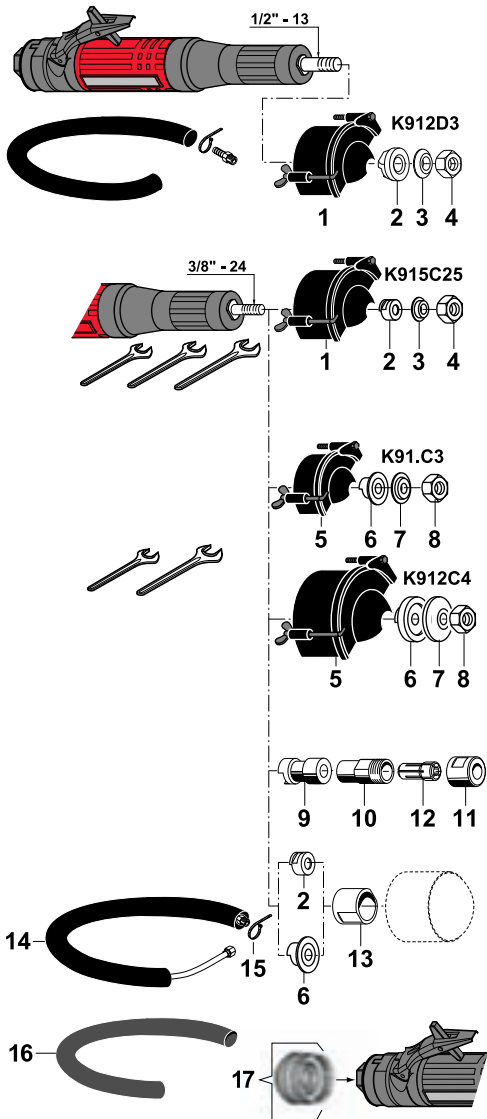
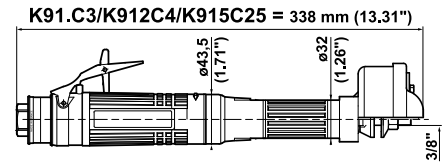
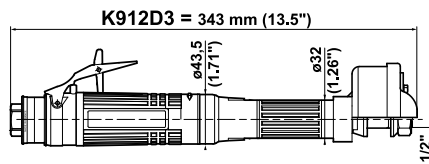
Double action safety lever

Built-in oil tank for outside operation

Wheel change with safety system

* Subject to use following the instruction manual supplied with the tool.

Accessories



K9..

ACCESSORIES INCLUDED

ITEM	K912D3 ø 80mm (3")	K915C25 ø 63mm (2 1/2")
• Exhaust hose L = 1.5m (60")	615 875 113 0	615 875 113 0
• Clamp	615 873 415 0	615 873 415 0
• 3/8" air hose nipple for 10mm ID hose	615 704 017 0	615 704 017 0
1 Wheel guard	615 504 151 0	615 504 150 0
2 Rear flange	615 503 127 0	615 503 126 0
3 Front flange	615 502 044 0	615 502 043 0
4 Locknut	615 608 045 0	615 608 044 0
• Flat wrench 17mm (11/16")		615 801 032 0
• Flat wrench 14.3mm (9/16")		615 801 074 0
• Flat wrench 19mm (3/4")		
	615 801 076 0	

ITEM	K91.C3 ø 80mm (3")	K912C4 ø 100mm (4")
5 Wheel guard	615 504 151 0	615 504 152 0
6 Rear flange	615 503 125 0	615 503 131 0
7 Front flange	615 502 013 0	615 502 063 0
8 Locknut	615 608 044 0	615 608 044 0
• Flat wrench. 14.3mm (9/16")	615 801 074 0	615 801 074 0
• Flat wrench. 19mm (3/4")	615 801 076 0	615 801 076 0

OPTIONAL ACCESSORIES

ITEM	PART NO.
9 Spacer for collet-holder	615 666 149 0
10 Series 200 collet-holder	615 523 023 0
11 Series 200 collet nut	615 607 144 0
12 Series 200 Erickson collet	(see page 156)
13 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	
14 Complete silencer kit	615 396 166 0
15 Clamp	615 873 115 0
16 Reinforced cloth-lined exhaust hose L = 0.75 m (30")	615 875 116 0
17 Clippable silencer	615 396 655 0



Grinders for cone wheels and type 1 wheels

∅ 63mm (2½") - ∅ 80mm (3") - ∅ 100mm (4")
900 Watts (1.21 hp) - 12000 to 18000 rpm



A



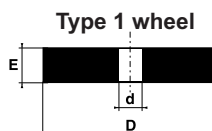
B



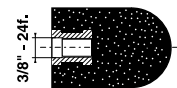
C



D



Type 1 wheel



Wheel type 16 - 18 - 18R and 19

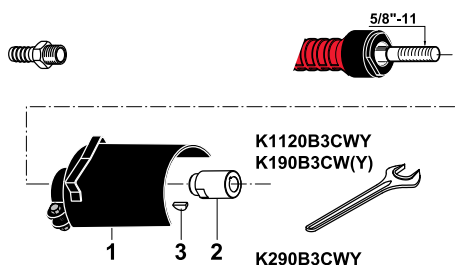
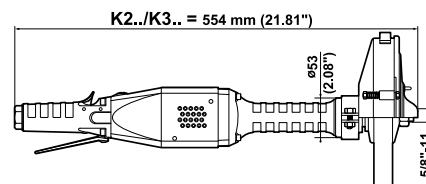
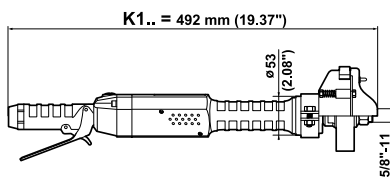
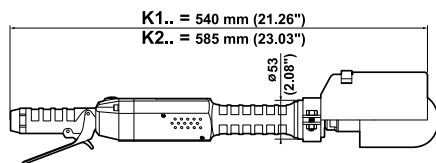
* Reinforced resinoid wheel

Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	WHEEL MAX CAPACITY		THREADED SPINDLE	POWER		AIR CONSUMPTION				AIR INLET THREAD		HOSE INT. Ø		
				D	xExd		W	hp	l/s	cfm	l/s	cfm	in.	mm	in.		
A	K918C3	615 170 118 0	18000	*80 x13x9.52	3x1½x3⅞	¾-24	900	1.21	1.7	3.7	7	15	16	34	¾	10	¾
B	K915C25	615 170 115 0	15000	63 x13x9.52	2½x1½x3⅞	¾-24	900	1.21	1.6	3.5	7	15	16	34	¾	10	¾
C	K912D3	615 170 113 0	12000	80 x20x12.7	3x2½x32x1½	½-13	900	1.21	1.7	3.7	7	15	16	34	¾	10	¾
A	K915C3	615 170 116 0	15000	*80 x13x9.52	3x1½x3⅞	¾-24	900	1.21	1.7	3.7	7	15	16	34	¾	10	¾
A	K912C3	615 170 111 0	12000	*80 x13x9.52	3x1½x3⅞	¾-24	900	1.21	1.7	3.7	7	15	16	34	¾	10	¾
D	K912C4	615 170 112 0	12000	*100 x13x9.52	4x1½x3⅞	¾-24	900	1.21	1.8	4.0	7	15	16	34	¾	10	¾

¾"-24 UNF - ½"-13 UNC

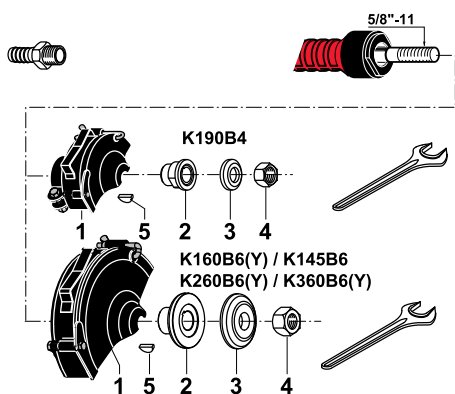
Accessories



K1120B3CWY / K.90B3CW(CWY) - ø 80mm (3")

ACCESSORIES INCLUDED

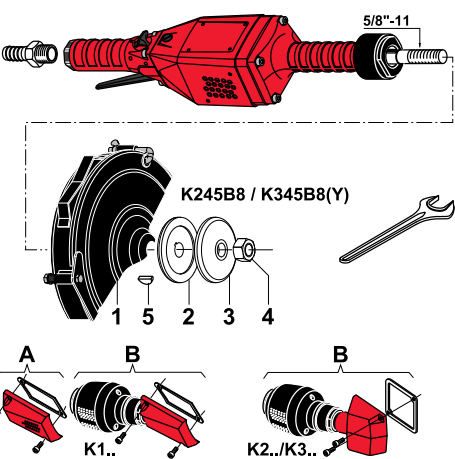
ITEM	PART NO.
• 1/2" air hose nipple for 16mm (5/8") ID hose	615 704 014 0
1 Wheel guard	615 504 080 0
2 Rear flange	615 503 095 0
3 Woodruff key	615 630 019 0
• Flat wrench, 27mm (1 1/16")	615 801 077 0



K190B4 / K.60B6(B6Y) / K145B6

ACCESSORIES INCLUDED

ITEM	K190B4 ø 100mm (4")	K.60B6 (B6Y) K145B6 ø 150mm (6")
	• 1/2" air hose nipple for 16mm (5/8") ID hose	615 704 014 0
1 Wheel guard	615 504 154 0	615 504 079 0
2 Rear flange	615 503 094 0	615 503 028 0
3 Front flange	615 502 046 0	615 502 027 0
4 Nut	615 608 006 0	615 608 006 0
5 Woodruff key	615 630 019 0	615 630 019 0
• Flat wrench, 27mm (1 1/16")	615 801 077 0	615 801 077 0



K245B8 / K345B8(B8Y) - ø 200mm (8")

ACCESSORIES INCLUDED

ITEM	K245B8 K345B8 (B8Y) ø 200mm (8")
• 1/2" air hose nipple for 16mm (5/8") ID hose	615 704 014 0
1 Wheel guard	615 504 078 0
2 Rear flange	615 503 004 0
3 Front flange	615 502 007 0
4 Nut	615 608 006 0
5 Woodruff key	615 630 019 0
• Flat wrench, 27mm (1 1/16")	615 801 077 0

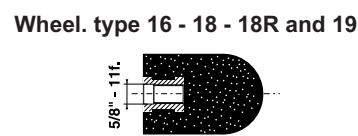
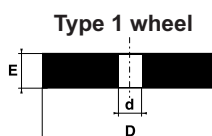
OPTIONAL ACCESSORIES

ITEM	K1..	K2.. / K3..
A Silencer kit	615 399 298 0	
B Silencer kit	615 399 459 0	615 399 460 0



Grinders for cone wheels and type 1 wheels

Ø 80mm (3") - Ø 100mm (4") - Ø 150mm (6") - Ø 200mm (8")
1000 to 2700 Watts (1.34 to 3.62 hp) - 4500 to 12000 rpm

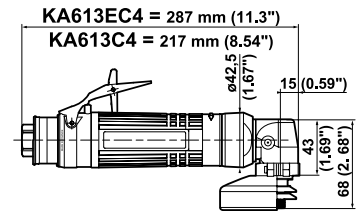
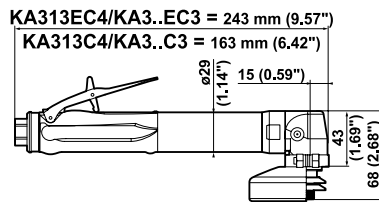


Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	WHEEL MAX CAPACITY		THREADED SPINDLE	POWER		WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR CONSUMPTION AT MAX OUTPUT		AIR INLET THREAD			HOSE INT. Ø			
			rpm	mm	in.		W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.	in.	mm	in.	
A	K190B3CW	615 170 005 0	9000	80	3	5/8-11	1200	1.61	3.5	7.7	9	19	27	57	1/2	15	5/8				
B	K190B4	615 170 004 0	9000	100x25x15.9	4x1x5/8	5/8-11	1200	1.61	3.2	7.0	9	19	27	57	1/2	15	5/8				
C	K160B6	615 170 003 0	6000	150x25x15.9	6x1x5/8	5/8-11	1200	1.61	3.5	7.7	6	12	23	48	1/2	15	5/8				
C	K145B6	615 170 002 0	4500	150x25x15.9	6x1x5/8	5/8-11	1000	1.34	3.5	7.7	5	10	20	42	1/2	15	5/8				
E	K260B6	615 170 008 0	6000	150x25x15.9	6x1x5/8	5/8-11	2000	2.70	5.1	11.2	10	21	38	80	1/2	15	5/8				
E	K360B6	615 170 010 0	6000	150x25x15.9	6x1x5/8	5/8-11	2700	3.62	5.6	12.3	13	27	41	86	1/2	15	5/8				
F	K245B8	615 170 006 0	4500	200x25x15.9	8x1x5/8	5/8-11	1800	2.41	5.8	12.7	8	17	32	67	1/2	15	5/8				
F	K345B8	615 170 009 0	4500	200x25x15.9	8x1x5/8	5/8-11	2400	3.22	6.3	13.9	8	17	33	70	1/2	15	5/8				
For USA Market only (to ANSI B186.1)																					
A	K1120B3CWY	615 170 171 0	12000	80	3	5/8-11	1300	1.74	3.0	6.6	16	34	30	64	1/2	15	5/8				
A	K190B3CWY	615 170 172 0	9000	80	3	5/8-11	1200	1.61	3.0	6.6	9	19	27	57	1/2	15	5/8				
D	K290B3CWY	615 170 174 0	9000	80	3	5/8-11	2400	3.22	4.5	9.9	18	38	46	97	1/2	15	5/8				
C	K160B6Y	615 170 173 0	6000	150x25x15.9	6x1x5/8	5/8-11	1200	1.61	3.5	7.7	6	12	23	48	1/2	15	5/8				
E	K260B6Y	615 170 175 0	6000	150x25x15.9	6x1x5/8	5/8-11	2000	2.70	5.1	11.2	10	21	38	80	1/2	15	5/8				
E	K360B6Y	615 170 177 0	6000	150x25x15.9	6x1x5/8	5/8-11	2700	3.62	5.6	12.3	13	27	41	86	1/2	15	5/8				
F	K345B8Y	615 170 178 0	4500	200x25x15.9	8x1x5/8	5/8-11	2400	3.22	6.3	13.9	8	17	33	70	1/2	15	5/8				

5/8"-11 UNC

Accessories



KA3..EC3 / KA3..C3 / KA313EC4 / KA313C4

ACCESSORIES INCLUDED

ITEM	KA3..EC3	KA313EC4
	KA3..C3	KA313C4
	ø 76mm (3")	ø 100mm (4")
• Exhaust hose L = 0.8m (31")	615 875 106 0	615 875 106 0
• 1/4" air hose nipple for 8mm ID hose	615 704 019 0	615 704 019 0
1 Wheel guard	615 504 155 0	615 504 160 0
2 Flange		615 606 515 0
3 Flange	615 502 064 0	615 502 064 0
4 Flange	615 503 144 0	615 503 144 0
• Pin wrench, 20-3mm	615 802 008 0	615 802 008 0
• Flat wrench, 11mm (7/16")	615 801 003 0	615 801 003 0

OPTIONAL ACCESSORIES

ITEM	PART NO.
5 Complete silencer kit	615 396 101 0
6 Silencer	615 574 028 0
7 Clippable silencer	615 396 124 0
8 Grease gun includes (24g - 0.8oz)	615 990 149 0
• Grease for bevel gear (1kg - 2.2lb)	615 990 148 0

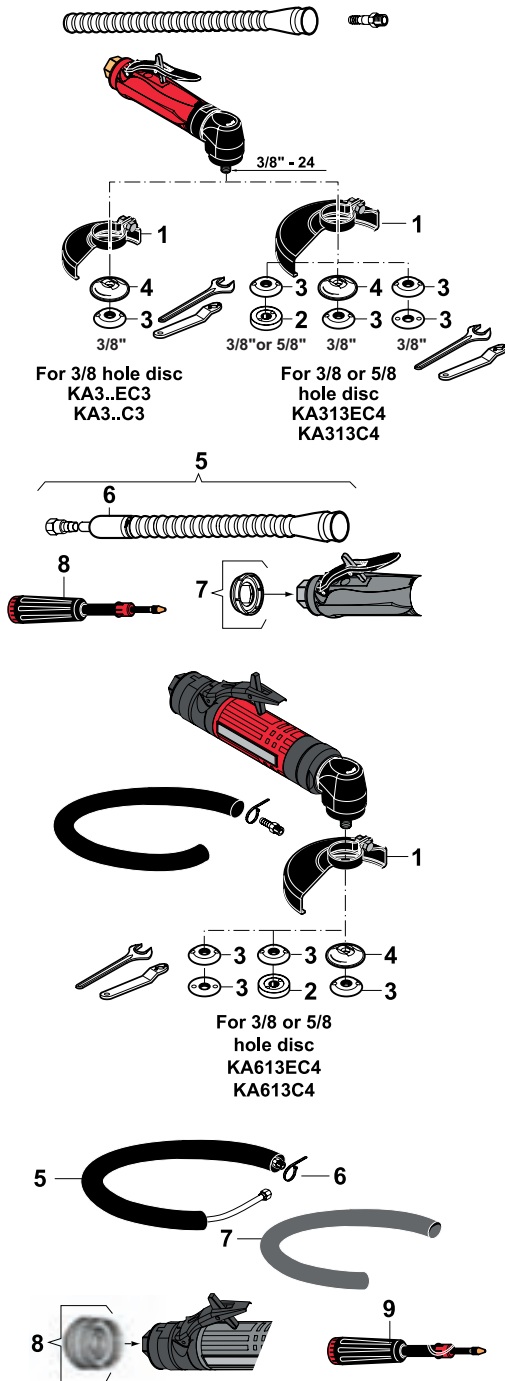
KA613EC4 / KA613C4 - ø 100mm (4")

ACCESSORIES INCLUDED

ITEM	KA613EC4
	KA613C4
• Exhaust hose L = 1.5m (60")	615 875 113 0
• Clamp	615 873 415 0
• 3/8" air hose nipple for 10mm ID hose	615 704 017 0
1 Wheel guard	615 504 160 0
2 Flange	615 606 515 0
3 Flange	615 502 064 0
4 Flange	615 503 144 0
• Pin wrench, 20-3mm	615 802 008 0
• Flat wrench, 11mm (7/16")	615 801 003 0

OPTIONAL ACCESSORIES

ITEM	PART NO.
5 Complete silencer kit	615 396 166 0
6 Clamp	615 873 115 0
7 Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
8 Clippable silencer	615 396 655 0
9 Grease gun includes (24g - 0.8oz)	615 990 149 0
• Grease for bevel gear (1kg - 2.2lb)	615 990 148 0



Grinders for depressed center wheels and cut-off wheels

∅ 76mm (3") - ∅ 100mm (4")
375 - 600 Watts (0.5 - 0.8 hp) - 13000 to 20000 rpm



A



B



C



D

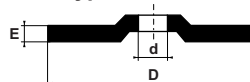


E

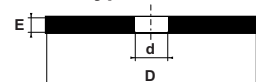


F

Type 27-42 wheel



Type 41 wheel

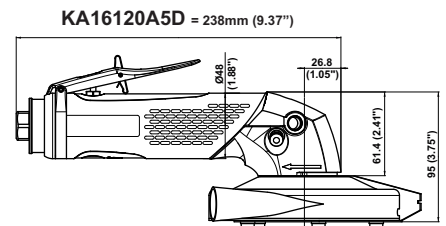
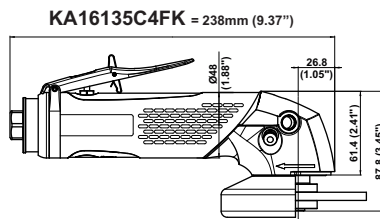


Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	WHEEL MAX CAPACITY DxExd		THREADED SPINDLE	POWER		WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR CONSUMPTION AT MAX OUTPUT		AIR INLET THREAD			HOSE INT. Ø		
			rpm	mm	in.	in.	W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.			
A	KA320EC3	615 170 046 0	20000	76 x7x9.52	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			
A	KA318EC3	615 170 045 0	18000	76 x7x9.52	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			
B	KA313EC4	615 170 050 0	13000	100 x7x9.52 & 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			
C	KA320C3	615 170 042 0	20000	76 x7x9.52	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			
C	KA318C3	615 170 041 0	18000	76 x7x9.52	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			
D	KA313C4	615 170 049 0	13000	100 x7x9.52 & 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			
E	KA613EC4	615 170 138 0	13000	100 x7x9.52 & 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			
F	KA613C4	615 170 137 0	13000	100 x7x9.52 & 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			

3/8"-24 UNF

Accessories



KA16135C4FK - ø 100mm (4")



ACCESSORIES INCLUDED

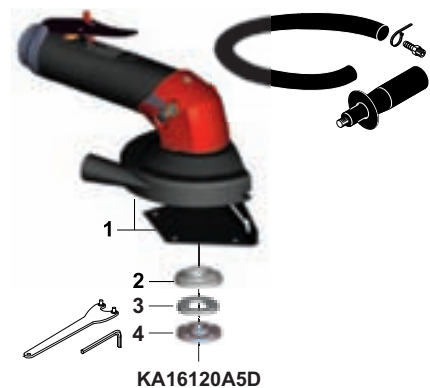
ITEM	KA16135C4FK 3/8" - 24
• Complete silencer kit	615 396 166 0
• Clamp	615 263 024 0
• Vibration-damping side handle	615 576 066 0
• Case	615 995 107 0
1 Wheel guard	615 504 196 0
2 Flange (Qty 2)	615 606 515 0
3 Rear flange	615 503 515 0
• Pin wrench 20-3mm	615 802 008 0
• Flat wrench, 16mm (5/8")	615 802 512 0

OPTIONAL ACCESSORIES

ITEM	PART NO.
4 Clippable silencer	615 396 957 0
5 Grease gun includes 24g (0.8oz)	615 990 149 0
• Grease for bevel gear (1 kg - 2.2 lb)	615 990 148 0



KA16120A5D - ø 127mm (5")

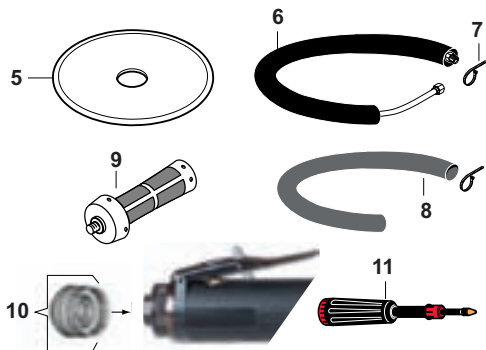


ACCESSORIES INCLUDED

ITEM	KA16120A5D M14x2
• Exhaust hose L = 1.5m (60")	615 875 113 0
• Clamp	615 263 024 0
• 3/8" air hose nipple for 13mm (1/2") ID hose	615 704 027 0
• Side handle	615 576 038 0
1 Wheel guard	615 396 076 0
2 Rear flange	615 503 134 0
3 Spacer	615 643 074 0
4 Front flange	615 502 066 0
• Pin wrench, 35mm (1-3/8")	615 802 010 0
• Hex. key 8mm (5/16")	615 802 061 0

OPTIONAL ACCESSORIES

ITEM	PART NO.
5 Diamond disc ø 127mm (5")	615 804 915 0
6 Complete silencer kit	615 396 166 0
7 Clamp	615 263 024 0
8 Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
9 Vibration-damping side handle	615 576 066 0
10 Clippable silencer	615 396 957 0
11 Grease gun includes 24g (0.8oz)	615 990 149 0
• Grease for bevel gear (1 kg - 2.2 lb)	615 990 148 0



Grinders for depressed center wheels, cut-off wheels and diamond disc

Ø 100mm (4") - Ø 127mm (5")
1600 Watts (2.15 hp) - 12000 - 13500 rpm



A

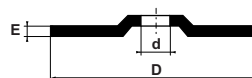


B

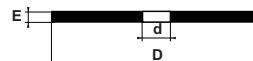


Supplied with dust extraction casing
for diamond disc Ø 127mm (5").
Vacuum hose ID 25mm (1")

Type 27-42 wheel



Type 41 wheel



Diamond disc



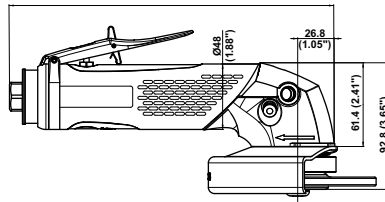
Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	WHEEL MAX CAPACITY		THREADED SPINDLE	POWER		WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR CONSUMPTION AT MAX OUTPUT		AIR INLET THREAD			HOSE INT. Ø		
			rpm	mm	in.	W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.	in.	mm	in.	
A	KA16135C4FK	615 170 441 0	13500	100x6.4x16	4x1/4x5/8	3/8-24	1600	2.15	1.53	3.4	25	53	35	74	3/8	13	1/2			
B	KA16120A5D	615 170 442 0	12000	127x3.2x22.2	5x1/8x7/8	M14x2	1600	2.15	1.98	4.4	20	42	32	68	3/8	13	1/2			

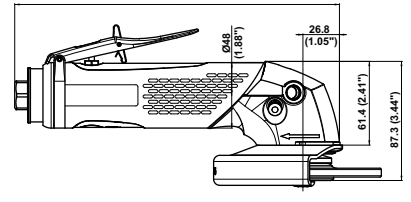
3/8"-24 UNF

Accessories

KA16120A45VK / B45VK = 238mm (9.37")



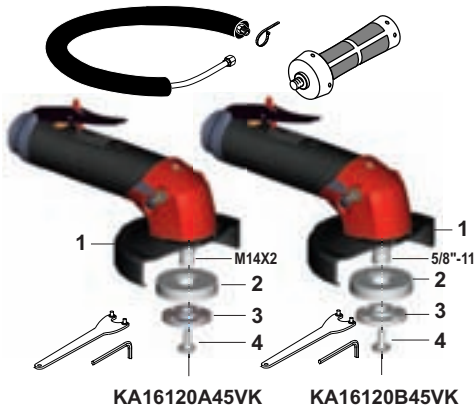
KA16120A45 / B45 = 238mm (9.37")



KA16120A45VK - KA16120B45VK - ø 115mm (4.5")

ACCESSORIES INCLUDED

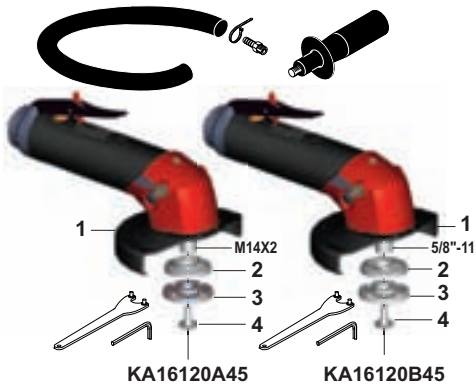
ITEM	KA16120A45VK M14x2	KA16120B45VK 5/8" -11
• Complete silencer kit	615 396 166 0	615 396 166 0
• Clamp	615 263 024 0	615 263 024 0
• Vibration-damping side handle	615 576 066 0	615 576 066 0
• Case	615 995 107 0	615 995 107 0
1 Multi-position guard	615 504 195 0	615 504 195 0
2 Auto-balancer	615 990 181 0	615 990 181 0
3 Front flange	615 502 066 0	615 502 067 0
4 Safety screw	615 614 076 0	615 614 076 0
• Pin wrench, 35mm (1 3/8")	615 802 010 0	615 802 010 0
• Hex. key 6.35mm (1/4")	615 802 057 0	615 802 057 0



KA16120A45 - KA16120B45 - ø 115mm (4.5")

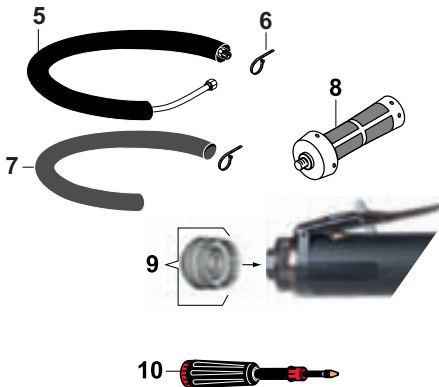
ACCESSORIES INCLUDED

ITEM	KA16120A45 M14x2	KA16120B45 5/8" -11
• Exhaust hose L = 1.5m (60")	615 875 113 0	615 875 113 0
• Clamp	615 263 024 0	615 263 024 0
• 3/8" air hose nipple for 13mm (1/2") ID hose	615 704 027 0	615 704 027 0
• Side handle	615 576 038 0	615 576 038 0
1 Multi-position guard	615 504 198 0	615 504 198 0
2 Rear flange	615 503 134 0	615 503 141 0
3 Front flange	615 502 066 0	615 502 067 0
4 Safety screw	615 614 076 0	615 614 076 0
• Pin wrench, 35mm (1 3/8")	615 802 010 0	615 802 010 0
• Hex. key 6.35mm (1/4")	615 802 057 0	615 802 057 0



OPTIONAL ACCESSORIES

ITEM	PART NO.
5 Complete silencer kit	615 396 166 0
6 Clamp	615 263 024 0
7 Reinforced cloth-lined exhaust hose L= 0.75m (30")	615 875 116 0
8 Vibration-damping side handle	615 576 066 0
9 Clippable silencer	615 396 957 0
10 Grease gun includes 24g (0.8oz)	615 990 149 0
• Grease for bevel gear (1 kg - 2.2lb)	615 990 148 0



Grinders for depressed center wheels, cut-off wheels and flap wheels

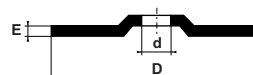
Ø 115mm (4.5")

1600 Watts (2.15 hp) - 12000 rpm

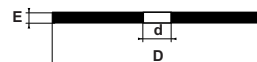
Multi-position guard



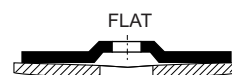
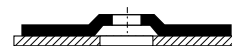
Type 27-42 wheel



Type 41 wheel



Depressed centre flap wheels



CURVED

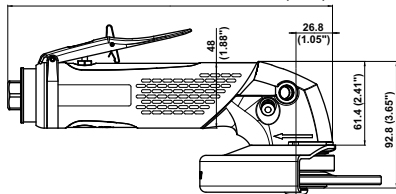
Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	WHEEL MAX CAPACITY		THREADED SPINDLE	POWER			AIR CONSUMPTION				AIR INLET THREAD			HOSE INT. Ø	
				D	Exd		W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in	
A	KA16120A45VK	615 170 456 0	12000	115x6.4x22.2	4.5x1/4x7/8	M14x2	1600	2.15	1.87	4.1	20	42	32	68	3/8	13	1/2	
A	KA16120B45VK	615 170 458 0	12000	115x6.4x22.2	4.5x1/4x7/8	5/8-11	1600	2.15	1.87	4.1	20	42	32	68	3/8	13	1/2	
B	KA16120A45	615 170 455 0	12000	115x6.4x22.2	4.5x1/4x7/8	M14x2	1600	2.15	1.75	3.9	20	42	32	68	3/8	13	1/2	
B	KA16120B45	615 170 457 0	12000	115x6.4x22.2	4.5x1/4x7/8	5/8-11	1600	2.15	1.75	3.9	20	42	32	68	3/8	13	1/2	

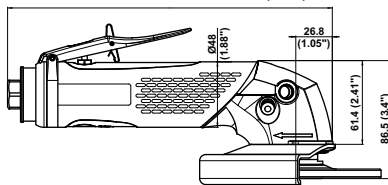
5/8"-11 UNC

Accessories

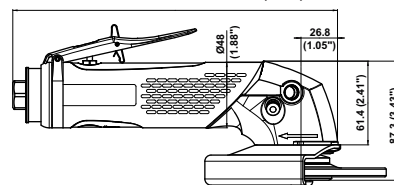
KA16120A5VK / B5VK = 238mm (9.37")



KA16120H5K / H5 = 238mm (9.37")



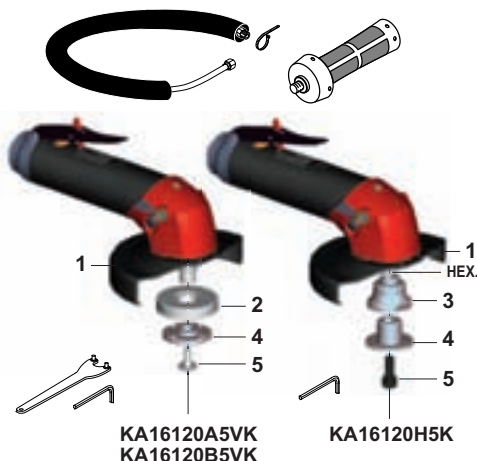
KA16120A5 / B5 = 238mm (9.37")



KA16120A5VK / B5VK / H5K - ø 127mm (5")

ACCESSORIES INCLUDED

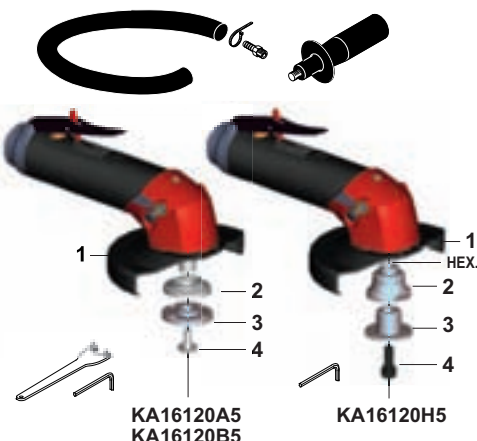
ITEM	KA16120A5VK M14x2	KA16120B5VK 5/8"-11	KA16120H5K Hex.
• Complete silencer kit	615 396 166 0	615 396 166 0	615 396 166 0
• Clamp	615 263 024 0	615 263 024 0	615 263 024 0
• Vibration-damping side handle	615 576 066 0	615 576 066 0	615 576 066 0
• Case	615 995 107 0	615 995 107 0	615 995 107 0
1 Multi-position guard	615 504 193 0	615 504 193 0	615 504 197 0
2 Auto-balancer	615 990 181 0	615 990 181 0	
3 Rear flange			615 503 124 0
4 Front flange	615 502 066 0	615 502 067 0	615 502 062 0
5 Safety screw	615 614 076 0	615 614 076 0	615 616 101 0
• Pin wrench, 35mm (1 3/8")	615 802 010 0	615 802 010 0	
• Hex. key 6mm			615 802 056 0
• Hex. key 6.35mm (1/4")	615 802 057 0	615 802 057 0	



KA16120A5 / B5 / H5 - ø 127mm (5")

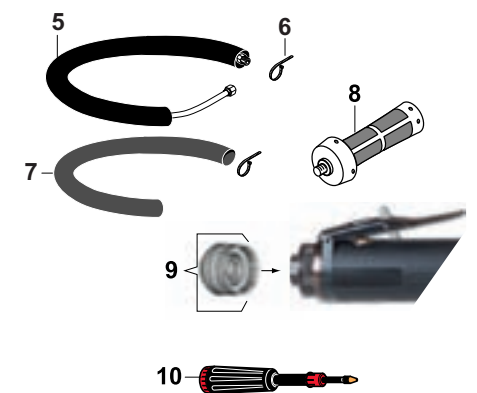
ACCESSORIES INCLUDED

ITEM	KA16120A5 M14x2	KA16120B5 5/8"-11	KA16120H5 Hex.
• Exhaust hose L = 1.5m (60")	615 875 113 0	615 875 113 0	615 875 113 0
• Clamp	615 263 024 0	615 263 024 0	615 263 024 0
• 3/8" air hose nipple for 13mm (1/2") ID hose	615 704 027 0	615 704 027 0	615 704 027 0
• Side handle	615 576 038 0	615 576 038 0	615 576 038 0
1 Multi-position guard	615 504 197 0	615 504 197 0	615 504 197 0
2 Rear flange	615 503 134 0	615 503 141 0	615 503 124 0
3 Front flange	615 502 066 0	615 502 067 0	615 502 062 0
4 Safety screw	615 614 076 0	615 614 076 0	615 616 101 0
• Pin wrench, 35mm (1 3/8")	615 802 010 0	615 802 010 0	
• Hex. key 6mm			615 802 056 0
• Hex. key 6.35mm (1/4")	615 802 057 0	615 802 057 0	



OPTIONAL ACCESSORIES

ITEM	PART NO.
5 Complete silencer kit	615 396 166 0
6 Clamp	615 263 024 0
7 Reinforced cloth-lined exhaust hose L = 0.75 m (30")	615 875 116 0
8 Vibration-damping side handle	615 576 066 0
9 Clippable silencer	615 396 957 0
10 Grease gun includes 24g (0.8oz)	615 990 149 0
• Grease for bevel gear (1kg - 2.2lb)	615 990 148 0



Grinders for depressed center wheels, cut-off wheels and flap wheels

∅ 127mm (5")

1600 Watts (2.15 hp) - 12000 rpm

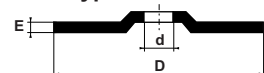


Quick wheel change

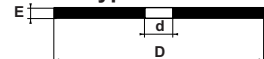
Multi-position guard



Type 27-42 wheel



Type 41 wheel



Depressed centre flap wheels



FLAT



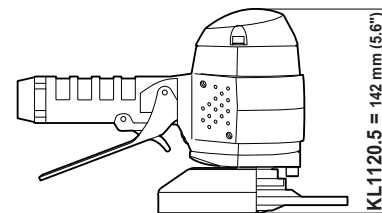
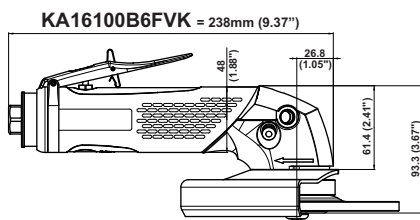
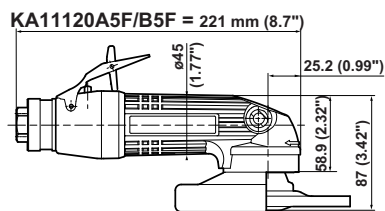
CURVED

Caution: comply with the speeds recommended by component and abrasive manufacturers.

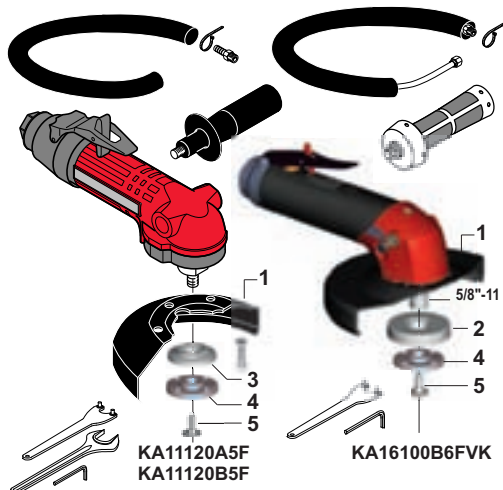
PIC REF	MODEL	PART NUMBER	FREE SPEED	WHEEL MAX CAPACITY		THREADED SPINDLE	POWER			AIR CONSUMPTION				AIR INLET THREAD			HOSE INT. Ø	
				DxExd			W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in	
			rpm	mm	in.	in.												
A	KA16120A5VK	615 170 438 0	12000	127x6.4x22.2	5x1/4x7/8	M14x2	1600	2.15	1.90	4.2	20	42	32	68	3/8	13	1/2	
A	KA16120B5VK	615 170 454 0	12000	127x6.4x22.2	5x1/4x7/8	5/8-11	1600	2.15	1.90	4.2	20	42	32	68	3/8	13	1/2	
A	KA16120H5K	615 170 434 0	12000	127x6.4x22.2	5x1/4x7/8	HEX	1600	2.15	1.77	3.9	20	42	32	68	3/8	13	1/2	
B	KA16120A5	615 170 437 0	12000	127x6.4x22.2	5x1/4x7/8	M14x2	1600	2.15	1.77	3.9	20	42	32	68	3/8	13	1/2	
B	KA16120B5	615 170 439 0	12000	127x6.4x22.2	5x1/4x7/8	5/8-11	1600	2.15	1.77	3.9	20	42	32	68	3/8	13	1/2	
B	KA16120H5	615 170 444 0	12000	127x6.4x22.2	5x1/4x7/8	HEX	1600	2.15	1.77	3.9	20	42	32	68	3/8	13	1/2	

5/8"-11 UNC

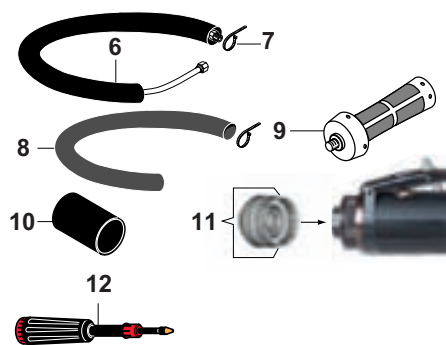
Accessories



KA11120A5F / B5F - ø 127mm (5") / KA16100B6FVK - ø 150mm (6")

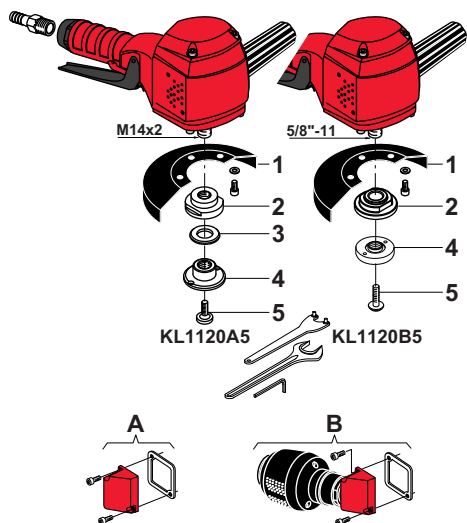


ACCESSORIES INCLUDED		KA11120A5F M14x2	KA11120B5F 5/8"-11	KA16100B6FVK 5/8"-11
• Complete silencer kit				615 396 166 0
• Vibration-damping side handle				615 576 066 0
• Exhaust hose L = 1.5m (60")		615 875 113 0	615 875 113 0	
• Clamp		615 263 024 0	615 263 024 0	615 263 024 0
• 3/8" air hose nipple for 13mm ID hose		615 704 027 0	615 704 027 0	
• Side handle		615 576 038 0	615 576 038 0	
1 Wheel guard		615 504 142 0	615 504 142 0	615 504 202 0
2 Auto-balancer				615 990 181 0
3 Rear flange		615 503 134 0	615 503 141 0	
4 Front flange		615 502 066 0	615 502 067 0	615 502 067 0
5 Safety screw		615 614 076 0	615 614 076 0	615 614 076 0
• Pin wrench, 35mm (1 3/8")		615 802 010 0	615 802 010 0	615 802 010 0
• Flat wrench, 17mm (1 1/16")		615 801 079 0	615 801 079 0	
• Hex. key 6.35mm (1/4")		615 802 057 0	615 802 057 0	615 802 057 0



OPTIONAL ACCESSORIES		KA11120A5/B5	KA16100B6FVK
6 Complete silencer kit		615 396 166 0	
7 Clamp		615 263 024 0	
8 Reinforced cloth-lined exhaust hose L = 0.75m (30")		615 875 116 0	
9 Vibration-damping side handle		615 576 066 0	
10 Thermal insulating sleeve		615 570 412 0	
11 Clippable silencer		615 396 655 0	615 396 957 0
12 Grease gun includes 24g (0.8oz)		615 990 149 0	615 990 149 0
• Grease for bevel gear (1kg - 2.2lb)		615 990 148 0	615 990 148 0

KL1120A5 / KL1120B5 - ø 127mm (5")



ACCESSORIES INCLUDED		KL1120A5 M14x2	KL1120B5 5/8"-11
• 3/8" air hose nipple for 10mm (3/8") ID hose		615 704 017 0	615 704 017 0
1 Wheel guard		615 504 086 0	615 504 086 0
2 Rear flange		615 503 096 0	615 503 143 0
3 Washer for wheels thickness <2mm		615 642 052 0	-
4 Nut		615 606 032 0	615 502 067 0
5 Safety screw		615 614 033 0	615 614 076 0
• Pin wrench, 35mm (1 3/8")		615 802 010 0	615 802 010 0
• Flat wrench, 27mm (1 1/16")		615 801 077 0	615 801 077 0
• Hex. key 6mm		615 802 056 0	
• Hex. key 6.35mm (1/4")			615 802 057 0

OPTIONAL ACCESSORIES		PART NO.
A Silencer kit		615 396 117 0
B Silencer kit		615 399 462 0

Grinders for depressed center wheels, cut-off wheels and flap wheels

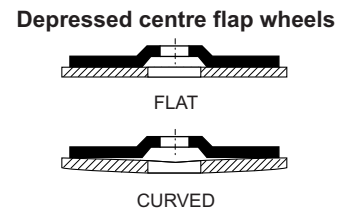
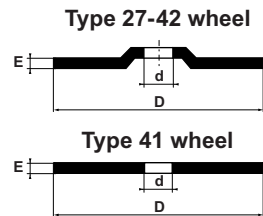
Ø 127mm (5") - Ø 150mm (6")

750 to 1500 Watts (1.0 to 2.0 hp) - 10000 - 12000 rpm

Fixed wheel guard



Adjustable lever position

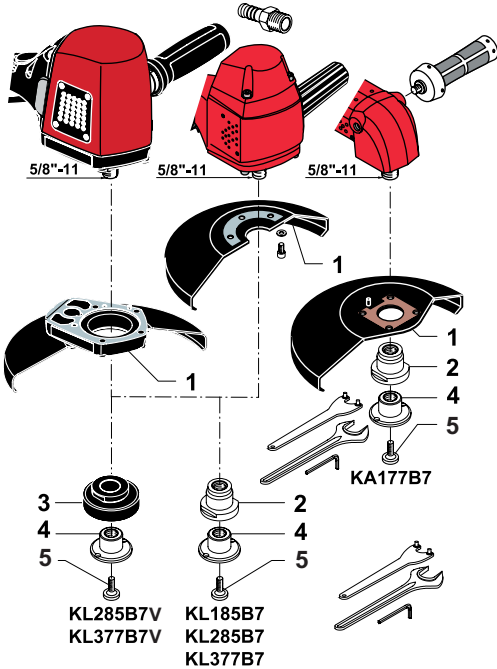
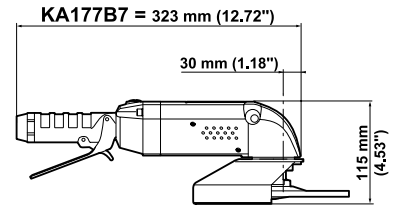
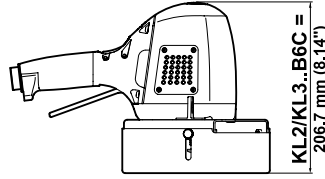
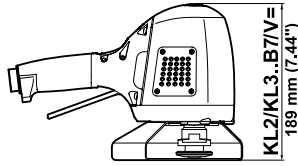
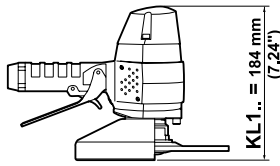


Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	WHEEL MAX CAPACITY DxExd		THREADED SPINDLE	POWER			AIR CONSUMPTION				AIR INLET THREAD			HOSE INT. Ø	
			rpm	mm	in.	in.	W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in	
A	KA11120A5F	615 170 052 0	12000	127x6.4x22.2	5x1/4x7/8	M14x2	1100	1.5	1.7	3.7	10	21	20	42	3/8	13	1/2	
A	KA11120B5F	615 170 055 0	12000	127x6.4x22.2	5x1/4x7/8	5/8-11	1100	1.5	1.7	3.7	10	21	20	42	3/8	13	1/2	
B	KL1120A5	615 170 013 0	12000	127x6.4x22.2	5x1/4x7/8	M14x2	750	1.0	2.3	5.0	16	34	16	34	3/8	10	3/8	
B	KL1120B5	615 170 181 0	12000	127x6.4x22.2	5x1/4x7/8	5/8-11	750	1.0	2.3	5.0	16	34	16	34	3/8	10	3/8	
C	KA16100B6FVK	615 170 470 0	10000	150x7.0x22.2	6x1/4x7/8	5/8-11	1500	2.0	1.9	4.2	20	42	32	68	3/8	13	1/2	

5/8"-11 UNC

Accessories



KL185B7 / KL285B7 / KL285B7V / KL377B7 / KL377B7V / KA177B7 - ø 180mm (7")

ACCESSORIES INCLUDED

ITEM	KL185B7 ø 180mm (7")	KL285B7 / V KL377B7 / V ø 180mm (7")	KA177B7 ø 180mm (7")
• Vibration-damping side handle			615 576 066 0
• 1/2" air hose nipple for 16mm (5/8") ID hose		615 704 014 0	615 704 014 0
• 1/2" air hose nipple for 13mm (1/2") ID hose	615 704 016 0		
1 Wheel guard	615 504 095 0	615 504 182 0	615 504 133 0
2 Rear flange for model B7	615 503 103 0	615 503 103 0	615 503 103 0
3 Auto-balancer for model B7V		615 503 146 0	
4 Nut	615 542 104 0	615 542 104 0	615 542 104 0
5 Safety screw	615 614 034 0	615 614 034 0	615 614 034 0
• Pin wrench, 35mm (1 3/8")	615 802 010 0	615 802 010 0	615 802 010 0
• Flat wrench, 27mm (1 1/16")	615 801 077 0	615 801 077 0	615 801 077 0
• Hex. key 6mm	615 802 056 0	615 802 056 0	615 802 056 0

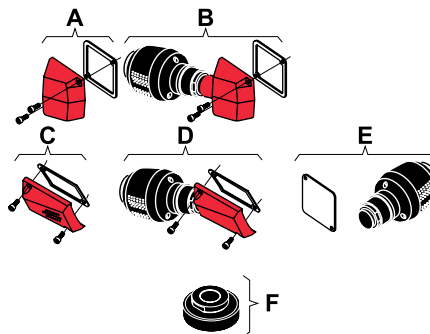
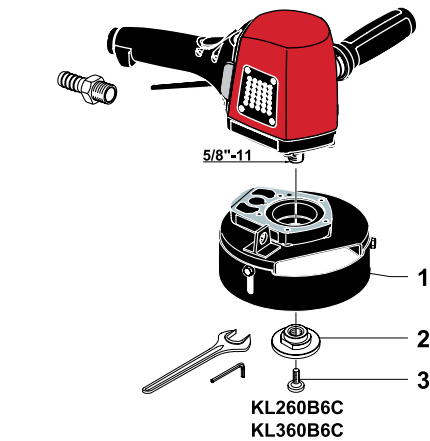
KL260B6C / KL360B6C - ø 150mm (6")

ACCESSORIES INCLUDED

ITEM	PART NO.
• 1/2" air hose nipple for 16mm (5/8") ID hose	615 704 014 0
1 Wheel guard	615 504 181 0
2 Rear flange	615 503 116 0
3 Safety screw	615 614 034 0
• Flat wrench, 27mm (1 1/16")	615 801 077 0
• Hex. key 6mm	615 802 056 0

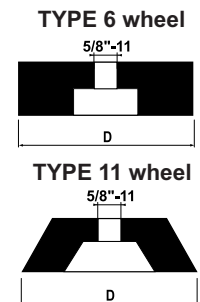
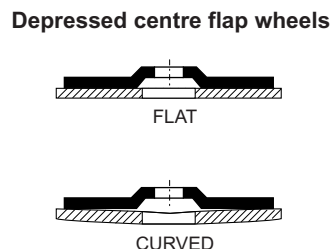
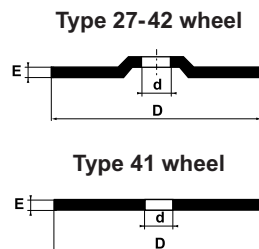
OPTIONAL ACCESSORIES

ITEM	KL2./ KL3..	KL185B7	KA177B7
A Silencer kit		615 396 117 0	
B Silencer kit		615 399 462 0	
C Silencer kit			615 399 298 0
D Silencer kit			615 399 459 0
E Silencer kit	615 399 463 0		
F Auto-balancer (except KL260/360B6C)		615 503 146 0	615 503 146 0



Grinders for depressed center wheels, cup wheels and flap wheels

∅ 150mm (6") - ∅ 180mm (7")
1200 to 3000 Watts (1.61 to 4.02 hp) - 6000 to 8500 rpm

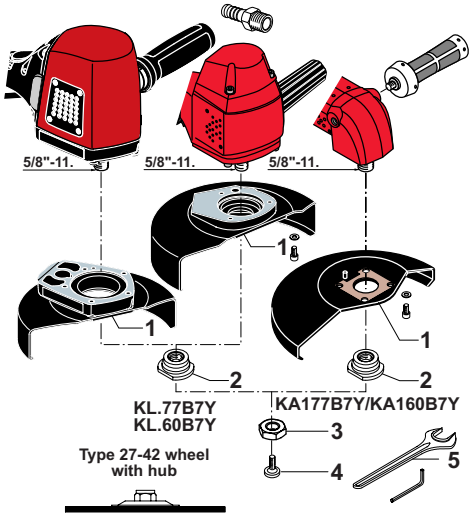
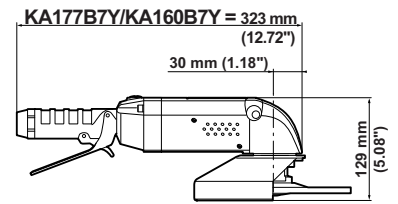
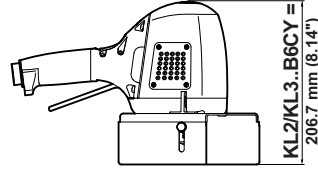
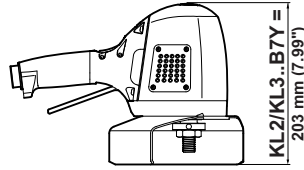
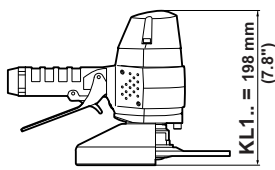


Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	WHEEL MAX CAPACITY		THREADED SPINDLE	POWER		WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR CONSUMPTION AT MAX OUTPUT		AIR INLET THREAD	HOSE INT. Ø		
			rpm	mm	in.		W	hp	kg	lb.	l/s	cfm	l/s	cfm		in.	mm	in.
VERTICAL GRINDERS																		
A	KL185B7	615 170 012 0	8500	180x9.5x22.2	7x ³ / ₈ x ⁷ / ₈	5/8-11	1200	1.61	2.8	6.1	16	34	27	57	1/2	13	1/2	
B	KL285B7	615 170 336 0	8500	180x9.5x22.2	7x ³ / ₈ x ⁷ / ₈	5/8-11	2700	3.62	4.0	8.8	15	31	44	93	1/2	15	5/8	
B	KL377B7	615 170 341 0	7700	180x9.5x22.2	7x ³ / ₈ x ⁷ / ₈	5/8-11	3000	4.02	4.2	9.2	19	40	46	97	1/2	15	5/8	
LOW VIBRATION - VERTICAL GRINDERS																		
B	KL285B7V	615 170 471 0	8500	180x9.5x22.2	7x ³ / ₈ x ⁷ / ₈	5/8-11	2700	3.62	4.1	9.0	15	31	44	93	1/2	15	5/8	
B	KL377B7V	615 170 472 0	7700	180x9.5x22.2	7x ³ / ₈ x ⁷ / ₈	5/8-11	3000	4.02	4.3	9.4	19	40	46	97	1/2	15	5/8	
ANGLE GRINDER																		
C	KA177B7	615 170 021 0	7700	180x9.5x22.2	7x ³ / ₈ x ⁷ / ₈	5/8-11	1200	1.61	2.9	6.3	14	30	27	57	1/2	15	5/8	
VERTICAL GRINDERS for cup wheels																		
D	KL260B6C	615 170 334 0	6000	150	6	5/8-11	2400	3.22	4.2	9.2	9	19	39	82	1/2	15	5/8	
D	KL360B6C	615 170 337 0	6000	150	6	5/8-11	2900	3.89	4.4	9.7	12	25	43	91	1/2	15	5/8	

5/8"-11 UNC

Accessories



KL.77B7Y / KL.60B7Y / KA1..B7Y - ø 180mm (7")

ACCESSORIES INCLUDED

ITEM	KL1..B7Y	KL2..B7Y KL3..B7Y	KA177B7Y KA160B7Y
• Vibration-damping side handle			615 576 066 0
• 1/2" air hose nipple for 16mm (5/8") ID hose		615 704 014 0	615 704 014 0
• 1/2" air hose nipple for 13mm (1/2") ID hose			615 704 014 0
1 Wheel guard	615 704 016 0	615 504 179 0	615 504 167 0
2 Rear flange	615 503 150 0	615 503 150 0	615 503 107 0
3 Nut	615 608 049 0	615 608 049 0	615 608 049 0
4 Safety screw	615 614 034 0	615 614 034 0	615 614 034 0
5 Flat wrench, 27mm (1 1/16")	615 801 077 0	615 801 077 0	615 801 077 0
• Hex. key 6mm	615 802 056 0	615 802 056 0	615 802 056 0

OPTIONAL ACCESSORIES

ITEM	KL.77B7Y KL.60B7Y	KA177B7Y
6 Rear flange	615 503 103 0	
7 Nut	615 542 104 0	
8 Auto-balancer	615 503 146 0	
9 Safety screw	615 614 034 0	
10 Wheel adaptor	C087920	
11 Pin wrench, 35mm (1 3/8")	615 802 010 0	
12 Flat wrench, 27mm (1 1/16")	615 801 077 0	
13 Hex. key 6mm	615 802 056 0	

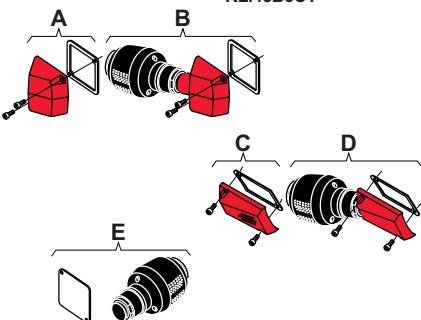
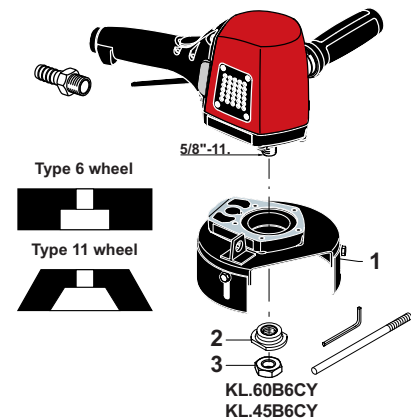
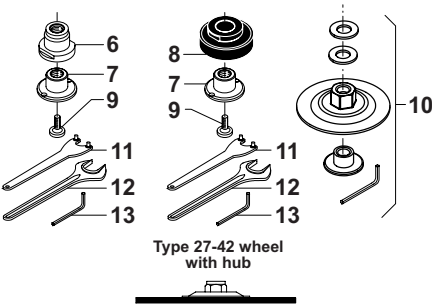
KL.60B6CY / KL245B6CY - ø 150mm (6")

ACCESSORIES INCLUDED

ITEM	PART NO.
• 1/2" air hose nipple for 16mm (5/8") ID hose	615 704 014 0
1 Wheel guard	615 504 178 0
2 Rear flange	615 503 150 0
3 Nut	615 608 049 0
• Lever	615 595 202 0
• Hex. key 8mm (5/16")	615 802 061 0

OTHER OPTIONAL ACCESSORIES

ITEM	KL1..B7Y	KL2..B.Y KL3..B.Y	KA177B7Y
A Silencer kit	615 396 117 0		
B Silencer kit	615 399 462 0		
C Silencer kit			615 399 298 0
D Silencer kit			615 399 459 0
E Silencer kit		615 399 463 0	



Grinders for depressed center wheels, cup wheels and flap wheels

∅ 150mm (6") - ∅ 180mm (7")

1100 to 2900 Watts (1.47 to 3.89 hp) - 4500 to 7700 rpm

USA
Market
Only



A



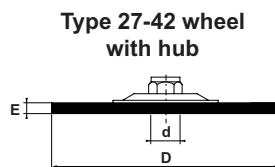
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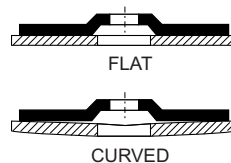
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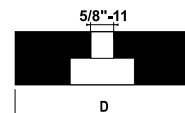
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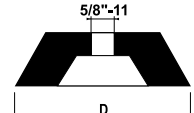
Depressed centre flap wheels



TYPE 6 wheel



TYPE 11 wheel



Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	WHEEL MAX CAPACITY		THREADED SPINDLE	POWER		WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR CONSUMPTION AT MAX OUTPUT		AIR INLET THREAD		HOSE INT. Ø	
				mm	in.		W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.	

VERTICAL GRINDERS

For USA Market only (to ANSI B186.1)

A	KL177B7Y	615 170 182 0	7700	180x9.5x22.2	7x ³ / ₈ x7 ¹ / ₈	5/8-11	1200	1.61	2.8	6.1	8	17	25	53	1/2	13	1/2
B	KL277B7Y	615 170 342 0	7700	180x9.5x22.2	7x ³ / ₈ x7 ¹ / ₈	5/8-11	2600	3.48	4.0	8.8	14	29	42	89	1/2	15	5/8
B	KL377B7Y	615 170 348 0	7700	180x9.5x22.2	7x ³ / ₈ x7 ¹ / ₈	5/8-11	3000	4.02	4.2	9.2	19	40	46	97	1/2	15	5/8
A	KL160B7Y	615 170 183 0	6000	180x9.5x22.2	7x ³ / ₈ x7 ¹ / ₈	5/8-11	1100	1.47	2.8	6.1	6	13	24	51	1/2	13	1/2
B	KL260B7Y	615 170 343 0	6000	180x9.5x22.2	7x ³ / ₈ x7 ¹ / ₈	5/8-11	2400	3.22	4.0	8.8	10	21	39	82	1/2	15	5/8
B	KL360B7Y	615 170 349 0	6000	180x9.5x22.2	7x ³ / ₈ x7 ¹ / ₈	5/8-11	2900	3.89	4.2	9.2	12	25	43	91	1/2	15	5/8

ANGLE GRINDERS

For USA Market only (to ANSI B186.1)

C	KA177B7Y	615 170 179 0	7700	180x9.5x22.2	7x ³ / ₈ x7 ¹ / ₈	5/8-11	1200	1.61	2.9	6.3	14	30	27	57	1/2	15	5/8
C	KA160B7Y	615 170 247 0	6000	180x9.5x22.2	7x ³ / ₈ x7 ¹ / ₈	5/8-11	1200	1.61	2.9	6.3	9	19	24	50	1/2	15	5/8

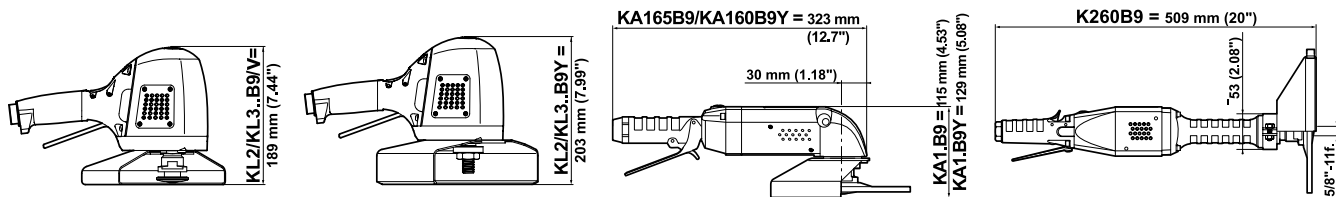
VERTICAL GRINDERS for cup wheels

For USA Market only (to ANSI B186.1)

D	KL260B6CY	615 170 345 0	6000	150	6	5/8-11	2400	3.22	4.2	9.2	10	21	39	82	1/2	15	5/8
D	KL360B6CY	615 170 351 0	6000	150	6	5/8-11	2900	3.89	4.4	9.7	12	25	43	91	1/2	15	5/8
D	KL245B6CY	615 170 346 0	4500	150	6	5/8-11	1700	2.28	4.2	9.2	7	15	32	68	1/2	15	5/8

5/8"-11 UNC

Accessories



KL.65B9 / KL.65B9V / KL.60B9Y / KL245B9Y / KA16.B9(Y) - ø 230mm (9")

ACCESSORIES INCLUDED

ITEM	KL265B9 / V KL365B9 / V	KL.60B9Y KL245B9Y	KA165B9	KA160B9Y
• Vibration-damping side handle			615 576 066 0	615 576 066 0
• 1/2" air hose nipple for 16 mm (5/8") ID hose	615 704 014 0	615 704 014 0	615 704 014 0	615 704 014 0
1 Wheel guard	615 504 183 0	615 504 180 0	615 504 136 0	615 504 168 0
2 Rear flange for model B9	615 503 103 0		615 503 103 0	
3 Auto-balancer for model B9V	615 503 146 0			
4 Nut	615 542 104 0		615 542 104 0	
5 Safety screw	615 614 034 0	615 614 034 0	615 614 034 0	615 614 034 0
6 Nut		615 608 049 0		615 608 049 0
• Flat wrench, 27mm (1 1/16")	615 801 077 0	615 801 077 0	615 801 077 0	615 801 077 0
• Pin wrench, 35mm (1 3/8")	615 802 010 0		615 802 010 0	
• Hex. Key 6mm	615 802 056 0	615 802 056 0	615 802 056 0	615 802 056 0

OPTIONAL ACCESSORIES

ITEM	KL.60B9Y KL245B9Y KA160B9Y
2 Rear flange	615 503 103 0
3 Auto-balancer	615 503 146 0
4 Nut	615 542 104 0
5 Safety screw	615 614 034 0
6 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

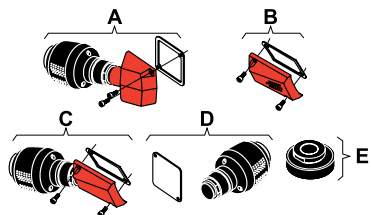
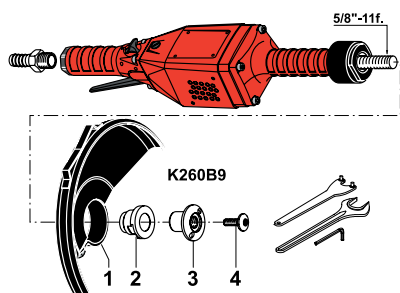
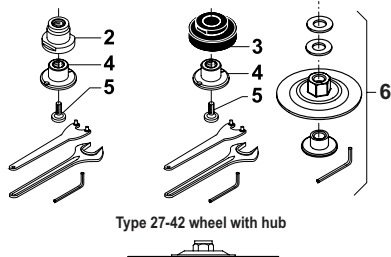
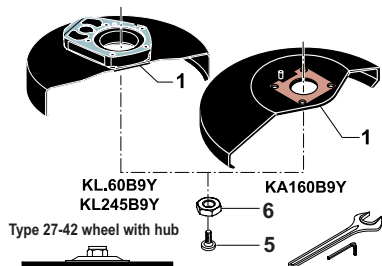
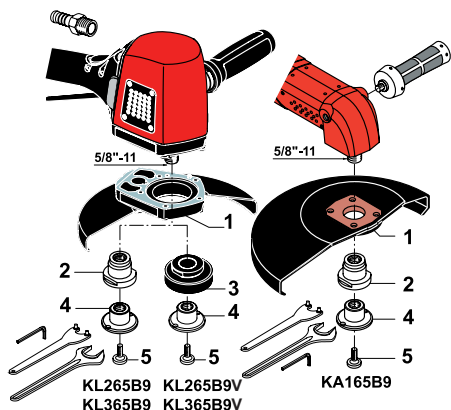
K260B9 - ø 230mm (9")

ACCESSORIES INCLUDED

ITEM	K260B9
• 1/2" air hose nipple for 16 mm (5/8") ID hose	615 704 014 0
1 Wheel guard	615 504 161 0
2 Rear flange	615 503 103 0
3 Nut	615 542 104 0
4 Safety screw	615 614 034 0
• 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

OTHER OPTIONAL ACCESSORIES

ITEM	K260B9	KL.65B9 KL.60B9Y KL245B9Y	KA165B9	KA160B9Y
A Silencer kit	615 399 460 0			
B Silencer kit			615 399 298 0	615 399 298 0
C Silencer kit			615 399 459 0	615 399 459 0
D Silencer kit		615 399 463 0		
E Auto-balancer	615 503 146 0		615 503 146 0	



Grinders for depressed center wheels

∅ 230mm (9")

1000 to 2900 Watts (1.34 to 3.89 hp) - 4500 to 6500 rpm



A



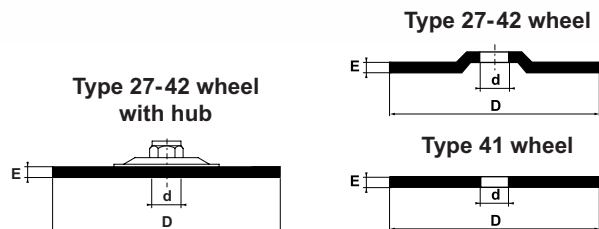
C



B



D



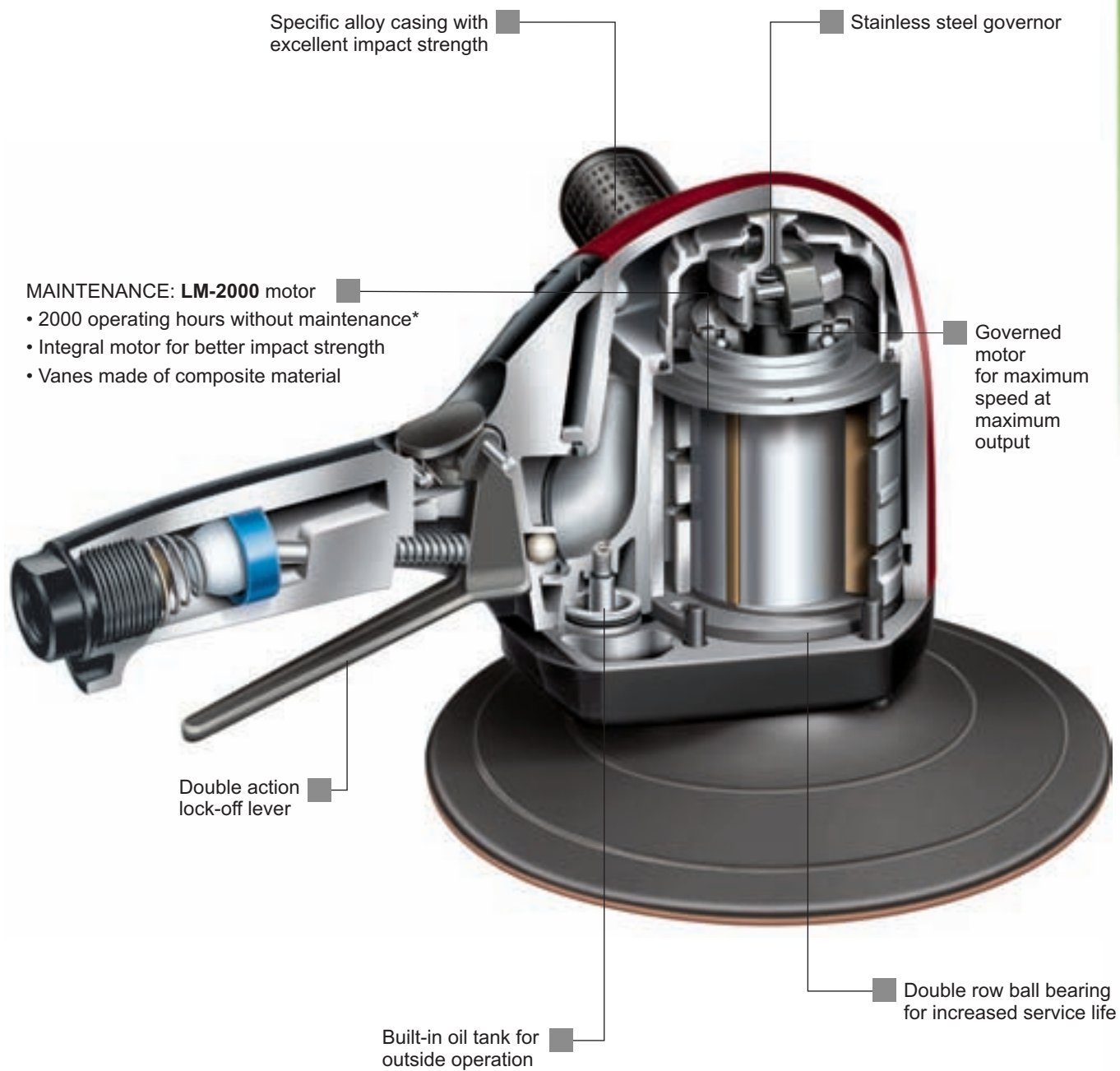
Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	WHEEL MAX CAPACITY		THREADED SPINDLE	POWER		WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR CONSUMPTION AT MAX OUTPUT		AIR INLET THREAD	HOSE INT. Ø		
			rpm	mm	in.	W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.		
VERTICAL GRINDERS																		
A	KL265B9	615 170 335 0	6500	230x6.4x22.2	9x1/4x7/8	5/8-11	2400	3.22	4.2	9.2	10	21	40	84	1/2	15	5/8	
A	KL365B9	615 170 338 0	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)																		
B	KL260B9Y	615 170 344 0	6000	230x6.4x22.2	9x1/4x7/8	5/8-11	2400	3.22	4.2	9.2	10	21	39	82	1/2	15	5/8	
B	KL360B9Y	615 170 350 0	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	
B	KL245B9Y	615 170 347 0	4500	230x6.4x22.2	9x1/4x7/8	5/8-11	1700	2.28	4.2	9.2	7	15	32	68	1/2	15	5/8	
LOW VIBRATION - VERTICAL GRINDERS																		
A	KL265B9V	615 170 473 0	6500	230x6.4x22.2	9x1/4x7/8	5/8-11	2400	3.22	4.3	9.4	10	21	40	84	1/2	15	5/8	
A	KL365B9V	615 170 474 0	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																		
C	KA165B9	615 170 020 0	6500	230x6.4x22.2	9x1/4x7/8	5/8-11	1200	1.61	3.0	6.6	11	23	25	53	1/2	15	5/8	
For USA Market only (to ANSI B186.1)																		
C	KA160B9Y	615 170 180 0	6000	230x6.4x22.2	9x1/4x7/8	5/8-11	1000	1.34	3.0	6.6	9	19	24	50	1/2	15	5/8	
STRAIGHT GRINDERS																		
D	K260B9	615 170 007 0	6000	230x6.4x22.2	9x1/4x7/8	5/8-11	2200	2.95	5.0	11.0	10	21	38	80	1/2	15	5/8	

5/8"-11 UNC

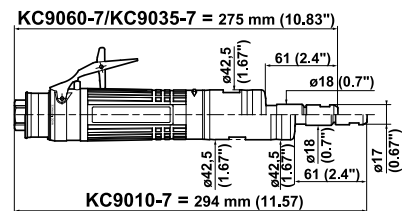
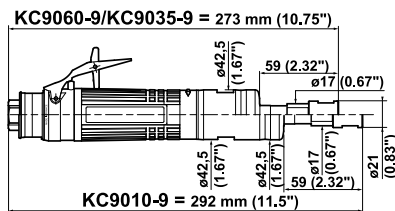


Sanders for abrasive discs, flap wheels & polishing accessories



* Subject to use as per the instruction manual supplied with the tool

Accessories



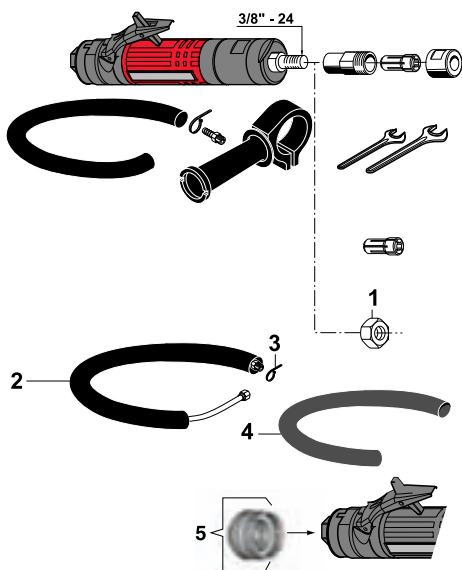
KC9060-9 / KC9035-9 / KC9010-9

ACCESSORIES INCLUDED

	PART NO.
• Series 200 resilient collet, \varnothing 5.55 to 6.35mm ($1/4$ "	615 526 063 0
• Exhaust hose L = 1.5m (60")	615 875 113 0
• Clamp	615 873 415 0
• $3/8$ " air hose nipple for 10mm ($3/8$ " ID hose	615 704 017 0
• Flat wrench, 14mm	615 801 005 0
• Flat wrench, 19mm ($3/4$ "	615 801 076 0
• Side handle	615 576 068 0

OPTIONAL ACCESSORIES

ITEM	PART NO.
• Series 200 resilient collet, \varnothing 2.4 to 3.2mm ($1/8$ "	615 526 061 0
• Series 200 resilient collet, \varnothing 5.2 to 6mm	615 526 062 0
• Series 200 resilient collet, \varnothing 7.2 to 8mm ($5/16$ "	615 526 064 0
• Series 200 resilient collet, \varnothing 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



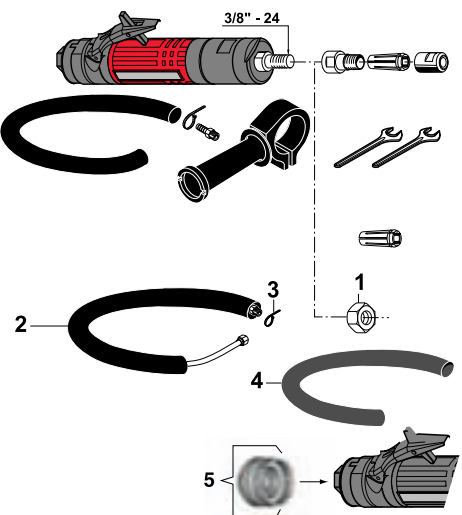
KC9060-7 / KC9035-7 / KC9010-7

ACCESSORIES INCLUDED

	PART NO.
• CNOMO collet \varnothing 6mm	615 526 049 0
• Exhaust hose L = 1.5m (60")	615 875 113 0
• Clamp	615 873 415 0
• $3/8$ " air hose nipple for 10mm ($3/8$ " ID hose	615 704 017 0
• Flat wrench, 14mm (Qty 2)	615 801 005 0
• Side handle	615 576 068 0

OPTIONAL ACCESSORIES

ITEM	PART NO.
• CNOMO collet \varnothing 3mm	615 526 048 0
• CNOMO collet \varnothing 6.35mm ($1/4$ "	615 526 050 0
• CNOMO collet \varnothing 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



Sanders for expandable wheels, flap wheels, brushes...

900 Watts (1.21 hp) - 1000 to 5500 rpm

Supplied with series 200 Erickson collet, \varnothing 5.55 to 6.35mm (1/4")

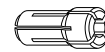


A



B

Series 200 Erickson collet



Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED		COLLET MAX CAPACITY		POWER		WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR CONSUMPTION AT MAX. POWER		AIR INLET THREAD		HOSE INT. \varnothing	
			rpm		mm	in.	W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.	
A	KC9060-9	615 170 166 0	5500		9.5	3/8	900	1.21	1.38	3.0	10	21	16	34	3/8	10	3/8	
A	KC9035-9	615 170 167 0	3500		9.5	3/8	900	1.21	1.38	3.0	6	13	14	30	3/8	10	3/8	
B	KC9010-9	615 170 168 0	1000		9.5	3/8	900	1.21	1.45	3.2	10	21	16	34	3/8	10	3/8	

Sanders for expandable wheels, flap wheels, brushes...

900 Watts (1.21 hp) - 1000 to 5500 rpm



A



B

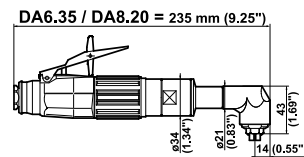
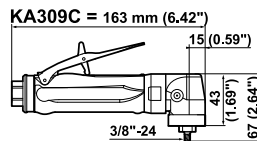
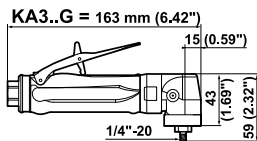
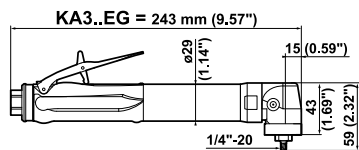
CNOMO type collet



Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED		COLLET MAX CAPACITY		POWER		WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR CONSUMPTION AT MAX. POWER		AIR INLET THREAD		HOSE INT. \varnothing	
			rpm		mm	in.	W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.	
A	KC9060-7	615 170 122 0	5500		8	5/16	900	1.21	1.38	3.0	10	21	16	34	3/8	10	3/8	
A	KC9035-7	615 170 121 0	3500		8	5/16	900	1.21	1.38	3.0	6	13	14	30	3/8	10	3/8	
B	KC9010-7	615 170 120 0	1000		8	5/16	900	1.21	1.45	3.2	10	21	16	34	3/8	10	3/8	

Accessories



KA3..EG / KA3..G / KA309C

ACCESSORIES INCLUDED

- Exhaust hose L = 0.8m (31")
- 1/4" air hose nipple for 8mm (5/16") ID hose
- Flat wrench, 11mm (7/16")

PART NO.

615 875 106 0
615 704 019 0
615 801 003 0

OPTIONAL ACCESSORIES

ITEM

- 1 Excentric sanding head for 1" pad

KA309C

3/8"-24

615 396 251 0

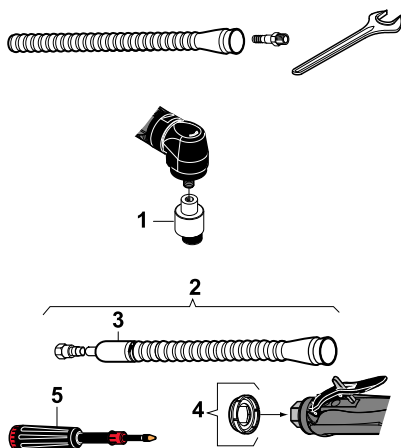
OTHER OPTIONAL ACCESSORIES

ITEM

- 2 Complete silencer kit
3 Silencer
4 Clippable silencer
5 Grease gun (capacity 24g - 0.8oz)
• Grease for bevel gear (1kg - 2.2lb)

PART NO.

615 396 101 0
615 574 028 0
615 396 124 0
615 990 149 0
615 990 148 0



DA6.35 / DA8.20

ACCESSORIES INCLUDED

- Collet \varnothing 6mm
- 1/4" air hose nipple for 6mm (1/4") ID hose
- Flat wrench, 10mm (3/8")
- Flat wrench, 14mm

PART NO.

615 526 079 0
615 705 009 0
615 801 002 0
615 801 005 0

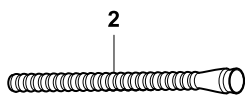
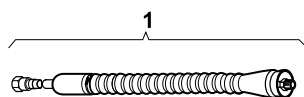
OPTIONAL ACCESSORIES

ITEM

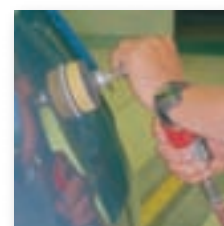
- 1 Complete silencer kit
2 Exhaust hose L = 0.8m (31")
3 Backing pad \varnothing 50mm (31/32")
• Collet \varnothing 2mm
• Collet \varnothing 2.5mm
• Collet \varnothing 3mm
• Collet \varnothing 3.5mm
• Collet \varnothing 4mm (5/32")
• Collet \varnothing 4.5mm
• Collet \varnothing 5mm
• Collet \varnothing 5.5mm
• Collet \varnothing 5.5mm
• Collet \varnothing 6mm
• Collet \varnothing 6.5mm (1/4")
• Collet \varnothing 7mm
• Collet \varnothing 7.5mm
• Collet \varnothing 8mm (5/16")

PART NO.

615 399 423 0
615 875 106 0
615 804 098 0
615 526 066 0
615 526 068 0
615 526 069 0
615 526 070 0
615 526 071 0
615 526 073 0
615 526 075 0
615 526 077 0
615 526 079 0
615 526 081 0
615 526 083 0
615 526 084 0
615 526 088 0



See page 159



Sanders for abrasive discs

220 to 375 Watts (0.3 to 0.5 hp) - 2100 to 20000 rpm

Supplied with 1/4" or 3/8" threaded spindle only



A

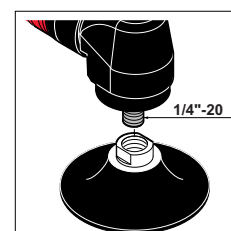


B



C

3/8"-24



D

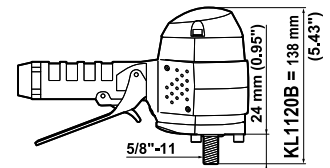
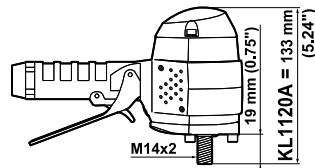
CNOMO collet, ø 6mm

Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	ABRASIVE MAX CAPACITY		THREADED SPINDLE	POWER		WEIGHT		AIR CONSUMPTION				AIR INLET THREAD	HOSE INT. Ø	
				rpm	ø mm		ø in.	W	hp	kg	lb.	l/s	cfm	l/s		cfm	in.
A	KA320EG	615 170 048 0	20000	76	3	1/4-20	375	0.5	0.67	1.47	6.5	13.5	10	21	1/4	8	5/16
A	KA312EG	615 170 040 0	12000	76	3	1/4-20	375	0.5	0.67	1.47	3.0	6.5	9	19	1/4	8	5/16
B	KA320G	615 170 044 0	20000	76	3	1/4-20	375	0.5	0.50	1.10	6.5	13.5	10	21	1/4	8	5/16
B	KA318G	615 170 310 0	18000	76	3	1/4-20	375	0.5	0.50	1.10	3.0	6.5	9	19	1/4	8	5/16
B	KA312G	615 170 038 0	12000	76	3	1/4-20	375	0.5	0.50	1.10	3.0	6.5	9	19	1/4	8	5/16
B	KA309G	615 170 204 0	9000	76	3	1/4-20	220	0.3	0.50	1.10	2.2	4.7	8	17	1/4	8	5/16
C	KA309C	615 170 203 0	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				Collet Max													
D	DA6.35	615 176 019 0	3500	cap. 8mm (5/16")			300	0.4	0.9	2.0	8.0	17.0	-	-	1/4	6	1/4
D	DA8.20	615 176 030 0	2100	cap. 8mm (5/16")			300	0.4	0.9	2.0	8.0	17.0	-	-	1/4	6	1/4

1/4"-20 UNC - 3/8"-24 UNF

Accessories



KL1120A / KL1120B

ACCESSORIES INCLUDED

- 3/8" air hose nipple for 10mm (3/8") ID hose

PART NO.

615 704 017 0

OPTIONAL ACCESSORIES

Sanding with standard abrasive disc ø 127mm (5")

ITEM	KL1120A M14x2	KL1120B 5/8"-11
A Soft sanding kit for abrasive disc (including item 1-2)	615 399 251 0	615 399 251 0
1 Ventilated backing pad with nut M14 & 5/8" (max. 12000 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
2 M14 Spacer	615 641 027 0	
2 5/8" Spacer		615 642 050 0

Sanding with semirigid disc ø 127mm (5")

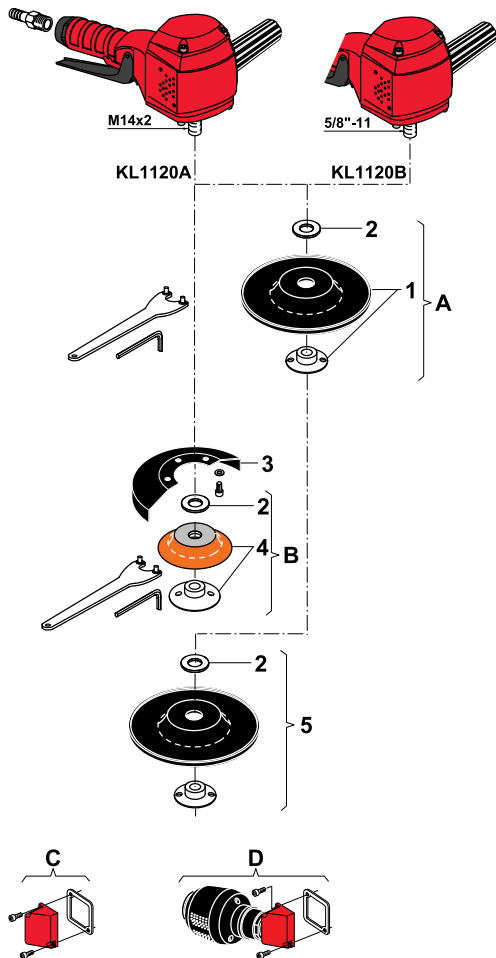
ITEM	KL1120A M14x2
3 Wheel guard	615 504 086 0
B Sanding kit for semirigid disc (including item 4-2)	615 399 203 0
4 Backing pad with nut M14 (max. 12000 rpm)	615 990 129 0
2 M14 Spacer	615 641 027 0
• Hex key 8mm (5/16")	615 802 061 0
• Pin wrench, 35mm (1 3/8")	615 802 010 0

Sanding with standard abrasive disc ø 127mm (5")

ITEM	KL1120A M14x2	KL1120B 5/8"-11
5 Semi-hard backing pad with nut M14 & 5/8" (max. 12000 rpm)	615 804 074 0	615 804 074 0
2 M14 Spacer	615 641 027 0	
2 5/8" Spacer		615 642 050 0

OTHER OPTIONAL ACCESSORIES

ITEM	PART NO.
C Silencer kit	615 396 117 0
D Silencer kit	615 399 462 0



Sanders for abrasive discs

Ø 127mm (5")

750 Watts (1.02 hp) - 12000 rpm

Supplied with M14 or 5/8" threaded spindle only



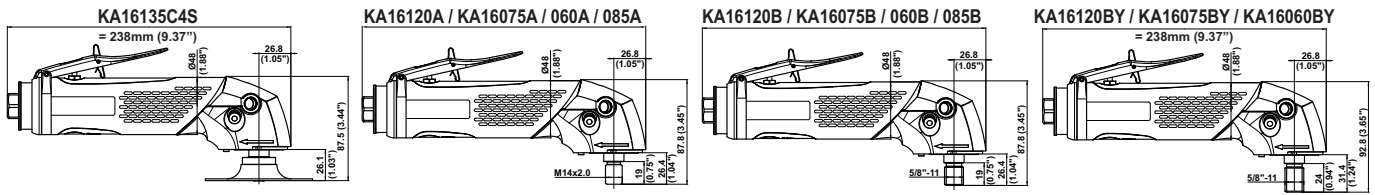
A

Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	ABRASIVE MAX CAPACITY		THREADED SPINDLE	POWER		WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR INLET THREAD	HOSE INT. Ø	
			rpm	Ø mm	Ø in.	in.	W	hp	kg	lb.	l/s	cfm	in.	mm	in.
A	KL1120A	615 170 022 0	12000	127	5	M14x2	750	1.02	2.2	4.8	16	34	3/8	10	3/8
A	KL1120B	615 170 207 0	12000	127	5	5/8"-11	750	1.02	2.2	4.8	16	34	3/8	10	3/8

5/8"-11 UNC

Accessories



KA16135C4S / KA16120/075/060A-B-BY / KA16085A-B

ACCESSORIES INCLUDED

ITEM	KA16135C4S 3/8"-24	KA16120	KA16085 KA16075/060
• Exhaust hose L= 1.5m (60")	615 875 113 0	615 875 113 0	615 875 113 0
• Clamp	615 263 024 0	615 263 024 0	615 263 024 0
• 3/8" air hose nipple for 13mm ID hose	615 704 027 0	615 704 027 0	615 704 027 0
• Side handle			615 576 038 0
• Flat wrench, 17mm (11/16")	615 801 032 0	615 801 032 0	615 801 032 0
• Vibration-damping side handle	615 576 066 0	615 576 066 0	
1 Flange	615 606 515 0		
2 Backing with nut	615 990 167 0		
• Pin wrench, 20-3mm	615 802 008 0		

OPTIONAL ACCESSORIES

ITEM	Sanding with standard abrasive disc ø 127mm (5")	
	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
3 Finger guard	615 504 145 0	615 504 145 0
4 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
5 M14 Spacer	615 641 027 0	
5 5/8" Spacer		615 642 050 0

Sanding with semirigid disc ø 127mm (5")

ITEM	KA16120A KA16085/075/060A M14x2	
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B Sanding kit for semirigid disc (including items 4-7)	615 396 075 0	615 396 075 0
3 Finger guard	615 504 145 0	615 504 145 0
6 Backing pad with nut M14 (max. 12.000 rpm)	615 990 129 0*	615 990 129 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
5 M14 Spacer	615 641 027 0	615 641 027 0

Sanding

ITEM	KA16085/075/060A M14x2	KA16085/075/060B 5/8"-11	KA16075/060BY 5/8"-11
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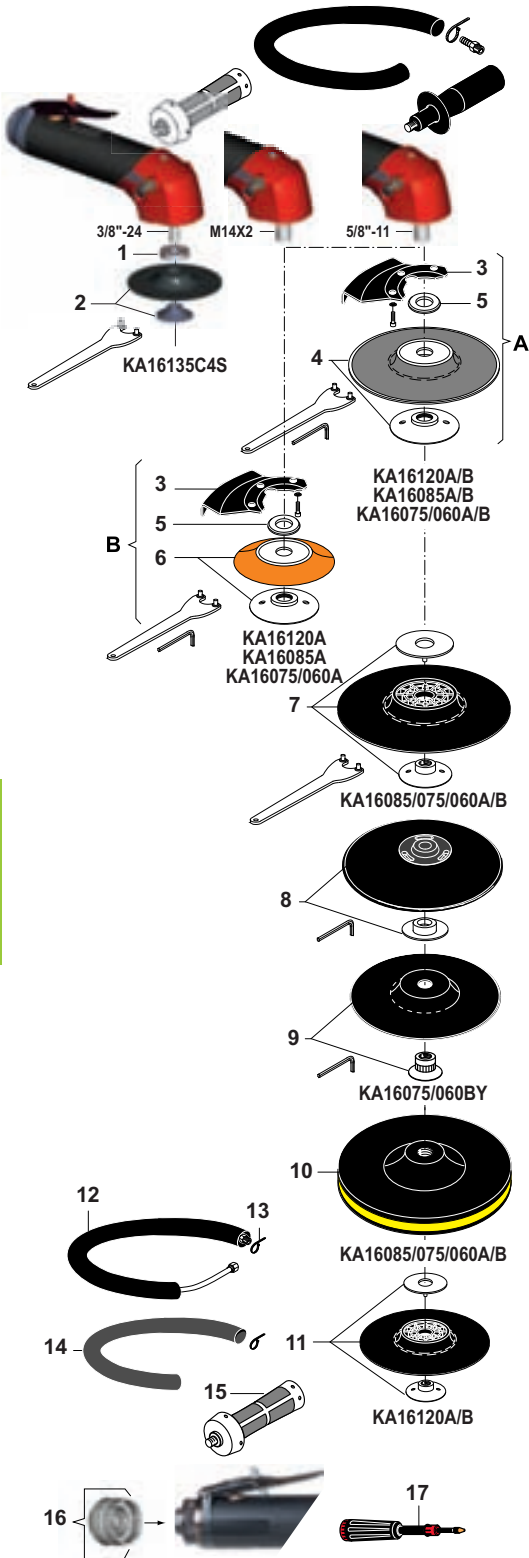
7 Soft backing pad with nut M14 & 5/8" ø 180mm (7") (max. 8500 rpm)	615 990 133 0*	615 990 133 0*	
7 Rigid backing pad with nut M14 & 5/8" ø 180mm (7") (max. 8.500 rpm)	615 990 134 0*	615 990 134 0*	
• Pin wrench 35mm (1-3/8")	615 802 010 0	615 802 010 0	
9 Spiracool pad whit nut ø 180mm (7") (max.8500 rpm)			S091836
9 Complete kit ø 180mm (7") (max.7000 rpm) for KA16060BY			K129587
• Hex key 8mm (5/16")			615 802 061 0
10 Rigid velcro-backed backing pad ø 180mm (7") (max.8700 rpm)	615 990 145 0	615 990 146 0	
10 Rigid velcro-backed backing pad ø 150mm (6") (max.10000 rpm)	615 990 137 0	615 990 138 0	

* Spare part: Nut 6156060220 for M14 model and 6156060290 for 5/8"-11

OTHER OPTIONAL ACCESSORIES

ITEM	PART NO.
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11 Semi-hard backing pad with nut M14 & 5/8" - ø 127mm (5") (max. 12.000 rpm)	615 804 074 0
12 Complete silencer kit	615 396 166 0
13 Clamp	615 263 024 0
14 Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
15 Vibration-damping side handle	615 576 066 0
16 Clippable silencer	615 396 957 0
17 Grease gun includes 24g (0.8 oz)	615 990 149 0
• Grease for bevel gear (1 kg -2.2 lb)	615 990 148 0



Sanders for abrasive discs

Ø100mm (4") - Ø127mm (5") - Ø150mm (6") - Ø180mm (7")

1250 to 1600 Watts (1.69 to 2.15 hp) - 6000 to 13500 rpm

Supplied with M14 or 5/8" threaded spindle only



A



B



C D



C D

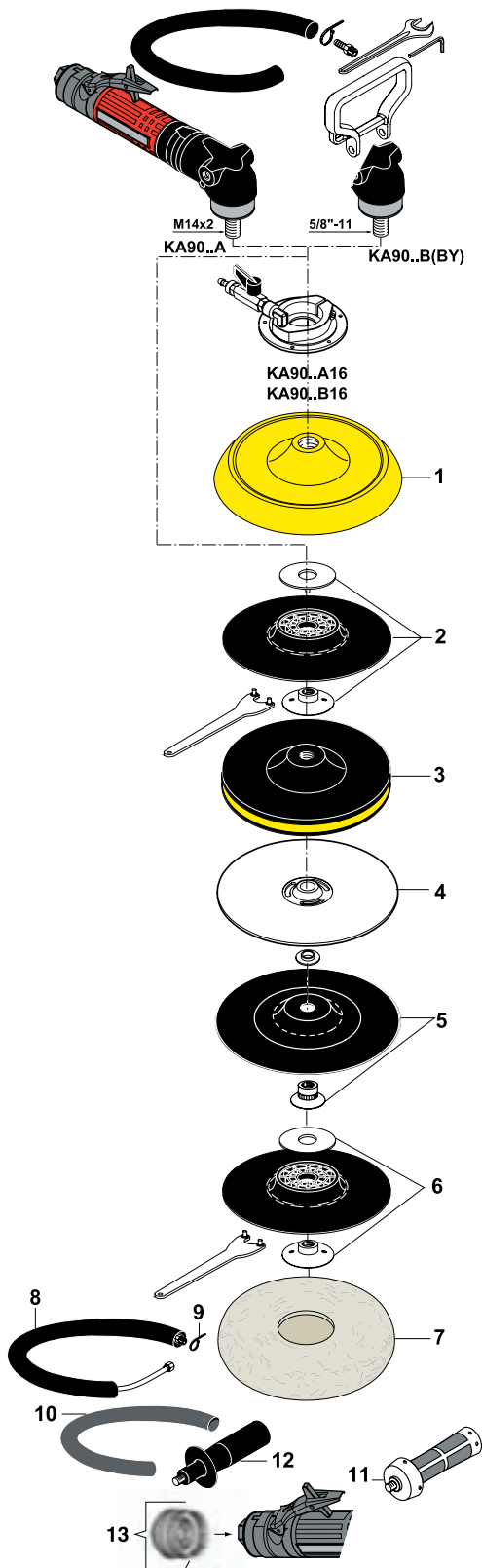
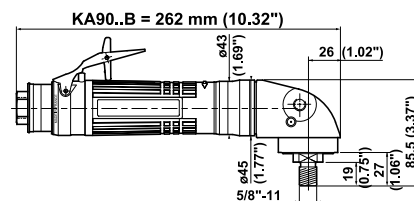
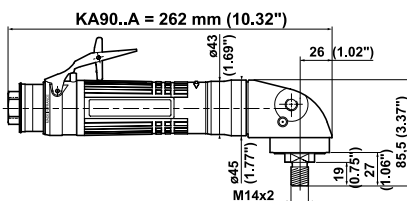
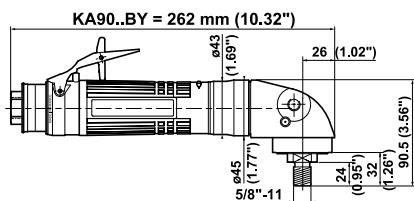


Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	THREADED SPINDLE	POWER		WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR CONSUMPTION AT MAX SPEED		AIR INLET THREAD	HOSE INT. Ø	
			rpm	in.	W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.
A	KA16135C4S	615 170 446 0	13500	3/8-24	1 600	2.15	1.48	3.3	25	53	35	74	3/8	13	1/2
B	KA16120A	615 170 435 0	12000	M14x2	1 600	2.15	1.39	3.0	20	42	32	68	3/8	13	1/2
B	KA16120B	615 170 445 0	12000	5/8-11	1 600	2.15	1.39	3.0	20	42	32	68	3/8	13	1/2
C/D	KA16085A	615 170 468 0	8500	M14x2	1 600	2.15	1.39	3.0	20	42	32	68	3/8	13	1/2
C/D	KA16085B	615 170 469 0	8500	5/8-11	1 600	2.15	1.39	3.0	20	42	32	68	3/8	13	1/2
C/D	KA16075A	615 170 448 0	7500	M14x2	1 400	1.90	1.39	3.0	15	32	27	57	3/8	13	1/2
C/D	KA16075B	615 170 452 0	7500	5/8-11	1 400	1.90	1.39	3.0	15	32	27	57	3/8	13	1/2
C/D	KA16060A	615 170 449 0	6000	M14x2	1 250	1.69	1.41	3.1	11	23	23	49	3/8	13	1/2
C/D	KA16060B	615 170 453 0	6000	5/8-11	1 250	1.69	1.41	3.1	11	23	23	49	3/8	13	1/2
For USA Market only (to ANSI B186.1)															
B	KA16120BY	615 170 447 0	12000	5/8-11	1 600	2.15	1.41	3.1	20	42	32	68	3/8	13	1/2
D	KA16075BY	615 170 450 0	7500	5/8-11	1 400	1.90	1.41	3.1	15	32	27	57	3/8	13	1/2
D	KA16060BY	615 170 451 0	6000	5/8-11	1 250	1.69	1.41	3.1	11	23	23	49	3/8	13	1/2

3/8"-24 UNF - 5/8"-11 UNC

Accessories



KA90..A / KA90..B / KA90..BY

ACCESSORIES INCLUDED

	PART NO.
• Exhaust hose L = 1.5m (60")	615 875 113 0
• Clamp	615 873 415 0
• 3/8" air hose nipple for 10mm (3/8") ID hose	615 704 017 0
• Support handle	615 576 069 0
• Flat wrench, 17mm (11/16")	615 801 032 0
• Hex key 8mm (5/16")	615 802 061 0
• Water intake system for KA90..A16 and B16	615 396 113 0

OPTIONAL ACCESSORIES

KA90..A16 and KA90..B16 with water intake

Water sanding ITEM	KA90..A16 M14x2	KA90..B16 5/8"-11
1 Foam pad ø 200mm (8") (max 3000 rpm)	615 990 139 0	615 990 015 0
1 Foam pad ø 180mm (7") (max 3200 rpm)	615 990 140 0	615 990 144 0
1 Foam pad ø 150mm (6") (max 3800 rpm)	615 990 135 0	

All pads are medium hardness, with a centre hole

Sanding ITEM	KA90..A M14x2	KA90..B 5/8"-11	KA9030/20BY 5/8"-11
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. 8500 rpm)	615 990 134 0	615 990 134 0	
• Pin wrench, 35mm (1 3/8")	615 802 010 0	615 802 010 0	
3 Rigid velcro-backed backing pad ø 180mm (7") (max. 8700 rpm)	615 990 145 0	615 990 146 0	
3 Rigid velcro-backed backing pad ø 150mm (6") (max. 10000 rpm)	615 990 137 0	615 990 138 0	
4 Spiracool pad with nut ø 180mm (7") (max. 8500 rpm)			S091836
4 Spiracool pad with nut ø 230mm (9") (max 6500 rpm)			S091839
5 Complete Kit ø 180mm (7") (max. 7000 rpm)			K129587
• Hex. Key 8mm (5/16")			615 802 061 0

Polishing ITEM	KA90..A	KA90..B
6 Soft backing pad with nut M14 & 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
7 Sheepskin ø 180mm (7") (max. 2100 rpm)	615 845 999 0	615 845 999 0

OTHER OPTIONAL ACCESSORIES

ITEM	PART NO.
8 Complete silencer kit	615 396 166 0
9 Clamp	615 873 115 0
10 Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
11 Vibration-damping side handle	615 576 066 0
12 Side handle	615 576 038 0
13 Clippable silencer	615 396 655 0



Sanders for abrasive discs polishing and water sanding

Ø 150mm (6") - Ø 180mm (7") - Ø 200mm (8") - Ø 230mm (9")
900 Watts (1.21 hp) - 2000 - 3000 rpm

Supplied with M14 or 5/8" threaded spindle only



A



B

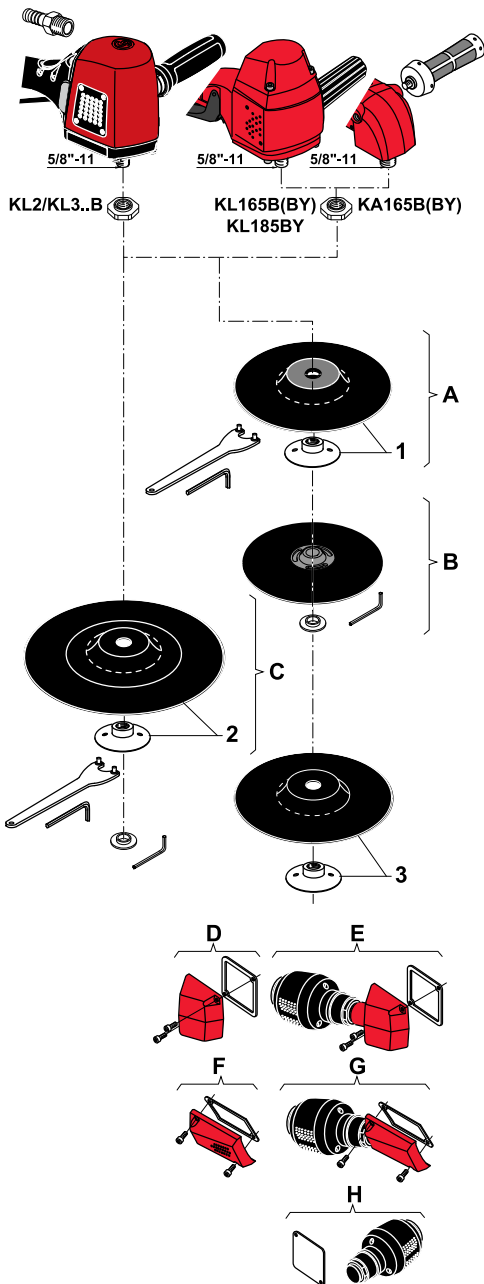
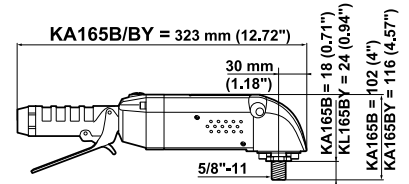
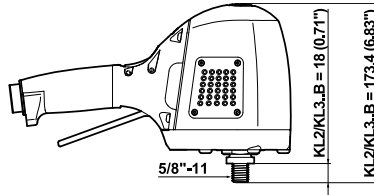
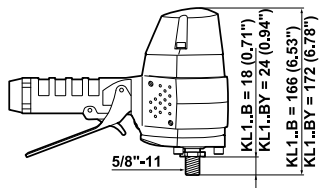
With water intake
in the center of the pad

Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	THREADED SPINDLE	POWER		WEIGHT		AIR CONSUMPTION				AIR INLET THREAD		HOSE INLET Ø	
			rpm	in.	W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.	
A	KA9030A	615 170 098 0	3000	M14x2	900	1.21	1.6	3.5	13	27	17	36	3/8	10	3/8	
A	KA9030B	615 170 099 0	3000	5/8-11	900	1.21	1.6	3.5	13	27	17	36	3/8	10	3/8	
A	KA9020A	615 170 096 0	2000	M14x2	900	1.21	1.6	3.5	7	15	17	36	3/8	10	3/8	
A	KA9020B	615 170 097 0	2000	5/8-11	900	1.21	1.6	3.5	7	15	17	36	3/8	10	3/8	
B	KA9030A16	615 170 102 0	3000	M14x2	900	1.21	2.0	4.4	13	27	17	36	3/8	10	3/8	
B	KA9030B16	615 170 103 0	3000	5/8-11	900	1.21	2.0	4.4	13	27	17	36	3/8	10	3/8	
B	KA9020A16	615 170 100 0	2000	M14x2	900	1.21	2.0	4.4	7	15	17	36	3/8	10	3/8	
B	KA9020B16	615 170 101 0	2000	5/8-11	900	1.21	2.0	4.4	7	15	17	36	3/8	10	3/8	
For USA Market only (to ANSI B186.1)																
A	KA9030BY	615 170 309 0	3000	5/8-11	900	1.21	1.6	3.5	13	27	17	36	3/8	10	3/8	

5/8"-11 UNC

Accessories



KL165B(BY) / KL185BY / KL245B / KL265B / KL360B / KA165B(BY)

ACCESSORIES INCLUDED

	KL165B(BY) KL185BY	KL2.5B KL360B	KA165B(BY)
• Rear flange	615 503 107 0	615 503 107 0	615 503 107 0
• Rear flange (for BY model)	615 503 151 0	615 503 151 0	615 503 149 0
• 1/2" air hose nipple for 13mm (1/2") ID hose	615 704 016 0		
• 1/2" air hose nipple for 15mm (5/8") ID hose		615 704 014 0	615 704 014 0
• Vibration-damping side handle			615 576 066 0

OPTIONAL ACCESSORIES

Sanding with standard abrasive disc ø 180mm (7")	KL165B KA165B	KL2.5B KL360B
A Sanding kit for abrasive disc (including item 1)	615 396 131 0	615 396 131 0
1 Soft Backing pad with nut (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	615 802 061 0

*Spare Part: Nut 615 608 047 0

Sanding with Spiracool pad ø 180mm (7")	KL185BY KL165BY	KA165BY
B Spiracool pad (max. 8500 rpm)	S091836	S091836
• Hex key 8mm (5/16")	615 802 061 0	615 802 061 0

Sanding with standard abrasive disc ø 230mm (9")	KL2.5B KL360B
C Sanding kit for abrasive disc (including item 2)	615 396 134 0
2 Soft Backing pad with nut (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

*Spare Part: Nut 615 608 029 0

OTHER OPTIONAL ACCESSORIES	KL185BY KL165B(BY)	KL2.5B KL360B	KA165B(BY)
3 Rigid backing pad with nut ø 180mm (7") (max. 8500 rpm) (except BY model)	615 990 134 0	615 990 134 0	615 990 134 0
D Silencer kit	615 396 117 0		
E Silencer kit	615 399 462 0		
F Silencer kit			615 399 298 0
G Silencer kit			615 399 459 0
H Silencer kit		615 399 463 0	



Sanders for abrasive discs

Ø 180mm (7") - Ø 230mm (9")
1200 to 2700 Watts (1.61 to 3.62 hp) - 4500 to 8500 rpm

Supplied with 5/8" threaded spindle only



A



B



C

Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	FREE SPEED	ABRASIVE MAX CAPACITY		THREADED SPINDLE	POWER		WEIGHT		AIR CONSUMPTION				AIR INLET THREAD	HOSE INLET Ø	
			rpm	ø mm	ø in.	in.	W	hp	kg	lb.	l/s	cfm	l/s	cfm	in.	mm	in.

VERTICAL SANDERS

A	KL165B	615 170 011 0	6500	180	7	5/8-11	1200	1.61	2.3	5.1	6	13	25	53	1/2	13	1/2
B	KL245B	615 170 333 0	4500	230	9	5/8-11	2000	2.70	3.5	7.7	7	15	32	68	1/2	15	
B	KL265B	615 170 339 0	6500	230	9	5/8-11	2200	3.00	3.5	7.7	11	23	41	87	1/2	15	5/8
B	KL360B	615 170 340 0	6000	230	9	5/8-11	2700	3.62	3.7	8.2	12	25	43	91	1/2	15	5/8

ANGLE SANDER

C	KA165B	615 170 025 0	6500	180	7	5/8-11	1200	1.61	2.3	5.1	11	23	25	53	1/2	15	5/8
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VERTICAL SANDERS

For USA Market only (to ANSI B186.1)

A	KL185BY	615 170 240 0	8500	180	7	5/8-11	1200	1.61	2.3	5.1	16	34	27	57	1/2	13	1/2
A	KL165BY	615 170 241 0	6500	180	7	5/8-11	1200	1.61	2.3	5.1	6	13	25	53	1/2	13	1/2

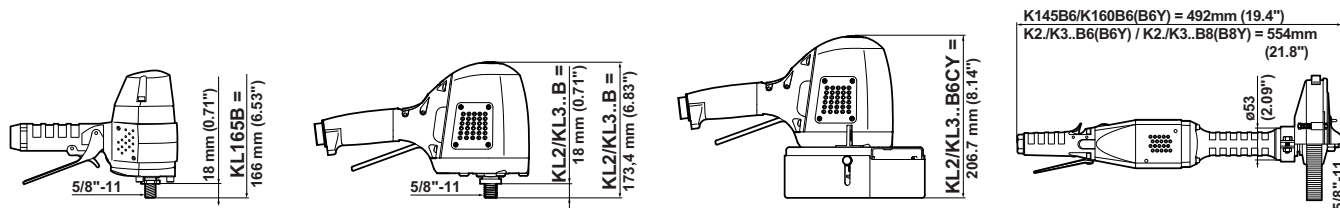
ANGLE SANDER

For USA Market only (to ANSI B186.1)

C	KA165BY	615 170 245 0	6500	180	7	5/8-11	1200	1.61	2.3	5.1	11	23	25	53	1/2	15	5/8
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5/8"-11 UNC

Accessories



KL165B / KL2.5B / KL360B / KL.60B6CY / KL245B6CY

ACCESSORIES INCLUDED

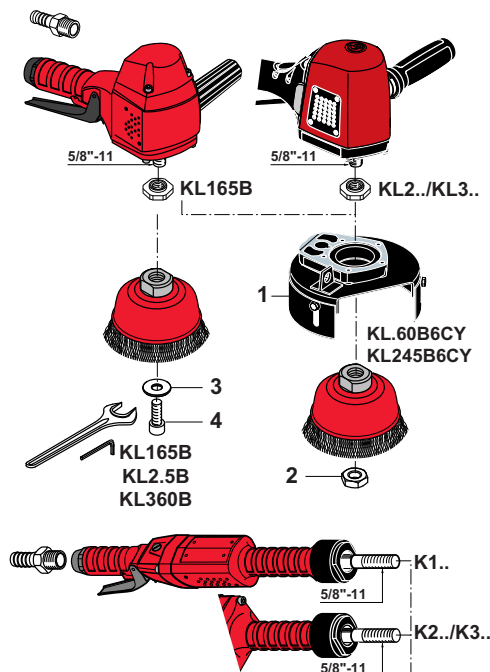
To be used with cup brush (not included)

ITEM	KL165B	KL2.5B KL360B	KL.60B6CY KL245B6CY
• Rear flange	615 503 107 0	615 503 107 0	615 503 151 0
• 1/2" air hose nipple for 13mm (1/2") ID hose	615 704 016 0		
• 1/2" air hose nipple for 15mm (5/8") ID hose		615 704 014 0	615 704 014 0
1 Wheel guard			615 504 178 0
2 Nut			615 608 049 0
• Flat wrench 27mm (1 1/16")			615 801 077 0

OPTIONAL ACCESSORIES

Kit for cup brush, max ø 150mm (6"), thread 5/8"-11

ITEM	KL165B KL2.5B KL360B
• Complete kit (including item 3-4)	615 396 133 0
3 Allen screw M8x20	615 616 002 0
4 Washer L8	615 642 070 0
• Flat wrench 27mm (1 1/16")	615 801 077 0
• Hex. Key 6mm	615 802 056 0



K145B6 / K.60B6(B6Y) / K.45B8(B8Y)

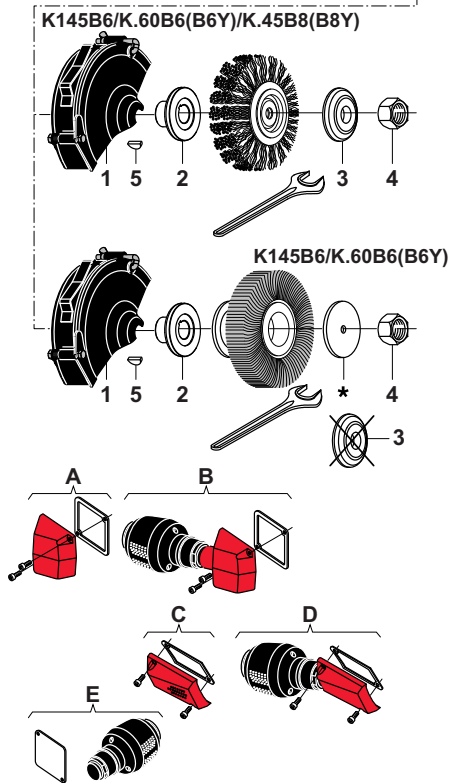
ACCESSORIES INCLUDED

ITEM	K145B6 K.60B6(B6Y) FLAP WHEEL ø 165mm (6-5/8")	K145B6 K.60B6(B6Y) RADIAL BRUSHES ø 150mm (6")	K345B8(B8Y) K245B8 RADIAL BRUSHES ø 200mm (8")
	• 1/2" air hose nipple for 15mm (5/8") ID hose	615 704 014 0	615 704 014 0
1 Wheel guard	615 504 079 0	615 504 079 0	615 504 078 0
2 Rear flange	615 503 028 0	615 503 028 0	615 503 004 0
3 Front flange	615 502 027 0	615 502 027 0	615 502 007 0
4 Nut	615 608 006 0	615 608 006 0	615 608 006 0
5 Woodruff key	615 630 019 0	615 630 019 0	615 630 019 0
• Flat wrench 27mm (1 1/16")	615 801 077 0	615 801 077 0	615 802 077 0

* Flange supplied with flap wheel. To be drilled to fit the diameter of the output shaft of the tool.

OTHER OPTIONAL ACCESSORIES

ITEM	KL165B	K2../K3..	K145B6 K160B6(B6Y)	KL2../KL3..
A Silencer Kit	615 396 117 0			
B Silencer Kit	615 399 462 0	615 399 460 0		
C Silencer Kit			615 399 298 0	
D Silencer Kit			615 399 459 0	
E Silencer Kit				615 399 463 0



Brushing machines for cup and radial brushes

Polishing machines for flap wheels

Ø 150mm (6") - Ø 165mm (6⁵/₈") - Ø 200mm (8")

1000 to 2700 Watts (1.34 to 3.62 hp) - 4500 to 6500 rpm



Other characteristics, see pages 165, 179 and 195

Caution: comply with the speeds recommended by component and abrasive manufacturers.

PIC REF	MODEL	PART NUMBER	ACCESSORIES	FREE SPEED	THREADED SPINDLE	POWER		WEIGHT	
				rpm	in.	W	hp	kg	lb.
VERTICAL MACHINES to be used with CUP BRUSHES									
A	KL165B	615 170 011 0	+ Kit 615 396 133 0 (Max Ø 150mm (6") - thread 5/8"-11)	6500	5/8-11	1200	1.61	2.4	5.3
B	KL245B	615 170 333 0	+ Kit 615 396 133 0 (Max Ø 150mm (6") - thread 5/8"-11)	4500	5/8-11	2000	2.70	3.5	7.7
B	KL265B	615 170 339 0	+ Kit 615 396 133 0 (Max Ø 150mm (6") - thread 5/8"-11)	6500	5/8-11	2200	3.00	3.5	7.7
B	KL360B	615 170 340 0	+ Kit 615 396 133 0 (Max Ø 150mm (6") - thread 5/8"-11)	6000	5/8-11	2700	3.62	3.7	8.2
For the USA Market only (to ANSI B186.1)									
C	KL260B6CY	615 170 345 0	Max Ø 150mm (6") thread 5/8"-11	6000	5/8-11	2200	3.00	4.2	9.2
C	KL360B6CY	615 170 351 0	Max Ø 150mm (6") thread 5/8"-11	6000	5/8-11	2700	3.62	4.4	9.7
C	KL245B6CY	615 170 346 0	Max Ø 150mm (6") thread 5/8"-11	4500	5/8-11	1700	2.28	4.2	9.2
STRAIGHT MACHINES to be used with RADIAL BRUSHES									
D	K145B6	615 170 002 0	Max Ø 150mm x bore 15.9mm (6" x 5/8")	4500	5/8-11	1000	1.34	3.5	7.7
E	K260B6	615 170 008 0	Max Ø 150mm x bore 15.9mm (6" x 5/8")	6000	5/8-11	2000	2.70	5.1	11.2
E	K360B6	615 170 010 0	Max Ø 150mm x bore 15.9mm (6" x 5/8")	6000	5/8-11	2700	3.62	5.6	12.3
E	K245B8	615 170 006 0	Max Ø 200mm x bore 15.9mm (8" x 5/8")	4500	5/8-11	1800	2.41	5.8	12.7
E	K345B8	615 170 009 0	Max Ø 200mm x bore 15.9mm (8" x 5/8")	4500	5/8-11	2400	3.22	6.3	13.9
For the USA Market only (to ANSI B186.1)									
D	K160B6Y	615 170 173 0	Max Ø 150mm x bore 15.9mm (6" x 5/8")	6000	5/8-11	1200	1.61	3.5	7.7
E	K260B6Y	615 170 175 0	Max Ø 150mm x bore 15.9mm (6" x 5/8")	6000	5/8-11	2000	2.70	5.1	11.2
E	K360B6Y	615 170 177 0	Max Ø 150mm x bore 15.9mm (6" x 5/8")	6000	5/8-11	2700	3.62	5.6	12.3
E	K345B8Y	615 170 178 0	Max Ø 200mm x bore 15.9mm (8" x 5/8")	4500	5/8-11	2400	3.22	6.3	13.9
STRAIGHT MACHINES to be used with FLAP WHEEL									
F	K145B6	615 170 002 0	Max. Ø 165 x 30 x 15.9mm (6 ⁵ / ₈ " x 1 ³ / ₁₆ " x 5/8")	4500	5/8-11	1000	1.34	3.5	7.7
F	K160B6	615 170 003 0	Max. Ø 165 x 30 x 15.9mm (6 ⁵ / ₈ " x 1 ³ / ₁₆ " x 5/8")	6000	5/8-11	1200	1.61	3.5	7.7
G	K260B6	615 170 008 0	Max. Ø 165 x 30 x 15.9mm (6 ⁵ / ₈ " x 1 ³ / ₁₆ " x 5/8")	6000	5/8-11	2000	2.70	5.1	11.2
G	K360B6	615 170 010 0	Max. Ø 165 x 30 x 15.9mm (6 ⁵ / ₈ " x 1 ³ / ₁₆ " x 5/8")	6000	5/8-11	2700	3.52	5.6	12.3
For the USA Market only (to ANSI B186.1)									
F	K160B6Y	615 170 173 0	Max. Ø 165 x 30 x 15.9mm (6 ⁵ / ₈ " x 1 ³ / ₁₆ " x 5/8")	6000	5/8-11	1200	1.61	3.5	7.7
G	K260B6Y	615 170 175 0	Max. Ø 165 x 30 x 15.9mm (6 ⁵ / ₈ " x 1 ³ / ₁₆ " x 5/8")	6000	5/8-11	2000	2.70	5.1	11.2
G	K360B6Y	615 170 177 0	Max. Ø 165 x 30 x 15.9mm (6 ⁵ / ₈ " x 1 ³ / ₁₆ " x 5/8")	6000	5/8-11	2700	3.62	5.6	12.3

5/8"-11 UNC



Dust extraction systems for grinders and sanders

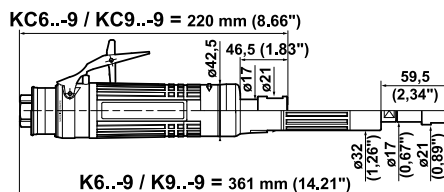
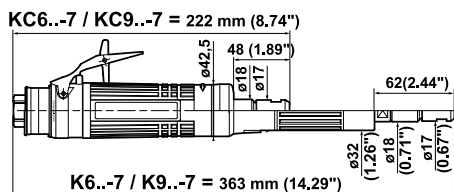


Suction cap with or without brush ■
for metallic or non metallic materials

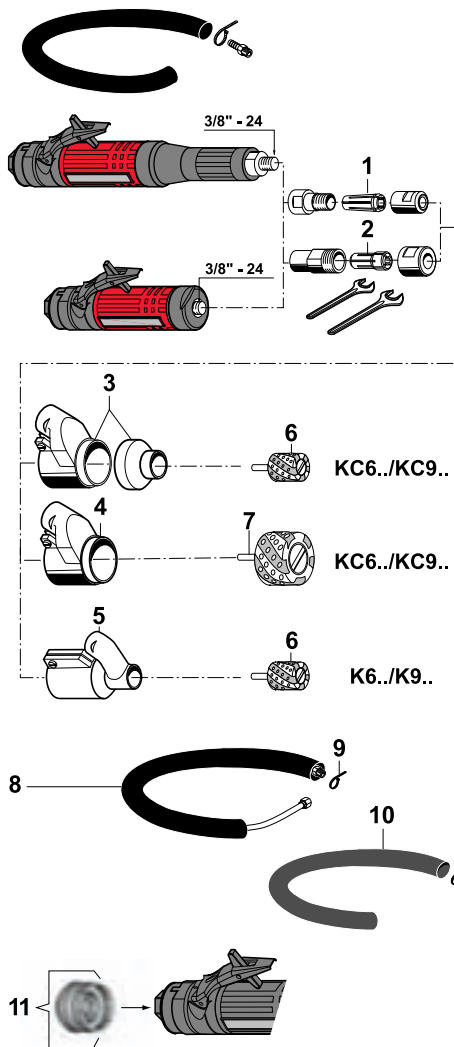
Dust extraction systems:

- **Straight machines:** for diamond burrs and diamond cylinders
- **Vertical machines and angle machines:** for grinding discs, sanding discs and diamond discs

Accessories



K6..- / K9..- / KC6..- / KC9..-



ACCESSORIES INCLUDED

ITEM	COLLET CNOMO	COLLET SERIES 200
1 CNOMO collet \varnothing 6mm	615 526 049 0	
2 Series 200 resilient collet, \varnothing 5.55 to 6.35mm (1/4")		615 526 063 0
• Exhaust hose L = 1.5m (60")	615 875 113 0	615 875 113 0
• Clamp	615 873 415 0	615 873 415 0
• 3/8" air hose nipple for 10mm (3/8") ID hose	615 704 017 0	615 704 017 0
• Flat wrench 14mm	615 801 005 0	615 801 005 0
• Flat wrench 19mm (3/4")		615 801 076 0

OPTIONAL ACCESSORIES

ITEM	K6../K9..-	KC6../KC9..
3 Suction cap		615 396 013 0
4 Suction cap		615 396 023 0
5 Suction cap	615 396 014 0	
6 Diamond cylinder \varnothing 27mm (1 1/16"), shank \varnothing 6mm (1/4") (20000 rpm max)	615 860 003 0	615 860 003 0
7 Diamond cylinder \varnothing 52mm (2 1/2"), shank \varnothing 6mm (1/4") (15000 rpm max)		615 860 004 0

OTHER OPTIONAL ACCESSORIES

ITEM	PART NO.
8 Complete silencer kit	615 396 166 0
9 Clamp	615 873 115 0
10 Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
11 Clippable silencer	615 396 655 0



Dust extraction systems for straight grinders

600 - 900 Watts (0.8 - 1.21 hp) - 12000 to 28000 rpm



A



B



B



615 396 014 0
Vacuum hose,
ID 25mm
(1")



615 396 013 0
Vacuum hose,
ID 32mm
(1 1/4")



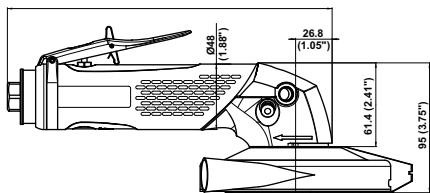
615 396 023 0
Vacuum hose,
ID 32mm
(1 1/4")

Caution: comply with the speeds recommended by component and abrasive manufacturers.

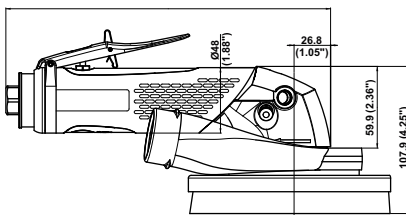
PIC REF	MODEL	PART NUMBER			SUCTION CAP ASSEMBLY	FREE SPEED	POWER		WEIGHT		AIR INLET THREAD
		CNOMO COLLET (-7)	SERIES 200 COLLET (-9)				W	hp	kg	lb.	
A	K628-	615 170 107 0	615 170 150 0	+	615 396 014 0	28000	600	0.80	1.3	2.9	3/8
A	K624-	615 170 106 0	615 170 151 0	+	615 396 014 0	24000	600	0.80	1.3	2.9	3/8
A	K922-	615 170 119 0	615 170 152 0	+	615 396 014 0	22000	900	1.21	1.4	3.1	3/8
A	K619-	615 170 105 0	615 170 153 0	+	615 396 014 0	19000	600	0.80	1.3	2.9	3/8
A	K918-	615 170 117 0	615 170 154 0	+	615 396 014 0	18000	900	1.21	1.4	3.1	3/8
A	K615-	615 170 104 0	615 170 155 0	+	615 396 014 0	15000	600	0.80	1.3	2.9	3/8
A	K915-	615 170 114 0	615 170 156 0	+	615 396 014 0	15000	900	1.21	1.4	3.1	3/8
A	K912-	615 170 110 0	615 170 157 0	+	615 396 014 0	12000	900	1.21	1.4	3.1	3/8
B	KC628-	615 170 126 0	615 170 158 0	+	615 396 013 0 or 615 396 023 0	28000	600	0.80	0.9	2.0	3/8
B	KC624-	615 170 125 0	615 170 159 0	+	615 396 013 0 or 615 396 023 0	24000	600	0.80	0.9	2.0	3/8
B	KC922-	615 170 130 0	615 170 160 0	+	615 396 013 0 or 615 396 023 0	22000	900	1.21	1.0	2.2	3/8
B	KC619-	615 170 124 0	615 170 161 0	+	615 396 013 0 or 615 396 023 0	19000	600	0.80	0.9	2.0	3/8
B	KC918-	615 170 129 0	615 170 162 0	+	615 396 013 0 or 615 396 023 0	18000	900	1.21	1.0	2.2	3/8
B	KC615-	615 170 123 0	615 170 163 0	+	615 396 013 0 or 615 396 023 0	15000	600	0.80	0.9	2.0	3/8
B	KC915-	615 170 128 0	615 170 164 0	+	615 396 013 0 or 615 396 023 0	15000	900	1.21	1.0	2.2	3/8
B	KC912-	615 170 127 0	615 170 165 0	+	615 396 013 0 or 615 396 023 0	12000	900	1.21	1.0	2.2	3/8

Accessories

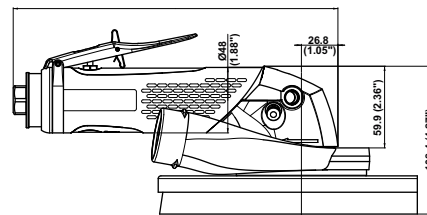
KA16120A5D = 238mm (9.37")



KA16120 / 075B5DE = 238mm (9.37")



KA16075 / 060B7DE = 238mm (9.37")



KA16120A5D

ACCESSORIES INCLUDED

ITEM	KA16120A5D ø 127mm (5")
• Exhaust hose L= 1.5m (60")	615 875 113 0
• Clamp	615 263 024 0
• 3/8" air hose nipple for 13mm (1/2") ID hose	615 704 027 0
• Side handle	615 576 038 0
1 Wheel guard	615 396 076 0
2 Rear flange	615 503 134 0
3 Spacer	615 643 074 0
4 Front flange	615 502 066 0
• Pin wrench 35mm (1-3/8")	615 802 010 0
• Hex key 8mm (5/16")	615 802 061 0

OPTIONAL ACCESSORIES

ITEM	PART NO.
5 Diamond disc ø 127mm (5")	615 804 915 0
6 Complete silencer kit	615 396 166 0
7 Clamp	615 263 024 0
8 Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
9 Vibration-damping side handle	615 576 066 0
10 Clippable silencer	615 396 957 0
11 Grease gun includes 24g (0.8 oz)	615 990 149 0
• Grease for bevel gear (1kg - 2.2 lb)	615 990 148 0

KA16120B5DE / KA16075B5DE / KA16075/060B7DE

ACCESSORIES INCLUDED

ITEM	KA16120B5DE KA16075B5DE ø 127mm (5")	KA16075B7DE KA16060B7DE ø 180mm (7")
• Exhaust hose L= 1.5m (60")	615 875 113 0	615 875 113 0
• Clamp	615 263 024 0	615 263 024 0
• 3/8" air hose nipple for 13mm (1/2") ID hose	615 704 027 0	615 704 027 0
• Side handle	615 576 038 0	615 576 038 0
1 Suction cap	615 504 194 0	615 504 194 0
2 Washer	615 643 083 0	615 643 083 0
3 Skirt with brush	615 570 234 0	615 570 231 0
4 Backing pad ø 180mm (7") with nut 5/8"		615 990 134 0
5 Ventilated backing pad ø 127mm (5") with nut 5/8"	615 990 127 0	
• Pin wrench 35mm (1-3/8")	615 802 010 0	615 802 010 0

OPTIONAL ACCESSORIES

ITEM	PART NO.
6 Complete silencer kit	615 396 166 0
7 Clamp	615 263 024 0
8 Reinforced cloth-lined exhaust hose L = 0.75m (30")	615 875 116 0
9 Vibration-damping side handle	615 576 066 0
10 Clippable silencer	615 396 957 0
11 Grease gun includes 24g (0.8 oz)	615 990 149 0
• Grease for bevel gear (1kg - 2.2 lb)	615 990 148 0



Dust extraction systems for angle grinders and sanders

ø 127mm (5") - ø 180mm (7")
1250 to 1600 Watts (1.69 to 2.15 hp) - 6000 to 12000 rpm



A
 Dust extraction casing for diamond disc ø 127mm (5")
 Vacuum hose ID 25mm (1")



B
 Vacuum hose,
 ID 38mm (1½")



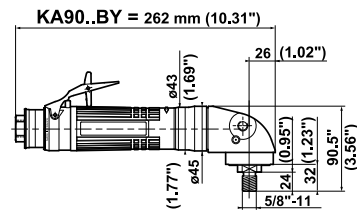
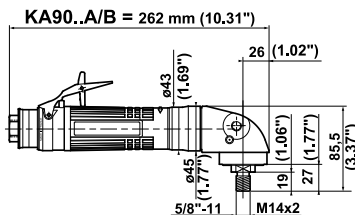
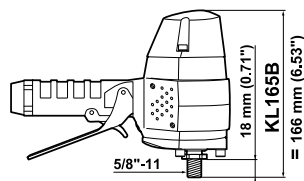
C
 Vacuum hose,
 ID 38mm (1½")

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

PIC REF	MODEL	PART NUMBER	FREE SPEED	ABRASIVE MAX CAPACITY		THREADED SPINDLE	POWER		WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR CONSUMPTION AT MAX SPEED		AIR INLET THREAD	HOSE INT. Ø	
				mm	in.		W	hp	kg	lb.	l/s	cfm	l/s	cfm		in.	mm
ANGLE GRINDER																	
A	KA16120A5D	615 170 442 0	12000	127x3.2x22.2	5x1/8 x 7/8	M14x2	1600	2.15	1.98	4.4	20	42	32	68	3/8	13	1/2
ANGLE SANDERS																	
B	KA16120B5DE	615 170 485 0	12000	127	5	5/8-11	1600	2.15	1.98	4.4	20	42	32	68	3/8	13	1/2
B	KA16075B5DE	615 170 459 0	7500	127	5	5/8-11	1400	1.90	1.98	4.4	15	32	27	57	3/8	13	1/2
C	KA16075B7DE	615 170 486 0	7500	180	7	5/8-11	1400	1.90	2.15	4.7	11	23	23	49	3/8	13	1/2
C	KA16060B7DE	615 170 460 0	6000	180	7	5/8-11	1250	1.69	2.15	4.7	11	23	23	49	3/8	13	1/2

5/8"-11 UNC

Accessories



KL165B / KA90.. A / KA90..B / KA90..BY

ACCESSORIES INCLUDED

	KL165B	KA90..A KA90..B / BY
• Rear flange	615 503 107 0	
• 1/2" air hose nipple for 13mm (1/2") ID hose	615 704 016 0	
• Exhaust hose L= 1.5m (60")		615 875 113 0
• Clamp		615 873 415 0
• 3/8" air hose nipple for 10mm (3/8") ID hose		615 704 017 0
• Support handle		615 576 069 0

OPTIONAL ACCESSORIES

For sanding materials

ITEM	KL165B non metallic Fibre disc ø 180mm (7")	KL165B metallic Fibre disc ø 180mm (7")
• Complete kit (including item 1-2-3)	615 399 364 0	615 399 365 0
1 Suction cap	615 399 359 0	615 399 360 0
2 Washer Z16U	615 642 050 0	615 642 050 0
3 Rigid backing pad with nut 5/8" (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
• Hex key 8mm (5/16")	615 802 061 0	615 802 061 0

For sanding metallic materials

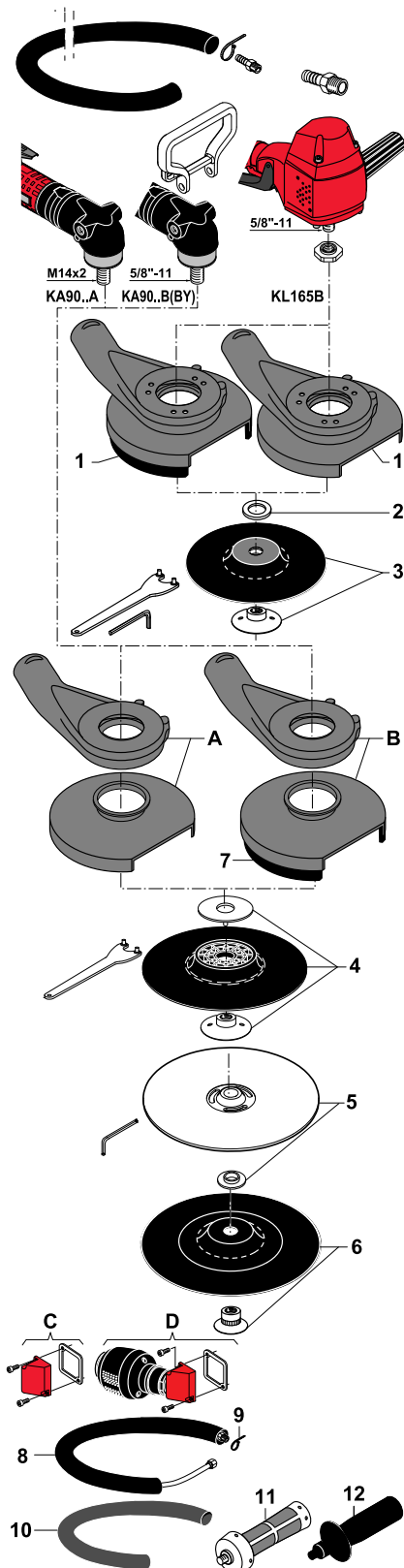
ITEM	KA90..A / B ø 180mm (7")	KA90..BY ø 180mm (7")
A Suction cap	615 396 125 0	615 396 125 0
4 Rigid backing pad with nut M14 & 5/8" ø 180mm (7") (Max. 8500 rpm)	615 990 134 0	
• Pin wrench, 35mm (1 3/8")	615 802 010 0	
5 Spiracool pad (Max. 8500 rpm)		S091836
6 Complete kit (Max. 7000 rpm)		K129587
• Hex key 8mm (5/16")		615 802 061 0

For sanding non metallic materials

ITEM	KA90..A / B ø 180mm (7")	KA90..BY ø 180mm (7")
B Suction cap (including item 6-7)	615 396 126 0	615 396 126 0
4 Rigid backing pad with nut M14 & 5/8" ø 180mm (7") (Max. 8500 rpm)	615 990 134 0	
7 Spare brush	615 570 233 0	
• Pin wrench, 35mm (1 3/8")	615 802 010 0	
5 Spiracool pad (Max. 8500 rpm)		S091836
6 Complete kit (Max. 7000 rpm)		K129587
• Hex key 8mm (5/16")		615 802 061 0

OTHER OPTIONAL ACCESSORIES

ITEM	KL165B	KA90..A KA90..B / BY
C Silencer kit	615 396 117 0	
D Silencer kit	615 399 462 0	
8 Complete silencer kit		615 396 166 0
9 Clamp		615 873 115 0
10 Reinforced cloth-lined exhaust hose L = 0.75m (30")		615 875 116 0
11 Vibration-damping side handle		615 576 066 0
12 Side handle		615 576 038 0
13 Clippable silencer		615 396 655 0



Dust extraction systems for vertical and angle sanders

∅ 180mm (7")

900 - 1200 Watts (1.21 - 1.61 hp) - 2000 to 6500 rpm

Supplied with M14 & 5/8" threaded spindle only



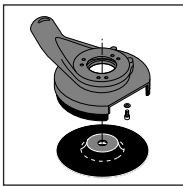
A



B

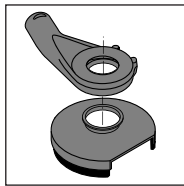
For standard abrasive disc for non metallic materials

KL165



615 399 364 0

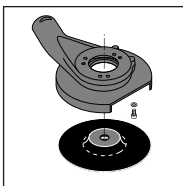
KA90..



615 396 126 0

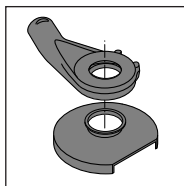
For standard abrasive disc for metallic materials

KL165



615 399 365 0

KA90..



615 396 125 0

Vacuum hose, ID 38mm (1 1/2")



C

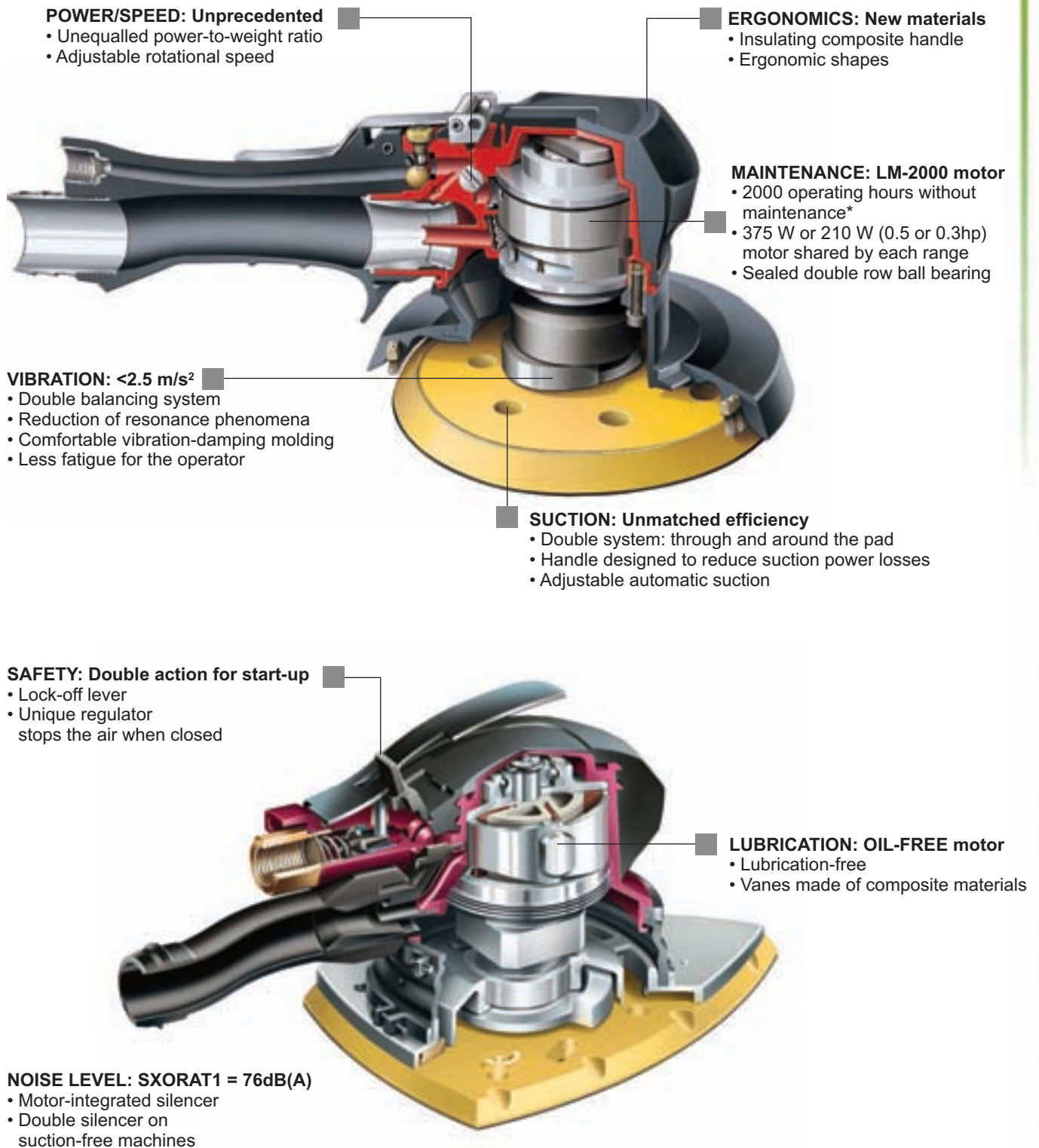
Caution: comply with the speeds recommended by component and abrasive manufacturers

PIC REF	MODEL	PART NUMBER		DUST EXTRACTION KIT	FREE SPEED	THREADED SPINDLE	POWER		WEIGHT		AIR INLET THREAD
					rpm	in	W	hp	kg	lb.	in.
VERTICAL SANDER											
A	KL165B	615 170 011 0	+	615 399 364 0 or 615 399 365 0	6500	5/8-11	1 200	1.61	2.3	5.1	1/2
ANGLE SANDERS											
B	KA9030A	615 170 098 0	+	615 396 126 0 or 615 396 125 0	3000	M14x2	900	1.21	1.6	3.5	3/8
B	KA9030B	615 170 099 0	+	615 396 126 0 or 615 396 125 0	3000	5/8-11	900	1.21	1.6	3.5	3/8
B	KA9020A	615 170 096 0	+	615 396 126 0 or 615 396 125 0	2000	M14x2	900	1.21	1.6	3.5	3/8
B	KA9020B	615 170 097 0	+	615 396 126 0 or 615 396 125 0	2000	5/8-11	900	1.21	1.6	3.5	3/8
ANGLE SANDERS for USA Market only (to ANSI B186.1)											
C	KA9030BY	615 170 309 0	+	615 396 126 0 or 615 396 125 0	3000	5/8-11	900	1.21	1.6	3.5	3/8

5/8"-11 UNC



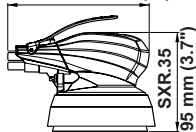
Random orbital sanders for abrasive discs and orbital sanders for abrasive sheets



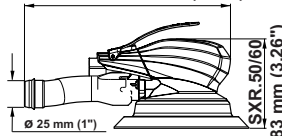
* Subject to use as per the instruction manual supplied with the tool.

Accessories

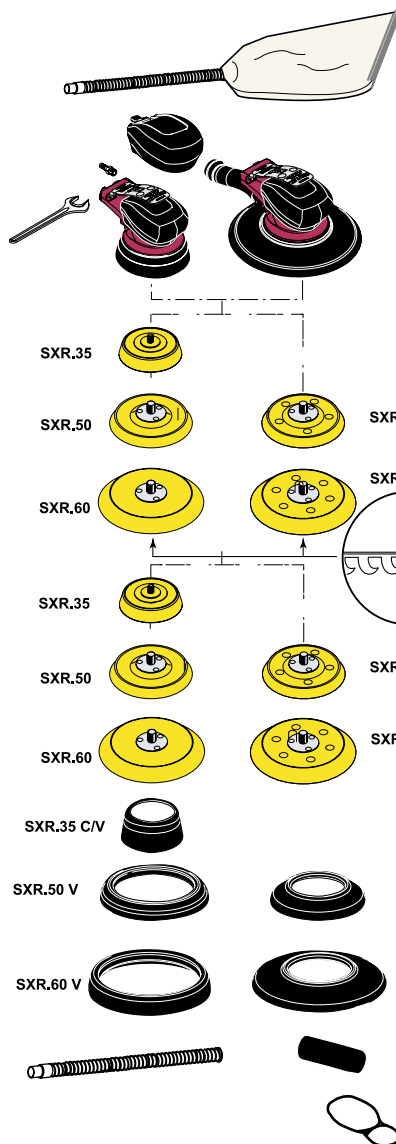
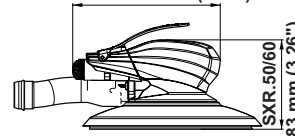
SXR. = 127 mm (5")



SXR.V/C = 186 mm (7.32")



SXR.C = 133 mm (5.24")



SXR.35. / SXR.50. / SXR.60.

ACCESSORIES INCLUDED

	PART NO.
• 1/4" air hose nipple for 6mm (1/4") ID hose	615 705 009 0
• Small grip (medium-size grip fitted on sander)	615 303 109 0
• Flat wrench 26mm across flats	615 801 078 0
• Complete dust extraction kit for SXRA..V and SXRB..V version	615 396 264 0

Pads: Thread 5/16"-24	For Hook & Loop abrasive	For Hook & Loop abrasive (V) or (C) with holes
• Pad ø 89mm (3.5") - 80gr - SXR(.)35(.)	615 990 158 0	-
• Pad ø 127mm (5") - 100gr - SXR(.)50	615 990 156 0	615 990 157 0
• Pad ø 150mm (6") - 130gr - SXR(.)60	615 990 154 0	615 990 155 0

OPTIONAL ACCESSORIES

Pads: Thread 5/16"-24	For self-adhesive abrasive	For self-adhesive abrasive (V) or (C) with holes
• Pad ø 89mm (3.5") - 80gr - SXR(.)35(.)	615 990 163 0	-
• Pad ø 127mm (5") - 100gr - SXR(.)50	615 990 161 0	615 990 162 0
• Pad ø 150mm (6") - 130gr - SXR(.)60	615 990 159 0	615 990 160 0

Vacuum skirts

• Vacuum skirt for SXR(.)35(.)	615 350 110 0
• Vacuum skirt for SXR(.)50C	615 350 107 0
• Vacuum skirt for SXR(.)60C	615 350 106 0
• Vacuum skirt for SXR(.)50V	615 350 103 0
• Vacuum skirt for SXR(.)60V	615 350 102 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

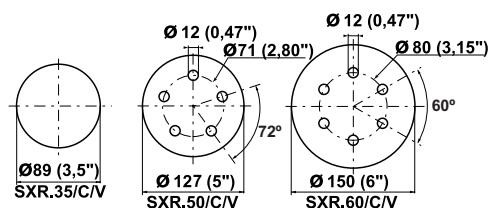
Hose

• Dust extraction hose ø 25mm (1") L = 1.5m (60")	615 396 263 0
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Bail Hook

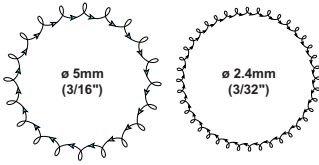
• Bail hook	615 571 060 0
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PAD DIMENSIONS



Random orbital sanders for abrasive discs

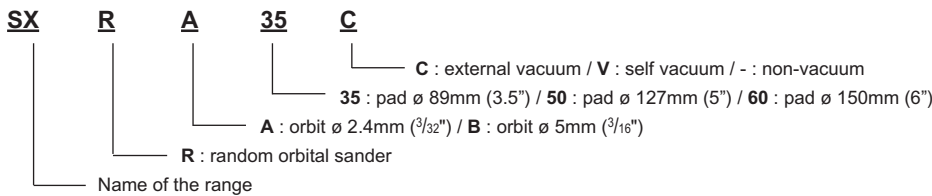
Ø 89mm (3.5") - Ø 127mm (5") - Ø 150mm (6")
210 Watts (0.3 hp) - 12000 rpm



Supplied kit



HOW TO SELECT YOUR SX SANDER — Eg: SXRA35C - SXR model / orbit Ø 2.4mm (3/32") / pad Ø 89mm (3.5") / with dust extraction



*Sanders equipped with PSA pad

Caution: comply with the speeds recommended by component and abrasive manufacturers.

PAD SIZE		MODEL	PART NUMBER	MODEL	PART NUMBER	MODEL	PART NUMBER	WEIGHT		AIR CONSUMPTION AT MAX. OUTPUT		AIR INLET THREAD	HOSE INT Ø	
mm	in.							kg	lb.	l/s	cfm	in.	mm	in.

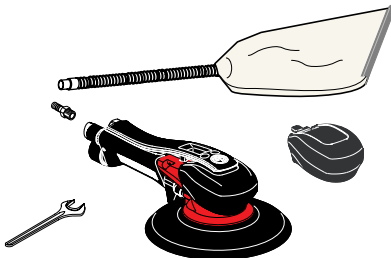
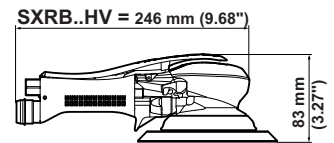
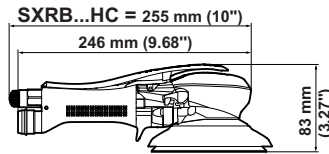
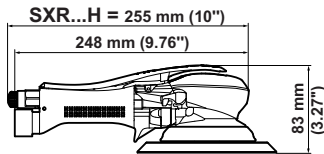
RANDOM ORBITAL SANDERS, ORBIT Ø 5mm (3/16")

		Non-vacuum		External vacuum		Self vacuum									
Ø 89	3.5	SXRB35	615 170 209 0	SXRB35C	615 170 215 0	SXRB35V	615 170 212 0	0.8	1.7	8.0	16.6	1/4	6	1/4	
Ø 127	5	SXRB50	615 170 210 0	SXRB50C	615 170 216 0	SXRB50V	615 170 213 0	0.8	1.7	8.0	16.6	1/4	6	1/4	
Ø 127	5	SXRB50*	615 170 300 0					0.8	1.7	8.0	16.6	1/4	6	1/4	
Ø 150	6	SXRB60	615 170 211 0	SXRB60C	615 170 217 0	SXRB60V	615 170 214 0	0.8	1.7	8.0	16.6	1/4	6	1/4	
Ø 150	6	SXRB60*	615 170 317 0					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	SXRA35	615 170 218 0	SXRA35C	615 170 224 0	SXRA35V	615 170 221 0	0.8	1.7	8.0	16.6	1/4	6	1/4	
Ø 127	5	SXRA50	615 170 219 0	SXRA50C	615 170 225 0	SXRA50V	615 170 222 0	0.8	1.7	8.0	16.6	1/4	6	1/4	
Ø 150	6	SXRA60	615 170 220 0	SXRA60C	615 170 226 0	SXRA60V	615 170 223 0	0.8	1.7	8.0	16.6	1/4	6	1/4	

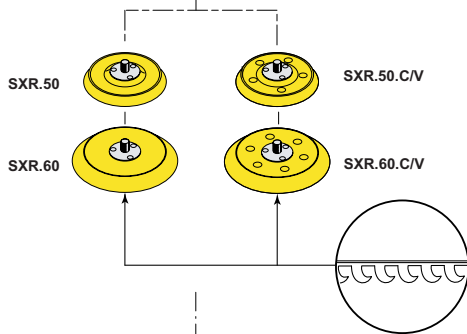
Accessories



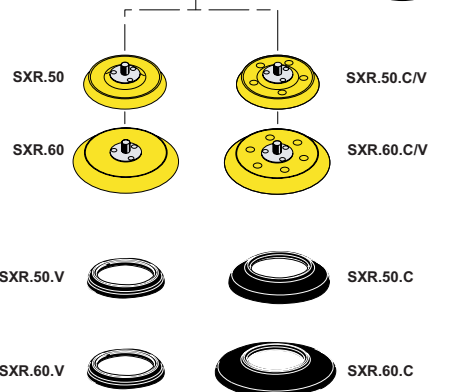
SXR....

ACCESSORIES INCLUDED

	PART NO.
• 1/4" air hose nipple for 6mm (1/4") ID hose	615 705 009 0
• Small grip (medium-size grip fitted on sander)	615 303 109 0
• Flat wrench 26mm across flats	615 801 078 0
• Complete dust extraction kit for SXR...V and SXR...V version	615 396 264 0



Pads: Thread 5/16"-24	For Hook & Loop abrasive	For Hook & Loop abrasive (V) or (C) with holes
• Pad ø 127mm (5") - 100gr - SXR(.)50	615 990 156 0	615 990 157 0
• Pad ø 150mm (6") - 130gr - SXR(.)60	615 990 154 0	615 990 155 0



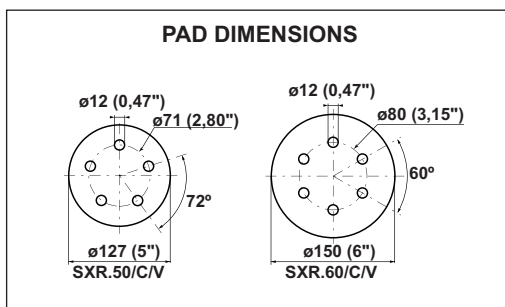
OPTIONAL ACCESSORIES Pads: Thread 5/16"-24	For self-adhesive abrasive	For self-adhesive abrasive (V) or (C) with holes
• Pad ø 127mm (5") - 100gr - SXR(.)50	615 990 161 0	615 990 162 0
• Pad ø 150mm (6") - 130gr - SXR(.)60	615 990 159 0	615 990 160 0

Vacuum skirts	
• Vacuum skirt for SXR(.)50HC	615 350 107 0
• Vacuum skirt for SXR(.)60HC	615 350 106 0
• Vacuum skirt for SXR(.)50HV	615 350 103 0
• Vacuum skirt for SXR(.)60HV	615 350 102 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

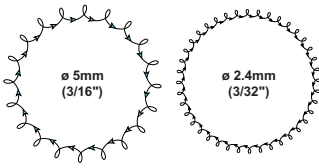
Hose	
• Dust extraction hose ø 25mm (1") L = 1.5m (60")	615 396 263 0

Bail Hook	
• Bail hook	615 571 060 0



Random orbital sanders for abrasive discs

Ø 127mm (5") - Ø 150mm (6")
210 Watts (0.3 hp) - 12000 rpm



SXR50H



SXR50HC



SXR50HV



SXR60H

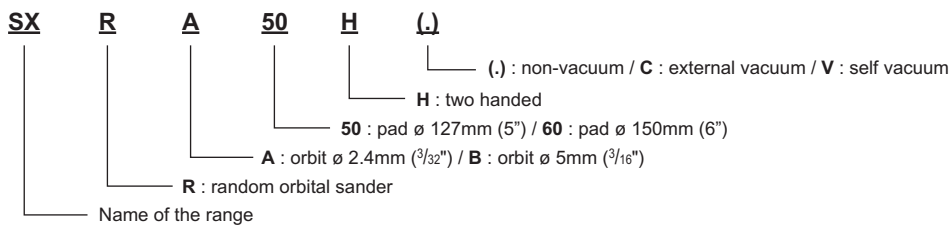


SXR60HC



SXR60HV

HOW TO SELECT YOUR SX SANDER – Eg: SXRA50H - SXR model / orbit 2.4mm (3/32") / pad Ø 127mm (5") / Two handed / non vacuum



*Sanders equipped with PSA pad

Caution: comply with the speeds recommended by component and abrasive manufacturers.

PAD SIZE		MODEL	PART NUMBER	MODEL	PART NUMBER	MODEL	PART NUMBER	WEIGHT		AIR CONSUMPTION AT MAX. OUTPUT		AIR INLET THREAD		HOSE INT Ø	
mm	in.							kg	lb.	l/s	cfm	in.	mm	in.	

RANDOM ORBITAL SANDERS, ORBIT Ø 5mm (3/16")

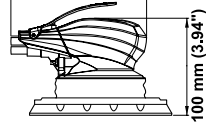
		Non-vacuum		External vacuum		Self vacuum									
Ø 127	5	SXR50H	615 170 353 0	SXR50HC	615 170 361 0	SXR50HV	615 170 358 0	0.9	2.0	8.0	16.6	1/4	6	1/4	
Ø 127	5	SXR50H*	615 170 354 0					0.9	2.0	8.0	16.6	1/4	6	1/4	
Ø 150	6	SXR60H	615 170 355 0	SXR60HC	615 170 362 0	SXR60HV	615 170 359 0	0.9	2.0	8.0	16.6	1/4	6	1/4	
Ø 150	6	SXR60H*	615 170 356 0					0.9	2.0	8.0	16.6	1/4	6	1/4	

RANDOM ORBITAL SANDERS, ORBIT Ø 2.4mm (3/32")

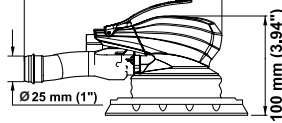
		Non-vacuum		External vacuum		Self vacuum									
Ø 127	5	SXRA50H	615 170 364 0	SXRA50HC	615 170 370 0	SXRA50HV	615 170 367 0	0.9	2.0	8.0	16.6	1/4	6	1/4	
Ø 150	6	SXRA60H	615 170 365 0	SXRA60HC	615 170 371 0	SXRA60HV	615 170 368 0	0.9	2.0	8.0	16.6	1/4	6	1/4	

Accessories

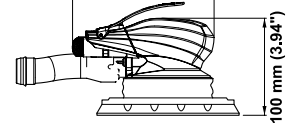
SXO.. = 127 mm (5")



SXO..V = 186 mm (7.32")



SXO..C = 133 mm (5.24")



SXOAR1. / SXOAT1.

ACCESSORIES INCLUDED

- 1/4" air hose nipple for 6mm (1/4") ID hose
- Small grip (medium-size grip fitted on sander)
- Complete dust extraction kit for SXO..V version

PART NO.

615 705 009 0

615 303 109 0

615 396 264 0

Pad for Hook & Loop abrasive

- Pad 80x130mm (3x5") for SXOAR..
- Pad 147x100mm (6x4") for SXOAT1..

PART NO.

615 350 121 0

615 350 122 0

OPTIONAL ACCESSORIES

- Paper holder kit
- Pad 80x130mm (3x5") for SXOAR..

PART NO.

615 396 413 0

615 350 123 0

Adaptor

- Vacuum hose adaptor \varnothing 25mm (1") / \varnothing 32mm (1 1/4")
- Vacuum hose adaptor \varnothing 25mm (1") / \varnothing 28mm (1 1/8")

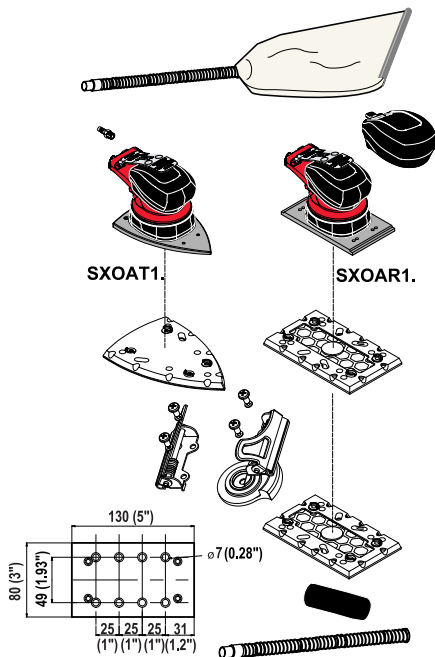
615 350 117 0

615 804 448 0

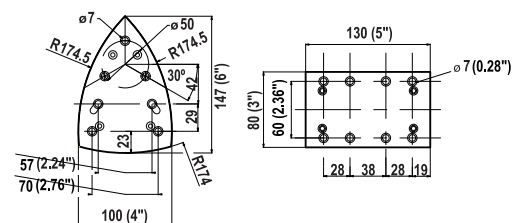
Hose

- Dust extraction hose \varnothing 25mm (1") L = 1.5m (60")

615 396 263 0



PAD DIMENSIONS



Orbital sanders for abrasive sheets

80 x 130mm (3"x 5") - 147 x 100mm (6"x 4")
210 Watts (0.3 hp) - 10000 rpm



SXOAR1



SXOAR1C



SXOAR1V



SXOAT1



SXOAT1C

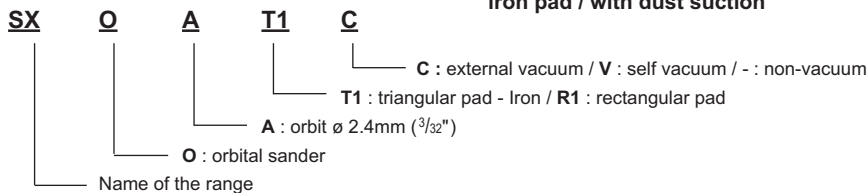


SXOAT1V



SXOAR1 equipped with paper holder kit P.N 615 396 413 0

HOW TO SELECT YOUR SXO SANDER — Eg: SXOAT1C - SXO model / orbit \varnothing 2.4mm ($\frac{3}{32}$ ")
 iron pad / with dust suction



Supplied kit

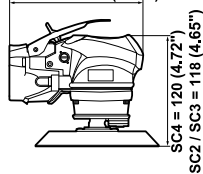


Caution: comply with the speeds recommended by component and abrasive manufacturers.

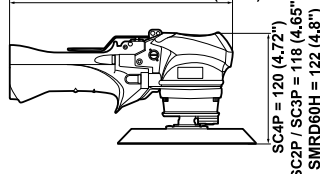
PAD SIZE		MODEL	PART NUMBER	MODEL	PART NUMBER	MODEL	PART NUMBER	WEIGHT		AIR CONSUMPTION AT MAX. OUTPUT		AIR INLET THREAD	HOSE INT. Ø		
mm	in.							kg	lb.	l/s	cfm	in.	mm	in.	
ORBITAL SANDERS, ORBIT \varnothing 2.4mm ($\frac{3}{32}$")															
		Non-vacuum			External vacuum			Self vacuum							
80x130	3x5	SXOAR1	615 170 233 0	SXOAR1C	615 170 237 0	SXOAR1V	615 170 235 0	1.0	2.2	8.0	16.6	1/4	6	1/4	
147x100	6x4	SXOAT1	615 170 234 0	SXOAT1C	615 170 238 0	SXOAT1V	615 170 236 0	1.0	2.2	8.0	16.6	1/4	6	1/4	

Accessories

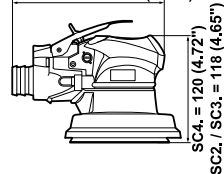
SC. = 142 mm (5.59")



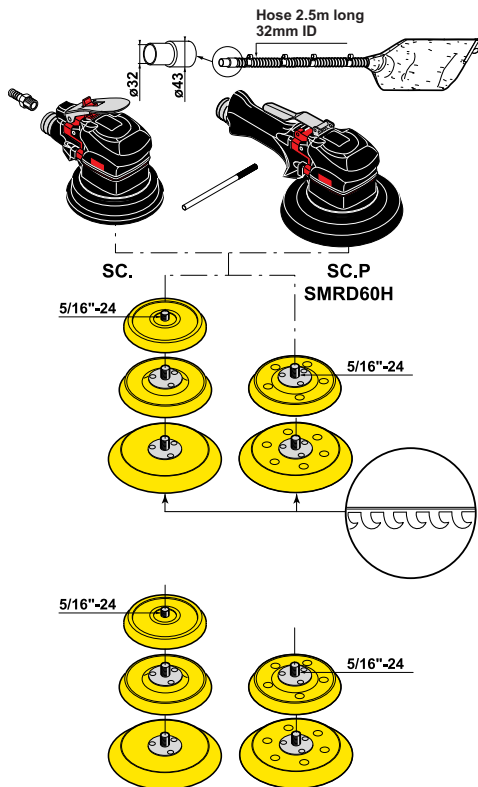
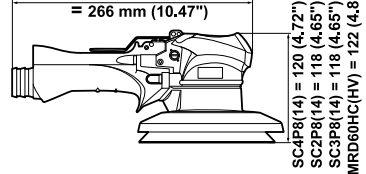
SC.P/SMRD60H = 242 mm (9.53")



SC.-8/-14 = 166 mm (6.54")



SC.P8/14/SMRD60HC/V = 266 mm (10.47")



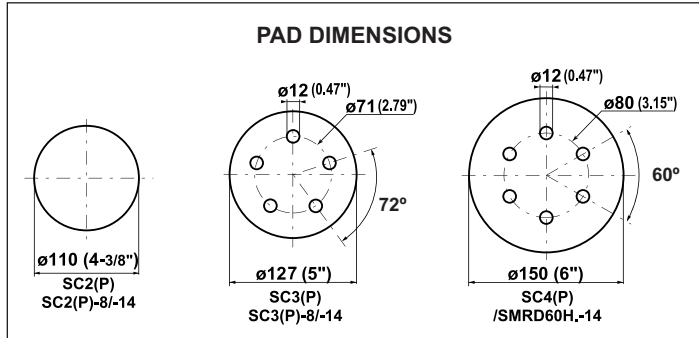
SC.. / SC..P / SMRD60..

ACCESSORIES INCLUDED

	PART NO.
• 1/4" air hose nipple for 8mm (5/32") ID hose	615 704 019 0
• Clamping lever	615 595 202 0
• Complete dust extraction kit for version (SC.-14/SRMD60HV)	615 399 471 0

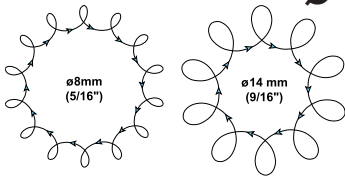
Pads: Thread 5/16" - 24	For Hook & Loop abrasive	For Hook & Loop abrasive (-8) or (-14) (C) or (V) with holes
• Pad ø 110mm (4 3/8") - SC2/-8/-14 - SC2P/8/14	615 990 102 0	-
• Pad ø 127mm (5") - SC3(P)	615 990 123 0	615 990 124 0
• Pad ø 150mm (6") - SC4(P) - SRMD60H.	615 990 125 0	615 990 126 0

Pads: Thread 5/16" - 24	For self-adhesive abrasive	For self-adhesive abrasive (-8) or (-14) (C) or (V)
• Pad ø 110mm (4 3/8") - SC2/-8/-14 - SC2P/8/14	615 990 101 0	-
• Pad ø 127mm (5") - SC3(P)	615 990 111 0	615 990 110 0
• Pad ø 150mm (6") - SC4(P) - SRMD60H.	615 990 119 0	615 990 118 0



Random orbital sanders for abrasive discs

Ø 110mm (4³/₈") - Ø 127mm (5") - Ø 150mm (6")
375 Watts (0.5 hp) - 10000 rpm



SC4



SC4P



SC4-8



SC4P8 - SMRD60HC



SMRD60H



SC4P14 - SMRD60HV

Caution: comply with the speeds recommended by component and abrasive manufacturers.

PAD SIZE		MODEL	PART NUMBER	MODEL	PART NUMBER	MODEL	PART NUMBER	WEIGHT		AIR CONSUMPTION AT MAX. OUTPUT		AIR INLET THREAD	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 110	4 ³ / ₈	SC2	615 170 080 0	SC2-8	615 170 092 0	SC2-14	615 170 086 0	1.1	2.42	11	23	1/4	8	5/16
Ø 127	5	SC3	615 170 082 0	SC3-8	615 170 094 0	SC3-14	615 170 088 0	1.2	2.64	11	23	1/4	8	5/16
Ø 150	6	SC4	615 170 081 0	SC4-8	615 170 093 0	SC4-14	615 170 087 0	1.3	2.86	11	23	1/4	8	5/16

SANDERS WITH HANDLE GRIP, ORBIT Ø 8mm (5/16")

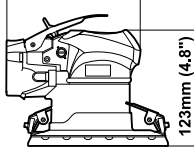
		Non-vacuum			External vacuum			Self vacuum						
Ø 110	4 ³ / ₈	SC2P	615 170 077 0	SC2P8	615 170 089 0	SC2P14	615 170 083 0	1.2	2.64	11	23	1/4	8	5/16
Ø 127	5	SC3P	615 170 079 0	SC3P8	615 170 091 0	SC3P14	615 170 085 0	1.3	2.86	11	23	1/4	8	5/16
Ø 150	6	SC4P	615 170 078 0	SC4P8	615 170 090 0	SC4P14	615 170 084 0	1.4	3.08	11	23	1/4	8	5/16

LARGE ORBIT SANDERS WITH HANDLE GRIP, ORBIT Ø 14mm (9/16")

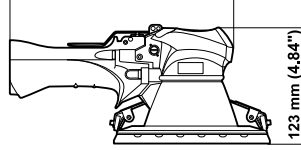
		Non-vacuum			External vacuum			Self vacuum						
Ø 150	6	SMRD60H	615 170 280 0	SMRD60HC	615 170 281 0	SMRD60HV	615 170 282 0	1.3	2.86	11	23	1/4	8	5/16

Accessories

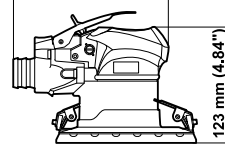
SV3 = 142mm (5.59")



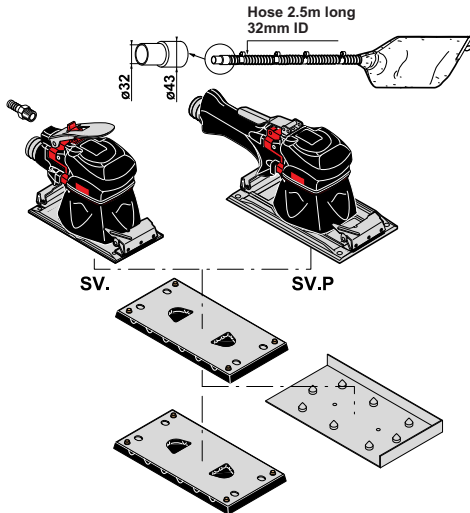
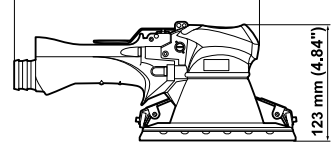
SV.P = 242 mm (9.53")



SV.-8/-14 = 166 mm (6.54")



SV.P8/14 = 266 mm (10.47")



SV.. / SV.P

ACCESSORIES INCLUDED

- 1/4" air hose nipple for 8mm (5/16") ID hose
- Complete dust extraction kit for version (-14)

PART NO.

615 704 019 0

615 399 471 0

Pads and Drilling Plate

- Pad 170x93mm (6⁵/₈"x 3⁵/₈") - SV3(P)
- Pad 215x113mm (8¹/₂"x 4¹/₂") - SV4P

Pad

Drilling plate
for release
(-8) or (-14)

615 350 018 0

615 990 094 0

615 350 019 0

615 990 095 0

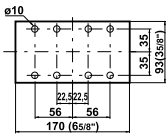
OPTIONAL ACCESSORY

- Pad 170x93mm (6⁵/₈"x 3⁵/₈") - 8 side holes SV3(P)

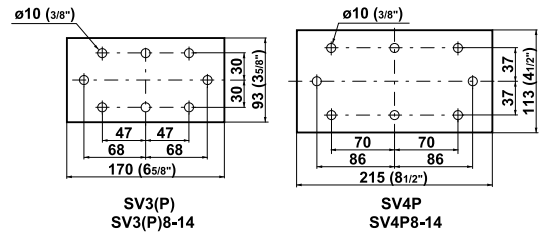
PART NO.

615 350 057 0

8 side holes



PAD DIMENSIONS



Orbital sanders for abrasive sheets

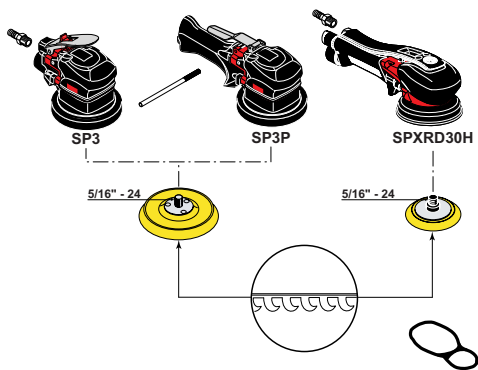
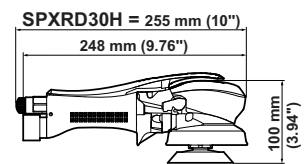
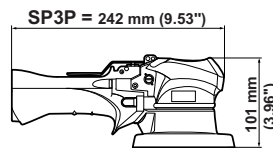
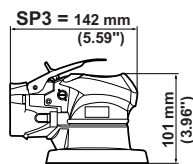
170 x 93mm (6⁵/₈"x 3⁵/₈") - 215 x 113mm (8¹/₂"x 4¹/₂")
 375 Watts (0.5 hp) - 8000 rpm



Caution: comply with the speeds recommended by component and abrasive manufacturers.

PAD SIZE		MODEL	PART NUMBER	MODEL	PART NUMBER	MODEL	PART NUMBER	WEIGHT		AIR CONSUMPTION AT MAX. OUTPUT		AIR INLET THREAD		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	6 ⁵ / ₈ x 3 ⁵ / ₈	SV3	615 170 066 0	SV3-8	615 170 074 0	SV3-14	615 170 070 0	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	6 ⁵ / ₈ x 3 ⁵ / ₈	SV3P	615 170 067 0	SV3P8	615 170 075 0	SV3P14	615 170 071 0	1.8	3.96	11	23	1/4	8	5/16	
215x113	8 ¹ / ₂ x 4 ¹ / ₂	SV4P	615 170 068 0	SV4P8	615 170 076 0	SV4P14	615 170 072 0	1.9	4.19	11	23	1/4	8	5/16	

Accessories



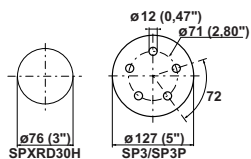
SP3 / SP3P / SPXRD30H

ACCESSORIES INCLUDED

	SP3/SP3P	SPXRD30H
• 1/4" air hose nipple for 8mm (5/16") ID hose	615 704 019 0	615 705 009 0
• 1/4" air hose nipple for 6mm (1/4") ID hose	615 595 202 0	
• Clamping lever		615 303 109 0
• Small grip (medium-size grip fitted on sander)		615 571 060 0
• Bail hook		
Pads: Thread 5/16" - 24		For Hook & Loop abrasive
• Pad ø 127mm (5") for SP3 / SP3P		615 990 123 0
• Pad ø 76mm (3") for SPXRD30H		615 990 178 0

OPTIONAL ACCESSORIES

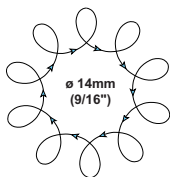
	SPXRD30H
• Pad cooling kit	615 397 037 0



Random orbital polishers

Ø 76mm (3") - Ø 127mm (5")

210 - 375 Watts (0.3 - 0.5 hp) - 10000 - 12000 rpm



SP3



SP3P

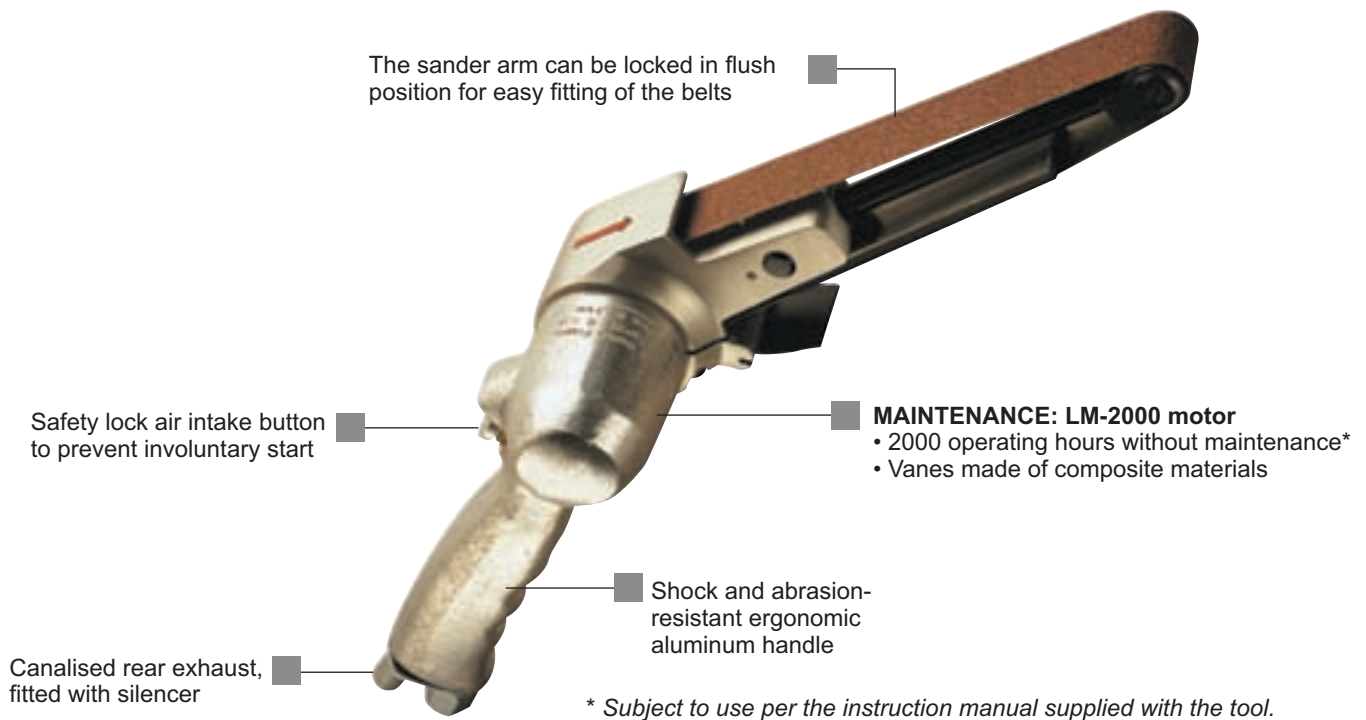


SPXRD30H

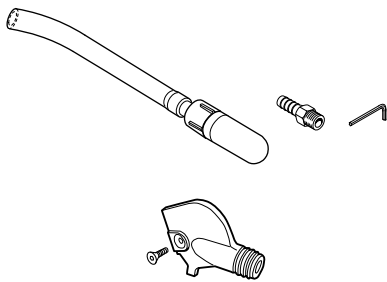
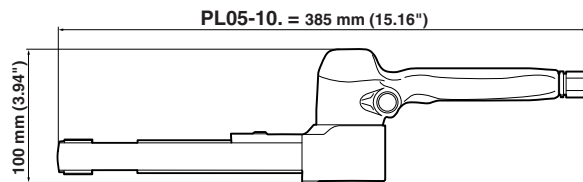
Caution: comply with the speeds recommended by component and abrasive manufacturers.

PAD SIZE		MODEL	PART NUMBER	WEIGHT		AIR CONSUMPTION AT MAX. OUTPUT		AIR INLET THREAD	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	SP3	615 170 198 0	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	SPXRD30H	615 170 332 0	0.9	1.98	11	23	1/4	8	5/16
Ø 127	5	SP3P	615 170 197 0	1.3	2.86	11	23	1/4	8	5/16

Belt sanders



Accessories



PL05-10D / PL05-10E / PL05-10F

ACCESSORIES INCLUDED

	PART NO.
• Exhaust hose	615 396 022 0
• 1/4" air hose nipple for 6mm (1/4") ID hose	615 705 009 0
• Hex. key 4 mm	615 802 054 0

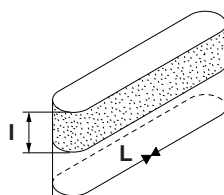
OPTIONAL ACCESSORIES

	PART NO.
• Suction cap for 32mm (1 1/4") ID vacuum hose	321003
• Screw FHc M4x10	615 616 118 0

OPTIONAL ACCESSORIES

COATED ABRASIVE BELTS

L x l		GRIT NUMBER				
mm	in.	P40	P50	P60	P90	P100
480 x 16	18 7/8 x 5/8	615 848 313 0	615 848 314 0	615 848 315 0	615 848 316 0	615 848 317 0
480 x 20	18 7/8 x 25/32	615 848 323 0	615 848 324 0	615 848 325 0	615 848 326 0	615 848 327 0
480 x 25	18 7/8 x 63/64	615 848 333 0	615 848 334 0	615 848 335 0	615 848 336 0	615 848 337 0



L x l		GRIT NUMBER			
mm	in.	P120	P150	P190	P240
480 x 16	18 7/8 x 5/8	615 848 318 0	615 848 319 0		
480 x 20	18 7/8 x 25/32	615 848 328 0	615 848 329 0	615 848 320 0	
480 x 25	18 7/8 x 63/64	615 848 338 0	615 848 339 0	615 848 330 0	615 848 331 0

Belt sanders

300 Watts (0.4 hp) - 16000 rpm



A



B



C

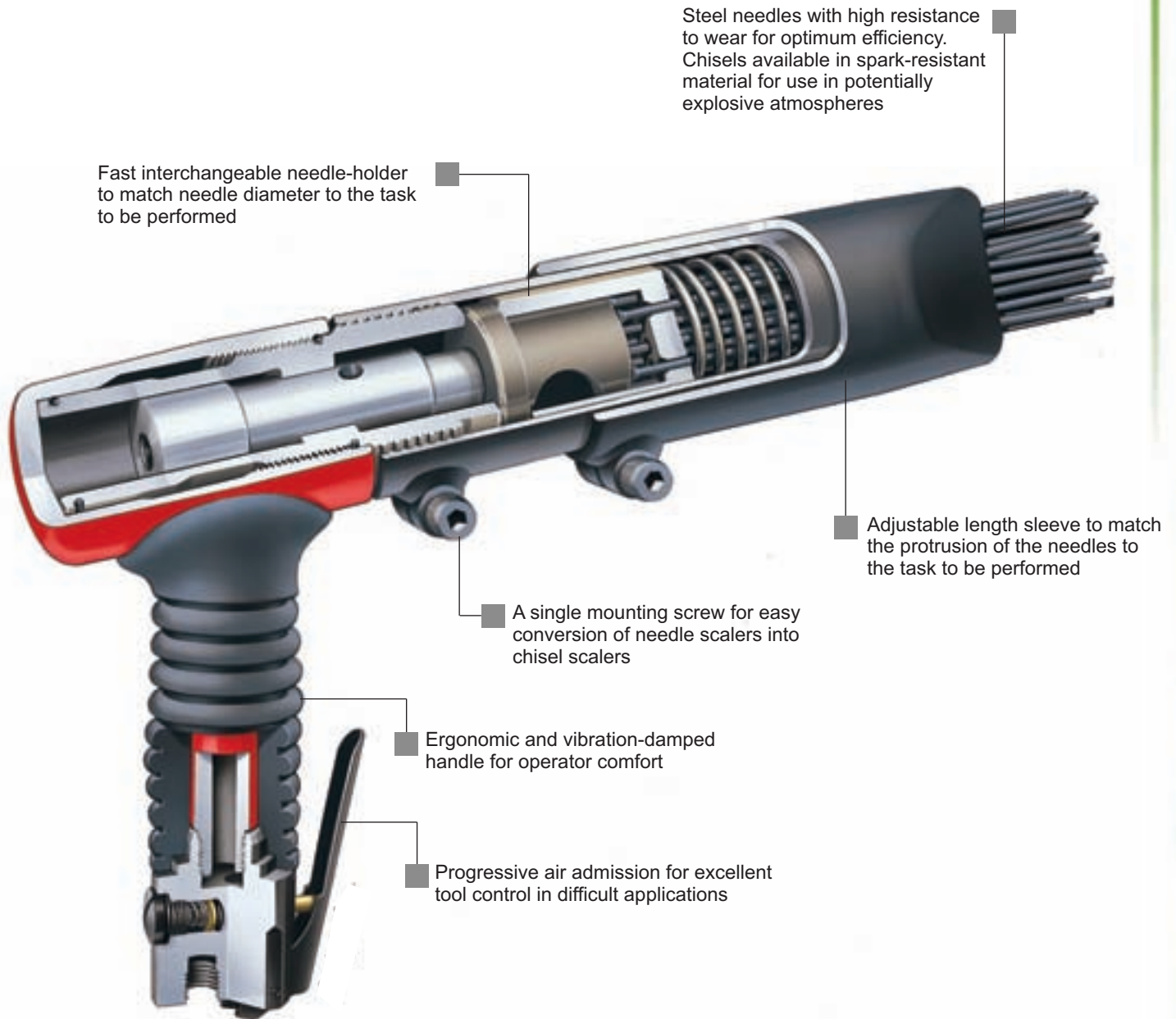


Caution: comply with the speeds recommended by component and abrasive manufacturers.

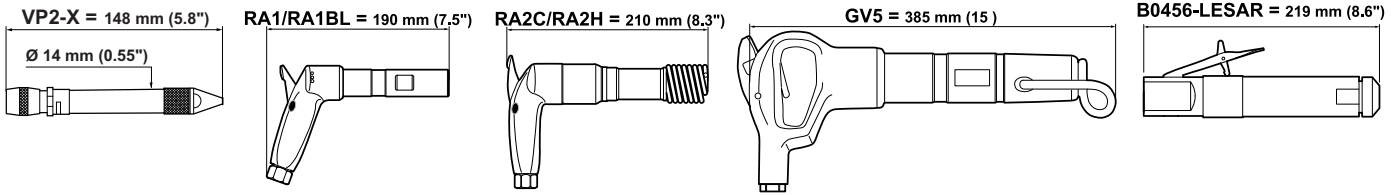
PIC REF	MODEL	PART NUMBER	FREE SPEED	BELT SIZE L x l		POWER		WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR INLET THREAD	HOSE INT. Ø	
				rpm	mm	in.	W	hp	kg	lb	l/s	cfm	in.	mm
A	PL05-10D	615 170 131 0	16000	480 x 16	18 ⁷ / ₈ x 5 ¹ / ₈	300	0.4	1.2	2.6	12	25.4	1/4	6	1/4
B	PL05-10E	615 170 132 0	16000	480 x 20	18 ⁷ / ₈ x 25 ¹ / ₃₂	300	0.4	1.2	2.6	12	25.4	1/4	6	1/4
C	PL05-10F	615 170 133 0	16000	480 x 25	18 ⁷ / ₈ x 63 ¹ / ₆₄	300	0.4	1.2	2.6	12	25.4	1/4	6	1/4



Needle Scalers, Chippers and Chisel Scalers



Accessories



VP2-X / RA1(BL) / RA2C(H) / GV5 / B0456

ACCESSORIES INCLUDED

ITEM	VP2-X	RA1 / RA2	B0456
• Air Hose - 3.2mm bore - Length 2m (78.7") - 1/8" - 1/4" BSP	75902		
• Tungsten carbide tipped needle	63213		
• Key	63533		
• 1/4" air hose nipple for 10mm (3/8") ID hose		615 705 006 0	
• Sealing chisel			P084376

OPTIONAL ACCESSORIES

Shank \varnothing 9.5 x 9mm (3/8" x 23/64")

ITEM	RA1	RA1 BL
1 Chisel, width 9mm (23/64"), length 150mm (529/32")	615 040 115 0	
2 Chisel, \varnothing 6mm (15/64"), length 250mm (927/32")	615 804 437 0	
3 Flat chisel, 3mm (1/8"), length 250mm (927/32")	615 804 438 0	
4 Chisel thickness, 6mm (15/64"), length 145mm (545/64")		615 041 114 0
4 Chisel thickness, 6mm (15/64"), length 200mm (77/8")		615 041 120 0

Shank 126 - \varnothing 15 x 55mm (19/32" x 211/64")

ITEM	RA2C
5 Chisel, width 16mm (5/8"), length 185mm (79/32")	615 045 118 0
5 Chisel, width 16mm (5/8"), length 250mm (927/32")	615 804 088 0
6 Pick, length 185mm (79/32")	615 045 218 0

Shank 122 - Hex 12.5 x 55mm (8/16" x 211/64")

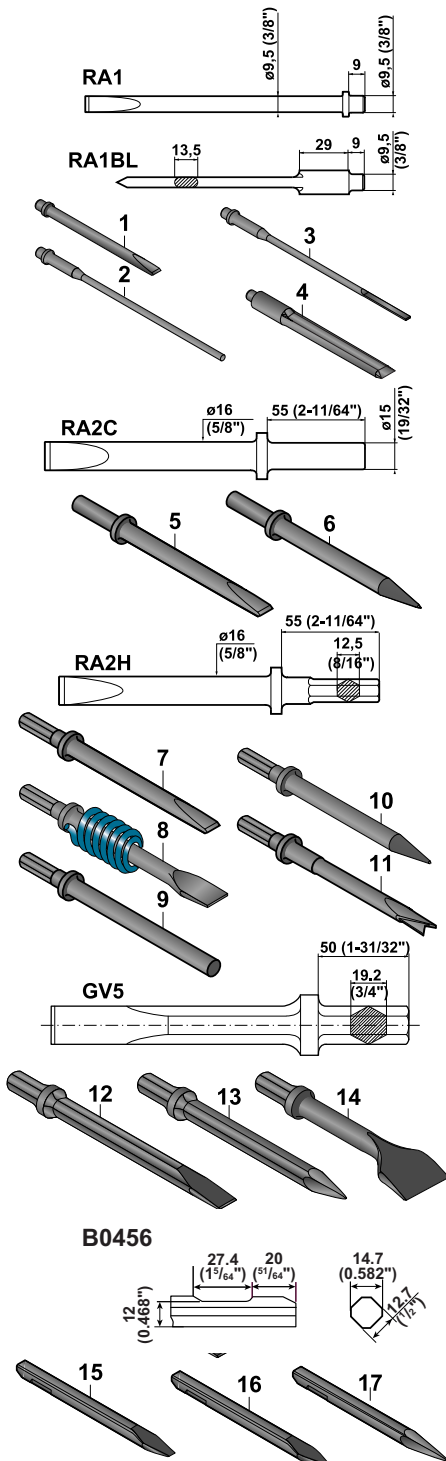
ITEM	RA2H
7 Chisel, width 16mm (5/8"), length 185mm (79/32")	615 046 118 0
7 Chisel, width 16mm (5/8"), length 250mm (927/32")	615 804 089 0
7 Chisel, width 16mm (5/8"), length 310mm (1213/64")	615 804 431 0
7 Chisel, width 16mm (5/8"), length 500mm (1911/16")	615 804 090 0
8 Chisel*, width 24mm (15/16"), length 310mm (1213/64")	615 804 440 0*
8 Chisel*, width 50mm (131/32"), length 250mm (927/32")	615 804 421 0*
*Supplied with retaining spring 615 690 089 0 (former TR0289)	
9 Blank tool, length 175mm (627/64")	615 046 017 0
9 Blank tool, length 240mm (929/64")	615 046 024 0
10 Pick, length 185mm (79/32")	615 046 218 0
10 Pick, length 250mm (927/32")	615 804 092 0
11 Blade cutter, length 200mm (77/8")	615 046 920 0

Hex. shank 19.2 x 50mm (3/4" x 131/32")

ITEM	GV5
12 Chisel, width 19mm (3/4"), length 300mm (1115/16")	615 804 095 0
12 Chisel, width 19mm (3/4"), length 500mm (1911/16")	615 804 096 0
13 Pick, length 300mm (1115/16")	615 804 093 0
13 Pick, length 500mm (1911/16")	615 804 094 0
14 Scraper, width 60mm (223/64"), length 250mm (927/32")	615 804 097 0

Shank: Qtr. Oct WF 1/2" (B0456)

ITEM	B0456
15 Flat Chisel, 15.9mm (5/8") face, length 191mm (71/2")	P073225
15 Flat Chisel, 35mm (13/8") face, length 102mm (4")	P072213
15 Flat Chisel, 35mm (13/8") face, length 229mm (9")	P084175
15 Flat Chisel, 35mm (13/8") face, length 305mm (12")	P084176
15 Flat Chisel, 35mm (13/8") face, length 457mm (18")	P084177
15 Flat Chisel, 44mm (13/4") face, length 213mm (53/8")	P070982
• Angle Scaling, 35mm (13/8") face, length 165mm (61/2")	P084376
16 Cape 6.4mm (1/4") face length 191mm (71/2")	P073224
17 Diamond Pt. 6.4mm (1/4") face length 191mm (71/2")	P073223



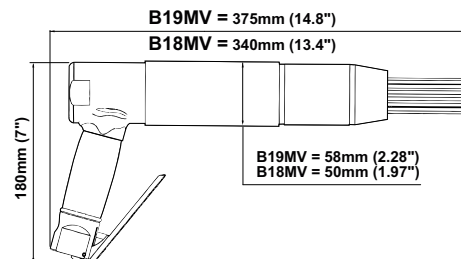
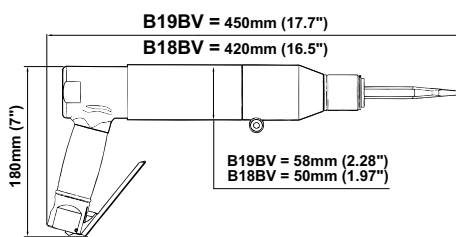
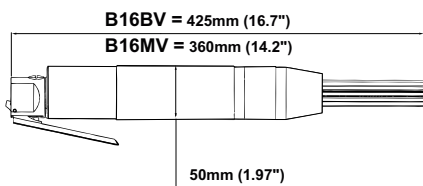
Air Scribe, Chisel Scalars and Weld Flux Chipper



All models: supplied without chisel, except for B0456

PIC REF	MODEL	PART NUMBER	BORE & STROKE		SHANK	BLOWS PER MINUTE	WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR INLET THREAD		HOSE INT. Ø	
			mm	in.			kg	lb.	l/s	cfm	in.	mm	in.	
AIR SCRIBE														
A	VP2-X	671094	-	-	-	11400	0.1	0.2	0.9	1.9	1/8	3.2	1/8	
CHISEL SCALERS														
B	RA1	615 174 018 0	13 x 45	0.51 x 1.77	Round	4000	1.1	2.4	3.0	7.0	1/4	10	3/8	
B	RA1 BL	615 174 019 0	13 x 45	0.51 x 1.77	Flatnosed	4000	1.1	2.4	3.0	7.0	1/4	10	3/8	
C	RA2C	615 174 020 0	18 x 58	0.71 x 2.28	126	3500	2.0	4.4	4.6	9.7	1/4	10	3/8	
C	RA2H	615 174 021 0	18 x 58	0.71 x 2.28	122	3500	2.0	4.4	4.6	9.7	1/4	10	3/8	
PNEUMATIC HAMMER														
D	GV5	615 174 017 0	28 x 52.5	1.1 x 2.07	19 x 50	2400	5.1	11.2	8.3	17.6	1/2	13	1/2	
WELD FLUX CHIPPER														
E	B0456-LESAR	T013046	23.8 x 25.4	15/16 x 1.0	Qtr. Oct WF 1/2"	4300	1.6	3.5	4.7	10.0	1/4	10	3/8	

Accessories



B16MV / B18MV / B19MV

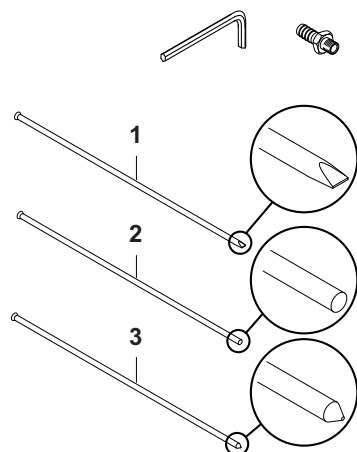
ACCESSORIES INCLUDED

- Hex. Key 6mm
- 1/4" air hose nipple for 10mm (3/8") ID hose

PART NO.
615 802 056 0

OPTIONAL ACCESSORIES

ITEM	PART NO.
1 Chisel tip needles, \varnothing 3mm (1/8"), length 178mm (7") (Qty 100)	615 399 819 0
1 Chisel tip needles, \varnothing 4mm (5/32"), length 178mm (7") (Qty 100)	615 399 820 0
2 Flat tip needles, \varnothing 2mm (5/64"), length 178mm (7") (Qty 100)	615 399 816 0
2 Flat tip needles, \varnothing 3mm (1/8"), length 178mm (7") (Qty 100)	615 399 817 0
2 Flat tip needles, \varnothing 4mm (5/32"), length 178mm (7") (Qty 100)	615 399 818 0
3 Pointed tip needles, \varnothing 3mm (1/8"), length 178mm (7") (Qty 100)	615 399 821 0
3 Pointed tip needles, \varnothing 4mm (5/32"), length 178mm (7") (Qty 100)	615 399 822 0



B16BV / B18BV / B19BV

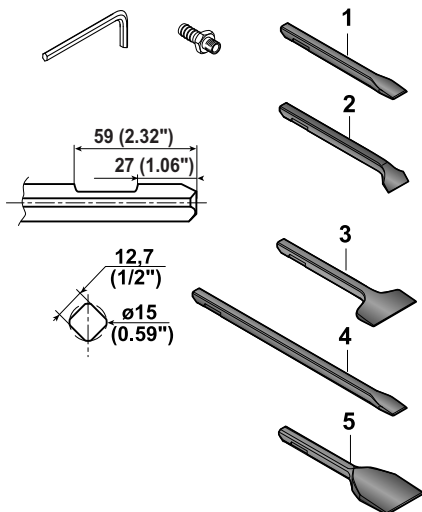
ACCESSORIES INCLUDED

- Hex. Key 6mm
- 1/4" air hose nipple for 10mm (3/8") ID hose
- 1 Chisel, width 19mm (3/4"), length 178mm (7") for B18BV & B19BV
- 2 Angle chisel, width 35mm (1 3/8"), length 178mm (7") for B16BV

PART NO.
615 802 056 0

OPTIONAL ACCESSORIES

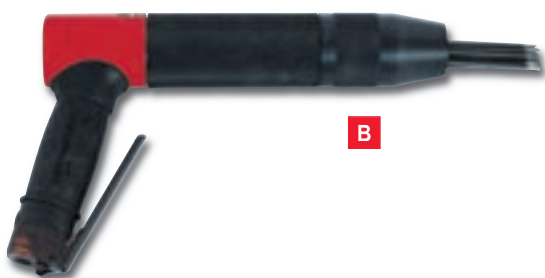
ITEM	PART NO.
1 Chisel, width 19mm (3/4"), length 178mm (7")	615 804 618 0
2 Angle chisel, width 35mm (1 3/8"), length 178mm (7")	615 804 622 0
3 Chisel, width 64mm (2 1/2"), length 178mm (7")	615 804 619 0
4 Chisel, width 19mm (3/4"), length 254mm (10")	615 804 620 0
5 Chisel, width 50mm (2"), length 178mm (7")	615 804 621 0



Vibration-Damped Chippers and Needle Scalers



A



B



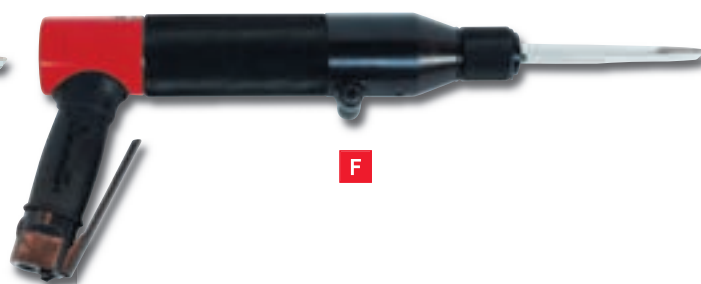
C



D



E



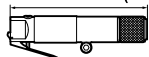
F

*B16BV Hammer is delivered with an angle chisel and B18BV / B19BV Hammers are delivered with standard straight chisel
All Needle Scalers are delivered with Chisel Tipped needles.*

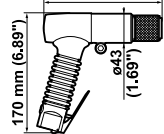
PIC REF	MODEL	PART NUMBER	BORE & STROKE		NEEDLE / CHISEL CAPACITY	BLOWS PER MINUTE	WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR INLET THREAD	HOSE INT. Ø	
			mm	in.			kg	lb.	l/s	cfm		in.	mm
VIBRATION-DAMPED NEEDLE SCALERS													
A	B16MV	615 174 050 0	23.5 x 11	0.92 x 0.43	19 x 3 (1/8)	2 400	2.4	5.3	2.4	5.1	1/4	10	3/8
B	B18MV	615 174 052 0	23.5 x 11	0.92 x 0.43	19 x 3 (1/8)	2 400	2.7	5.9	2.0	4.2	1/4	10	3/8
C	B19MV	615 174 054 0	34.4 x 20	1.35 x 0.79	28 x 3 (1/8)	3 000	3.6	7.9	2.1	4.4	1/4	10	3/8
VIBRATION-DAMPED CHIPPERS													
D	B16BV	615 174 051 0	23.5 x 11	0.92 x 0.43	1/2" Square	2 400	2.8	6.2	2.4	5.1	1/4	10	3/8
E	B18BV	615 174 053 0	23.5 x 11	0.92 x 0.43	1/2" Square	2 400	3.1	6.8	2.0	4.2	1/4	10	3/8
F	B19BV	615 174 055 0	34.4 x 20	1.35 x 0.79	1/2" Square	3 000	4.1	9.0	2.1	4.4	1/4	10	3/8

Accessories

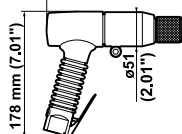
B15B = 201 mm (7.91")
B16B = 231 mm (9.09")



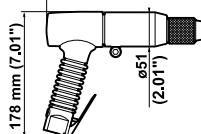
B18B = 173 mm (6.81")



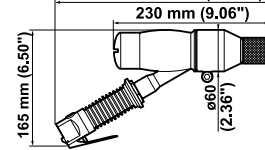
B19B = 191 mm (7.52")



B19B-1 = 218 mm (8.58")



B21B = 310 mm (12.20")



B15B / B16B / B18B / B19B / B19B1 / B21B

ACCESSORIES INCLUDED

- Hex. Key 6mm (1/4")
- 1/4" air hose nipple for 10mm ID hose

PART NO.
615 802 056 0

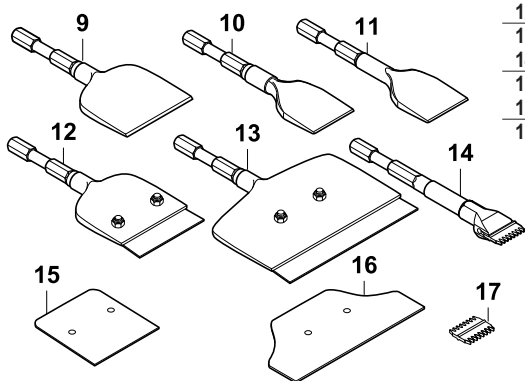
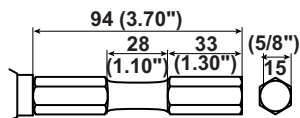
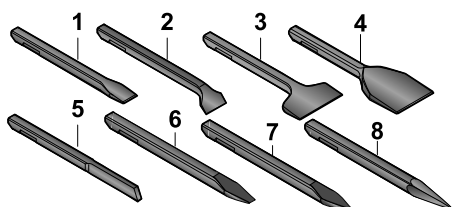
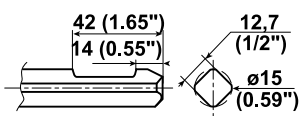
OPTIONAL ACCESSORIES

ISO 1/2" Square Shank Chisels

ITEM	B15B / B16B B18B / B19B / B21B
1 Chisel, width 19mm (3/4"), length 180mm (7")	615 804 443 0
2 Angle chisel, width 35mm (1 3/8"), length 180mm (7")	615 804 444 0
3 Chisel, width 60mm (3 23/64"), length 180mm (7")	615 804 445 0
4 Spark-resistant chisel, width 50mm (1 31/32")	615 003 900 0
5 Chisel, width 6mm (1/4"), length 180mm (7") for brick joints	615 804 062 0
6 Flat Chisel, 15.9mm (5/8") face, length 191mm (7 1/2")	P073225
6 Flat Chisel, 35mm (1 3/8") face, length 102mm (4")	P072213
6 Flat Chisel, 35mm (1 3/8") face, length 229mm (9")	P084175
6 Flat Chisel, 35mm (1 3/8") face, length 305mm (12")	P084176
6 Flat Chisel, 35mm (1 3/8") face, length 457mm (18")	P084177
6 Flat Chisel, 44mm (1 3/8") face, length 213mm (5 3/8")	P070982
7 Cape 6.4mm (1/4") face length 191mm (7 1/2")	P073224
8 Diamond Pt. 6.4mm (1/4") face length 191mm (7 1/2")	P073223

Hex. Shank 5/8" Chisels

ITEM	B19B1
9 Chisel, width 100mm (3 15/16"), length 180mm (7")	615 804 441 0
10 Chisel, width 50mm (1 31/32"), length 180mm (7")	615 804 442 0
11 Spark-resistant chisel, width 50mm (1 31/32")	615 002 900 0
12 Scaling tool, width 100mm (3 15/16")	615 002 901 0
13 Scaling tool, width 200mm (7 7/8")	615 002 902 0
14 Comb-type chisel, width 38mm (1 1/2"), length 180mm (7")	615 002 903 0
15 Spare blade, width 100mm (3 15/16") (Qty 5)	615 250 527 0
16 Spare blade, width 200mm (7 7/8") (Qty 5)	615 250 528 0
17 Spare comb, width 38mm (1 1/2")	615 250 539 0



Chippers - Chisel Scalers



A



B



C



D

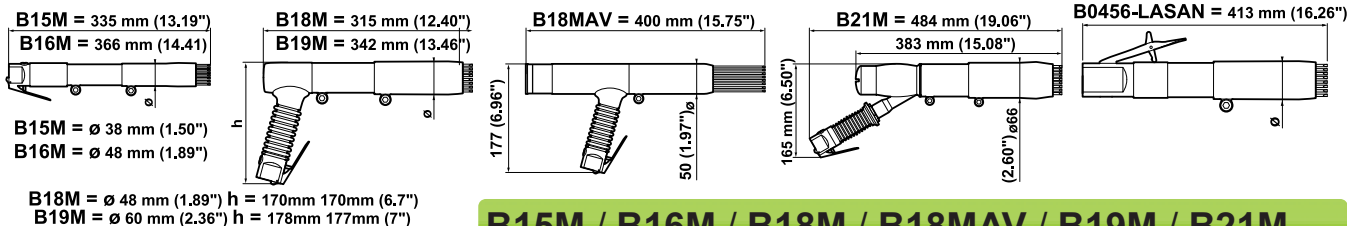


E

All models: Supplied without chisel

PIC REF	MODEL	PART NUMBER	BORE & STROKE		SHANK	BLOWS PER MINUTE	WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR INLET THREAD	HOSE INT. Ø	
			mm	in.			kg	lb.	l/s	cfm		in.	mm
A	B15B	615 174 023 0	18.0 x 30.0	0.71 x 1.18	ISO 1/2 square	3800	1.5	3.3	1.4	3.0	1/4	8	5/16
A	B16B	615 174 025 0	23.5 x 35.6	0.92 x 1.40	ISO 1/2 square	3000	2.0	4.4	2.6	5.5	1/4	10	3/8
B	B18B	615 174 027 0	23.5 x 35.6	0.92 x 1.40	ISO 1/2 square	3000	2.0	4.4	2.6	5.5	1/4	10	3/8
C	B19B	615 174 030 0	28.6 x 39.0	1.12 x 1.53	ISO 1/2 square	2200	3.0	6.6	3.8	8.0	1/4	10	3/8
D	B19B1	615 174 031 0	28.6 x 39.0	1.12 x 1.53	Hex. 5/8	2200	3.0	6.6	3.8	8.0	1/4	10	3/8
E	B21B	615 174 040 0	33.0 x 49.2	1.30 x 1 ¹⁵ / ₁₆	ISO 1/2 square	2200	4.0	8.8	4.0	8.5	1/4	10	3/8

Accessories



B15M / B16M / B18M / B18MAV / B19M / B21M

ACCESSORIES INCLUDED

- Hex. Key 6mm
- 1/4" air hose nipple for 10mm (3/8") ID hose

PART NO.

615 802 056 0

OPTIONAL ACCESSORIES

ITEM	B15M	B16M/B18M
1 1/2" square tool retainer	615 250 524 0	615 250 525 0
2 Round adjustable sleeve	615 250 523 0	615 250 515 0
3 Needle holder for 29 needles \varnothing 2mm (5/64")	615 250 531 0	
3 Needle holder for 51 needles \varnothing 2mm (5/64")		615 250 532 0

OPTIONAL ACCESSORIES

ITEM	B19M	B21M
4 1/2" square tool retainer	615 250 538 0	615 250 536 0
5 5/8" hex. tool retainer	615 250 526 0	
6 Round adjustable sleeve	615 250 519 0	615 250 535 0
7 Needle holder for 19 needles \varnothing 4mm (5/32")	615 250 533 0	
7 Needle holder for 65 needles \varnothing 2mm (5/64")	615 250 543 0	
7 Needle holder for 49 needles \varnothing 3mm (1/8")		615 250 537 0

Needles Sets - for all Models

8 Chisel tip needles, \varnothing 3mm (1/8"), length 178mm (7") (Qty 100)	615 399 819 0
9 Flat tip needles, \varnothing 2mm (5/64"), length 178mm (7") (Qty 100) except for B18MAV	615 399 816 0
9 Flat tip needles, \varnothing 3mm (1/8"), length 178mm (7") (Qty 100)	615 399 817 0
9 Flat tip needles, \varnothing 4mm (5/32"), length 178mm (7") (Qty 100) except for B18MAV	615 399 818 0
10 Pointed tip needles, \varnothing 3mm (1/8"), length 178mm (7") (Qty 100)	615 399 821 0
10 Pointed tip needles, \varnothing 4mm (5/32"), length 178mm (7") (Qty 100) except for B18MAV	615 399 822 0

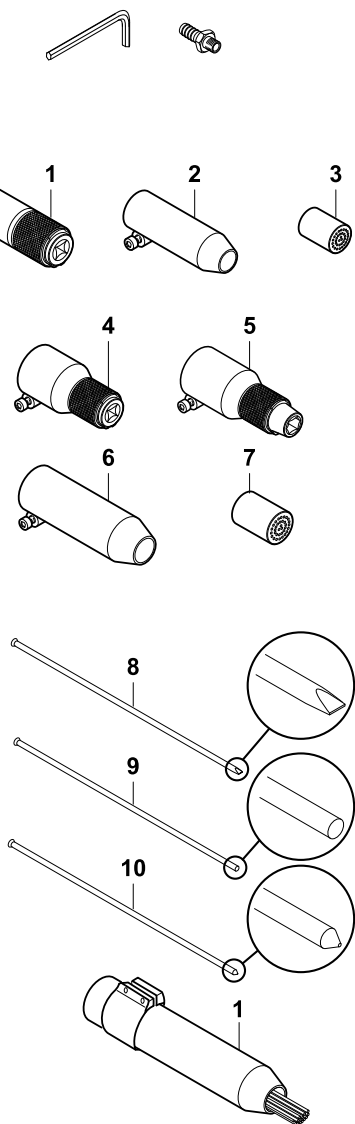
B0456

OPTIONAL ACCESSORIES

ITEM	B0456-LASAN
1 Round Nose	P103105

Needles Sets

• Steel needle set, \varnothing 3mm (1/8"), length 178mm (7") Qty. 19	P100146
• Steel needle set, \varnothing 2mm (5/64"), length 178mm (7") Qty. 29	NP123905
• Steel needle set, \varnothing 2mm (5/64"), length 178mm (7") Qty. 53	NP123906
• Steel needle set, \varnothing 3mm (1/8"), length 127mm (5") Qty. 19	P136403
• Steel needle set, \varnothing 3mm (1/8"), length 178mm (7") Qty. 12	NP123901
• Steel needle set, \varnothing 3mm (1/8"), length 178mm (7") Qty. 23	NP123902
• Steel needle set, \varnothing 3mm (1/8"), length 178mm (7") Qty. 28	NP123903
• Steel needle set, \varnothing 3mm (1/8"), length 178mm (7") Qty. 250	NP137638
• Stainless, needle set, \varnothing 3mm (1/8"), length 178mm (7") Qty. 19	P106454



Standard Needle Scalers and Vibration-Damped Needle Scaler



A



B



C



D



E

All models: Supplied with chisel tip needles and flatnosed sleeve except for B18MAV & B0456 (round sleeve) and B21M with flat needles.

*Entire needle attachment can be removed from B0456-LASAN.

PIC REF	MODEL	PART NUMBER	BORE & STROKE		NEEDLE CAPACITY No. x \varnothing mm (in.)	BLOWS PER MINUTE	WEIGHT		AIR CONSUMPTION AT FREE SPEED		AIR INLET THREAD		HOSE INT. \varnothing	
			mm	in.			kg	lb.	l/s	cfm	in.	mm	in.	
STANDARD NEEDLE SCALERS														
A	B15M	615 174 024 0	18.0 x 30.0	0.71 x 1.18	12 x 3 (1/8)	3800	1.6	3.5	1.4	3.0	1/4	8	5/16	
A	B16M	615 174 026 0	23.5 x 35.6	0.92 x 1.40	19 x 3 (1/8)	3000	2.6	5.7	2.6	5.5	1/4	10	3/8	
B	B18M	615 174 028 0	23.5 x 35.6	0.92 x 1.40	19 x 3 (1/8)	3000	2.6	5.7	2.6	5.5	1/4	10	3/8	
B	B19M	615 174 032 0	28.6 x 39.0	1.12 x 1.53	28 x 3 (1/8)	2200	3.7	8.2	3.8	8.0	1/4	10	3/8	
C	B21M	615 174 041 0	33.0 x 49.2	1.30 x 1 ¹⁵ / ₁₆	35 x 4 (9/32)	2200	5.6	12.4	4.0	8.5	1/4	10	3/8	
D	B0456-LASAN*	T013049	23.8 x 25.4	1 ⁵ / ₁₆ x 1	19 x 3 (1/8)	4300	2.7	6.0	6.6	13.9	1/4	10	3/8	
VIBRATION-DAMPED NEEDLE SCALER														
E	B18MAV	615 174 029 0	23.5 x 35.6	0.92 x 1.40	19 x 3 (1/8)	3000	3.5	7.7	2.6	5.5	1/4	10	3/8	



Riveting & Drilling - Selection Guide

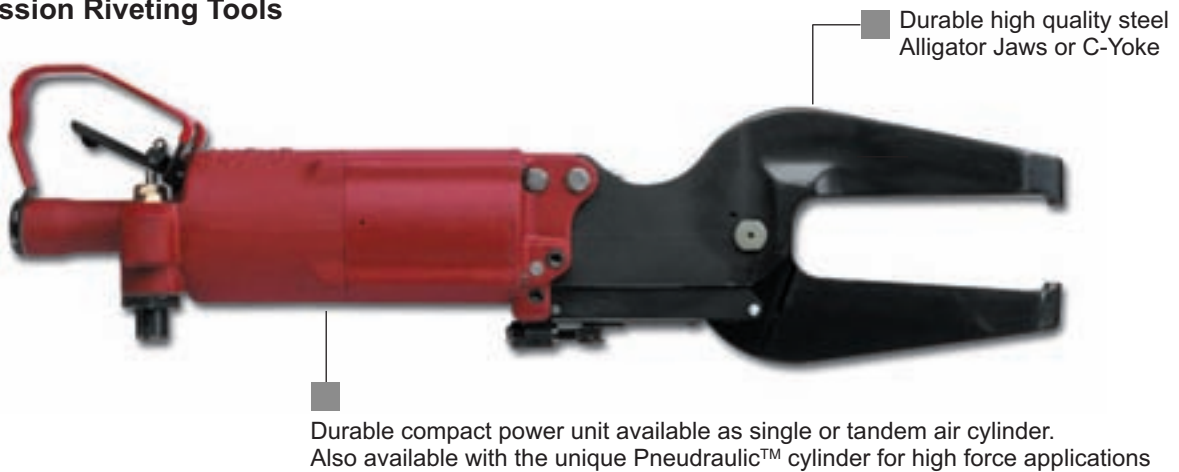
TOOL TYPE	ACCESSORIES	PAGE
RIVETING HAMMERS		234-237
		
COMPRESSION TOOLS - RIVETING		238-245
		
PISTOL GRIP DRILLS		246-251
		
STRAIGHT GRIP DRILLS		252
		
ANGLE DRILLS - Compact 90° Angle Head - Standard 90° Angle Head Heavy Duty 90° Angle Head		253-256
		
ANGLE DRILLS - Compact 30°/45° & 360° Angle Head Standard 360° Angle Head		257-258
		
TAPPERS		259
		
MULTI DRILLS		260-261
		
SPECIALITY TOOLS - Hole Deburring & Rivet Shaving Rack Feed Drills		262-265
		
ACCESSORIES		266-269
		
CFD - PECK-CFD - Portable Feed Drill		270-275
		



Riveting Hammers, Compression Tools Riveting

A complete range of riveting tools to accommodate many hand held applications, from compression riveters to riveting hammers, Desoutter can provide riveting tools to suit most needs

Compression Riveting Tools



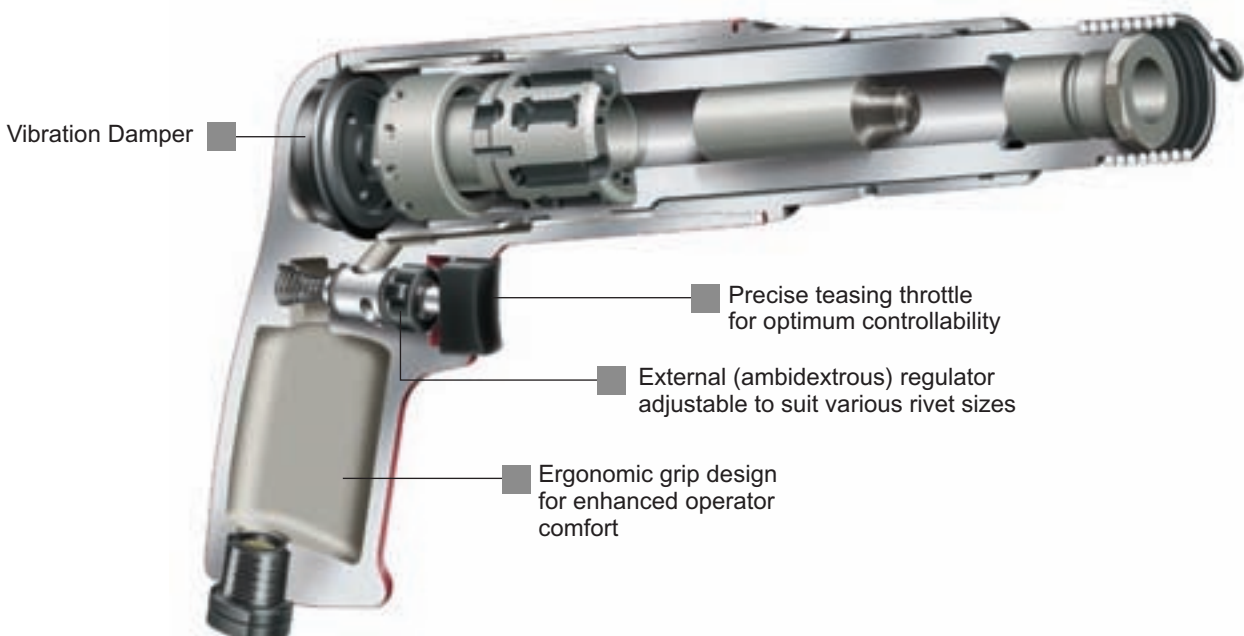
Percussive Riveting Tools

Conventional riveting hammers CP4444 & CP4447 provide the power capable of upsetting aluminium rivets up to $\varnothing 9.5\text{mm}$ (3/8") and steel rivets up to $\varnothing 7.9\text{mm}$ (5/16").

'Vibration Reduced' Percussive Riveting Tools

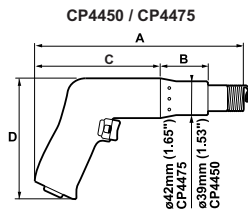
In pistol form the CP4450 with a capacity up to $\varnothing 6.4\text{mm}$ (1/4") and the new high force CP4475 with a capacity up to $\varnothing 9.5\text{mm}$ (3/8").

The CP4450-S in-line 'Vibration reduced' riveting hammer is ideal for over structure application when vertical application is necessary

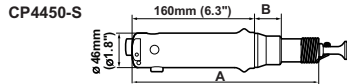
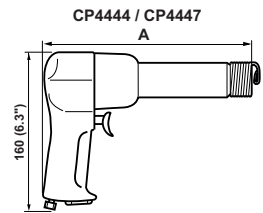


Accessories

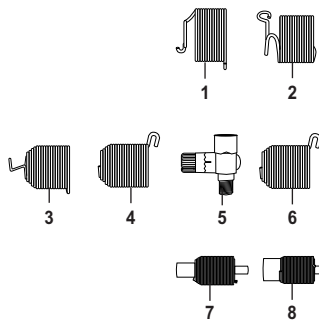
Model	A		B		C		D	
	mm	in.	mm	in.	mm	in.	mm	in.
CP4450-2	213	8.4	32	1.26	102	4.0	138	5.4
CP4450-3	226	8.9	32	1.26	102	4.0	138	5.4
CP4450-4	251	9.9	60	2.36	102	4.0	138	5.4
CP4475-3	275	10.8	54	2.13	180	7.1	140	5.5
CP4475-4	300	11.8	79	3.11	180	7.1	140	5.5
CP4475-6	351	13.8	130	5.12	180	7.1	140	5.5



Model	A	
	mm	in.
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



Model	A		B	
	mm	in.	mm	in.
CP4450-S-2	220	8.7	32	1.26
CP4450-S-3	223	9.2	32	1.26
CP4450-S-4	258	10.2	60	2.36



CP4444 / CP4447 / CP4450 / CP4475 / CP4450-S

ACCESSORIES INCLUDED

ITEM	CP4444 CP4450(S)	CP4447 CP4475
1 Light Wire Quick-Change Retainer	A046095	A047095
2 Wire Quick-Change Retainer		

OPTIONAL ACCESSORIES

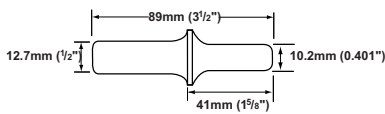
ITEM	CP4444 CP4450	CP4447 CP4475
3 Zip-Quick Retainer	A046094	
4 Beehive Retainer	A046096	
5 Air Inlet Regulation (for CP4450-S only)	CA085203	
6 Beehive Retainer		A047096
7 Nail Driving Attachment for 20-60 Penny Nail Size (for CP4447-RUSAB & CP4475)		P042448
8 Nail Driving Attachment for 12" Spikes (for CP4447-RUVAB)		P047810

CP4444 / CP4450 / CP4450-S

Type I Rivet Sets ø 10.2mm (0.401")

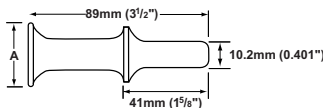
RIVET HEAD CUPPING	2.4mm (3/32")	3.2mm (1/8")	4.0mm (5/32")	4.8mm (3/16")	6.4mm (1/4")
• Round (AN-430)	P089206	P089207	P089208	P089209	P089210*
• Brazier (AN-455)	P089211	P089212	P089213	P089214	P089215*
• Universal (AN-470)	P089221	P089222	P089223	P089224	P089225*
• Soft Blank Set	P071108				
• Hardened Blank Set	P080178				

* Must use Light Wire Quick-Change Retainer, A046095 with these sets



Type I Flush Rivet Sets ø 10.2mm (0.401")

	A		CP4444/4450 .401 SHANK
	mm	in	
•	25.4	1"	A046090
•	31.8	1 1/4"	A089232
•	38.1	1 1/2"	A089233
•	44.5	1 3/4"	A046091

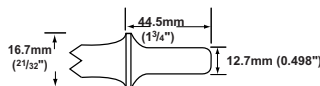


CP4447 / CP4475

Type D Rivet Sets ø 12.7mm (0.498")

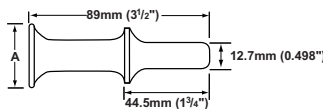
RIVET HEAD CUPPING	RIVET SET PART NO. BY RIVET BODY DIA.		
	4.8mm (3/16")	6.4mm (1/4")	8mm (5/16")
• Round (AN-430)	P089240	P089241	P089242*
• Brazier (AN-455)	P089244	P089245	
• Modified Brazier (AN-456)	P089248	P089244	P089245*
• Universal (AN-470)	P089252	P089253	P089254*
• Soft Blank Set	P070995		
• Hardened Blank Set	P080198		

* Must use Light Wire Quick-Change Retainer, A047095



Type I Flush Rivet Sets ø 12.7mm (0.498")

	A		CP4447/4475 .498 SHANK
	mm	in	
•	31.8	1 1/4"	A047091



Standard and Vibration Reduced Riveting Hammers



Air inlet thread: 1/4" NPT/BSP

PIC REF	MODEL	PART NUMBER	AIRFRAME REF	BLOW PER MINUTE	BORE AND STROKE		ENERGY PER BLOW		CHISEL SHANK OPENING	CAPACITY COLD RIVETS		WEIGHT		HOSE INT. Ø	
					mm	in.	J	ft.lb		Dural	Steel	kg	lb	mm	in.
RIVETING HAMMERS (PISTOL GRIP) - STANDARD															
A	CP4444-RURAB	T022961	2X	2580	12.7 x 50.8mm 1/2" x 2"	4.0	2.9	TYPE 1 0.401"	3.2mm 1/8"	2.4mm 3/32"	1.0	2.2	10	3/8	
A	CP4444-RUSAB	T022962	3X	2160	12.7 x 76.2mm 1/2" x 3"	6.1	4.5	TYPE 1 0.401"	4.8mm 3/16"	4.0mm 5/32"	1.1	2.3	10	3/8	
A	CP4444-RUTAB	T022963	4X	1740	12.7 x 101.6mm 1/2" x 4"	8.1	6.0	TYPE 1 0.401"	6.4mm 1/4"	4.8mm 3/16"	1.3	2.7	10	3/8	
B	CP4447-RUSAB	T022965	5XB	1560	19.1 x 68.3mm 3/4" x 2 1/16"	12.3	9.1	TYPE D 0.498"	6.4mm 1/4"	4.8mm 3/16"	2.2	4.7	10	3/8	
B	CP4447-RUTAB	T022912	9XB	1140	19.1 x 98.4mm 3/4" x 3 7/8"	17.8	13.1	TYPE D 0.498"	7.9mm 5/16"	6.4mm 1/4"	2.3	5.1	10	3/8	
B	CP4447-RUVAB	T022964	7XB	900	19.1 x 147.6mm 3/4" x 5 13/16"	26.6	19.6	TYPE D 0.498"	9.5mm 3/8"	7.9mm 5/16"	2.7	9.0	10	3/8	
RIVETING HAMMERS (PISTOL GRIP) - VIBRATION REDUCED															
C	CP4450-2	T025189	2X	2580	12.7 x 50.8mm 1/2" x 2"	4.0	2.9	TYPE 1 0.401"	3.2mm 1/8"	2.4mm 3/32"	1.2	2.7	10	3/8	
C	CP4450-3	T025190	3X	2160	12.7 x 76.2mm 1/2" x 3"	6.1	4.5	TYPE 1 0.401"	4.8mm 3/16"	4.0mm 5/32"	1.3	2.8	10	3/8	
C	CP4450-4	T025191	4X	1740	12.7 x 101.6mm 1/2" x 4"	8.1	6.0	TYPE 1 0.401"	6.4mm 1/4"	4.8mm 3/16"	1.5	3.2	10	3/8	
D	CP4475-3	T025241	5XB	2000	19.1 x 76.2mm 3/4" x 3"	13.7	10.1	TYPE D 0.498"	6.4mm 1/4"	4.8mm 3/16"	1.8	3.9	10	3/8	
D	CP4475-4	T025242	9XB	1700	19.1 x 101.6mm 3/4" x 4"	18.3	13.5	TYPE D 0.498"	7.9mm 5/16"	6.4mm 1/4"	2.4	5.3	10	3/8	
D	CP4475-6	T025243	7XB	1250	19.1 x 152.4mm 3/4" x 6"	27.5	20.3	TYPE D 0.498"	9.5mm 3/8"	7.9mm 5/16"	2.8	6.2	10	3/8	
RIVETING HAMMERS (IN-LINE) - VIBRATION REDUCED															
E	CP4450-S-2	205 146 712 4	2X	2580	12.7 x 50.8mm 1/2" x 2"	4.0	2.9	TYPE 1 0.401"	3.2mm 1/8"	2.4mm 3/32"	1.25	2.8	10	3/8	
E	CP4450-S-3	205 146 713 4	3X	2160	12.7 x 76.2mm 1/2" x 3"	6.1	4.5	TYPE 1 0.401"	4.8mm 3/16"	4.0mm 5/32"	1.35	3.0	10	3/8	
E	CP4450-S-4	205 146 714 4	4X	1740	12.7 x 101.6mm 1/2" x 4"	8.1	6.0	TYPE 1 0.401"	6.4mm 1/4"	4.8mm 3/16"	1.45	3.2	10	3/8	

Compression Tools – Riveting – Selection



CP0214 – C Yoke

- Single and Tandem cylinder options
- Riveting Capacity –
 - ø 3.2mm (1/8") (single cylinder)
 - ø 4.8mm (3/16") (tandem cylinder)
- Lock-off throttle – reduces the risk of accidental operation



CP0341 – C Yoke

- Patented 'Pneudraulic™' air-hydraulic riveter
- Riveting Capacity –
 - ø 7.14mm (9/32")
- Lock-off throttle – reduces the risk of accidental operation
- Versatile – can accommodate various rivet lengths and joint thickness through the adjustment of air pressure (reducing setting times and eliminating the need to use set length spacer shims with the rivet sets)



CP0351 – C Yoke

- Single and Tandem cylinder options
- Riveting Capacity –
 - ø 4.8mm (3/16") (single cylinder)
 - ø 6.4mm (1/4") (tandem cylinder)
- Actuation throttle guard – reduces the risk of accidental operation
- Short stroke adjustment – aids positioning of the tool (limits the return travel of the moving set of the tool on the rivet to reduce the starting clearance between rivet and rivet sets)



CP0214 – Alligator Jaw

- Single and Tandem cylinder options
- Riveting Capacity –
 - ø 3.2mm (1/8") (single cylinder)
 - ø 4.8mm (3/16") (tandem cylinder)
- Lock-off throttle – reduces the risk of accidental operation



CP0351 – Alligator Jaw

- Single and Tandem cylinder options
- Riveting Capacity –
 - ø 4.0mm (5/32") (single cylinder)
 - ø 6.4mm (1/4") (tandem cylinder)
- Actuation throttle guard – reduces the risk of accidental operation
- Short stroke adjustment – aids positioning of the tool (limits the return travel of the moving set of the tool on the rivet to reduce the starting clearance between rivet and rivet sets)

Selection Criteria

• Type of Rivet

- Rivet material
- Rivet body diameter
- Rivet length before and after compression
- Force required to compress rivet (if known)

• What material is the rivet made from?

• What size is the rivet?

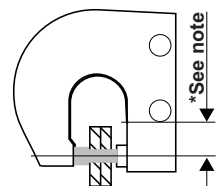
• What is the form of the rivet head?

• Components to assemble

- Access to rivet on assembly

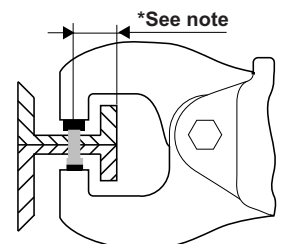
• Open access (up to 54mm (2 1/8") reach)

– 'C' Yoke tool



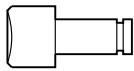
• Restricted access (up to 232mm (9 1/8") reach)

– 'Alligator' Jaw tool



- **Note:** the amount of reach required is determined by the distance from the rivet centerline to the accessible edge of the workpiece

Compression Tools – Riveting – Selection



Compression Rivet Sets

(Complete with retaining rings)

Minimum Order: 6 of any part number.

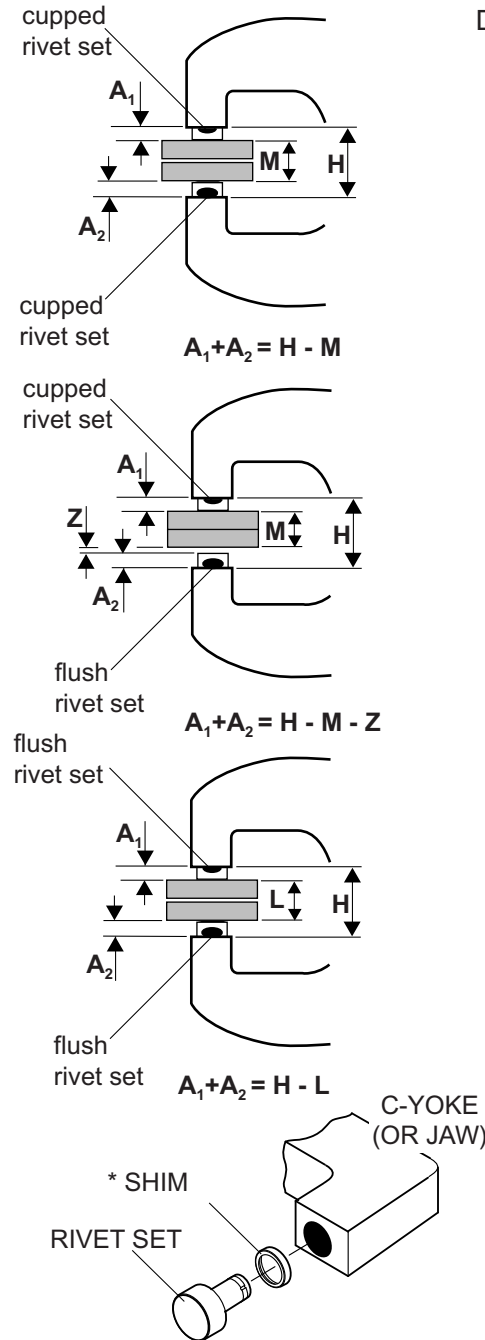
Note: The illustration above shows one rivet set. Two rivet sets are required to be used per tool. Part numbers are for one rivet set only.

SELECTING RIVET SETS TO FIT CP0214, CP0341 and CP0351 RIVETERS

To develop maximum power, the riveter must drive (set) the rivet at the end of the riveter's stroke (with the exception of the CP0341 which develops max power throughout its full stroke).

For maximum power the combined length of the two rivet sets must be of the correct length.

Determine the correct lengths as follows:



1) When two cupped rivet sets are used:

The length of the body dimensions of the rivet sets (A1, A2) should equal the closed height dimension of the yoke (H) minus the total thickness of material being riveted together.

2) When one cupped set and one flush set are used:

The length of the body dimensions of the two rivet sets (A1, A2) should equal the closed height dimension of the yoke (H) minus the total thickness of the material being riveted (M) and the height of the finished rivet head (Z) compressed by the flush set (A).

3) When two flush sets are used:

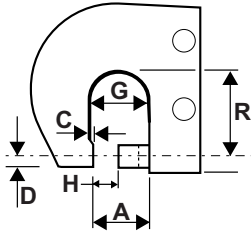
The length of the body dimensions of the two rivet sets (A1, A2) should equal the closed height dimension of the yoke (H) minus the overall length of the rivet (L) after it is compressed.

If necessary, select rivet sets a little short and shim to the correct length using spacer shims.

* Set Length Spacer Shims

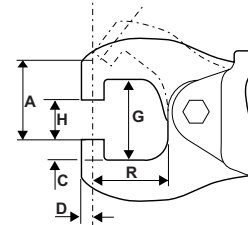
TYPE RIVET SET SHANK	PART NUMBERS OF HARDENED SHIMS		
	0.4mm thick (1/64")	0.8mm thick (1/32")	1.6mm thick (1/16")
CR-1	P083254	P083255	P083256
CR-2		P083257	P083258

Compression Tools – Technical Data



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



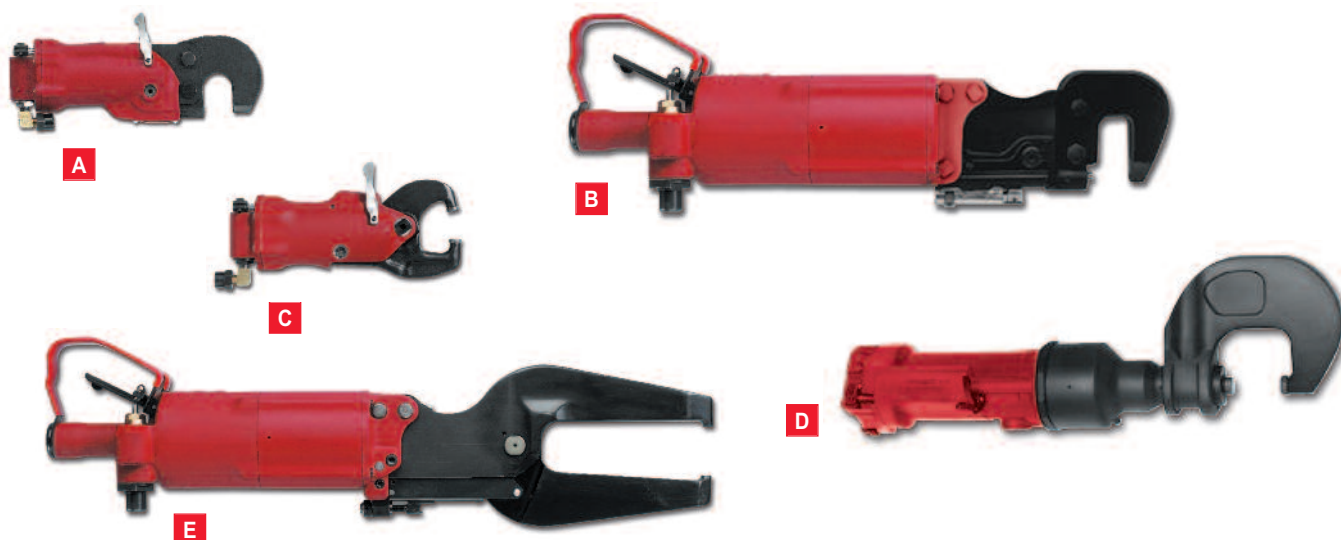
C Yoke Model	A		C		D		G		H		R	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
CP0214CELEL	32	1 1/4	-	-	5	3/16	32	1 1/4	17.5	11/16	38	1 1/2
CP0214FALEL	32	1 1/4	-	-	5	3/16	32	1 1/4	17.5	11/16	38	1 1/2
CP0214SETEL	32	1 1/4	-	-	6.4	1/4	32	1 1/4	17.5	11/16	38	1 1/2
CP0214KETEL	32	1 1/4	-	-	6.4	1/4	32	1 1/4	17.5	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

Alligator Jaw Model	A		C		D		G		H		R	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	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
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

Air inlet: 1/4" NPTF

MODEL	CYLINDER TYPE	RIVET SET TYPE	LENGTH		WEIGHT		SOUND LEVEL	SOUND POWER
			mm	in.	kg	lb		
CP0214ANBEL	Single	CR-1 (ø 4.8mm 3/16")	233	9 3/16	1.7	3 3/4	90	101
CP0214ANFEL	Single	CR-1 (ø 4.8mm 3/16")	254	10	1.9	4 1/4	90	101
CP0214ANGEL	Single	CR-1 (ø 4.8mm 3/16")	273	10 3/4	2.0	4 1/2	90	101
CP0214CELEL	Single	CR-1 (ø 4.8mm 3/16")	262	10 5/16	2.0	4 1/2	90	101
CP0214ENBEL	Tandem	CR-1 (ø 4.8mm 3/16")	303	11 15/16	2.2	4 3/4	90	101
CP0214ENFEL	Tandem	CR-1 (ø 4.8mm 3/16")	324	12 3/4	2.4	5 1/4	90	101
CP0214ENGEL	Tandem	CR-1 (ø 4.8mm 3/16")	343	13 1/2	2.5	5 1/2	90	101
CP0214FALEL	Tandem	CR-1 (ø 4.8mm 3/16")	356	14	2.5	5 1/2	90	101
CP0214KETEL	Tandem	CR-2 (ø 6.4mm 1/4")	356	14	2.5	5 1/2	90	101
CP0214SETEL	Single	CR-2 (ø 6.4mm 1/4")	262	10 5/16	2.0	4 1/2	90	101
CP0341CUDEL	Pneudraulic™	CR-2 (ø 6.4mm 1/4")	505	19 7/8	6.1	13 1/2	85	-
CP0351ASGEL	Single	CR-1 (ø 4.8mm 3/16")	495	19 1/2	7.1	15 3/4	96	107
CP0351ASKEL	Single	CR-1 (ø 4.8mm 3/16")	549	21 5/8	9.0	19 3/4	96	107
CP0351ASVEL	Single	CR-1 (ø 4.8mm 3/16")	654	25 3/4	11.9	26 1/4	96	106
CP0351CUDEL	Single	CR-1 (ø 4.8mm 3/16")	445	17 1/2	5.7	12 1/2	96	107
CP0351ESGEL	Tandem	CR-1 (ø 4.8mm 3/16")	603	23 3/4	8.4	18 1/2	96	107
CP0351ESKEL	Tandem	CR-1 (ø 4.8mm 3/16")	657	25 7/8	10.2	22 1/2	96	107
CP0351ESREL	Tandem	CR-1 (ø 4.8mm 3/16")	708	27 7/8	12.2	27	96	107
CP0351ESVEL	Tandem	CR-1 (ø 4.8mm 3/16")	762	30	13.2	29	96	107
CP0351FUDEL	Tandem	CR-1 (ø 4.8mm 3/16")	552	21 3/4	6.9	15 1/4	96	107
CP0351PU	Single	n/a	546	21 1/2	9.3	20 1/2	96	107
CP0351CABHDY	Single	n/a	445	17 1/2	9.2	20 5/16	96	107

Compression Tools – Riveting



For applications requiring the special 'Alligator Jaws or C-Yokes'



Alligator Jaws mounting versions

PART NUMBER	MODEL	EQUIVALENT STANDARD MODEL
T019138	CP0214ANPEL	CP0214ANBEL/ANFEL/ANGEL without jaws
T018997	CP0214ENPEL	CP0214ENBEL/ENFEL/ENGEL without jaws
T025405	CP0351ASNEL	CP0351ASKEL without jaws

C Yoke mounting versions

PART NUMBER	MODEL	EQUIVALENT STANDARD MODEL
T018677	CP0214CENEL	CP0214CELEL without yoke
T018430	CP0214FANEL	CP0214FALEL without yoke
T022493	CP0341CUNEL	CP0341CUDEL without yoke
T007772	CP0351CUNEL	CP0351CUDEL without yoke

*CR1 **CR2

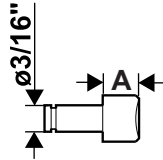
PIC REF	MODEL	PART NUMBER	CAPACITY				STANDARD YOKE DIMENSIONS				MAX FORCE		MOVING PLUNGER			
			ALUM.		STEEL		REACH		CLOSED HEIGHT		(90 psi/6.2 bar)		MAX. TRAVEL		FINAL PART OF STROKE AT MAX. FORCE	
			mm	in.	mm	in.	mm	in.	mm	in.	kN	lb	mm	in.	mm	in.
C-Yoke (single cylinder)																
A	CP0214CELEL*	T012344	3.2	1/8	2.4	3/32	38.1	1 1/2	17.5	11/16	13.35	3,000	14.3	9/16	1.3	0.050
A	CP0214SETEL**	T023474	3.2	1/8	2.4	3/32	38.1	1 1/2	17.5	11/16	13.35	3,000	14.3	9/16	1.3	0.050
B	CP0351CUDEL*	T008955	4.8	3/16	4.0	5/32	54.0	2 1/8	19.8	25/32	26.70	6,000	14.3	9/16	3.2	0.125
C-Yoke (tandem cylinder)																
A	CP0214FALEL*	T013152	4.8	3/16	4.0	5/32	38.1	1 1/2	17.5	11/16	26.70	6,000	14.3	9/16	1.6	0.063
A	CP0214KETE**	T023475	4.8	3/16	4.0	5/32	38.1	1 1/2	17.5	11/16	26.70	6,000	14.3	9/16	1.6	0.063
B	CP0351FUDEL*	T012608	6.4	1/4	5.6	7/32	54.0	2 1/8	19.8	25/32	53.40	12,000	14.3	9/16	3.2	0.125
C-Yoke (pneudraulic™)																
D	CP0341CUDEL**	T022512	7.1	9/32	6.4	1/4	54.0	2 1/8	25.4	1	60.10	13,500	31.8	1 1/4	Full stroke	
Alligator (single cylinder)																
C	CP0214ANBEL*	T012343	3.2	1/8	2.4	3/32	38.1	1 1/2	22.2	7/8	13.35	3,000	15.9	5/8	1.3	0.050
C	CP0214ANFEL*	T018671	2.4	3/32	2.4	3/32	57.1	2 1/4	22.2	7/8	9.79	2,200	22.2	7/8	2.4	0.094
C	CP0214ANGEL*	T018672	2.4	3/32	1.6	1/16	76.2	3	22.2	7/8	8.01	1,800	31.8	1 1/4	1.4	0.056
E	CP0351ASGEL*	T007783	4.0	5/32	3.2	1/8	73.0	2 7/8	22.2	7/8	23.14	5,200	15.9	5/8	3.2	0.125
E	CP0351ASKEL*	T007773	3.2	1/8	2.4	3/32	127.0	5	22.2	7/8	15.13	3,400	34.0	1 3/8	4.8	0.188
E	CP0351ASVEL*	T009582	3.2	1/8	2.4	3/32	232.0	9 1/8	19.1	3/4	13.35	3,000	42.9	1 11/16	1.6	0.063
Alligator (tandem cylinder)																
C	CP0214ENGEL*	T018164	3.2	1/8	2.4	3/32	76.2	3	22.2	7/8	15.13	3,400	31.8	1 1/4	2.6	0.104
C	CP0214ENFEL*	T018163	4.0	5/32	3.2	1/8	57.1	2 1/4	22.2	7/8	19.14	4,300	22.2	7/8	2.4	0.094
C	CP0214ENBEL*	T018678	4.8	3/16	4.0	5/32	38.1	1 1/2	22.2	7/8	26.70	6,000	15.9	5/8	1.6	0.06
E	CP0351ESKEL*	T012603	4.8	3/16	4.0	5/32	127.0	5	22.2	7/8	30.26	6,800	34.0	1 3/8	4.8	0.188
E	CP0351ESREL*	T012604	4.8	3/16	4.0	5/32	178.0	7	38.1	1 1/2	26.70	6,000	42.9	1 11/16	4.8	0.188
E	CP0351ESVEL*	T012605	4.8	3/16	4.0	5/32	232.0	9 1/8	19.1	3/4	26.70	6,000	42.9	1 11/16	1.6	0.063
E	CP0351ESGEL*	T012602	6.4	1/4	4.8	3/16	73.0	2 7/8	22.2	7/8	46.28	10,400	15.9	5/8	3.2	0.125

Compression Tools – Riveting - Rivet Sets

RIVET DIAMETER		'A' BODY LENGTH		AN-435 BUTTON	AN-430 ROUND	AN-455 BRAZIER	AN-456 MODIFIED BRAZIER	AN-470 UNIVERSAL	AN-442 FLAT
mm	in.	mm	in.	part no.	part no.	part no.	part no.	part no.	part no.

CR-1 SHANK RIVET SETS FOR CP0214 and CP0351 – CUPPED SETS

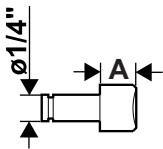
(C-Yoke tools – CP0214 CELEL, FALEL, CUDEL, FUEDEL + all Alligator Yoke tools)



2.4	3/32"	6.4	1/4"	P091601	P089370	P089390	P089410	P089430	P091621
2.4	3/32"	9.5	3/8"	P091602	P089371	P089391	P089411	P089431	P091622
2.4	3/32"	12.7	1/2"	–	–	–	P089412	P089432	P091623
3.2	1/8"	6.4	1/4"	P091606	P089375	P089395	P053826	P089435	P091626
3.2	1/8"	9.5	3/8"	P091607	P089376	–	P053827	P089436	P091627
3.2	1/8"	12.7	1/2"	P091608	P089377	P089397	–	P089437	P091628
4.0	5/32"	6.4	1/4"	P091611	P089380	P089400	P053831	P089440	P091631
4.0	5/32"	9.5	3/8"	P091612	P089381	P089401	P053832	P089441	P091632
4.0	5/32"	12.7	1/2"	P091613	P089382	P089402	P053833	P089442	P091633
4.8	3/16"	6.4	1/4"	P091616	P089385	P089405	P053836	P089445	P091636
4.8	3/16"	9.5	3/8"	P091617	P089386	P089406	P053837	P089446	P091637
4.8	3/16"	12.7	1/2"	P091618	P089387	P089407	P053838	P089447	P091638

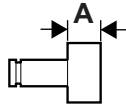
CR-2 SHANK RIVET SETS FOR CP0214 and CP0341 – CUPPED SETS

(C-Yoke tools – CP0214 SETEL, KETEL + CP0341 CUDEL)



3.2	1/8"	6.4	1/4"	–	–	–	–	P089510	P091661
3.2	1/8"	9.5	3/8"	P091642	–	–	–	P089511	–
3.2	1/8"	12.7	1/2"	–	–	–	–	P089512	P091663
4.0	5/32"	6.4	1/4"	–	P089455	–	–	P089515	–
4.0	5/32"	9.5	3/8"	–	–	–	–	P089516	P091667
4.0	5/32"	12.7	1/2"	P091648	–	–	–	P089517	P091668
4.8	3/16"	6.4	1/4"	–	P089460	P089480	–	P089520	P091671
4.8	3/16"	9.5	3/8"	–	P089461	P089481	–	P089521	P491672
4.8	3/16"	12.7	1/2"	P091653	–	P089482	–	P089522	P091673
6.4	1/4"	6.4	1/4"	–	P089465	P089485	–	P089525	P091676
6.4	1/4"	9.5	3/8"	–	P089466	P089486	–	P089526	–
6.4	1/4"	12.7	1/2"	–	P089467	–	–	P089527	P091678

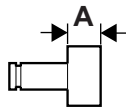
SHANK SIZE	'A' BODY LENGTH					
	3.2mm (1/8")	6.4mm (1/4")	9.5mm (3/8")	12.7mm (1/2")	15.8mm (5/8")	19mm (3/4")



FLUSH SETS for any rivet size

CR-1 (ø 4.8mm 3/16")	P089495	P089496	P089497	P089498	P089499	P089500
CR-2 (ø 6.4mm 1/4")	–	P089501	P089502	P089503	P089504	P089505

TYPE OF RIVET SET SHANK	'A' LENGTH		BODY DIAMETER		PART NUMBER
	mm	in.	mm	in.	



SOFT SET BLANKS

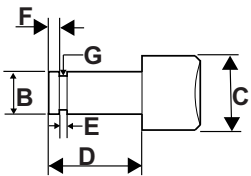
CR-1 (ø 4.8mm 3/16")	19.1	3/4"	15.9	5/8"	P093672
CR-2 (ø 6.4mm 1/4")	19.1	3/4"	19.1	3/4"	P093673

SET LENGTH SPACER SHIMS

TYPE RIVET SET SHANK	PART NUMBERS OF HARDENED SHIMS		
	0.4mm (1/64")	0.8mm (1/32")	1.6mm (1/16")
CR-1	P083254	P083255	P083256
CR-2		P083257	P083258

RIVET SET RETAINER RING

TYPE RIVET SET SHANK	PART NUMBER
CR-1	P071916
CR-2	P071917



* 'C' dimension is for flush set only. 'C' varies on cupped sets according to rivet size and type of head.

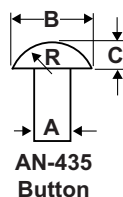
TYPE OF RIVET SET SHANK	B		C*		D		E		F		G	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.

SHANK DIMENSIONS FOR RIVET SETS

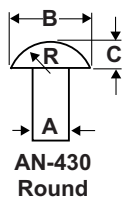
For CP0214, CP0351 and CP0341 Compression Riveters

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

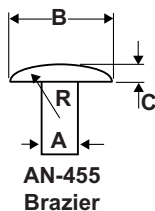
Compression Tools – Rivet Sizes (Reference)



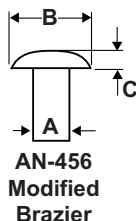
A		B		C		R	
mm	in.	mm	in.	mm	in.	mm	in.
AN-435 A.S.A. BUTTON							
2.4	3/32"	4.22	0.166	1.78	0.070	2.13	0.084
3.2	1/8"	5.56	0.219	2.39	0.094	2.82	0.111
4.0	5/32"	6.93	0.273	4.32	0.117	3.51	0.138
4.8	3/16"	8.33	0.328	3.58	0.141	4.22	0.166
6.4	1/4"	11.10	0.437	4.78	0.188	5.61	0.221
7.9	5/16"	13.87	0.546	5.94	0.234	7.01	0.276



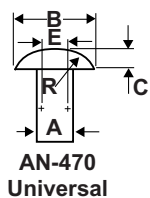
A		B		C		R	
mm	in.	mm	in.	mm	in.	mm	in.
AN-430 ROUND							
2.4	3/32"	4.75	0.187	1.78	0.070	2.49	0.098
3.2	1/8"	6.45	0.250	2.39	0.094	3.30	0.130
4.0	5/32"	7.92	0.312	2.97	0.117	4.11	0.162
4.8	3/16"	9.53	0.375	3.58	0.141	4.95	0.195
6.4	1/4"	12.70	0.500	4.78	0.188	6.60	0.260
7.9	5/16"	16.46	0.648	5.94	0.234	8.26	0.325



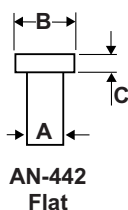
A		B		C		R	
mm	in.	mm	in.	mm	in.	mm	in.
AN-455 BRAZIER							
2.4	3/32"	5.94	0.234	1.19	0.047	4.32	0.170
3.2	1/8"	7.92	0.312	1.60	0.063	5.74	0.226
4.0	5/32"	9.90	0.390	1.98	0.078	7.19	0.283
4.8	3/16"	11.89	0.468	2.39	0.094	8.64	0.340
6.4	1/4"	15.83	0.625	3.18	0.125	11.51	0.453
7.9	5/16"	19.84	0.781	3.96	0.156	14.35	0.565



A		B		C	
mm	in.	mm	in.	mm	in.
AN-456 MODIFIED BRAZIER					
2.4	3/32"	3.96	0.156	0.79	0.031
3.2	1/8"	5.97	0.235	1.19	0.047
4.0	5/32"	7.92	0.312	1.60	0.063
4.8	3/16"	9.91	0.390	1.98	0.078
6.4	1/4"	11.89	0.468	2.39	0.094
7.9	5/16"	15.88	0.625	3.18	0.125



A		B		C		R		E	
mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
AN-470 UNIVERSAL									
2.4	3/32"	4.75	0.187	1.04	0.041	2.08	0.082	1.19	0.047
3.2	1/8"	6.45	0.250	1.37	0.054	2.74	0.108	1.60	0.063
4.0	5/32"	7.92	0.312	1.70	0.067	3.43	0.135	1.98	0.078
4.8	3/16"	9.53	0.375	2.08	0.082	4.17	0.164	2.39	0.094
6.4	1/4"	12.70	0.500	2.72	0.107	5.51	0.217	3.18	0.125
7.9	5/16"	16.46	0.648	3.45	0.136	6.91	0.272	3.96	0.156



A		B		C	
mm	in.	mm	in.	mm	in.
AN-442 FLAT					
2.4	3/32"	4.75	0.187	0.94	0.037
3.2	1/8"	6.45	0.250	1.27	0.050
4.0	5/32"	7.92	0.312	1.57	0.062
4.8	3/16"	9.53	0.375	1.91	0.075
6.4	1/4"	12.70	0.500	2.54	0.100
7.9	5/16"	16.46	0.648	3.18	0.125

Compression Tools – Sheet Metal Punch



CP0351-PU

- Punching Capacity:
 ø 4.8mm (3/16") in aluminum
 through 4.8mm (3/16") material thickness
- Actuation throttle guard:
 reduces the risk of accidental operation
- Use for a wide range of punching operations where it is preferable to take the tool to the job.
 e.g. large structures such as truck trailers

Capacity:

Maximum hole is ø 13mm (1/2") relative to material and thickness.
 Within maximum force of 24.0 kN – 5,400 lbs, material thickness should not exceed hole diameter.

To determine force required use formula: $F = 3.14 \times D \times T \times S$

where 'F' is force (lbs); 'D' is hole diameter (in.); 'T' is thickness of material (in.); 'S' is tensile strength of material (psi) or 'F' is force (kN); 'D' is hole diameter (mm); 'T' is thickness of material (mm); 'S' is tensile strength of material (N/mm²).

Accessories supplied with tool

HOLE SIZE IN ALUMINUM	PUNCH	DIE	COLLAR
ø 4.8mm (3/16")	P041307	P043009	P041309
ø 5.2mm (13/64")	P112836	P112837	P112838

MODEL	PART NUMBER	MAX. MATERIAL THICKNESS ALUM.		HOLE DIAMETER		MAX. DISTANCE EDGE OF SHEET TO HOLE CENTRELINE		MAX. PUNCHING FORCE (90 psi/6.2 bar)		WORK CLEARANCE PUNCH RETRACTED	
		mm	in.	mm	in.	mm	in.	kN	lb	mm	in.
CP0351PU	T013417	4.8	3/16	4.8	3/16	47.6	17/8	24.0	5400	12.7	1/2
CP0351PU	205 146 721 4	4.8	3/16	5.2	13/64	47.6	17/8	24.0	5400	12.7	1/2

Compression Tools – Edge Former



CP0351-CABH-DY

- Forming Capacity (max material thickness) – \varnothing 6.4mm (1/4")
- Rotary Suspension Bail fitted – eases handling and orientation of tool
- Use for a wide range of flattening of spot welded flanges and removing bends
- Custom yokes and dies can be used for crimping and staking operations
- Automatic cycling frequency is adjustable from 1 cycle per throttle actuation to up to 200 cycles per minute whilst the throttle actuation is maintained.

Accessories supplied with tool

	PART NUMBER
• Yoke	P059557
• Die	P059556
• Ball bearing Suspension Bail	P102451

MODEL	PART NUMBER	MAX. MATERIAL THICKNESS ALUM.		MAX. CYCLES PER MINUTE	REACH		MAX. COMPRESSIVE FORCE (90 psi/6.2 bar)	
		mm	in.		mm	in.	kN	lb
CP0351-CABH-DY	T020475	6.4	1/4	200	14.4	9/16	26.7	6000



Drills, Tappers, Rack Feed Drills

Pistol Grip, Straight Grip, Angle Drills - Multi Drills

High power - Durable - long life - High precision - Ergonomic
Typical construction (illustration shows DR750)



Pistol Grips Drills

Ideal for all general industrial drilling tasks. Best ergonomic shape, single and double handed use

Straight Drills

Mainly smaller diameter drilling. Suitable for production line repetitive operations

Angle Drills

Ideal for restricted access applications



Right Drill Selection

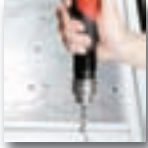
High power - Durable: long life - High precision - Ergonomic



Choosing the right Drill

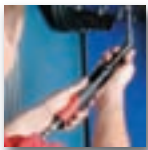
Pistol Grip Drills

- Ideal for all general industrial drilling tasks
- Drilling capacity up to 13mm (1/2") Ø steel
- Best ergonomic shape - single and double handed use
- Use of side handle recommended for larger drills with high torque reaction



Straight Drills

- Mainly smaller diameter drilling less than 10mm (3/8") Ø Steel
- Favoured for vertical drilling
- Suitable for production line repetitive operations



Angle Drills

- Most commonly used in aerospace
- Ideal for restricted access applications
- Drill capacity up to 8mm (5/16") Ø steel

Choosing the right Chuck

Key Adjustable Chuck

- Ideal for all general industrial drilling tasks
- High precision keyed chucks

Keyless Chucks

- Quick change (hand operated) chuck

Collet Chuck / Spindle

- Generally high speed drilling
- High precision
- Most commonly used in aerospace

Screw Shank

- Female threaded output
- Use with threaded shank drills
- Most commonly used in aerospace

How to select your tool:

- 1 Select material 2 Select hole size 3 Define speed

TOOL TYPE	FREE SPEED	TITANIUM	STAINLESS STEEL	HARD CAST IRON, MEDIUM HARD STEEL	SOFT CAST IRON, MILD STEEL	HARD PLASTICS	ALUMINIUM, BRASS, COPPER, BRONZE 1	COMPOSITE	WOOD, SOFT PLASTICS, CHIPBOARD
	rpm		9-15m/min	10-20m/min	20-35m/min	30-40m/min	50-80m/min	50-100m/min	80-120m/min
Drill Ø mm (in.)									

PISTOL GRIP

DR350 Ø8-10mm (5/16" - 3/8") cap.	20000							4.0 (5/32")	2.0 (5/64")
	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 3				4.0 (5/32")	5.0 (3/16")	8.0 (5/16") 2		
	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 Ø8-13mm (5/16" - 1/2") cap.	18500							4.0 (5/32")	2.0 (5/64")
	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")		
	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 Ø8-13mm (5/16" - 1/2") cap.	20000							2.0 (5/64")	2.0 (5/64")
	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* (19/32")
	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")					

STRAIGHT CASE

DR300-T... Ø8-10mm (5/16" - 3/8") cap.	20000							4.0 (5/32")	2.0 (5/64")
	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")						

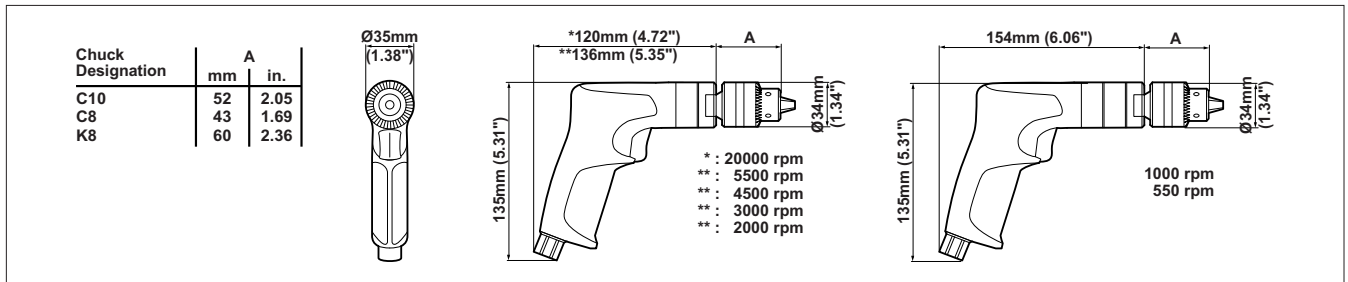
* above standard chuck capacity

Pistol Grip Drills

0.35 kW (0.5 hp) - 550 to 20000 rpm



Accessories: see page 266-268



PIC REF	MODEL	PART NUMBER	FREE SPEED	CHUCK SIZE		MOTOR POWER		STALL TORQUE		WEIGHT		AIR FLOW		AIR INLET		HOSE INT. Ø	
				rpm	mm	in.	kW	hp	Nm	ln lb	kg	lb	l/s	cfm	in.	mm	in.
TRIGGER START – KEY CHUCK MODELS																	
A	DR350-P20000-C8	205 147 252 4	20000	8	5/16	0.35	0.5	0.6	5.3	0.62	1.36	9.5	20	1/4	6	1/4	
A	DR350-P5500-C8	205 147 250 4	5500	8	5/16	0.35	0.5	2.3	20.4	0.62	1.36	9.5	20	1/4	6	1/4	
A	DR350-P4500-C8	205 147 382 4	4500	8	5/16	0.35	0.5	2.7	23.9	0.62	1.36	9.5	20	1/4	6	1/4	
A	DR350-P3000-C8	205 147 248 4	3000	8	5/16	0.35	0.5	4.0	35.4	0.62	1.36	9.5	20	1/4	6	1/4	
A	DR350-P2000-C8	205 147 246 4	2000	8	5/16	0.35	0.5	5.4	47.8	0.62	1.36	9.5	20	1/4	6	1/4	
B	DR350-P1000-C10	205 147 244 4	1000	10	3/8	0.35	0.5	12.7	112.4	0.79	1.74	9.5	20	1/4	6	1/4	
B	DR350-P550-C10	205 147 242 4	550	10	3/8	0.35	0.5	18.6	164.6	0.79	1.74	9.5	20	1/4	6	1/4	
TRIGGER START – KEYLESS CHUCK MODELS																	
C	DR350-P5500-K8	205 147 251 4	5500	8	5/16	0.35	0.5	2.3	20.4	0.64	1.41	9.5	20	1/4	6	1/4	
C	DR350-P4500-K8	205 147 383 4	4500	8	5/16	0.35	0.5	2.7	23.9	0.64	1.41	9.5	20	1/4	6	1/4	
C	DR350-P3000-K8	205 147 249 4	3000	8	5/16	0.35	0.5	4.0	35.4	0.64	1.41	9.5	20	1/4	6	1/4	
C	DR350-P2000-K8	205 147 247 4	2000	8	5/16	0.35	0.5	5.4	47.8	0.64	1.41	9.5	20	1/4	6	1/4	
D	DR350-P1000-K8	205 147 245 4	1000	8	5/16	0.35	0.5	12.7	112.4	0.72	1.59	9.5	20	1/4	6	1/4	
D	DR350-P550-K8	205 147 243 4	550	8	5/16	0.35	0.5	18.6	164.6	0.72	1.59	9.5	20	1/4	6	1/4	
TRIGGER START – WITHOUT CHUCK MODELS																	
E	DR350-P20000*	205 147 359 4	20000			0.35	0.5	0.6	5.3	0.49	1.1	9.5	20	1/4	6	1/4	
E	DR350-P5500*	205 147 358 4	5500			0.35	0.5	2.3	20.4	0.49	1.1	9.5	20	1/4	6	1/4	
E	DR350-P4500*	205 147 384 4	4500			0.35	0.5	2.7	23.9	0.49	1.1	9.5	20	1/4	6	1/4	
E	DR350-P3000*	205 147 357 4	3000			0.35	0.5	4.0	35.4	0.49	1.1	9.5	20	1/4	6	1/4	
E	DR350-P2000*	205 147 356 4	2000			0.35	0.5	5.4	47.8	0.49	1.1	9.5	20	1/4	6	1/4	
F	DR350-P1000*	205 147 355 4	1000			0.35	0.5	12.7	112.4	0.57	1.3	9.5	20	1/4	6	1/4	
F	DR350-P550*	205 147 354 4	550			0.35	0.5	18.6	164.6	0.57	1.3	9.5	20	1/4	6	1/4	

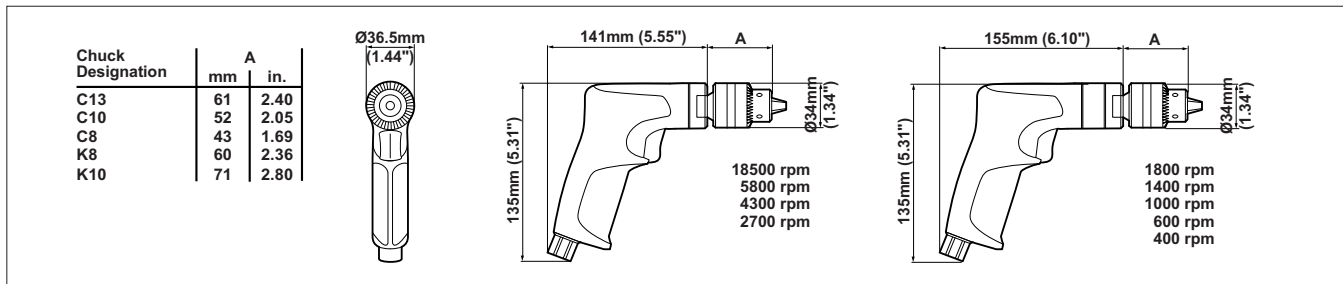
* Chuck spindle 3/8" x 24 UNF

Pistol Grip Drills

0.5 kW (0.68 hp) - 400 to 18500 rpm



Accessories: see page 266-268 



PIC REF	MODEL	PART NUMBER	FREE SPEED	CHUCK SIZE		MOTOR POWER		STALL TORQUE		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
				mm	in.	kW	hp	Nm	In lb	kg	lb	l/s	cfm	in.	mm	in.
TRIGGER START – KEY CHUCK MODELS																
A	DR500-P18500-C8	205 147 676 4	18500	8	5/16	0.5	0.68	1.0	8.85	0.67	1.5	14	30	1/4	10	3/8
A	DR500-P5800-C8	205 147 673 4	5800	8	5/16	0.5	0.68	3.1	27.44	0.67	1.5	14	30	1/4	10	3/8
A	DR500-P4300-C8	205 147 670 4	4300	8	5/16	0.5	0.68	4.2	37.17	0.67	1.5	14	30	1/4	10	3/8
A	DR500-P2700-C8	205 147 667 4	2700	8	5/16	0.5	0.68	6.9	61.07	0.67	1.5	14	30	1/4	10	3/8
B	DR500-P1800-C10	205 147 664 4	1800	10	3/8	0.5	0.68	9.9	87.62	0.84	1.8	14	30	1/4	10	3/8
B	DR500-P1400-C10	205 147 661 4	1400	10	3/8	0.5	0.68	13.4	118.59	0.84	1.8	14	30	1/4	10	3/8
B	DR500-P1000-C10	205 147 658 4	1000	10	3/8	0.5	0.68	18.0	159.30	0.84	1.8	14	30	1/4	10	3/8
B	DR500-P600-C13	205 147 655 4	600	13	1/2	0.5	0.68	28.7	254.00	0.96	2.1	14	30	1/4	10	3/8
B	DR500-P400-C13	205 147 652 4	400	13	1/2	0.5	0.68	46.0	407.10	0.96	2.1	14	30	1/4	10	3/8
TRIGGER START – KEYLESS CHUCK MODELS																
C	DR500-P5800-K8	205 147 674 4	5800	8	5/16	0.5	0.68	3.1	27.44	0.85	1.9	14	30	1/4	10	3/8
C	DR500-P4300-K8	205 147 671 4	4300	8	5/16	0.5	0.68	4.2	37.17	0.85	1.9	14	30	1/4	10	3/8
C	DR500-P2700-K8	205 147 668 4	2700	8	5/16	0.5	0.68	6.9	61.07	0.85	1.9	14	30	1/4	10	3/8
D	DR500-P1800-K10	205 147 665 4	1800	10	3/8	0.5	0.68	9.9	87.62	1.00	2.2	14	30	1/4	10	3/8
D	DR500-P1400-K10	205 147 662 4	1400	10	3/8	0.5	0.68	13.4	118.59	1.00	2.2	14	30	1/4	10	3/8
D	DR500-P1000-K10	205 147 659 4	1000	10	3/8	0.5	0.68	18.0	159.30	1.00	2.2	14	30	1/4	10	3/8
D	DR500-P600-K10	205 147 656 4	600	10	3/8	0.5	0.68	28.7	254.00	1.00	2.2	14	30	1/4	10	3/8
D	DR500-P400-K10	205 147 653 4	400	10	3/8	0.5	0.68	46.0	407.10	1.00	2.2	14	30	1/4	10	3/8
TRIGGER START – WITHOUT CHUCK MODELS																
E	DR500-P18500*	205 147 678 4	18500			0.5	0.68	1.0	8.85	0.56	1.2	14	30	1/4	10	3/8
E	DR500-P5800*	205 147 675 4	5800			0.5	0.68	3.1	27.44	0.56	1.2	14	30	1/4	10	3/8
E	DR500-P4300*	205 147 672 4	4300			0.5	0.68	4.2	37.17	0.56	1.2	14	30	1/4	10	3/8
E	DR500-P2700*	205 147 669 4	2700			0.5	0.68	6.9	61.07	0.56	1.2	14	30	1/4	10	3/8
F	DR500-P1800*	205 147 666 4	1800			0.5	0.68	9.9	87.62	0.64	1.4	14	30	1/4	10	3/8
F	DR500-P1400*	205 147 663 4	1400			0.5	0.68	13.4	118.59	0.64	1.4	14	30	1/4	10	3/8
F	DR500-P1000*	205 147 660 4	1000			0.5	0.68	18.0	159.30	0.64	1.4	14	30	1/4	10	3/8
F	DR500-P600*	205 147 657 4	600			0.5	0.68	28.7	254.00	0.64	1.4	14	30	1/4	10	3/8
F	DR500-P400*	205 147 654 4	400			0.5	0.68	46.0	407.10	0.64	1.4	14	30	1/4	10	3/8

* Chuck spindle 3/8" x 24 UNF

Pistol Grip Drills

High Power Drill
0.75 kW (1 hp) - 400 to 20000 rpm



Accessories: see page 266-268

Chuck Designation	mm	A in.
C13	61	2.40
C10	52	2.05
C8	43	1.69
K10	71	2.80
K8	60	2.36

DR750-P20000.....JT1
DR750-P6000.....JT1
DR750-P4100.....JT1
DR750-P3300.....JT1
DR750-P2700.....JT1

DR750-P13000.....JT1
DR750-P750.....JT1
DR750-P400.....JT1

PIC REF	MODEL	PART NUMBER	FREE SPEED	CHUCK SIZE		MOTOR POWER		STALL TORQUE		WEIGHT		AIR FLOW		AIR INLET		HOSE INT.	
				rpm	mm	in.	kW	hp	Nm	in lb	kg	lb	l/s	cfm	in.	mm	in.

TRIGGER START - KEY CHUCK MODELS

A	DR750-P20000-C8	205 146 659 4	20000	8	5/16	0.75	1.00	1.6	14.2	1.1	2.4	14	30	1/4	10	3/8
A	DR750-P6000-C8	1465124	6000	8	5/16	0.75	1.00	5.3	46.9	1.1	2.4	14	30	1/4	10	3/8
A	DR750-P4100-C8	1465114	4100	8	5/16	0.75	1.00	7.1	62.8	1.1	2.4	14	30	1/4	10	3/8
A	DR750-P3300-C10	1465104	3300	10	3/8	0.75	1.00	9.6	85.0	1.1	2.4	14	30	1/4	10	3/8
A	DR750-P2700-C10	1465094	2700	10	3/8	0.75	1.00	11.1	98.2	1.1	2.4	14	30	1/4	10	3/8
B	DR750-P1300-C10	1465084	1300	10	3/8	0.75	1.00	23.9	211.5	1.6	3.5	14	30	1/4	10	3/8
B	DR750-P750-C13	1465074	750	13	1/2	0.75	1.00	41.0	362.9	1.6	3.5	14	30	1/4	10	3/8
B	DR750-P400-C13	205 146 658 4	400	13	1/2	0.75	1.00	55.0	486.8	1.6	3.5	14	30	1/4	10	3/8

TRIGGER START - JACOBS TAPER 1 SPINDLE - WITHOUT CHUCK

C	DR750-P20000-JT1	205 146 667 4	20000			0.75	1.00	1.6	14.2	0.9	2.0	14	30	1/4	10	3/8
C	DR750-P6000-JT1	205 146 666 4	6000			0.75	1.00	5.3	46.9	0.9	2.0	14	30	1/4	10	3/8
C	DR750-P4100-JT1	205 146 665 4	4100			0.75	1.00	7.1	62.8	0.9	2.0	14	30	1/4	10	3/8
C	DR750-P3300-JT1	205 146 664 4	3300			0.75	1.00	9.6	85.0	0.9	2.0	14	30	1/4	10	3/8
C	DR750-P2700-JT1	205 146 663 4	2700			0.75	1.00	11.1	98.2	0.9	2.0	14	30	1/4	10	3/8
D	DR750-P1300-JT1	205 146 662 4	1300			0.75	1.00	23.9	211.5	1.15	2.5	14	30	1/4	10	3/8
D	DR750-P750-JT1	205 146 661 4	750			0.75	1.00	41.0	362.9	1.15	2.5	14	30	1/4	10	3/8
D	DR750-P400-JT1	205 146 660 4	400			0.75	1.00	55.0	486.8	1.15	2.5	14	30	1/4	10	3/8

TRIGGER START - KEYLESS CHUCK MODELS

E	DR750-P6000-K8	1465164	6000	8	5/16	0.75	1.00	5.3	46.9	1.1	2.4	14	30	1/4	10	3/8
E	DR750-P4100-K8	1465154	4100	8	5/16	0.75	1.00	7.1	62.8	1.1	2.4	14	30	1/4	10	3/8
E	DR750-P3300-K10	1465144	3300	10	3/8	0.75	1.00	9.6	85.0	1.1	2.4	14	30	1/4	10	3/8
E	DR750-P2700-K10	1465134	2700	10	3/8	0.75	1.00	11.1	98.2	1.1	2.4	14	30	1/4	10	3/8

TRIGGER START - WITHOUT CHUCK

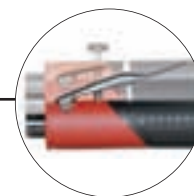
F	DR750-P20000*	205 147 458 4	20000			0.75	1.00	1.6	14.2	0.9	2.0	14	30	1/4	10	3/8
F	DR750-P6000*	205 147 417 4	6000			0.75	1.00	5.3	46.9	0.9	2.0	14	30	1/4	10	3/8
F	DR750-P4100*	205 147 456 4	4100			0.75	1.00	7.1	62.8	0.9	2.0	14	30	1/4	10	3/8
F	DR750-P3300*	205 147 455 4	3300			0.75	1.00	9.6	85.0	0.9	2.0	14	30	1/4	10	3/8
F	DR750-P2700*	205 147 416 4	2700			0.75	1.00	11.1	98.2	0.9	2.0	14	30	1/4	10	3/8
G	DR750-P1300*	205 147 415 4	1300			0.75	1.00	23.9	211.5	1.15	2.5	14	30	1/4	10	3/8
G	DR750-P750**	205 147 452 4	750			0.75	1.00	41.0	362.9	1.15	2.5	14	30	1/4	10	3/8
G	DR750-P400**	205 147 451 4	400			0.75	1.00	55.0	486.8	1.15	2.5	14	30	1/4	10	3/8

* Chuck spindle 3/8" x 24 UNF

** Chuck spindle 1/2" x 20 UNF

Straight Grip Drills

0.3 kW (0.4 hp) - 550 to 20000 rpm



Interchangeable lever included



A



B



C



D

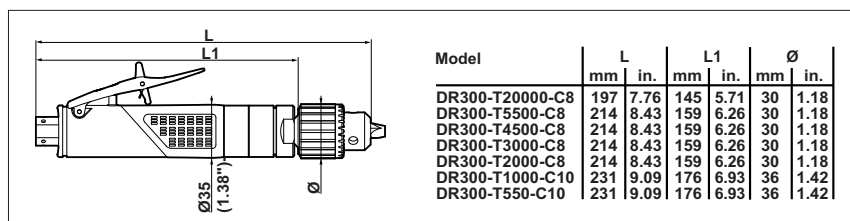


E



F

Accessories: see page 266-268



PIC REF	MODEL	PART NUMBER	FREE SPEED	CHUCK SIZE		MOTOR POWER		STALL TORQUE		WEIGHT		AIR FLOW		AIR INLET		HOSE INT. Ø	
				rpm	mm	in.	kW	hp	Nm	in lb	kg	lb	l/s	cfm	in.	mm	in.

KEY CHUCK MODELS

A	DR300-T20000-C8	205 147 496 4	20000	8	5/16	0.3	0.4	0.6	5.3	0.47	1.03	9.5	20	1/4	6	1/4
B	DR300-T5500-C8	205 147 493 4	5500	8	5/16	0.3	0.4	2.3	20.4	0.6	1.32	9.5	20	1/4	6	1/4
B	DR300-T4500-C8	205 147 490 4	4500	8	5/16	0.3	0.4	2.7	23.9	0.6	1.32	9.5	20	1/4	6	1/4
B	DR300-T3000-C8	205 147 487 4	3000	8	5/16	0.3	0.4	4.0	35.4	0.6	1.32	9.5	20	1/4	6	1/4
B	DR300-T2000-C8	205 147 484 4	2000	8	5/16	0.3	0.4	5.4	47.8	0.6	1.32	9.5	20	1/4	6	1/4
C	DR300-T1000-C10	205 147 481 4	1000	10	3/8	0.3	0.4	12.7	112.4	0.75	1.65	9.5	20	1/4	6	1/4
C	DR300-T550-C10	205 147 478 4	550	10	3/8	0.3	0.4	18.6	164.6	0.75	1.65	9.5	20	1/4	6	1/4

WITHOUT CHUCK MODELS

F	DR300-T20000*	205 147 495 4	20000			0.3	0.4	0.6	5.3	0.34	0.75	9.5	20	1/4	6	1/4
D	DR300-T5500*	205 147 492 4	5500			0.3	0.4	2.3	20.4	0.47	1.04	9.5	20	1/4	6	1/4
D	DR300-T4500*	205 147 489 4	4500			0.3	0.4	2.7	23.9	0.47	1.04	9.5	20	1/4	6	1/4
D	DR300-T3000*	205 147 486 4	3000			0.3	0.4	4.0	35.4	0.47	1.04	9.5	20	1/4	6	1/4
D	DR300-T2000*	205 147 483 4	2000			0.3	0.4	5.4	47.8	0.47	1.04	9.5	20	1/4	6	1/4
E	DR300-T1000*	205 147 480 4	1000			0.3	0.4	12.7	112.4	0.52	1.15	9.5	20	1/4	6	1/4
E	DR300-T550*	205 147 477 4	550			0.3	0.4	18.6	164.6	0.52	1.15	9.5	20	1/4	6	1/4

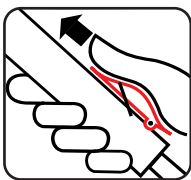
* Chuck spindle 3/8" x 24 UNF

Angle Drill Selection



DR300-T5/S5

DR300-T6/S6



Ergonomics

Spindle and lock ring
By locking the spindle the drill bit can be replaced using a single tool.

How to select your tool:

- 1 Select material 2 Select hole size 3 Define speed

DRILL SELECTION GUIDE – ANGLE DRILL

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		9-15m/min	10-20m/min	20-35m/min	30-40m/min	50-80m/min	50-100m/min	80-120m/min
					Drill ø mm				

COMPACT HEAD

DR300-T5/S5 (30°, 45°, 90° & 360° head)	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")
DR300-QR (30°, 45°, 90° & 360° head)	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")	-	-	-	-	-

STANDARD HEAD

DR300-T6/S6 (90° & 360° head)	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")	-
DR300-QR (90° & 360° head)	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")	-	-	-	-	-

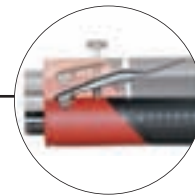
HEAVY DUTY

DR3141 (90° head)	2100	-	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")
DR3143 (90° head)	770	-	7.0 (9/32")	8.0 (5/16")	8.0 (5/16")	-	-	-	-
	2100	-	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")
	770	-	6.5 (1/4")	6.5 (1/4")	6.5 (1/4")	-	-	-	-

Angle Drills

Compact 90° Angle Head

0.3 kW (0.4 hp) - 1000 to 5500 rpm



Interchangeable lever included



A



B

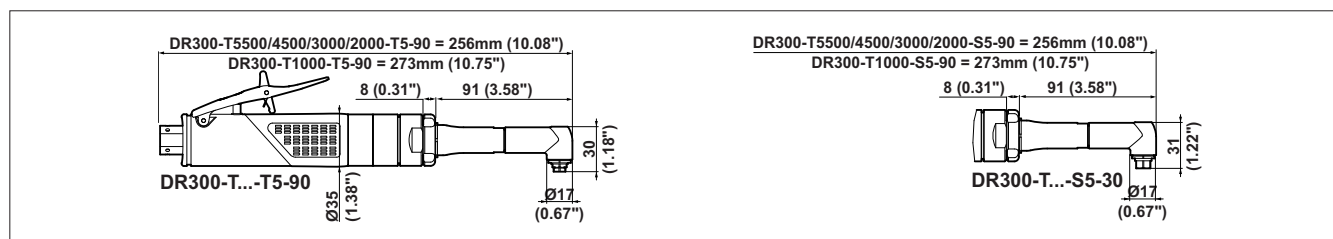


C



D

Accessories: see page 267



PIC REF	MODEL	PART NUMBER	FREE SPEED		MOTOR POWER		WEIGHT		AIR FLOW		HOSE INT. Ø		
			rpm		kW	hp	kg	lb	l/s	cfm	in.	mm	in.
COLLET SPINDLE - 5mm (3/16") CAPACITY													
A	DR300-T5500-T5-90	205 147 551 4	5500		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
A	DR300-T4500-T5-90	205 147 549 4	4500		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
A	DR300-T3000-T5-90	205 147 547 4	3000		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
A	DR300-T2000-T5-90	205 147 545 4	2000		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
B	DR300-T1000-T5-90	205 147 543 4	1000		0.3	0.4	0.70	1.54	9.5	20	1/4	6	1/4
1/4" x 28 SPINDLE - MAX. CAPACITY: 5mm (3/16")													
C	DR300-T5500-S5-90	205 147 552 4	5500		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
C	DR300-T4500-S5-90	205 147 550 4	4500		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
C	DR300-T3000-S5-90	205 147 548 4	3000		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
C	DR300-T2000-S5-90	205 147 546 4	2000		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
D	DR300-T1000-S5-90	205 147 544 4	1000		0.3	0.4	0.70	1.54	9.5	20	1/4	6	1/4



Interchangeable lever included

Angle Drills

Standard 90° Angle Head
 0.3 kW (0.4 hp) - 550 to 5500 rpm



A



B

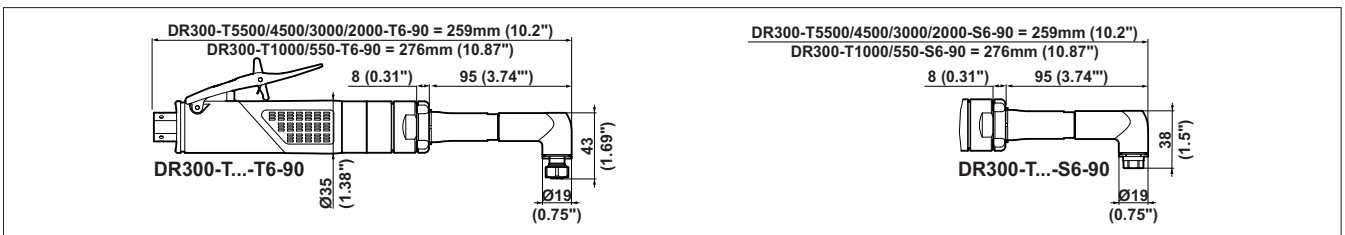


C



D

Accessories: see page 267

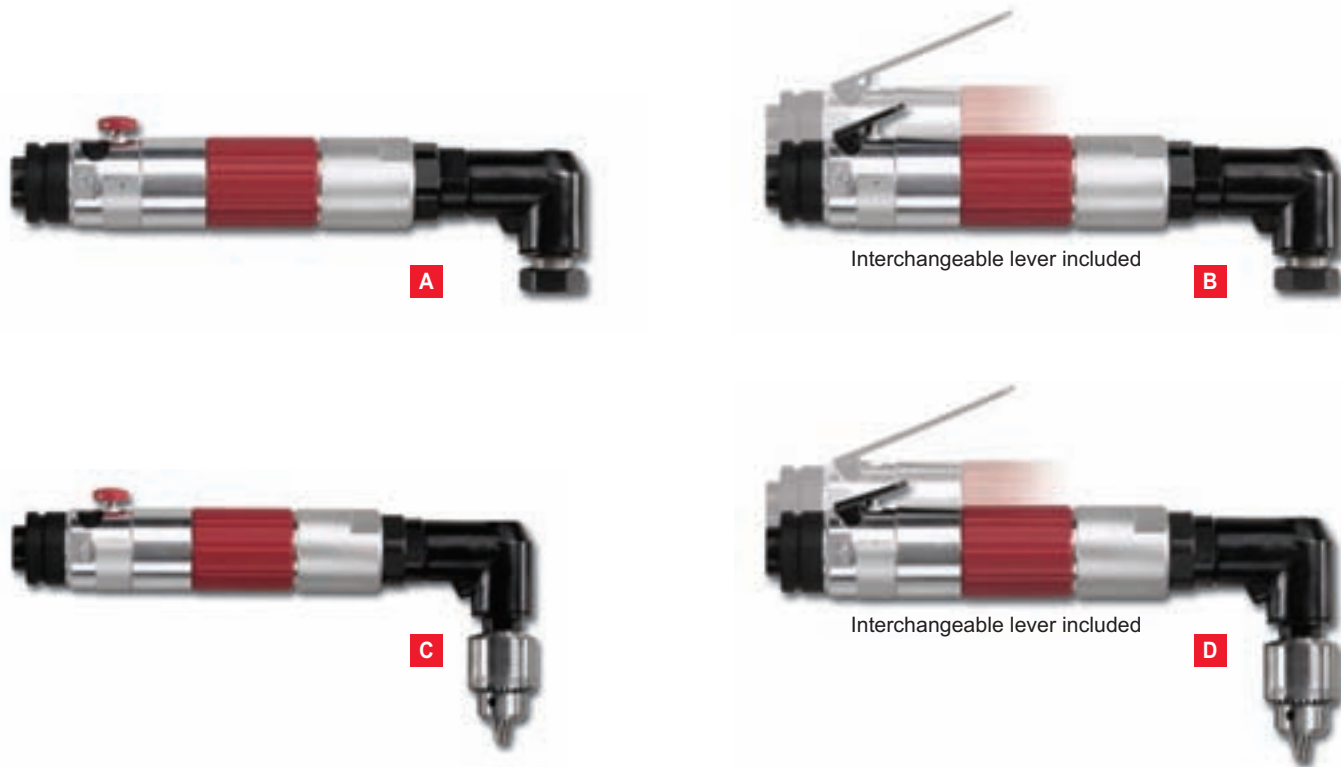


PIC REF	MODEL	PART NUMBER	FREE SPEED		MOTOR POWER		WEIGHT		AIR FLOW		AIR INLET		HOSE INT. Ø	
			rpm	kW	hp	kg	lb	l/s	cfm	in.	mm	in.		
COLLET SPINDLE - 6.4mm (1/4") CAPACITY														
A	DR300-T5500-T6-90	205 147 598 4	5500	0.3	0.4	0.68	1.50	9.5	20	1/4	6	1/4		
A	DR300-T4500-T6-90	205 147 595 4	4500	0.3	0.4	0.68	1.50	9.5	20	1/4	6	1/4		
A	DR300-T3000-T6-90	205 147 592 4	3000	0.3	0.4	0.68	1.50	9.5	20	1/4	6	1/4		
A	DR300-T2000-T6-90	205 147 589 4	2000	0.3	0.4	0.68	1.50	9.5	20	1/4	6	1/4		
B	DR300-T1000-T6-90	205 147 586 4	1000	0.3	0.4	0.76	1.67	9.5	20	1/4	6	1/4		
B	DR300-T550-T6-90	205 147 583 4	550	0.3	0.4	0.76	1.67	9.5	20	1/4	6	1/4		
1/4" x 28 SPINDLE - MAX. CAPACITY: 6.4mm (1/4")														
C	DR300-T5500-S6-90	205 147 599 4	5500	0.3	0.4	0.68	1.50	9.5	20	1/4	6	1/4		
C	DR300-T4500-S6-90	205 147 596 4	4500	0.3	0.4	0.68	1.50	9.5	20	1/4	6	1/4		
C	DR300-T3000-S6-90	205 147 593 4	3000	0.3	0.4	0.68	1.50	9.5	20	1/4	6	1/4		
C	DR300-T2000-S6-90	205 147 590 4	2000	0.3	0.4	0.68	1.50	9.5	20	1/4	6	1/4		
D	DR300-T1000-S6-90	205 147 587 4	1000	0.3	0.4	0.76	1.67	9.5	20	1/4	6	1/4		
D	DR300-T550-S6-90	205 147 584 4	550	0.3	0.4	0.76	1.67	9.5	20	1/4	6	1/4		

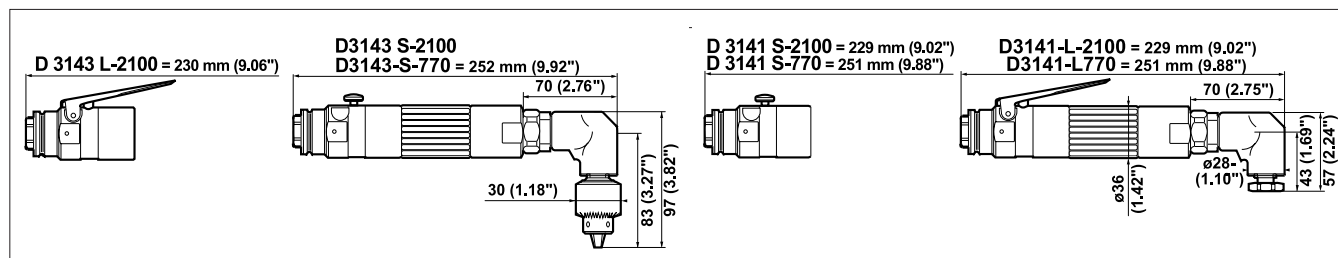
Angle Drills

Heavy Duty 90° Angle Head

0.28 kW (0.38 hp) - 770 - 2100 rpm



Accessories: see page 267



PIC REF	MODEL	PART NUMBER	FREE SPEED		MOTOR POWER		WEIGHT		AIR FLOW		AIR INLET		HOSE INT. Ø	
			rpm		kW	hp	kg	lb	l/s	cfm	in.	mm	in.	

COLLET SPINDLE – 8mm (5/16") CAPACITY

Button Start

A	D3141-S-2100	1383084	2100	0.28	0.38	0.86	1.9	9.4	19.9	1/4	6	1/4
A	D3141-S-770	1383244	770	0.28	0.38	1.00	2.2	9.4	19.9	1/4	6	1/4

Lever Start

B	D3141-L-2100	1383164	2100	0.28	0.38	0.86	1.9	9.4	19.9	1/4	6	1/4
B	D3141-L-770	1383324	770	0.28	0.38	1.00	2.2	9.4	19.9	1/4	6	1/4

KEY CHUCK – 8mm (5/16") CAPACITY

Button Start

C	D3143-S-2100	1383404	2100	0.28	0.38	0.96	2.1	9.4	19.9	1/4	6	1/4
C	D3143-S-770	1383664	770	0.28	0.38	1.00	2.2	9.4	19.9	1/4	6	1/4

Lever Start

D	D3143-L-2100	1383584	2100	0.28	0.38	0.96	2.1	9.4	19.9	1/4	6	1/4
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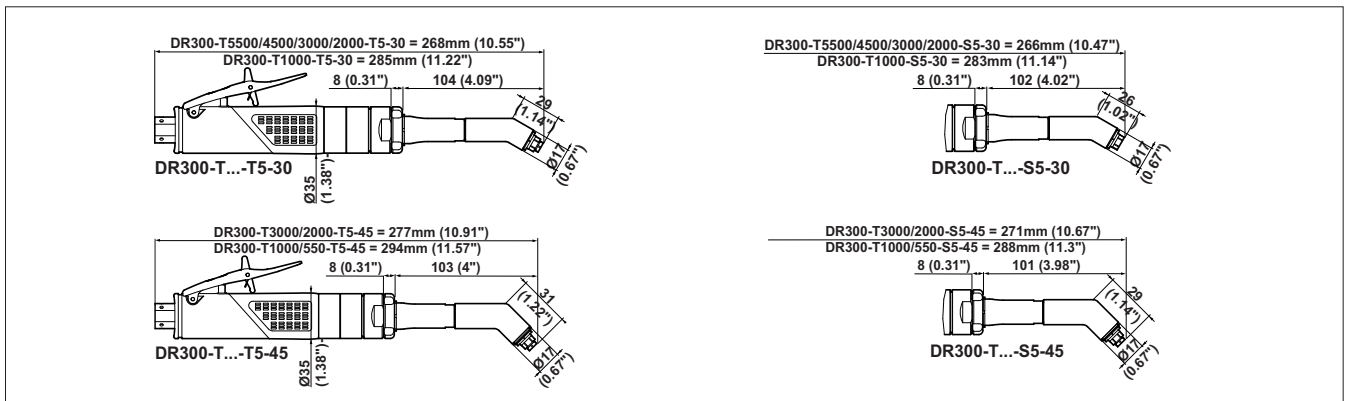
Interchangeable lever included

Angle Drills

Compact 30° and 45° Angle Head
0.3 kW (0.4 hp) - 550 to 5500 rpm



Accessories: see page 267



PIC REF	MODEL	PART NUMBER	FREE SPEED		MOTOR POWER		WEIGHT		AIR FLOW		AIR INLET		HOSE INT. Ø	
			rpm		kW	hp	kg	lb	l/s	cfm	in.	mm	in.	

COLLET SPINDLE - 5mm (3/16") CAPACITY

A	DR300-T5500-T5-30	205 147 539 4	5500		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
A	DR300-T4500-T5-30	205 147 537 4	4500		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
A	DR300-T3000-T5-30	205 147 535 4	3000		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
A	DR300-T2000-T5-30	205 147 533 4	2000		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
B	DR300-T1000-T5-30	205 147 531 4	1000		0.3	0.4	0.70	1.54	9.5	20	1/4	6	1/4

1/4" x 28 SPINDLE - MAX. CAPACITY: 5mm (3/16")

A	DR300-T5500-S5-30	205 147 540 4	5500		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
A	DR300-T4500-S5-30	205 147 538 4	4500		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
A	DR300-T3000-S5-30	205 147 536 4	3000		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
A	DR300-T2000-S5-30	205 147 534 4	2000		0.3	0.4	0.62	1.36	9.5	20	1/4	6	1/4
B	DR300-T1000-S5-30	205 147 532 4	1000		0.3	0.4	0.70	1.54	9.5	20	1/4	6	1/4

COLLET SPINDLE - 5mm (3/16") CAPACITY

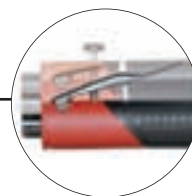
C	DR300-T3000-T5-45	205 147 574 4	3000		0.3	0.4	0.68	1.49	9.5	20	1/4	6	1/4
C	DR300-T2000-T5-45	205 147 571 4	2000		0.3	0.4	0.68	1.49	9.5	20	1/4"	6	1/4
D	DR300-T1000-T5-45	205 147 568 4	1000		0.3	0.4	0.76	1.67	9.5	20	1/4"	6	1/4
D	DR300-T550-T5-45	205 147 565 4	550		0.3	0.4	0.76	1.67	9.5	20	1/4"	6	1/4

1/4" x 28 SPINDLE - MAX. CAPACITY: 5mm (3/16")

C	DR300-T3000-S5-45	205 147 575 4	3000		0.3	0.4	0.68	1.49	9.5	20	1/4	6	1/4
C	DR300-T2000-S5-45	205 147 572 4	2000		0.3	0.4	0.68	1.49	9.5	20	1/4"	6	1/4
D	DR300-T1000-S5-45	205 147 569 4	1000		0.3	0.4	0.76	1.67	9.5	20	1/4"	6	1/4
D	DR300-T550-S5-45	205 147 566 4	550		0.3	0.4	0.76	1.67	9.5	20	1/4"	6	1/4

Angle Drills

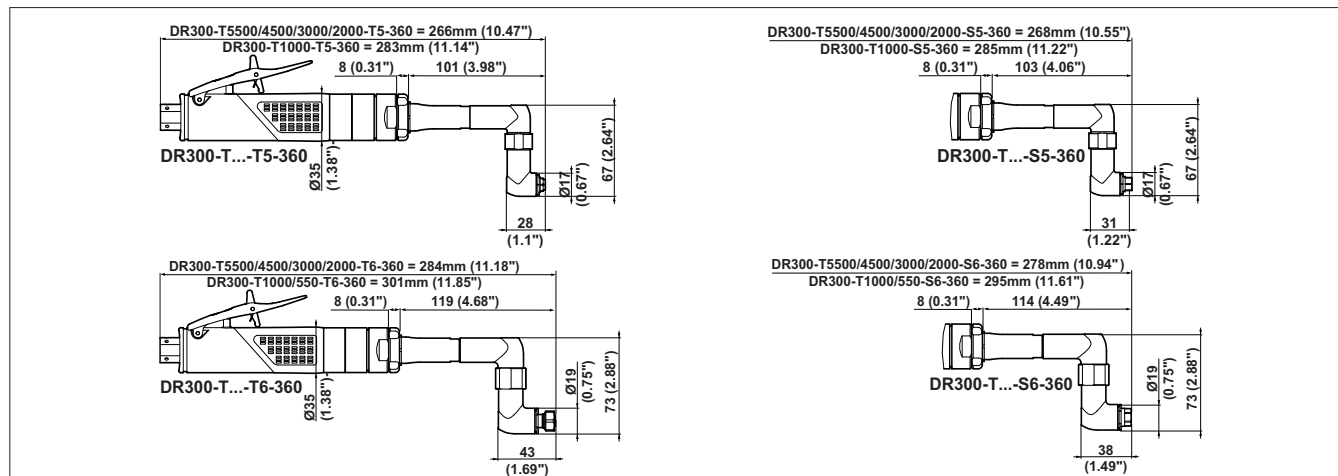
Compact and Standard 360° Angle Head 0.3 kW (0.4 hp) - 550 to 5500 rpm



Interchangeable lever included



Accessories: see page 267



PIC REF	MODEL	PART NUMBER	FREE SPEED	MOTOR POWER		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
			rpm	kW	hp	kg	lb	l/s	cfm	in.	mm	in.

COLLET SPINDLE - 5mm (3/16") CAPACITY

A	DR300-T5500-T5-360	205 147 563 4	5500	0.3	0.4	0.70	1.54	9.5	20	1/4	6	1/4
A	DR300-T4500-T5-360	205 147 561 4	4500	0.3	0.4	0.70	1.54	9.5	20	1/4	6	1/4
A	DR300-T3000-T5-360	205 147 559 4	3000	0.3	0.4	0.70	1.54	9.5	20	1/4	6	1/4
A	DR300-T2000-T5-360	205 147 557 4	2000	0.3	0.4	0.70	1.54	9.5	20	1/4	6	1/4
B	DR300-T1000-T5-360	205 147 555 4	1000	0.3	0.4	0.78	1.72	9.5	20	1/4	6	1/4

1/4" x 28 SPINDLE - MAX. CAPACITY: 5mm (3/16")

A	DR300-T5500-S5-360	205 147 564 4	5500	0.3	0.4	0.70	1.54	9.5	20	1/4	6	1/4
A	DR300-T4500-S5-360	205 147 562 4	4500	0.3	0.4	0.70	1.54	9.5	20	1/4	6	1/4
A	DR300-T3000-S5-360	205 147 560 4	3000	0.3	0.4	0.70	1.54	9.5	20	1/4	6	1/4
A	DR300-T2000-S5-360	205 147 558 4	2000	0.3	0.4	0.70	1.54	9.5	20	1/4	6	1/4
B	DR300-T1000-S5-360	205 147 556 4	1000	0.3	0.4	0.78	1.72	9.5	20	1/4	6	1/4

COLLET SPINDLE - 6.4mm (1/4") CAPACITY

C	DR300-T5500-T6-360	205 147 616 4	5500	0.3	0.4	0.77	1.69	9.5	20	1/4	6	1/4
C	DR300-T4500-T6-360	205 147 613 4	4500	0.3	0.4	0.77	1.69	9.5	20	1/4	6	1/4
C	DR300-T3000-T6-360	205 147 610 4	3000	0.3	0.4	0.77	1.69	9.5	20	1/4	6	1/4
C	DR300-T2000-T6-360	205 147 607 4	2000	0.3	0.4	0.77	1.69	9.5	20	1/4	6	1/4
D	DR300-T1000-T6-360	205 147 604 4	1000	0.3	0.4	0.85	1.87	9.5	20	1/4	6	1/4
D	DR300-T550-T6-360	205 147 601 4	550	0.3	0.4	0.85	1.87	9.5	20	1/4	6	1/4

1/4" x 28 SPINDLE - MAX. CAPACITY: 6.4mm (1/4")

C	DR300-T5500-S6-360	205 147 617 4	5500	0.3	0.4	0.77	1.69	9.5	20	1/4	6	1/4
C	DR300-T4500-S6-360	205 147 614 4	4500	0.3	0.4	0.77	1.69	9.5	20	1/4	6	1/4
C	DR300-T3000-S6-360	205 147 611 4	3000	0.3	0.4	0.77	1.69	9.5	20	1/4	6	1/4
C	DR300-T2000-S6-360	205 147 608 4	2000	0.3	0.4	0.77	1.69	9.5	20	1/4	6	1/4
D	DR300-T1000-S6-360	205 147 605 4	1000	0.3	0.4	0.85	1.87	9.5	20	1/4	6	1/4
D	DR300-T550-S6-360	205 147 602 4	550	0.3	0.4	0.85	1.87	9.5	20	1/4	6	1/4

Tappers



A



B

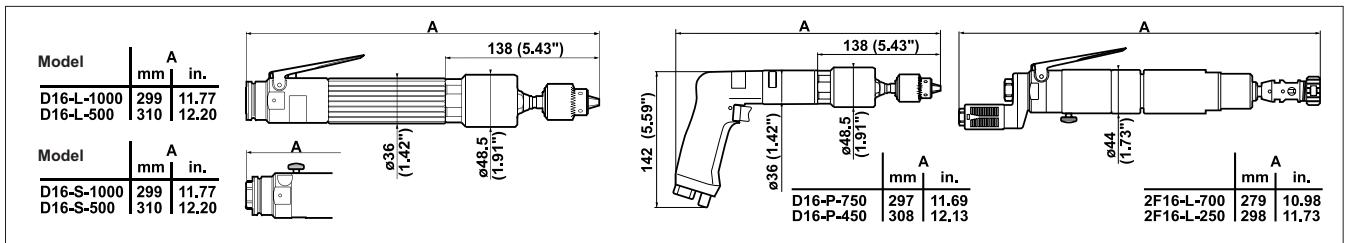


C



D

Accessories: see page 268 



PIC REF	MODEL	PART NUMBER	FREE SPEED		REVERSE SPEED		CHUCK SIZE		MAX. TAPPING TORQUE		WEIGHT		AIR FLOW		AIR INLET		HOSE INT. Ø	
			rpm	rpm	mm	in.	N.m	ft.lb	kg	lb	l/s	cfm	in.	mm	in.			

D SERIES

Button Start – push/pull reverse

A	D16-S-1000	1274544	1000	2000	6.5	1/4	4.3	3.17	1.3	2.86	9.4	19.9	1/4	10	3/8
A	D16-S-500	1274384	500	1000	10.0	3/8	8.6	6.34	1.4	3.08	9.4	19.9	1/4	10	3/8

Lever Start – push/pull reverse

B	D16-L-1000	1274624	1000	2000	6.5	1/4	4.3	3.17	1.3	2.86	9.4	19.9	1/4	10	3/8
B	D16-L-500	1274464	500	1000	10.0	3/8	8.6	6.34	1.4	3.08	9.4	19.9	1/4	10	3/8

Trigger Start – push/pull reverse

C	D16-P-750	1288084	750	1500	6.5	1/4	6.2	4.57	1.7	3.75	8.5	18.0	1/4	10	3/8
C	D16-P-450	1287934	450	900	10.0	3/8	11.1	8.18	1.8	3.97	8.5	18.0	1/4	10	3/8

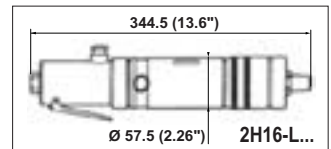
F SERIES

Lever Start – button reverse – stand mounted

D	2F16-L-700	1241394	700	700	6.5	1/4	6.7	4.94	1.7	3.75	11.1	23.5	1/4	10	3/8
D	2F16-L-250	1241474	250	250	6.5	1/4	17.5	12.90	1.8	3.97	11.1	23.5	1/4	10	3/8



E



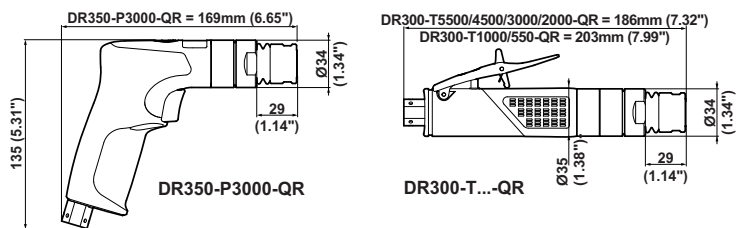
PIC REF	MODEL	PART NUMBER	LOW SPEED SETTING		HIGH SPEED SETTING		MAX. TAPPING TORQUE		WEIGHT		AIR FLOW		AIR INLET		HOSE INT. Ø	
			rpm	rpm	N.m	ft.lb	N.m	ft.lb	kg	lb	l/s	cfm	in.	mm	in.	

H SERIES

Lever Start - button reverse - stand mounted

E	2H16-L-250/800 - B16	1452444	250	800	90	66.4	29	21.4	3.1	6.8	15.6	33	3/8	10	3/8
E	2H16-L-250/800 - B18	1434184	250	800	90	66.4	29	21.4	3.1	6.8	15.6	33	3/8	10	3/8
E	2H16-L-160/500 - B18	1434264	130	500	140	103.3	47	34.7	3.1	6.8	15.6	33	3/8	10	3/8
E	2H16-L-90/250 - B18	1434344	90	250	240	177.0	90	66.4	3.1	6.8	15.6	33	3/8	10	3/8

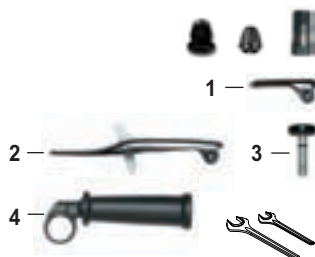
Accessories



DR350-P3000-QR / DR300-T550/1000/2000/3000/4500/5500-QR

ACCESSORIES INCLUDED

ITEM	205 050 331 3 205 050 329 3 205 050 333 3 205 050 335 3	ANGLE HEAD 205 050 338 3 205 050 341 3	205 050 353 3	DRILLS DR300
• ø 4.8mm (3/16") capacity collet	2552	19182	615 526 088 0	
• ø 6.4mm (1/4") capacity collet				205 050 299 3
• ø 8mm (5/16") capacity collet				205 050 288 3
1 Short lever				205 050 045 3
2 Safety lever				205 049 446 3
3 Inlet button (with lever recess plugs)				205 050 746 3
4 Side handle (for DR300-T550/1000/2000/3000)				
• Exhaust hose (with clamping)	268263	82623		
• Wrench 8-9mm (Qty 2)				
• Wrench 10mm				



OPTIONAL ACCESSORIES

ITEM	PART NO.
4 Side handle	205 049 446 3



Collet Capacity	205 050 331 3	205 050 338 3	205 050 353 3	Collet Capacity	205 050 331 3	205 050 338 3	205 050 353 3
	A	B	C		A	B	C
• ø 1.0mm	2172			• ø 3.9mm	2462		
• ø 1.1mm	2182			• ø 4.0mm (5/32")	2472	19052	615 526 071 0
• ø 1.2mm	2192			• ø 4.1mm	2482		
• ø 1.3mm	2202			• ø 4.2mm	2492	19062	
• ø 1.4mm	2212			• ø 4.3mm	2502		
• ø 1.5mm	2222			• ø 4.4mm	2512	19072	
• ø 1.6mm	2232	18922		• ø 4.5mm	2522		615 526 073 0
• ø 1.7mm	2242			• ø 4.6mm	2532	19082	
• ø 1.8mm	2252	18932		• ø 4.7mm	2542		
• ø 1.9mm	2262			• ø 4.8mm (3/16")	2552	19092	
• ø 2.0mm	2272	18942	615 526 066 0	• ø 4.9mm	2562		
• ø 2.1mm	2282			• ø 5.0mm	2572	19102	615 526 075 0
• ø 2.2mm	2292	18952		• ø 5.2mm		19122	
• ø 2.3mm	2302			• ø 5.4mm		19132	615 526 077 0
• ø 2.4mm (3/32")	2312			• ø 5.5mm			615 526 077 0
• ø 2.5mm	2322		615 526 068 0	• ø 5.6mm		19142	
• ø 2.6mm	2332	18972		• ø 5.8mm		19152	
• ø 2.7mm	2342			• ø 6.0mm		19162	615 526 079 0
• ø 2.8mm	2352	18982		• ø 6.2mm		19172	
• ø 2.9mm	2362			• ø 6.4mm		19182	
• ø 3.0mm	2372	18992	615 526 069 0	• ø 6.5mm			615 526 081 0
• ø 3.1mm	2382			• ø 7.0mm			615 526 083 0
• ø 3.2mm (1/8")	2392	19002		• ø 7.5mm			615 526 084 0
• ø 3.3mm	2402			• ø 8.0mm			615 526 088 0
• ø 3.4mm	2412	19022		• ø 1/16"	91442		
• ø 3.5mm	2422		615 526 070 0	• ø 3/32"	91452		
• ø 3.6mm	2432	19032		• ø 1/8"	91462		
• ø 3.7mm	2442			• ø 5/32"	91472		
• ø 3.8mm	2452	19042		• ø 3/16"	91482		



CHUCK MOUNTING

3/8" x 24 tpi

205 050 543 3

- Chuck threaded 3/8" UNF cap. 8mm (5/16") (with key)
- Keyless Chuck threaded 3/8" UNF- cap. 8mm (5/16")

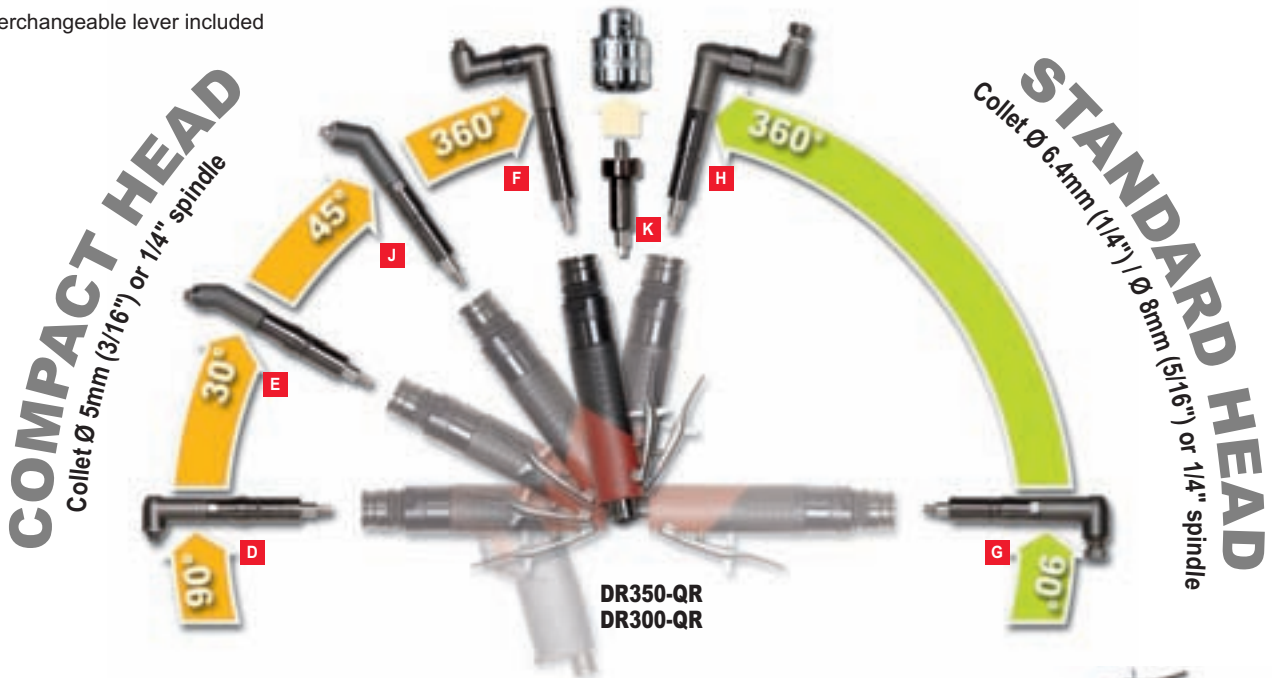
205 053 013 3

473433

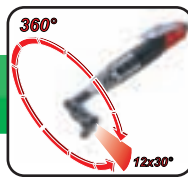
Multi Drills

0.3 - 0.35 kW (0.4 - 0.5 hp) - 550 to 5500 rpm

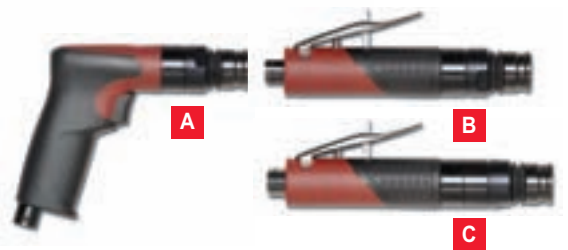
Interchangeable lever included



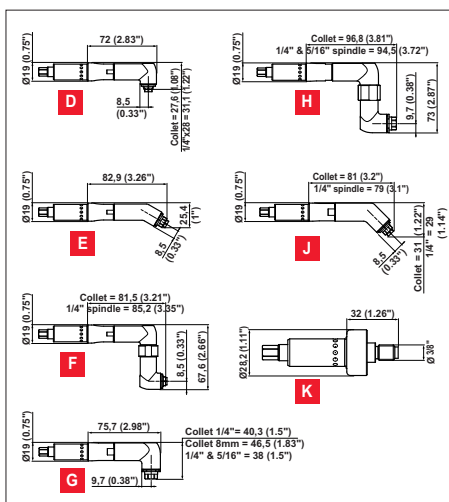
Quick-Release head



12 positions, 360° orientation



PIC REF	MODEL	PART NUMBER	FREE SPEED		MOTOR POWER		STALL TORQUE		WEIGHT		AIR FLOW		AIR INLET		HOSE INT. Ø	
			rpm		kW	hp	Nm	in.lb.	kg	lb	l/s	cfm	in.	mm	in.	
MULTI DRILLS																
A	DR350-P3000-QR	205 147 528 4	3000		0.35	0.5	4.0	35.4	0.50	1.10	9.5	20	1/4	6	1/4	
B	DR300-T5500-QR	205 147 527 4	5500		0.30	0.4	2.3	20.4	0.50	1.10	9.5	20	1/4	6	1/4	
B	DR300-T4500-QR	205 147 526 4	4500		0.30	0.4	2.7	23.9	0.50	1.10	9.5	20	1/4	6	1/4	
B	DR300-T3000-QR	205 147 525 4	3000		0.30	0.4	4.0	35.4	0.50	1.10	9.5	20	1/4	6	1/4	
B	DR300-T2000-QR	205 147 524 4	2000		0.30	0.4	5.4	47.8	0.50	1.10	9.5	20	1/4	6	1/4	
C	DR300-T1000-QR	205 147 523 4	1000		0.30	0.4	12.7	112.4	0.58	1.27	9.5	20	1/4	6	1/4	
C	DR300-T550-QR	205 147 522 4	550		0.30	0.4	18.6	164.6	0.58	1.27	9.5	20	1/4	6	1/4	



PIC	PART NUMBER	DESIGNATION	COLLET MAX. CAPACITY		WEIGHT	
			mm	in.	kg	lb
D	205 050 331 3	Compact 90° Angle Head - Collet spindle	5.0	3/16	0.17	0.37
D	205 050 332 3	Compact 90° Angle Head - 1/4" x 28 spindle			0.17	0.37
E	205 050 329 3	Compact 30° Angle Head - Collet spindle	5.0	3/16	0.17	0.37
E	205 050 330 3	Compact 30° Angle Head - 1/4" x 28 spindle			0.17	0.37
F	205 050 333 3	Compact 360° Angle Head - Collet spindle	5.0	3/16	0.25	0.55
F	205 050 334 3	Compact 360° Angle Head - 1/4" x 28 spindle			0.25	0.55
G	205 050 338 3	Standard 90° Angle Head - Collet spindle	6.4	1/4	0.23	0.51
G	205 050 353 3	Standard 90° Angle Head - Collet spindle	8.0	5/16	0.24	0.53
G	205 050 339 3	Standard 90° Angle Head - 1/4" x 28 spindle			0.23	0.51
G	205 050 340 3	Standard 90° Angle Head - 5/16" x 24 spindle			0.23	0.51
H	205 050 341 3	Standard 360° Angle Head - Collet spindle	6.4	1/4	0.32	0.70
H	205 050 342 3	Standard 360° Angle Head - 1/4" x 28 spindle			0.32	0.70
H	205 050 343 3	Standard 360° Angle Head - 5/16" x 24 spindle			0.32	0.70
J	205 050 335 3	Compact 45° Angle Head - Collet spindle	5.0	3/16	0.23	0.51
J	205 050 336 3	Compact 45° Angle Head - 1/4" x 28 spindle			0.23	0.51
K	205 050 543 3	Chuck mounting 3/8" x 24 UNF			0.25	0.55

Speciality Tools

Offset Angle Heads

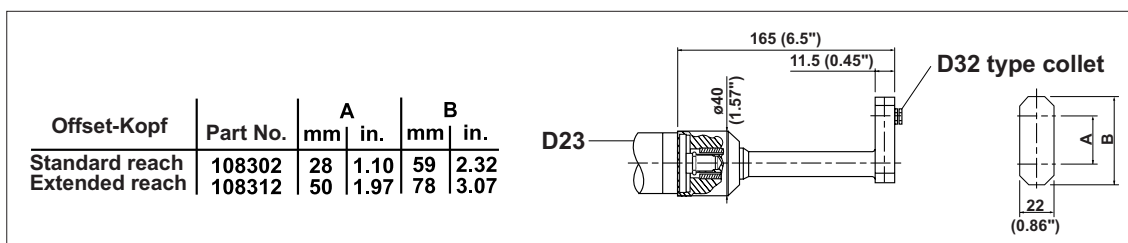
Introduction

Offset Angle Heads are used to provide solutions to drill holes in areas where access is very limited.

Two types of offset angle head module (standard and extended reach) suitable for mounting to the D23 (straight and pistol versions) drill are available.

To order please ensure that you list both the D23 Drill plus the Offset Angle Head to suit your requirements.

e.g.: D23-P-700 + Standard reach Part No. 108302



PIC REF	MODEL	PART NUMBER	FREE SPEED		CHUCK SIZE		MOTOR POWER		STALL TORQUE		WEIGHT		AIR FLOW	AIR INLET	HOSE INT. Ø	
			rpm	mm	in.	kW	hp	Nm	in.lb.	kg	lb	l/s	in.	mm	in.	

PISTOL GRIP DRILLS – TRIGGER START – D SERIES

A	D23-P-6000	1364374	6000	8.0	0.315	0.28	0.38	2.0	17.7	0.90	1.98	8.5	1/4	10	3/8
A	D23-P-4600	1364454	4600	8.0	0.315	0.28	0.38	2.0	17.7	0.90	1.98	8.5	1/4	10	3/8
A	D23-P-2900	1364534	2900	8.0	0.315	0.28	0.38	3.0	26.6	0.90	1.98	8.5	1/4	10	3/8
A	D23-P-1800	1364794	1800	8.0	0.315	0.28	0.38	5.0	44.3	1.10	2.42	8.5	1/4	10	3/8
A	D23-P-1100	1364874	1100	8.0	0.315	0.28	0.38	9.0	79.7	1.10	2.42	8.5	1/4	10	3/8
A	D23-P-700	1364954	700	8.0	0.315	0.28	0.38	15.0	132.8	1.10	2.42	8.5	1/4	10	3/8
A	D23-P-400	1365004	400	8.0	0.315	0.28	0.38	24.0	212.0	1.10	2.42	8.5	1/4	10	3/8

STRAIGHT GRIP DRILLS – LEVER START – D SERIES

B	D23-L-5700	1362914	5700	8.0	0.315	0.28	0.38	2.0	17.7	0.70	1.54	9.4	1/4	10	3/8
B	D23-L-4400	1363144	4400	8.0	0.315	0.28	0.38	2.0	17.7	0.70	1.54	9.4	1/4	10	3/8
B	D23-L-2800	1363304	2800	8.0	0.315	0.28	0.38	3.0	26.6	0.84	1.85	9.4	1/4	10	3/8
B	D23-L-1750	1363564	1750	8.0	0.315	0.28	0.38	6.0	53.1	0.84	1.85	9.4	1/4	10	3/8
B	D23-L-1050	1363724	1050	8.0	0.315	0.28	0.38	10.0	88.5	0.84	1.85	9.4	1/4	10	3/8
B	D23-L-400	1363984	400	8.0	0.315	0.28	0.38	25.0	221.3	0.84	1.85	9.4	1/4	10	3/8

STRAIGHT GRIP DRILLS – BUTTON START – D SERIES

•	D23-S-4400	1363064	4400	8.0	0.315	0.28	0.38	2.0	17.7	0.70	1.54	9.4	1/4	10	3/8
•	D23-S-2800	1363224	2800	8.0	0.315	0.28	0.38	3.0	26.6	0.70	1.54	9.4	1/4	10	3/8
•	D23-S-1750	1363484	1750	8.0	0.315	0.28	0.38	6.0	53.1	0.84	1.85	9.4	1/4	10	3/8
•	D23-S-1050	1363644	1050	8.0	0.315	0.28	0.38	10.0	88.5	0.84	1.85	9.4	1/4	10	3/8
•	D23-S-400	1363804	400	8.0	0.315	0.28	0.38	25.0	221.3	0.84	1.85	9.4	1/4	10	3/8

Hole Deburring & Rivet Shaving



A



B



C



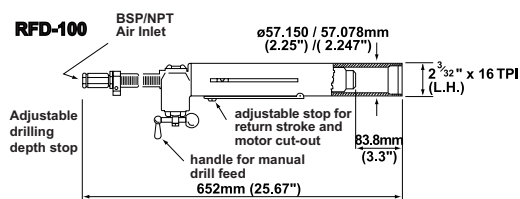
D

Accessories: see page 269

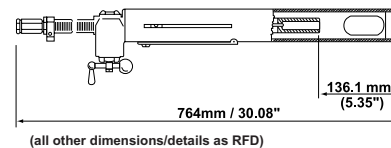


PIC REF	MODEL	PART NUMBER	FREE SPEED	COLLET SIZE	MAXIMUM CUTTER DIA.		WEIGHT		LENGTH		AIR FLOW		AIR INLET	HOSE INT. Ø	
					mm	in.	kg	lb	mm	in.	l/s	cfm		mm	in.
			rpm	mm	mm	in.	kg	lb	mm	in.	l/s	cfm	in.	mm	in.
HOLE DEBURRING TOOLS – PUSH TO START															
(integral speed regulator)															
A	A27-A-1300	1406594	100 - 1300	4	–	–	0.24	0.52	172	6.77	2.4	5.0	M5	3	1/8
B	C27-AX-1450	1405414	100 - 1450	6	–	–	0.48	1.05	218	8.58	6.2	13.0	1/4	6	1/4
RIVET SHAVERS (for accessory 1/4"-26 WHIT)															
C	D156-S-20000	1275194	20000	–	14.3	9/16	1.0	2.2	232	9.13	9.3	19.7	1/4	10	3/8
D	D156-P-20000	147664	20000	–	14.3	9/16	1.1	2.4	203	7.99	9.3	19.7	1/4	10	3/8
RIVET SHAVERS (for accessory 1/4"-28 UNF)															
D	D156-P-20000	205 146 600 4	20000	–	14.3	9/16	1.1	2.4	203	7.99	9.3	19.7	1/4	10	3/8

Accessories



RFD-125



RFD-100 / RFD-125

ACCESSORIES INCLUDED

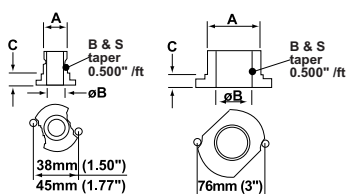
	PART NO.	
	RFD	RFDT
• Chuck with key capacity 13mm (1/2")	29142	
• Extended Nose (1" x 14 TPI LH nose thread)	251043	
• Bayonet Plate – 45mm (1.77") centres	251063	
• Bayonet Plate – 76mm (2.99") centres		35323

OPTIONAL ACCESSORIES

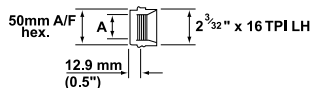
	PART NO.
	RFD
• Chuck Key	29242

Bayonet Plates

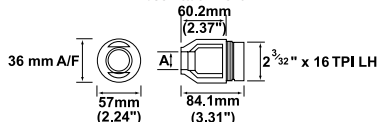
	PART NO.			
	'A'	'ØB'	'C'	
• Locating centres – 38mm (1.50")	3/4" x 16 TPI (LH)	14.2mm (0.559")	9.5mm (3/8")	251053
• Locating centres – 45mm (1.77")	1" x 14 TPI (LH)	19.05mm (3/4")	9.5mm (3/8")	251063
• Locating centres – 45mm (1.77")	1 1/8" x 20 TPI (LH)	19.05mm (3/4")	9.5mm (3/8")	31113
• Locating centres – 76mm (2.99")	2 3/32" x 16 TPI (LH)	38.1mm (1.150")	12.7mm (1/2")	35323



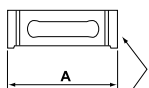
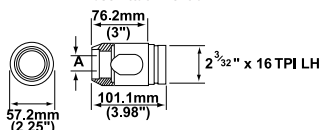
Nose Attachment 1



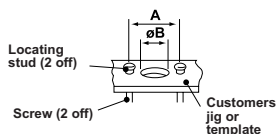
Nose Attachment 2



Nose Attachment 3



Internal thread
23/32" 16 TPI LH
- both ends



1. Push nose into jig



2. Give quarter turn counter clockwise to lock

Nose Attachments

Nose type	To suit bayonet plate centres	Thread 'A'	PART NO.
1	38mm (1.50")	3/4" x 16 TPI (LH)	235773
2	38mm (1.50")	3/4" x 16 TPI (LH)	251033
2	45mm (1.77")	1" x 14 TPI (LH)	251043
3	–	1 1/4" x 12 TPI (LH)	235213
3	–	1 1/2" x 12 TPI (LH)	235223
3	–	2" x 16 TPI (LH)	235343

Extension Tubes

Nominal stroke available to drill	Length 'A'	PART NO.
80mm / (3.15")	170mm / (6.69")	250923

Jig Plates

Centres 'A'	PART NO.	
	LOCATING STUD	SCREW
38mm (1.50")	17632	17642
45mm (1.77")	17632	17642

For dimension 'ØB' please ask for details of our range of drill bushes.

Rack Feed Drills

- The Rack Feed Drill is a semi-fixtured (nose mounted) portable drilling unit, utilising a manual feed through an integral “rack and pinion” mechanism to accommodate the approach drilling and retract cycles. This provides the user with complete control of the feed rate during drilling and allows the user to “feel” the feed rate required. Versatile and flexible, especially when drilling laminates and sandwich materials.
- RFD is suitable for drilling/reaming various materials used in the Aerospace industries e.g. Inconel, Titanium, Steel, Aluminium and Composites.
- A wide speed range from 60 rpm to 2800 rpm is available allowing the best speed to be selected to suit the application.
- RFD-100 provides 102mm (4") of adjustable working stroke length with a 13mm (1/2") chuck capacity.
- RFDT-125 provides 127mm (5") of adjustable working stroke length with a No. 2 Morse Taper drive spindle.
- Automatic motor start/stop – can be set to operate at any point within stroke setting for maximum economy of air.
- Various nose configurations can be provided.



RFD Selection

DRILL DIA.	MATERIAL			
	Inconel	Titanium	Mild Steel	Aluminium
3mm 1/8"	RFD-330/500 RFDT-330/500	RFD-500 RFDT-500	RFD-2800	RFD-2800
5mm 3/16"	RFD-140/330 RFDT-140/330	RFD-330/500 RFDT-330/500	RFD-1850	RFD-2800
6mm 1/4"	RFD-140 RFDT-140	RFD-140/330 RFDT-140/330	RFD-800 RFDT-800	RFD-1850
8mm 5/16"	RFD-140 RFDT-140	RFD-140/330 RFDT-140/330	RFD-800 RFDT-800	RFD-800 RFDT-800
10mm 3/8"	RFD-85/140 RFDT-85/140	RFD-140 RFDT-140	RFD-800 RFDT-800	RFD-800 RFDT-800
13mm 1/2"	RFD-60/85 RFDT-60/85	RFD-85/140 RFDT-85/140	RFD-500 RFDT-500	RFD-800 RFDT-800
16mm 5/8"		RFD-85/140 RFDT-85/140	RFD-330 RFDT-330	RFD-800 RFDT-800
19mm 3/4"		RFD-60/85 RFDT-60/85	RFD-85/140 RFDT-85/140	RFD-330/500 RFDT-330/500
25mm 1"			RFD-60/85 RFDT-60/85	RFD-140/330 RFDT-140/330

Use selection data as a guide only

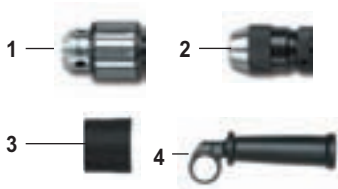
MODEL	PART NUMBER	FREE SPEED	MAX STROKE		OUTPUT SPINDLE	WEIGHT		AIR CONSUMPTION		AIR INLET	HOSE INT. Ø	
			mm	in.		kg	lb	l/s	cfm	in.	mm	in.
RFD-100-2800	681214	2800	102	4		3.9	8.6	11.8	25	1/4	10	3/8
RFD-100-1850	681394	1850	102	4		3.9	8.6	11.8	25	1/4	10	3/8
RFD-100-800	680084	800	102	4	Chuck	3.9	8.6	11.8	25	1/4	10	3/8
RFD-100-500	680164	500	102	4	13mm	3.9	8.6	11.8	25	1/4	10	3/8
RFD-100-330	680244	330	102	4	1/2"	3.9	8.6	11.8	25	1/4	10	3/8
RFD-100-140	1457364	140	102	4	capacity	3.9	8.6	11.8	25	1/4	10	3/8
RFD-100-85	1457374	85	102	4		3.9	8.6	11.8	25	1/4	10	3/8
RFD-100-60	1457384	60	102	4		3.9	8.6	11.8	25	1/4	10	3/8
RFDT-125-800	1445654	800	127	5		5.5	12.1	11.8	25	1/4	10	3/8
RFDT-125-500	1445664	500	127	5	No. 2	5.5	12.1	11.8	25	1/4	10	3/8
RFDT-125-330	1445674	330	127	5	Morse	5.5	12.1	11.8	25	1/4	10	3/8
RFDT-125-140	1445504	140	127	5	Taper	5.5	12.1	11.8	25	1/4	10	3/8
RFDT-125-85	1445514	85	127	5		5.5	12.1	11.8	25	1/4	10	3/8
RFDT-125-60	1445524	60	127	5		5.5	12.1	11.8	25	1/4	10	3/8

Accessories for Pistol & Straight Grip Drills

DR350-P... / DR500-P... / DR750-P...

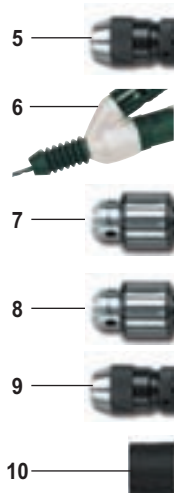
ACCESSORIES INCLUDED

ITEM	DR350-P...C8	DR350-P...C10	DR500-P...C13	DR350-P...K8
	DR500-P...C8	DR500-P...C10	DR750-P...C13	DR500-P...K8/10
1 Chuck threaded 3/8" UNF - cap. 8mm (5/16") (with key)	205 053 013 3			
1 Chuck threaded 3/8" UNF - cap. 10mm (3/8") (with key)		205 052 954 3		
1 Chuck threaded 3/8" UNF - cap. 13mm (1/2") (with key)			473113	
• Chuck Key	410213	29232	29242	
2 Keyless Chuck threaded 3/8" UNF - cap. 8mm (5/16") (for K8 model)				473433
2 Keyless Chuck threaded 3/8" UNF - cap. 10mm (3/8") (for K10 model)				473423
3 Chuck Guard (for DR350-P...C8)	205 049 275 3			
3 Chuck Guard (for DR500-P...C8)	205 049 486 3			
3 Chuck Guard (for DR750-P...C8 & C10)	473143	473133		
4 Side Handle *supplied with the DR350-P550.. & DR350-P1000..	205 049 446 3*	205 049 446 3*		205 049 446 3*
4 Side handle *supplied with DR500-P400 to P1800		205 053 102 3*	205 053 102 3*	205 053 102 3*
4 Side handle (for DR750-P...)	473173	473173	473173	473173
• Suspension Bail (for DR750-P...)	473153	473153	473153	473153



OPTIONAL ACCESSORIES

ITEM	DR350-P...	DR500-P...	DR750-P.	DR750-P. JT1 MOUNT	DR750. JT2 MOUNT
• Sleeve - JT1 female to JT2 male				12243	
4 Side Handle	205 049 446 3	205 053 102 3			
5 Keyless Chuck threaded 3/8" UNF - cap. 8mm (5/16")	473433	473433	473433		
5 Keyless Chuck threaded 3/8" UNF - cap. 10mm (3/8")		473423	473423		
5 Keyless Chuck threaded 3/8" UNF - cap. 13mm (1/2")			205 047 819 3		
6 Dust extraction kit (*for DR750-P...-C8 & C10)	205 050 218 3		205 047 503 3*		
7 Chuck threaded 3/8" UNF - cap. 10mm (3/8") (with key)			31132		
• Chuck key			29232		
• Flat wrench, 12.7mm (1/2")			15533		
8 Chuck with key (29182) - cap. 6.5mm (1/4")				29492	
8 Chuck with key (29232) - cap. 10mm (3/8")				29042	34752
8 Chuck with key (29232) - cap. 13mm (1/2")					34332
9 Keyless Chuck - cap. 6.5mm (1/4")				524.09	
9 Keyless Chuck - cap. 10mm (3/8")				524.15	524.10
9 Keyless Chuck - cap. 13mm (1/2")					524.16
9 Keyless Chuck - cap. 16mm (5/8")					
10 Chuck Guard - use with chuck with key - cap. 6.5mm (1/4")				473143	
10 Chuck Guard - use with chuck with key - cap. 10mm (3/8")					473133
• No. 2 Morse Taper Spindle					34862



DR300-T...

ACCESSORIES INCLUDED

ITEM	DR300-T...C8	DR300-T...C10
1 Short lever	205 050 299 3	205 050 299 3
2 Safety lever	205 050 288 3	205 050 288 3
3 Inlet button with lever recess plugs	205 050 453 3	205 050 453 3
4 Chuck threaded 3/8" UNF - cap. 8mm (5/16") (with key)	205 053 013 3	
4 Chuck threaded 3/8" UNF - cap. 10mm (3/8") (with key)		205 052 654 3
• Chuck key	410213	29232
5 Chuck Guard	205 049 275 3	
• Exhaust hose (with clamp ring)	205 051 259 3	205 051 259 3
6 Side handle		205 049 446 3

OPTIONAL ACCESSORIES

ITEM	DR300-T...C8	DR300-T...C10
7 Keyless Chuck threaded 3/8" UNF - cap. 8mm (5/16")	473433	473433
8 Dust extraction kit	205 050 218 3	
9 Suspension Bail (for vertical tool suspension)	39433	39433
6 Side handle	205 049 446 3	



Accessories for Angle Drills

DR300-...-T5-90/-S5-90/-T6-90/-S6-90 DR300-...-T5-30/-45/-S5-30/-45 DR300-...-T5-360/-S5-360/-T6-360/-S6-360 D3141-S/-L / D3143-S/-L

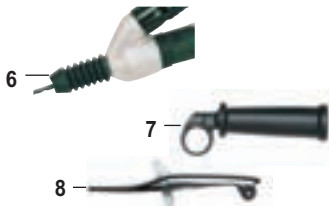
ACCESSORIES INCLUDED

ITEM	DR300-T5-90	DR300-T6-90	DR300-S5-90		D3141-S D3141-L	D3143-S D3143-L
	DR300-T5-30/-45/-360	DR300-T6-360	DR300-S5-30/-45/-360	DR300-S6-90/-360		
• ø 4.8mm (3/16") capacity collet	2552					
• ø 6.4mm (1/4") capacity collet		19182				
• ø 8mm (5/16") capacity collet					2872	
1 Chuck threaded 3/8" UNF - cap. 8mm (5/16") (with key)						410203
2 Short lever	205 050 299 3	205 050 299 3	205 050 299 3		410303	410303
3 Standard lever					305893	305893
4 Safety lever	205 050 288 3	205 050 288 3	205 050 288 3			
5 Inlet button with lever recess plugs	205 050 454 3	205 050 454 3	205 050 454 3		205 050 454 3	
• Exhaust hose with clamp ring	205 050 746 3	205 050 746 3	205 050 746 3		205 050 746 3	
• Chuck key						410213
• Flat wrench 8-9.5mm	268263					
• Flat wrench 10mm		82623				



OPTIONAL ACCESSORIES

ITEM	DR300-T5-90	DR300-T6-90/-360	DR300-S5-90	D3141-S	D3143-S
	DR300-T5-30/-45/-360	DR300-S6-90/-360	DR300-S5-30/-45/-360	D3141-L	D3143-L
6 Dust extraction kit	94972				
7 Side handle	205 049 446 3	205 049 446 3	205 049 446 3		
8 Safety lever				323893	323893



Collet capacity	DR300-T5-90	DR300-T6-90	D3141-S	Collet capacity	DR300-T5-90	DR300-T6-90	D3141-S
	T5-30/-45/-360	T6-360	D3141-L		T5-30/-45/-360	T6-360	D3141-L
	A	B	C		A	B	C
• ø 0.8mm	2152			• ø 3.9mm	2462		
• ø 0.9mm	2162			• ø 4.0mm (5/32")	2472	19052	2672
• ø 1.0mm	2172			• ø 4.1mm	2482		
• ø 1.1mm	2182			• ø 4.2mm	2492	19062	2682
• ø 1.2mm	2192			• ø 4.3mm	2502		
• ø 1.3mm	2202			• ø 4.4mm	2512	19072	2692
• ø 1.4mm	2212			• ø 4.5mm	2522		
• ø 1.5mm	2222			• ø 4.6mm	2532	19082	2702
• ø 1.6mm	2232	18922		• ø 4.7mm	2542		
• ø 1.7mm	2242			• ø 4.8mm (3/16")	2552	19092	2712
• ø 1.8mm	2252	18932		• ø 4.9mm	2562		
• ø 1.9mm	2262			• ø 5.0mm	2572	19102	2722
• ø 2.0mm	2272	18942		• ø 5.2mm		19122	2732
• ø 2.1mm	2282			• ø 5.4mm		19132	2742
• ø 2.2mm	2292	18952		• ø 5.6mm		19142	2752
• ø 2.3mm	2302			• ø 5.8mm		19152	2762
• ø 2.4mm (3/32")	2312	18962	2592	• ø 6.0mm		19162	2772
• ø 2.5mm	2322			• ø 6.2mm		19172	2782
• ø 2.6mm	2332	18972	2602	• ø 6.4mm (1/4")		19182	2792
• ø 2.7mm	2342			• ø 6.6mm			2802
• ø 2.8mm	2352	18982	2612	• ø 6.8mm			2812
• ø 2.9mm	2362			• ø 7.0mm			2822
• ø 3.0mm	2372	18992	2622	• ø 7.2mm (9/32")			2832
• ø 3.1mm	2382			• ø 7.4mm			2842
• ø 3.2mm (1/8")	2392	19002	2632	• ø 7.6mm			2852
• ø 3.3mm	2402			• ø 7.8mm			2862
• ø 3.4mm	2412	19022	2642	• ø 8.0mm (5/16")			2872
• ø 3.5mm	2422			• ø 1/16"	91442		
• ø 3.6mm	2432	19032	2652	• ø 3/32"	91452		
• ø 3.7mm	2442			• ø 1/8"	91462		
• ø 3.8mm	2452	19042	2662	• ø 5/32"	91472		
A threaded 9/32"x 40				• ø 3/16"	91482		



Accessories for Tappers

D16-S-... / D16-L-... / D16-P-... / 2F16-L-...

ACCESSORIES INCLUDED

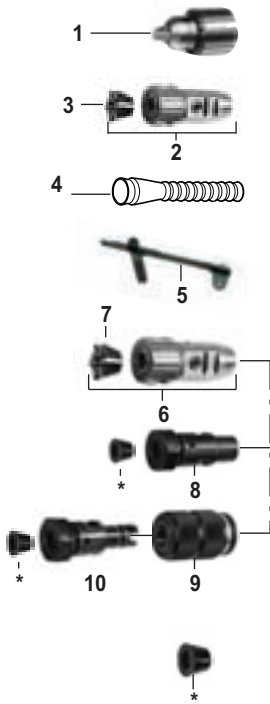
ITEM	PART NUMBER		
	D16-S-1000 D16-L-1000 D16-P-750	D16-S-500 D16-L-500 D16-P-450	2F16-L-700 2F16-L-250
1 Chuck (Jacobs No. 1 taper) - cap. 6.5mm (1/4") (with key)	29492		
1 Chuck (Jacobs No. 1 taper) - cap. 10mm (3/8") (with key)		29042	
• Chuck key	29182	29232	
2 Precision collet tap holder (No. 1 taper)			29462
3 Collet capacity M3.5 to M6 (9/64" to 1/4")			29482
4 Exhaust hose (except D16-P-..)	222453	222453	222453
• Clamp	235203	235203	235203

OPTIONAL ACCESSORIES

ITEM	PART NO.
5 Lock off lever	323893
6 Precision collet tap holder (with collet 29472) (1 JT)	29452
7 Collet capacity M4 to M8 (5/32" to 5/16")	29472
7 Collet capacity M3 to M7 (1/8" to 9/32")	29482
7 Collet capacity M6 to M12 (15/64" to 15/32")	97982
8 *Tap Holder (1 JT)	69922
9 Quick Release Chuck	16852
10 *Quick Release Tap Holder	69872

*Collets for Tap Holders:

TAP SIZE		BA	SHANK DIA		PART NO.
mm	in.		mm		
• M2.2 & M2.5		6 & 8	2.8		2612
• M3	1/8"	5	3.2		2632
• M3.5		4	3.6		2652
• M4			4.0		2672
• M4.5		3	4.5		2702
• M5	3/16"	2	5.0		2722
• M5.5	7/32"	1	5.6		2752
• M6	1/4"	0	6.3		2792
• M7	9/32"		7.1		2832
• M8 & M11	5/16" & 7/16"		8.0		2872
• M9 & M12	1/2"		9.0		69882
• M10	3/8"		10.0		69892
• *Wrench for Tap Holder collet nut					29443
• *2mm A/F hexagon key for Tap Holder grub screws					206773

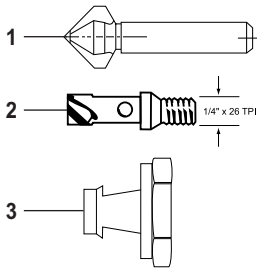


Accessories for Hole Deburring & Rivet Shaving

A27-A-... / C27-AX-... / D156-S-... / D156-P-...

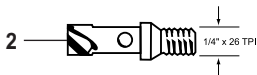
ACCESSORIES INCLUDED

ITEM	PART NO.			
	A27-A	C27-AX	D156-S	D156-P
• ø 3mm capacity collet - 9/32" x 40 Treaded	2372			
• ø 4mm (5/32") capacity collet - 9/32" x 40 Treaded	2472			
• ø 6.4mm (1/4") capacity collet			615 526 059 0	
1 Cutter (90° point) – 5mm dia	91752			
1 Cutter (90° point) – 10mm dia		91572		
2 Cutter – carbide tipped (11.1mm 7/16" dia)			70602	70602
3 Cutter Guard			18822	18822
• Air Hose (M5 x 1/8" BSP) – 4mm bore	79322			
• Adaptor (1/8" BSP female to 1/8" NPT male)	271463			
• Suspension Bail	280903	39433		
• Exhaust hose	280913	222453	222453	
• Exhaust Hose Clip		235203	235203	
• Collet Nut Wrench	82623	18583		
• Collet Spindle Wrench	268263	159003	15533	15533
• Cutter Guard Wrench			38873	38873
• Bit stop		322053		

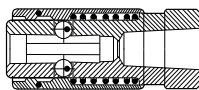


OPTIONAL ACCESSORIES

ITEM	PART NO.	
	D156-S	D156-P
• Suspension Bail	39433	
• Offset exhaust silencer	77722	
2 Cutter – carbide tipped ø6.4mm (ø1/4")	70572	70572
2 Cutter – carbide tipped ø7.9mm (ø5/16")	70582	70582
2 Cutter – carbide tipped ø9.5mm (ø3/8")	70592	70592
2 Cutter – carbide tipped ø12.7mm (ø1/2")	70622	70622
3 Cutter Guard ø6.4mm (ø 1/4")	18782	18782
3 Cutter Guard ø7.9mm (ø 5/16")	18792	18792
3 Cutter Guard ø9.5mm (ø 3/8")	18802	18802
3 Cutter Guard ø12.7mm (ø 1/2")	18832	18832
3 Cutter Guard ø14.3mm (ø 9/16")	18842	18842



Drilling Accessories



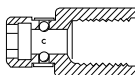
SCREWDRIVER BIT ADAPTOR

TAPER	INSIDE HEX	NOTES	PART NO.
Jacobs No 1	5/16 Hex	Quick release	27742
Jacobs No 1	1/4" Hex	Quick release	31102



TAPER ADAPTOR

TAPER	TAPER	NOTES	PART NO.
Jacobs No 1	Jacobs No 2		12243



SCREWDRIVER BIT ADAPTOR

INSIDE THREAD	TAPER/INSIDE HEX	NOTES	PART NO.
3/8" x 24	1/4" Hex E6.3	Positive retention	615 804 419 0

CFD - Portable Feed Drill & PECK-CFD - Portable Peck Feed Drill

- These tools are designed to be fixture mounted and to produce high quality holes during the drilling process. Consequently, they provide optimum operator comfort and do not depend on the operator to exert the forces required for manual drilling.

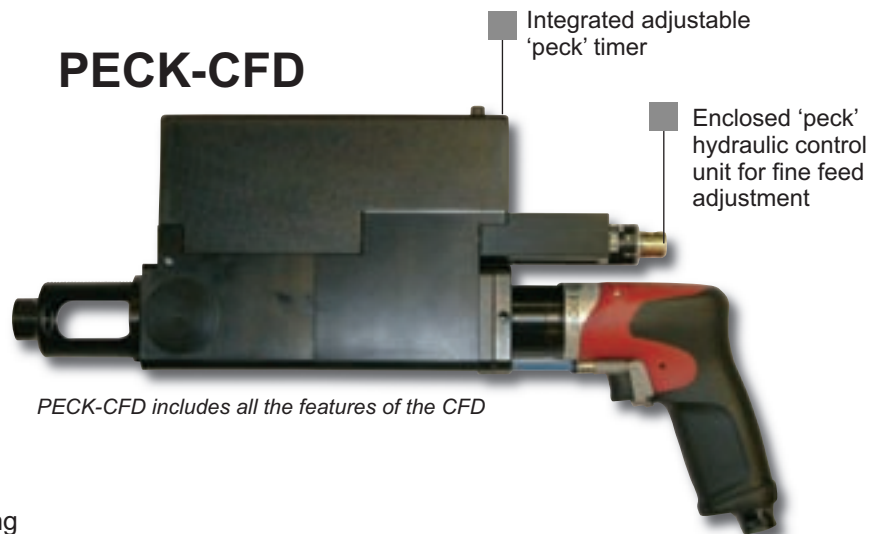
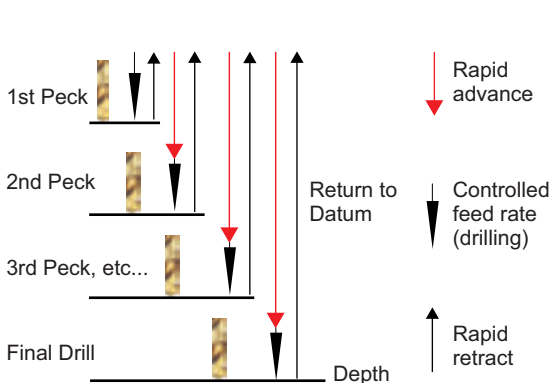
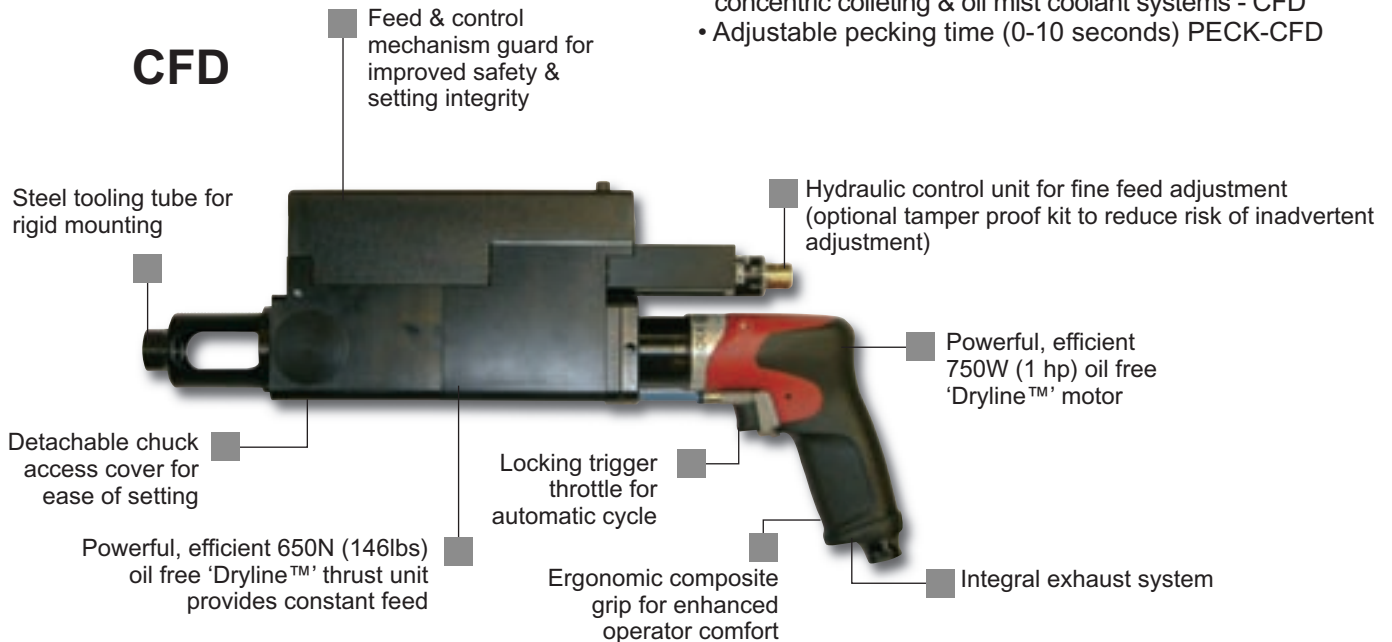
Ergonomics & Operator Comfort

- High Power to Weight ratio
- Lightweight for ease of handling to fixture mount

- PECK-CFD - Utilising our existing Constant Feed Drill design with the added advantage of 'peck' drilling.

Features

- Powered by a full 750W (1 hp) oil free motor
- Feed unit provides in excess of 650N (146lbs) thrust
- Working stroke 50mm (2")
- Chuck capacity Ø10mm max. (3/8")
- Adjustable dwell control (0-4 seconds) - ideal for countersinking & spotfacing application
- Depth repeatability $\leq 0.0127\text{mm}$ ($\leq 0.0005\text{"}$)
- Integrated feed ports to activate external accessories e.g. concentric colleting & oil mist coolant systems - CFD
- Adjustable pecking time (0-10 seconds) PECK-CFD



PECK-CFD includes all the features of the CFD

Reliability and Servicing

- Modular construction provides ease of servicing
- Minor and major service kits available to ensure a 'right first time' service

Portable Feed Drill

Drilling Speed Selection Guide

FREE SPEED	TITANIUM		STAINLESS STEEL		SOFT CAST IRON MILD STEEL		ALUMINUM BRASS COPPER		COMPOSITE	
rpm			9-15 m/min	30-50 ft/min	20-25 m/min	65-115 ft/min	50-80 m/min	165-265 ft/min	50-100 m/min	165-330 ft/min
Drill Ø										
20000	-	-	-	-	-	-	2mm	5/64"	4mm	5/32"
6000	-	-	-	-	-	-	4mm	5/32"	5mm	3/16"
4100	-	-	-	-	-	-	6mm	1/4"	8mm	5/16"
3300	-	-	-	-	3mm	1/8"	8mm	5/16"	10mm	3/8"
2700	-	-	-	-	4mm	5/32"	10mm	3/8"	-	-
1300	2mm	5/64"	4mm	5/32"	9mm	11/32"	-	-	-	-
750	3mm	1/8"	7mm	9/32"	10mm	3/8"	-	-	-	-
400	3mm	1/8"	7mm	9/32"	10mm	3/8"	-	-	-	-

CFD - PECK-CFD



Max. working stroke 50mm (2")

MODEL		FREE SPEED	STD. CHUCK SIZE		MOTOR POWER		DYNAMIC THRUST		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
		rpm	mm	in.	kW	Hp	N	lbf	kg	lb	l/s	cfm	BSP/NPT	mm	in.
CFD-DR750-P20000	PECK-CFD-DR750-P20000	20000	8	5/16	0.75	1.00	650	146	4.5	9.90	14	30	1/4	10	3/8
CFD-DR750-P6000	PECK-CFD-DR750-P6000	6000	8	5/16	0.75	1.00	650	146	4.5	9.90	14	30	1/4	10	3/8
CFD-DR750-P4100	PECK-CFD-DR750-P4100	4100	8	5/16	0.75	1.00	650	146	4.5	9.90	14	30	1/4	10	3/8
CFD-DR750-P3300	PECK-CFD-DR750-P3300	3300	10	3/8	0.75	1.00	650	146	4.5	9.90	14	30	1/4	10	3/8
CFD-DR750-P2700	PECK-CFD-DR750-P2700	2700	10	3/8	0.75	1.00	650	146	4.5	9.90	14	30	1/4	10	3/8
CFD-DR750-P1300	PECK-CFD-DR750-P1300	1300	10	3/8	0.75	1.00	650	146	5.0	11.00	14	30	1/4	10	3/8
CFD-DR750-P750	PECK-CFD-DR750-P750	750	10	3/8	0.75	1.00	650	146	5.0	11.00	14	30	1/4	10	3/8
CFD-DR750-P400	PECK-CFD-DR750-P400	400	10	3/8	0.75	1.00	650	146	5.0	11.00	14	30	1/4	10	3/8

How to order...

Constant Feed Drill



Hydraulic Control Unit

PART NUMBER	MODEL	FREE SPEED	STD. CHUCK SIZE	
		rpm	mm	in.
205 147 221 4	CFD-DR750-P20000	20000	8	5/16
205 147 220 4	CFD-DR750-P6000	6000	8	5/16
205 147 219 4	CFD-DR750-P4100	4100	8	5/16
205 147 218 4	CFD-DR750-P3300	3300	10	3/8
205 147 217 4	CFD-DR750-P2700	2700	10	3/8
205 147 216 4	CFD-DR750-P1300	1300	10	3/8
205 147 215 4	CFD-DR750-P750	750	10	3/8
205 147 214 4	CFD-DR750-P400	400	10	3/8

Pt No. 91942 – 25mm (1") stroke
Pt No. 91952 – 50mm (2") stroke



For alternative chuck or collet spindle, please select from accessories section.

How to order...

Peck Feed Drill



Hydraulic Control Unit

PART NUMBER	MODEL	FREE SPEED	STD. CHUCK SIZE	
		rpm	mm	in.
205 147 367 4	PECK-CFD-DR750-P20000	20000	8	5/16
205 147 366 4	PECK-CFD-DR750-P6000	6000	8	5/16
205 147 365 4	PECK-CFD-DR750-P4100	4100	8	5/16
205 147 364 4	PECK-CFD-DR750-P3300	3300	10	3/8
205 147 363 4	PECK-CFD-DR750-P2700	2700	10	3/8
205 147 362 4	PECK-CFD-DR750-P1300	1300	10	3/8
205 147 361 4	PECK-CFD-DR750-P750	750	10	3/8
205 147 360 4	PECK-CFD-DR750-P400	400	10	3/8

Pt No. 91972 – 25mm (1") stroke
Pt No. 91982 – 50mm (2") stroke



For alternative chuck or collet spindle, please select from accessories section.

Concentric Colleting System

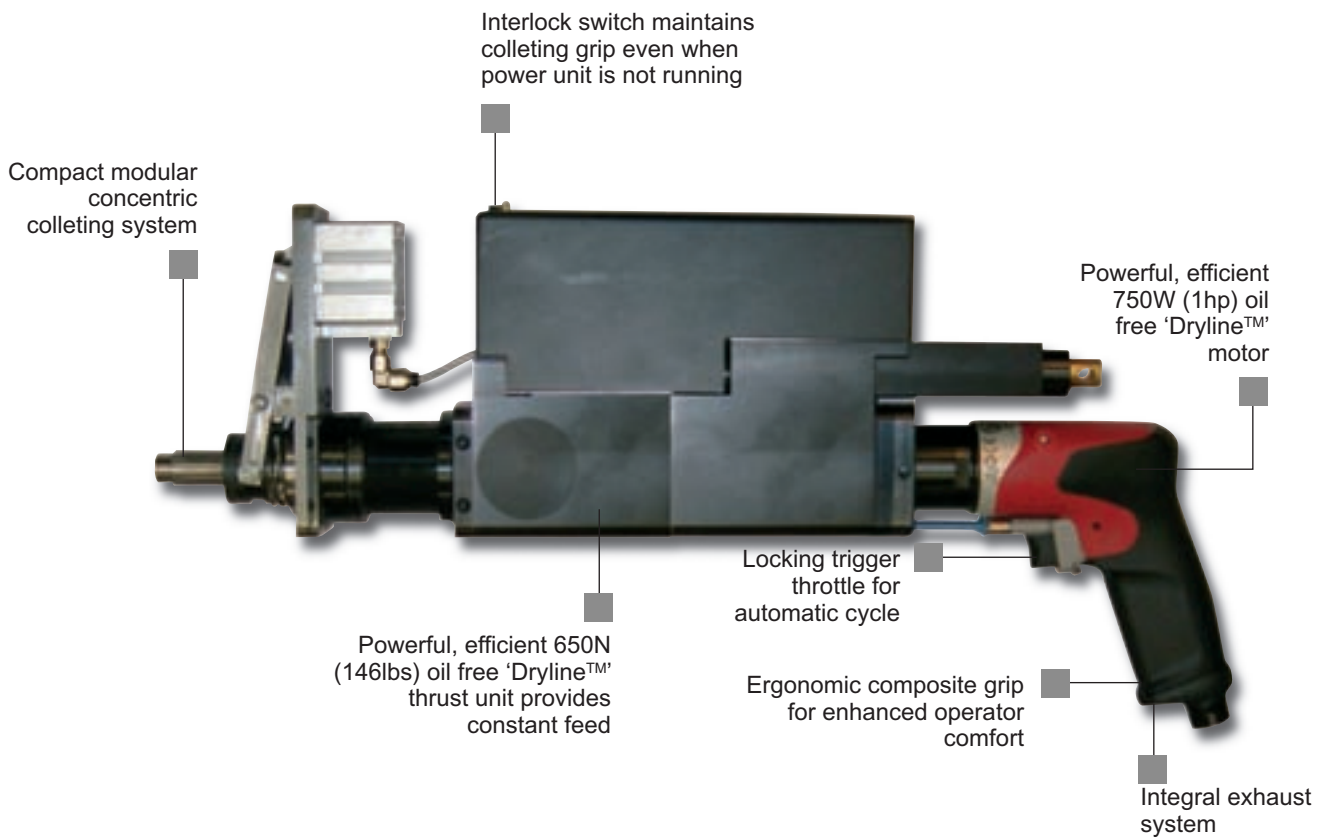
- Utilising our existing Constant Feed Drill & Peck Feed Drill designs we are now able to offer both units with the added benefit of Concentric Collet jig mounting

Ergonomics & Operator Comfort

- High Power to Weight ratio
- Simple to use system for ease of handling

Features

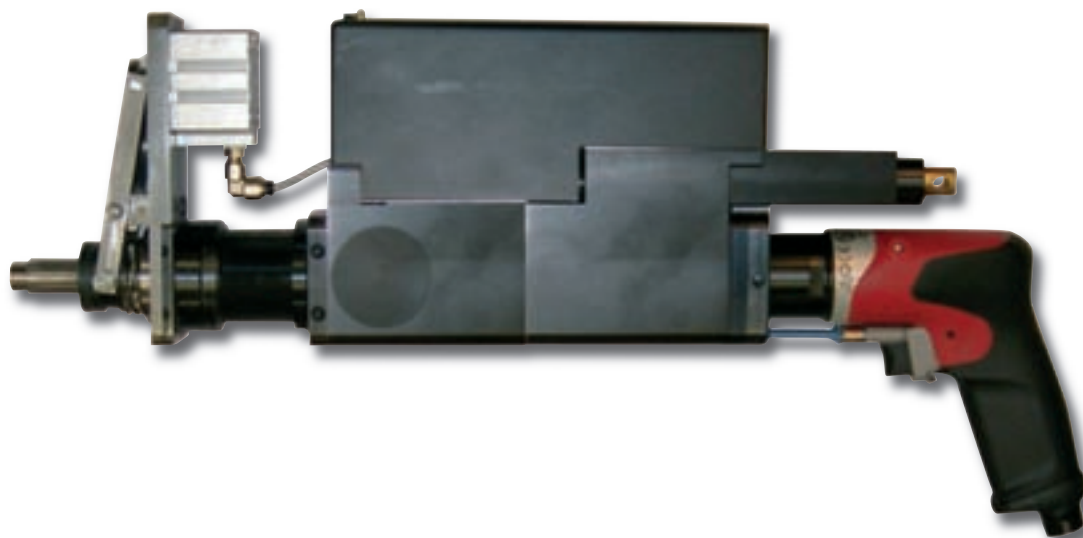
- All the great features of the Constant Feed Drill and Peck Feed Drill
- Virtually all popular sizes of colleting system can be accommodated
- Tailor made design & manufacture service available



Reliability & Servicing

- Modular construction provides ease of servicing
- Minor & major service kits available to ensure a 'right first time' service

Concentric Colleting System



How to order...

Constant Feed Drill

fitted with

Concentric collet
(refer to next page for specifications)



Hydraulic Control Unit

Pt No. 91942 – 25mm (1") stroke
Pt No. 91952 – 50mm (2") stroke

MODEL	FREE SPEED	STD. CHUCK SIZE	
	rpm	mm	in
CFD-DR750-P20000	20000	8	5/16
CFD-DR750-P6000	6000	8	5/16
CFD-DR750-P4100	4100	8	5/16
CFD-DR750-P3300	3300	10	3/8
CFD-DR750-P2700	2700	10	3/8
CFD-DR750-P1300	1300	10	3/8
CFD-DR750-P750	750	10	3/8
CFD-DR750-P400	400	10	3/8



How to order...

Peck Feed Drill

fitted with

Concentric collet
(refer to next page for specifications)



Hydraulic Control Unit

Pt No. 91972 – 25mm (1") stroke
Pt No. 91982 – 50mm (2") stroke

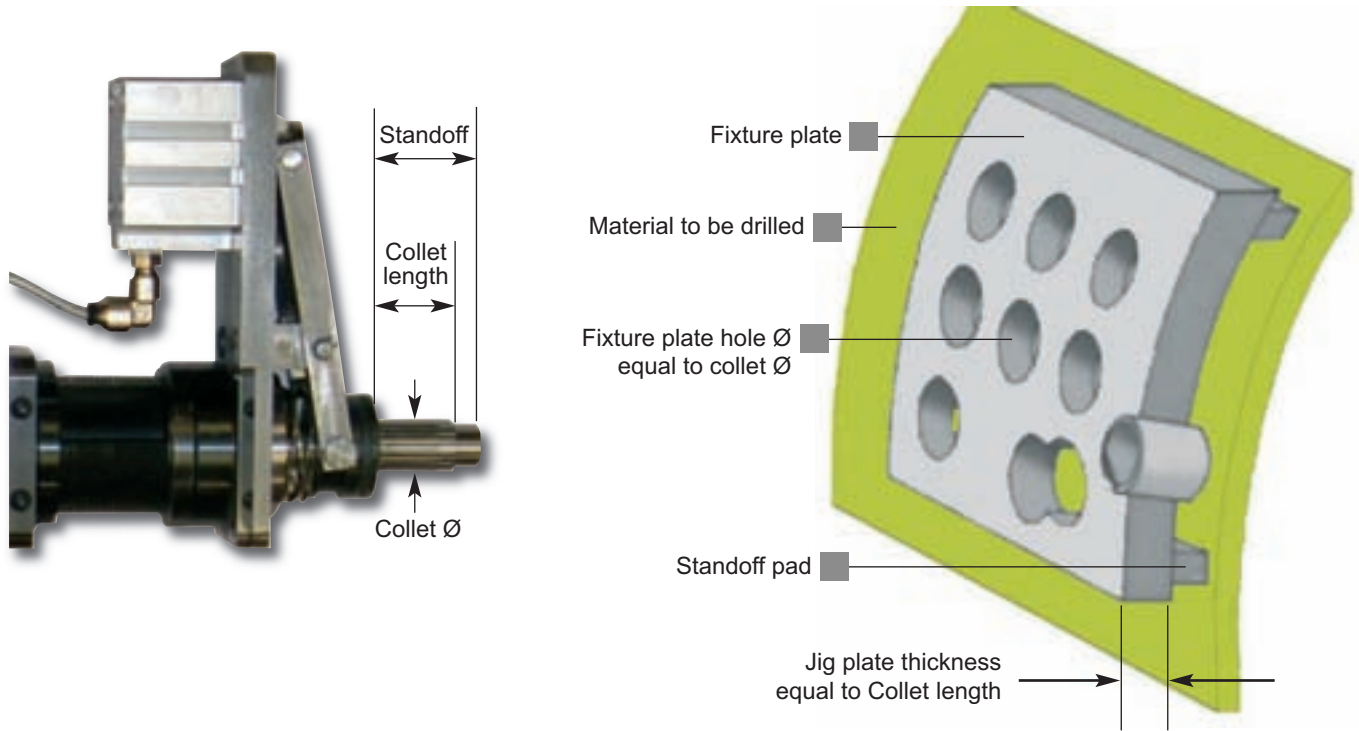
MODEL	FREE SPEED	STD. CHUCK SIZE	
	rpm	mm	in
PECK-CFD-DR750-P20000	20000	8	5/16
PECK-CFD-DR750-P6000	6000	8	5/16
PECK-CFD-DR750-P4400	4100	8	5/16
PECK-CFD-DR750-P3300	3300	10	3/8
PECK-CFD-DR750-P2700	2700	10	3/8
PECK-CFD-DR750-P1300	1300	10	3/8
PECK-CFD-DR750-P750	750	10	3/8
PECK-CFD-DR750-P400	400	10	3/8



Concentric Colleting System

The Concentric Collet automatically clamps to the fixture plate when the drill cycle is initiated. Once the drilling cycle is complete the concentric collet grip is retained until the interlock switch is depressed. The feed drill can then be removed from the fixture plate and moved to the next drilling operation.

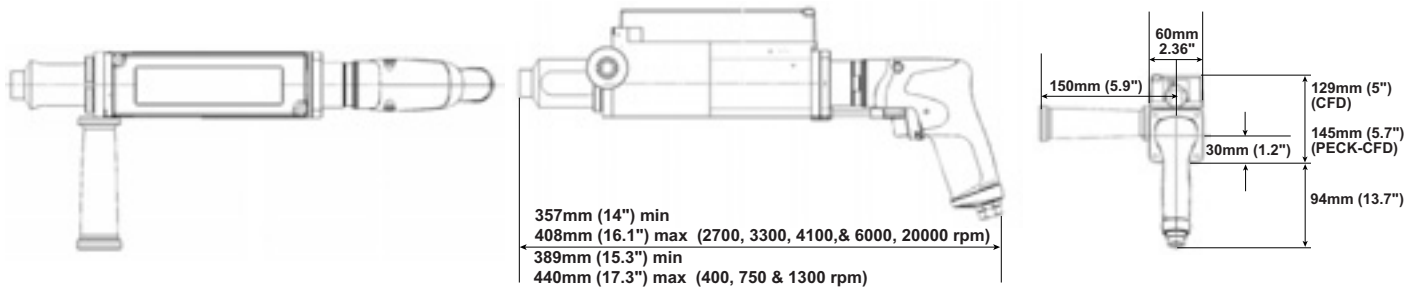
Typical Concentric Collet Tooling:



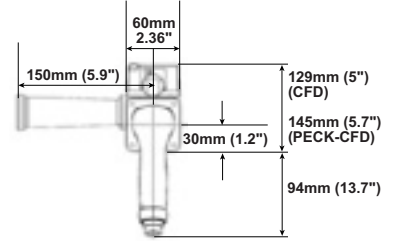
Data required to specify concentric collet :

- Collet diameter (max. Ø31.75mm / Ø1.25") _____
- Collet Length _____
- Standoff (jig plate thickness + standoff pad thickness) _____
- Hole diameter (max 10mm / 3/8") _____
- Max cutter body size _____
- Cutter length _____
- Thickness of material to be drilled (max <50mm / <2") _____
- Cutter type Drill _____
- Combination Drill / Reamer _____
- Combination Drill / Countersink _____
- Other (please specify) _____

Accessories

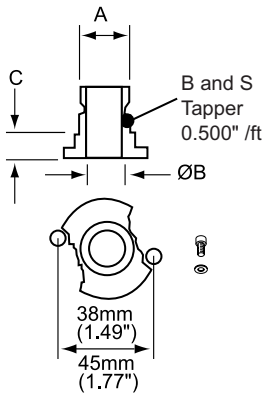
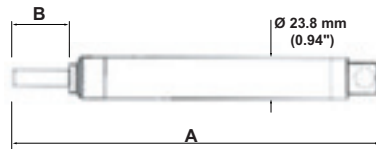


357mm (14") min
 408mm (16.1") max (2700, 3300, 4100, & 6000, 20000 rpm)
 389mm (15.3") min
 440mm (17.3") max (400, 750 & 1300 rpm)



Hydraulic Control Unit

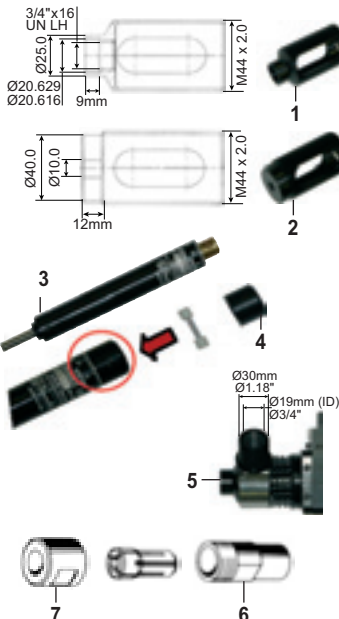
MAX. STROKE	A		B		PART NO.	USED ON	
	mm	in.	mm	in.			
25	1	199	7.83	30.1	1.19	91942	CFD
50	2	276	10.9	55.5	2.19	91952	CFD
25	1	215	8.46	56.3	2.22	91972	PECK-CFD
50	2	292	11.50	81.7	3.22	91982	PECK-CFD



Bayonet plates

	A	Ø B	C	PART NO.
• Locating centres - 38mm (1.49")	3/4" x 16 TPI (LH)	14.2mm (0.56")	9.5mm (3/8")	251053
• Locating centres - 45mm (1.77")	1" x 14 TPI (LH)	19.05mm (3/4")	9.5mm (3/8")	251063
• Locating centres - 45mm (1.77")	1 1/8" x 20 TPI (LH)	19.05mm (3/4")	9.5mm (3/8")	31113

CFD and PECK-CFD



ACCESSORIES INCLUDED

ITEM	20000, 6000 & 4100 rpm	3300, 2700, 1300 & 750 & 400 rpm
• Chuck (without key) capacity 8mm - 5/16"	410203	
• Chuck Key	410213	
• Chuck with key capacity 10mm (3/8")		31132
• Chuck Key		29232
1 Tooling Tube 3/4" - 16 UN LH thread	469883	469883

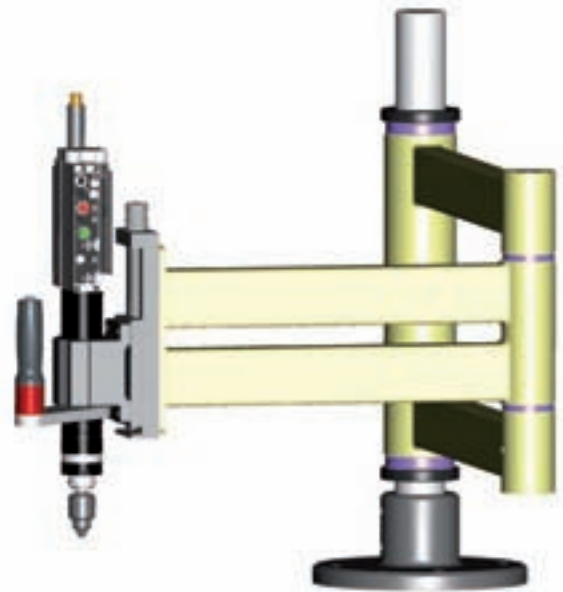
OPTIONAL ACCESSORIES

ITEM	PART NO
2 Tooling Tube blank (for local customisation)	471873
3 Hydraulic Control Unit - 25mm (1") stroke (for use with CFD only)	91942
3 Hydraulic Control Unit - 50mm (2") stroke (for use with CFD only)	91952
3 Hydraulic Control Unit - 25mm (1") stroke (for use with PECK-CFD only)	91972
3 Hydraulic Control Unit - 50mm (2") stroke (for use with PECK-CFD only)	91982
4 Hydraulic Control Unit Tamper proof HCU cap	110632
5 Dust Extraction kit	205 047 954 3
6 Collet spindle	615 523 023 0
7 Collet nut	615 607 144 0
• Collet capacity ø 2.4mm to 3.2mm (1/8")	615 526 061 0
• Collet capacity ø 5.2mm to 6mm (7/32")	615 526 062 0
• Collet capacity ø 5.55mm to 6.35mm (1/4")	615 526 063 0
• Collet capacity ø 7.2mm to 8mm (5/16")	615 526 064 0
• Collet capacity ø 8.7mm to 9.5mm (3/8")	615 526 065 0

Auto Feed Drills and Tappers

Ease of Incorporation into Machine or Process

- Extensive range of mounting clamps
- Control interfaces to link AFD(E) to other equipment (either pneumatic or electric)
- Single signal required for AFD(E) to perform cycle
- Output signals at datum and depth
- Electric motor mounting on 200, 400 and 600 series can be rotated to 180°



Comprehensive range of Product

- For single spindle operations to multi spindle processes
- Pneumatic and electric drive from 0.22kW to 1.1kW (0.3hp to 1.5hp) with thrusts from 320N to 1557N (72 to 350lbf)
- Reliability through quality



Modular Design

- Flexibility of unit function and speed
- Common components in different models reducing inventory
- Multiple spindle head options
- Drill and tapping options for all models



For further information see the AFD catalogue

Electric drive / Pneumatic feed



MODEL	MOTOR POWER		DYNAMIC THRUST		FREE SPEED	WORKING STROKE		FUNCTION
	kW	hp	N	lbf	rpm	mm	in.	
AFDE200	0.25	0.34	320	72	850-11950	90	3.54	Drill/Tapper



MODEL	MOTOR POWER		DYNAMIC THRUST		FREE SPEED	WORKING STROKE		FUNCTION
	kW	hp	N	lbf	rpm	mm	in.	
AFDE400	0.37	0.50	724	163	330-1740	100	3.94	Drill/Tapper
AFDE410	0.33	0.44	724	163	1740-11950	100	3.94	



MODEL	MOTOR POWER		DYNAMIC THRUST		FREE SPEED	WORKING STROKE		FUNCTION
	kW	hp	N	lbf	rpm	mm	in.	
AFDE610	0.75	1.00	1557	350	330-6300	100	3.94	Drill/Tapper
AFDE620	1.10	1.47	1557	350	330-5250	100	3.94	Drill/Tapper

Electric drive / Leadscrew feed



MODEL	MOTOR POWER		TAPPING TORQUE		FREE SPEED	WORKING STROKE		FUNCTION
	kW	hp	Nm	lbf ins	rpm	mm	in.	
AFTE480	0.75	1.00	4.4-35.8	39-317	180-1740	60	2.36	Tapper

Pneumatic drive / feed



MODEL	MOTOR POWER		DYNAMIC THRUST		FREE SPEED	WORKING STROKE		FUNCTION
	kW	hp	N	lbf	rpm	mm	in.	
AFD205	0.22	0.30	400	90	650-18700	50	1.97	Drill/Tapper



MODEL	MOTOR POWER		DYNAMIC THRUST		FREE SPEED	WORKING STROKE		FUNCTION
	kW	hp	N	lbf	rpm	mm	in.	
AFD215	0.22	0.30	400	90	650-18700	90	3.54	Drill/Tapper



MODEL	MOTOR POWER		DYNAMIC THRUST		FREE SPEED	WORKING STROKE		FUNCTION
	kW	hp	N	lbf	rpm	mm	in.	
AFD415	0.38	0.51	706	159	490-18000	100	3.94	Drill/Tapper



MODEL	MOTOR POWER		DYNAMIC THRUST		FREE SPEED	WORKING STROKE		FUNCTION
	kW	hp	N	lbf	rpm	mm	in.	
AFD625	0.66	0.85	1557	350	40-3300	100	3.94	Drill/Tapper

Air Motors

Advantages

Desoutter offers a wide range of rotating vane type air motors within a power range of 0.26 kW (0.35 hp) to 0.66 kW (0.85 hp). Most motors can be supplied as single rotation or reversible. Reversible motors have keyed shafts, while single direction motors can be supplied with threaded shafts or alternatives.



Air motors are versatile power sources which can be used to power many kinds of operations requiring a rotational drive. They have many advantages over electric motors, and often become the only feasible method of operation.

Compact, with high power to weight ratio, an air motor will often be one third or less than the size of a comparable electric motor. An air motor can be used in a portable application where the weight and/or physical size of the electric motor would preclude portable operations. For example, a 0.63 kW (0.85 hp) air motor running at 2000 rpm weighs 1.4 kg (3 lbs) and is approximately 200mm (8") long and just over 50mm (2") in diameter.

The output speed and torque can be simply controlled by regulating either the air pressure or air flow. No expensive control equipment is required.

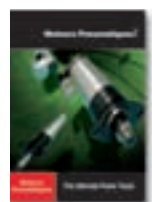
If a motor is loaded to a stalled condition, and held there for any length of time, no damage is caused to the motor. In certain applications, such as tightening fasteners, one acceptable method of control is to regulate the air pressure so that the motor stalls at the required torque.

When the load is released, the air motor will reach free running speed usually within one third to one half of a revolution.

No risk of overheating either when continuously run or frequent stop/starts or reversing. Note that this condition assumes the use of an inline lubrication system.

Reversing motors require simple control of air pressure into ports in the control top of the motor to determine direction of rotation. To reverse the direction of rotation takes milliseconds to complete.

Resists moisture, dust, heat. Is generally explosion proof and can be used safely in most hazardous situations.



For further information see the Air motors catalogue

Air Motors

ATEX available
II 2G c IIC T6



DM6, DM65 Series

0.26 kW (0.35 hp)
Maximum Torque
8 Nm (5.9 lbf ft),
Non Reversible



2DM6 Series

0.26 kW (0.35 hp)
Maximum Torque
8 Nm (5.9 lbf ft),
Reversible



HM Series

0.45 kW (0.6 hp)
Maximum Torque 41 Nm (30 lbf ft),
Non Reversible



HM55 Series

0.63 kW (0.84 hp)
Maximum Torque 41 Nm (30 lbf ft),
Non Reversible



2HM5 Series

0.66 kW (0.85 hp)
Maximum Torque 41 Nm (30 lbf ft),
Reversible



2H410 Series

0.66 kW (0.85 hp)
Maximum Torque 102 Nm (78 lbf ft),
Worm Drive Motors

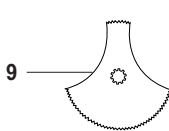
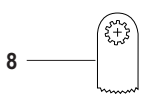
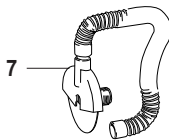
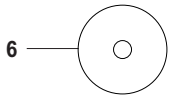
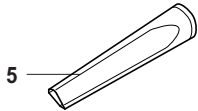
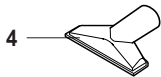
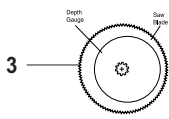
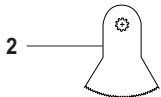
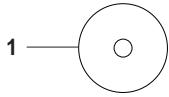


Accessories

D144-T-.. / S144-T-.. / D170-L / AV101

ACCESSORIES INCLUDED

ITEM	APPLICATION	PART NO.			
		D144-T	S144-T	D170-L	AV101
• Exhaust hose		222453		222453	
• Exhaust Hose Clip		235203		235203	
• Spindle Wrench		164433		15533	
• Clamp Nut Wrench		29443			
• Guard Nut Wrench		29653			
• Hex. Key – 4mm (⁵ / ₃₂ " A/F		204903		204903	
1 Saw Blade – diamond coated 64mm (2.5") dia.	Fibreglass	32732			
1 Saw Blade – 80 teeth 45mm (1.77") dia.	Soft Steel <1.2mm (³/₆₄"		76362		
1 Saw Blade 64mm (2.5") dia.	Plastics			90762	
1 Saw Blade – teflon coated 64mm (2.5") dia.	Plastics			90772	
2 Saw Blade 50.8mm (2") radius x 50mm (1.97") wide	Soft Wood			90832	
3 Depth Gauge				27262	
4 Upholstery Nozzle					106443
5 Crevice Nozzle					106533



OPTIONAL ACCESSORIES

ITEM	APPLICATION	PART NO.		
		D144-T	S144-T	D170-L
6 Saw Blade 64mm (2.5") dia.	Wood	34252		
6 Saw Blade 50mm (1.97") dia.	Soft Steel >1.2mm (³/₆₄" max depth 7mm		76372	
6 Saw Blade 50mm (1.97") dia.	Hard Steel <1.2mm (³/₆₄" max depth 10mm (³ / ₈ "		76382	
6 Saw Blade 50mm (1.97") dia.	Aluminium max depth 10mm (³ / ₈ "		76392	
7 Dust Extraction Hood includes 2m hose – 32mm (1.26") ID				78472
6 Saw Blade – diamond tipped 64mm (2.5") dia.	Fibreglass			16962
6 Saw Blade – diamond tipped 1.2mm (³ / ₆₄ " tooth pitch - 64mm (2.5") dia.	Fibreglass			90722
6 Saw Blade – diamond tipped 1.2mm (³ / ₆₄ " tooth pitch - 80mm (3.15") dia.	Fibreglass			90732
6 Saw Blade – 1.5mm (0.06") tooth pitch 51mm (2") dia.	Soft Wood			90782
6 Saw Blade – 1.8mm (0.07") tooth pitch 64mm (2.5") dia.	Soft Wood			90792
6 Saw Blade – 1.5mm (0.06") tooth pitch 76mm (3") dia.	Soft Wood			90802
8 Saw Blade 22mm (0.87") radius x 15mm (¹⁹ / ₃₂ " wide	Soft Wood			90822
9 Saw Blade 63.5mm (2.5") dia. 60mm (2.36") + 16mm (⁵ / ₈ ") segments	Soft Wood			90842



A



B



C



D



E

PIC REF	MODEL	PART NUMBER	FREE SPEED	OSCILLATING FREQUENCY	BLADE Ø		WEIGHT		LENGTH		AIR CONSUMPTION		AIR INLET THREAD	HOSE INT. Ø	
			rpm	c/min	mm	in.	kg	lb.	mm	in.	l/s	cfm	in.	mm	in.
FIBREGLASS SAW - capacity 13mm (1/2") depth															
A	D144-T-3300	1273234	3300		64	2.5	0.9	2.0	229	9.01	9.4	19.9	1/4 BSP	10	3/8
CIRCULAR SAW - capacity 10mm (3/8") depth (hard steel 1.2mm (3/64") depth)															
B	S144-T-3100	936974	3100		45	1.77	1.4	3.1	245	9.65	9.4	19.9	1/4 BSP	10	3/8
OSCILLATING SAW															
C	D170-L	1261574		19000	80	3.2	0.9	2.0	287	11.30	9.3	19.7	1/4 BSP	10	3/8
VACUUM CLEANER															
D	AV101	128534					0.7	1.54	202	7.95	5.9	12.5	1/4 BSP	6	1/4
VACUUM PEN															
E	V100	129504					0.45	0.99	137	5.39	0.7	0.33	3.6 Spline	4	5/32



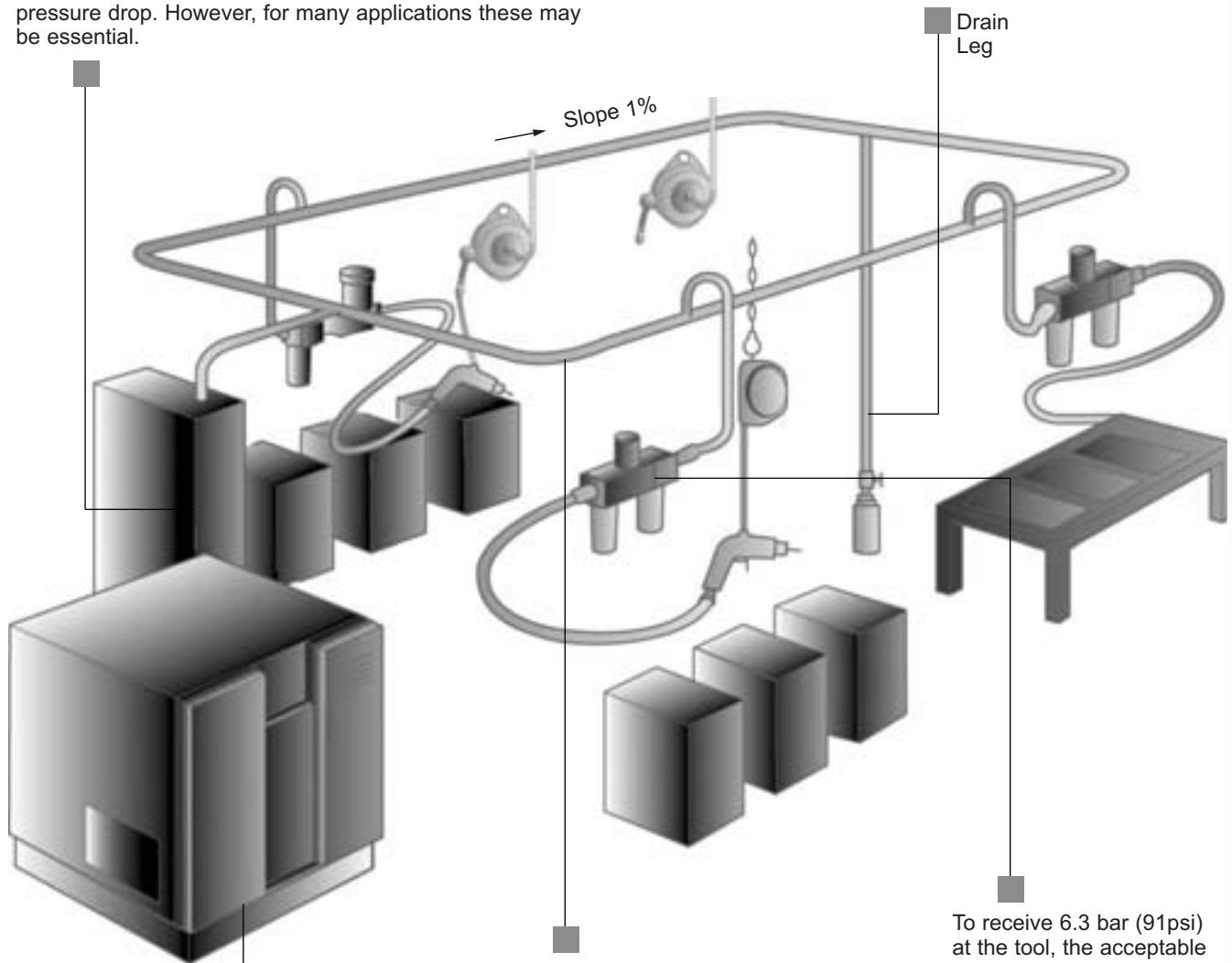
Desoutter



Air Line Network



Air dryers and filters can cause a 0.2 - 0.3 bar (3-4 psi) pressure drop. However, for many applications these may be essential.



A normal compressor can deliver up to 7.5 bar (109 psi) air line pressure, depending on start and stop settings.

A carefully designed network virtually eliminates pressure drop. We recommend a Ring Main layout which has a slope away from the input of 1%.

To receive 6.3 bar (91psi) at the tool, the acceptable maximum pressure drop from airline accessories is 0.6 bar (9 psi). A combination of high performance components and careful engineering will achieve this.



Filter, Regulator and Lubricator

Why do you need an FRL?

Air filter

Filter separates impurities such as water and solid particles.

Not using filters in combination with air tools leads to shorter service life, higher maintenance costs and lower efficiency. Old air systems with cool dryers, for instance, generate a lot of rust and running tools without installing a filter could damage the tool in less than a week.

Desoutter filters separate up to 98% of the water when operating within their working range. All three types (Small, Medium and Big) are very low pressure drop.

Air pressure regulators

The regulator ensures that the pre-set working pressure remains constant - regardless of pressure variations in the intake air and minor variations in the airflow rate. For example, a pressure of 1 bar higher than necessary results in a 16% increase in air consumption.

Spring controlled regulators are quick acting and therefore should be used for all types of air tools.

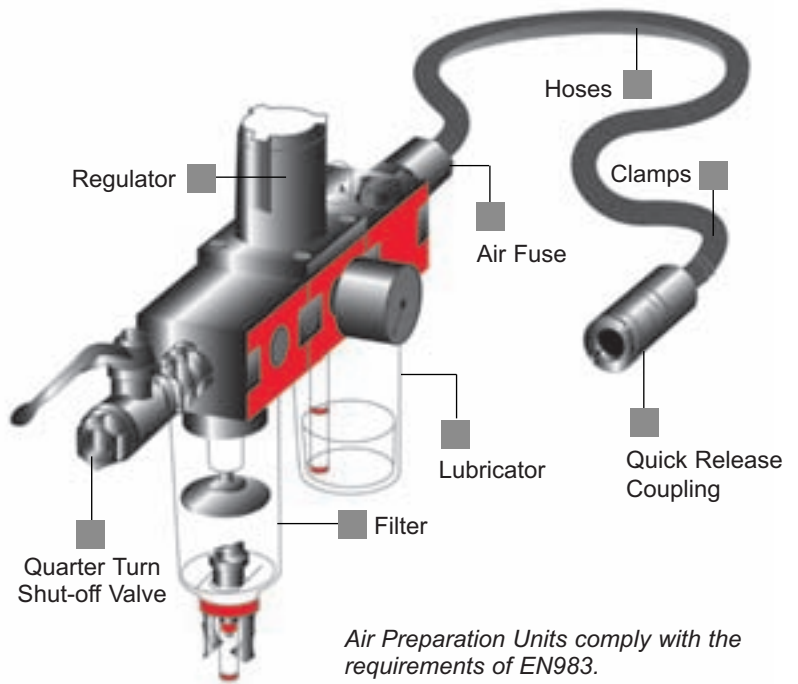
Lubricators

If lubricators are not used, tool motor vanes will need to be changed more often. The life of the vanes may decrease to as little as 1/10th of the normal working time. The oil fog lubricator is the most common type of lubricator. It supplies drops of oil to the air hose.

DIFFERENT TYPES OF FRL:	PORT SIZE IN.	AIR FLOWS AT 6 BARS L/S l/s (CFM)
Small units	1/4	Up to 9 (19)
	3/8	Up to 14 (29.7)
Medium units	1/2	Up to 37 (78.4)
Big units	1	Up to 83 (175.9)

When to choose a small unit?

Small units are suitable for most assembly tools, percussive tools, drills, nibblers, saw and small grinders.



Air Preparation Units comply with the requirements of EN983.

TOOL PRESSURE	AIR CONSUMPTION
6.3 bar (91psi)	100%
7 bar (101psi)	110%
8 bar (116psi)	125%



Filter, Regulator and Lubricator



PIC REF	DESCRIPTION	PORT SIZE G	RECOMMENDED FLOW AT 6.3 BAR - l/s (cfm)	MAX OPERATING PRESSURE (BAR)	PART NO.
FILTER					
A	FILTER SEMI AUTO DRAIN 3/8"	3/8"	14 (29.7)	16	109272
	FILTER SEMI AUTO DRAIN 1/2" BOWL GUARD ⁽¹⁾	1/2"	31 (65.7)	16	109182
LUBRICATORS					
B	OIL FOG LUBRICATOR 1/4"	1/4"	9 (19.0)	16	109072
	OIL FOG LUBRICATOR 3/8"	3/8"	14 (29.7)	16	109132
	OIL FOG LUBRICATOR 1/2"	1/2"	12 (25.4)	16	109202
REGULATORS					
C	REGULATOR 1/4"	1/4"	9 (19.0)	16	109062
	REGULATOR 3/8"	3/8"	14 (29.7)	16	109122
	REGULATOR 1/2"	1/2"	32 (69.8)	16	109192
FILTER-REGULATOR UNITS					
D	FILTER-REGULATOR SEMI AUTO DRAIN 3/8"	3/8"	9 (19.0)	16	109142
	FILTER-REGULATOR SEMI AUTO DRAIN 1/2"	1/2"	14 (29.7)	16	109232
	FILTER-REGULATOR SEMI AUTO DRAIN 1/2" BOWL GUARD ⁽¹⁾	1/2"	32 (69.8)	16	109222
FILTER REGULATOR LUBRICATOR 2 STAGE UNITS					
E	FILTER-REG. LUBRICA SEMI AUTO 1/4"	1/4"	9 (19.0)	16	109082
	FILTER-REG. LUBRICA SEMI AUTO 3/8"	3/8"	14 (29.7)	16	109152
	FILTER-REG. LUBRICA SEMI AUTO 1/2"	1/2"	37 (78.4)	16	109242
	FILTER-REG. LUBRICA SEMI AUTO 1"	1"	83 (175.9)	10	109292
	FILTER-REG. LUBRICA MANUAL 1/4"	1/4"	9 (19.0)	16	109092
	FILTER-REG. LUBRICA SEMI AUTO 3/8" ⁽¹⁾	3/8"	14 (29.7)	16	109162
	FILTER-REG. LUBRICA SEMI AUTO 1/2" ⁽¹⁾	1/2"	37 (78.4)	16	109252
FILTER REGULATOR LUBRICATOR 3 STAGE UNITS					
F	FILTER REG. LUBRICA SEMI AUTO 1/2"	1/2"	37 (78.4)	16	109262

(1) New drain valve & bowl



Accessories

PRESSURE GAUGE



DESCRIPTION	BSP Size	Ø mm	MAX PRESSURE (BAR)	PART NO.
Pressure gauge 1/8" 0-10	1/8"	40	10	109352
Pressure gauge 1/4" 0-10	1/4"	50	10	109432
Pressure gauge 1/4" 0-16	1/4"	63	16	109482

FILTER ELEMENTS: replacement filter 5 or 30 m



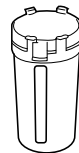
DESCRIPTION	FILTER ELEMENT	UNIT COMPATIBILITY	PART NO.
Filter Element 5 MI	5µm	1/4" port	109332
Filter Element 30 M	30µm	1/4" port	109342
Filter Element 5 MI	5µm	3/8" & 1/2" port	109362
Filter Element 30 M	30µm	3/8" & 1/2" port	109372
Filter Element 5 MI	5µm	1" port	109442
Filter Element	30µm	1" port	109452

ASSEMBLY / COUPLING KIT:

to connect 2 single units



DESCRIPTION	UNIT COMPATIBILITY	PART NO.
Assembly Kit 3/8" - 1/2"	for 3/8" & 1/2"	109402
Assembly Kit 1"	for 1"	109472

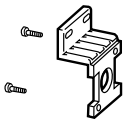


METAL BOWL GUARD KIT : metal bowl to fit polycarbonate filter and lubricator (metal bowl are standard on 1" units)

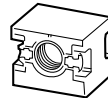
DESCRIPTION	UNIT COMPATIBILITY	PART NO.
Metal Bowl Guard	for 3/8" & 1/4"	109392

MOUNTING BRACKET KIT:

for mounting to a vertical surface



DESCRIPTION	UNIT COMPATIBILITY	PART NO.
Mounting Bracket 1/4"	1/4" port	109322
Mounting Bracket	3/8" & 1/2" port	109422
Mounting Bracket	1" port	109462



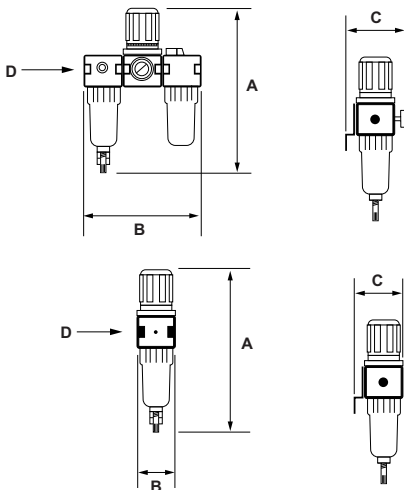
PORTING BLOCK KIT:

to provide an additional port supplying non-lubricated air

DESCRIPTION	UNIT COMPATIBILITY	PART NO.
Porting Block Kit	1/2" port	109382

Dimensions and Spare Parts

AIR LINE SERVICE EQUIPMENT



DIMENSIONS						WEIGHT		PART NO.
A		B		C				
mm	in.	mm	in.	mm	in.	kg	lb	
185	7.3	95	3.7	112.5	4.4	0.75	1.6	109082, 109092
253	9.9	127	5.0	125	4.9	1.50	3.3	109152, 109162, 109242, 109252
253	9.9	189	7.4	125	4.9	1.85	4.1	109262
313	12.3	180	7.1	141	5.5	4.40	9.7	109292

DIMENSIONS						WEIGHT		PART NO.
A		B		C				
mm	in.	mm	in.	mm	in.	kg	lb	
92.5	3.6	50	2.0	77.5	3.0	0.30	0.7	109062
135.5	5.3	50	2.0	77.5	3.0	0.25	0.6	109072
139.5	5.5	50	2.6	77.5	3.0	0.25	0.6	109102
115	4.5	65	2.6	89	3.5	0.55	1.2	109122, 109192
177	9.9	65	2.6	89	3.5	0.55	1.2	109132, 109202
253	7.2	65	2.6	89	3.5	0.75	1.6	109142, 109222, 109232
185	13.5	65	2.6	89	3.5	0.55	1.2	109172, 109182, 109272, 109282
342.5		97	3.8	109.5	4.3	2.20	4.8	109302

SPARE PARTS

DESCRIPTION	UNIT COMPATIBILITY	MATERIAL	PART NO.
Lubricator Bowl	1/4" port	Polycarbonate	111582
Filter Bowl	1/4" port	Polycarbonate	111592
Filter Bowl - Semi Auto Drain	1/4" port	Polycarbonate	111602
O-Ring	1/4" port		111622
Lubricator Bowl	3/8" & 1/2" port	Polycarbonate	111632
Filter Bowl	3/8" & 1/2" port	Polycarbonate	111642
Filter Bowl - Semi Auto Drain	3/8" & 1/2" port	Polycarbonate	111652
O-Ring	3/8" & 1/2" port		111662

Hoses, Hose reels



Hoses should be chosen to meet the demands of the working environment, typically between 6 to 13mm (1/4" and 1/2"). The hoses should have a length of 3-5m (6 to 15feet) to ensure sufficient mobility at the workplace and limited pressure drop. PVC hoses are suitable for general applications, from simple grinding to heavy assembly. To avoid large pressure drops, the hose size should be increased by one size for a length of 5-10m (15 to 30feet), two sizes for a length of 20m (60feet), and three sizes for lengths of 20-40m (60 to 120feet).

HOSE RECOMMENDATIONS:

DESCRIPTION	PVC	RUBBER	POLUR
Pliable	Good	Good	Good
Flexible	Good	Very good	Good
Indoor / outdoor	Indoor	In / out	Indoor
Spark resistant	Bad	Good	Bad
Rough treatment	Good	Very good	Good

Hose Reels

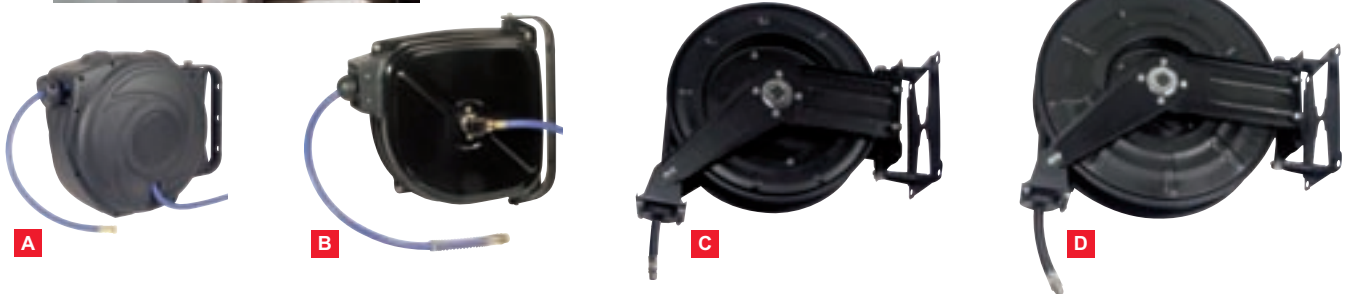


CUSTOMER BENEFITS

- No hoses on the ground for improved safety
- From 1 to 10 / 15 or 16 meters hose lengths with feedback force for a clean work space
- Directional swivel-plate to help you correctly reach your application
- High airflow for maximum productivity
- Lightweight and flexible polyurethane hose to reduce operator fatigue
- Open Reels with rubber hose available for heavy-duty grinding/spark areas

APPLICATIONS

- Workshops and service stations in the automotive, truck, earthmoving and farming industry
- Industrial assembly lines
- Shipyards, Foundries



PIC REF	MODEL	PART NUMBER	THREAD TYPE	CONNECTION		LENGTH		Ø INTERNAL		FLUID	HOSE MATERIAL	INLET	WEIGHT		MAX PRESSURE		AIR FLOW	
				IN (in.)	OUT (in.)	m	feet	mm	in.				kg	lbs.	Bar	PSI	l/s	Cfm
A	HR S HOSE REEL	615 804 5020	BSP	1/4	1/4	10	33	8	5/16	Air	100% Polyurethane	1 m/3.3 feet lead-hose	4.5	9.9	16	232	7	14.12
	HRN S HOSE REEL	615 804 5030	NPT	1/4	1/4	10	33	8	5/16	Air	100% Polyurethane	1 m/3.3 feet lead-hose	4.5	9.9	16	232	7	14.12
B	HR M HOSE REEL	615 804 5040	BSP	1/4	1/4	12	39	10	3/8	Air	100% Polyurethane	1.5 m/4.92 feet lead-hose	8.5	18.7	20	290	10	21.19
	HRN M HOSE REEL	615 804 5050	NPT	1/4	1/4	12	39	10	3/8	Air	100% Polyurethane	1.5 m/4.92 feet lead-hose	8.5	18.7	20	290	10	21.19
C	HRO M HOSE REEL	615 804 5060	BSP	1/4	1/4	16	52	10	3/8	Air	100% Polyurethane	1.5 m/4.92 feet lead-hose	11	24.3	20	290	8.5	17.65
	HROR M HOSE REEL	615 804 5100	BSP	3/8	3/8	15	49	10	3/8	Air/ Water	Rubber (SBR+NR /SBR+EPDM)	1.5 m/4.92 feet lead-hose	11	24.3	20	290	8.5	17.65
	HRNO M HOSE REEL	615 804 5070	NPT	1/4	1/4	16	52	10	3/8	Air	100% Polyurethane	1.5 m/4.92 feet lead-hose	11	24.3	20	290	8.5	17.65
D	HRNR M HOSE REEL	615 804 5110	NPT	3/8	3/8	15	49	10	3/8	Air/ Water	Rubber (SBR+NR /SBR+EPDM)	1.5 m/4.92 feet lead-hose	11	24.3	20	290	8.5	17.65
	HRO L HOSE REEL	615 804 5080	BSP	3/8	3/8	16	52	13	1/2	Air	100% Polyurethane	1.5 m/4.92 feet lead-hose	14	30.9	20	290	16	33.55
	HROR L HOSE REEL	615 804 5120	BSP	3/8	3/8	15	49	13	1/2	Air/ Water	Rubber (SBR+NR /SBR+EPDM)	1.5 m/4.92 feet lead-hose	14	30.9	20	290	16	33.55
	HRNO L HOSE REEL	615 804 5090	NPT	3/8	3/8	16	52	13	1/2	Air	100% Polyurethane	1.5 m/4.92 feet lead-hose	14	30.9	20	290	16	33.55
	HRNOR L HOSE REEL	615 804 5130	NPT	3/8	3/8	15	49	13	1/2	Air/ Water	Rubber (SBR+NR /SBR+EPDM)	1.5 m/4.92 feet lead-hose	14	30.9	20	290	16	33.55



Hoses

Straight Hoses

Polyurethane braided hoses

Rolls with clear wrapping.
80 shore A "extreme-flexible" quality
20 bar (290PSI) on all sizes.



Polyurethane braided hoses - Assembled sets

PUR quality -
Chromed thread
adaptors fitted on the hose
with pressed ferrules



PUR BRAIDED HOSES

DIMENSIONS (ID x OD)		ROLL LENGTH (foil wrapped)		PART NO.
mm	in.	m	ft	
6.5 x 10,0 mm	1/4" ID	25.00	83.25	615 804 6230
8.0 x 12,0 mm	5/16" ID	25.00	83.25	615 804 6240
9.5 x 13,0 mm	3/8" ID	25.00	83.25	615 804 6250
13.0 x 18,0 mm	1/2" ID	25.00	83.25	615 804 6260

Temperature range: -30 / +70°C / -22 / +158°F

PUR BRAIDED HOSES - ASSEMBLED SETS

DIMENSIONS (ID x OD)		MALE THREAD	LENGTH (foil wrapped)		PART NO.
mm	in.	BSP	m	ft	
6.5 x 10,0 mm	1/4" ID	1/4"	8.00	26.64	615 804 6270
8.0 x 12,0 mm	5/16" ID	1/4"	8.00	26.64	615 804 6280
9.5 x 13,0 mm	3/8" ID	1/4"	8.00	26.64	615 804 6290
13.0 x 18,0 mm	1/2" ID	1/2"	8.00	26.64	615 804 6300

Temperature range: -30 / +70°C / -22 / +158°F

PVC SELF ASSEMBLY HOSES

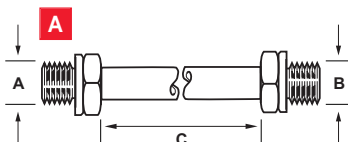
DIMENSIONS (ID x OD)		LENGTH	WORKING PRESSURE		PART NO.
mm	in.		bar	PSI	
6 x 10,5 mm	1/4" ID	Per Meter (1 pc = 1 m)	18	261	271403
10 x 14 mm	3/8" ID	Per Meter (1 pc = 1 m)	13	188	271413
12 x 17 mm	1/2" ID	Per Meter (1 pc = 1 m)	11	160	271423

Temperature range: -15 / +60°C / -5 / +140°C

RUBBER ALLOY (RUBBER/PVC) HOSES

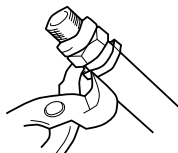
DIMENSIONS (ID x OD)		LENGTH		PART NO.
mm	in.	m	ft	
10 x 18 mm	3/8" ID	30	98	111702
12,5 x 22 mm	1/2" ID	30	98	111722

When assembled with fittings, working pressure of 6.3 bar
Temperature range: -30 / +70°C / -22 / +158°F



Close the lugs firmly with a pair of O-Clip pincers

'O'-Clip pincers
- Part No. 77282



PVC ASSEMBLED HOSES

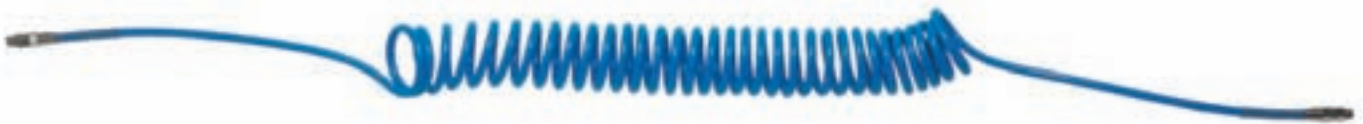
PIC REF	HOSE BORE		HOSE OUTSIDE DIAMETER		LENGTH		MALE THREADS		WORKING PRESSURE (AT 20°C) (68°F)		TEMPERATURE RANGE		PART NO.
	mm	in.	mm	in.	metre	ft	A	B	bar	psi	°C	°F	
A	5	3/16	7	9/32	2	6.5	M5	1/8"	6.3	91	-15 to +50	-5 to +122	79322
	5	3/16	8.5	11/32	2	6.5	1/8"	1/4"	6.3	91	-15 to +50	-5 to +122	75902
	5	3/16	8.5	11/32	3	10	1/8"	1/4"	6.3	91	-15 to +50	-5 to +122	75922
	6	1/4	8	5/16	3	10	1/4"	1/4"	6.3	91	-15 to +50	-5 to +122	75942
	6	1/4	8	5/16	5	16	1/4"	1/4"	6.3	91	-15 to +50	-5 to +122	75952
	10	3/8	14	9/16	3	10	1/4"	1/4"	6.3	91	-15 to +50	-5 to +140	75972
	10	3/8	14	9/16	5	16	1/4"	1/4"	6.3	91	-15 to +50	-5 to +140	75982
	6	1/4	8	5/16	3	10	1/8"	1/4"	6.3	91	-15 to +50	-5 to +122	104552

Working pressure = 6,3 bar (91 PSI)



Spiral hoses ■

The most usual way of using a small spiral hose is with a straight screwdriver together with a balancer. Another way is to use a larger spiral hose with pistol grip tools. The need for couplings is dependent on whether or not the operator needs to change tool/air consumer.



PUR ASSEMBLED SPIRAL HOSES

HOSE BORE DIAMETER		WORKING LENGTH		MALE THREADS		PART NO.
mm	in.	m	ft	A BSP	B BSP	
6	1/4	1.5	5	1/8	1/4	99922
6	1/4	1.5	5	1/4	1/4	99932
6.5	1/4	2	6.5	1/4	1/4	96832
6.5	1/4	4	13	1/4	1/4	96852
6.5	1/4	3	10	1/4	1/4	98072
6.5	1/4	4	13	1/4	1/4	98082
8.5	11/32	5	16	1/4	1/4	98092
8.5	11/32	5	16	3/8	3/8	98102

Temperature range: -30 / +60°C / -22 / +140°F

PUR SPIRAL HOSES ASSEMBLIES

Assembled with Series 2009 ball type swivel fittings and kink protection.
98 shore A ester PUR raw material.



HOSE DIMENSIONS (ID x OD)		WORKING LENGTH		CONNECTION	PART NO.
mm	in.	m	ft	BSP	
Sets complete with ball bearing type swivelling fittings and self-sealing O-rings					
5.0 x 8 mm	3/16 ID	2	6.5	1/4"	615 804 6310
5.0 x 8 mm	3/16 ID	4	13	1/4"	615 804 6320
5.0 x 8 mm	3/16 ID	6	19.5	1/4"	615 804 6330
5.0 x 8 mm	3/16 ID	8	26	1/4"	615 804 6340
6.5 x 10mm	1/4 ID	2	6.5	1/4"	615 804 6350
6.5 x 10mm	1/4 ID	4	13	1/4"	615 804 6360
6.5 x 10mm	1/4 ID	6	19.5	1/4"	615 804 6370
6.5 x 10mm	1/4 ID	8	26	1/4"	615 804 6380
8.0 x 12mm	5/16 ID	2	6.5	3/8"	615 804 6390
8.0 x 12mm	5/16 ID	4	13	3/8"	615 804 6400
8.0 x 12mm	5/16 ID	6	19.5	3/8"	615 804 6410
8.0 x 12mm	5/16 ID	8	26	3/8"	615 804 6420
Sets complete with rigid fittings, flexible kink protection and self-sealing O-rings					
11.0 x 16mm	1/2 ID	2	6.5	3/8"	615 804 6430
11.0 x 16mm	1/2 ID	4	13	3/8"	615 804 6440
11.0 x 16mm	1/2 ID	6	19.5	3/8"	615 804 6450
11.0 x 16mm	1/2 ID	8	26	3/8"	615 804 6460

Temperature range: -30 / +60°C / -22 / +140°F



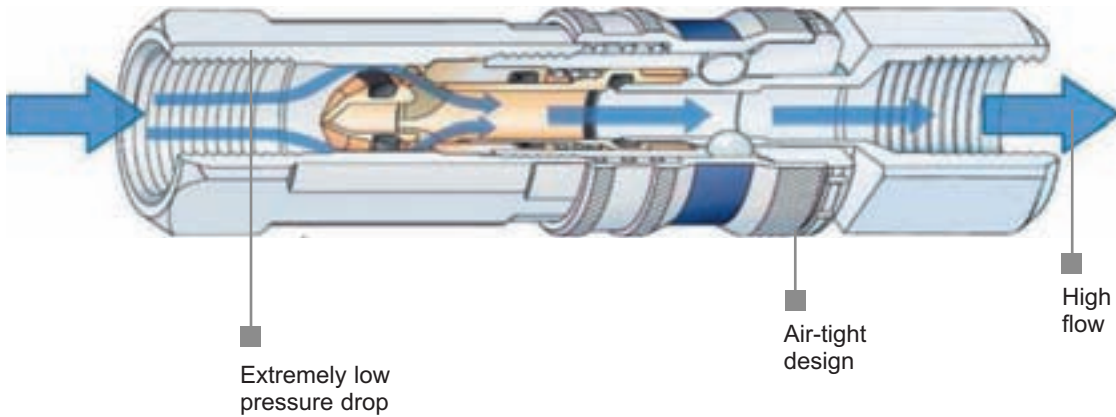
SELF ASSEMBLY SPIRAL HOSES

HOSE BORE		WORKING LENGTH		DIMENSIONS								PART NO.
mm	in.	m	ft	A		B		C		D		
mm	in.	m	ft	mm	in.	mm	in.	mm	in.	mm	in.	
8 x 12.0	5/16 x 0.47	2.5	8	500	19.7	180	7.1	100	3.9	65	2.6	102892
8 x 12.0	5/16 x 0.47	5	16	500	19.7	390	15	100	3.9	65	2.6	102902



Couplings and Nipples

■ Quick couplings (for minor to medium air flows)



■ The most common type of quick coupling used is a female body (coupling) and a male body (nipple). When pushed together, the balls and pins on the coupling and nipple interlock.

The couplings disconnect when an external sleeve is manually

operated. There are two types of quick couplings: two hand operated, where the sleeve must be pulled back and released at connection, and one hand operated, where the sleeve automatically releases at connection.

■ How to select the right coupling and nipple?

Look at the information on the tool

Example:

screwdriver SD140

Air flow: 8.7 l/s (18.4 cfm)

Air inlet: 1/4"

Hose int. Ø: 3/8" / 10mm

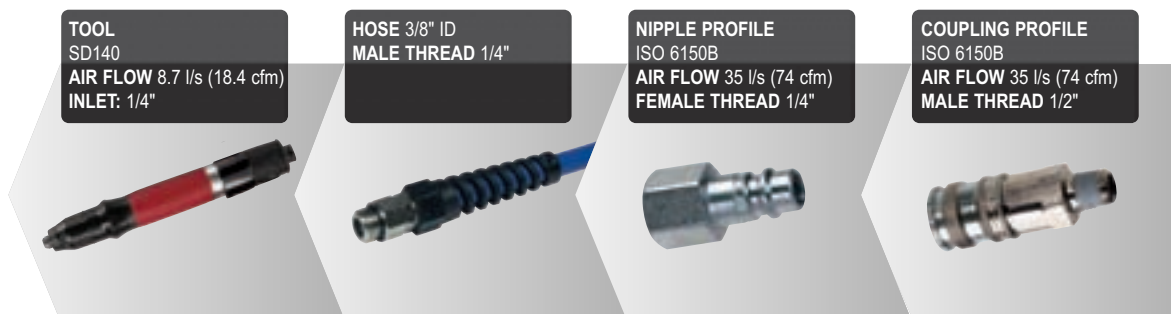
At the back of the tool it is recommended to have a hose nipple (see page 286) or an assembled hose with male thread.

Choose a hose with internal diameter of 3/8" / 10mm and 1/4" male thread.

Then at the other end of the hose, you'll select a nipple with air flow 35 l/s (74 cfm), profile ISO 6150B and 1/4" female thread.

The coupling will have the same profile to connect with the nipple and a male thread to fit on a 1/2" FRL unit, for instance.





Example :



Couplings and Nipples







Coupling

	FITTING SIZE		AIR FLOW AT 6 BAR (87 PSI)		CONNECTION	PROFILE	TYPE	PART NO.	
	In.	mm	l/s	cfm					
Air Coupling Male Thread 	1/4"	6	18	38	Male	ISO 6150B (former US std)	BSPT	615 804 6470	
	1/4"	6	18	38	Male	ISO 6150B (former US std)	NPT	615 804 6480	
	1/4"	6	35	73	Male	EURO STD 7.6	BSPT	909 200 8911	
	1/4"	6	35	73	Male	EURO STD 7.6	NPT	615 804 6490	
	3/8"	10	18	38	Male	ISO 6150B (former US std)	BSPT	615 804 6500	
	3/8"	10	18	38	Male	ISO 6150B (former US std)	NPT	615 804 6510	
	3/8"	10	35	73	Male	EURO STD 7.6	BSPT	909 200 8941	
	3/8"	10	35	73	Male	EURO STD 7.6	NPT	615 804 6520	
	1/2"	13	35	73	Male	EURO STD 7.6	BSPT	909 200 8971	
	1/2"	13	35	73	Male	EURO STD 7.6	NPT	615 804 6530	
	1/2"	13	64	134	Male	EURO STD 10.4	BSPT	909 201 0401	
Air Coupling Female Thread 	1/4"	6	18	38	Female	ISO 6150B (former US std)	BSP	615 804 6540	
	1/4"	6	18	38	Female	ISO 6150B (former US std)	NPT	615 804 6550	
	1/4"	6	35	73	Female	EURO STD 7.6	BSP	909 200 8821	
	1/4"	6	35	73	Female	EURO STD 7.6	NPT	615 804 6560	
	3/8"	10	18	38	Female	ISO 6150B (former US std)	BSP	615 804 6570	
	3/8"	10	18	38	Female	ISO 6150B (former US std)	NPT	615 804 6580	
	3/8"	10	35	73	Female	EURO STD 7.6	BSP	909 200 8861	
	3/8"	10	35	73	Female	EURO STD 7.6	NPT	615 804 6590	
	1/2"	13	35	73	Female	EURO STD 7.6	BSP	909 200 8881	
	1/2"	13	35	73	Female	EURO STD 7.6	NPT	615 804 6600	
Air Coupling Barbed 	1/4"	6	18	38	Hose	ISO 6150B (former US std)		615 804 6610	
	1/4"	6	35	73	Hose	EURO STD 7.6		909 200 9181	
	5/16"	8	18	38	Hose	ISO 6150B (former US std)		615 804 6620	
	5/16"	8	35	73	Hose	EURO STD 7.6		909 201 3091	
	3/8"	10	18	38	Hose	EURO STD 7.6		909 200 9931	
	3/8"	10	35	73	Hose	EURO STD 7.6		909 200 9211	
	1/2"	13	35	73	Hose	EURO STD 7.6		909 200 9241	
	Air Coupling Barb & Nut 	6.5x10	hose	35	73	Barb & Nut	EURO STD 7.6		909 201 0131
		8x12	hose	35	73	Barb & Nut	EURO STD 7.6		909 201 0161

Coupling picture reference refers to corresponding nipple profile

Nipples

	FITTING SIZE		AIR FLOW AT 6 BAR (87 PSI)		CONNECTION	PROFILE	TYPE	PART NO.	
	In.	mm	l/s	cfm					
Air Nipple Male Thread 	1/8"	3	18	38	Male	ISO 6150B (former US std)	BSPT	909 200 9691	
	1/8"	3	18	38	Male	ISO 6150B (former US std)	NPT	615 804 6630	
	1/8"	3	35	73	Male	EURO STD 7.6	BSPT	909 201 3061	
	1/8"	3	35	73	Male	EURO STD 7.6	NPT	615 804 6640	
	1/4"	6	18	38	Male	ISO 6150B (former US std)	BSPT	909 200 9721	
	1/4"	6	18	38	Male	ISO 6150B (former US std)	NPT	615 804 6650	
	1/4"	6	35	73	Male	EURO STD 7.6	BSPT	909 200 9091	
	1/4"	6	35	73	Male	EURO STD 7.6	NPT	615 804 6660	
	3/8"	10	18	38	Male	ISO 6150B (former US std)	BSPT	909 200 9751	
	3/8"	10	18	38	Male	ISO 6150B (former US std)	NPT	615 804 6670	
	3/8"	10	35	73	Male	EURO STD 7.6	BSPT	909 200 9121	
	3/8"	10	35	73	Male	EURO STD 7.6	NPT	615 804 6680	
	3/8"	10	64	134	Male	EURO STD 10.4	BSP	909 201 3361	
	1/2"	13	35	73	Male	EURO STD 7.6	BSPT	909 200 9151	
	1/2"	13	35	73	Male	EURO STD 7.6	NPT	615 804 6690	
Air Nipple Female Thread 	1/4"	6	35	73	Female	EURO STD 7.6	BSP	909 200 9001	
	1/4"	6	35	73	Female	EURO STD 7.6	NPT	615 804 6700	
	3/8"	10	35	73	Female	EURO STD 7.6	BSP	909 200 9031	
	3/8"	10	35	73	Female	EURO STD 7.6	NPT	615 804 6710	
	1/2"	13	35	73	Female	EURO STD 7.6	BSP	909 200 9061	
	1/2"	13	35	73	Female	EURO STD 7.6	NPT	615 804 6720	
Air Nipple Barbed 	1/4"	6	35	73	Barbed	EURO STD 7.6		909 200 9271	
	5/16"	8	18	38	Barbed	ISO 6150B (former US std)		909 200 9571	
	5/16"	8	35	73	Barbed	EURO STD 7.6		909 201 0221	
	3/8"	10	18	38	Barbed	ISO 6150B (former US std)		909 200 9601	
	3/8"	10	35	73	Barbed	EURO STD 7.6		909 200 9301	
	1/2"	13	35	73	Barbed	EURO STD 7.6		909 200 9331	
	Air Coupling Barb & Nut 	6.5x10	hose	35	73	Barb & Nut	EURO STD 7.6		909 201 0281
		8x12	hose	35	73	Barb & Nut	EURO STD 7.6		909 201 0311



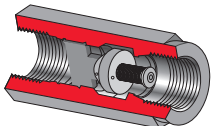
Air Fuses

When a fitting comes loose from a pressurized hose or the hose is damaged, the hose starts to blow an excessive amount of air in an uncontrolled way, causing hose whip. This can cause injury, and damage to the workpiece and environment.

A way to ensure that this doesn't happen is to use an Air fuse.

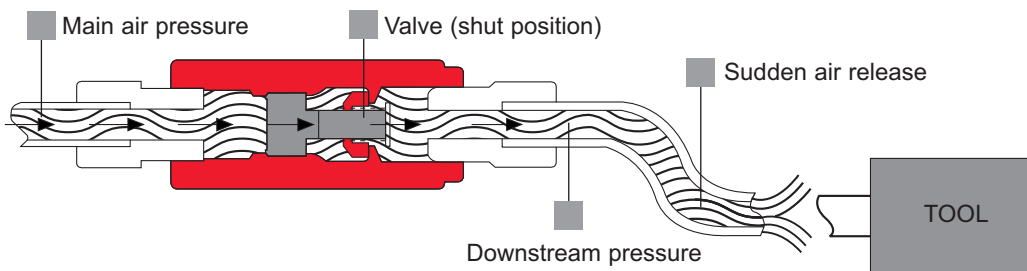
An Air Fuse reduces the likelihood of potentially dangerous hose whip caused when a hose bursts or a fitting becomes detached. Air Fuses quickly shut off the supply and reset automatically as soon as back pressure in the line downstream is restored.

Air Fuses help to meet OSHA requirement 1926.302 (USA) and may eliminate the need for restraining or shielding hose, as required by European Standard EN983.



MATERIALS

Body	Anodised aluminium
Internal parts	Brass
Spring	Stainless steel



- Reduces risk of hose whip, helping to protect personnel
- Simple and reliable design
- High life expectancy

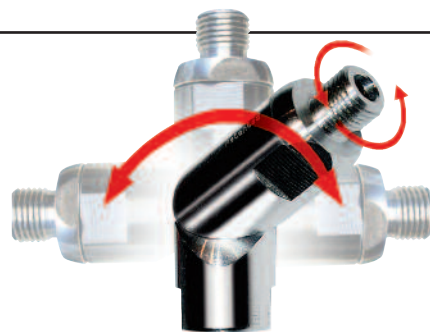
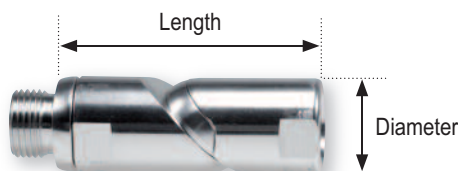
- Aluminium anodised body for high corrosion resistance
- Auto-Reset to restart downstream activity with the minimum downtime

PORT SIZE		PRESSURE DROP AT SHUT OFF FLOW		SHUT OFF FLOW RATE AT 7 BAR		TOOL MAXIMUM AIR FLOW		FOR FLOW RATES	PART NO.
BSP	NPT	bar	psi	l/s	cfm	l/s	cfm		
1/4"		0.30	4.35	13.00	27.30	10.00	21.00	High	110402
3/8"		0.14	2.03	18.00	37.80	10.00	21.00	Low	110422
3/8"		0.30	4.35	32.00	67.20	25.00	52.50	High	110432
1/2"		0.30	4.35	45.00	94.50	35.00	73.50	High	110442
	1"	0.30	4.35	86.00	180.60	70.00	147.00	High	110542



Air-Flex Swivel Connector

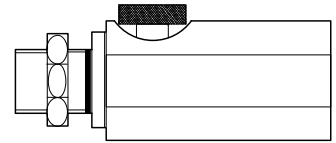
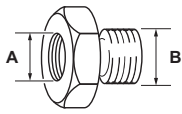
The 360° Experience



MODEL	PART NUMBER	MAX RECOMMENDED AIR FLOW		FEMALE INLET		MALE OUTLET		WEIGHT		LENGTH		OUTSIDE DIAMETER	
		l/s	cfm	in.	in.	g	lb	mm	in.	mm	in.		
AIR-FLEX 1/4" BSP	615 804 746 0	12	25	1/4 BSP	1/4 BSP	79	0.17	67	2.63	24.0	0.94		
AIR-FLEX 3/8" BSP	615 804 748 0	35	74	3/8 BSP	3/8 BSP	126	0.28	82	3.23	29.5	1.16		
AIR-FLEX 1/2" BSP	615 804 750 0	35	74	1/2 BSP	1/2 BSP	132	0.29	82	3.23	29.5	1.16		
AIR-FLEX 1/4" NPT	615 804 747 0	12	25	1/4 NPT	1/4 NPT	79	0.17	67	2.63	24.0	0.94		
AIR-FLEX 3/8" NPT	615 804 749 0	35	74	3/8 NPT	3/8 NPT	126	0.28	82	3.23	29.5	1.16		
AIR-FLEX 1/2" NPT	615 804 751 0	35	74	1/2 NPT	1/2 NPT	132	0.29	82	3.23	29.5	1.16		

Pressure drop of 0,2 bar at nominal pressure of 6 bar.

Adaptors & Threaded Fittings



REDUCERS

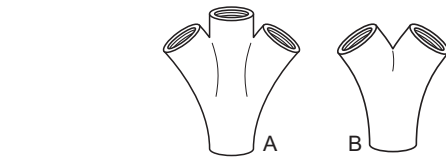
THREAD A	MALE THREAD B	PART NO.
in.	in.	
1/8 BSP	1/4 BSP	62972
1/4 BSP	1/8 BSP	615 804 6060
1/4 NPT	1/4 BSP	181523
1/8 NPT	1/8 BSP	61103
3/8 BSP	1/4 BSP	615 804 6070
1/2 BSP	3/8 BSP	615 804 6080
1/8 BSP	1/8 NPT	271463
1/4 BSP	1/8 BSP	209843

DOUBLE CONNECTION

MALE THREAD	PART NO.
in.	
1/8" 1/8"	615 804 5750
1/8" 1/4"	615 804 5760
1/4" 1/4"	615 804 5770
1/4" 3/8"	615 804 5780
3/8" 3/8"	615 804 5790
3/8" 1/2"	615 804 5800
1/2" 1/2"	615 804 5810
1/2" 3/4"	615 804 5820
3/4" 3/4"	615 804 5830
3/4" 1"	615 804 5840

AIR INLET REGULATOR

SIZE	PART NO.
in.	
1/4 BSP	81223
1/4 BSP	694

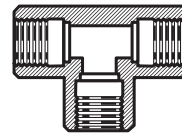


ADAPTOR

SIZE	PART NO. A	PART NO. B
in.		
3/8 BSP	100032	
1/2 BSP	98662	100042

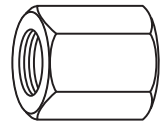
EQUAL TEE

SIZE	PART NO.
in.	
1/4 BSP	63802
3/8 BSP	63822



DOUBLE FEMALE SLEEVE

SIZE	PART NO.
in.	
1/4 BSP	62962



BUSHING

MALE THREAD	FEMALE THREAD	PART NO.
in.	in.	
1/4	1/8	615 804 5860
3/8	1/4	615 804 5870
1/2	1/4	615 804 5880
1/2	3/8	615 804 5890
3/4	1/2	615 804 5900
1	3/4	615 804 5910



HOSE CONNECTION

MALE THREAD	HOSE NIPPLE	PART NO.
in.	in. mm	
1/8 BSP	1/8 3.2	615 804 5920
1/8 BSPT	3/16 5	615 804 5930
1/8 BSPT	1/4 6.3	615 804 5940
1/4 BSP	1/8 3.2	615 804 5950
1/4 BSPT	1/4 6.3	615 804 5960
1/4 BSPT	5/16 8	615 804 5970
1/4 BSPT	3/8 10	615 804 5980
3/8 BSPT	3/8 10	615 804 5990
3/8 BSPT	1/2 12.5	615 804 6000
1/2 BSPT	1/2 12.5	615 804 6010
1/2 BSPT	5/8 16	615 804 6020
1/2 BSPT	3/4 20	615 804 6030
3/4 BSP	3/4 20	615 804 6040
1 BSP	1 25	615 804 6050



GASKETS

(between material & nipple)

FOR COUPLING WITH MALE PARALLEL THREAD	PART NO.
M5	615 804 6090
1/8 BSP	615 804 6100
1/4 BSP	615 804 6110
3/8 BSP	615 804 6120
1/2 BSP	615 804 6130
3/4 BSP	615 804 6140
1 BSP	615 804 6150



PRESSURE CLAMPS

MEDIUM CLAMP FOR DRIVE mm	PART NO.
8.0-14.0	615 804 6730
11.0-17.0	615 804 6740
13.0-20.0	615 804 6750
15.0-24.0	615 804 6760
19.0-28.0	615 804 6770
22.0-32.0	615 804 6780



Safety Instructions

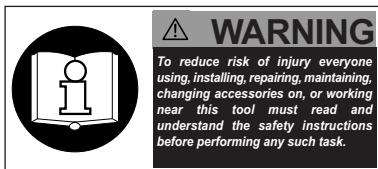
General Safety Instructions for the Operation of Power Tools

The goal of Desoutter is to produce tools that help the operator work safely and efficiently.

The most important safety device for this or any other tool is the operator. Care and good judgement are the best protection against injury.

All possible hazards cannot be covered here, but we have tried to highlight some of the important ones.

Individuals should look for and obey Caution, Warning and Danger signs placed on tools and displayed in the workplace. Operators should read and follow safety instructions packed with each tool. For a copy of these instructions, contact your local Desoutter representative.



Learn how each tool works. Even if you have previously used similar tools, carefully check out each tool before you use it. Get the 'feel' of it and know its capabilities, limitations, potential hazards, how it operates and how it stops.

All tools are designed to operate at a line pressure of 6.3 bar +/- 0.15bar in accordance with ISO2787.

Sound levels +/- 3dB(A)* are measured in accordance with EN ISO15744. Vibration values* are measured in accordance with ISO 8662.

*These declared values were obtained by laboratory type testing in accordance with the stated standards and are suitable for comparison with the declared values of other tools tested in accordance with the same standards. These declared values are not adequate for use in risk assessments and values measured in individual work places may be higher. The actual exposure values and risk of harm experienced by an individual user are unique and depend upon the way the user works, the workpiece and the workstation design, as well upon the exposure time and the physical condition of the user.

We, Desoutter, cannot be held liable for the consequences of using the declared values, instead of values reflecting the actual exposure, in an individual risk assessment in a work place situation over which we have no control.

Tools are CE marked to comply with European Machinery Directive.

Specifications subject to change without prior notice.

Further occupational health and safety information can be obtained from the following web sites:

<http://www.osha.gov> (USA)

<http://europe.osha.eu.int> (Europe).



COMPRESSED AIR HAZARDS

- Air under pressure can cause injury. Never point an air hose at yourself or anyone else. Never blow your clothes free of dust with compressed air. Always direct exhaust air away from yourself and others in the work area.
- Always check for damaged or loose hoses and fittings before using an air tool, and replace if necessary. Whipping hoses can cause serious injury.
- Disconnect the tool from the air supply when not in use, before changing accessories, setting the torque, or when making repairs.
- Do not exceed rated air pressure to increase the output of the tool. This could cause injury and shorten tool life.
- Do not assemble quick coupler on the tool. Vibration can cause breakage resulting in a whipping air hose. Instead, use quick couplers on the end of a short leader hose.
- When universal twist couplings are used, lock pins must be installed to prevent accidental hose disconnection.
- Air tools are not intended for use in explosive atmospheres and are not insulated for contact with electric power sources.



ELECTRICAL HAZARDS

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adaptor plugs with earthed (grounded) power tools and equipment. Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded metal surfaces. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- Do not expose electric power tools and equipment to wet conditions.
- Do not operate power tools in explosive atmospheres. Power tools create sparks which may ignite dust, fumes or flammable liquids.
- Have electric power tools and equipment serviced by a qualified repair person using only identical replacement parts.



PROJECTILE HAZARDS

- Always wear impact resistant eye and face protection when involved with or near the operation or repair of tools.



BREATHING HAZARDS

- Proper breathing protection must be worn when working with materials, which produce airborne particles.



NOISE HAZARDS

- Hearing loss can result from prolonged exposure to excessive sound levels.
- Use hearing protection as recommended by your employer or Occupational Health and Safety Regulations.



VIBRATION HAZARDS

- Repetitive work motions, awkward positions, and exposure to vibration may be harmful to your hands and arms.
- If numbness, tingling, pain or whitening of the skin occurs, stop using tool and consult a physician.



ENTANGLEMENT HAZARDS

- To reduce the risk of injury from entanglement, do not wear loose clothing when using rotating accessories.



ADDITIONAL HAZARDS

- Slip/Trip/Fall is a major cause of serious injury or death. Beware of excessive hose/cord left on the walking or work surface.
- Operators and maintenance personnel must be physically fit to perform job tasks, and handle the bulk, weight and power of the tool.
- Deburring tools should be used to reduce the risk of cuts and abrasions due to burrs.
- Wear gloves to protect hands from sharp edges.

Safety Instructions

Specific Safety Instructions for Power Tool Groups

In addition to the General Safety Instructions, the following are safety instructions and warnings that apply to the safe operation of specific power tool groups.



COMPRESSION TOOLS

- To reduce the risk of injury always keep hands and fingers away from yoke and moving jaws, sets or dies. If possible, hold the tool body with both hands.
- Inspect the yoke daily for cracks. Injury may result if a cracked yoke fails during use.
- All yokes have a life limitation based on cycles and riveting force. This tool and its accessories must not be modified.



DRILLS & TAPPERS

- Keep away from rotating bit and chuck. You can become cut or burned if you come into contact with the drill bit or tap, chips/swarf, or work surface.
- Use intermittent drill feed pressure to avoid long shaved chips/swarf.
- The drill bit or tap can suddenly bind and cause the workpiece or tool to rotate, causing arm and shoulder injuries.
- It is recommended that side handles are used for operator comfort and safety on high torque drilling applications above 4Nm (3 lbft) on straight case tools and 10Nm (7.4 lbft) on pistol grip drills. Drills with a chuck capacity larger than 10mm (3/8") should always be used with a side handle.



PERCUSSIVE TOOLS

(Riveting Hammers, Air Scribe)

- All chisels, rivet sets and other associated accessories should be checked for cracks, excessive wear, or other physical damage before each use. Accessories that show signs of damage should be replaced immediately.
- Never use a tool without the proper accessory retainer.



IMPACT AND IMPULSE WRENCHES

- Never use hand sockets or accessories. Use only impact sockets and accessories in good condition. Sockets in poor condition reduce impact power and could also shatter, resulting in personal injury.
- When using a universal joint, never operate the tool off the work. It may run too fast and cause the joint to be thrown from the tool.
- Always use the simplest hook up possible. Long springy extension bars and adaptors absorb impact power and could break loose resulting in personal injury. Instead, use deep sockets wherever possible.
- For tools using the pin and o-ring socket retainer, use the o-ring to securely retain the socket pin or use a one-piece retainer ring to retain the socket.
- Serious injury can result from overtorqued or under-torqued fasteners, which can break, or loosen and separate. Released assemblies can become projectiles. Assemblies requiring a specific torque must be checked using a torque meter.

NOTE: So-called 'click' torque wrenches do not check for potentially dangerous over-torqued conditions.



ANGLE WRENCHES

- Never use hand sockets or accessories. Use only power drive sockets and accessories.
- To reduce the risk of injury, always support the handle securely in the direction opposite of the spindle rotation to minimize torque reaction.



ACCESSORIES

- Always use accessories of correct size and design for the tool. Tool and accessories must not be modified in any way.
- Never use a tool without the proper accessory retainer.
- Do not use a tool or attachment for a purpose not intended by the manufacturer.



OTHER TOOLS

(e.g. Screwdrivers, Shears, Saws, etc.)

- Specific instructions/warnings affecting this group of tools are contained in product-specific documents accompanying each product.



ABRASIVE TOOLS

- Before grinding, test grinding wheel by briefly running tool at full throttle. Be sure to use a barrier (such as under a heavy work table) to protect yourself from possible broken wheel parts.
- Never mount a grinding wheel on a sander.
- Never use a grinding wheel rated at a speed lower than the air grinder speed.
- All grinding wheels and polishing/sanding accessories should be checked for cracks or other damage before mounting and use.
- Always use the recommended wheel guard to prevent injury when performing grinding operations. If a guard has withstood wheel or disk breakage, it must be replaced.
- Position a guard between the grinding wheel or disc and the operator.
- Use barriers to protect others from fragments and grinding sparks.
- Make sure grinding wheels are mounted according to manufacturer's specifications: always use correct mounting flanges.
- Never tamper with or remove a speed governor from a tool to make it run faster. Periodically check tool speed with a tachometer.

For complete safety instructions, please see the documentation provided with each tool.



For more information about ergonomics please ask for the Ergosense booklet LT198 or visit www.desouttertools.com and look in the Industrial Tools on line catalogue

Vibration level (m/s²) - Noise level (dB(A))

All values are current as of the date of this publication. For the latest information please visit www.desouttertools.com

PAGE	MODEL	PART NO.	VIBRATION LEVEL ISO 8662 (m/s ²)	NOISE LEVEL ISO 15744 dB(A)	SOUND LEVEL dB(A)	PAGE	MODEL	PART NO.	VIBRATION LEVEL ISO 8662 (m/s ²)	NOISE LEVEL ISO 15744 dB(A)	SOUND LEVEL dB(A)
12	EAP1.5-15-T-2	615 165 312 0	<2.5	<70		28	EME36-140 OF	615 165 515 0	<2.5	<70	
12	EAP1.5-20-T-2	615 165 313 0	<2.5	<70		28	EME40-180 OF	615 165 516 0	<2.5	<70	
12	EAP1.5-26-T-2	615 165 314 0	<2.5	<70		28	EME44-350 OF	615 165 602 0	<2.5	<70	
12	EAP2-20-T-2	615 165 315 0	<2.5	<70		28	EMES4-600 OF	615 165 603 0	<2.5	<70	
12	EAP2-30-T-2	615 165 316 0	<2.5	<70		28	EME50-850 OF	615 165 604 0	<2.5	<70	
12	EAP2-40-T-2	615 165 317 0	<2.5	<70		40	ECS06	615 165 442 0	<2.5	<70	
12	EAP2-65-T-2	615 165 318 0	<2.5	<70		40	ECS2	615 165 443 0	<2.5	<70	
12	EAP1.5-15-TA-2	615 165 323 0	<2.5	<70		40	ECS4	615 165 445 0	<2.5	<70	
12	EAP1.5-20-TA-2	615 165 324 0	<2.5	<70		40	ECS7	615 165 446 0	<2.5	<70	
12	EAP1.5-26-TA-2	615 165 325 0	<2.5	<70		40	ECS10	615 165 444 0	<2.5	<70	
12	EAP2-20-TA-2	615 165 326 0	<2.5	<70		40	ECS16	615 165 459 0	<2.5	<70	
12	EAP2-30-TA-2	615 165 327 0	<2.5	<70		40	ECS90-M20	615 165 454 0	<2.5	<70	
12	EAP2-40-TA-2	615 165 328 0	<2.5	<70		40	ECS2-M20	615 165 455 0	<2.5	<70	
12	EAP2-65-TA-2	615 165 329 0	<2.5	<70		40	ECS4-M20	615 165 456 0	<2.5	<70	
12	EAP2-30-TF2	615 165 404 0	<2.5	<70		40	ECS7-M20	615 165 457 0	<2.5	<70	
12	EAP2-65-TF2	615 165 405 0	<2.5	<70		40	ECS10-M20	615 165 458 0	<2.5	<70	
12	EAP1.5-15-T-1	615 165 334 0	<2.5	<70		40	ECS16-M20	615 165 460 0	<2.5	<70	
12	EAP1.5-20-T-1	615 165 335 0	<2.5	<70		40	ECSA2	615 165 447 0	<2.5	<70	
12	EAP1.5-26-T-1	615 165 336 0	<2.5	<70		40	ECSA7	615 165 448 0	<2.5	<70	
12	EAP2-20-T-1	615 165 337 0	<2.5	<70		40	ECSA10	615 165 449 0	<2.5	<70	
12	EAP2-30-T-1	615 165 338 0	<2.5	<70		41	ECP3L	615 165 198 0	<2.5	<70	
12	EAP2-40-T-1	615 165 339 0	<2.5	<70		41	ECP5L	615 165 200 0	<2.5	<70	
12	EAP2-65-T-1	615 165 340 0	<2.5	<70		41	ECP10L	615 165 201 0	<2.5	<70	
12	EAP1.5-15-TA-1	615 165 345 0	<2.5	<70		41	ECP20L	615 165 202 0	<2.5	<70	
12	EAP1.5-20-TA-1	615 165 346 0	<2.5	<70		41	ECP20S	615 165 203 0	<2.5	<70	
12	EAP1.5-26-TA-1	615 165 347 0	<2.5	<70		41	ECP30S	615 165 204 0	<2.5	<70	
12	EAP2-20-TA-1	615 165 348 0	<2.5	<70		41	ECP40S	615 165 262 0	<2.5	<70	
12	EAP2-30-TA-1	615 165 349 0	<2.5	<70		41	ECP3LT	615 165 231 0	<2.5	<70	
12	EAP2-40-TA-1	615 165 350 0	<2.5	<70		41	ECP5LT	615 165 232 0	<2.5	<70	
12	EAP2-65-TA-1	615 165 351 0	<2.5	<70		41	ECP10LT	615 165 233 0	<2.5	<70	
12	EAP2-30-TF1	615 165 402 0	<2.5	<70		41	ECP20LT	615 165 234 0	<2.5	<70	
12	EAP1.5-20-TF1	615 165 403 0	<2.5	<70		42	ECP190	615 165 399 0	<2.5	<70	
12	EDP1.5-15-T-2	615 165 319 0	<2.5	<70		42	ECP550	615 165 400 0	<2.5	<70	
12	EDP2-24-T-2	615 165 320 0	<2.5	<70		42	ECP950	615 165 401 0	<2.5	<70	
12	EDP2-33-T-2	615 165 321 0	<2.5	<70		42	ECP1500	615 165 524 0	<2.5	<70	
12	EDP2-43-T-2	615 165 322 0	<2.5	<70		42	ECP210	615 165 525 0	<2.5	<70	
12	EDP1.5-15-TA-2	615 165 330 0	<2.5	<70		42	ECP3000	615 165 526 0	<2.5	<70	
12	EDP2-24-TA-2	615 165 331 0	<2.5	<70		42	ECP4000	615 165 527 0	<2.5	<70	
12	EDP2-33-TA-2	615 165 332 0	<2.5	<70		42	ECP100-R	615 165 523 0	<2.5	<70	
12	EDP2-43-TA-2	615 165 333 0	<2.5	<70		42	ECP190-R	615 165 451 0	<2.5	<70	
12	EDP1.5-15-T-1	615 165 341 0	<2.5	<70		42	ECP550-R	615 165 452 0	<2.5	<70	
12	EDP2-24-T-1	615 165 342 0	<2.5	<70		42	ECP950-R	615 165 453 0	<2.5	<70	
12	EDP2-33-T-1	615 165 343 0	<2.5	<70		44	ECA15	615 165 108 0	<2.5	<70	
12	EDP2-43-T-1	615 165 344 0	<2.5	<70		44	ECA20	615 165 100 0	<2.5	<70	
12	EDP1.5-15-TA-1	615 165 352 0	<2.5	<70		44	ECA30	615 165 101 0	<2.5	<70	
12	EDP2-24-TA-1	615 165 353 0	<2.5	<70		44	ECA40	615 165 102 0	<2.5	<70	
12	EDP2-33-TA-1	615 165 354 0	<2.5	<70		44	ECA60	615 165 103 0	<2.5	<70	
12	EDP2-43-TA-1	615 165 355 0	<2.5	<70		44	ECA70	615 165 104 0	<2.5	<70	
15	ELS2.5-1550-P	615 165 419 0	<2.5	<70		44	ECA90	615 165 105 0	<2.5	<70	
15	ELS8-1000-P	615 165 420 0	<2.5	<70		44	ECA115	615 165 106 0	<2.5	<70	
15	ELS8-400-P	615 165 421 0	<2.5	<70		44	ECA125	615 165 188 0	<2.5	<70	
15	ELS8-800-P	615 165 421 0	<2.5	<70		44	ECA150	615 165 189 0	<2.5	<70	
15	ELS12-600-P	615 165 422 0	<2.5	<70		44	ECA200	615 165 190 0	<2.5	<70	
15	ELB2.5-1250-P	615 165 415 0	<2.5	<70		45	ECD5	615 165 088 0	<2.5	<70	
15	ELB6-900-P	615 165 416 0	<2.5	<70		45	ECD20	615 165 093 0	<2.5	<70	
15	ELB2.5-670-P	615 165 439 0	<2.5	<70		45	ECD30	615 165 094 0	<2.5	<70	
15	ELB6-670-P	615 165 440 0	<2.5	<70		45	ECD50	615 165 095 0	<2.5	<70	
15	ELB8-670-P	615 165 417 0	<2.5	<70		45	ECB70	615 165 088 0	<2.5	<70	
15	ELB12-600-P	615 165 418 0	<2.5	<70		45	ECD120	615 165 097 0	<2.5	<70	
22	ERP3L	615 165 193 0	<2.5	<70		46	ECSF06	615 165 501 0	<2.5	<70	
22	ERP5L	615 165 194 0	<2.5	<70		46	ECSF2	615 165 502 0	<2.5	<70	
22	ERP10L	615 165 195 0	<2.5	<70		46	ECSF4	615 165 503 0	<2.5	<70	
22	ERP20L	615 165 196 0	<2.5	<70		46	ECSF7	615 165 504 0	<2.5	<70	
22	ERP20S	615 165 197 0	<2.5	<70		46	ECSF10	615 165 505 0	<2.5	<70	
22	ERP30S	615 165 198 0	<2.5	<70		46	ECSF16	615 165 506 0	<2.5	<70	
22	ERP40S	615 165 263 0	<2.5	<70		47	MC35-10	615 165 107 0	<2.5	<70	
22	ERP3LT	615 165 227 0	<2.5	<70		47	MC35-20	615 165 108 0	<2.5	<70	
22	ERP5LT	615 165 228 0	<2.5	<70		47	MC38-10	615 165 109 0	<2.5	<70	
22	ERP10LT	615 165 229 0	<2.5	<70		47	MC38-20	615 165 110 0	<2.5	<70	
22	ERP20LT	615 165 230 0	<2.5	<70		47	MC51-10	615 165 111 0	<2.5	<70	
23	ERAL1.5-15	615 165 356 0	<2.5	<70		47	MC51-20	615 165 112 0	<2.5	<70	
23	ERAL1.5-25	615 165 357 0	<2.5	<70		47	MC60-10	615 165 113 0	<2.5	<70	
23	ERAL2-30	615 165 362 0	<2.5	<70		47	MC60-20	615 165 114 0	<2.5	<70	
23	ERAL2-40	615 165 363 0	<2.5	<70		47	MC60-30	615 165 115 0	<2.5	<70	
23	ERAL2-60	615 165 364 0	<2.5	<70		47	MC80-10	615 165 116 0	<2.5	<70	
23	ERAL2-80	615 165 365 0	<2.5	<70		47	MC80-20	615 165 117 0	<2.5	<70	
23	ERAL2-80 SQ1/2	615 165 406 0	<2.5	<70		47	MC80-30	615 165 118 0	<2.5	<70	
23	ERAL4-90	615 165 384 0	<2.5	<70		47	MC80-40	615 165 119 0	<2.5	<70	
23	ERAL4-110	615 165 385 0	<2.5	<70		47	MC106-10	615 165 120 0	<2.5	<70	
23	ERAL4-120	615 165 386 0	<2.5	<70		47	MC106-20	615 165 121 0	<2.5	<70	
23	ERAL4-140	615 165 387 0	<2.5	<70		48	MCL38-20	615 165 124 0	<2.5	<70	
23	ERAL4-170	615 165 388 0	<2.5	<70		48	MCL51-20	615 165 125 0	<2.5	<70	
23	ERAL4-225	615 165 389 0	<2.5	<70		48	MCL60-20	615 165 126 0	<2.5	<70	
23	ERAL6-135	615 165 390 0	<2.5	<70		48	MCL60-30	615 165 127 0	<2.5	<70	
23	ERAL6-170	615 165 441 0	<2.5	<70		48	MCL30-40	615 165 128 0	<2.5	<70	
23	ERAL6-280	615 165 391 0	<2.5	<70		54	SLC030-L1200-C4Q	615 165 500 0	<2.5	<70	
23	ERAL6-350	615 165 392 0	<2.5	<70		54	SLC100-L1600-C4Q	615 165 498 0	<2.5	<70	
23	ERAL6-480	615 165 393 0	<2.5	<70		54	SLC150-L320-C4Q	615 165 467 0	<2.5	<70	
25	ERD5J	615 165 060 0	<2.5	<70		54	SLC030-L1200-C90A4H	615 165 478 0	<2.5	<70	
25	ERDL1.5-12	615 165 366 0	<2.5	<70		54	SLC100-L600-C90A4H	615 165 479 0	<2.5	<70	
25	ERDL1.5-20	615 165 367 0	<2.5	<70		55	SLC030-P1200-C4Q	615 165 488 0	<2.5	<70	
25	ERDL1.5-30	615 165 368 0	<2.5	<70		55	SLC100-P600-C4Q	615 165 462 0	<2.5	<70	
25	ERDL2-40	615 165 369 0	<2.5	<70		55	SLC150-P320-C4Q	615 165 463 0	<2.5	<70	
25	ERDL2-50	615 165 370 0	<2.5	<70		55	SLC030-T1200-C4Q	615 165 489 0	<2.5	<70	
25	ERDL4-60	615 165 407 0	<2.5	<70		55	SLC100-L600-C4Q	615 165 494 0	<2.5	<70	
25	ERDL4-80	615 165 394 0	<2.5	<70		55	SLC150-T320-C4Q	615 165 465 0	<2.5	<70	
25	ERDL4-135	615 165 395 0	<2.5	<70		55	SLC030-F1200-C4Q	615 165 490 0	<2.5		

Vibration level (m/s²) - Noise level (dB(A))

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PAGE	MODEL	PART NO.	VIBRATION LEVEL ISO 8662 (m/s ²)	NOISE LEVEL ISO 15744 dB(A)	SOUND LEVEL dB(A)	PAGE	MODEL	PART NO.	VIBRATION LEVEL ISO 8662 (m/s ²)	NOISE LEVEL ISO 15744 dB(A)	SOUND LEVEL dB(A)
61	SLE017-L1500-S4Q	1464914	<2.5	59		78	SC2-025-A2200-R4Q	205 147 276 4	4.5	71	
61	SLE023-L1000-S4Q	1464924	<2.5	59		78	SC2-035-A1500-R4Q	205 147 275 4	6.4	71	
61	SLE032-L750-S4Q	1464934	<2.5	59		78	SC2-045-A1000-R4Q	205 147 274 4	4.6-8	71	
61	SLE047-L550-S4Q	1464944	<2.5	59		78	SC2-055-A700-R4Q	205 147 273 4	4.9-9.7	71	
61	SLE037-L200-S4Q	615 165 373 0	<2.5	59		78	SC2-065-A500-R4Q	205 147 272 4	5.1-8.7	71	
61	SLE025-A1500-S4Q	1465414	<2.5	59		78	SD023-AB3500-R4Q	1462934	2.9-3.6	73	
61	SLE030-A1000-C4Q	1465424	<2.5	59		78	SD035-AB2200-R4Q	1462944	3.9-8.3	73	
61	SLE036-A750-C4Q	1465434	<2.5	59		78	SD055-AB1470-R4Q	1462934	5.7-11.5	73	
61	SLE045-A550-C4Q	1465444	<2.5	59		78	SD075-AB1100-R4Q	1462924	7.8-15.7	73	
61	SLE026-L1500-C4Q	1465884	<2.5	59		78	SD100-AB820-R4Q	1462914	8.5-17.5	73	
61	SLE030-L1000-C4Q	1465894	<2.5	59		78	SD100-AB510-R4Q	1462904	5.8-13.2	73	
61	SLE036-L750-C4Q	1465904	<2.5	59		78	SD023-AR3500-R4Q	1462894	2.8-3.6	73	
61	SLE045-L550-C4Q	1465914	<2.5	59		78	SD035-AR2200-R4Q	1462884	3.9-8.3	73	
62	SLE012-T2000-S4Q	1465904	<2.5	59		78	SD055-AR1470-R4Q	1462874	5.1-8.3	73	
62	SLE017-T1500-S4Q	1465914	<2.5	59		78	SD075-AR1100-R4Q	1462864	7.8-15.7	73	
62	SLE023-T1000-S4Q	1465924	<2.5	59		78	SD100-AR820-R4Q	1462854	8.5-17.5	73	
62	SLE032-T750-S4Q	1465934	<2.5	59		78	SD100-AR510-R4Q	1462844	5.8-13.2	73	
62	SLE047-T550-S4Q	1465944	<2.5	59		78	SC2-025-L2200-R4Q	205 147 290 4	4.5	71	
62	SLE012-L2000-S90A4H	1464954	<2.5	59		78	SC2-035-L1500-R4Q	205 147 289 4	6.4	71	
62	SLE017-L1500-S90A4H	1464964	<2.5	59		78	SC2-045-L1000-R4Q	205 147 288 4	4.6-8	71	
62	SLE023-L1000-S90A4H	1464974	<2.5	59		78	SC2-055-L700-R4Q	205 147 287 4	4.9-9.3	71	
62	SLE032-L750-S90A4H	1464984	<2.5	59		78	SC2-065-L500-R4Q	205 147 286 4	5.1-8.7	71	
62	SLE047-L550-S90A4H	1464994	<2.5	59		78	SD023-LB3500-R4Q	1463214	2.8-3.6	73	
72	2A89-A-1300	1225434	<2.5	64		78	SD035-LB2200-R4Q	1463204	3.9-8.3	73	
72	2A89-A-700	1225514	<2.5	64		78	SD055-LB1470-R4Q	1463194	5.7-11.5	73	
72	2A89-A-400	1225694	<2.5	64		78	SD075-LB1100-R4Q	1463184	7.8-15.7	73	
72	2A89-A-1300	1223154	<2.5	64		78	SD100-LB820-R4Q	1463174	8.5-17.5	73	
72	2A89-A-700	1223234	<2.5	64		78	SD100-LB510-R4Q	1463164	5.8-13.2	73	
72	2A89-A-400	1223314	<2.5	64		78	SD023-LR3500-R4Q	1463154	2.8-3.6	73	
72	SB011-AB1600-S4Q	1460644	<2.5	69		78	SD035-LR2200-R4Q	1463144	3.9-8.3	73	
72	SB015-AB1100-S4Q	1460634	<2.5	69		78	SD055-LR1470-R4Q	1463134	5.7-11.5	73	
72	SB025-AB750-S4Q	1460624	<2.5	69		78	SD075-LR1100-R4Q	1463124	7.8-15.7	73	
72	SB025-AB500-S4Q	1460684	<2.5	69		78	SD100-LR820-R4Q	1463114	8.5-17.5	73	
72	SB011-AR1600-S4Q	1460524	<2.5	69		78	SD100-LR510-R4Q	1463104	5.8-13.2	73	
72	SB015-AR1100-S4Q	1460514	<2.5	69		79	SBP024-T2300-R4Q	1462184	0.9-2.5	73	
72	SB025-AR750-S4Q	1460504	<2.5	69		79	SBP022-T1600-R4Q	1462174	1.8-3.2	73	
72	SB025-AR500-S4Q	1460564	<2.5	69		79	SBP044-T1100-R4Q	1462204	2.3-3.9	73	
72	SC2-025-A2200-S4Q	205 147 269 4	<2.5	71		79	SBP044-T550-R4Q	1462214	1.7-4.7	73	
72	SC2-035-A1500-S4Q	205 147 268 4	<2.5	71		79	SCP024-T2300-R4Q	1456774	0.9-2.5	73	
72	SC2-045-A1000-S4Q	205 147 267 4	<2.5	71		79	SCP022-T1600-R4Q	1456784	1.8-3.2	73	
72	SC2-055-A700-S4Q	205 147 266 4	<2.5	71		79	SCP044-T1100-R4Q	1456794	2.3-3.9	73	
72	SC2-065-A500-S4Q	205 147 265 4	<2.5	71		79	SCP044-T550-R4Q	1456804	1.7-4.7	73	
72	SD023-AB3500-S4Q	1462824	<2.5	73		79	SDP023-T3400-R4Q	1465694	2.3-3.9	73	
72	SD035-AB2200-S4Q	1462824	<2.5	73		79	SDP023-T2200-R4Q	1465684	3	75	
72	SD055-AB1470-S4Q	1462814	<2.5	73		79	SDP055-T1400-R4Q	1465624	3.2	75	
72	SD075-AB1100-S4Q	1462804	<2.5	73		79	SDP075-T1050-R4Q	1465614	4.2	75	
72	SD100-AB820-S4Q	1462794	<2.5	73		79	SDP100-T780-R4Q	1465604	5.6	75	
72	SD140-AB510-S4Q	1462784	<2.5	73		79	SDP100-T490-R4Q	1465594	7.9	75	
72	SD160-AB320-S4Q	1462774	<2.5	73		79	SDP100-T300-R4Q	1465584	6.7	75	
72	SD023-AR3500-S4Q	1462764	<2.5	73		79	SDP023-T2300-R4Q	205 147 635 4	<2.5	75	
72	SD035-AR2200-S4Q	1462754	<2.5	73		79	SDT035-T2200-R4Q	205 147 636 4	<2.5	75	
72	SD055-AR1470-S4Q	1462744	<2.5	73		79	SDT055-T1470-R4Q	205 147 637 4	<2.5	75	
72	SD075-AR1100-S4Q	1462734	<2.5	73		79	SDT075-T1100-R4Q	205 147 638 4	<2.5	75	
72	SD100-AR820-S4Q	1462724	<2.5	73		79	SDT100-T820-R4Q	205 147 639 4	<2.5	75	
72	SD140-AR510-S4Q	1462714	<2.5	73		79	SDT100-T510-R4Q	205 147 644 4	<2.5	75	
72	SD160-AR320-S4Q	1462704	<2.5	73		79	SDT100-T320-R4Q	205 147 641 4	<2.5	75	
73	SB021-LR2000-S4Q	205 147 509 4	<2.5	72		79	SCP024-T2300-R4Q	1456894	0.9-2.5	73	
73	SB021-LR1600-S4Q	205 147 508 4	<2.5	72		79	SCP1022-A1600-R4Q	1456884	1.8-3.2	73	
73	SB043-LR1050-S4Q	205 147 507 4	<2.5	72		79	SCP044-A1100-R4Q	1458914	2.3-3.9	73	
73	SB047-LR500-S4Q	205 147 506 4	<2.5	72		80	SDP023-T3400-D4Q	1465714	<2.5	75	
73	SC2-025-L2200-S4Q	205 147 283 4	<2.5	71		80	SDP035-T2100-D4Q	1465704	<2.5	75	
73	SC2-035-L1500-S4Q	205 147 282 4	<2.5	71		80	SDP055-T1400-D4Q	1465694	<2.5	75	
73	SC2-045-L1000-S4Q	205 147 281 4	<2.5	71		80	SDP075-T1050-D4Q	1465684	<2.5	75	
73	SC2-055-L700-S4Q	205 147 280 4	<2.5	71		80	SDP100-T780-D4Q	1465674	<2.5	75	
73	SC2-065-L500-S4Q	205 147 279 4	<2.5	71		80	SDP140-T510-D4Q	1465664	<2.5	75	
73	SD023-LB3500-S4Q	1463094	<2.5	73		80	SD160L-AR320-S4Q	205 147 799 4	<2.5	73	
73	SD035-LB2200-S4Q	1463084	<2.5	73		81	SD140-LA510-S4	1464584	<2.5	73	
73	SD055-LB1470-S4Q	1463074	<2.5	73		81	SD75-LA1100-S4	1464604	<2.5	73	
73	SD075-LB1100-S4Q	1463064	<2.5	73		81	2F189-PX-900	1240584	<2.5	82	
73	SD100-LB820-S4Q	1463054	<2.5	73		81	2F189-PX-600	1240744	<2.5	82	
73	SD140-LB510-S4Q	1463044	<2.5	73		81	2F189-PX-400	1240904	<2.5	82	
73	SD160-LB320-S4Q	1463034	<2.5	73		82	SC021-L2000-S90A4S	1459154	<2.5	73	
73	SD023-LR3500-S4Q	1463024	<2.5	73		82	SC021-L1400-S90A4S	1459144	<2.5	73	
73	SD035-LR2200-S4Q	1463014	<2.5	73		82	SC043-L950-S90A4S	1459134	<2.5	73	
73	SD055-LR1470-S4Q	1463004	<2.5	73		82	SC047-L500-S90A4S	1459124	<2.5	73	
73	SD075-LR1100-S4Q	1462994	<2.5	73		82	SC021-L2200-S45A4S	1459574	<2.5	73	
73	SD100-LR820-S4Q	1462984	<2.5	73		82	SC021-L1500-S45A4S	1459584	<2.5	73	
73	SD140-LR510-S4Q	1462974	<2.5	73		82	SC043-L1050-S45A4S	1459594	<2.5	73	
73	SD160-LR320-S4Q	1462964	<2.5	73		82	SC047-L520-S45A4S	1459604	<2.5	73	
74	SBP021-T2300-S4Q	1462954	<2.5	73		82	SDP023-L2200-S90A4H	1459614	<2.5	73	
74	SBP043-T1100-S4Q	1462944	<2.5	73		82	SC021-L1500-S45A4H	1459494	<2.5	73	
74	SBP044-T750-S4Q	1462934	<2.5	73		82	SC043-L1050-S45A4H	1459504	<2.5	73	
74	SBP043-T1100-S4Q	1462164	<2.5	73		82	SC047-L520-S45A4H	1459514	<2.5	73	
74	SBP047-T550-S4Q	1462174	<2.5	73		82	SC021-L2000-S90A4H	1459074	<2.5	73	
74	SCBP021-T2300-S4Q	1466374	<2.5	73		82	SC021-L1400-S90A4H	1459064	<2.5	73	
74	SCBP021-T1600-S4Q	1466364	<2.5	73		82	SC043-L950-S90A4H	1459054	<2.5	73	
74	SCBP043-T1100-S4Q	1466334	<2.5	73		82	SDP044-T550-S90A4H	1463254	<2.5	73	
74	SCBP044-T750-S4Q	1466344	<2.5	73		82	SD070-LB1100-S90-A4H	1463244	<2.5	73	
74	SCBP047-T550-S4Q	1466334	<2.5	73		82	SD070-LB820-S90-A4H	1463234	<2.5	73	
74	SCP021-T2300-S4Q	1456734	<2.5	73		82	SD070-LB510-S90-A4H	1463224	<2.5	73	
74	SCP021-T1600-S4Q	1456744	<2.5	73		82	SD070-LB320-S90-A4H	1463214	<2.5	73	
74	SCP043-T1100-S4Q	1456754	<2.5	73		82	SD070-LR1100-S90-A4H	1463204	<2.5	73	
74	SCP047-T550-S4Q	1456764	<2.5	73		82	SD070-LR820-S90-A4H	1463284	<2.5	73	
74	SDP023-T3400-S4Q	1465574	<2.5	75		82	SD070-LR510-S90-A4H	1463274	<2.5	73	
74	SDP035-T2100-S4Q	1465584	<2.5	75		82	SD070-LR320-S90-A4H	1463264	<2.5	73	
74	SDP055-T1400-S4Q	1465594	<2.5	75		82	SD070-LB1100-S90-A4S	1463374	<2.5	73	
74	SDP075-T1050-S4Q	1465544	<2.5	75		82	SD070-LB820-S90-A4S	1463364	<2.5	73	
74	SDP100-T780-S4Q	1465534	<2.5	75							

Vibration level (m/s²) - Noise level (dB(A))

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PAGE	MODEL	PART NO.	VIBRATION LEVEL ISO 8662 (m/s ²)	NOISE LEVEL ISO 15744 dB(A)	SOUND LEVEL dB(A)	PAGE	MODEL	PART NO.	VIBRATION LEVEL ISO 8662 (m/s ²)	NOISE LEVEL ISO 15744 dB(A)	SOUND LEVEL dB(A)
83	SH1200-LR215-S90-A13S	205 147 476 4	<2.5		82	129	CP0614 GALED	T020021	9.5	97	107
83	SH2000-LR100-S90-A13S	205 147 801 4	<2.5		82	129	CP0614 PALED	T020022	9.5	97	107
84	SC024-L2000-R90A4S	1459194	3.7-8.2	73		129	CP0611P RLS	T025413	12.4	102	113
84	SC022-L1400-R90A4S	1459194	2.7-7.2	73		129		T025414	12.4	102	113
84	SC044-L950-R90A4S	1459194	3.2-9.9	73		147	KC1600-30T	615 170 313 0	<2.5	71	
84	SC044-L500-R90A4S	1459164	4.5-5.2	73		147	KC1600-32T	615 170 314 0	<2.5	71	
84	SC024-L2000-R90A4H	1459114	3.7-8.2	73		147	KC1600-30	615 170 315 0	<2.5	71	
84	SC022-L1400-R90A4H	1459104	2.7-7.2	73		147	KC01600-32	615 170 316 0	<2.5	71	
84	SC044-L950-R90A4H	1459094	3.2-9.9	73		147	KC061000-30	205 146 638 4	2.4	71	
84	SC044-L500-R90A4H	1459084	4.5-5.2	73		147	KC061000-32	205 146 707 4	2.4	71	
84	SD070-LB1100-R90-A4H	1463334	6.9-8.3	73		147	05-X-80000	258984	2.7	76	
84	SD070-LB1100-R90-A4S	1463324	3.8-8.2	73		147	05-X-80000	258984	2.7	76	
84	SD070-LB510-R90-A4H	1463314	2.0-4.6	73		149	K340-	615 170 036 0	<2.5	78	
84	SD070-LB510-R90-A4S	1463304	1.8-3.9	73		149	K331-7	615 170 035 0	2.7	80	
84	SD070-LR1100-R90-A4H	1463654	6.9-8.3	73		149	K325-7	615 170 034 0	2.9	74	
84	SD070-LR1100-R90-A4S	1463644	3.8-8.0	73		149	K320-7	615 170 033 0	4.0	75	
84	SD070-LR510-R90-A4H	1463634	2.0-4.6	73		149	KC340-7	615 170 032 0	<2.5	77	
84	SD070-LR510-R90-A4S	1463624	1.8-3.9	73		149	KC331-7	615 170 031 0	<2.5	77	
84	SD070-LB1100-R90-A4S	1463354	6.9-8.3	73		149	KC325-7	615 170 030 0	<2.5	77	
84	SD070-LB820-R90-A4S	1463444	3.7-8.0	73		149	KC320-7	615 170 029 0	2.7	74	
84	SD070-LB510-R90-A4S	1463434	2.0-4.6	73		149	KA320E7	615 170 047 0	<2.5	80	
84	SD070-LB320-R90-A4S	1463424	1.8-3.9	73		149	KA312E7	615 170 039 0	<2.5	77	
84	SD070-LR1100-R90-A4S	1463694	6.9-8.3	73		149	KA320-7	615 170 043 0	<2.5	78	
84	SD070-LR820-R90-A4S	1463684	3.8-8.0	73		149	KA312-7	615 170 037 0	<2.5	75	
84	SD070-LR510-R90-A4S	1463674	2.0-4.6	73		149	KLA14	615 170 026 0	<2.5	77	
84	SD070-LR320-R90-A4S	1463664	3.7-8.0	73		151	K628-7	615 170 107 0	<2.5	85	
84	SD097-LB1080-R90-A10S	1463584	9.5	73		151	K624-7	615 170 106 0	<2.5	81	
84	SD130-LB600-R90-A10S	1463574	7.2	73		151	K922-7	615 170 119 0	<2.5	81	
84	SD209-LB370-R90-A10S	1463564	7.4	73		151	K619-7	615 170 105 0	<2.5	76	
84	SD097-LR1080-R90-A10S	1463724	9.5	73		151	K918-7	615 170 117 0	<2.5	80	
84	SD130-LR600-R90-A10S	1463714	7.2	73		151	K615-7	615 170 104 0	<2.5	76	
84	SD209-LR370-R90-A10S	1463704	7.4	73		151	K915-7	615 170 114 0	<2.5	81	
84	2D472-LX-550	1388614	4.1-5.2	73		151	K912-7	615 170 110 0	2.7	76	
85	SD106-LB500-R90-A4S	1463524	<2.5	73		151	K628-7	615 170 126 0	<2.5	75	
85	SD096-LB800-D90-A4S	1465984	<2.5	73		151	KC624-7	615 170 125 0	<2.5	82	
85	2D472-LX-550	1388534	<2.5	73		151	KC922-7	615 170 130 0	<2.5	81	
85	H410-N-500	1302374	<2.5	82		151	KC619-7	615 170 124 0	<2.5	74	
85	H410-N-350	1302454	<2.5	82		151	KC918-7	615 170 129 0	<2.5	81	
85	H410-N-150	1302534	<2.5	82		151	KC615-7	615 170 123 0	<2.5	74	
85	H410-N-90	1302614	<2.5	82		151	KC915-7	615 170 128 0	<2.5	80	
85	H410-N-60	1302794	<2.5	82		151	KC917-7	615 170 127 0	<2.5	75	
86	SD160-LB240-S-OE17	1463594	<2.5	73		151	KC912-300-7	615 170 108 0	<2.5	74	
86	SD160-LB240-S-OE13	1463604	<2.5	73		151	KC912-500-7	615 170 109 0	<2.5	74	
86	SD160-LB240-S-OE12	1463614	<2.5	73		153	K340-9	615 170 139 0	2.8	78	
86	SD160-LB240-S-OE10	1463734	<2.5	73		153	K331-9	615 170 140 0	<2.5	80	
86	SD120-LB320-S-OE8	1463744	<2.5	73		153	K325-9	615 170 141 0	2.9	74	
86	SD120-LB320-S-OE7	1463754	<2.5	73		153	K320-9	615 170 142 0	7.2	75	
86	SD160-LB240-S-OE	1463474	<2.5	73		153	KC340-9	615 170 143 0	<2.5	77	
86	SD160-LB240-S-OE	1463484	<2.5	73		153	KC331-9	615 170 144 0	<2.5	77	
87	SC2-025-1AM2200-S4Q	205 147 426 4	<2.5	71		153	KC325-9	615 170 145 0	<2.5	78	
87	SC2-035-1AM1500-S4Q	205 147 425 4	<2.5	71		153	KC320-9	615 170 027 0	<2.5	74	
87	SC2-045-1AM1000-S4Q	205 147 424 4	<2.5	71		153	KC318-9	615 170 196 0	<2.5	72	
87	SC2-055-1AM700-S4Q	205 147 423 4	<2.5	71		153	KA320E9	615 170 146 0	<2.5	80	
87	SC2-065-1AM500-S4Q	205 147 422 4	<2.5	71		153	KA312E9	615 170 147 0	<2.5	77	
87	SC2-025-2RM2200-S4Q	205 147 440 4	<2.5	71		153	KA320-9	615 170 148 0	<2.5	78	
87	SC2-035-2RM1500-S4Q	205 147 439 4	<2.5	71		157	KA319-9	615 170 151 0	<2.5	75	
87	SC2-045-2RM1000-S4Q	205 147 438 4	<2.5	71		153	KA312-9	615 170 149 0	<2.5	75	
87	SC2-055-2RM700-S4Q	205 147 437 4	<2.5	71		153	KA309-9	615 170 266 0	<2.5	76	
87	SC2-065-2RM500-S4Q	205 147 436 4	<2.5	71		153	KA613E9	615 170 136 0	<2.5	83	
87	SD023-1AM3500-S4Q	1464254	<2.5	73		153	KA613-9	615 170 135 0	<2.5	85	
87	SD035-1AM2200-S4Q	1464244	<2.5	73		155	KA320-9FE	615 170 206 0	<2.5	80	
87	SD055-1AM1470-S4Q	1464234	<2.5	73		155	KA312-9FE	615 170 205 0	<2.5	78	
87	SD075-1AM1100-S4Q	1464224	<2.5	73		157	K628-9	615 170 150 0	<2.5	85	
87	SD100-1AM820-S4Q	1464214	<2.5	73		157	K624-9	615 170 151 0	<2.5	81	
87	SD140-1AM510-S4Q	1464204	<2.5	73		157	K922-9	615 170 152 0	<2.5	81	
87	SD160-1AM320-S4Q	1464194	<2.5	73		157	K619-9	615 170 153 0	<2.5	76	
87	SD023-2RM3500-S4Q	1464324	<2.5	73		157	K918-9	615 170 154 0	<2.5	80	
87	SD035-2RM2200-S4Q	1464314	<2.5	73		157	K615-9	615 170 155 0	<2.5	76	
87	SD055-2RM1470-S4Q	1464304	<2.5	73		157	K915-9	615 170 156 0	<2.5	81	
87	SD075-2RM1100-S4Q	1464294	<2.5	73		157	K912-9	615 170 157 0	<2.5	76	
87	SD100-2RM820-S4Q	1464284	<2.5	73		157	K628-9	615 170 158 0	<2.5	75	
87	SD140-2RM510-S4Q	1464274	<2.5	73		157	KC624-9	615 170 159 0	<2.5	82	
87	SD160-2RM320-S4Q	1464264	<2.5	73		157	KC922-9	615 170 160 0	<2.5	81	
92	PT031-L10000-H10S	205 147 466 4	<2.5	75		157	KC619-9	615 170 161 0	<2.5	74	
92	PT028-T9000-I4Q	205 147 789 4	<2.5	72		157	KC918-9	615 170 162 0	<2.5	81	
92	PT031-T9000-H10S	205 147 467 4	<2.5	75		157	KC615-9	615 170 163 0	<2.5	74	
92	PT052-T7000-H10S	205 147 468 4	<2.5	80		157	KC915-9	615 170 164 0	<2.5	80	
92	PT070-T6000-H10S	205 147 469 4	<2.5	84		157	KC912-9	615 170 165 0	<2.5	75	
92	PT110-T4500-H13S	205 147 470 4	<2.5	79		157	KC912-300-9	615 170 166 0	<2.5	74	
92	PT160-T3500-H13S	205 147 471 4	3	79		157	KC912-500-9	615 170 170 0	<2.5	74	
92	PT240-T2800-H19S	205 147 472 4	5.7	81		157	KA16120-9	615 170 443 0	4.0	82	
92	PT010-T5000-S4Q	205 146 227 4	<2.5	70		157	K1180-9	615 170 246 0	<2.5	95	
92	PT010-L5000-S4Q	205 146 225 4	<2.5	70		158	KC624-9RT	615 170 290 0	<2.5	82	
92	PT014-T6000-S4Q	205 146 228 4	<2.5	73		163	K918C3	615 170 118 0	5.2	77	
92	PT014-L6000-S4Q	205 146 226 4	<2.5	73		163	K915C25	615 170 115 0	6.3	77	
92	PT025-T4500-S10S	205 147 463 4	<2.5	76		163	K912C3	615 170 112 0	5.2	78	
92	PT025-L4500-S10S	205 147 463 4	3	76		163	K915C3	615 170 116 0	<2.5	78	
92	PT035-T6000-S4Q	205 147 790 4	<2.5	74		163	K912C3	615 170 111 0	3.4	81	
92	PT040-T6000-S10S	205 146 229 4	<2.5	77		163	K912C4	615 170 112 0	2.5	78	
92	PT070-T4000-S13S	205 146 230 4	3.5	82		165	K190B3CW	615 170 005 0	<2.5	82	
92	PT125-T3500-S13S	205 146 231 4	3.3	79		165	K190B4	615 170 004 0	2.9	82	
92	PT250-T4000-S19S	205 147 464 4	8.6	80		165	K160B6	615 170 003 0	2.6	77	
92	PT450-T3000-S19S	205 147 465 4	3.8	85		165	K145B6	615 170 002 0	<2.5	75	
127	CP6031 HABAD	1021887	4.3	88	98	165	K260B6	615 170 008 0	<2.5	87	
127	CP 6031 HABAK	1021884	4.3	88	98	165	K360B6	615 170 010 0	<2.5	82	
127	CP6031 HABAV	1021885	4.3	88	98	165	K245B8	615 170 006 0	<2.5	81	
127	CP6300 RSR	1022585	4.3	95	105	165	K345B8	615 170 009 0	<2.5	82	
127	CP6041 HABAB	1021888	5.7	90	100	165	K1120B3CWY	615 170 171 0	<2.		

Vibration level (m/s²) - Noise level (dB(A))

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PAGE	MODEL	PART NO.	VIBRATION LEVEL ISO 8662 (m/s ²)	NOISE LEVEL ISO 15744 dB(A)	SOUND LEVEL dB(A)	PAGE	MODEL	PART NO.	VIBRATION LEVEL ISO 8662 (m/s ²)	NOISE LEVEL ISO 15744 dB(A)	SOUND LEVEL dB(A)
175	KA11120A5F	615 170 052 0	9.0	84		197	KL265B	615 170 339 0			
175	KA11120B5F	615 170 055 0	9.0	84		197	KL360B	615 170 340 0	3.7	85	
175	KL1120A5	615 170 013 0	<2.5	84		197	KL360B	615 170 340 0	3.7	85	
175	KL1120B5	615 170 191 0	<2.5	84		197	KL360B6CY	615 170 345 0	<2.5	87	
175	KA16100B6FVK	615 170 010 0	1.8	82		197	KL360B6CY	615 170 351 0	<2.5	87	
177	KL185B7	615 170 012 0	3.1	78		197	KL245B6CY	615 170 346 0	<2.5	85	
177	KL285B7	615 170 336 0	5.0	86		209	SXR35	615 170 209 0	<2.5	76	
177	KL377B7	615 170 341 0	4.6	88		209	SXR35	615 170 210 0	<2.5	76	
177	KL285B7V	615 170 471 0	<2.5	86		209	SXR35	615 170 211 0	<2.5	76	
177	KL377B7V	615 170 472 0	<2.5	88		209	SXR35	615 170 215 0	<2.5	78	
177	KA177B7	615 170 021 0	<2.5	91		209	SXR35	615 170 217 0	<2.5	78	
177	KL260B6C	615 170 334 0	<2.5	84		209	SXR35	615 170 212 0	<2.5	85	
177	KL360B6C	615 170 337 0	<2.5	84		209	SXR35	615 170 213 0	<2.5	85	
179	KL177B7Y	615 170 182 0	<2.5	91		209	SXR35	615 170 214 0	<2.5	85	
179	KL277B7Y	615 170 342 0	4.0	87		209	SXR35	615 170 218 0	<2.5	76	
179	KL377B7Y	615 170 348 0	4.6	88		209	SXR35	615 170 219 0	<2.5	76	
179	KL160B7Y	615 170 183 0	<2.5	77		209	SXR35	615 170 220 0	<2.5	76	
179	KL260B7Y	615 170 343 0	2.9	87		209	SXR35	615 170 221 0	<2.5	85	
179	KL360B7Y	615 170 349 0	3.1	87		209	SXR35	615 170 222 0	<2.5	85	
179	KA177B7Y	615 170 179 0	<2.5	91		209	SXR35	615 170 223 0	<2.5	85	
179	KA160B7Y	615 170 247 0	<2.5	77		209	SXR35	615 170 224 0	<2.5	85	
179	KL260B6CY	615 170 345 0	<2.5	87		209	SXR35	615 170 225 0	<2.5	78	
179	KL360B6CY	615 170 351 0	<2.5	84		209	SXR35	615 170 226 0	<2.5	78	
179	KL245B6CY	615 170 346 0	<2.5	85		209	SXR35	615 170 227 0	<2.5	85	
181	KL265B9	615 170 335 0	3.5	84		209	SXR35	615 170 228 0	<2.5	85	
181	KL365B9	615 170 338 0	4.0	87		209	SXR35	615 170 229 0	<2.5	76	
181	KL260B9Y	615 170 344 0	2.5	86		209	SXR35	615 170 230 0	<2.5	76	
181	KL360B9Y	615 170 350 0	3.6	85		209	SXR35	615 170 231 0	<2.5	78	
181	KL245B9Y	615 170 347 0	<2.5	84		209	SXR35	615 170 232 0	<2.5	78	
181	KL265B9V	615 170 473 0	<2.5	84		209	SXR35	615 170 233 0	<2.5	85	
181	KL365B9V	615 170 474 0	<2.5	87		209	SXR35	615 170 234 0	<2.5	85	
181	KA165B9	615 170 020 0	<2.5	89		209	SXR35	615 170 235 0	<2.5	76	
181	KA160B9Y	615 170 180 0	<2.5	89		209	SXR35	615 170 236 0	<2.5	76	
181	K260B9	615 170 007 0	2.8	85		209	SXR35	615 170 237 0	<2.5	76	
185	KC9060-9	615 170 166 0	<2.5	83		209	SXR35	615 170 238 0	<2.5	82	
185	KC9035-9	615 170 167 0	<2.5	82		209	SXR35	615 170 239 0	<2.5	85	
185	KC9010-9	615 170 168 0	<2.5	82		209	SXR35	615 170 240 0	<2.5	85	
185	KC9060-7	615 170 122 0	<2.5	83		209	SXR35	615 170 241 0	<2.5	77	
185	KC9035-7	615 170 121 0	<2.5	82		209	SXR35	615 170 242 0	<2.5	77	
185	KC9010-7	615 170 120 0	<2.5	84		209	SXR35	615 170 243 0	<2.5	76	
187	KA320E5	615 170 048 0	<2.5	77		209	SXR35	615 170 244 0	<2.5	82	
187	KA312EG	615 170 054 0	<2.5	76		209	SXR35	615 170 245 0	<2.5	81	
187	KA320G	615 170 044 0	<2.5	77		209	SXR35	615 170 246 0	<2.5	80	
187	KA318G	615 170 310 0	<2.5	77		209	SXR35	615 170 247 0	<2.5	83	
187	KA312G	615 170 038 0	<2.5	77		209	SXR35	615 170 248 0	<2.5	85	
187	KA309G	615 170 204 0	<2.5	76		209	SXR35	615 170 249 0	<2.5	81	
187	KA309C	615 170 203 0	<2.5	76		209	SXR35	615 170 250 0	<2.5	82	
187	DA6.35	615 170 019 0	<2.5	74		209	SXR35	615 170 251 0	<2.5	80	
187	DA8.20	615 170 030 0	<2.5	75		209	SXR35	615 170 252 0	<2.5	80	
189	KL1120A	615 170 022 0	<2.5	83		209	SXR35	615 170 253 0	<2.5	82	
189	KL1120A	615 170 022 0	3.1	83		209	SXR35	615 170 254 0	<2.5	83	
189	KL1120B	615 170 207 0	<2.5	83		209	SXR35	615 170 255 0	<2.5	83	
191	KA16135C4S	615 170 446 0	<2.5	85		209	SXR35	615 170 256 0	<2.5	83	
191	KA16120A	615 170 435 0	<2.5	85		209	SXR35	615 170 257 0	<2.5	82	
191	KA16120A	615 170 435 0	<2.5	85		209	SXR35	615 170 258 0	<2.5	84	
191	KA16120B	615 170 445 0	<2.5	85		209	SXR35	615 170 259 0	<2.5	80	
191	KA16085A	615 170 468 0	2.6	80		209	SXR35	615 170 260 0	<2.5	85	
191	KA16085B	615 170 469 0	2.6	80		209	SXR35	615 170 261 0	<2.5	80	
191	KA16075A	615 170 448 0	2.6	79		209	SXR35	615 170 262 0	<2.5	78	
191	KA16075B	615 170 452 0	2.6	79		209	SXR35	615 170 263 0	<2.5	81	
191	KA16060A	615 170 449 0	<2.5	77		209	SXR35	615 170 264 0	<2.5	81	
191	KA16060B	615 170 453 0	<2.5	77		209	SXR35	615 170 265 0	<2.5	80	
191	KA16120BY	615 170 447 0	<2.5	86		209	SXR35	615 170 266 0	<2.5	81	
191	KA16075BY	615 170 450 0	3.1	78		209	SXR35	615 170 267 0	<2.5	80	
191	KA16060BY	615 170 451 0	<2.5	75		209	SXR35	615 170 268 0	<2.5	82	
191	KA16060BY	615 170 451 0	<2.5	76		209	SXR35	615 170 269 0	<2.5	81	
193	KA9030A	615 170 098 0	<2.5	83		209	SXR35	615 170 270 0	<2.5	106	
193	KA9030B	615 170 099 0	<2.5	83		209	SXR35	615 170 271 0	<2.5	85	
193	KA9020A	615 170 096 0	<2.5	80		209	SXR35	615 170 272 0	<2.5	86	
193	KA9020B	615 170 097 0	<2.5	80		209	SXR35	615 170 273 0	<2.5	88	
193	KA9030A16	615 170 102 0	<2.5	83		209	SXR35	615 170 274 0	<2.5	93	
193	KA9030B16	615 170 103 0	<2.5	83		209	SXR35	615 170 275 0	<2.5	96	
193	KA9020A16	615 170 100 0	<2.5	83		209	SXR35	615 170 276 0	<2.5	86	
193	KA9020B16	615 170 101 0	<2.5	83		209	SXR35	615 170 277 0	<2.5	92	
193	KA9030BY	615 170 309 0	<2.5	84		209	SXR35	615 170 278 0	<2.5	103	
193	KA9030BY	615 170 309 0	<2.5	82		209	SXR35	615 170 279 0	<2.5	102	
195	KL165B	615 170 011 0	<2.5	77		209	SXR35	615 170 280 0	<2.5	97	
195	KL245B	615 170 333 0	<2.5	84		209	SXR35	615 170 281 0	<2.5	98	
195	KL265B	615 170 339 0	<2.5	86		209	SXR35	615 170 282 0	<2.5	101	
195	KL360B	615 170 340 0	<2.5	85		209	SXR35	615 170 283 0	<2.5	103	
195	KL165BY	615 170 025 0	<2.5	85		209	SXR35	615 170 284 0	<2.5	102	
195	KL185BY	615 170 240 0	<2.5	77		209	SXR35	615 170 285 0	<2.5	105	
195	KL165BY	615 170 241 0	<2.5	77		209	SXR35	615 170 286 0	<2.5	104	
195	KL165BY	615 170 245 0	<2.5	77		209	SXR35	615 170 287 0	<2.5	105	
197	KL245B	615 170 333 0	<2.5	80		209	SXR35	615 170 288 0	<2.5	101	
						209	SXR35	615 170 289 0	<2.5	101	
						209	SXR35	615 170 290 0	<2.5	101	
						209	SXR35	615 170 291 0	<2.5	101	
						209	SXR35	615 170 292 0	<2.5	101	
						209	SXR35	615 170 293 0	<2.5	101	
						209	SXR35	615 170 294 0	<2.5	101	
						209	SXR35	615 170 295 0	<2.5	101	
						209	SXR35	615 170 296 0	<2.5	101	

Vibration level (m/s²) - Noise level (dB(A))

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PAGE	MODEL	PART NO.	VIBRATION LEVEL ISO 8662 (m/s ²)	NOISE LEVEL ISO 15744 dB(A)	SOUND LEVEL dB(A)	PAGE	MODEL	PART NO.	VIBRATION LEVEL ISO 8662 (m/s ²)	NOISE LEVEL ISO 15744 dB(A)	SOUND LEVEL dB(A)
241	CP0214KETEL	T023475	<2.5	90	101	255	DR300-T2000-S6-90	205 147 590 4	<2.5		75
241	CP0351FUDEL	T012608	<2.5	90	101	255	DR300-T1000-S6-90	205 147 587 4	<2.5		75
241	CP0341CUDDEL	T022512	<2.5	90	101	255	DR300-T550-S6-90	205 147 584 4	<2.5		75
241	CP0214ANBEL	T012343	<2.5	90	101	256	D3141-S-2100		1383084	<2.5	77
241	CO0214ANFEL	T018671	<2.5	90	101	256	D3141-S-770		1383244	<2.5	77
241	CP0214ANFEL	T018672	<2.5	96	107	256	D3141-L-2100		1383164	<2.5	77
241	CP0351ASGEL	T007783	<2.5	96	107	256	D3141-L-770		1383324	<2.5	77
241	CP0351ASKEL	T007773	<2.5	96	107	256	D3143-S-2100		1383404	<2.5	77
241	CP0351ASVEL	T009582	<2.5	96	101	256	D3143-S-770		1383664	<2.5	77
241	CP0214ENGEL	T018164	<2.5	90	107	256	D3143-L-2100		1383584	<2.5	77
241	CP0214ENFEL	T018163	<2.5	96	107	257	DR300-T5500-T5-30	205 147 539 4	<2.5		75
241	CP0214ENBEL	T018678	<2.5	96	107	257	DR300-T4500-T5-30	205 147 537 4	<2.5		75
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SDT055-T1470-S4Q	1465764	74	SLK003-L1000-S4Q	615 165 252 0	57	TRA12	615 396 532 0	118
SDT075-T1100-R4Q	205 147 638 4	79	SLK007-L1000-S4Q	615 165 253 0	57	TRA25	615 396 533 0	118
SDT075-T1100-S4Q	1465754	74	SLK010-L670-S4Q	615 165 254 0	57	TRA40	615 804 570 0	118
SDT100-T320-R4Q	205 147 641 4	79	SLK011-A1000-S4Q	615 165 257 0	57	TWINCVI II	615 932 619 0	19
SDT100-T510-R4Q	205 147 644 4	79	SLK011-L1000-S4Q	615 165 255 0	57	TWINCVI II 1 SERVO	615 932 626 0	19
SDT100-T820-R4Q	205 147 639 4	79	SLK015-A1000-S4Q	615 165 258 0	57	TWINCVI II ETHERNET	615 932 665 0	19
SDT100-T820-S4Q	1465744	74	SLK015-L1000-S4Q	615 165 256 0	57	TWINCVI II PROFIBUS	615 932 621 0	19
SDT140-T510-S4Q	1465734	74	SLK017-A1000-S4Q	615 165 562 0	57	TWINCVI II US	615 932 640 0	19
SDT160-T320-S4Q	1465724	74	SLK017-L1000-S4Q	615 165 559 0	57	TWINCVI II US ETHERNET	615 932 667 0	19
SFP - NJ Screw Dispenser		91	SLK022-A1000-S4Q	615 165 473 0	57	V100	129504	281
SH1200-LR215-S90-A13S	205 147 476 4	83	SLK022-L1000-S4Q	615 165 470 0	57	VP2-X	671094	225

What is ergonomics?

Ergonomics at work deals with the interactions between operators and their work equipment, work environment and work process.

Ergonomically designed work systems enhance safety, effectiveness and efficiency, improve human working and living conditions and counteract adverse effects on human health and performance.

Best Practice with ErgoSense™

Desoutter promotes the use of Ergonomic Best Practice amongst their customers at all times and are happy to establish working partnerships to help reach this goal. The following chart shows how this may be achieved.

People

This includes not only the person who will be using a power tool, but also those people who work in the vicinity of the power tool, as they may also be affected by noise, dust etc. Their health before starting to work with or near a power tool needs to be assessed as well as monitored when the tool is in use. Training is of course very important before anyone uses a power tool and Desoutter are happy to provide guidance and training material specific to the use of our products.

Environment

Attention needs to be paid to aspects of the working area such as heating, comfort, noise, dust and rest areas. Desoutter Sales Consultants can provide guidance on exposure levels and other requirements.

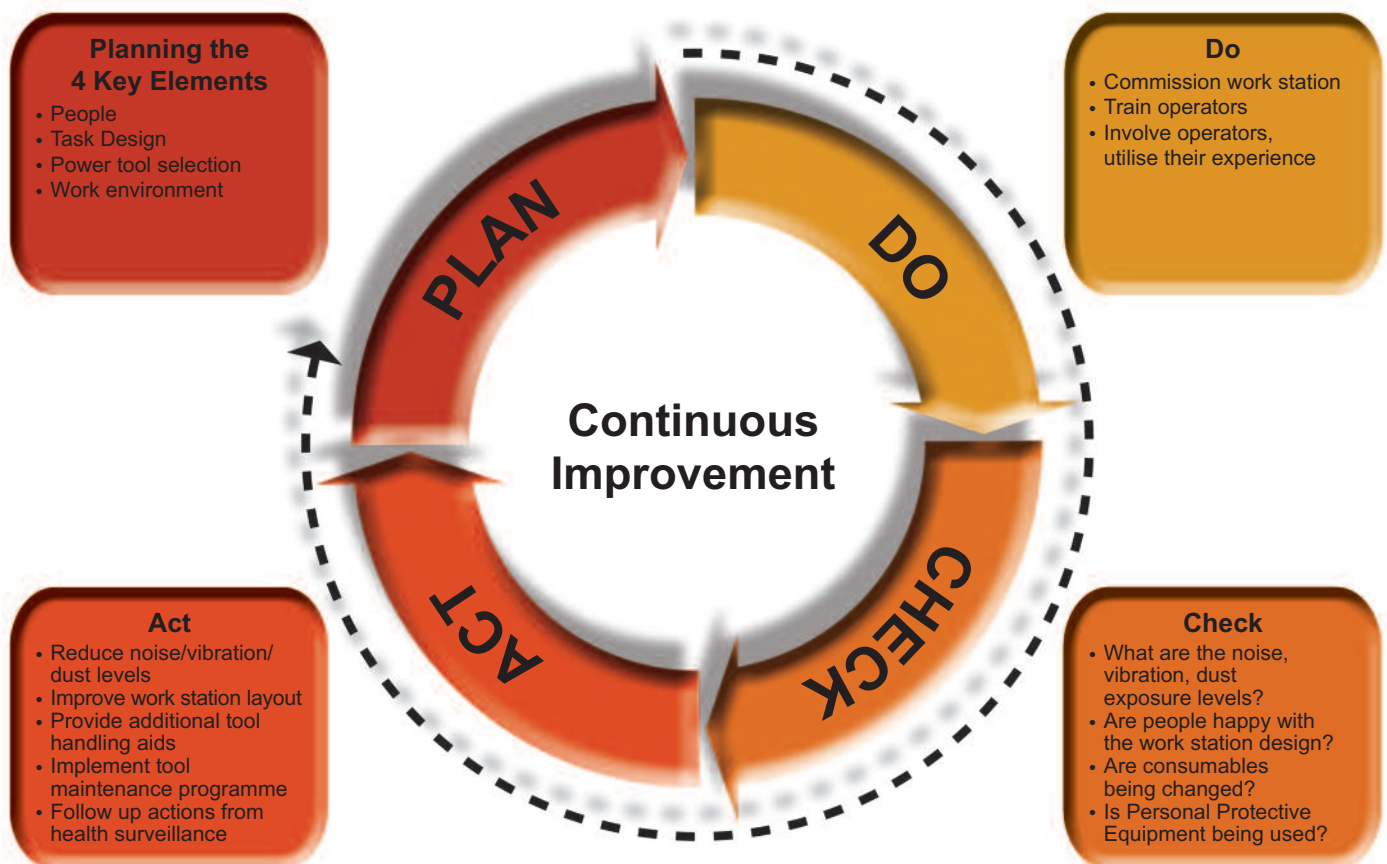
Task Design

The design of the workstation and the way in which a task is performed are critical in avoiding long term problems. Critical items include: design of the working envelope, neutral wrist position, correct tool selection for task, design of workpiece fixturing and provision of handling aids such as side handles / stands / balancers.

Power Tool Selection

Desoutter power tools embody the latest thinking on ergonomic principles. Look for the following features:

- Correct shape & size for optimal handling
- Low torque reactions, reduced loads & forces on the operator for maximum comfort in use
- Low emissions of noise/dust/vibrations/oil help improve the working environment
- Conformance to all relevant standards, worldwide.



International Ergonomic Standards

Desoutter has a long history of active participation with the International Standards Organisation & other NGOs responsible for formulating the standards that are now accepted worldwide. Desoutter staff participate on Committees, Working Groups and Trade Associations to ensure they keep up to date with developments in legislation & standards in all parts of the world. Desoutter are happy to share this knowledge with our customers through the ErgoSense™ Programme. Please call us.

More Than Productivity



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