



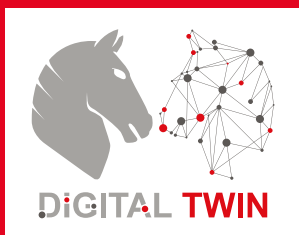
Industrial^{Tools}



More Than Productivity

Desoutter Expertise

<https://www.desouttertools.com/en/blog>



**Access 24/7, The Virtual Replica
of Your Desoutter Tool**

Go to www.desouttertools.com and
Enter your tool's Serial Number



- ⌚ — Compliance & Calibration Certificates
- ⌚ — Maintenance Time Table
- ⌚ — Technical Drawings
- ⌚ — Spare Parts Listing
- ⌚ — Manuals



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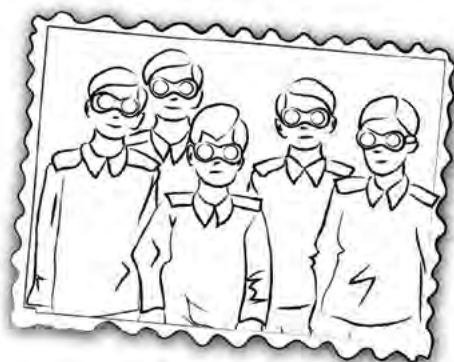
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Unless specified all inlet threads are BSP or NPT dependent of market

100

YEARS OF INNOVATION



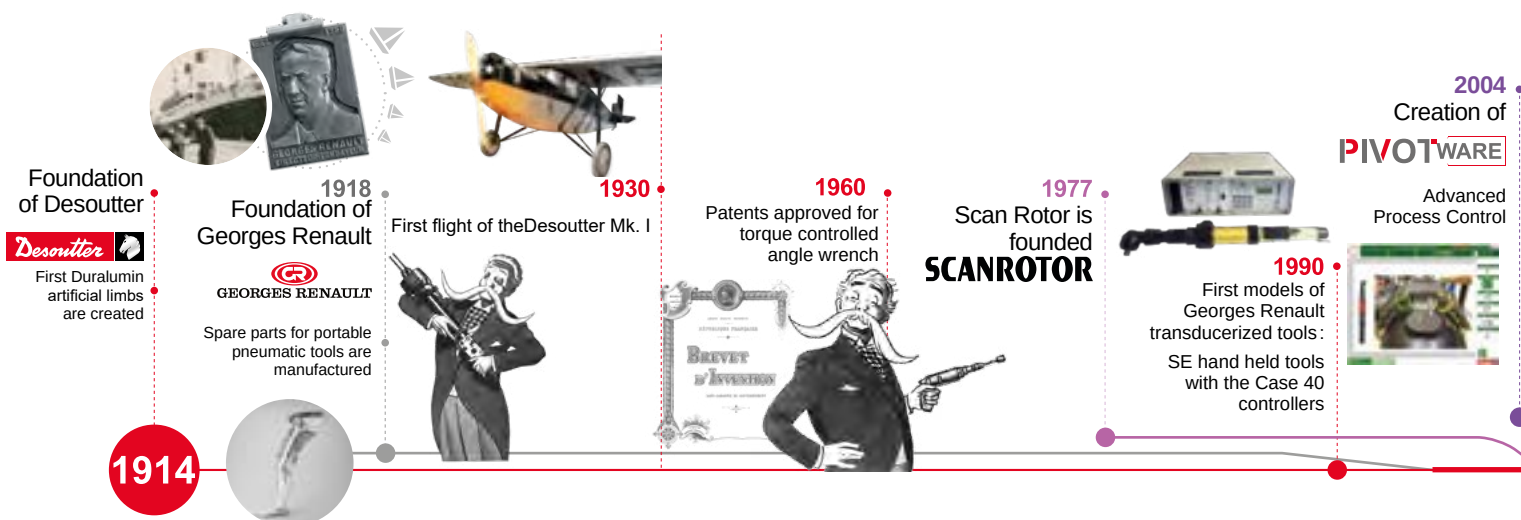
In Desoutter's earliest days one hundred years ago, who would have imagined that it would become today's global leader in its sector? How many industrial companies can claim, like Desoutter, to have weathered the years with such success, never forgetting the values that have formed the foundation of their prosperity?

This one century of existence would not have been possible without that drive for innovation that characterises our company, without that perpetual determination to evolve along with the changing world around us, always acting with vision to anticipate the needs of tomorrow.

This longevity is also the fruit of dedicated devotion on the part of all those employees who have shared their ideas, their skills and their technological expertise in order to turn that thrust for innovation into reality and to give it meaning.

But this history is also - and primarily - that of our customers and partners who remain the sole reason for our existence. It is for them and alongside them that we strive for perfection day after day, and our intention has been to pay tribute to them in the name of this shared success by compiling some of their testimonials in this book.

Together we have written the beginning of a great story. And together we will continue to move forward, to look to the future with the same ambition: always to offer "more than productivity".



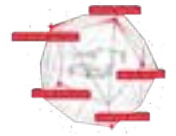


Find more on what customers tell about their Desoutter's customer experience in the **Desoutter's anniversary book!**

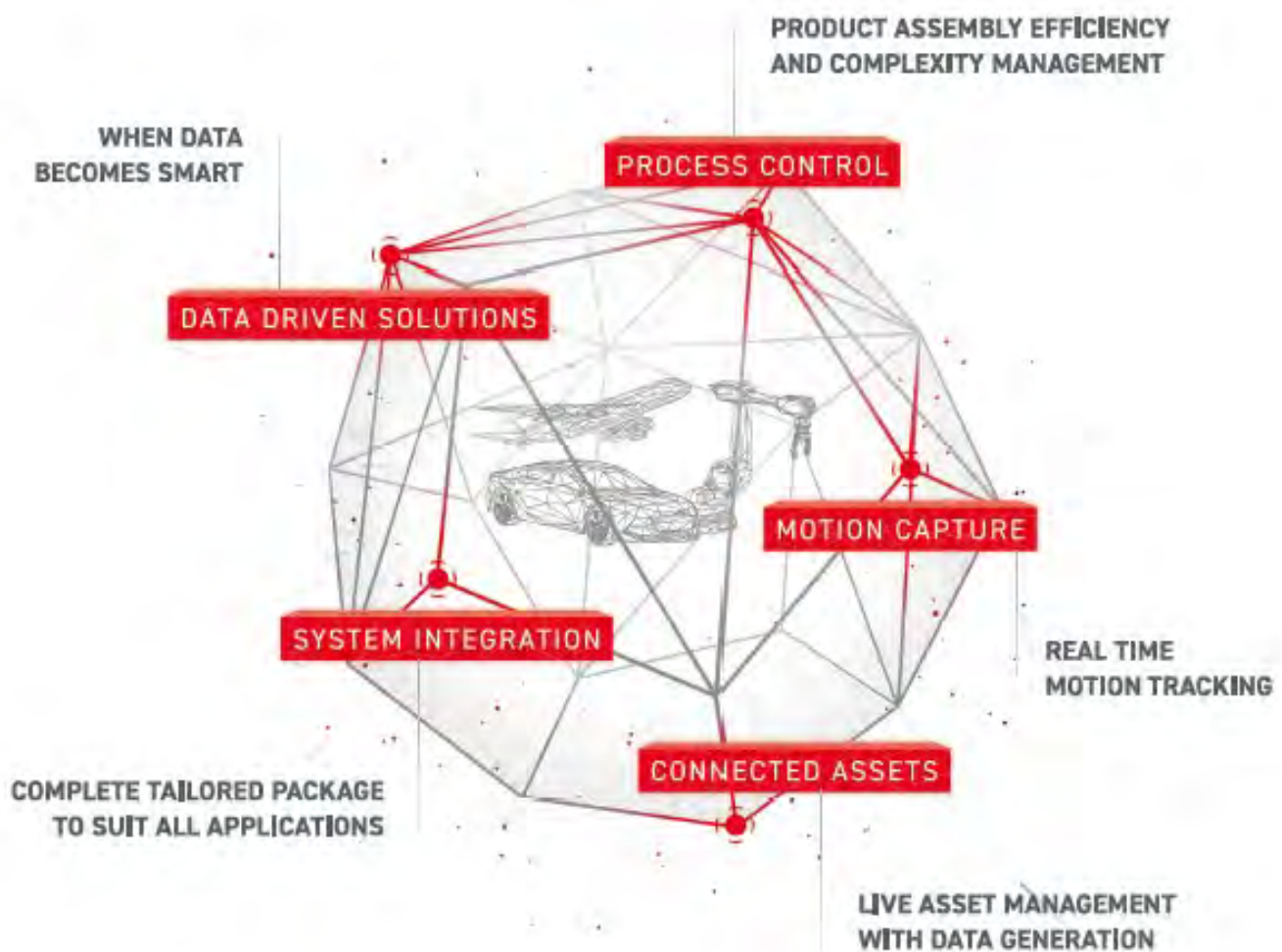


Desoutter Ecosystem

Maximize process efficiency



Desoutter ecosystem is a set of
INTERCONNECTED EXPERTISE AND SOLUTIONS
design to face current and future production lines' challenges



FLEXIBLE

One complete solution from applications up to data analytics with recommendations.



SCALABLE

Build your story at your own pace with DESOUTTER ECOSYSTEM



INTUITIVE

Work in full autonomy with a seamless user experience



Desoutter Ecosystem

Maximize process efficiency

INTERCONNECTED SOLUTIONS

FULL RANGE OF SCALABLE, FLEXIBLE AND ADVANCED SOLUTIONS

A



JOINTS
/WORKSTATIONS

B



OPERATOR
GUIDANCE

C



COMPLETE TAILORED
SOLUTIONS

D



LIGHT AUTOMATION

E



PROCESS
CONTROL

F



DATA-DRIVEN

START FROM ANYWHERE



According to current production line challenges

EVOLVE AT ANY TIME



To adapt to new production line challenges

INTERCONNECTED EXPERTISE

WE ARE GLOBAL... AND ACT LOCAL !



GLOBAL
NETWORK

Of local entities covering over 50 countries to deliver an efficient local support.



LOCAL PROJECT
TEAMS

Around the globe who tailor our Desoutter technical offer to match with all specific requirements.



REGIONAL
EXPERT

With significant local agility to accelerate product and feature innovations.



ON SITE SERVICE
SUPPORT

Service experts all around the world integrate the required solutions in your factory

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 more than productivity.



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 airline systems, for instance, keep our pneumatic nutrunners spinning at exactly the right speed and power, saving you precious seconds for each operation.

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.

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 motors vehicles to appliances, planes to construction machines, electronics to energy – there is a Desoutter air powered and electric tool solution for you.

Covering all segments

Motor vehicle industry

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

Aerospace

A long history of providing tools solutions to aerospace companies. We cover a wide range of their needs, from airframe and engine construction to system assembly.

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.



A PARTNER YOU CAN COUNT ON...

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

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.

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.



Service adds value

From day one, our experts are by your side, ensuring smooth product setup and providing responsive support throughout the entire lifecycle.

With preventive maintenance, we help extend the life of your tools, maintain the quality of your assemblies, and maximize uptime. Because reliable tools mean consistent performance and optimal productivity.

Discover our service offer designed to meet your needs:



- **INSTALLATION & COMMISSIONING**



- **EXPERT SUPPORT**



- **MAINTENANCE & CALIBRATION**



Improved
uptime



Lower maintenance
costs



Quality with
high productivity



INSTALLATION & COMMISSIONING

A professional, high quality installation adds value.

Benefits

- ✓ Fast and right first time.
- ✓ Avoids delays & minimises risks.
- ✓ Maintains warranty.
- ✓ Ensures tool accuracy and ergonomics.
- ✓ Full support from start to finish from certified technicians.



MAINTENANCE & CALIBRATION

Production uptime is key for your business

- ✓ Preventive Maintenance reduces the production stops due to breakdowns and NOK's.

You think your maintenance costs are too high

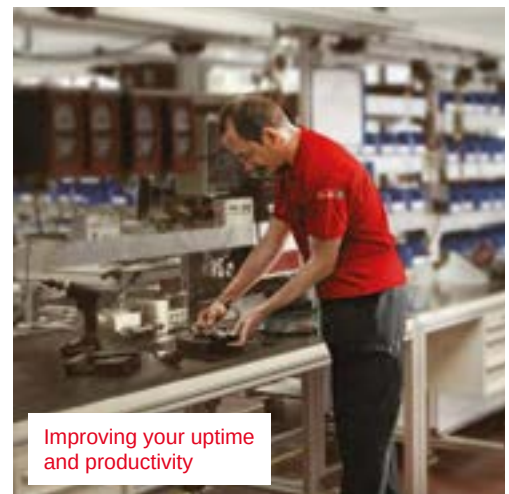
- ✓ Preventive maintenance decreases the costs of breakdowns.

You want to keep the best quality with high productivity

- ✓ Preventive maintenance ensures tool accuracy and reduces rework.

You value reducing your impact

Preventive maintenance and warranty extension help extend tool lifespan while reducing the need for spare parts and replacements over time.



3 PRODUCTS TO MEET YOUR NEEDS



Tool Calibration



Preventive Maintenance



Warranty Extension

	Machine Capability Test (MCT)	Preventive Maintenance and wear parts replacement	Optimised Preventive Maintenance + Repairs	Repair & Reuse of components
Tool Calibration	✓			
Preventive Maintenance	✓	✓		
Warranty Extension	✓	✓	✓	✓

Desoutter Service



EXPERT SUPPORT

Maximised uptime

- ✓ Get support on the whole ecosystem, within 1 hour

Secured quality

- ✓ We help you maintain processes that deliver the expected quality

Increased efficiency

- ✓ We handle the systems, acting right first time so you can focus on your production.

Minimal CO2 footprint

- ✓ Less travels with Remote Support, less emissions



Remote Care Access

- ✓ Technical articles
- ✓ Remote support
- ✓ Unlimited updates
- ✓ Preferential upgrade rates

Remote Care Performance

- ✓ Technical articles
- ✓ Priority support
- ✓ Unlimited updates
- ✓ Preferential upgrade rates
- ✓ Early access features
- ✓ Continuous learning
- ✓ Timed or Unlimited



On-Site Support

- ✓ Upfront organisation for quote and order
- ✓ Planned presence for proactive activities
- ✓ Prioritised response
- ✓ Urgent support



Explore our online solutions

Service Link: your spare parts portal

- ✓ Designed as a Search Assistant.
- ✓ Intuitive navigation.
- ✓ Simplified order process.
- ✓ Data download.



Free access, join now!

service-link.desouttertools.com

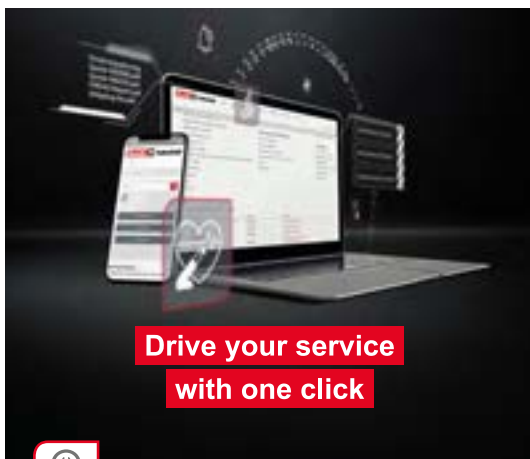


Search quickly,
explore deeply.



SERVICE LINK
One platform. Endless information.

The user-friendly tool that enables customers to explore entire product documentation.
Instant access to spare parts and product information, plus true design exploded views.



Drive your service
with one click



TRACK MY SERVICE STATUS (TMSS)
Your operational service desk

Administrative tasks just got... effortless!

Stay ahead of upcoming due dates for all tasks related to tool maintenance.
Personalised notifications help you stay focused and on track with priorities.



Track My Service Status (TMSS): online operational service desk

- ✓ Track your tools maintenance status.
- ✓ All certificates of calibration available whenever you need them, for up to 10 years.
- ✓ Customized maintenance notifications.



Ask your TMSS credentials
tmss.desouttertools.com

Assembly Tools - Selection guide

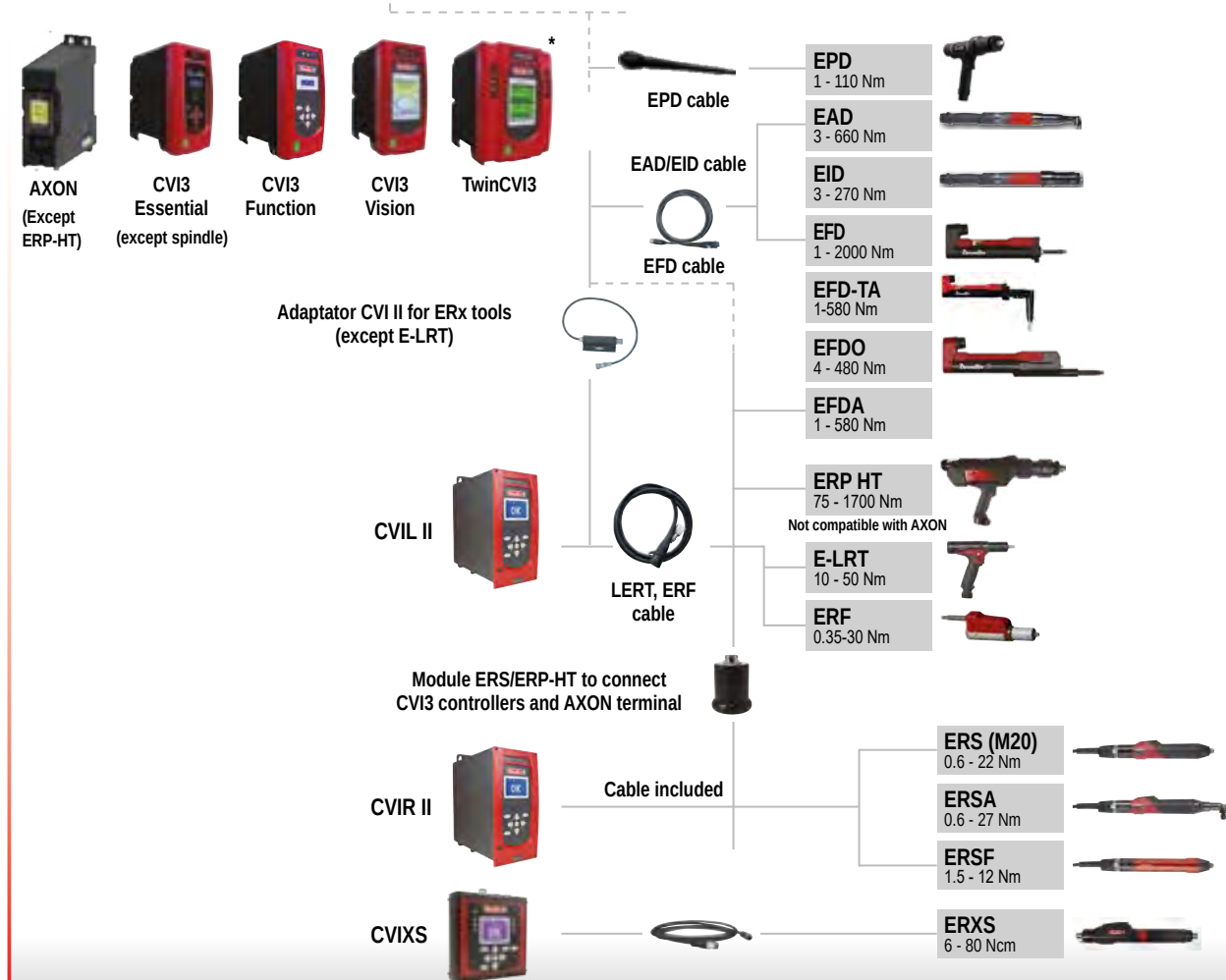
PAGE	TOOL TYPE
16-29	BATTERY STAND ALONE ASSEMBLY TOOLS 
30-60	INDUSTRIAL SMART HUB & WIRELESS TRANSDUCERIZED BATTERY TOOLS 
61-93	ELECTRIC TRANSDUCERIZED DC TOOLS & NUTRUNNERS 
94-103	DIGITAL EXPERIENCE - CVI Config / CVI Monitor / CVI Analyzer / CVI Key / E-LIT Config / Delta QC / DeMeter / Pivotware
104-112	ELECTRIC TRANSDUCERIZED DC TOOLS - PC & Networks/Software - CVIR II / CVIL II / CVIXS 
113-121	ELECTRIC CURRENT CONTROLLED DC TOOLS - CVIC 
122-129	ELECTRIC FASTENING TOOLS 
130-153	PNEUMATIC FASTENING TOOLS 
154-173	CUSTOMIZED SOLUTIONS: ExBx HT - Screwfeeders - Multiplus - Arms 
174-202	TORQUE MEASUREMENT SYSTEMS 

Advanced tightening systems

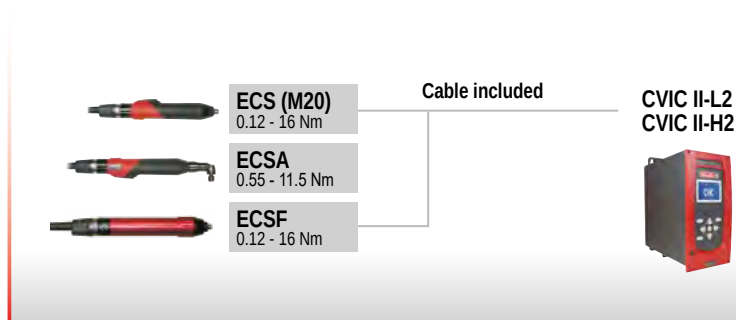
ELECTRIC TRANSDUCER CORDLESS



ELECTRIC TRANSDUCER CORD



ELECTRIC CURRENT CONTROL





E-LIT Series - Optimize your performance

Clutch Battery Tool range



FOCUS



3 MODELS TO CHOOSE FROM	 BRUSHLESS MOTOR	 LI-ION BATTERY	 E-LIT CONFIG SOFTWARE	 SPEED MODULE	 CONNECT
E-LIT PLUS ELECTRONIC BRUSHLESS (ELB) PISTOL 	✓	✓	✓		
E-LIT PREMIUM ELECTRONIC BRUSHLESS SPEED CONTROL (ELS) PISTOL AND ANGLE 	✓	✓	✓	✓	
E-LIT WIRELESS COMMUNICATION (ELC) PISTOL AND ANGLE 	✓	✓	✓	✓	✓

Tool management device

Speed setting / For ELS and ELC models

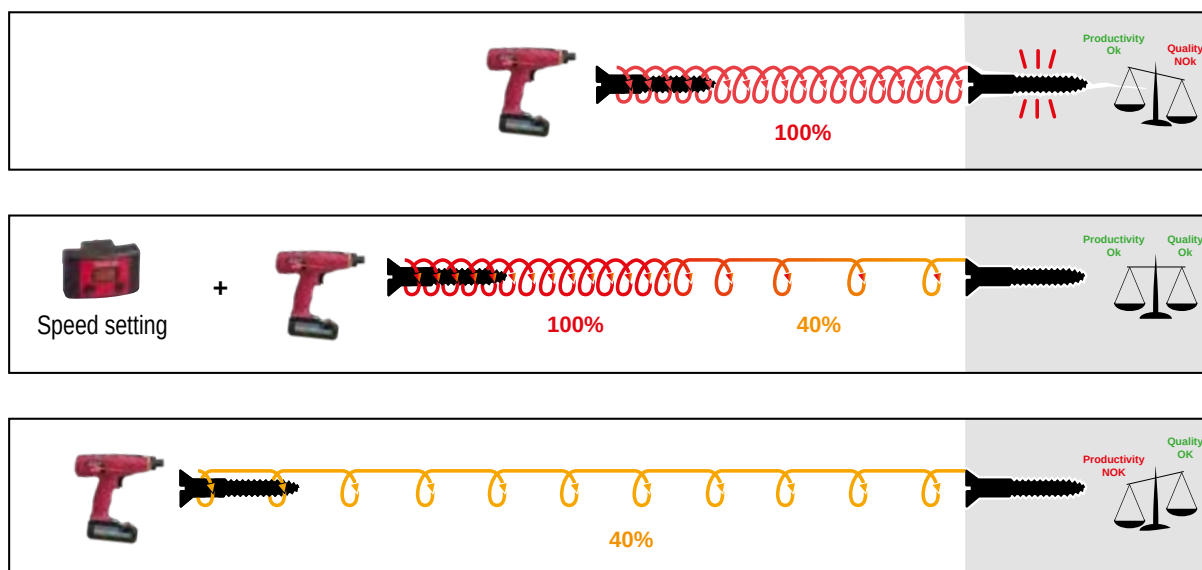
Two speed setting easily controlled by external module



Everything needed to optimize your assembly process

Guarantee quality and keep high productivity

- Decrease final speed to ensure tightening quality
- Avoid quality defects in your final product
- Decrease starting speed to facilitate bolt engagement



E-LIT CONFIG software



SOFTWARE
see page 98



E-LIT Series - Optimize your performance

Clutch Battery Tool range

Focus on wireless clutch tool solution

TU E-LIT WIFI proposes a better production follow-up, a better error proofing and a better total cost of ownership of your production line by integrating and controlling a clutch tool on the CONNECT platform.

BETTER CONTROL OF PRODUCTION LINE

by enable or disable clutch tool

PRODUCTION QUALITY IMPROVEMENT

with traceability on standard joint

EASY INTEGRATION

thanks to CONNECT platform connectivity



Enable/disable tool

according to production process:

- Batch count
- Reverse mode
- Open protocol, I/Os & Field bus



OK/NOK reports

and prevent from FALSE OK:

- OK/NOK
- Re-hit
- Cross thread prevention



Setting adjustments

To fit with application requirements

- Up to 3 speeds
- 4 Pset & 4 Assembly Process
- Batch count



Traceability information

For a better follow-up and analysis

- Results linked with a VIN NUMBER
- Lock tool when memory is full (option)
- CVI MONITOR, ANALYZER & NET WEB compatible



FOCUS ON ERROR PROOFING FEATURE CROSS THREAD PREVENTION

A clutch could shut off even if the screw is not well seated due to higher resistance linked to cross thread situation

TU E-LIT WIFI is now able to detect a cross thread situation and report a NOK in your traceability system



FOCUS ON PRODUCTION CONTROL FEATURE BATCH COUNT

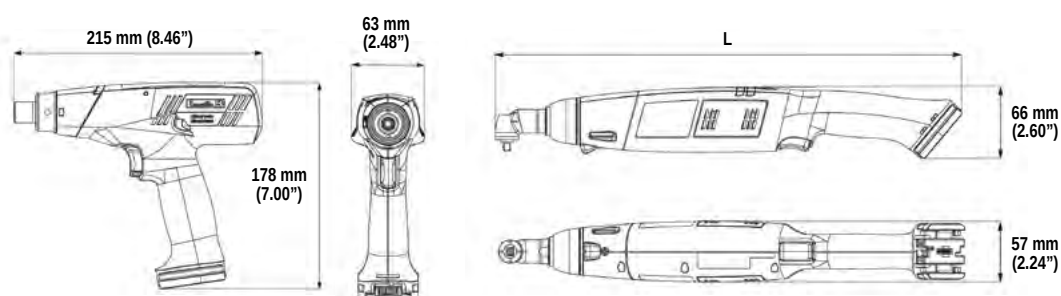
More production takt time is high or more production process is complex, more the risk to miss a screw is high !

Batch count
real time feed-back



Avoid quality issues and reduce rework time with batch count functionality

Accessories



MODEL	L	
	mm	in
ELS7 / ELC7	438	17.24
ELS15 / ELC15	438	17.24
ELS30 / ELC30	496	19.52
ELS45 / ELC45	507	19.96
ELS60 / ELC60	521	20.51

OPTIONAL ACCESSORIES

ITEM		PISTOL	ANGLE HEAD 18V	ANGLE HEAD 36V	ELC - W TOOLS	PART NO.
Battery type						
1	Li-ion battery pack 18V 2.5 Ah - 0.46 kg (1,01lb)	✓	✓		✓	615 813 266 0
2	Li-ion battery pack 36V 2.5 Ah - 0.77 kg (1,70lb)	✓		✓	✓	615 813 267 0
Chargers						
3	Charger Universal 18 / 36V	✓	✓	✓	✓	615 813 270 0
•	Power Cord C13-C14 L=0.3m (daisy chain cable)	✓	✓	✓	✓	615 813 383 0
Protective covers - Tools						
4	For Pistol - Clear	✓			✓	615 396 870 0
4	For Pistol - Black	✓			✓	615 211 030 0
4	For Pistol - Blue	✓			✓	615 211 031 0
4	For Pistol - Red	✓			✓	615 211 032 0
4	For Pistol - Grey	✓			✓	615 211 033 0
4	For Body angle head - Black		✓	✓	✓	615 211 004 0
4	For Body angle head - Blue		✓	✓	✓	615 211 025 0
4	For Body angle head - Red		✓	✓	✓	615 211 026 0
4	For Body angle head - Grey		✓	✓	✓	615 211 027 0
5	For Angle < 15Nm - Black		✓		✓	615 397 672 0
5	For Angle 30Nm - Black			✓	✓	615 573 214 0
5	For Angle 45Nm - Black			✓	✓	615 573 215 0
5	For Angle 60Nm - Black			✓	✓	615 211 005 0
Protective covers - Battery						
6	For Battery 18V 2.5Ah - Clear	✓	✓		✓	615 211 136 0
6	For Battery 18V 2.5Ah - Black	✓	✓		✓	615 211 137 0
6	For Battery 18V 2.5Ah - Red	✓	✓		✓	615 211 138 0
6	For Battery 18V 2.5Ah - Grey	✓	✓		✓	615 211 139 0
6	For Battery 36V 2.5Ah - Clear	✓	✓	✓	✓	615 211 140 0
6	For Battery 36V 2.5Ah - Black	✓	✓	✓	✓	615 211 141 0
6	For Battery 36V 2.5Ah - Red	✓	✓	✓	✓	615 211 142 0
6	For Battery 36V 2.5Ah - Grey	✓	✓	✓	✓	615 211 143 0
Miscellaneous						
•	Kit Overmould Presto (x10 pcs)					615 211 057 5
7	Speed Setting Module (ELS/ELC version)	✓	✓	✓	✓	615 396 829 0
8	Side handle - Pistol	✓			✓	615 396 757 0
9	Suspension bail - Pistol	✓			✓	443 703
10	Kit colour rings - Pistol (7 colors : white, yellow, orange, green, blue, purple, grey)	✓			✓	615 396 742 5
10	Kit colour rings - Angle tools (8 colors : white, yellow, orange, green, blue, purple, grey, black)		✓	✓	✓	615 970 114 5
11	Kit Nose Crowfoot	✓			✓	615 810 695 0
12	eDOCK + Battery data interface	✓	✓	✓	✓	615 813 400 0
•	E-LIT CONFIG software	✓	✓	✓	✓	-
•	CVI CONFIG software				✓	-
Desoutter Tool Holsters						
13	DTH-42	✓			✓	107892
14	DTH-90	✓			✓	615 812 119 0
15	DTH TWIN (single) without rail		✓	✓	✓	615 811 411 0
16	DTH TWIN rail kit with 2 Twin holders		✓	✓	✓	615 811 412 5
17	DTH TWIN stand kit with 2 Twin holders		✓	✓	✓	615 811 413 5



E-LIT series

0.4 to 60 Nm (3.5 to 530 in. lb) - 50 to 1550 rpm



A



B



C



D

PIC REF	MODEL	PART NUMBER	TORQUE RANGE		ROTATIONAL SPEED	OUTPUT DRIVE	WEIGHT WITHOUT BATTERY		VOLTAGE
			Nm	in. lb			kg	lb	

E-LIT PLUS - ELECTRONIC BRUSHLESS MOTOR

A	ELB 2.5-1250-P	615 165 415 0	0.8-2.5	7-22	1250	Hex. 1/4 F	0.8	1.76	18
A	ELB 6-900-P	615 165 416 0	2-6	17.7-53	900	Hex. 1/4 F	0.8	1.76	18
A	ELB 6-670-P	615 165 440 0	2-6	17.7-53	670	Hex. 1/4 F	0.8	1.76	18
A	ELB 8-670-P	615 165 417 0	3-8	26.5-70	670	Hex. 1/4 F	0.8	1.76	18
A	ELB 12-600-P	615 165 418 0	5-12	44.2-106	570	Hex. 1/4 F	0.8	1.76	18

E-LIT PREMIUM - ELECTRONIC BRUSHLESS SPEED SETTING

A	ELS 2.5-1550-P	615 165 419 0	0.8-2.5	7.1-22	500-1550	Hex. 1/4 F	0.8	1.76	18
A	ELS 6-1000-P	615 165 420 0	2-6	17.7-53	300-1000	Hex. 1/4 F	0.8	1.76	18
A	ELS 8-400-P	615 165 605 0	3-8	26.5-70	120-400	Hex. 1/4 F	0.8	1.76	18
A	ELS 8-800-P	615 165 421 0	3-8	26.5-70	300-765	Hex. 1/4 F	0.8	1.76	18
A	ELS 8-400-P4S	615 165 825 0	3-8	26.5-70	120-400	Sq. 1/4	0.8	1.76	18
A	ELS 12-600-P	615 165 422 0	5-12	44.2-106	250-570	Hex. 1/4 F	0.8	1.76	18
A	ELS 12-400-P4S	615 165 826 0	5-12	44.2-106	120-400	Sq. 1/4	0.8	1.76	18
B	ELS 7-360-A4S	615 165 725 0	2.5-7	22-62	120-360	Sq. 1/4	1.2	2.6	18
B	ELS 7-880-A	615 165 628 0	2.5-7	22-62	400-880	Hex. 1/4 F	1.2	2.6	18
B	ELS 7-880-A10S	615 165 888 0	2.5-7	22-62	400-880	Sq. 3/8	1.2	2.6	18
B	ELS 15-480-A	615 165 629 0	5-15	44.2-133	200-480	Sq. 3/8	1.2	2.6	18
B	ELS 15-480-A4S	615 165 839 0	5-15	44.2-133	200-480	Sq. 1/4	1.2	2.6	18
C	ELS 30-300-A	615 165 630 0	14-30	123.9-265	100-300	Sq. 3/8	1.5	3.3	36
C	ELS 45-180-A	615 165 631 0	20-45	177-398	50-180	Sq. 3/8	1.5	3.3	36
D	ELS 60-160-A	615 165 632 0	25-60	220-530	50-160	Sq. 1/2	1.97	4.33	36

E-LIT WIRELESS - COMMUNICATION

A	ELC 6-1000-P-W	615 166 100 0	2-6	17.7-53	300-1000	Hex. 1/4 F	0.9	1.76	18
A	ELC 8-400-P-W	615 166 101 0	3-8	26.5-70	120-400	Hex. 1/4 F	0.9	1.76	18
A	ELC 8-800-P-W	615 166 102 0	3-8	26.5-70	300-765	Hex. 1/4 F	0.9	1.76	18
A	ELC 12-600-P-W	615 166 103 0	5-12	44.2-106	250-570	Hex. 1/4 F	0.9	1.76	18
B	ELC7-360-A4S-W	615 166 104 0	2.5-7	22-62	120-360	Sq. 1/4	1.2	2.6	18
B	ELC7-880-A-W	615 166 105 0	2.5-7	22-62	400-880	Hex. 1/4 F	1.2	2.6	18
B	ELC15-480-A-W	615 166 106 0	5-15	44.2-133	200-480	Sq. 3/8	1.2	2.6	18
C	ELC30-300-A-W	615 166 107 0	14-30	123.9-265	100-300	Sq. 3/8	1.5	3.3	36
C	ELC45-180-A-W	615 166 108 0	20-45	177-398	50-180	Sq. 3/8	1.5	3.3	36
D	ELC60-160-A-W	615 166 109 0	25-60	220-530	50-160	Sq. 1/2	2	4.3	36

• Battery not included in standard offering

B-FLEX: Performance and flexibility

FOCUS



KEYPOINTS

BEST ERGONOMICS	HIGH TECHNOLOGY	QUALITY CONTROL
Ergostop technology to avoid RSI (Repetitive Strain Injury)	Smart embedded HMI on tool	Direct feedback for the operator
Perfectly balanced grip design	High resolution transducer	Visible tightening results on tool HMI
Rebalancing with the two different battery positions	New motor dedicated to battery tools : high speed, high torque, low temperature	Torque control and angle monitoring
Operator comfort		

B-FLEX: Ergonomy and control



ERROR PROOF QUALITY CONTROL

- Direct feedback for the operator
- Torque and Angle tightening result
- Torque control tightening strategy



No PC needed

100 last results on "CVI Monitor"



Data to collect

Password protection

Battery level

Ergostop



Program setting



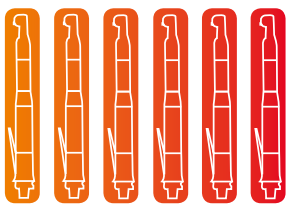
Results



Easy setting

B-FLEX ADVANCED (Standard features +)

6 Pset

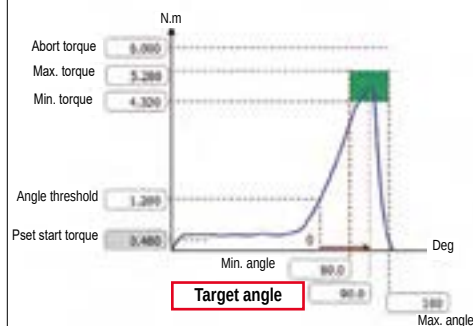


6 TOOLS in 1 B-FLEX



Angle Strategy

Error proof your standard tightenings



Full data collection

(up to 10 000 on CVI Analyzer)

CVI ANALYZER



B-FLEX Series - Pistol grip

1.5 to 17 Nm (1.1 to 12.5 ft. lb) - 10 to 1800 rpm

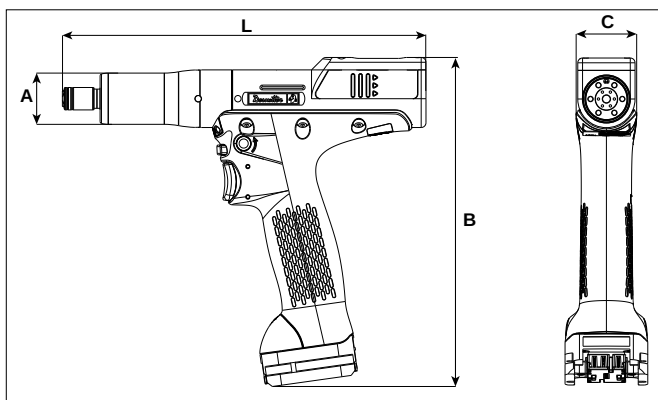


A



B

MODEL	L		A		B		C	
	mm	in.	mm	in.	mm	in.	mm	in.
EPB 8-1800-4Q	227	8.94	32	1.26	206	8.11	38	1.5
EPB 8-1800-10S	227	8.94	32	1.26	206	8.11	38	1.5
EPB 14-900-4Q	227	8.94	32	1.26	206	8.11	38	1.5
EPB 14-900-10S	227	8.94	32	1.26	206	8.11	38	1.5
EPB 17-700-4Q	227	8.94	32	1.26	206	8.11	38	1.5
EPB 17-700-10S	227	8.94	32	1.26	206	8.11	38	1.5



ACCESSORIES
see page 28

PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE RANGE						ROTATIONAL SPEED (RPM)		WEIGHT WITHOUT BATTERY		VOLTAGE
				MIN.	RECOM- MEN- DED	MAX.	MIN.	RECOM- MEN- DED	MAX.	18V	36V	kg	lb	
			in.	Nm	Nm	Nm	ft. lb	ft. lb	ft. lb					V

B-FLEX - TRANSDUCERIZED BATTERY TOOL

A	EPB 8-1800-4Q	615 165 899 0	Hex.1/4	1.5	7	8	1.1	5.2	5.9	900	1800	1	2.2	18/36
B	EPB 8-1800-10S	615 165 903 0	Sq.3/8	1.5	7	8	1.1	5.2	5.9	900	1800	1	2.2	18/36
A	EPB14-900-4Q	615 165 978 0	Hex.1/4	4	12	14	2.4	8.8	10.3	540	940	1	2.2	18/36
B	EPB14-900-10S	615 165 977 0	Sq.3/8	4	12	14	2.4	8.8	10.3	540	940	1	2.2	18/36
A	EPB 17-700-4Q	615 165 905 0	Hex.1/4	7	15	17	5.2	11	12.5	400	700	1	2.2	18/36
B	EPB 17-700-10S	615 165 901 0	Sq.3/8	7	15	17	5.2	11	12.5	400	700	1	2.2	18/36

B-FLEX - ADVANCED

A	EPBA 8-1800-4Q	615 165 972 0	Hex.1/4	1.5	7	8	1.1	5.2	5.9	900	1800	1	2.2	18/36
B	EPBA 8-1800-10S	615 165 971 0	Sq.3/8	1.5	7	8	1.1	5.2	5.9	900	1800	1	2.2	18/36
A	EPBA14-900-4Q	615 165 974 0	Hex.1/4	4	12	14	2.4	8.8	10.3	540	940	1	2.2	18/36
B	EPBA14-900-10S	615 165 973 0	Sq.3/8	4	12	14	2.4	8.8	10.3	540	940	1	2.2	18/36
A	EPBA 17-700-4Q	615 165 976 0	Hex.1/4	7	15	17	5.2	11	12.5	400	700	1	2.2	18/36
B	EPBA 17-700-10S	615 165 975 0	Sq.3/8	7	15	17	5.2	11	12.5	400	700	1	2.2	18/36

• Battery not included in standard offering

• Battery 18V, 2.5 Ah : 0.46 kg (1.01lb) & 36V, 2.5 Ah : 0.77 kg (1.70lb)



B-FLEX Series - Angle head

5 to 95 Nm (3.7 to 70 ft. lb) - 10 to 900 rpm



A



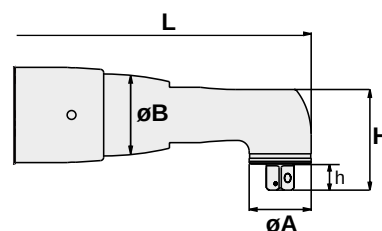
B



C

MODEL	L		H		H		ØA		ØB	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
EAB 15-900	470	18.5	10.2	0.40	33.8	1.33	22	0.87	37.0	1.46
EAB 26-560	496	19.5	12.0	0.47	45.7	1.80	28	1.10	37.0	1.46
EAB 32-410	496	19.5	12.0	0.47	45.7	1.80	28	1.10	37.0	1.46
EAB 45-330	506	19.9	12.0	0.47	51.0	2.00	35	1.38	37.0	1.46
EAB 50-450	546	21.5	12.0	0.47	51.0	2.00	35	1.38	37.0	1.46
EAB 60-370	559	22.0	11.9	0.468	57.0	2.20	40	1.57	41.0	1.61
EAB 75-300	582	22.9	17.5	0.69	60.4	2.38	45	1.77	48.5	1.91
EAB 95-240	582	22.9	17.5	0.69	60.4	2.38	45	1.77	48.5	1.91

L = Tool length without battery



ACCESSOIRES
see page 28

PIC REF	MODEL	PART NUMBER	SQUARE DRIVE	TORQUE RANGE						ROTATIONAL SPEED	WEIGHT WITHOUT BATTERY		VOLTAGE
				MIN.	RECOM-MENDED	MAX.	MIN.	RECOM-MENDED	MAX.		kg	lb	
			in.	Nm	Nm	Nm	ft. lb	ft. lb	ft. lb	rpm			V
•	EAB 15-900	615 165 731 0	1/4	5	13	15	3.7	9.6	11	900	1.55	3.42	36
A	EAB 26-560	615 165 732 0	3/8	5	24	26	3.7	18	19	560	1.65	3.64	36
A	EAB 32-410	615 165 733 0	3/8	7	30	32	5.2	22	24	410	1.65	3.64	36
B	EAB 45-330	615 165 734 0	3/8	9	40	45	6.6	30	33	330	1.76	3.88	36
B	EAB 50-450	615 165 735 0	3/8	9	45	50	6.6	33	37	450	2.04	4.50	36
B	EAB 60-370	615 165 736 0	1/2	10	55	60	7.4	41	44	370	2.35	5.18	36
C	EAB 75-300	615 165 737 0	1/2	12	70	75	8.8	52	55	300	2.94	6.48	36
C	EAB 95-240	615 165 738 0	1/2	19	90	95	14	66	70	240	2.98	6.57	36

B-FLEX - TRANSDUCERIZED BATTERY TOOL

B-FLEX - ADVANCED

•	EABA15-900	615 165 961 0	1/4	5	13	15	3.7	9.6	11	900	1.55	3.42	36
A	EABA26-560	615 165 962 0	3/8	5	24	26	3.7	18	19	560	1.65	3.64	36
A	EABA32-410	615 165 963 0	3/8	7	30	32	5.2	22	24	410	1.65	3.64	36
B	EABA45-330	615 165 964 0	3/8	9	40	45	6.6	30	33	330	1.76	3.88	36
B	EABA50-450	615 165 965 0	3/8	9	45	50	6.6	33	37	450	2.04	4.50	36
B	EABA60-370	615 165 966 0	1/2	10	55	60	7.4	41	44	370	2.35	5.18	36
C	EABA75-300	615 165 967 0	1/2	12	70	75	8.8	52	55	300	2.94	6.48	36
C	EABA95-240	615 165 968 0	1/2	19	90	95	14	66	70	240	2.98	6.57	36

- Battery not included in standard offering
- Battery 36V, 2.5Ah - Weight: 0.77 kg (1.70lb)

B-FLEX QRX

5 to 95 Nm (3.7 to 70 ft. lb) - 10 to 560 rpm

Advanced Multi Applications Tool



BOOST YOUR PRODUCTIVITY

Real Time Pset selection for the selected Quick release accessory with RFID technology

BOOST YOUR FLEXIBILITY

Possibility to use the same tool for multiple applications

MODEL	PART NUMBER	TORQUE			ROTATIONAL MAX SPEED (RPM)	WEIGHT*	
		MIN	NOMINAL	MAX		kg	ilb
EABA26-560 QRX	615 166 080 0	5	24	26	560	2.04	4.50
EABA32-410 QRX	615 166 081 0	7	30	32	410	2.04	4.50
EABA45-330 QRX	615 166 082 0	9	40	45	330	2.21	4.87
EABA50-450 QRX	615 166 083 0	9	45	50	450	2.49	5.49
EABA60-370 QRX	615 166 084 0	10	55	60	370	2.82	6.22
EABA75-300 QRX	615 166 085 0	12	70	75	300	3.42	7.54
EABA95-240 QRX	615 166 086 0	19	90	95	240	3.46	7.63

*Weight without battery

All tools are powered by a battery pack 36V 2.5Ah

Battery 36V, 2.5Ah - Weight : 0.77 kg (1.70lb)



BLRTA

6 to 45 Nm (4.4 to 33.19 ft.lb) - 1520 to 3990 rpm



A



B

BOOST YOUR PRODUCTIVITY

- By reducing cycle time
- By improving joint quality
- By providing process quality

BOOST YOUR FLEXIBILITY

- Free of cable management
- Free of reaction arm
- Reduce total cost of ownership

BOOST YOUR UP TIME

- Boost the uptime of the operator
- Boost the uptime of the tool

	STANDALONE VERSION
Wifi Communication	N/A
Programming on the tool	✓
Pset	6
No. of step in Pset	1
Assembly process	N/A
Results	10 000 with CVI analyzer
Tightening Curve	N/A
Disconnected mode	N/A



ACCESSORIES
see page 28

PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	OUTPUT RETAINING TYPE	TORQUE				ROTATIONAL MAX SPEED (RPM)		LENGTH		WEIGHT*		VOL-TAGE
					MIN	MAX	MIN	MAX							
			in.		Nm	Nm	ft.lb	ft.lb	18V	36V	mm	in.	kg	in.	V
A	BLRTA025-2350-10S	615 166 023 0	Sq 3/8	Through hole	6	25	4.4	18.4	1520	2350	233	9.17	1.2	2.6	18/36
B	BLRTA025-2350-4Q	615 166 024 0	Hex.1/4	Quick change chuck	6	25	4.4	18.4	1520	2350	233	9.17	1.2	2.6	18/36
-	BLRTA045-3990-10S	615 166 187 0	Sq 3/8	Through hole	15	45	11.6	33.19	3990	3990	251	9.9	1.34	2.96	18/36

*Weight without battery

Accessories



B-FLEX / QRX / BLRTA / EAB / EPB

ACCESSORIES INCLUDED

	EPB/EPBA	BLRTA
• Pistol protective cover Red	615 211 022 0	615 211 073 0

OPTIONAL ACCESSORIES

ITEM	EAB/QRX	EPB/EPBA	BLRTA
------	---------	----------	-------

Battery type

1	Li-ion battery pack 18V 2.5 Ah - 0.46 kg (1,01lb)	615 813 266 0	615 813 266 0
2	Li-ion battery pack 36V 2.5 Ah - 0,77 kg (1,70lb)	615 813 267 0	615 813 267 0

Charger

3	Charger Universal 18 / 36V	615 813 270 0	615 813 270 0	615 813 270 0
•	Power Cord C13-C14 L=0.3m (daisy chain cable)	615 813 383 0	615 813 383 0	615 813 383 0

Protective covers - Tools

4	For Angle head EAB 15	615 211 003 0		
4	For Angle head EAB 26/32	615 573 207 0		
4	For Angle head EAB 45/50	615 573 208 0		
4	For Angle head EAB 60	615 573 209 0		
4	For Angle head EAB 75/95	615 573 210 0		
5	Pistol protective cover Black	615 211 019 0		

Protective covers - Battery

6	For Battery 18V 2.5Ah - Clear	615 211 136 0	615 211 136 0	
6	For Battery 18V 2.5Ah - Black	615 211 137 0	615 211 137 0	
6	For Battery 18V 2.5Ah - Red	615 211 138 0	615 211 138 0	
6	For Battery 18V 2.5Ah - Grey	615 211 139 0	615 211 139 0	
6	For Battery 36V 2.5Ah - Clear	615 211 140 0	615 211 140 0	615 211 140 0
6	For Battery 36V 2.5Ah - Black	615 211 141 0	615 211 141 0	615 211 141 0
6	For Battery 36V 2.5Ah - Red	615 211 142 0	615 211 142 0	615 211 142 0
6	For Battery 36V 2.5Ah - Grey	615 211 143 0	615 211 143 0	615 211 143 0

Miscellaneous

7	Nose crowfoot adapter for EPB	615 565 518 0		
8	eDOCK + Battery data interface	615 813 400 0	615 813 400 0	615 813 400 0
9	Side handle	615 397 016 0		

Desoutter Tool holster

10	DTH TWIN (single) without rail	615 811 411 0		
11	DTH TWIN rail kit with 2 Twin holders	615 811 412 5		
12	DTH TWIN stand kit with 2 Twin holders	615 811 413 5		
13	DTH90	615 812 119 0	615 812 119 0	





[] DA



DESOUTTER 4.0

Desoutter

CONNECT - Industrial Smart Hub

SINGLE POINT OF CONNECTION FOR UP TO 20 TOOLS

With only one safety power supply
With only one Ethernet/fieldbus connection
With only one stand to mount the CONNECT

CAPACITIVE INDUSTRIAL GRADE TOUCH SCREEN

With several display options
and quick response time.

MULTI-TOOL SOLUTION

Up to 20 tools connected
to only one CONNECT.

FINE-TUNES SETTINGS & SCALABLE SOLUTION

With feature management
fine-tunes the Tightening Units by
loading only features needed for
each application.

FOOTPRINT OPTIMIZATION

With a volume of only 4L,
the CONNECT can be installed
anywhere, under any constraints.

FEATURE REBALANCING

Easy feature rebalancing from
tightening unit to another one.

EASY LINE REBALANCING

Pair the tool in less than 10 seconds,
with easy contactless pairing feature.

REMOVABLE INTEGRATED MEMORY

Transfer DATA and settings from one CONNECT
to another in a fast and effective way.



CONNECT - Industrial Smart Hub

CONNECT has been designed to meet today's and tomorrow's demanding production processes.



Each Tightening Unit activated includes a Standard package. The standard package has been built to meet with more than 80% of requirements.

INDUSTRIAL SMART HUB

CONNECT is a powerful platform able to manage all items related to the assembly line

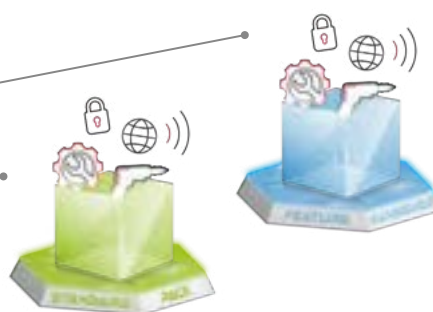
With error proofing accessories and full traceability management for up to 20 tools, CONNECT is a solution with a **HIGH LEVEL OF CONNECTIVITY** to manage and control the assembly line under all circumstances.

MULTI-CORDLESS TOOL SOLUTION

SCALABLE SOLUTION

EASY TOOL & FEATURE REBALANCING

FULL TRACEABILITY



For more demanding applications, it is possible to activate additional features.

FEATURE MANAGEMENT

FEATURE MANAGEMENT is a scalable solution which allows you to get what you really need

With its **HIGH LEVEL OF FLEXIBILITY**, you can add new features whenever the requirements on your production line change. You just have to activate the feature and it is ready to use.

TOOL RANGE COMPATIBLE

COMPATIBLE WITH ALL DESOUTTER CORDLESS TOOLS with IEEE 802.11 wireless communication.



◦ EABC



◦ EPBC



◦ BLRTC



◦ QSHIELD



◦ EABS



◦ E-LIT

CONNECT - Industrial Smart Hub

Multi-Cordless Tool solution

CONNECT-W

With embedded access point **Up to 10 tightening units activated.**

With **CONNECT-W**, 10 tightening units can be activated which means 10 cordless tools can be paired.

CONNECT-X

Requires an external access point **Up to 20 tightening units activated** (No embedded access point).

With **CONNECT-X**, 20 tightening units can be activated which means 20 cordless tools can be paired.

Tool's Rebalancing



EASY CONTACTLESS PAIRING

With easy wireless pairing, tool is paired in less than **10 seconds.**

Virtual Cable



TRACKING SOLUTION

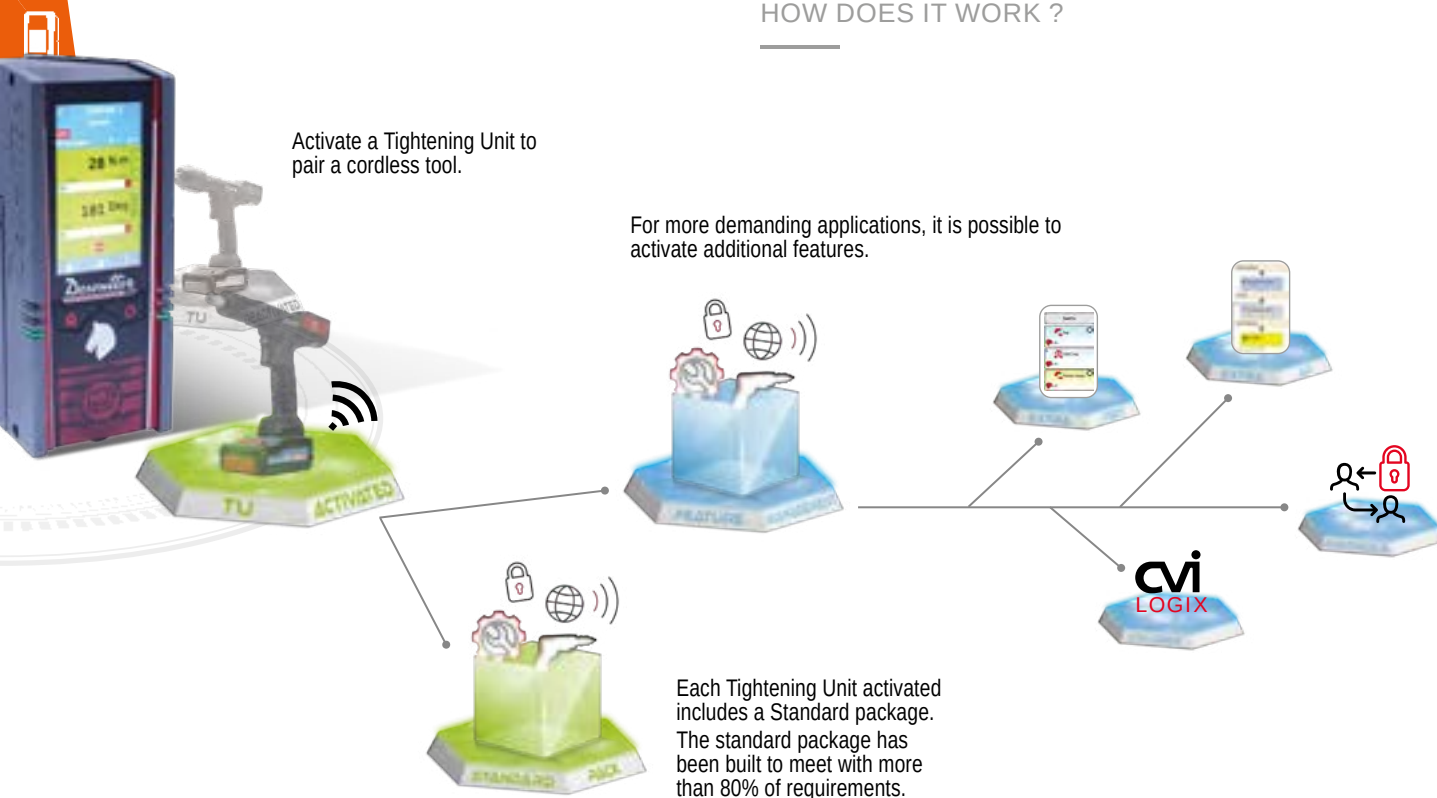
- Ensures the use of tools in the right locations and applications
- Easy to install and set up with the Easy Teaching mode

CONNECT - Industrial Smart Hub

Get what you really need with feature management

FEATURE MANAGEMENT is a scalable solution in order to provide a high level of flexibility to meet requirements. With feature management, you can add or remove a feature whenever you want or whatever the feature.

HOW DOES IT WORK ?



SEVERAL TIGHTENING UNITS [TU] ARE AVAILABLE ON CONNECT PLATFORM WITH DIFFERENT STANDARD PACK FEATURE LEVELS

STANDARD PACK

	TU PREMIUM	TU ESSENTIAL	TU E-LIT WIFI	TU DIGITAL WRENCH
Compatible tool	EABC, EPBC, EABS, BLRTC	EABC, EPBC, EABS, BLRTC	ELC-P-W, ELC-A-W	QShield-C
Number of Pset	10	6	4	10
Number of Assembly Process	10	6	4	10
Live Results	Torque & angle values curves	Torque & angle values curves	OK/NOK	Torque & Angle values curves
Result Transfer/storage	Torque & angle values + curves	OK/NOK	OK/NOK	Torque & Angle values curves
Tightening strategy	Torque and/or angle control Torque and/or angle monitoring	Torque control angle monitoring	Torque control	Torque or Angle control Torque or Angle monitoring
Protocol	Open protocol	Open protocol	Open protocol	Open protocol
Pairing	RFID or eDock pairing	RFID or eDock pairing	eDock pairing	RFID or USB pairing



CONNECT - Industrial Smart Hub

FEATURES UNDER FEATURE MANAGEMENT ?

Feature activation is done Tightening Unit per Tightening Unit for more flexibility on your production line.

Feature management is required:

- For each Tightening Unit activation:



TIGHTENING UNIT

Up to 10 TU with CONNECT-W
Up to 20 TU with CONNECT-X

TU PREMIUM / TU ESSENTIAL / TU E-LIT WIFI
/ TU DIGITAL WRENCH

- For zone control activation



VIRTUAL CABLE

Tracker with one or multiple workings spaces

TU PREMIUM / TU ESSENTIAL

- For additional Pset activation



EXTRA PSET

Pack "up to 50 PSET"
Pack "up to 250 PSET"

TU PREMIUM / TU DIGITAL WRENCH

- For specific Protocol activation



PROTOCOL

Desoutter protocol
Customer protocols

TU PREMIUM / TU ESSENTIAL / TU E-LIT WIFI
/ TU DIGITAL WRENCH

- For additional Assembly Process activation



EXTRA ASSEMBLY PROCESS

Pack "up to 50 AP"
Pack "up to 250 AP"

TU PREMIUM / TU DIGITAL WRENCH

- For CVI logix activation



AUTOMATION CONTROL

CVI LOGIX

TU PREMIUM / TU ESSENTIAL / TU E-LIT WIFI

- For specific strategies activation



STRATEGIES

Residual Torque

TU DIGITAL WRENCH

HOW TO ACTIVATE A FEATURE ?

- THE HIGH FLEXIBILITY OF FEATURE MANAGEMENT IS REACHED THANKS TO UV*.

- ANY OR ALL FEATURES CAN BE ACTIVATED BY APPLYING UV*.

- EACH FEATURE HAS ITS OWN UV*.

* UV = Unit Value



	CONNECT-W	CONNECT-X
Weight	2,8 kg	
Volume	4,2 Liters	
Display	Capacitive color touch screen (4,3")	
Access point	EMBEDDED (includes internal access point)	NOT INCLUDED (external access point required)
Removable Integrated Memory	Included (accessible from front panel)	
Power supply	110V – 220V or 24V	
Connectivity	4 Ethernet ports – 4 USB ports – RS-232 port – eBUS port – fieldbus card slot	
IP Protection	IP 40 IP54 with an additional accessory	
Accessories	Wall mounting – stack light – socket tray – bit tray – operator panel – field bus – I/O expander -	

CONNECT - Industrial Smart Hub



A



B

PIC REF	MODEL	PART NUMBER	CONSUMPTION (CURRENT)		MAIN SUPPLY	DIMENSIONS						WEIGHT	
			115V	230V		WIDTH		HEIGHT		DEPTH		kg	lb.
					50/60 Hz	mm	in.	mm	in.	mm	in.		
A	CONNECT-X	615 932 722 0	< 1A	< 1A	Single-phase	90	3.5	221	8.70	210	2.8	2.8	6.17
B	CONNECT-W	615 932 723 0	< 1A	< 1A	Single-phase	90	3.5	221	8.70	210	2.8	2.8	6.17



- 1 Switch On/Off
- 2 Auto-Sensing Voltage 110-240V
- 3 24V power supply
- 4 RS232 port
- 5 eBUS port (Bus dedicated to Error Proofing Integration accessories - EPI)
- 6 Ethernet switch with 4 Ethernet ports (including one POE)
- 7 2 USB ports on connector panel + 2 USB ports on front panel
- 8 Plug & Play Fieldbus module port

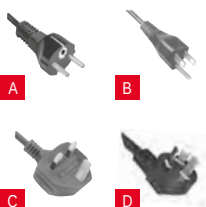
FEATURE MANAGEMENT

PIC REF	DESCRIPTION	PART NUMBER
A	UV	615 927 843 0
B	eWallet	615 927 844 0



POWER CORD to be ordered with CONNECT

PLUG	DESCRIPTION	PART NO.
A	European	615 917 739 0
B	US	615 917 741 0
C	UK	615 917 740 0
D	Chinese	615 917 742 0



OPTIONAL ACCESSORIES

ITEM	PART NO.
Fieldbus modules	
1 Profibus module	615 927 595 0
2 ProfiNet module (1 port)	615 927 596 0
3 ProfiNet module (2 ports)	615 927 597 0
3 ProfiNet IRT module (2 ports)	615 927 070 0
4 DeviceNet module	615 927 599 0
4 CC-Link module	615 927 598 0
5 EtherNet IP module	615 927 594 0
6 Modbus TCP module	615 927 615 0
Others	
• Advanced wall mounting	615 399 631 0
• KIT IP54 CONNECT	615 399 336 0





QShield - Connected

Digital Wrench for Torque & Angle full track and trace

RFID TAG End-fittings with automatic recognition for ratio management and/or Pset selection

Standard interchangeable heads and reversible ratchets



Gyroscope
(Angle 1,2° to 250°/s)



Length independent transducer with double bridge strain gauge to guarantee a tightening result regardless of the position of the operator's hand.

Accuracy of +/-1% on Torque reading value (from 10 to 100% of the nominal torque)



Industrial IoT gateway module

- Dual band (2.4 & 5 Ghz)
- Wi-Fi enterprise security
- Global certification (TLS encryption)

Wrench Protection



Easy pairing & rebalancing



Mini USB port for Configuration, data export to Delta QC software & Calibrations



RGB Color display
Visual feedback AND a complementary configurable vibration for operator guidance

Li-Ion Battery
8 hours autonomy on QShield-C



- ISO 6789:2017 compliance
- Wireless Communication & Easy Pairing
- Real Time reporting & traceability
- Feature Management & rebalancing
- A Unique platform of Multi-Tools on CONNECT allowing Tightening / Rework stations



Digital Wrench on CONNECT

QSHIELD-C is a unique flexible solution to secure safety and quality critical applications on production lines, either requiring the highest precision on both torque and angle, tightening sequences with interchangeable heads, or simply enable assembly in difficult access conditions. It's a step in the evolution of processes to ramp up until production volumes justify investments to semi-automatic or fully automated processes. Ultimately, it's also accurate and flexible enough to allow a rework from previous stations.



ACCESSORIES
see page 200

MODEL	PART NUMBER	RANGE		ANGLE	DRIVE		INCLUDED RATCHET	LENGTH WITHOUT RATCHET		LEVER ARM*		WEIGHT	
		Nm	ft.lbs		mm	in.		mm	in.	mm	in.	kg	lb.
Q-SHIELD 30-C	615 935 200 0	3 - 30	2.21 - 22.13	✓	9x12	0.35x0.47	3/8	402	15.83	320	12.6	0.7	1.5
Q-SHIELD 150-C	615 935 201 0	15 - 150	11.06 - 110.6	✓	14x18	0.55x0.71	1/2	418	16.46	342	13.5	0.8	1.7
Q-SHIELD 200-C	615 935 202 0	20 - 200	14.75 - 147.5	✓	14x18	0.55x0.71	1/2	627	24.7	552	21.75	1.6	3.5
Q-SHIELD 350-C	615 221 037 0	35 - 350	25.81 - 258.1	✓	14x18	0.55x0.71	3/4	694	27.33	625.5	24.62	2.6	5.7
Q-SHIELD 400-C	615 935 203 0	40 - 400	29.5 - 295.0	✓	14x18	0.55x0.71	3/4	1028	40.48	960	37.8	3.2	7.0
Q-SHIELD 500-C	615 935 204 0	50 - 500	36.88 - 368.8	✓	21x26	0.82x1.02	3/4	1137	44.77	1100	43.3	5.5	12.1
Q-SHIELD 800-C	615 935 205 0	80 - 800	59.0 - 590.0	✓	dia 28	dia 1.1	1	1314	51.74	1362	53.62	6.7	14.7
Q-SHIELD 900-C	615 935 206 0	90 - 900	66.38 - 663.8	✓	dia 28	dia 1.1	1	1392	54.8	1440	56.7	8.2	18.0

* Useful length is from Ratchet axis to handle middle

All models are supplied with box including reversible ratchet with TAG (QShield Batteries supplied separately)



PIC REF	MODEL	PART NUMBER	HEIGHT		LENGTH		WIDTH		WEIGHT	
			mm	in	mm	in	mm	in	gr	lb
A	Q-SHIELD battery	615 936 500 0	-	-	110	4.33	Ø 22	Ø 8.86	80	0.18
B	QA Charger	615 936 461 0	68	2.67	210	8.26	150	5.90	1290	2.84
C	Q-SHIELD 2x Adapters	615 936 533 0	-	-	-	-	-	-	160	0.35
D	Wrench Protection	615 936 504 0	-	-	-	-	-	-	-	-

Fieldbus / Process

Data network / Traceability



Q-shield-C-eLINK

Experience precision like never before with our **Q-SHIELD-C-ELINK** torque wrench, designed to be used with the nexonar tracker, for integrated Real-Time Location System (RTLS). The tracker is powered directly from the wrench itself, eliminating the need for cables or frequent tracker charging. Q-Shield-C-eLINK improves workflow and productivity by ensuring tightenings are only validated at the desired location. Say goodbye to downtime and hello to seamless performance.



PIC	MODEL	PART NUMBER	RANGE		ANGLE	DRIVE		INCLUDED RATCHET	LENGHT WIT-HOUT RATCHET		LEVER ARM*		WEIGHT	
			Nm	ft.lbs		mm	in.		mm	in.	mm	in.	kg	lb.
A	Q-SHIELD 30-C-ELINK	615 221 044 0	3 - 30	2.21 - 22.13	✓	9X12	0.35X0.47	3/8	402	15.83	320	12.6	0.7	1.5
A	Q-SHIELD 150-C-ELINK	615 221 045 0	15 - 150	11.06 - 110.6	✓	14X18	0.55X0.71	1/2	418	16.46	342	13.5	0.8	1.7
B	Q-SHIELD 200-C-ELINK	615 221 046 0	20 - 200	14.75 - 147.5	✓	14X18	0.55X0.71	1/2	627	24.7	552	21.75	1.6	3.5
B	Q-SHIELD 350-C-ELINK	615 221 070 0	35 - 350	25.81 - 258.1	✓	14X18	0.55X0.71	3/4	694	27.33	625.5	24.62	2.6	5.7
C	Q-SHIELD 400-C-ELINK	615 221 047 0	40 - 400	29.5 - 295.0	✓	14X18	0.55X0.71	3/4	1028	40.48	960	37.8	3.2	7.0
C	Q-SHIELD 500-C-eLINK	615 221 048 0	50 - 500	36.88 - 368.8	✓	21X26	0.82X1.02	3/4	1137	44.77	1100	43.3	5.5	12.1
D	Q-SHIELD 800-C-ELINK	615 221 049 0	80 - 800	59.0 - 590.0	✓	DIA 28	DIA 1.1	1	1314	51.74	1362	53.62	6.7	14.7
D	Q-SHIELD 900-C-ELINK	615 221 050 0	90 - 900	66.38 - 663.8	✓	DIA 28	DIA 1.1	1	1392	54.8	1440	56.7	8.2	18.0

* Useful length is from Ratchet axis to handle middle. All models are supplied with box including reversible ratchet with TAG (QShield Batteries supplied seperately).



Why is Q-shield-C-eLink existing

- For some applications, customer is looking for a solution with tracking of tools localization to validate the sequence, to avoid & limit errors.
- Real-Time location system (RTLS) with Nexonar tracker can be a solution to achieve this precision.
- Using Q-Shield-C-eLINK is very convenient as the tracker is powered from the tool: no need of cable or frequent charging.
- The Q-SHIELD-C eLINK is a connected asset thanks to the Connect Industrial Hub.



BENEFITS

- Trackers are powered by the wrench providing ultimate convenience
- No cables or charging of tracker required
- Integrated trackers and their Real-Time Location System (RTLS) provide unmatched precision and reduced risk of errors
- Enhanced productivity and minimised downtime
- Perfect for hard-to-access applications where other tools cannot be used, open or closed crowfoot, with high accuracy (+/-1%)
- Wi-Fi communication with Connect (Industrial hub) - open for any industrial communication
- Q-Shield-C-eLINK can be used without tracker, as a normal "Q-Shield-C"

OPTIONAL ACCESSORIES

ITEM NO.	MODEL	PART NUMBER	HEIGHT		LENGTH		WIDTH		WEIGHT	
			mm	in	mm	in	mm	in	g	lb
1	Q-SHIELD BATTERY	615 936 500 0	-	-	110	4.33	Ø 22	Ø 8.86	80	0.18
2	QA-CHARGER	615 936 461 0	68	2.67	210	8.26	150	5.90	1290	2.84
3	Q-SHIELD 2X ADAPTERS	615 936 533 0	-	-	-	-	-	-	160	0.35
4	TRIPLE Q-SHIELD SDS	NX-001-102	-	-	-	-	-	-	-	-

1 —



2 —



3 —



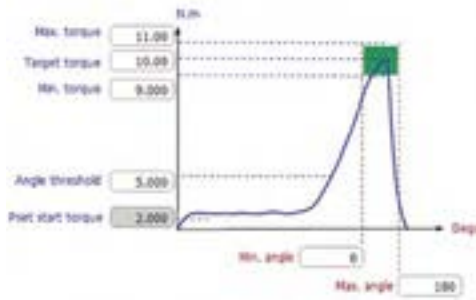
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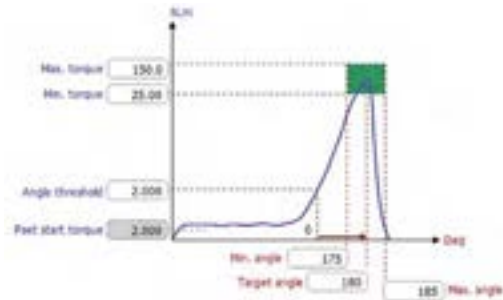
QShield-C Strategies



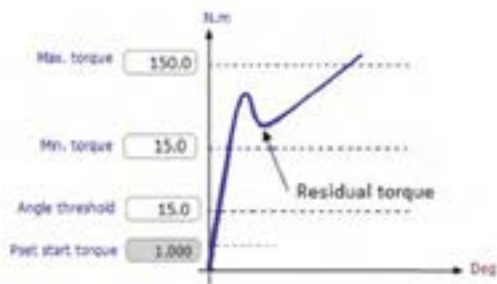
- TORQUE STRATEGY :
Tightening to a Target Torque
with a monitoring of the Angle and Torque
(OK if both Torque and Angle are within Min/Max)



- ANGLE STRATEGY :
Tightening to a Target Angle
with a monitoring of the Torque and Angle
(OK if both Torque and Angle are within Min/Max)



- RESIDUAL TORQUE STRATEGY :
Joint check in Production on pre-tightened joints
(NOK management)



Triple result detection
Residual + Breakaway (B)
+ Peak Torque (P)



7 TYPICAL SCENARIOS

- 1 Start of production (low quantities - ROI)
- 2 Difficult access conditions
- 3 More accuracy
- 4 Sequence using different end-fittings
- 5 Tighten to angle
- 6 Rework station (Diversity & Uptime)
- 7 PCT Test (Residual torque / Joint check)



BENEFITS

- Accuracy for critical tightenings
- Wide torque range to replace click wrenches
- Production data traceability
- Repair station fastening capability
- Difficult access joints tightening
- Re-hit detection
- Low calibration cost
- Back up tool for safety & quality critical applications



Virtual Cable

Virtual Cable is an Ultra Wide Band solution (UWB) used within the CONNECT hub platform that enables total traceability and control over tools locations and applications.

Virtual Cable ensures that the correct wireless tool can only be used for its pre-determined tasks in the correct working area. The tool is enabled for tightening only in the defined working area preventing Production errors and Quality issues.

Manage up to 20 tools in the right areas!

BOOST YOUR PRODUCTIVITY

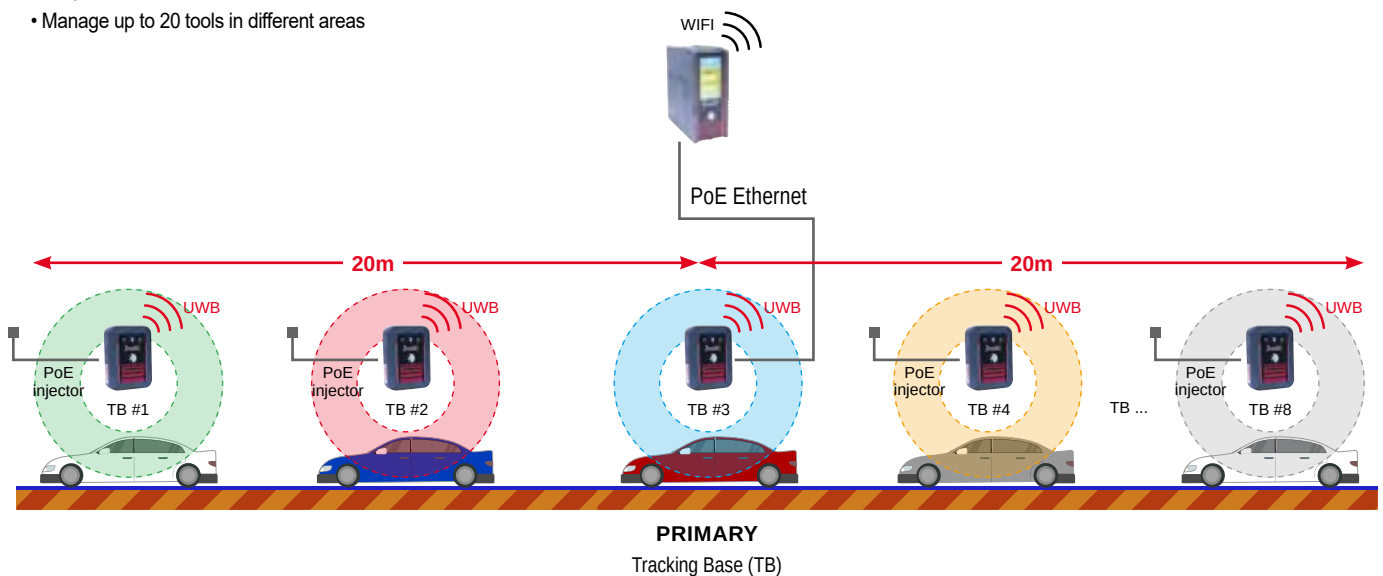
- You can standardise battery tools locating tools in the right working areas
- Ergonomic solution suitable for confined applications and inside cars

BOOST YOUR UP TIME

- Create your working area in less than 10s with the unique Trigger Learning mode by directly pressing the tool's trigger
- Power supply via PoE

BOOST YOUR FLEXIBILITY

- Easy to rebalance tools
- Manage up to 20 tools in different areas



SPECIFICATIONS

ORDERING INFORMATION	PART NUMBER
Tracking Base	615 813 335 0
Tracker for EPBC tools	615 813 260 0
Tracker for EABC tools	615 813 259 0
Tracker for EABS tools	615 813 415 0
PoE Injector	615 813 263 0
PERFORMANCE	
Frequency Range	3.5 to 6.5 GHz
Area coverage	Sphere of 20m (65.6 ft) of radius
Max. number of Tracking bases per CONNECT	8
Max. number of areas per Tracking Base	8
Max. number of tools per CONNECT	20

TECHNICAL SPECIFICATIONS	
Environmental Sealing	Tracker: IP40 Tracking base: IP54
Power consumption	Tracking base PoE: 20mA
Power supply	802.11af PoE Injector, 100-240 VAC
Tracking Base dimensions	110 x 150 x 40 mm (4.33 x 95.9 x 1.75 in.)



EABS - The One Hand Nutrunner

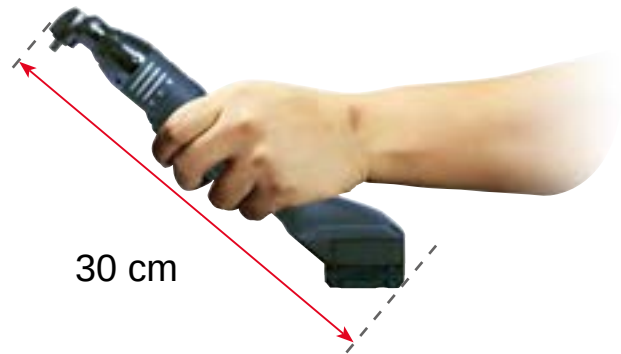


EABS - The One Hand Nutrunner

COMPACTNESS

EABS IS A CONCENTRATION OF ADVANCED TECHNOLOGY which allows to get a compactness never reached up to now with transducerized battery tools.

With a length at 30 cm, EABS can be used with only one hand. Consequently, one hand is released and could be used either to boost productivity or to improve operator's balance during tightening.



HIGH SPEED BATTERY TOOLS WITH 18V BATTERY



EABS IS A PERFECT BALANCE BETWEEN ERGONOMICS AND PRODUCTIVITY

EABS can reach really high speed to boost your productivity even with an 18V battery. Indeed, with an EABS 8 model and an EABS 12 model, free speed values are higher than 1000 rpm while preserving ergonomy with a total weight less than 1.5 kg.

TOOL'S REBALANCING



EASY WIRELESS PAIRING

The EABS tool has an embedded RFID chip for fast and efficient pairing with the CONNECT. Error proofing the process and eliminating any potential wireless setting mistakes.

With easy wireless pairing, tool is paired in less than 10 seconds.



EABS Series

1.5 to 24 Nm (1.1 to 16.2 ft.lb) – 10 to 1500 rpm



A



B

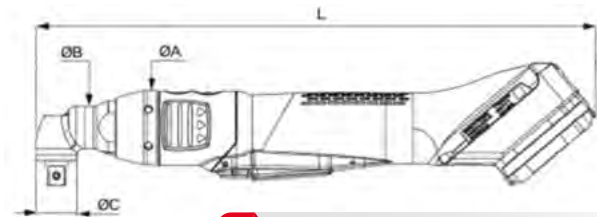


C



D

MODEL	L		ØA		ØB		ØC	
	mm	in.	mm	in.	mm	in.	mm	in.
EABS8-1500	297	11.69	39	1.54	22	0.87	22	0.87
EABS12-1100	297	11.69	39	1.54	22	0.87	22	0.87
EABS17-800	297	11.69	39	1.54	22	0.87	22	0.87
EABS24-500	335	13.19	39	1.54	23	0.91	28	1.10

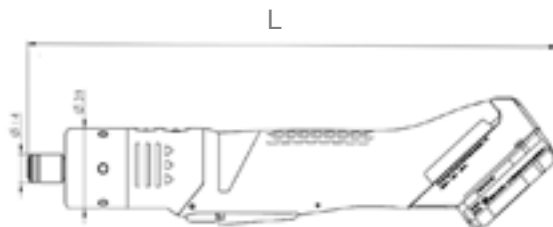


ACCESSORIES
see page 52

PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE						MAX. ROTATIONAL SPEED	WEIGHT*		LENGTH*		VOLTAGE
				MIN.	RECOMMENDED	MAX	MIN.	RECOMMENDED	MAX.		Kg	lb	mm	.in	
			in.	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	rpm					V
A	EABS8-1500-4Q	615 166 088 0	Hex.1/4	1.5	7	8	1.10	5.16	5.90	1500	1.0	2.20	297	11.69	18/36
B	EABS8-1500-4S	615 166 087 0	Sq 1/4	1.5	7	8	1.10	5.16	5.90	1500	1.0	2.20	297	11.69	18/36
A	EABS12-1100-4Q	615 166 091 0	Hex.1/4	4	10	12	2.95	7.37	8.85	1100	1.0	2.20	297	11.69	18/36
B	EABS12-1100-4S	615 166 089 0	Sq 1/4	4	10	12	2.95	7.37	8.85	1100	1.0	2.20	297	11.69	18/36
B	EABS12-1100-10S	615 166 090 0	Sq 3/8	4	10	12	2.95	7.37	8.85	1100	1.0	2.20	297	11.69	18/36
A	EABS17-800-4Q	615 166 094 0	Hex.1/4	5	14	17	3.68	10.32	12.53	800	1.0	2.20	297	11.69	18/36
B	EABS17-800-4S	615 166 092 0	Sq 1/4	5	14	17	3.68	10.32	12.53	800	1.0	2.20	297	11.69	18/36
B	EABS17-800-10S	615 166 093 0	Sq 3/8	5	14	17	3.68	10.32	12.53	800	1.0	2.20	297	11.69	18/36
C	EABS24-500-4Q	615 166 096 0	Hex.1/4	10	22	24	7.37	16.22	17.70	520	1.3	2.87	335	13.19	18/36
D	EABS24-500-10S	615 166 095 0	Sq 3/8	10	22	24	7.37	16.22	17.70	520	1.3	2.87	335	13.19	18/36

*Weight and length without battery

EIBS Series



MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE						MAX. SPEED	LENGTH*	WEIGHT WITHOUT BATTERY		VOLTAGE
			MIN.	RECOMMENDED	MAX	MIN.	RECOMMENDED	MAX.			kg	lb	
		in.	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	rpm	mm			V
EIBS7-1700-4Q	8920204015	Hex. 1/4" F	1	6	7	0.7	4.4	5.2	1700	278	1.05	2.31	18/36
EIBS10-1300-4Q	8920204370	Hex. 1/4" F	3	8.5	10	2.2	6.3	7.4	1300	297	1.15	2.53	18/36
EIBS14-950-4Q	8920204229	Hex. 1/4" F	4	12	14	2.9	8.8	10.3	950	297	1.15	2.53	18/36

*Battery not included in standard offering

BLRTC

6 to 45 Nm (4.4 to 33.19 ft.lb) - 1520 to 3990 rpm



A



B

BOOST YOUR PRODUCTIVITY

- By reducing cycle time
- By improving joint quality
- By providing process quality

BOOST YOUR FLEXIBILITY

- Free of cable management
- Free of reaction arm
- Reduce total cost of ownership

BOOST YOUR UP TIME

- Boost the uptime of the operator
- Boost the uptime of the tool

	WIFI COMMUNICATION VERSION
Wifi Communication	2.4GHz or 5 GHz
Programming on the tool	N/A
Pset	250
No. of step in Pset	10
Assembly process	250
Results	10000
Tightening Curve	20
Disconnected mode	✓



ACCESSORIES
see page 52

PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	OUTPUT RETAINING TYPE	TORQUE				ROTATIONAL MAX SPEED (RPM)		LENGTH		WEIGHT*		VOLTAGE
					MIN	MAX	MIN	MAX							
			in.		Nm	Nm	ft.lb	ft.lb	18V	36V	mm	in.	kg	in.	V
A	BLRTC025-2350-10S	615 166 025 0	Sq 3/8	Through hole	6	25	4.4	18.4	1520	2350	233	9.17	1.2	2.6	18/36
B	BLRTC025-2350-4Q	615 166 026 0	Hex.1/4	Quick change chuck	6	25	4.4	18.4	1520	2350	233	9.17	1.2	2.6	18/36
-	BLRTC045-3990-10S	615 166 186 0	Sq 3/8	Through hole	15	45	11.6	33.19	3990	3990	251	9.9	1.34	2.96	18/36

*Weight without battery



Wireless transducerized battery tool



ADVANCED ERGONOMICS

- Low weight tools
- Effortless trigger
- 45° oriented battery (angle version)
- Slim angle head for tight areas access



EASY INTEGRATION

- Quick wireless installation with contactless RFID pairing
- Data collection through wireless communication
- Improve error-proofing control with advanced tightening strategies
- Easy attachment for crowfoot & tubenuts



INCREASED PRODUCTIVITY

- High speed tool
- Embedded display for pset selection
- Strong & efficient wireless communication, tested in industrial environment



OPTIMIZED MAINTENANCE

- Long life batteries, no memory effect on Li-ion battery
- Dust & oil proof trigger
- Common spare parts

EPBcom Series

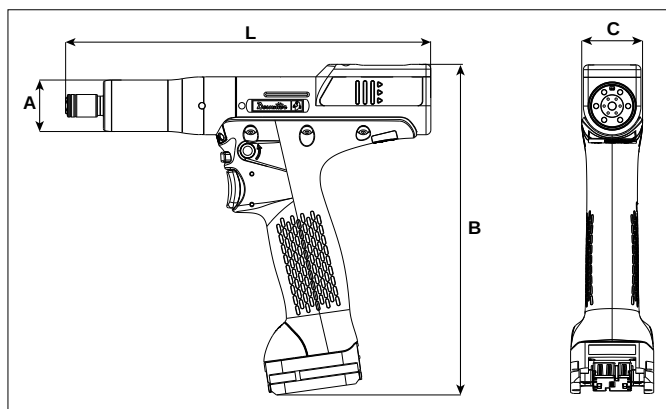
1.5 to 17 Nm (1.1 to 12.5 ft.lb) - 10 to 1800 rpm



A



B



MODEL	L		A		B		C	
	mm	in.	mm	in.	mm	in.	mm	in.
EPBC 8-1800-4Q	227	8.94	32	1.26	206	8.11	38	1.5
EPBC 8-1800-10S	227	8.94	32	1.26	206	8.11	38	1.5
EPBC14-900-4Q	227	8.94	32	1.26	206	8.11	38	1.5
EPBC14-900-10S	227	8.94	32	1.26	206	8.11	38	1.5
EPBC 17-700-4Q	227	8.94	32	1.26	206	8.11	38	1.5
EPBC 17-700-10S	227	8.94	32	1.26	206	8.11	38	1.5



ACCESSORIES
see page 52

PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE RANGE						ROTATIONAL SPEED (RPM)		WEIGHT WITHOUT BATTERY		VOLTAGE
				MIN.	RECOM-MENDED	MAX.	MIN.	RECOM-MENDED	MAX.	18V	36V	kg	lb	
			in.	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb					V

EPBcom - TRANSDUCERIZED BATTERY TOOL

A	EPBC 8-1800-4Q	615 165 900 0	Hex.1/4"F	1.5	7	8	1.1	5.2	5.9	900	1800	1.0	2.2	18/36
B	EPBC 8-1800-10S	615 165 904 0	Sq.3/8	1.5	7	8	1.1	5.2	5.9	900	1800	1.0	2.2	18/36
A	EPBC14-900-4Q	615 165 980 0	Hex.1/4"F	4	12	14	2.9	8.8	10.3	540	940	1.0	2.2	18/36
B	EPBC14-900-10S	615 165 979 0	Sq. 3/8	4	12	14	2.9	8.8	10.3	540	940	1.0	2.2	18/36
A	EPBC 17-700-4Q	615 165 906 0	Hex.1/4"F	7	15	17	5.2	11	12.5	400	700	1.0	2.2	18/36
B	EPBC 17-700-10S	615 165 902 0	Sq.3/8	7	15	17	5.2	11	12.5	400	700	1.0	2.2	18/36

- Battery not included in standard offering
- Battery 18V, 2.5 Ah : 0.46 kg (1.01lb) & 36V, 2.5 Ah : 0.77 kg (1.70lb)





EABcom Series

5 to 95 Nm (3.7 to 70 ft.lb) - 10 to 900 rpm



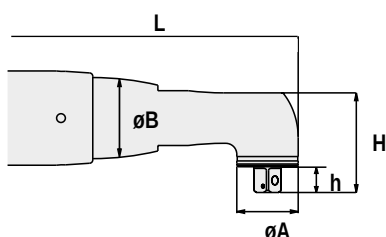
A



B



C



MODEL	L		H		H		ØA		ØB	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
EABC 15-900	470	18.5	10.2	0.40	33.8	1.33	22	0.87	37.0	1.46
EABC 26-560	496	19.5	12.0	0.47	45.7	1.80	28	1.10	37.0	1.46
EABC 32-410	496	19.5	12.0	0.47	45.7	1.80	28	1.10	37.0	1.46
EABC 45-330	506	19.9	12.0	0.47	51.0	2.00	35	1.38	37.0	1.46
EABC 50-450	546	21.5	12.0	0.47	51.0	2.00	35	1.38	37.0	1.46
EABC 60-370	559	22.0	11.9	0.468	57.0	2.20	40	1.57	41.0	1.61
EABC 75-300	582	22.9	17.5	0.69	60.4	2.38	45	1.77	48.5	1.91
EABC 95-240	582	22.9	17.5	0.69	60.4	2.38	45	1.77	48.5	1.91

L = Tool length without battery

eLINK range

Angle head tool with integrated task light
(with LED color code reporting)



Barcode reader ready



Optional accessory
1D/2D/QR
Bar Code Reader
(615 813 038 0)



ACCESSORIES
see page 52

PIC REF	MODEL	PART NUMBER EABCOM	PART NUMBER EABCOM eLINK	SQUARE DRIVE	TORQUE RANGE						ROTATIONAL SPEED	WEIGHT WITHOUT BATTERY		VOL-TAGE
				in.	MIN.	RECOM-MENDED	MAX.	MIN.	RECOM-MENDED	MAX.	rpm	kg	lb	V
					Nm	Nm	Nm	ft.lb	ft.lb	ft.lb				

EABcom - TRANSDUCERIZED BATTERY TOOL

•	EABC 15-900	615 165 841 0	615 166 050 0	1/4	5	13	15	3.7	9.6	11	900	1.55	3.42	36
A	EABC 26-560	615 165 842 0	615 166 051 0	3/8	5	24	26	3.7	18	19	560	1.65	3.64	36
A	EABC 32-410	615 165 843 0	615 166 052 0	3/8	7	30	32	5.2	22	24	410	1.65	3.64	36
B	EABC 45-330	615 165 844 0	615 166 053 0	3/8	9	40	45	6.6	30	33	330	1.76	3.88	36
B	EABC 50-450	615 165 845 0	615 166 054 0	3/8	9	45	50	6.6	33	37	450	2.04	4.50	36
B	EABC 60-370	615 165 846 0	615 166 055 0	1/2	10	55	60	7.4	41	44	370	2.35	5.18	36
C	EABC 75-300	615 165 847 0	615 166 056 0	1/2	12	70	75	8.8	52	55	300	2.94	6.48	36
C	EABC 95-240	615 165 848 0	615 166 057 0	1/2	19	90	95	14	66	70	240	2.98	6.57	36

- Battery not included in standard offering
- Battery 36V, 2.5Ah - Weight: 0.77 kg (1.70lb)

Accessories

EABS / BLRTC / EPBcom / EABcom

ACCESSORIES INCLUDED

	EPBcom	BLRTC	EABS
• Protective cover - Black	615 211 019 0	615 211 073 0	Included (7)

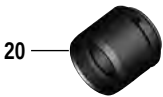
OPTIONAL ACCESSORIES

ITEM	EABcom	EPBcom	BLRTC	EABS
Battery type				
1 Li-ion battery pack 18V 2.5 Ah - 0.46 kg (1,01lb)		615 813 266 0	615 813 266 0	615 813 266 0
2 Li-ion battery pack 36V 2.5 Ah - 0,77 kg (1,70lb)	615 813 267 0	615 813 267 0	615 813 267 0	615 813 267 0
Charger				
3 Charger Universal 18 / 36V	615 813 270 0	615 813 270 0	615 813 270 0	615 813 270 0
• Power Cord C13-C14 L=0.3m (daisy chain cable)	615 813 383 0	615 813 383 0	615 813 383 0	615 813 383 0
Protective covers - Tools				
4 For Angle head EAB 15	615 211 003 0			
4 For Angle head EAB 26/32	615 573 207 0			
4 For Angle head EAB 45/50	615 573 208 0			
4 For Angle head EAB 60	615 573 209 0			
4 For Angle head EAB 75/95	615 573 210 0			
5 For Pistol EPB - Red		615 211 022 0		
6 For angle EABS 8 - EABS 12 - EABS 17				615 813 250 0
6 For angle EABS 24				615 813 251 0
Protective covers - Battery				
7 For Battery 18V 2.5Ah - Clear		615 211 136 0	615 211 136 0	615 211 136 0
7 For Battery 18V 2.5Ah - Black		615 211 137 0	615 211 137 0	615 211 137 0
7 For Battery 18V 2.5Ah - Red		615 211 138 0	615 211 138 0	615 211 138 0
7 For Battery 18V 2.5Ah - Grey		615 211 139 0	615 211 139 0	615 211 139 0
7 For Battery 36V 2.5Ah - Clear	615 211 140 0	615 211 140 0	615 211 140 0	615 211 140 0
7 For Battery 36V 2.5Ah - Black	615 211 141 0	615 211 141 0	615 211 141 0	615 211 141 0
7 For Battery 36V 2.5Ah - Red	615 211 142 0	615 211 142 0	615 211 142 0	615 211 142 0
7 For Battery 36V 2.5Ah - Grey	615 211 143 0	615 211 143 0	615 211 143 0	615 211 143 0
Miscellaneous				
8 Nose crowfoot adapter for EPB.		615 565 518 0		
9 eDOCK + Battery data interface	615 813 400 0	615 813 400 0	615 813 400 0	615 813 400 0
10 Barcode reader for EPBC (1D/2D/QR)		615 812 281 0		
• Barcode reader for EABC-eLINK (1D/2D/QR)	615 813 038 0			
• Access point Wifi 802.11N-US:	615 811 417 5	615 811 417 5	615 811 417 5	615 811 417 5
• Access point Wifi 802.11N-EU:	615 811 419 5	615 811 419 5	615 811 419 5	615 811 419 5
• Access point Wifi 802.11N-A	615 811 650 5	615 811 650 5	615 811 650 5	615 811 650 5
• Access point Wifi 802.11N-H	615 811 420 5	615 811 420 5	615 811 420 5	615 811 420 5
• Plug UK	615 917 202 0	615 917 202 0	615 917 202 0	615 917 202 0
11 Side handle		615 397 016 0		
Virtual Cable				
12 Tracking Base	615 813 335 0	615 813 335 0	615 813 335 0	615 813 335 0
13 Tracker	615 813 259 0	615 813 260 0	615 813 260 0	615 813 415 0
• PoE Injector 30W	615 813 263 0	615 813 263 0	615 813 263 0	615 813 263 0
Desoutter Tool holster				
14 DTH TWIN (single) without rail	615 811 411 0			615 811 411 0
15 DTH TWIN rail kit with 2 Twin holders	615 811 412 5			
16 DTH TWIN stand kit with 2 Twin holders	615 811 413 5			
17 DTH90		615 812 119 0	615 812 119 0	
18 DTH Battery (single) without rail	615 813 385 0			615 813 385 0
Suspension				
19 Swivelling front suspension kit	615 397 413 0			615 813 405 0
20 EABS back suspension				615 813 296 0



Front trigger for open crowfoot applications

OPTIONAL ACCESSORIES



ITEM		EABcom
Front trigger for open crowfoot applications		
20	Mechanical kit for tools for EABC tools (must be mounted on tool by authorized Desoutter service technician)	615 398 530 0
20	Kit FLEX FRONT START for EABC15 to EABC45	615 911 034 5
20	Kit FLEX FRONT START for EABC50 to EABC95	615 911 033 5



Tools display module for EABS

ITEM	PART NUMBER	DESCRIPTION
21	BER2329000	EABS tool display module (TDM)
21	BER2329600	EABS TDM for battery cover
22	BER2329500	EABS suspended tool display module
23	BER2329603	EABS TDM protection cover



21



22



23

MULTI - Multi - Spindles solution

DESOUTTER ECOSYSTEM

CONNECT

Place your CONNECT wherever you want at the station or anywhere in the plant using the dedicated CONNECT network.

M-POWERBOX

- The MULTI all-in-one and compact M-PowerBox:
- Can be connected to just one power source with a voltage level from 380V to 480V/3ph.
 - Option to be on a daisy chain of up to several power boxes to synchronize up to 40 tools.

M-SAFETYBOX

- The M-SafetyBox is a core component for MULTI's safety management and the main connectivity point to the CONNECT and all your safety devices.
- 24VDC power supply output (Compatible with CONNECT)
 - Ethernet
 - eStop (Cat.3 Pl.e)
 - Quick Stop

M-DRIVE

- The M-Drive can manage all Desoutter premium EFM fixtured spindles and can be installed and rebalanced in a matter of seconds.
- Restart in 30" for the shortest stop on the line.
 - Optimised fanless cooling design for any production rate
 - Easy access to install and rebalance - only one safety screw
 - Direct front access to the tool cable
 - Tool hot swap through tool changer within 6 seconds

M-MODURACK

No more cables, the M-Modurack ensures the power distribution, communication, and safety between all the components of the solution.

EFM - FIXTURED SPINDLE

- Premium EFM fixtured spindles offer performance from 1 to 2000 Nm.
- Designed for:
- Performance and durability
 - Compactness (lightest and shortest tool on the market)
 - Easy integration
 - Optimised PCD (Pitch Cycle Diameter)
 - High precision and repeatability



BOOST YOUR FLEXIBILITY

- Integrated through the CONNECT to the Desoutter Ecosystem
- High Compacity for easy integration
- Advanced tightening strategy to manage all types of applications



BOOST YOUR UPTIME

- Insight from Demeter
- Easy maintenance with channel diagnostics
- Service Contract to get the best of the solution



BOOST YOUR PRODUCTIVITY

- High Speed for High Torque Spindle
- Up to 40 spindles
- Highly Robust, resistant to vibration, shock, heat, humidity and dust



Key fact about the MULTI



0.2 M²
Compact

Less than 1m for
40 spindles



UP TO 40

Modular

Choose from 1 to
40 spindles



30 SEC.

Fastest restart

Restart a station unit in 30'



1

Single Platform

One common platform to
manage all assets

They trust us

APPLICATION IN POWERTRAIN

Desoutter's MULTI system is extremely compact, occupies a small space, and it's light-weight. In addition to meeting customer's own standards, its simple maintenance, good cable management, easy integration, easy installation and other advantages compare favorably with similar products on the market. Also The MULTI is in line with customer's digital production and intelligent manufacturing development planning needs.



TIGHTENING MANAGER -

AGRICULTURAL VEHICLE MANUFACTURE

The improvements in speed and accuracy, coupled with the additional benefits of full traceability and improved operator safety, have enabled us to take productivity to the next level.



Select your MULTI

TENSION

- What three-phase power supply do you use?
The MULTI all-in-one and compact M-PowerBox can be connected to just one power source with a voltage level from 380V to 480V/3ph. This means it is quick and easy to install.

SAFETY

- Do you need to meet specific safety requirements?
The M-SafetyBox is a core component for MULTI's safety management and the main connectivity point to the CONNECT and all your safety devices.

TORQUE

- What is the maximum torque your application requires?
Check the torque needs according to your application. Premium EFM fixtured spindles offer performance from 1 to 2000 Nm.

GET IN TOUCH

Our team will be happy to answer every question about the Modular Multi-Spindle Solution by Desoutter.



CABLE LENGTH

- What is the distance between your tightening station and the Drive?
The MULTI compact modules are designed to be mounted on the tightening unit, which requires less floor space, and fewer cables. Less cable management means a leaner, simpler, and faster installation.

BOLTS / SCREWS

- How many bolts or screws require simultaneous tightening?
To meet the varied demands of factory production, the MULTI can manage up to 40 tools, synchronised or not. The M-Drives are managed by the M-ModuRack, the backbone of the system. Cables and firmware are not required, but just a simple plug-and-play system.



Set-up your MULTI with Feature Management

Feature Management is a **scalable solution** that allows you to get the features that you need.

With its HIGH LEVEL OF FLEXIBILITY, you can **add new features to your MULTI** (working mode, protocols, PSET, assembly process, and advanced tightening strategies) whenever your production line requirements change. Just **activate the feature**, and **off you go!**

STANDARD PACK FOR 1 TIGHTENING UNIT CORD

	CORD TRANSDUCERIZED TOOL APPLICATIONS	CORD TRANSDUCERIZED TOOL APPLICATIONS
	Tightening Unit Premium	Tightening Unit Essential
Number of Pset	10	6
Number of Assembly Process	10	6
Live Results	Torque, angle, curve	Torque, angle, curve
Result Transfer/storage	Torque, angle, curve	OK/NOK
Tightening strategy	Torque and/or angle control	Torque control, Angle monitoring
Protocol	Open protocol	Open protocol

EXTRA FEATURES

WORKING MODE	PSET & ASSEMBLY PROCESS	ADVANCED TIGHTENING STRATEGY	PROTOCOLS
Workgroup* - [MULTI : from 2 to 40 Spindles]	Additional PSET up to 50 PSET	Yield point	Desoutter protocol
Automation control with CVI LOGIX	Additional PSET up to 250 PSET	Zero torque angle	Curves by Open protocol
	Additional AP up to 50 AP	Seating detection	VW protocol
	Additional AP up to 250 AP		IPM protocol
			PFCS protocol
			FORD Protocol
			TOYOTA GLOBAL POKA YOKE



Analyze your Multi data with ease!

DeMeter uses robust analytics to process and transform raw data into meaningful results through:

- Relevant KPIs to assess your performance
- Intuitive dashboards for clear visualization of your data
- Detailed graphs and reports for in-depth analysis
- Real-time notifications to keep you informed of critical changes



Installation should never be an afterthought!



Discover **INSTALLATION & COMMISSIONING** for MULTI

You have invested in a high-performance product. Now, make sure it delivers from day one. With **INSTALLATION & COMMISSIONING** by Desoutter, you ensure a flawless setup and immediate operational readiness, right first time.

What does **INSTALLATION & COMMISSIONING** include?

Installation, programming, functional test, each tool calibration, operator training and support during the production ramp-up



Minimize Downtime, maximize productivity with **REMOTE CARE**

We commit to your sustainability and efficiency through our expertise; you concentrate on your production.

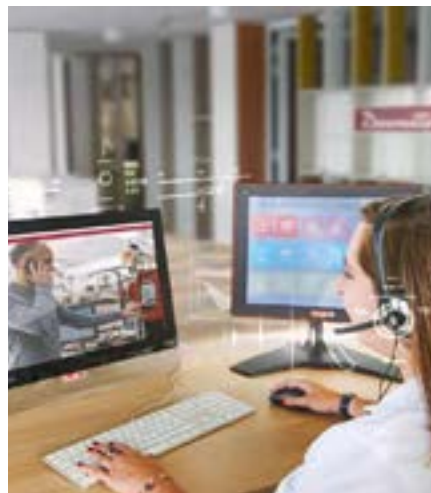
Get Expert support within one hour: on-site, on app, worldwide.



Avoid production disruptions, extend the life of your tools and reduce their environmental impact.

Preventive Maintenance and Warranty Extension significantly increase tool lifespan, reduce spare consumption, ensure consistent quality and protect by minimising breakdowns.

In addition, Tool Calibration is systematically done after each maintenance.



MULTI - Multi-Spindles solution



A



B



C



D



E



F



G



H

PIC	MODEL	PART NUMBER	AMBIENT STORAGE TEMP.		AMBIENT OPERATING TEMPERATURE				POWER CONSUMPTION	WEIGHT		POWER SUPPLY
			MAX °C	MAX °F	MIN. °C	MAX. °C	MIN. °F	MAX. °F		Kg	lb	
A	M-POWERBOX	615 932 751 0	70	158	0	40	32	104	32	6	13.2	380 - 480
B	M-SAFETYBOX	615 932 752 0	70	158	0	40	32	104	2	2.5	5.51	24
C	M-DRIVE	615 932 763 0	70	158	0	40	32	104	3	3.5	7.72	520
D	M-PROTECKTRACK	615 932 755 0	70	158	0	40	32	104	-	3.5	7.72	-
E	M-MODURACK2	615 932 756 0	70	158	0	40	32	104	32	0.5	1.1	-
F	M-MODURACK3	615 932 757 0	70	158	0	40	32	104	32	0.7	1.54	-
G	M-MODURACK5	615 932 758 0	70	158	0	40	32	104	32	1.2	2.65	-
H	M-RACKPLUG	615 932 759 0	-	-	-	-	-	-	-	-	-	-

Ready for your transformation

- Innovative modular solution for multi-spindle applications
- Optimized design for various production environments
- Customized station solution from your actual assembly requirements
- Zero-error assembly with advanced tightening strategies & production monitoring



BOOST YOUR FLEXIBILITY

- Integrated through the CONNECT to the Desoutter Ecosystem
- High Compacity for easy integration
- Advanced tightening strategy to manage all types of applications

BOOST YOUR UP TIME

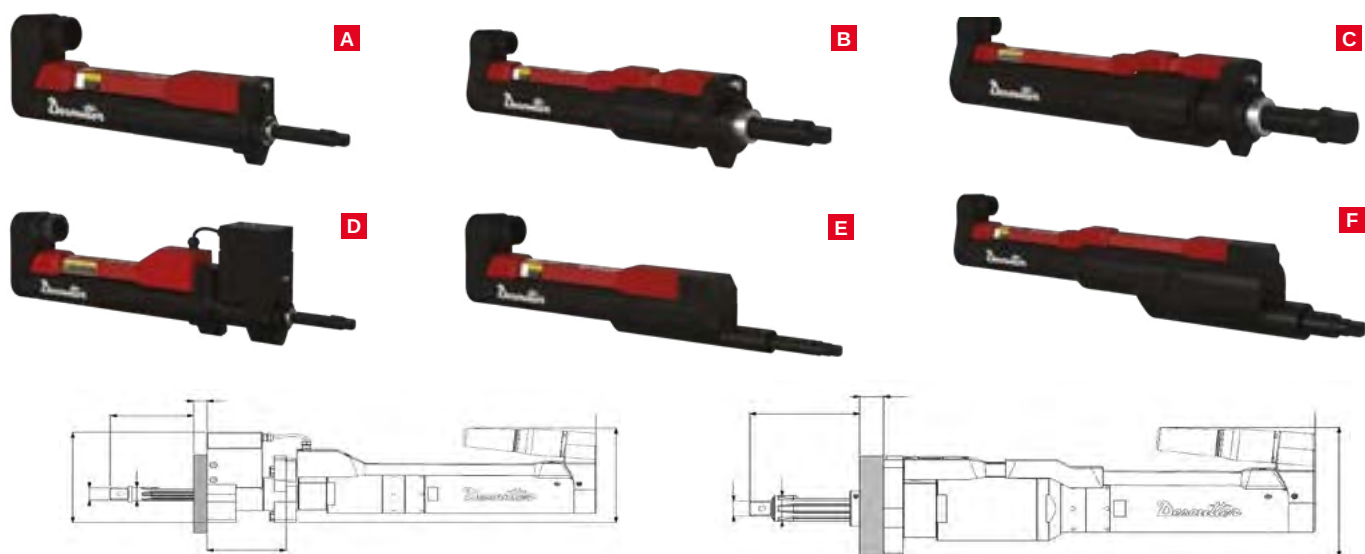
- Insight from Demeter
- Easy maintenance with channel diagnostics
- Service Contract to get the best of the solution

BOOST YOUR PRODUCTIVITY

- High Speed for High Torque Spindle
- Up to 40 spindles
- Highly Robust, resistant to vibration, shock, heat, humidity and dust



MULTI - EFM / EFM-TA / EFMO / EFMA



PIC	MODEL	PART NUMBER	OUTPUT DRIVE	STROKE	TORQUE						FREE SPEED	C-C DISTANCE		TOOL LENGTH L		WEIGHT	
					MIN.	RECOM-MENDED	MAX.	MIN.	RECOM-MENDED	MAX.		mm	in.	mm	in.	kg	lb
			in.	mm	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	rpm						

EFM

A	EFM43-8	615 166 220 0	3/8	50	1.6	8	10	0.6	5.9	7.4	2000	43	1.69	286	11.26	1.85	4.08
A	EFM43-15	615 166 221 0	3/8	50	1.5	15	17	1.1	11.1	12.5	2000	43	1.69	286	11.26	1.85	4.08
A	EFM43-30	615 166 222 0	3/8	50	3	30	32	2.2	22.1	23.6	1454	43	1.69	322	12.68	2.3	5.07
A	EFM43-45	615 166 223 0	3/8	50	4.5	45	50	3.3	33.2	36.9	1112	43	1.69	322	12.68	2.3	5.07
A	EFM51-70	615 166 224 0	1/2	50	7	70	80	5.2	51.6	59	816	51	2.01	367	14.45	3.95	8.71
A	EFM51-135	615 166 225 0	1/2	50	17.5	135	150	10	99.6	111	463	51	2.01	367	14.45	3.95	8.71
A	EFM60-175	615 166 227 0	3/4	50	18	175	190	13.3	129	140	575	60	2.36	383	15.08	5.3	11.7
A	EFM60-250	615 166 228 0	3/4	50	25	250	280	18.4	184	207	409	60	2.36	383	15.08	5.3	11.7
B	EFM80-330	615 166 229 0	3/4	60	33	330	360	24.3	243	266	299	80	3.15	445	17.52	9.9	21.8
B	EFM80-450	615 166 230 0	3/4	60	45	450	500	33.2	332	369	218	80	3.15	445	17.52	9.9	21.8
B	EFM80-680	615 166 231 0	1	60	68	680	750	50.2	502	553	145	80	3.15	445	17.52	9.9	21.8
B	EFM80-950	615 166 233 0	1	60	90	950	1050	66.4	701	774	190	80	3.15	488	19.21	13.3	29.4
C	EFM106-1400	615 166 234 0	1-1/2	60	140	1400	1470	103	1030	1080	130	106	4.17	531	20.91	18.5	40.8
C	EFM106-1900	615 166 235 0	1-1/2	60	190	1900	2000	140	1400	1480	100	106	4.17	531	20.91	18.5	40.8

EFM-TA

D	EFM51-70-TA	615 166 269 0	1/2	50	20	70	80	14.8	51.6	59	816	51	2.01	465	18.31	5.7	12.5
D	EFM51-135-TA	615 166 270 0	1/2	50	20	135	150	14.8	99.6	111	463	51	2.01	465	18.31	5.7	12.5
D	EFM60-175-TA	615 166 271 0	3/4	50	30	175	190	22.1	129	140	409	60	2.36	481	18.94	7.9	17.4
D	EFM60-250-TA	615 166 272 0	3/4	50	50	250	280	36.9	184	207	299	60	2.36	481	18.94	7.9	17.4

EFMO

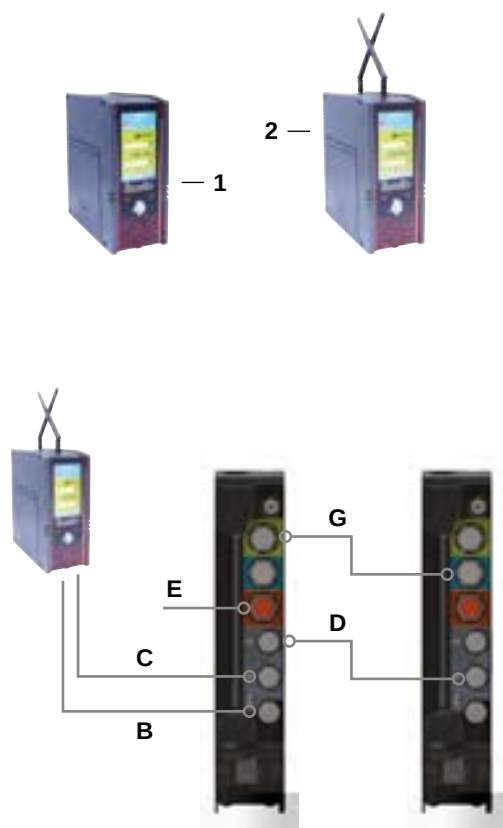
E	EFMO24-20	615 166 159 0	3/8	50	4	20	22	1.5	14.8	16.2	1940	24	0.94	351	13.82	3.1	6.83
E	EFMO30-80	615 166 160 0	1/2	50	16	80	90	5.9	59	66.4	900	30	1.18	456	17.95	5.5	12.1
E	EFMO40-180	615 166 161 0	3/4	50	36	180	200	13.3	133	148	560	40	1.57	504	19.84	8.8	19.4
F	EFMO54-450	615 166 162 0	3/4	50	90	450	480	33.2	332	354	230	54	2.13	617	24.29	17.2	37.9



EFMA - ANGLE HEADED TOOLS WITHOUT TELESCOPIC MODULE

A	EFMA40-55	8920904518	1/2	12	55	65	8.9	46.6	47.9	719	40	1.57	322	12.64	139	5.5	4.5	9.9
B	EFMA63-190	8920904520	3/4	80	190	250	59	140	184	320	63	2.47	383	15.04	189	7.5	3.2	7
C	EFMA76-300	8920904532	3/4	107	300	380	79	221	280	287	76	2.98	383	15.04	191	7.5	10.6	23.2
D	EFMA107-450	8920904531	1	150	450	580	110.6	332	428	170	107	4.21	383	15.04	322	12.7	13	28.5

Connect



ITEM		PART NUMBER
1	CONNECT-X	615 932 722 0
2	CONNECT-W	615 932 723 0

ADDITIONAL ACCESSORIES

ITEM		PART NUMBER
•	support for connect	615 932 762 0
B	m12/m12 connect/m-safetybox power cable 1m (3.28ft)	615 917 753 0
B	m12/m12 connect/m-safetybox power cable 5m (16ft)	615 917 754 0
C	rj45/m12x connect/m-safetybox ethernet cable 1m (3.28ft)	615 917 756 0
C	rj45/m12x connect/m-safetybox ethernet cable 5m (16ft)	615 917 757 0
D	m12x/m12x safetybox/safetybox ethernet cable 1m (3.28ft)	615 917 760 0
D	m12x/m12x safetybox/safetybox ethernet cable 5m (16ft)	615 917 761 0
G	m12/m12 safetybox/safetybox emergency stop cable 1m (3.28ft)	615 917 763 0
G	m12/m12 safetybox/safetybox emergency stop cable 5m (16ft)	615 917 764 0
E	open wires emergency stop cable 5m (16ft)	615 917 766 0

Cables

•	Tool Cable 2.5m (8.20ft)	615 917 651 0
•	Tool Cable 5m (16ft)	615 917 652 0
•	Tool Cable 10m (32.8ft)	615 917 654 0
•	Tool Cable 15m (49.2ft)	615 917 655 0
•	Tool Extension Cable 8m (26.2ft)	615 917 581 0
•	Tool extension cable 16m (52.5ft)	615 917 584 0
•	Tool extension cable 32m (105ft)	615 917 587 0

TELESCOPIC MODULES (OPTION)	PART NUMBER	LENGTH		WEIGHT	
		mm	in	kg	lb
TELESCOPIC MODULE 3/8" EFX43 IP54	615 397 013 5	165	6.50	0.75	1.65
TELESCOPIC MODULE 1/2" EFX51 IP54	615 397 017 5	183	7.20	1.55	3.42
TELESCOPIC MODULE 3/4" EFX60 IP54	615 397 014 5	203	7.99	1.95	4.3
TELESCOPIC MODULE 3/4" EFX80 IP54	615 399 267 0	398	15.67	9.6	21.16
TELESCOPIC MODULE 1" EFX80 IP54	615 399 268 0	406	15.98	9.6	21.16
TELESCOPIC MODULE 1" EFX106 IP54	615 399 296 0	446	17.56	14.1	31.08
TELESCOPIC MODULE 1 1/2" EFX106 IP54	615 399 270 0	467	18.39	14.1	31.08





AXON Terminal

MULTI-ASSET SOLUTION

- AXON can manage a wide range of corded tools to exceed your requirements.
- Thanks to the various type of tools, it can support a wide torque range, from 0.6Nm to 2000Nm

FOOTPRINT OPTIMIZATION

- Compact terminal with optimized footprint.

AGILE FEATURE MANAGEMENT

- With feature rebalancing mode, you can rebalance a digital feature from one station to face easily line evolution

EASY LINE REBALANCING

- Backup stored in the Drive and in the module. Easy to rebalance by switching the module or the drive.

TOP OF THE CLASS MAINTENANCE

- Separate Drive and Module improved rebalancing and line optimization. One Drive for multiple applications, use cases and tools.

WEB USER INTERFACE

- Unique approach for live monitoring with embedded web user interface.
- Get access to results & data with multiple concurrent access.



BOOST YOUR FLEXIBILITY

- Get what you really need with feature management
- Compatible with latest corded tools from Desoutter



BOOST YOUR UPTIME

- Easily rebalance your production line with the removable module
- One unique platform to optimize your maintenance management
- Web User Interface embedded to have an easy access to data anywhere at



BOOST YOUR PRODUCTIVITY

- One platform for all corded tools
- Advanced tightening strategies to manage all type of applications
- Full error proofing capabilities



One platform for corded tools



Handheld tools				Fixtured tools			
Pistol Range	Straight & Angle Head Range			Fixtured Range			
							
1-110Nm	3-660Nm	3-270Nm	0.6-27Nm	1-2000Nm	12-580Nm	4-480Nm	0.6-12Nm
EPD	EAD	EID	ERS*	EFD	EFDA	EFDO	ERSF*
				ERS Module		ERP-HT is not supported	
							

AXON Terminal

In an ever-evolving and increasingly demanding environment, today's challenges will not be the same as tomorrow's.

Desoutter provides solutions to your current needs and future solutions for your next challenges.

In its continuous pursuit of innovation, Desoutter has created the most advanced and cutting-edge Terminal for corded tool solutions: THE AXON TERMINAL. The capital in the end should be bold

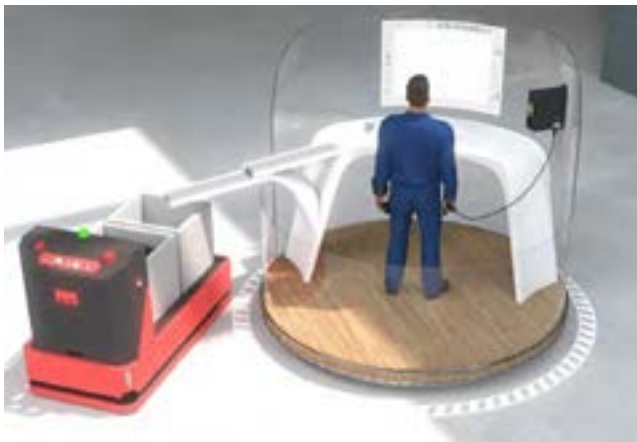
With a range of corded tools managed by AXON, Desoutter has the perfect tightening tool for your application, whether it's a straightforward easy application or one with the highest demands.

The AXON Terminal combines a high-powered drive with a smart module to elevate corded tools to the next level. By utilizing the latest and most efficient components, AXON ensures top performance and seamless integration into any application or work area.

AXON APPLICATIONS

As a unique and dedicated platform for corded solutions, AXON can fit any type of applications:

FIXED WORKSTATION



LIGHT AUTOMATION



HIGH TORQUE APPLICATIONS



SCREWFEEDING SYSTEMS



Software package

- EASY CONNECTIVITY AND A USER-FRIENDLY INTERFACE makes for a fast installation and smooth commissioning
- EASY UPGRADE CAPABILITIES AND FLEXIBILITY OF THE TOOL RANGE assures readiness for your future requirements
- ROBUST TOOLS AND HARDWARE BACKUP make for reliable and safe station
- ASSEMBLY QUALITY GUARANTEED with the process control and the error proofing modules



CVI KEY

- Create & manage tailor-made access rights per user profile.

CVI CONFIG

- Set your systems point to point or via network with an intuitive & guided interface.

CVI MONITOR

- Monitor and diagnostic in live your systems. Check directly the I/O and fieldbus for an easy commissioning.

CVI ANALYZER

- Analyse & import/export tightening data with results, curves, filters, profiles.

DEMETER

MONITORING OF PRODUCTION EFFICIENCY

- FULL DATA TRACEABILITY with real-time KPIs
- REAL-TIME DATA AND STATISTICS displayed in customized dashboards
- NOTIFICATIONS MANAGEMENT for a high reactivity on alerts and events
- CURVES ANALYTICS based on AI technology to detect potential defected joints



PIVOTWARE

ERROR PROOFING AT THE STATION

- PROCESS CONTROL to take control of all assets connected at the station
- TRACEABILITY of all actions performed by the users
- OPERATOR GUIDANCE to ensure a good understanding of the required actions
- PROCESS OWNERSHIP with an intuitive easy-to-use programming software



Tightening process optimization

- NETWORK COMMUNICATION: standard fieldbus & advanced customer protocols
- TIGHTENING STRATEGY: combine flexible steps with different control and different monitoring
- DIRECT VISUALISATION AND ACCESS : simple configuration and results on the Terminal screen and on a remote HMI
- ASSEMBLY PROCESS: control a complete operation with several fastenings and logical requirements (scans, I/O, ...)



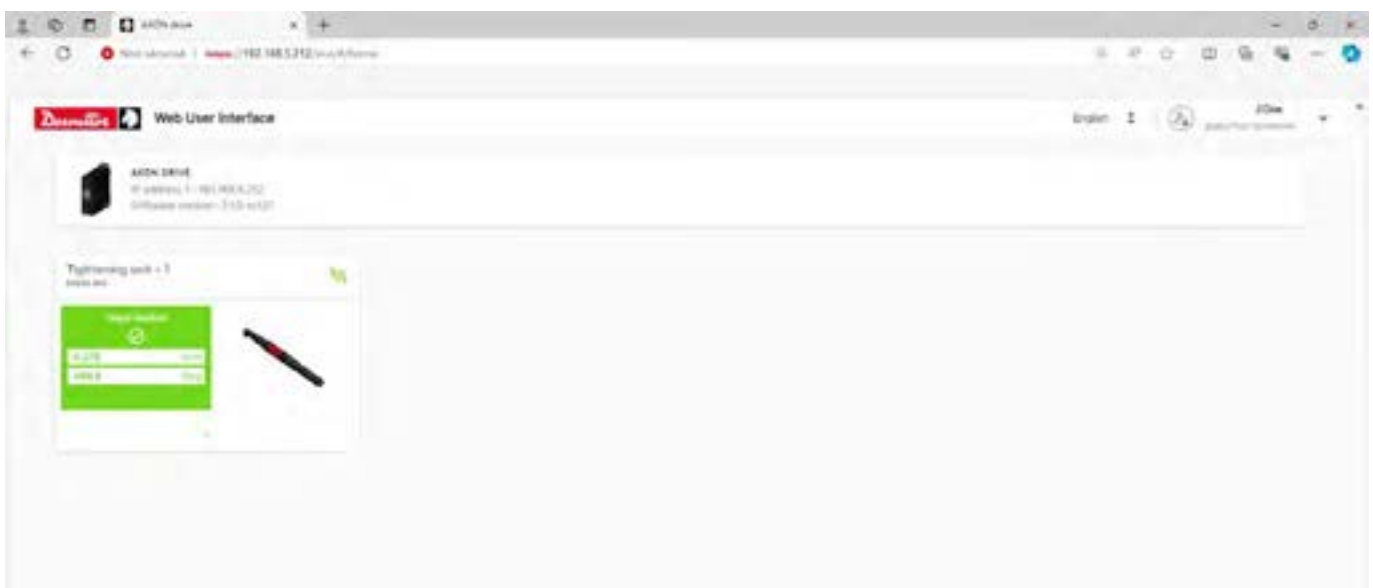
WEB UI INTRODUCTION

In a way of high industrialization, digitalization and automatization, the industries are changing very fast with more and more data centric.

Combining high performance tightening with relevant digital solutions and process control, the collection of valuable data can help to analyze and to identify bottlenecks, streamline workflows, and enhance overall efficiency.

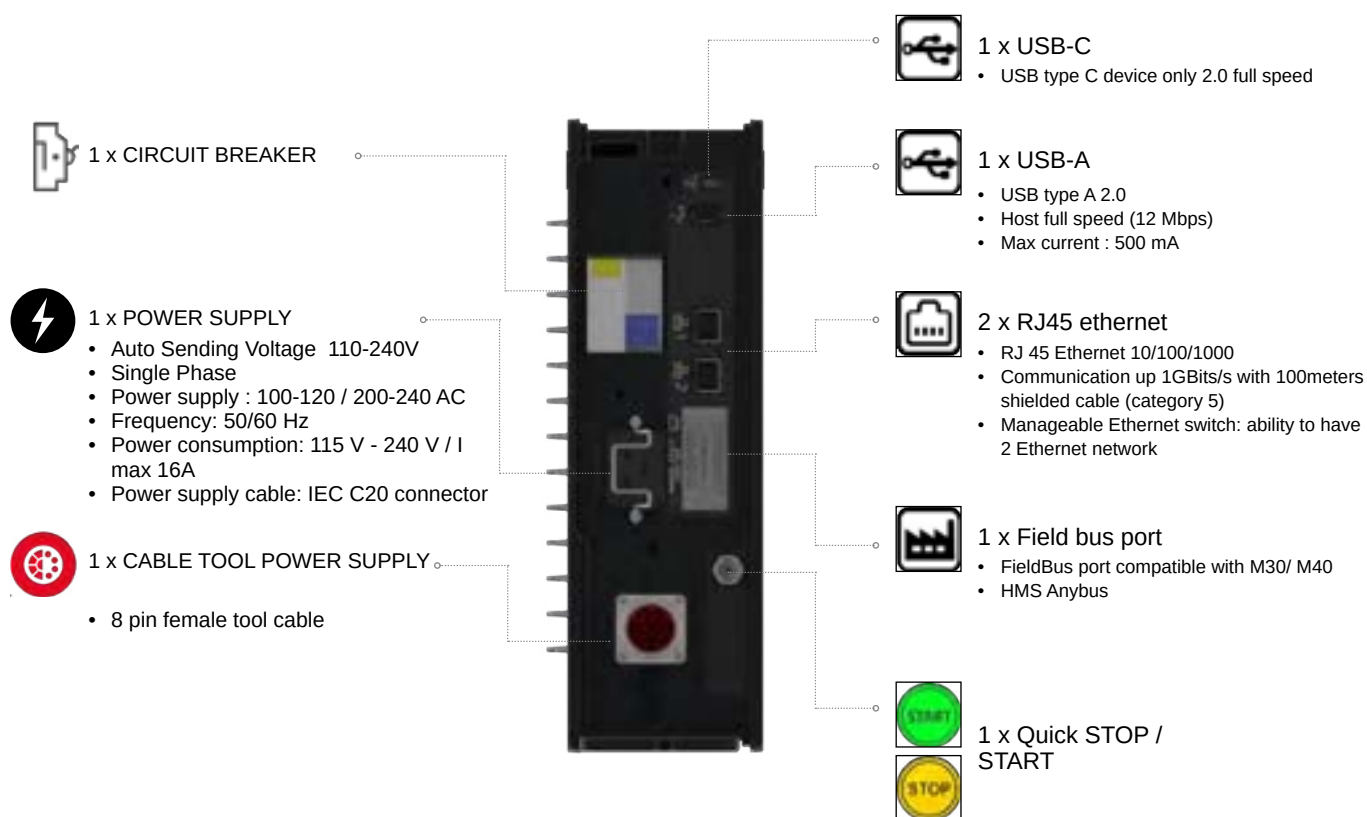
Having an easy and unlimited access to these precise data are key!

AXON comes with an embedded web user interface to have access to several data, anywhere at anytime with no limit of people connected at the same time !



HARDWARE FOCUS

AXON DRIVE: CONNECTIVITY



Weight	6 kg 13,2 lbs
Volume	10,08 dm ³ 615,12 in ³
Order no.	6159327800

HARDWARE FOCUS

AXON MODULE SX: CONNECTIVITY



USER INTERFACE

- Color touch screen 4"
- Resolution : 480 x 320



FUNCTION BUTTON 2

- Boot menu (short press)
- Turn system ON/OFF (long press)



FUNCTION BUTTON 1

- Home page / Main menu (short press)

BOTTOM VIEW



1 x RJ45 ethernet

- RJ 45 Ethernet 10/100/1000
- Power over Ethernet capability [POE]
- 1. 802.3at Type 2 "PoE+" :
- 2. Max power : 30 W
- 3. Max current : 600 mA
- Communication up 1GBits/s with 100meters shielded cable (category 5)



1 x USB-A

- USB type A 2.0
- Host full speed (12 Mbps)
- Max current : 500 mA



158,3 mm
6,23 in

93,2 mm
3,66 in

40 mm
1,57 in

Weight	0,2 kg 0,44 lbs
Volume	0,59 dm ³ 36,00 in ³
Order no.	6159327830



Get what you really need with feature management

FEATURE MANAGEMENT is a scalable solution in order to provide a high level of flexibility to meet requirements. With feature management, you can add or remove a feature whenever you want or whatever the feature.

TIGHTENING UNIT STANDARD PACK

	TU PREMIUM	TU CORE	TU ESSENTIAL
Number of Psets	10	6	6
Number of APs	10	1	6
Results memory size	20000	20000	20000
Curves memory size	50	50	-
Live Results	Torque, Angle, curve	Torque, Angle, curve	Torque, Angle, curve
Results transfers and storage	Torque, Angle, curve	Torque, Angle, curve	OK/NOK
Tightening strategies	Torque and/or angle control & monitoring	Torque and/or angle control & monitoring	Torque control and angle monitoring
Protocol / Reporting	Open protocol, CVI Net Web, DeMeter, ToolsNet	Open protocol, CVI Net Web, DeMeter, ToolsNet	Open protocol, CVI Net Web, DeMeter, ToolsNet
Advanced Tightening Strategy	-	Seating Detection	

PSET & ASSEMBLY PROCESS

	TU PREMIUM	TU CORE	TU ESSENTIAL
Additional Psets up to 50 Psets	OK	-	-
Additional Psets up to 250 Psets	OK	-	-
Additional APs up to 50 APs	OK	-	-
Additional APs up to 250 APs	OK	-	-

WORKING MODE

	TU PREMIUM	TU CORE	TU ESSENTIAL
Automation control with CVI LOGIX	OK	OK	OK

PROTOCOLS

	TU PREMIUM	TU CORE	TU ESSENTIAL
Desoutter protocol	OK	-	OK***
Curves by Open protocol	OK	-	-
VW protocol (certified with limitations)	OK	-	-
IPM protocol	OK	-	OK
PFCS protocol	OK	-	OK*
FORD protocol	OK	-	OK*
TOYOTA GLOBAL POKAYOKE**	OK	-	OK*

ADVANCED TIGHTENING STRATEGY

	TU PREMIUM	TU CORE	TU ESSENTIAL
Yield point	OK	-	-
Zero torque angle	OK	-	-
Seating detection	OK	INCLUDED	-
Gyroscopoe [eCompass]	OK	-	-

* Technically ready but need to be certified by customer / ** CVI LOGIX is required / *** With TU ESSENTIAL limitation

Extra Features

-  **ADDITIONAL PSET**
A Parameter set is commonly called Pset. A Pset is a tightening process combining one or several steps, each step describing a function
-  **ADDITIONAL AP**
An Assembly Process, commonly called "AP", is a tightening process which combines one or several assembly actions to proceed in a defined order.
-  **PROTOCOL**
Protocols manages communication over ethernet between the system and any external devices according to specific "customer" requirements
-  **AUTOMATION CONTROL**
Extend your automation control with the CVI Logix features to have a complete stand-alone working station
-  **YIELD POINT**
The yield point detection strategy allows to tighten up to fastener elastic deformation zone
-  **GYROSCOPE [ECOMPASS]**
Gyro [eCompass] allows to compensate any movement of the operator that might add or remove angle in the assembly
-  **ZERO TORQUE ANGLE**
The zero torque angle strategy allows to improve consistency of the assembly regardless friction
-  **SEATING DETECTION**
The seating detection strategy allows constant clamping force independently from the dispersion of torque in the seating zone

ORDERING PARTS

PACK	DESCRIPTION	DETAIL	PART NO.
	AXON Drive	AXD	615 932 780 0
	AXON Module SX	AXM-SX	615 932 783 0
	AXON-SX Essential	AXD + AXM-SX + TU Essential	615 932 797 0
	AXON-SX Core	AXD + AXM-SX + TU Core	615 932 795 0
	AXON-SX Premium	AXD + AXM-SX + TU Premium	615 932 796 0





OPERATOR PANEL*
Operator Interface, with visual and auditory alarms and 3 key switch positions
[Ref : 6159360720](#)



SOCKET/BIT TRAY*
Socket tray with tubes & inserts
[Ref : 615 936095 0](#)
Socket tray : [Ref: 615 936 071 0](#)
Bit Tray [Ref : n°615936 080 0](#)



STACK LIGHT*
4 colors stack light with buzzer, push button and 2 key switch positions
[Ref : 6159360740](#)



WALL MOUNTING
[Ref : 6158136760](#)



I/O COMMUNICATION*
I/O EXPANDER
with 8 configurable inputs and outputs. [Ref : 6159360740](#)



HMS MODULE
FieldBus port compatible with M30/ M40 HMS Anybus CompactCom
Compatible with : Modbus TCP (AB6446) / Device Net (AB6424) / Ethernet/IP (AB6430) / Profibus (AB6422) / Profinet I/O class A 1 port RJ 45 (AB6425) / Profinet I/O class B 2 ports RJ 45 (AB6431) / CC-link (AB6432) / Profinet IRP/MRP M40 (AB6918) / Ethernet/IP M40 (AB6842)
[Ref : check in Desoutter catalog](#)



WITH USB TO CAN KIT*
[Ref : 6158136800](#)



TABLE MOUNTING
[Contact PROJECT team](#)

FIELD BUS MODULES

ITEM		PART NO.
1	Profibus module	615 927 595 0
2	ProfiNet module (1 port)	615 927 596 0
3	ProfiNet module (2 ports)	615 927 597 0
3	ProfiNet IRT module (2 ports)	615 927 070 0
4	DeviceNet module	615 927 599 0
4	CC-Link module	615 927 598 0
5	EtherNet IP module	615 927 594 0
6	Modbus TCP module	615 927 615 0
7	CC-Link IE Module	615 927 943 0

EBUS CABLE

	PART NO.
eBUS cable Shielded 1m (3.3ft)	615 917 607 0
eBUS cable Shielded 3m (9.9ft)	615 917 608 0
eBUS cable Shielded 5m (16.4ft)	615 917 609 0
eBUS cable Shielded 15m (49.2ft)	615 917 610 0
eBUS Termination plug	615 917 625 0

POWER CORD

PLUG	PART NO.
European	615 917 069 0
US NEMA 5-15	615 917 060 0
US NEMA 5-20	615 917 063 0
UK	615 917 070 0
Chinese	615 917 061 0

ACCESSORIES

	PART NO.
eWALLET	615 927 844 0
UV	615 927 843 0

Installation should never be an afterthought!



Ensure AXON is fully operational for the start of production

An investment was made in a highly technical product, and you want it to be fully operational immediately, right?

Benefit from the installation and commissioning package for your AXON and ensure your installation is programmed right the first time.

What does installation & commissioning include?

Installation, programming, functional tests, tool calibration, station back-up, capability tests, operator training, and support during the start of production.



Avoid production disruptions and extend the lifespan of your tools

Safeguard the reliability and accuracy of your AXON tools with our preventive maintenance solutions to reduce downtime and increase your productivity.

Calibration, Preventive maintenance, Extension of warranty, on-site or at the nearest Desoutter workshop. Select the maintenance you need for your tools.



The new standard of Value in Efficient Tightening...

In an era of FLEXIBLE manufacturing and the race to ZERO-fault assembly, Desoutter is proud to introduce the new standard of Value in Efficient Tightening for safety-critical applications: CVI3 assembly system.

This new system offers unequalled EFFICIENCY for all plants thanks to the best combination of advanced process control, easy integration, user-friendly interface & unmatched flexibility.

The CVI3 system integrates **UNIQUE** added value **INNOVATIONS**:
Reduce rework cost: complete station process control including tightening

& logical operations without need for a dedicated PLC > **Assembly Process**
Decrease installation/re-balance cost: Fast & easy line re-balancing with multiple Battery transducerized tools connected to 1 CVI3 controller > **EAB cordless tools**.

Improve quality with intuitive software: User-friendly & visual interface to view tightening data & detect quality issues > **CVI ANALYZER**.

Optimize flexibility: 2 fixtured spindles synchronized or asynchronized in standard > **TWINCVI3**.



ADVANCED PROCESS CONTROL



EASY INTEGRATION

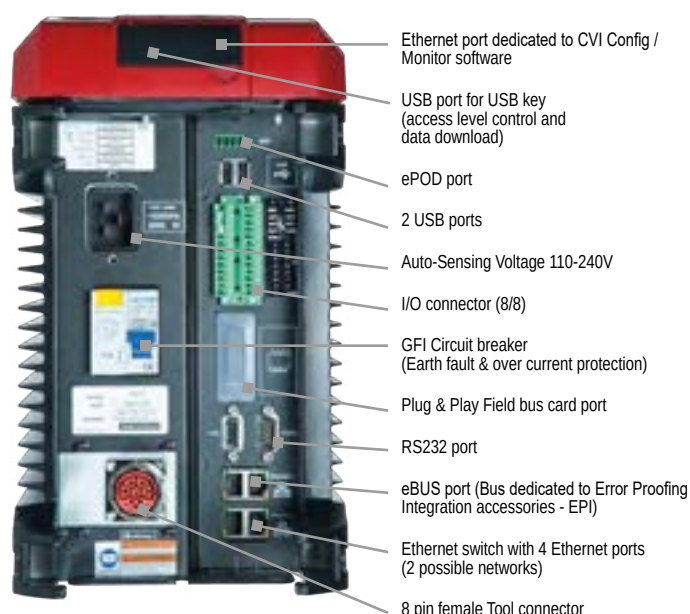


UNMATCHED FLEXIBILITY



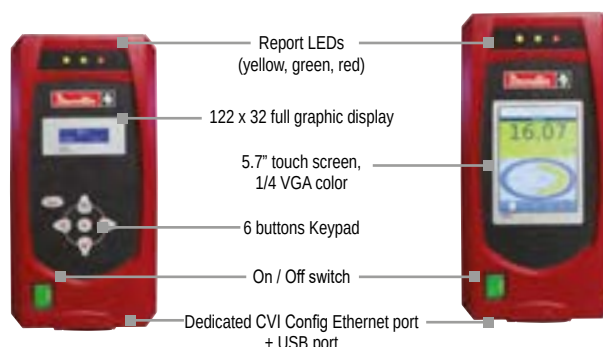
USER-FRIENDLY INTERFACE

Technical features



CVI3 Function /
CVI3 Essential

CVI3 Vision



FEATURES	CVI3 ESSENTIAL	CVI3 FUNCTION	CVI3 VISION	TWINCVI3 SYNCHRO/ASYNCHRO
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CONTROLLERS

Weight - kg (lbs)	9.3 (20.5)	9.3 (20.5)	9.3 (20.5)	15 (33.1)
Volume (dm ³)	19.5	19.5	19.5	29.6
Color touchscreen			✓ (5.7")	✓ (5.7")

STORAGE

Pset results (torque, angle, date, time, report)	10000 (Only OK/NOK)	10000	10000	10000/20000
Pset curves (OK/NOK)		20	20	20/40
Assembly Process results	1000 (Only OK/NOK)	1000	1000	1000/2000
Event log storage (number of events)	500	500	500	500

BASIC FUNCTIONS

Nbr of Psets	6	250	250	250
Nbr of steps per Pset	15	15	15	15
Barcode reading (standard and 2D)	✓	✓	✓	✓
Quick Pset	✓	✓	✓	✓
Tubenut release	✓	✓	✓	✓

ADVANCED FUNCTIONS

Access Level Control/Management with unlimited profiles	✓	✓	✓	✓
ID input to select Assembly Process (up to 10 different identifiers)	✓	✓	✓	✓
Number of Assembly Process	6	250	250	250
Advanced Soft PLC (in option with CVILOGIX, ePod Essential, ePod2C (min.) is required)	✓	✓	✓	✓
1 Network/Fieldbus Access point per group of up to 14 tools			✓	✓
Full synchronized control for a group of up to 14 controllers			✓	✓

TIGHTENING STRATEGIES

Control : torque, angle, torque OR angle, torque AND angle, yield point*, torque rate*, seating detection*	Torque only	✓	✓	✓
Monitoring : torque rate*, 2nd part angle, current, slip off, stick slip, time & rundown angle	Angle only	✓	✓	✓

CONNECTIVITY

Configurable I/O	8/8	8/8	8/8	8/8
USB ports (2 + 1 front)	✓	✓	✓	✓
Embedded Ethernet switch (4 ports + 1 front – 2 networks)	✓	✓	✓	✓
Dedicated Bus for integrated positioning management	✓	✓	✓	✓

OPTIONAL FIELDBUS

Plug & Play Fieldbus module port (EthernetIP, ProfiNet A/B/IRT, Modbus TCP, DeviceNet, Profibus, CC-Link)	✓	✓	✓	✓
Configurable fieldbus data mapping	✓	✓	✓	✓

*with cable tools

Controller



A



B



C



D

PIC REF	MODEL	PART NUMBER	CONSUMPTION (CURRENT)		MAIN SUPPLY	DIMENSIONS						WEIGHT	
			110V	240V		WIDTH		HEIGHT		DEPTH		kg	lb.
A	CVI3 Vision	615 932 691 0	8A	4A	Single-phase	175	6.9	361	14.2	310	12.2	9.3	20.5
A	CVI3 Vision eSTOP	615 932 694 0	8A	4A	Single-phase	175	6.9	361	14.2	310	12.2	9.3	20.5
B	TWINCVI3	615 932 697 0	16A	8A	Single-phase	265	10.4	361	14.2	310	12.2	15	33.1
B	TWINCVI3 eSTOP	615 932 698 0	16A	8A	Single-phase	265	10.4	361	14.2	310	12.2	15	33.1
C	CVI3 Function	615 932 690 0	8A	4A	Single-phase	175	6.9	361	14.2	310	12.2	9.3	20.5
C	CVI3 Function eSTOP	615 932 693 0	8A	4A	Single-phase	175	6.9	361	14.2	310	12.2	9.3	20.5
D	CVI3 Essential	615 932 695 0	8A	4A	Single-phase	175	6.9	361	14.2	310	12.2	9.3	20.5

CVIMONITOR included with controller: License free remote software for realtime monitoring of results, curves, I/O status, Fieldbus diagnostic, calibration & maintenance indicators

POWER CORD

to be ordered with the controller

PLUG	DESCRIPTION	PART NO.
A	European	615 917 069 0
B	US NEMA 5-15	615 917 060 0
C	US NEMA 5-20	615 917 063 0
D	UK	615 917 070 0
E	Chinese	615 917 061 0



SOFTWARES
see page 96

OPTIONAL ACCESSORIES

ITEM	PART NO.
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Fieldbus modules

1	Profibus module	615 927 595 0
2	ProfiNet module (1 port)	615 927 596 0
3	ProfiNet module (2 ports)	615 927 597 0
3	ProfiNet IRT module (2 ports)	615 927 070 0
4	DeviceNet module	615 927 599 0
4	CC-Link module	615 927 598 0
5	EtherNet IP module	615 927 594 0
6	Modbus TCP module	615 927 615 0
7	CC-Link IE Module	615 927 943 0

ePOD

8	without ePOD	-
8	ePOD2C	615 936 311 0
8	ePOD3C	615 936 318 0
8	ePOD4C	615 936 312 0
8	ePOD4C PFCS	615 936 332 0
8	ePOD2 eCompass	615 936 333 0
8	EPOD VW AUDI XML	615 936 090 0
8	EPOD VOLVO SJC	615 936 092 0
8	ePOD RENAULT 3 FTT	615 936 840 0
8	ePOD RENAULT 2C FTT	615 936 842 0
8	ePOD RENAULT	615 936 335 0
8	EPOD IPM	615 936 109 0
8	EPOD CHRYSLER PFCS	615 936 091 0
8	EPOD 3	615 936 077 0
8	EPOD 2	615 936 076 0
8	EPOD 1	615 936 075 0

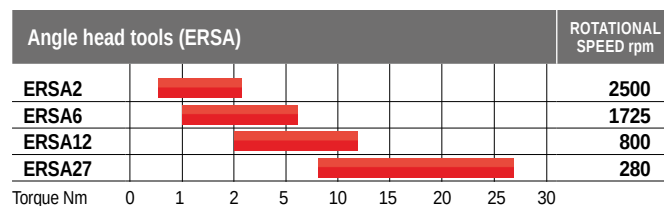
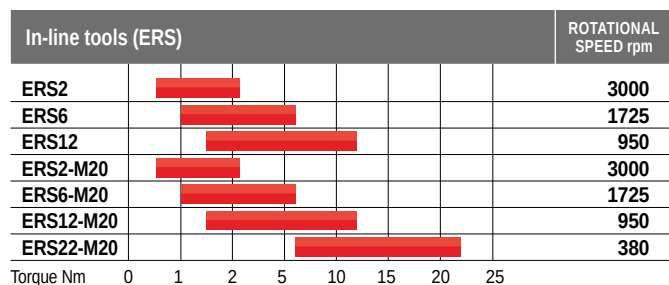
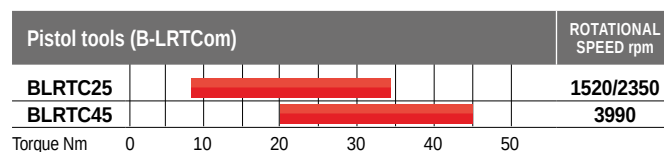
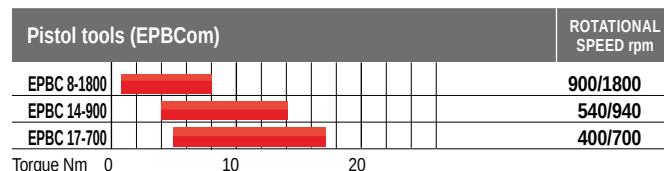
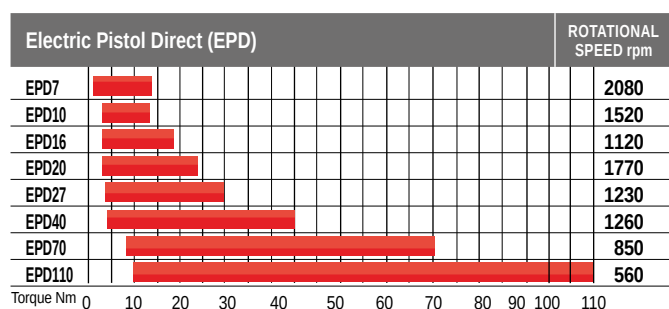
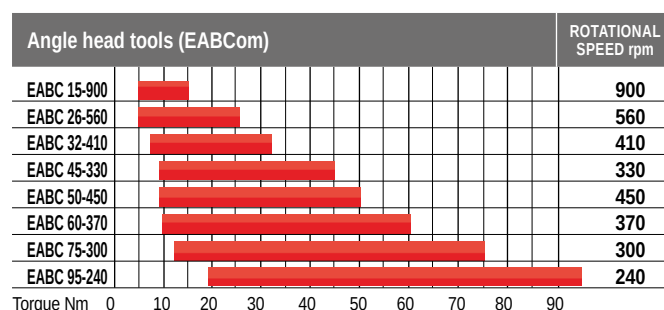
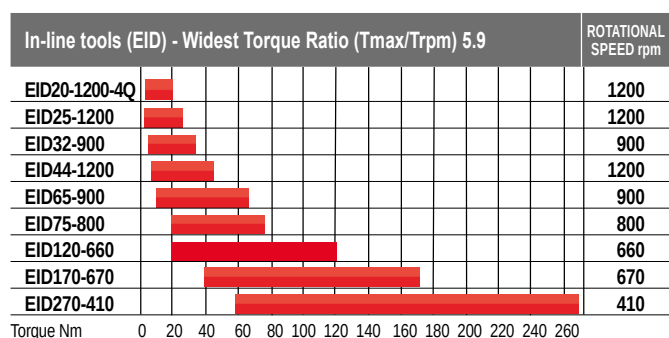
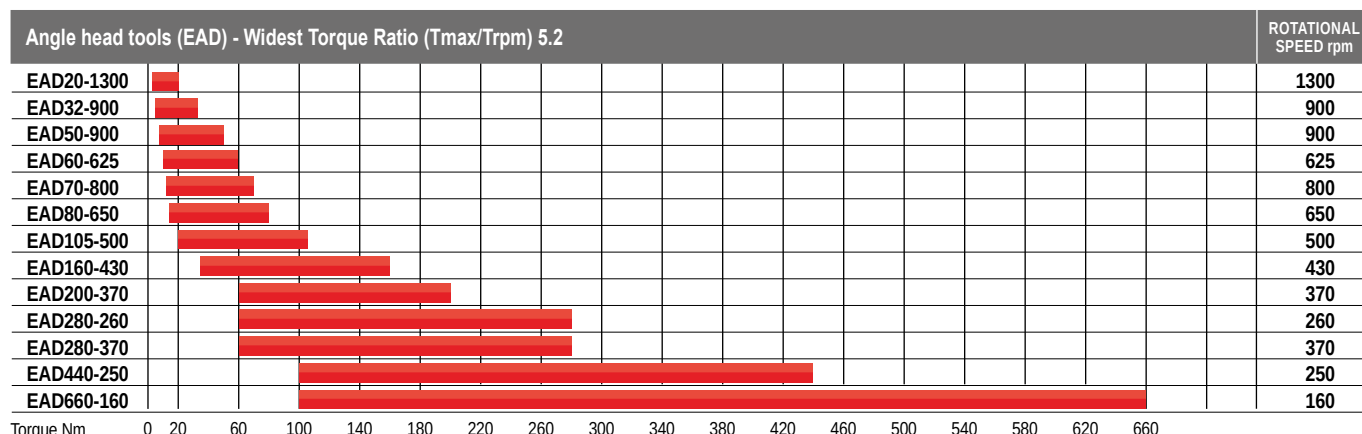


Others Accessories

9	Table mounting	615 397 399 5
10	Wall mounting CVI3 Function/Essential/Vision	615 397 631 5
11	Wall mounting TWINCVI3	615 811 897 0
12	Cable with 2 M8 male plugs - 0.5m (1.64ft)	615 917 626 0
	Cable with 2 M8 male plugs - 1m (3.28ft)	615 917 633 0
	Cable with 2 M8 male plugs - 2m (6.56ft)	615 917 634 0
13	Cable with 1 M8 male plugs - 5m (16.40ft)	615 917 635 0

Torque Range - Portable electric nutrunners

Performance of Portable electric nutrunners - EAD, EID, EABC, EPBC, B-LRTC, ERS, EPD and ERP-HT



EPD - Electric Pistol Direct



BOOST YOUR FLEXIBILITY

- Led for operator feed-back (configurable)
- Internal buzzer for sonor feed-back (configurable)
- Vibration reporting to improve the tightening feed-back to the operator (Configurable)



BOOST YOUR UPTIME

- Durability of the tools improved for a longer and better use
- New design, more ergonomic and robust for better resistance to extreme environments
- Dust and oil proof trigger tightening strategies



BOOST YOUR PRODUCTIVITY

- High speed tool and compact
- One hand for the tool, one hand to Boost productivity



Torque Range - Electric Pistol Direct

RÉFÉRENCE	DÉSIGNATION	OUTPUT DRIVE	CABLE OUTPUT	TORQUE MIN		TORQUE MAX		FREE SPEED	TOOL LENGTH		WEIGHT	
				Nm	ft/lb	Nm	ft/lb		mm	in	kg	lb
6151662810	EPD7-2080-4Q	Hexa ¼	EPD7 Bottom Cable	1	0.74	7	5.16	2080	206	8.11	0.9	1.98
6151662820	EPD7-2080-4Q-1	Hexa ¼	EPD7 Top Cable 1m	1	0.74	7	5.16	2080	206	8.11	0.9	1.98
6151662830	EPD7-2080-4Q-5	Hexa ¼	EPD7 Top Cable 5m	1	0.74	7	5.16	2080	206	8.11	0.9	1.98
6151662840	EPD7-2080-10S	SQ 3/8	EPD7 Bottom Cable	1	0.74	7	5.16	2080	206	8.11	0.9	1.98
6151662850	EPD7-2080-10S-1	SQ 3/8	EPD7 Top Cable 1m	1	0.74	7	5.16	2080	206	8.11	0.9	1.98
6151662860	EPD7-2080-10S-5	SQ 3/8	EPD7 Top Cable 5m	1	0.74	7	5.16	2080	206	8.11	0.9	1.98
6151662870	EPD10-1520-4Q	Hexa ¼	EPD10 Bottom Cable	2	1.48	10	7.38	1520	206	8.11	0.9	1.98
6151662880	EPD10-1520-4Q-1	Hexa ¼	EPD10 Top Cable 1m	2	1.48	10	7.38	1520	206	8.11	0.9	1.98
6151662890	EPD10-1520-4Q-5	Hexa ¼	EPD10 Top Cable 5m	2	1.48	10	7.38	1520	206	8.11	0.9	1.98
6151662900	EPD10-1520-10S	SQ 3/8	EPD10 Bottom Cable	2	1.48	10	7.38	1520	206	8.11	0.9	1.98
6151662910	EPD10-1520-10S-1	SQ 3/8	EPD10 Top Cable 1m	2	1.48	10	7.38	1520	206	8.11	0.9	1.98
6151662920	EPD10-1520-10S-5	SQ 3/8	EPD10 Top Cable 5m	2	1.48	10	7.38	1520	206	8.11	0.9	1.98
6151662930	EPD16-1120-4Q	Hexa ¼	EPD16 Bottom Cable	2	1.48	16	11.81	1120	206	8.11	0.9	1.98
6151662950	EPD16-1120-4Q-5	Hexa ¼	EPD16 Top Cable 5m	2	1.48	16	11.81	1120	206	8.11	0.9	1.98
6151662960	EPD16-1120-10S	SQ 3/8	EPD16 Bottom Cable	2	1.48	16	11.81	1120	206	8.11	0.9	1.98
6151662970	EPD16-1120-10S-1	SQ 3/8	EPD16 Top Cable 1m	2	1.48	16	11.81	1120	206	8.11	0.9	1.98
6151662980	EPD16-1120-10S-5	SQ 3/8	EPD16 Top Cable 5m	2	1.48	16	11.81	1120	206	8.11	0.9	1.98
6151662990	EPD20-1770-10S	SQ 3/8	EPD20 Bottom Cable	2	1.48	20	14.75	1770	222	8.74	1.1	2.43
6151663000	EPD20-1770-10S-1	SQ 3/8	EPD20 Top Cable 1m	2	1.48	20	14.75	1770	222	8.74	1.1	2.43
6151663010	EPD20-1770-10S-5	5 SQ 3/8	EPD20 Top Cable 5m	2	1.48	20	14.75	1770	222	8.74	1.1	2.43
6151663020	EPD27-1230-10S	SQ 3/8	EPD27 Bottom Cable	3	2.21	27	19.91	1230	222	8.74	1.1	2.43
6151663030	EPD27-1230-10S-1	SQ 3/8	EPD27 Top Cable 1m	3	2.21	27	19.91	1230	222	8.74	1.1	2.43
6151663040	EPD27-1230-10S-5	SQ 3/8	EPD27 Top Cable 5m	3	2.21	27	19.91	1230	222	8.74	1.1	2.43
6151663050	EPD40-1260-10S	SQ 3/8	EPD40 Bottom Cable	4	2.95	40	29.5	1260	275	10.83	1.95	4.3
6151663060	EPD40-1260-10S-1	SQ 3/8	EPD40 Top Cable 1m	4	2.95	40	29.5	1260	275	10.83	1.95	4.3
6151663070	EPD40-1260-10S-5	SQ 3/8	EPD40 Top Cable 5m	4	2.95	40	29.5	1260	275	10.83	1.95	4.3
6151663080	EPD70-850-SQ1/2	SQ 1/2	EPD70 Bottom Cable	7	5.16	70	51.63	850	275	10.83	1.95	4.3
6151663090	EPD70-850-SQ1/2-1	SQ 1/2	EPD70 Top Cable 1m	7	5.16	70	51.63	850	275	10.83	1.95	4.3
6151663100	EPD70-850-SQ1/2-5	SQ 1/2	EPD70 Top Cable 5m	7	5.16	70	51.63	850	275	10.83	1.95	4.3
6151663110	EPD110-560-SQ1/2	SQ 1/2	EPD110 Bottom Cable	10	7.38	110	81.13	560	310	12.21	2.7	5.95
6151663120	EPD110-560-SQ1/2-1	SQ 1/2	EPD110 Top Cable 1m	10	7.38	110	81.13	560	310	12.21	2.7	5.95
6151663130	EPD110-560-SQ1/2-5	SQ 1/2	EPD110 Top Cable 5m	10	7.38	110	81.13	560	310	12.21	2.7	5.95

Electric transducerized High torque - CVI3

75 to 1700 Nm (55 to 1253 ft.lb) - 85 to 822 rpm

The transducerized nutrunners range ERP is dedicated to high torque applications, especially structural assemblies requiring accuracy and traceability.



A



B



C

Complete Loop



ERS / ERPHT Adaptor necessary

PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE RANGE				MAX RUNDOWN TORQUE	SPEED	GEARBOX DIAMETER		LENGHT		WEIGHT		SPLINE
				MIN.	MAX.	MIN.	MAX.			mm	in.	mm	in.	kg	lb	
A	ERP250	615 165 883 0	3/4	75	250	55	184	18	822	54	2.13	355	13.9	5.1	11.2	3
B	ERP500	615 165 884 0	3/4	150	500	110	368	37	347	67	2.64	390	15.3	5.8	12.8	4
C	ERP750	615 165 885 0	1	225	750	165	553	56	245	67	2.64	410	16.1	6.2	13.7	5
C	ERP1000	615 165 886 0	1	300	1000	221	737	75	205	67	2.64	420	16.5	6.4	14.1	5
•	ERP1700	615 165 887 0	1	510	1700	376	1253	127	85	84	3.31	455	17.9	8.3	18.3	9

ACCESSORIES



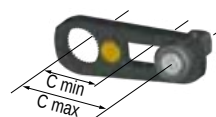
REACTION BARS	SPLINE	1 STRAIGHT	2 S-TYPE	3 L TYPE ALUMINIUM	4 SQUARE	5 SLIDING DRIVE	6 SLIDING DRIVE EXTENDED C-C	7 SUSPENSION BAIL	8 SIDE HANDLE
ERP250	3	615 812 097 5	615 812 068 5	615 812 072 5	615 812 057 5	615 812 113 5	N/A	615 812 123 0	615 576 085 0
ERP500	4	615 812 054 5	615 812 069 5	615 812 073 5	615 812 058 5	615 812 062 5	615 812 063 5	615 812 123 0	615 576 085 0
ERP750 / ERP1000	5	615 812 055 5	615 812 070 5	N/A	615 812 059 5	615 812 064 5	615 812 065 5	615 812 123 0	615 576 085 0
ERP1700	9	615 812 056 5	615 812 071 5	N/A	615 812 060 5	615 812 066 5	615 812 067 5	615 812 123 0	615 576 085 0



NUTRUNNER CABLE	PART NO.
Tool cable 3m (9.8ft)	615 917 461 0
Tool cable 5m (16ft)	615 917 462 0
Tool cable 10m (32.8ft)	615 917 464 0
Tool cable 15m (49.2ft)	615 917 465 0



DESCRIPTION	PART NO.
ERS-ERPHT Adaptor	615 936 537 0



Sliding drive C-C

PART NO.	C	
	mm (in.)	mm (in.)
615 812 113 5	70 (2.76)	120 (4.72)
615 812 062 5	76 (3)	126 (4.96)
615 812 063 5	82 (3.23)	218 (8.58)
615 812 064 5	80 (3.15)	125 (4.92)
615 812 065 5	82 (3.23)	218 (8.58)
615 812 066 5	80 (3.15)	130 (5.11)
615 812 067 5	80 (3.15)	280 (11.0)

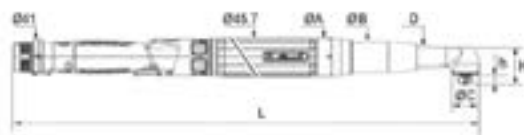


Angle head electric nutrunners - AXON Terminal & CVI3

3 to 105 Nm (2.2 to 77.4 ft.lb) - 500 to 1300 rpm



MODEL	h		H		ØA		ØB		ØC		ØD	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
EAD20-1300	12.0	0.47	45.5	1.79	46	1.81	37	1.46	28	1.10	25	0.98
EAD32-900	12.0	0.47	45.5	1.79	46	1.81	37	1.46	28	1.10	25	0.98
EAD50-900	12.0	0.47	51.1	2.01	46	1.81	37	1.46	35	1.38	28	1.10
EAD60-625	12.0	0.47	56.7	2.23	58	2.28	41	1.61	40	1.57	32	1.26
EAD60-625 - 1/2"	12.0	0.47	52.0	2.43	58	2.28	41	1.61	40	1.57	32	1.26
EAD70-800	12.0	0.47	56.7	2.23	58	2.28	43	1.69	40	1.57	32	1.26
EAD70-800 - 1/2"	17.0	0.67	62.0	2.43	58	2.28	43	1.69	40	1.57	32	1.26
EAD80-650	17.5	0.69	60.4	2.38	58	2.28	48	1.89	45	1.77	40	1.57
EAD105-500	17.5	0.69	60.4	2.38	58	2.28	48	1.89	45	1.77	40	1.57



ACCESSORIES
see page 95

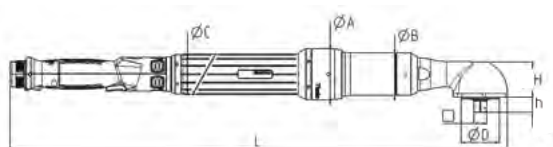
MODEL	PART NUMBER	SQUARE DRIVE	TORQUE						ROTATIONAL SPEED	LENGTH		WEIGHT	
			MIN.	RECOM-MENDED	MAX.	MIN.	RECOM-MENDED	MAX.		mm	in.	kg	lb.
		in.	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	rpm				
EAD20-1300	615 165 606 0	3/8	3	18	20	2.2	13.3	14.8	1300	481	19.2	1.6	3.53
EAD32-900	615 165 607 0	3/8	5	30	32	3.7	22.1	23.6	900	481	19.2	1.6	3.53
EAD50-900	615 165 609 0	3/8	8	45	50	5.9	33.2	40.6	900	531	20.9	2	4.41
EAD60-625	615 166 079 0	3/8	10	55	60	7.4	41	44	625	504	19.8	2.1	4.5
EAD60-625 - 1/2"	615 166 188 0	1/2	10	55	60	7.4	41	44	625	504	19.8	2.1	4.5
EAD70-800	615 165 611 0	3/8	12	65	70	8.9	47.9	51.6	800	544	21.4	2.3	5.07
EAD70-800	615 165 882 0	1/2	12	65	70	8.9	47.9	51.6	800	544	21.4	2.3	5.07
EAD80-650	615 165 612 0	1/2	15	75	80	11.1	55.3	59	650	567	22.3	2.9	6.39
EAD105-500	615 165 613 0	1/2	20	90	105	14.8	66.4	77.4	500	567	22.3	2.9	6.39

Angle head electric nutrunners - AXON Terminal & CVI3

35 to 660 Nm (26 to 487 ft.lb) - 160 to 430 rpm



MODEL	h		H		ØA		ØB		ØC		ØD	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
EAD160-430	17.1	0.67	65	2.56	66	2.6	55	2.17	52	2.05	50	1.16
EAD200-370	23	0.91	85	3.35	66	2.6	55	2.17	52	2.05	62	2.44
EAD280-260	23	0.91	85	3.35	66	2.6	55	2.17	52	2.05	62	2.44
EAD280-370	23	0.91	85	3.35	76	2.99	55	2.17	66	2.60	62	2.44
EAD440-250	24	0.94	91	3.58	76	2.99	67	2.64	66	2.60	75	2.95
EAD660-160	33.1	1.3	110	4.33	76	2.99	67	2.64	66	2.60	106	4.17



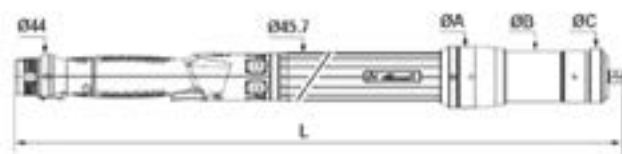
ACCESSORIES
see page 95

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				
EAD160-430	615 165 681 0	1/2	35	150	160	26	111	118	430	650	25.6	4.3	9.5
EAD200-370	615 165 682 0	3/4	60	170	200	44	125	148	370	673	26.5	5.1	11.2
EAD280-260	615 165 683 0	3/4	60	250	280	44	184	207	260	673	26.5	5.1	11.2
EAD280-370	615 165 684 0	3/4	60	250	280	44	184	207	370	681	26.8	6.1	13.5
EAD440-250	615 165 685 0	3/4	100	400	440	74	295	325	250	735	28.9	8.4	18.5
EAD660-160	615 165 686 0	1	100	600	660	74	443	487	160	774	30.4	11.0	24.3



In-line electric nutrunners - AXON Terminal & CVI3

3 to 75 Nm (2.2 to 57.5 ft.lb) - 800 to 1200 rpm



MODEL	ØA		ØB		ØC	
	mm	in.	mm	in.	mm	in.
EID20-1200-4Q	62	2.44	37	1.46	60	2.36
EID25-1200	62	2.44	37	1.46	60	2.36
EID32-900	62	2.44	37	1.46	60	2.36
EID44-1200	62	2.44	48	1.89	54	2.13
EID65-900	58	2.28	48	1.89	54	2.13
EID75-800	58	2.28	48	1.89	54	2.13



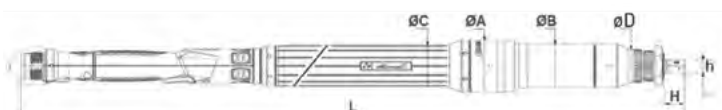
ACCESSORIES
see page 95

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				
EID20-1200-4Q*	615 165 992 0	Hex. 1/4 F	3	18	21	2.2	13.3	15.5	1200	430	16.9	1.45	3.20
EID25-1200*	615 165 614 0	Sq. 3/8	3	20	25	2.2	14.8	18.4	1200	430	16.9	1.45	3.20
EID32-900*	615 165 615 0	Sq. 3/8	5	30	32	3.7	22.1	25.1	900	430	16.9	1.45	3.20
EID44-1200*	615 165 616 0	Sq. 3/8	7	40	44	5.2	29.5	33.2	1200	489	19.3	2	4.41
EID65-900	615 165 617 0	Sq. 1/2	10	60	65	7.4	44.3	47.9	900	489	19.3	2	4.41
EID75-800	615 165 618 0	Sq. 1/2	20	70	75	14.8	51.6	57.5	800	489	19.3	2	4.41

(*): Tools mounted with second lever start in standard

In-line electric nutrunners - AXON Terminal & CVI3

35 to 660 Nm (26 to 487 ft.lb) - 160 to 430 rpm



MODEL	ØA		ØB		ØC		ØD	
	mm	in.	mm	in.	mm	in.	mm	in.
EID120-660	66	2.60	55	2.17	52	2.05	42.0	1.65
EID170-670	72	2.83	55	2.17	66	2.60	42.0	1.65
EID270-410	76	2.99	67	2.64	66	2.60	53.5	2.11



ACCESSORIES
see page 95

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				
EID120-660	615 165 677 0	1/2	20	110	120	15	81	89	660	583	22.9	3.3	7.3
EID170-670	615 165 678 0	1/2	40	150	170	30	111	125	670	591	23.3	4.6	10.1
EID270-410	615 165 679 0	3/4	60	250	270	44	184	199	410	625	24.6	6.1	13.5

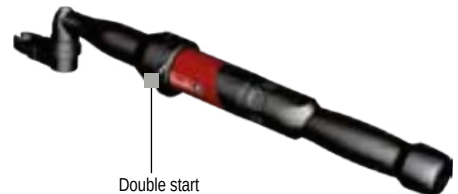
Crowfoot and tube nut tools



Offset Closed



Offset Open



Double start



In line Closed



In line Open



Double start



Flush Socket tools



Hold and Drive tools

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 also provide customized tools.



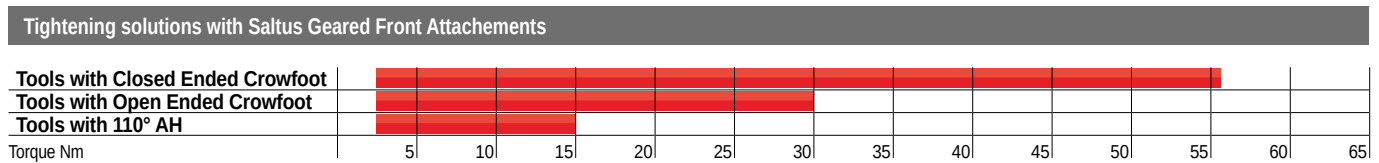
Standard Tightening Solutions with SALTUS

Geared Front Attachments

The Desoutter tightening solutions with SALTUS Geared front attachment includes a range of Closed-ended crowfoots, Open ended Crowfoots & 110° Angle Heads offering best-in class performance, quality and reliability for the most demanding applications.

The patented designs of SALTUS Geared front attachment provides the market leading efficiency & accuracy, and the optimal integration with the Desoutter tool range delivers the most ergonomic and durable solution for high-class tightening.

Torque range:



STANDARD TOOL RANGES WITH SALTUS GFAS

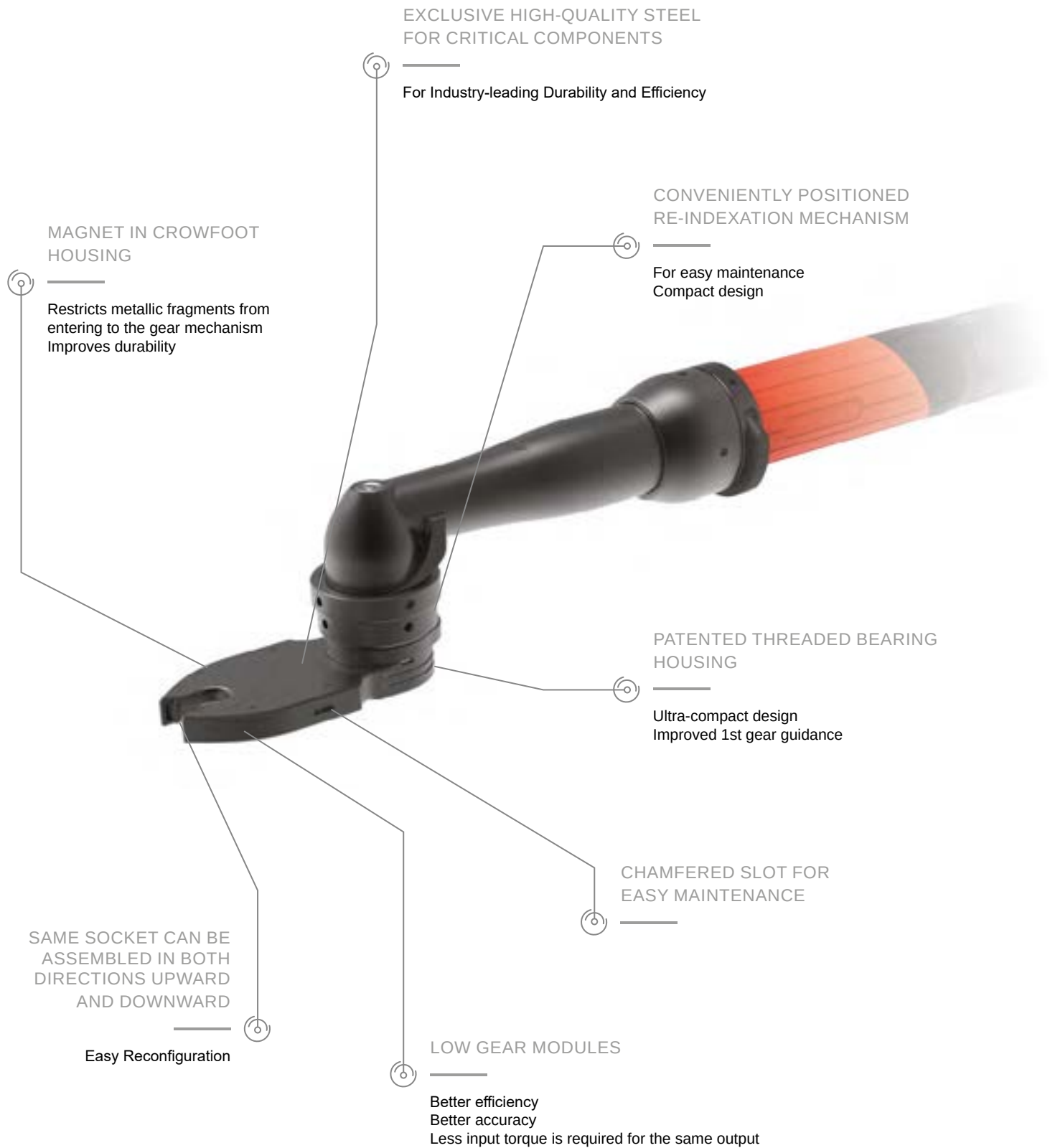


	ELECTRIC TRANSDUCERIZED	ELECTRIC CLUTCH TOOL	PNEUMATIC TOOLS
EAD	✓		
EAB	✓		
EPB	✓		
E-LIT		✓	
ERSA	✓		
ECSA	✓		
SD			✓
SH			✓

Standard Tightening Solutions with SALTUS

Geared Front Attachments

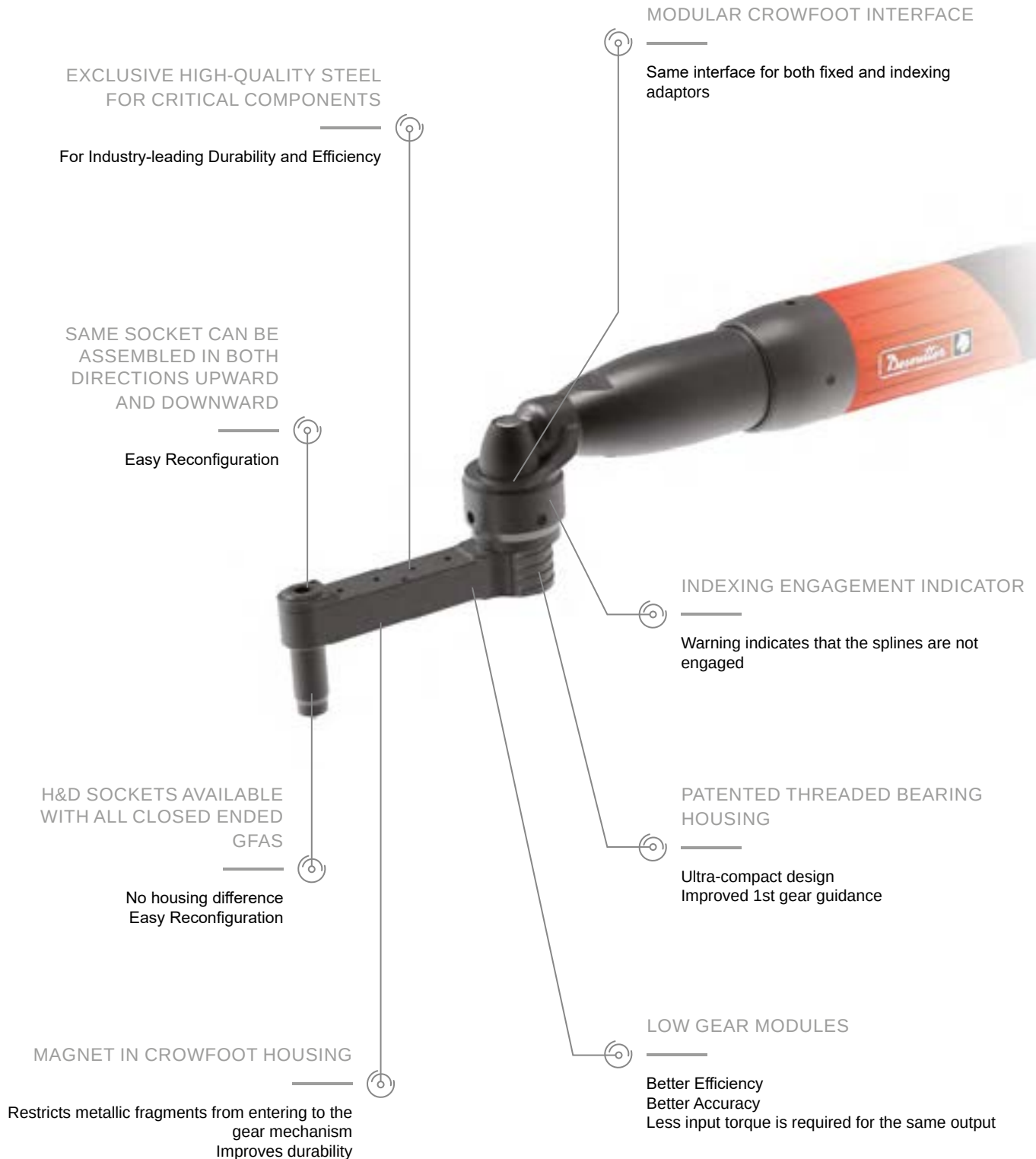
Main Features



Standard Tightening Solutions with SALTUS

Geared Front Attachments

Main Features



Standard Tightening Solutions with SALTUS

Geared Front Attachments

Main Features



BENEFITS

- Compact Solution thanks to optimal integration with Desoutter tools
- High accuracy and Durability
- Better tool Ergonomics
- Hundreds of standard configurations with Desoutter tool ranges are possible to access the most challenging tightening joints



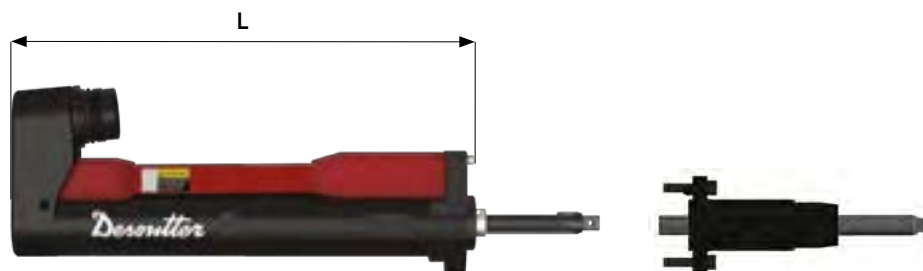
MODEL	PART NUMBER	BASE TOOL / DRIVE UNIT	MAX. OUTPUT TORQUE	MAX. OUTPUT SPEED	TOOL ANGLE HEAD	CROWFOOT TYPE	ADAPTER TYPE	OUTPUT DIMENSION A/F	EXTENSION	BATTERY TYPE
			Nm	rpm				mm		
EAD50-900-OOZRg22h-30-900	6150700108	EAD50-900	30	900	90°	Open Offset	Fixed	14	Flush	-
EAD32-900-OOZMFG29-18-900	6150700110	EAD32-900	18	900	90°	Open Offset	Fixed	10	Flush	-
EAD50-900-COZE4J7Z-31-833	6150700113	EAD50-900	31	833	90°	Closed Offset	Fixed	12	Flush	-
EABC32-410-COZE4E7Z-29-379	6150700116	EABC32-410	29	379	90°	Closed Offset	Fixed	12	Flush	18/36 V

Contact your Desoutter representative for assistance in configuring the right standard solution with SALTUS geared front attachments for your application.



Fixtured electric spindles - AXON Terminal & CVI3

1.6 to 2000 Nm (0.7 to 1475 ft.lb) - 47 to 2000 rpm



MODEL	LENGTH TOOL-L		WEIGHT TOOL	
	mm	in.	kg	lb.
EFD43-8	276	10.9	2.1	4.6
EFD43-15	276	10.9	2.1	4.6
EFD43-30	311	12.2	2.3	5.1
EFD43-45	311	12.2	2.3	5.1
EFD51-70	357	14.0	3.9	8.6
EFD51-135	357	14.0	3.9	8.6
EFD60-175	373	14.7	5.3	11.7
EFD60-250	373	14.7	5.3	11.7
EFD80-330	435	17	10.2	22.5
EFD80-450	435	17	10.2	22.5
EFD80-680	435	17	10.2	22.5
EFD80-950	435	17	10.2	22.5
EFD106-1100	476	19	15.3	33.7
EFD106-1600	511	20	15.9	35
EFD106-1900	511	20	15.9	35

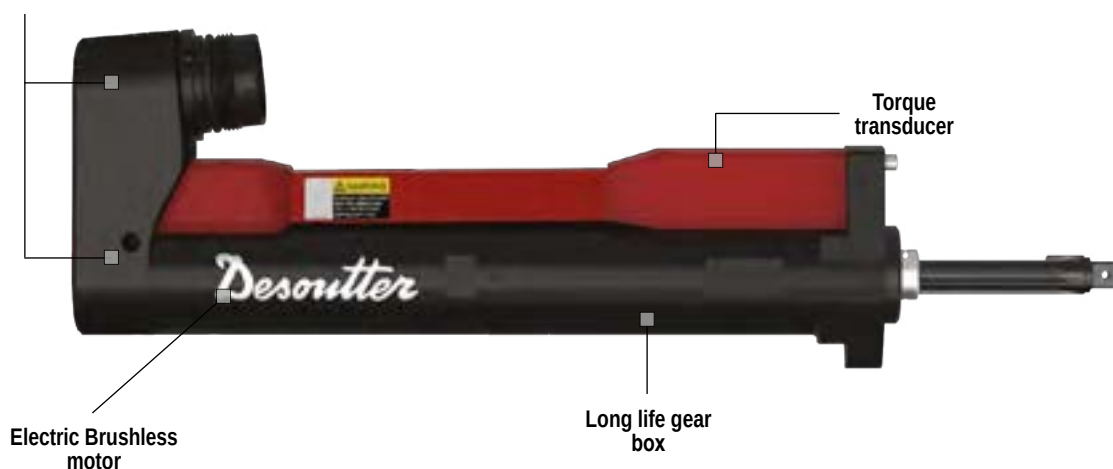
TELESCOPIC MODULES (OPTION)	PART NO.	LENGTH		WEIGHT	
		mm	in.	kg	lb.
Telescopic Module 3/8" EFx43 IP54	615 397 013 5	165	6.50	0.75	1.65
Telescopic Module 1/2" EFx51 IP54	615 397 017 5	183	7.20	1.55	3.42
Telescopic Module 3/4" EFx60 IP54	615 397 014 5	203	7.99	1.95	4.3
Telescopic Module 3/4" EFx80 IP54	615 399 267 0	398	15.67	9.6	21.16
Telescopic Module 1" EFx80 IP54	615 399 268 0	406	15.98	9.6	21.16
Telescopic Module 1" EFx106 IP54	615 399 296 0	446	17.56	14.1	31.08
Telescopic Module 1 1/2" EFx106 IP54	615 399 270 0	467	18.39	14.1	31.08

 **ACCESSOIRES**
see page 94

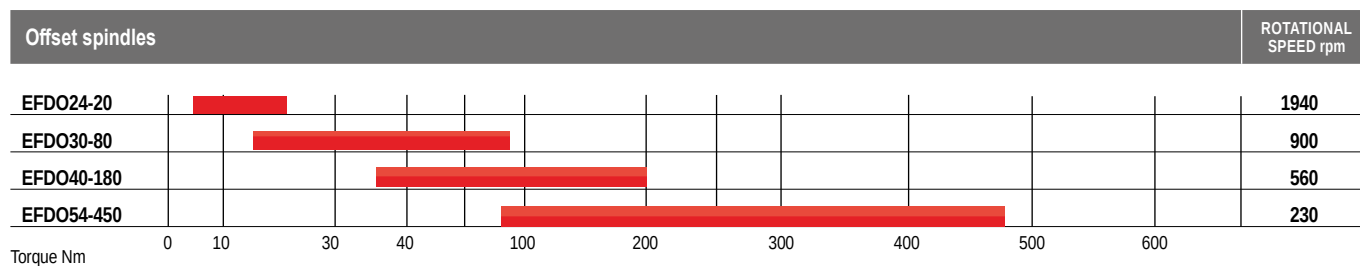
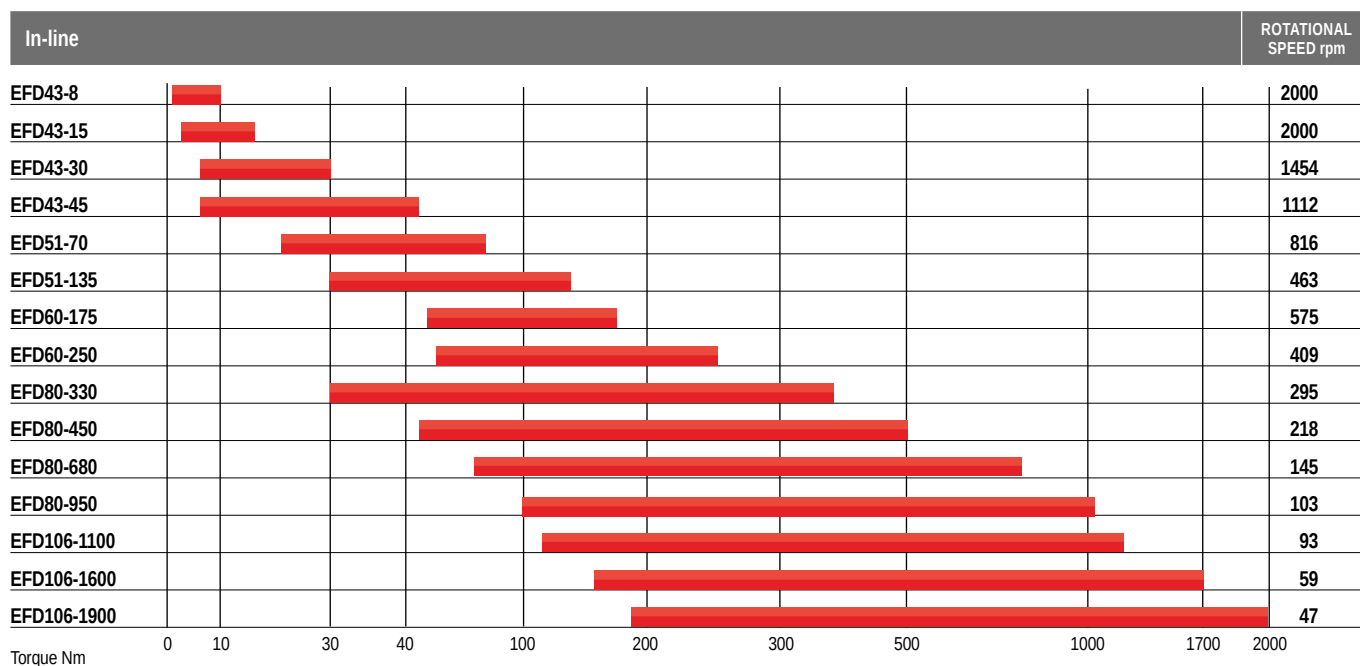
MODEL	PART NUMBER	SQUARE DRIVE	TORQUE						ROTATIONAL SPEED	TELESCOPIC STROKE		MIN.CENTRE DISTANCE	
			MIN.	RECOM- MENDED	MAX.	MIN.	RECOM- MENDED	MAX.		mm	in.	mm	in.
EFD43-8	615 166 204 0	3/8	1.6	8	10	0.7	5.9	7.4	2000	50	1.97	43	1.69
EFD43-15	615 166 205 0	3/8	1.5	15	17	2.2	11.1	12.5	2000	50	1.97	43	1.69
EFD43-30	615 166 206 0	3/8	3	30	32	5.2	22.1	23.6	1454	50	1.97	43	1.69
EFD43-45	615 166 207 0	3/8	4.5	45	50	5.2	33.2	36.9	1112	50	1.97	43	1.69
EFD51-70	615 166 208 0	1/2	7	70	80	14.7	51.6	59	816	50	1.97	51	2.01
EFD51-135	615 166 209 0	1/2	13.5	135	150	22.1	99.6	111	463	50	1.97	51	2.01
EFD60-175	615 166 211 0	3/4	17.5	175	190	36.9	129	140	575	50	1.97	60	2.36
EFD60-250	615 166 212 0	3/4	25	250	280	40.6	184	206	409	50	1.97	60	2.36
EFD80-330	615 166 213 0	3/4	33	330	360	22.1	243.4	265.5	299	60	1.97	80	3.15
EFD80-450	615 166 214 0	3/4	45	450	500	33.2	331.9	368.8	218	60	1.97	80	3.15
EFD80-680	615 166 215 0	1	68	680	740	51.6	501.5	545.8	145	60	1.97	80	3.15
EFD80-950	615 166 216 0	1	90	950	1050	73.8	700.7	774.4	103	60	1.97	80	3.15
EFD106-1100	615 166 217 0	1	110	1100	1150	81.1	811.3	848.2	93	60	1.97	106	4.17
EFD106-1600	615 166 218 0	1 1/2	160	1600	1700	118.0	1180.1	1253.9	59	60	1.97	106	4.17
EFD106-1900	615 166 219 0	1 1/2	190	1900	2000	140.1	1401.4	1475.1	47	60	1.97	106	4.17

Torque Range - Fixtured electric spindles

Tool connector with 350° rotation
in both direction



Performance of Fixtured electric spindles - EFD Range



Fixtured electric spindles - AXON Terminal & CVI3

3 to 250 Nm (2.2 to 206 ft.lb) - 145 to 2000 rpm



PIC REF	MODEL	PART NUMBER	SQUARE DRIVE	TORQUE						ROTATIONAL SPEED	TELESCOPIC STROKE		MIN.CENTRE DISTANCE	
				MIN.	RECOM-MENDED	MAX.	MIN.	RECOM-MENDED	MAX.		mm	in.	mm	in.
	EFD43-15-TA	6151662530	3/8	3	15	17	2.2	11.1	12.5	2000	50	1.97	43	1.69
	EFD43-30-TA	6151662540	3/8	7	30	32	5.2	22.1	23.6	1454	50	1.97	43	1.69
	EFD43-45-TA	6151662550	3/8	7	45	50	5.2	33.2	36.9	1112	50	1.97	43	1.69
	EFD51-135-TA	6151662560	1/2	30	135	150	22.1	99.6	111	463	50	1.97	51	2.01
	EFD60-95-TA	6151662570	1/2	22	95	105	16.2	70.1	77.4	1055	50	1.97	60	2.36
	EFD60-175-TA	6151662580	3/4	50	175	190	36.9	129	140	575	50	1.97	60	2.36
	EFD60-250-TA	6151662590	3/4	55	250	280	40.6	184	206	409	50	1.97	60	2.36
A	EFD80-330-TA	8920904619	3/4	30	330	360	22.1	243.4	265.5	299	60	1.97	80	3.15
A	EFD80-450-TA	8920904512	3/4	45	450	500	33.2	331.9	368.8	218	60	1.97	80	3.15
A	EFD80-680-TA	8920904732	1	70	680	740	51.6	501.5	545.8	145	60	1.97	80	3.15



ACCESSOIRES
see page 94

Fixtured offset electric spindles -AXON Terminal & CVI3

4 to 480 Nm (2.9 to 352.9 ft.lb) - 230 to 1940 rpm



PIC REF	MODEL	PART NUMBER	SOCKET HOLDER	STROKE	TORQUE						FREE SPEED	C-C DISTANCE		TOOL LENGTH		WEIGHT	
					MIN.	RECOM- MENDED	MAX.	MIN.	RECOM- MENDED	MAX.		mm	in.	mm	in.	kg	lb
			in.	mm	Nm	Nm	Nm	ft.lb	ft.lb	ft.lb	rpm						
EFDO																	
A	EFDO24-20	615 166 190 0	3/8	50	4	20	22	2.9	14.7	16.2	1940	24	0.94	350	13.78	3.1	6.83
B	EFDO30-80	615 166 191 0	1/2	50	16	80	90	5.9	58.8	66.2	900	30	1.18	450	17.72	5.5	12.12
C	EFDO40-180	615 166 192 0	3/4	50	36	180	200	13.2	132.4	147.1	560	40	1.57	485	19.09	8.8	19.40
D	EFDO54-450	615 166 193 0	3/4	50	90	450	480	33.1	330.9	352.9	230	54	2.13	600	23.62	17.2	37.92



Cable for EPD / EAD / EID / EFD



CABLE FOR EPD TOOLS	PART NO.
CABLTO-C3-LT (2.5m)	615 917 835 0
CABLTO-C3-LT (5m)	615 917 836 0
CABLTO-C3-LT (10m)	615 917 837 0
CABLTO-C3-LT (15m)	615 917 838 0

CABLE FOR EAD & EID TOOLS	PART NO.
Tool cable 2.5m (8.2ft)	615 917 601 0
Tool cable 5m (16ft)	615 917 602 0
Tool cable 10m (32.8ft)	615 917 604 0
Tool cable 15m (49.2ft)	615 917 605 0
Tool cable eFLEX 2.5m (8.2ft)	615 917 631 0
Tool cable eFLEX 5m (16.4ft)	615 917 632 0

CABLE FOR EFD RANGE TOOLS	PART NO.
Tool cable 1m (3.28ft)	615 917 650 0
Tool cable 2.5m (8.2ft)	615 917 651 0
Tool cable 5m (16ft)	615 917 652 0
Tool cable 10m (32.8ft)	615 917 654 0
Tool cable 15m (49.2ft)	615 917 655 0

EXTENSION CABLE FOR ERP TOOLS	PART NO.
Extension cable 5m (16ft)	615 917 083 0
Extension cable 10m (32.8ft)	615 917 084 0
Extension cable 15m (49.2ft)	615 917 085 0
Extension cable 20m (65.6ft)	615 917 086 0
Extension cable 25m (82ft)	615 917 087 0
Extension cable 30m (98ft)	615 917 088 0

EXTENSION CABLE FOR EPD, EAD, EID, EFD RANGE TOOLS	PART NO.
Ext. cable 8m (26.2ft)	615 917 581 0
Ext. cable 16m (52.5ft)	615 917 584 0
Ext. cable 32m (105ft)	615 917 587 0
Ext. cable 50m (164ft)	615 917 589 0

eBUS CABLE	PART NO.
eBUS cable Shielded 1m (3.3ft)	615 917 607 0
eBUS cable Shielded 3m (9.9ft)	615 917 608 0
eBUS cable Shielded 5m (16.4ft)	615 917 609 0
eBUS cable Shielded 15m (49.2ft)	615 917 610 0
eBUS Termination plug	615 917 625 0

TRANSDUCER HOLDERS FOR EFD/EFM TOOLS	PART NO.
3/8" square drive EFD43 / EFM43	615 396 426 0
1/2" square drive EFD51/60-95 / EFM51/60-95	615 396 427 0
3/4" square drive EFD60-175/250 / EFM60-175/250	615 396 428 0
3/4" square drive EFD80-330/450 / EFM80-330/450	615 396 429 0

EPD TOOLS	PART NO.	
Side handle	615 401 282 0	For EPD7, EPD10 & EPD16 (Side handle – 467033 + spacer 6152112080)
Side handle	467033	For EPD20 & EPD27

Accessories



AXON Terminal and CVI3 Controllers

OPTIONAL ACCESSORIES

ITEM		PART NO.
1	Socket tray with tubes & inserts	615 936 095 0
	• Socket tray	615 936 071 0
2	Kit tubes & Inserts for Socket tray	615 398 035 5
3	Bit holder module for Socket tray	615 398 083 5
4	Bit Tray	615 936 080 0
5	Operator Panel	615 936 072 0
6	Stack Light	615 936 073 0
7	I/O Expander	615 936 074 0
	• Y cable for RS232 port	615 917 620 0

EPD

ACCESSORIES INCLUDED

ITEM		PART NO. ERP
1	Side handle	467033
2	Suspension bail	467003

EPD TOOLS		PART NO.
Plastic cover EPD7/10/16	Included with tool - for EPD7/10/16 bottom cable	615 211 214 0
Plastic cover EPD20/27	Included with tool - for EPD20/27 bottom cable	615 211 215 0
Plastic cover EPD7/10/16	Included with tool - for EPD7/10/16 top cable	615 211 219 0
Plastic cover EPD20/27	Included with tool - for EPD20/27 top cable	615 211 220 0
Plastic cover EPD40/70	Optional - for EPD40/70 bottom cable	615 211 217 0
Plastic cover EPD110	Optional - for EPD110 bottom cable	615 211 218 0
Plastic cover EPD40/70	Optional - for EPD40/70 top cable	615 211 222 0
Plastic cover EPD110	Optional - for EPD110 top cable	615 211 223 0

REACTION BARS	PART NO.	
Reaction bar interface	6155485040	For EPD7, EPD10 & EPD16
Reaction bar interface	6155475050	For EPD20 & EPD27
Reaction bar straight spline 4	6158120545	For EPD40, EPD70 & EPD110 : Straight reaction bar (1)
Reaction bar s-type spline 4	6158120695	For EPD40, EPD70 & EPD110 : S type reaction bar (2)
Reaction bar sliding drive spline 4	6158120625	For EPD40, EPD70 & EPD110: Sliding drive reaction bar short (5/6)
Reaction bar l-type aluminum spline 4	6158120735	For EPD40, EPD70 & EPD110: L-type aluminium bar (4)
Reaction bar sliding drive spline 4 ext	6158120735	For EPD40, EPD70 & EPD110: Sliding drive reaction bar extended (5/6)
Reaction bar square spline 4	6158120585	For EPD40, EPD70 & EPD110: Square reaction bar (4)



EAD / EID / ERPHT

OPTIONAL ACCESSORIES

ITEM		PART NO.
Suspension bail		
8	Swivelling - All tools up to EAD105/EID75	615 397 413 0
8	Swivelling - for tools EAD160/200/280-260 & EID120	615 571 072 0
Front trigger		
9	Mechanical kit for tools EAD20 to EAD105 & EID20 to EID75 (must be mounted on tool by authorized Desoutter service technician)	615 398 530 0
9	Electric kit for EAD20 to EAD32 & EID20 to EID32	615 911 034 5
9	Electric kit for EAD50 to EAD105 & EID44 to EID75	615 911 033 5
Telescopic output for EID tools		
10	3/8" for EID25/32	615 397 811 0
10	3/8" for EID44	615 398 178 0
10	1/2" for EID65/75	615 398 079 0
10	1/2" for EID120/170	615 398 080 0
10	3/4" for EID270/300	615 398 081 0
Telescopic output for EAD / EFDA tools		
11	1/2" for EAD160	615 398 076 0
11	3/4" for EAD200/280 & EFDA63-190	615 398 077 0
11	3/4" for EAD440	615 398 078 0
11	1" for EFDA107-450	615 398 161 0
Angle head protection for EAD tools		
12	For EAD20/32	615 573 207 0
12	For EAD50	615 573 208 0
12	For EAD60/70	615 573 209 0
12	For EAD80/105	615 573 210 0
In-line protection for EID tools		
13	For EID20/25/32	615 573 211 0
13	For EID44/65/75	615 573 212 0
Finger Protection for EAD tools		
14	For EAD20/32	615 397 635 0
14	For EAD50/60	615 397 636 0
14	For EAD70	615 397 637 0
Miscellaneous		
15	Handle lever	615 397 831 0
16	Trigger locker	615 397 842 0
17	Barcode reader + Headlight accessory - EAD/EID	615 812 138 0
18	Headlight accessory - EAD/EID	615 812 139 0
	• Mounting plate for custom arm - EAD160/200/280/440/660	Contact Desoutter
Desoutter Tool Holster		
19	DTH42 (For ERP3/5/10/20/30)	107892
20	DTH90 (For ERP3/5/10/20/30)	615 812 119 0
21	DTH TWIN (single) without rail	615 811 411 0
22	DTH TWIN rail kit with 2 Twin holders	615 811 412 5
23	DTH TWIN stand kit with base & 2 Twin holders	615 811 413 5
	• D53 arms	See page 168
	• TRA telescopic reaction arms	See page 178
	• Balancers	See page 188
ITEM	ADAPTER FOR ERAL/ERDL/ERP / EME / ERS AND ERP-HT	PART NO.
24	CVI II Tool Adaptor	615 936 070 0
25	ERS-ERPHT Adaptor	615 936 537 0

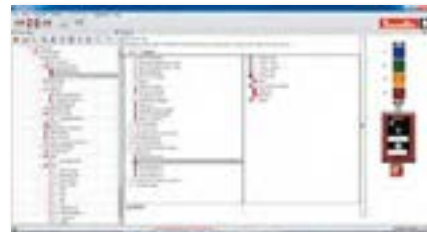
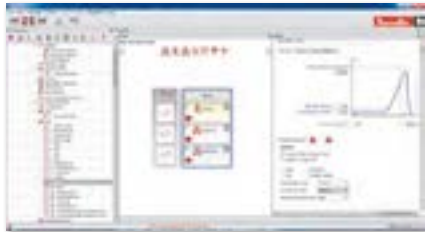


Set your tools right...

AXON Terminal ,CVI3 & CONNECT Platform



To set any point to point or via network with an intuitive and guided interface.



USER-FRIENDLY INTERFACE

- Configurable complete Assembly line view in the tree area
- Easy Tool/PSet setting including Quick Pset
- PSet steps definition with drag & drop feature and Intuitive settings with curve template
- Fast learning curve with contextual help
- Real time error-proofing consistency check

HIGH FLEXIBILITY

- Dynamic mapping for I/O, fieldbus with drag & drop feature
- Including positioning set up
- 2 ways transfer of all parameters between stations & PC
- Complete backup/restore of stations

ASSEMBLY PROCESS

- Complete process logic mapping including tightening & non-tightening operations with Assembly Process



(included in CVI CONFIG) To monitor results, maintenance and diagnostic in real time.

REAL-TIME MONITOR

- Results
- Curves
- Export in csv format
- Real time fieldbus variables monitoring

USER INFO HISTORY

- Alarms history (logs)
- Problem solving guidance

MAINTENANCE

- read the counters of the tools, controller and cables
- set preventive maintenance alarms
- reset the counters and alarms
- tool calibration
- autocalibration with Delta 6D
- Real time access to tool parameters/counters (partial/total number of cycles performed by the tool/cable)
- Test mode to check torque transducer, angle encoder, brushless motor
- Battery tool setup and maintenance

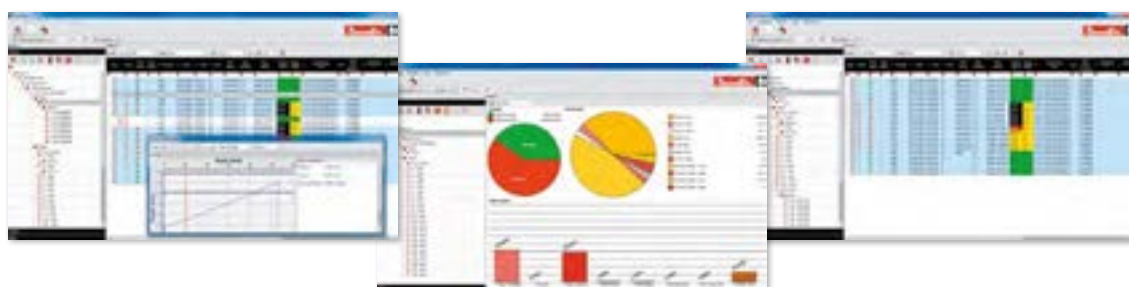


Set your tools right...

AXON Terminal ,CVI3 & CONNECT Platform



To collect tightening data and analyze results thanks to customized filter and report.



FLEXIBILITY

- Complete Factory and Assembly line layout definition
- Multi User Profiles definition
- Advanced customized filter definition
- Advanced data searching
- Multi tab view

TRACEABILITY

- Unlimited results and curves collection in local DB through plant network
- Complete back-up solution
- Including data import from USB key
- Result and Curve export in csv format

ANALYSIS

- OK/NOK distribution
- NOK distribution reasons analysis

	PART NO.
Software	
CVI ANALYZER - 1 user	615 927 696 0
CVI ANALYZER - 5 users	615 927 697 0
CVI ANALYZER - 25 users	615 927 698 0



To create & manage tailor-made access rights per user profile.

TAILOR MADE PROTECTION

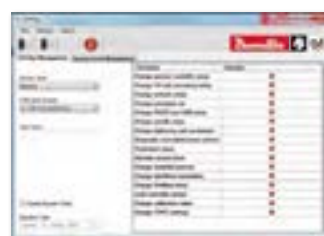
- Intuitive software to create/manage access level
- Protection guaranteed by unique profile keys created by the administrator (locked against copy)

SIMPLE INTERFACE

- Plug & Play USB key
- 4 profiles already available by default

HIGH FLEXIBILITY

- Unlimited number of profiles
- Set up the right access level



	PART NO.
Software	
CVI KEY	615 927 676 0

Set your tools right...

E-Lit Platform

Manage your E-LIT tools

- Save your E-LIT tool setting
- Use your own tool ID
- Upload saved setting on new tools
- Go further on the setting possibility



	PISTOL	ANGLE HEAD 18V	ANGLE HEAD 36V	ELC TOOLS	PART NO.
Software					
E-LIT CONFIG software	✓	✓	✓	✓	-
License E-LIT PC Level 1				✓	615 927 685 0

Set your tools right...

Other Platform

CVIPC2000 software is a user friendly tool able to program tightening cycles, collect and display results and curves for other Desoutter controllers platforms.

Programming mode

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

Real time control mode on results, tightening reports.

Standard statistical analysis, reports and charts.

Maintenance mode with direct access to tool information, including test mode and complete backup/restore of stations.



The standard CVIPC 2000 is used for point to point connection of a single controller.

The CVIS/CVIC version is used for point to point connection of a single CVIS/CVIC/CVIC-II L and H/CVIL-II controller.

The advanced version is used for multipoint connection of several controllers.

MODEL	PART NUMBER
Reporting to Toolsnet open protocol 1 licence	615 927 829 0
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
Open protocol 1 licence	615 927 830 0
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

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
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
CVIPC2000 for CVIS/CVIC 1 Install	615 927 521 0
CVIPC2000 for CVIS/CVIC 2 Install	615 927 534 0



DEMETER

Maximize efficiency of the production process

WHAT IS DEMETER?

DeMeter is the digitalization solution for smart factory to help you maximize the efficiency of your production process.

DeMeter is a data-driven solution which collects, analyzes and presents your assembly production data seamlessly to ensure you stay ahead in the fast-paced world of manufacturing.

The benefits of DeMeter include:

- Real-time monitoring of production performance
- Identification of areas to improve global efficiency
- Tracking hidden quality deviations



CLOSE THE LOOP
with Service experts



Traceability

Collect and compile all traceability from your process control stations, drilling and tightening tools.

OEE Monitoring

Monitor the Overall Efficiency of your Equipment (OEE) of your factory with dedicated indicators. Track every aspect of your production in real-time, empowering you to make informed decisions on the spot.

Real-time diagnosis

- Use the smart widgets to detect instantly the bottlenecks of your production with the identification of the most critical assets and/or stop reasons.
- No need to wait to manually compile all your data, DeMeter does it live for you.

Customizable metrics

Tailor DeMeter to fit your specific needs with our intuitive live dashboard. Choose and customize the indicators that are most relevant to your area of expertise, ensuring you focus on what's essential for your success.

Alerts & production status

- Stay connected to your production floor anytime, anywhere. Monitor the Andon Board and receive instant notifications, ensuring you're always in the loop, even when you're on the move.
- With the unique Smart Alerts feature, create your own rules to be alerted on what really matters to you on the production line and react efficiently.

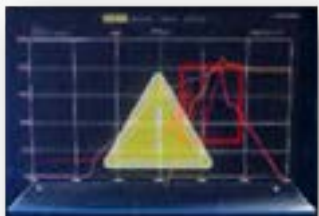
Service support

Because we believe that service is essential to maintaining the highest operational efficiency, we include service support in all our offers. Benefit from our expertise instantly and stay up to date with the latest innovations.

Always connected to our Remote Experts Team through your Support Portal!

Anomaly detection system

Thanks to its advanced Curves Analytics feature, DeMeter is able to identify deviations or abnormalities of curves to guarantee the best quality of your product and prevent recalls or late error detections.



Real-time Check & Rework

In combination with Pivotware, set up an efficient inline rework strategy to correct process deviations detected in your production without stopping the line.



Flexible offer

DeMeter proposes a flexible offer based on the number of connected devices and assets. Tailor DeMeter to your needs with additional features:

- More Dashboards with complete widget library.
- Smart Notifications to receive and manage operator calls and tightening events on a mobile application.
- Curves Analytics for automatic curves classification to detect abnormalities at an early stage.

DE METER
Desoutter



Pivotware - Process Control

Take control of your process

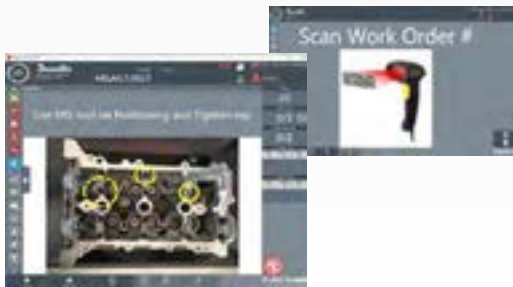


is a process control and worker assistance solution. It's designed to enhance productivity and efficiency in manufacturing by providing step-by-step guidance to operators, ensuring error-proof actions, and maintaining high-quality standards



Operator guidance with a fresh interface

Pivotware provides on-screen instructions to guide operators through each step of the process, reducing errors.



Full Traceability

- Assembly Birth Certificate
- Integration with MSSQL databases

Pivotware records all work results and serial numbers, allowing for comprehensive data analysis and quality control.

Assembly Step	Step	Result	Serial	Operator
Assembly Step 1	Step 1 Completed	OK	123456	Operator A
Assembly Step 2	Step 2 Completed	OK	123457	Operator B
Assembly Step 3	Step 3 Completed	OK	123458	Operator C
Assembly Step 4	Step 4 Completed	OK	123459	Operator D
Assembly Step 5	Step 5 Completed	OK	123460	Operator E
Assembly Step 6	Step 6 Completed	OK	123461	Operator F
Assembly Step 7	Step 7 Completed	OK	123462	Operator G
Assembly Step 8	Step 8 Completed	OK	123463	Operator H
Assembly Step 9	Step 9 Completed	OK	123464	Operator I
Assembly Step 10	Step 10 Completed	OK	123465	Operator J

Zero Defect Strategy

Pivotware integrates smart tools and real-time feedback to detect and correct assembly errors immediately.

It offers various interfaces to integrate tools, scanners, printers, sensors, and more for a connected and efficient production environment.



Easy to use

- Drag & Drop Process Programming
- Asset and User Management
- Variant Management

As a flexible solution, Pivotware allows to manage Excel based process.

Pivotware is easily scalable: it can be implemented from a single station to an entire production line and easily expanded as needed.



Pivotware - Process Control

Feature Management

Feature management is a flexible solution designed to fit with tomorrow's challenges.

Within the Desoutter ecosystem, this modular licensing model allows customers to select and pay only for the specific features they need. This approach offers several benefits:

- **Cost Efficiency:** only use the features that are essential for your operations.
- **Customization:** tailor the software to your specific requirements, enhancing productivity and efficiency.
- **Scalability:** As needs evolve, activate additional features without requiring a complete software overhaul.
- **Flexibility:** This model supports a wide range of applications, making it adaptable to various industries and processes



Empower Desoutter Ecosystem



In combination with **DeMeter**, set up an efficient inline rework strategy to correct immediately all deviations detected for the parts in your production without stopping the line.

By adding Real-Time Location System (RTLS) with nexonar tracker, enhance efficiency, quality, and safety for an error-proof manufacturing. Infrared technology ensures precise tracking of asset and personnel actions, optimizing production. This system can be integrated into Pivotware, providing a seamless interface for the operator.



Pivotware - Process Control

Product references list

HARDWARE

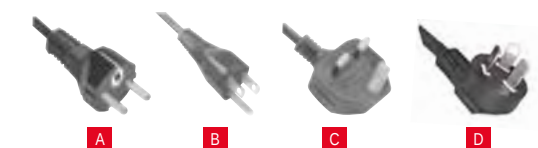
Infinity		PART NUMBER
PRIM Infinity One 8GB	Infinity V7 and higher including Features Management	615 927 867 0
Panel PC's		PART NUMBER
Infinity Panel PC 17"	with Alim, without power cable	615 932 787 0
Accessories		
INFINITY Positioning HW USB to CAN kit	1 x kit	615 813 265 0
Kit drive SSD with pre loaded software - spare part - Order with customer center		
Cable HD15 0,5m	Spare part	615 917 664 0
Infinity Wifi kit		615 929 058 0
Cables		
Power cord 2m - A - European		615 917 201 0
Power cord 2m - B - USA		615 917 203 0
Power cord 2m - C - UK		615 917 202 0
Power cord 2m - D - Chinese		615 917 206 0

PANEL PC



Infinity Panel PC 17" (615 932 787 0)		
System		
	OS	Windows 10 IoT English Language
	Core	Core i3-814u-2core- 8th generation
	Clock	2.4 GHz
	RAM	8GB
	SSD	256 GB TLC
Panel		
	Size	17" (4:3) LCD Led Backlight
	Resolution	1280 x 1024
	Brightness	350 -nit brightness
	Colors	16,7 Million
	IP	IP65 front - IP20 rear
	Touchscreen	Capacitive technology PCAP multitouch -10points

CABLES



ACCESSORIES



INSTALLATION & COMMISSIONING



Digital transformation is the key to Industry 4.0. With our Software experts and our global presence, we work together to make it happen at your facility

Your benefits:

- ✓ Get it right first time
- ✓ Realize the full potential of Pivotware
- ✓ Deploy scalable, future proof processes



REMOTE CARE



With our Remote Care service, ensure continuous operations and efficiency. Our experts are ready to assist and support within one hour—on-site, on app, worldwide.

Your benefits:

- ✓ Get Expert support whenever needed
- ✓ Improve stability and efficiency with unlimited Updates & Upgrades
- ✓ Discover hidden potential thanks to Continuous Coaching





Transducerized Tools

Handheld Tools

- Brushless AC motor: virtually maintenance free
- Resolver: smooth angle control at any speed
- 6 leds OK / NOK signals

Fixtured electric spindles

- Long life gear boxes
- Brushless motor
- High output torque transducer for a larger torque range



Controllers



Controller - CVIR II

Error proofing and flexibility

Advanced control unit with flexibility and technology

- Easy integration into your assembly line with multiple choices of connectivity



ERS
Transducerized technology

ECS
Current Control Technology

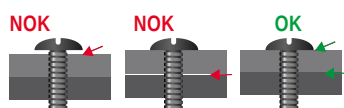
COMMUNICATION

- 1 Ethernet port for CVIPC or network communication
- 1 RS232 port to connect barcode readers or CVIPC 2000
- 8 Inputs and 8 Outputs
- 1 Optional fieldbus module

Innovative Tightening Strategy

Seating detection

Detect the screw head contact on your part by torque rate management, even with material variation



QUALITY GUARANTEED

MODEL	PART NUMBER	TOOLS	CONSUMPTION (CURRENT)		MAINS SUPPLY	DIMENSIONS						WEIGHT	
			115 V	230 V		WIDTH		HEIGHT		DEPTH		kg	lb.
CVIR II	615 932 681 0	ERS/ECS	4A	2A	50/60 hertz	mm	in.	mm	in.	mm	in.		
						130	5.1	278	10.9	291	11.5	5	11

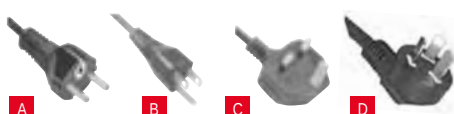
MAIN FUNCTIONS	CVIR II
Programming modes	
Quick cycle	✓
Learning mode	✓
Number of cycles	50
Number of phases available	15
Phase characteristics	
Search sequence	✓
Approach	✓
Run down speed	✓
Final speed phase	✓
Action on NOK	✓
Run reverse	✓
Jump to another phase	✓
Prevailing Torque	✓
Synchronisation phase	✓
Tightening strategies	
Torque	✓
Torque with angle monitoring	✓
Angle with torque monitoring	✓
Yield point	✓
Seating detection	✓
Number of stored results	2000 to 10000 according configuration

Upgrade kits...

POWER CORD

to be ordered with the controller

PLUG	DESCRIPTION	PART NO.
A	European	615 917 201 0
B	US	615 917 203 0
C	UK	615 917 202 0
D	Chinese	615 917 206 0



OPTIONAL ACCESSORIES

	PART NO.
• PC cable length 2 m (78.7")	615 917 047 0
• 37 pin D-Sub female I/O adapter	615 919 003 0
• Shelf support - Aluminium profile	615 397 403 5
• BRDx2 (Backup Rescue Device)	615 936 328 0

Fieldbus / Protocol

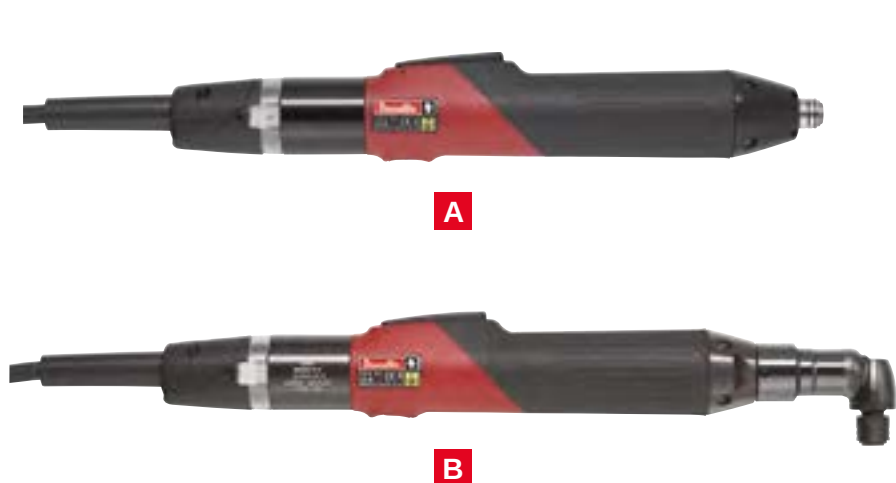
MODEL	PART NO.
Ethernet IP Module	615 927 594 0
Profibus DP Module	615 927 595 0
ProfiNet Module (1 port)	615 927 596 0
ProfiNet Module (2 ports)	615 927 597 0
CC-Link Module	615 927 598 0
Devicenet Module	615 927 599 0
MODBUS TCP Slave	615 927 615 0



Electric transducerized screwdrivers - CVIR II

0.6 to 27 Nm (5.3 to 239 ft.lb) – 280 to 3000 rpm

The transducerized screwdrivers range ERS is dedicated for all type of tightening which required accuracy and traceability



Visible & Programmable reporting LED System



ACCESSORIES
see page 114

To connect with CVI3 controller, ERS module is needed

PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE				SPEED	WEIGHT	
				MIN.	MAX.	MIN.	MAX.		kg	lb
			in.	Nm	Nm	in/lb	in/lb	rpm		
A	ERS2	615 165 688 0	Hex.1/4F	0.6	2.5	5.3	22.1	3000	0.7	1.54
A	ERS6	615 165 689 0	Hex.1/4F	1.0	6.0	8.8	53.1	1725	0.7	1.54
A	ERS12	615 165 690 0	Hex.1/4F	1.5	12	13.3	106.2	950	0.7	1.54
A	ERS2-M20	615 165 691 0	Hex.1/4F	0.6	2.5	5.3	22.1	3000	0.7	1.54
A	ERS6-M20	615 165 692 0	Hex.1/4F	1.0	6.0	8.8	53.1	1725	0.7	1.54
A	ERS12-M20	615 165 693 0	Hex.1/4F	1.5	12	13.3	106.2	950	0.7	1.54
A	ERS22-M20	615 165 916 0	Sq.3/8	6.0	22	53.1	194.7	380	1.05	2.31
B	ERSA2	615 165 697 0	Hex.1/4F	0.6	2.5	5.3	22.1	2500	1.0	2.2
B	ERSA6	615 165 698 0	Hex.1/4F	1.0	6.0	8.8	53.1	1450	1.0	2.2
B	ERSA12	615 165 699 0	Hex.1/4F	2.0	12	17.7	106.2	800	1.0	2.2
B	ERSA27	615 165 917 0	Sq.3/8	8.0	27	70.8	239	280	1.25	2.75
C	ERSF2	615 165 694 0	Hex.1/4F	0.6	2.5	5.3	22.1	3000	0.7	1.54
C	ERSF6	615 165 695 0	Hex.1/4F	1.0	6.0	8.8	53.1	1725	0.7	1.54
C	ERSF12	615 165 696 0	Hex.1/4F	1.5	12	13.3	106.2	950	0.7	1.54
C	*ERSF2-03	615 166 068 0	Hex.1/4F	0.6	2.5	5.3	22.1	3000	0.7	1.54
C	*ERSF6-03	615 166 069 0	Hex.1/4F	1.0	6.0	8.8	53.1	1725	0.7	1.54
C	*ERSF12-03	615 166 070 0	Hex.1/4F	1.5	12	13.3	106.2	950	0.7	1.54

*Models with 30cm integrated cable instead of 4 meters

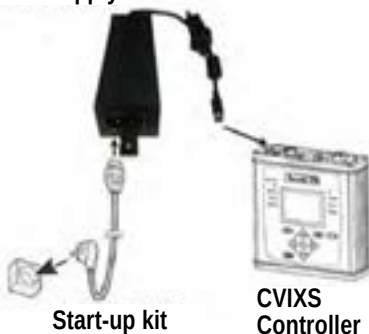
Electric transducerised Very Low Torque – CVIXS



MAIN FUNCTIONS	
Programming modes	
Quick cycle	✓
Learning mode	✓
Number of cycles	50
Number of phases available	15
Phase characteristics	
Search sequence	✓
Run down speed	✓
Final speed phase	✓
Action on NOK	✓
Run reverse	✓
Jump to another phase	✓
Prevailing Torque	✓
Synchronisation phase	✓
Tightening strategies	
Torque	✓
Torque with angle monitoring	✓
Angle with torque monitoring	✓
Seating detection	✓
Stall torque	✓
Number of stored results	2000 to 10000 according configuration

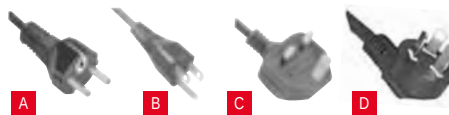
Controller features

Power Supply

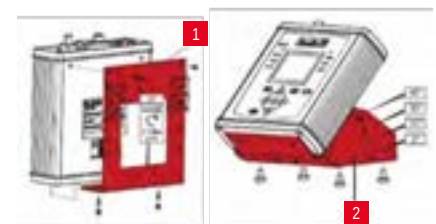


Start-up kit

PLUG	DESCRIPTION	PART NO.
A	European	615 917 201 0
B	US	615 917 203 0
C	UK	615 917 202 0
D	Chinese	615 917 206 0



CVIXS supports



ITEM	DESCRIPTION	PART NO.
1	KIT RAIL DIN SUPPORT CVIXS	615 812 231 0
2	KIT ANGLE SUPPORT CVIXS	615 812 232 0

CVIXS fieldbus communication : order fieldbus module + fieldbus protocol

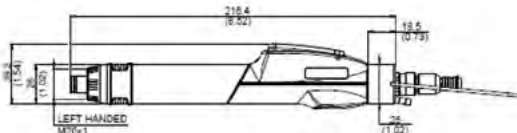
	MODEL	PART NO.
FIELD BUS PROTOCOL	Ethernet IP Module	615 929 051 0
	Profibus DP Module	615 929 052 0
	ProfiNet Module (1 port)	615 929 053 0
	ProfiNet Module (2 ports)	615 929 054 0
	CC-Link Module	615 929 055 0
	Devicenet Module	615 929 056 0
	MODBUS TCP Slave	615 929 057 0

MODEL	PART NUMBER	TOOLS	CONSUMPTION (CURRENT)	SUPPLY VOLTAGE	DIMENSIONS						WEIGHT	
					WIDTH		HEIGHT		DEPTH			
			W		mm	in.	mm	in.	mm	in.	kg	lb.
CVIXS CONTROLLER	615 932 720 0	ERXS	150	36 VDC	171,6	6,73	171	6,75	54,6	2,15	1,12	2,2
CVIXS POWER SUPPLY	615 932 663 0	CVIXS	72-180	100-240 VAC	65	2,56	50	8,07	50	1,97	0,97	2,13

Electric transducerised Very Low Torque – NANO DRIVER



A



Transducerized tool for Extreme Precision

- 4mm wing shank and half moon bits for the smallest screws
- Safety Critical Repeatability
- Traceability using internal transducer

Ergonomic Design

- Streamlined & contoured
- Non-slip Tool Housing
- Push / Lever start
- Highly Flexible Light Weight Industrial Cable
- M20 output thread for easy integration and automatization

Programmable Vacuum System Activation Options

- Built in Accelerometer
- Dedicated connector for 24V vacuum pump

PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE				MAX SPEED	LENGTH		WEIGHT	
				MIN	MAX	MIN	MAX		mm	in.	kg	lb
A	ERXS 20	615 165 874 0	WS-HM	6	20	0,53	1,77	1000	216	8,5	0,3	0,66
A	ERXS 50	615 165 875 0	WS-HM	15	50	1,32	4,43	1000	216	8,5	0,3	0,66
A	ERXS 80	615 165 876 0	WS-HM	24	80	2,12	7,08	1000	216	8,5	0,3	0,66

DESCRIPTION	PART NO.
TOOL & EXTENSION CABLE 3 METERS - 9,8 FT*	615 917 643 0

*Connect up to 3 cables (max 9 Meters - 29,5 ft)

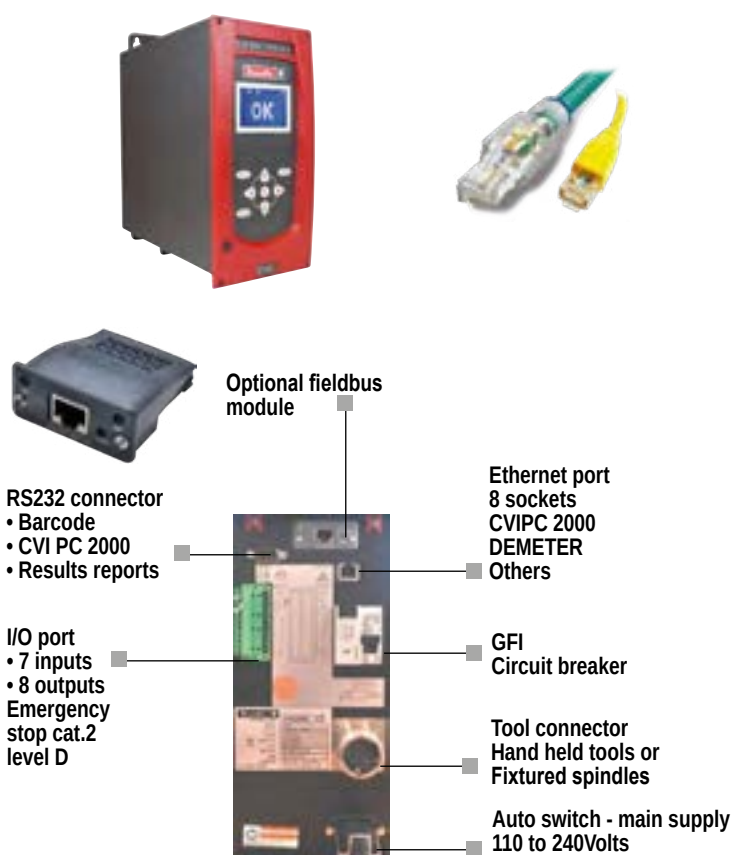
ACCESSORIES

ITEM	PART NUMBER
Vacuum solution	
1 "Blank nozzle short: 40mm. To be machined according to screw"	615 704 033 0
2 "Blank nozzle long: 60mm. To be machined according to screw"	615 704 034 0
3 "Vacuum adapter kit. For tool handheld. To be ordered with a blank nozzle"	615 812 883 0
Arms	
4 D53-5	615 810 700 0
5 D53-5S	615 810 706 0
6 Special clamp	615 812 885 5
Bits	
• Refer to accessories section	page 299
Miscellaneous	
7 Flange M20 for automatization	205 052 875 3
8 DTH42 Tool holster	107892
9 Cable 2m for Bit Tray	615 917 598 0



Controller - CVIL II

Flexible integration



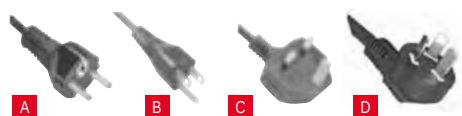
FEATURES	CVIL II
General functions	
Number of cycles	50
Number of phases	15
Batch count	999
Bar code reading via RS232 port	✓
Programming	
LCD screen and display	✓
CVIPC software	✓
Tightening results	
Led "Low", "OK", "High" Torque	✓
Led "Low", "OK", "High" Angle	✓
Torque+Angle+Data+Time+Report	up to 10 000
Number of curves (flexibility with OK and NOK)	10

MODEL	PART NUMBER	CONSUMPTION (CURRENT)		MAINS SUPPLY	DIMENSIONS						WEIGHT	
		115 V	230 V		WIDTH		HEIGHT		DEPTH		kg	lb.
CVIL II	615 932 680 0	4A	2A	50/60 hertz Single-phase	mm	in.	mm	in.	mm	in.	5.9	13

Upgrade kits...

POWER CORD
to be ordered with the controller

PLUG	DESCRIPTION	PART NO.
A	European	615 917 201 0
B	US	615 917 203 0
C	UK	615 917 202 0
D	Chinese	615 917 206 0



OPTIONAL ACCESSORIES

	PART NO.
• PC cable length 2 m (78.7")	615 917 047 0
• 37 pin D-Sub female I/O adapter	615 919 003 0
• Shelf support - Aluminium profile	615 397 403 5
• BRDx2 (Backup Rescue Device)	615 936 328 0

Fieldbus / Protocol

MODEL	PART NO.
Ethernet IP Module	615 927 594 0
Profibus DP Module	615 927 595 0
ProfiNet Module (1 port)	615 927 596 0
ProfiNet Module (2 ports)	615 927 597 0
CC-Link Module	615 927 598 0
Devicenet Module	615 927 599 0
MODBUS TCP Slave	615 927 615 0



Electric pulse nutrunners - E-PULSE

10 to 50 Nm (7.4 to 36.9 ft.lb) - 4600 rpm



ADVANCED ERGONOMICS

- Reaction free
- Soft grip and slim handle
- Low weight tool



INCREASED PRODUCTIVITY

- Max. speed 4600 rpm
- Point and shoot solution
- Pistol tool 30 % shorter time to locate bolt



OPTIMIZED MAINTENANCE

- No oil to change
- Brushless electric motor
- Long life gearbox



IMPROVED ENVIRONMENT

- Reduce CO2 emission
- Clean workspace
- Reduce energy consumption



A



C



E



B



D



F

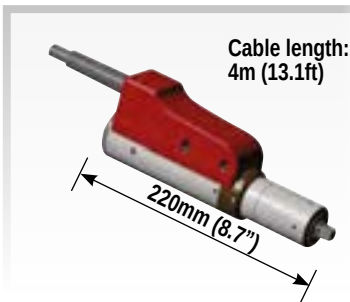


ACCESSORIES
see page 114

PIC REF	PART NUMBER	MODEL	OUTPUT DRIVE	OUTPUT RETAINING TYPE	TORQUE				ROTATIONAL MAX SPEED	LENGTH		WEIGHT		INTEGRATED CABLE
					MIN	MAX	MIN	MAX		mm	in.	kg	in.	
			in.		Nm	Nm	ft.lb	ft.lb	rpm	mm	in.	kg	in.	
A	615 165 838 0	ELRT025-P4600-10S	Sq. 3/8	Trough hole	10	25	7.4	18.4	4600	228	9.0	1.3	2.9	N/A
B	615 165 890 0	ELRT025-P4600-4Q	Hex.1/4	Quick change chuck	10	25	7.4	18.4	4600	228	8.7	1.3	2.9	N/A
C	615 166 040 0	ELRT025T-10S-5	Sq 3/8	Trough hole	10	25	7.4	18.4	4600	255	10.0	2.6	5.7	5 meters
C	615 166 047 0	ELRT25T-10S-1	Sq 3/8	Trough hole	10	25	7.4	18.4	4600	255	10.0	2.1	4.6	1 meter
D	615 166 041 0	ELRT25T-4Q-5	Hex.1/4	Quick change chuck	10	25	7.4	18.4	4600	249	9.8	2.6	5.7	5 meters
D	615 166 048 0	ELRT25T-4Q-1	Hex.1/4	Quick change chuck	10	25	7.4	18.4	4600	249	9.8	2.1	4.6	1 meter
E	615 166 022 0	ELRT050-P4900-10S	Sq 3/8	Trough hole	20	50	14.8	36.9	4900	244	9.6	1.7	3.7	N/A
F	615 166 042 0	ELRT050T-10S-5	Sq 3/8	Trough hole	20	50	14.8	36.9	4900	271	10.7	3.0	6.6	5 meters
F	615 166 049 0	ELRT050T-10S-1	Sq 3/8	Trough hole	20	50	14.8	36.9	4900	271	10.7	2.5	5.5	1 meter

Fixtured electric spindles ERF

For your assembly applications, Desoutter offers a range of fixtured electric spindles, transducerized or current controlled with integrated cable



CVIL II Range

MODEL	PART NUMBER	TORQUE RANGE	
		Nm	ft.lb
ERF3L	615 165 286 0	0.35 - 3	0.26 - 2.2
ERF5L	615 165 287 0	0.5 - 5	0.37 - 3.7
ERF10L	615 165 288 0	3 - 10	2.2 - 7.4
ERF20L	615 165 289 0	5 - 20	3.7 - 14.8
ERF20S	615 165 290 0	5 - 20	3.7 - 14.8
ERF30S	615 165 291 0	7 - 30	5.2 - 22.1

For further information about technical data, please contact your Desoutter representative or Project Manager for assistance

Accessories



ERS / ERSA / ERSF / E-LRT

OPTIONAL ACCESSORIES

ITEM		ERS.	ELRT
1	Long lever Kit	615 321 254 0	
2	Suspension yoke kit	615 791 080 0	
3	Reaction handle	615 397 016 0	
4	Plastic cover for ELRT		615 211 012 0
5	Pistol grip kit for ERS	615 390 059 0	
6	D53-25 Linear arm (tool clamp included) - (see page 148)	615 810 702 0	
6	D53-25X Linear arm, extended reach (tool clamp included) - (see page 148)	615 810 703 0	
7	D53-25S Folder arm (tool clamp included) - (see page 148)	615 810 708 0	
8	Bit Tray	615 929 025 0	615 929 025 0
9	Spring suspension balancer	50522	50542
10	Tool Holster DTH90		615 812 119 0
11	ERS Module	615 936 537 0	
12	Sleeve drive socket	see page 297/298/299	

EXTENTION CABLE FOR ERS TOOLS	PART NO.
Ext. cable 5m (16ft)	615 917 222 0
Ext. cable 10m (32ft)	615 917 224 0



HEAVY DUTY THIN CABLE FOR ELRT TOOLS	PART NO.
Cable 5m (16ft)	615 917 641 0

HEAVY DUTY EXTENTION CABLE FOR ELRT TOOLS	PART NO.
Ext. cable 5m (16ft)	615 917 083 0
Ext. cable 10m (32ft)	615 917 084 0
Ext. cable 15m (49.2ft)	615 917 085 0
Ext. cable 20m (65.6ft)	615 917 086 0
Ext. cable 25m (82ft)	615 917 087 0
Ext. cable 30m (98ft)	615 917 088 0

EME / EMEL

OPTIONAL ACCESSORIES

TRANSDUCER-HOLDER FOR 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



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 - MULTICVIL & CVIL II	PART NO.
Cable 5m (16ft)	615 917 541 0
Cable 10m (32ft)	615 917 542 0
Cable 15m (49.2ft)	615 917 543 0



EXTENTION CABLE FOR EME TOOLS - MULTICVIL & CVIL II	PART NO.
Ext. cable 5m (16ft)	615 917 083 0
Ext. cable 10m (32ft)	615 917 084 0
Ext. cable 15m (49.2ft)	615 917 085 0
Ext. cable 20m (65.6ft)	615 917 086 0
Ext. cable 25m (82ft)	615 917 087 0
Ext. cable 30m (98ft)	615 917 088 0



CVIC Range Current controlled



Easy to integrate

Small size and smooth design for a simple installation.

Speed up the set up time by using the self learning process. Provides automatic set up for the tool to optimize your fastening process.

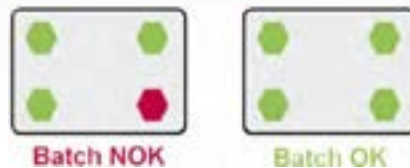
Multi torque capability

Replace multiple pneumatic tools with one electric tool per station.



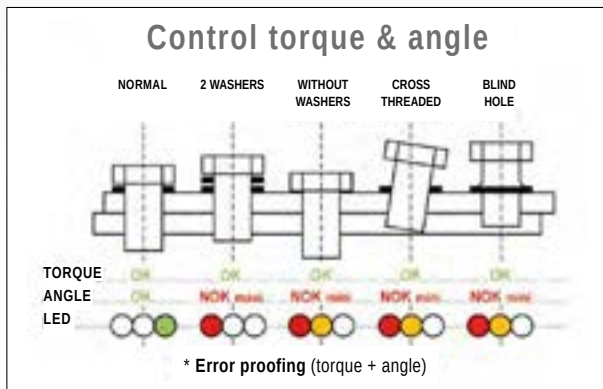
Fastening quality guaranteed in all your products

Set up a batch count to ensure all bolts are tightened with correct strategy.



Quality of tightening

Control torque and angle with multi phases strategies.



Advanced ergonomics

Maximize your operators' comfort with ergo stop and direct reporting led in the controller and on the tool.



Open to peripherals

Increase your assembly quality and process through barcode reader, socket tray or bit 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	5000 to 20000 according configuration	

TYPES OF PHASES IN A CYCLE		
Search Sequence	✓	✓
Run Down speed	✓	✓
Final speed	✓	✓
Run reverse	✓	✓
Action on 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
PC Software Windows		
program cycles, collect, display and save results, run statistics, curves		
CVIPC2000 *: 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
Serial port RS232 (PC transfer, Bar code, Report output)	✓	✓
Ethernet connection (CVIPC2000 / DeMeter)	✓	✓

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

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

Controllers - CVIC

Electric current control



CVIC II-L2
CVIC II-H2



ECS (M20)
0.12 - 16 Nm



ECSA
0.55 - 11.5 Nm



ECSF
0.12 - 16 Nm



MODEL	PART NUMBER	TOOLS	CONSUMPTION (current)		MAINS SUPPLY	DIMENSIONS						WEIGHT	
			115V	230V		WIDTH		HEIGHT		DEPTH		kg	lb.

CVIC II CONTROLLERS

CVIC II-L2	615 932 676 0	ECS	4A	2A	Single-phase	130	5.1	278	10.9	291	11.5	5	11
CVIC II-H2	615 932 677 0	ECS	4A	2A	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	European	615 917 201 0
B	US	615 917 203 0
C	UK	615 917 202 0
D	Chinese	615 917 206 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
• 37 pin D-Sub female I/O adapter	615 919 003 0
• BRDx2 (Backup Rescue Device)	615 936 328 0

Fieldbus / Protocol

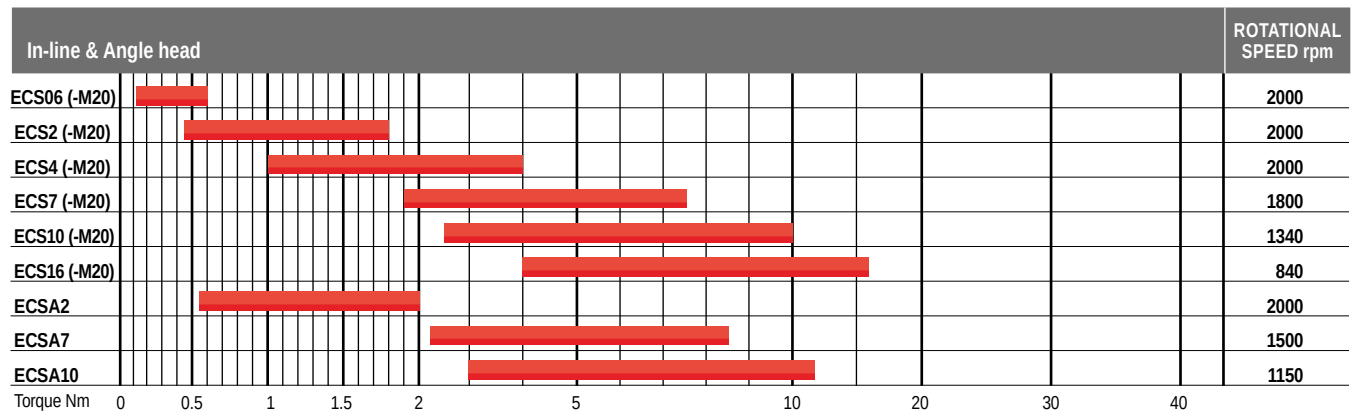
MODEL	PART NO.
Ethernet IP Module	615 927 594 0
Profibus DP Module	615 927 595 0
ProfiNet Module (1 port)	615 927 596 0
ProfiNet Module (2 ports)	615 927 597 0
CC-Link Module	615 927 598 0
Devicenet Module	615 927 599 0
MODBUS TCP	615 927 615 0



Torque range

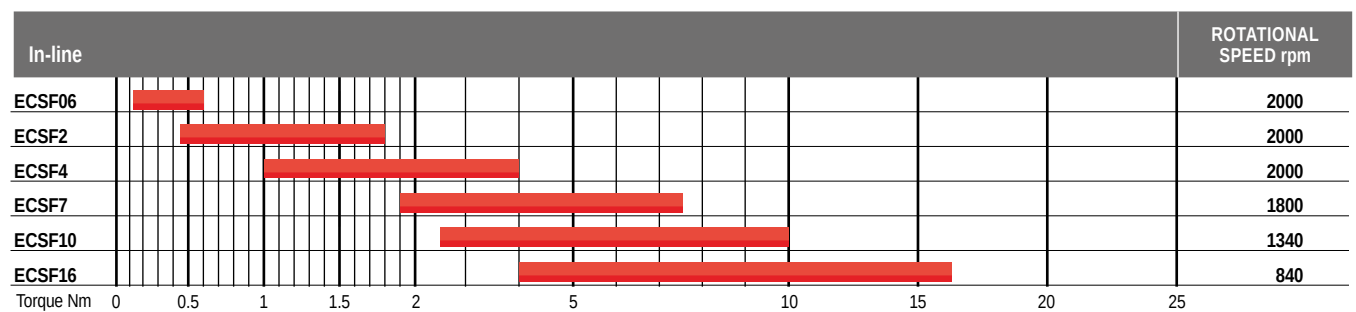
Performances of Portable electric nutrunners

ECS, ECSA Series



Performances of Fixtured electric spindles

ECSF



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



A



B



C



ACCESSORIES
see page 123

PIC REF	MODEL	PART NUMBER	OUTPUT HEX	TORQUE RANGE				ROTATIONAL SPEED	LENGTH		WEIGHT	
				MIN.	MAX.	MIN.	MAX.		mm	in.	kg	lb.
				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	15.9	2000	285	11.2	0.6	1.3
A	ECS4	615 165 445 0	Hex. 1/4 F	1	4	8.8	35.4	2000	285	11.2	0.6	1.3
A	ECS7	615 165 446 0	Hex. 1/4 F	1.9	7.5	16.8	66.4	1800	285	11.2	0.7	1.5
A	ECS10	615 165 444 0	Hex. 1/4 F	2.5	10	22.1	88.5	1340	285	11.2	0.7	1.5
A	ECS16	615 165 459 0	Hex. 1/4 F	4	16	35.4	141.6	840	285	11.2	0.7	1.5

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	15.9	2000	285	11.2	0.6	1.3
B	ECS4-M20	615 165 456 0	Hex. 1/4 F	1	4	8.8	35.4	2000	285	11.2	0.6	1.3
B	ECS7-M20	615 165 457 0	Hex. 1/4 F	1.9	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	2.5	10	22.1	88.5	1340	285	11.2	0.7	1.5
B	ECS16-M20	615 165 460 0	Hex. 1/4 F	4	16	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	1	2.2
C	ECSA7	615 165 448 0	Hex. 1/4 F	2.2	8.5	19.5	75.2	1500	329	12.9	1	2.2
C	ECSA10	615 165 449 0	Hex. 1/4 F	3	11.5	26.6	101.8	1150	329	12.9	1	2.2



Fixtured electric spindles - CVIC

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



A



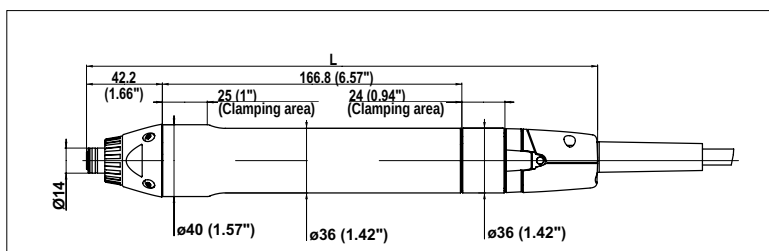
Offset head for application with close centers
(minimum 19mm)



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 123

PIC REF	MODEL	PART NUMBER	OUTPUT HEX	TORQUE RANGE		ROTATIONAL SPEED AT	LENGTH		WEIGHT	
				in.	Nm		mm	in.	kg	lb.
A	ECSF06	615 165 501 0	Hex. 1/4 F		0.12-0.6	1.1-5.3	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	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	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	11.2	0.7	1.5
A	ECSF10	615 165 505 0	Hex. 1/4 F		2.5-10	22.1-88.5	1340	11.2	0.7	1.5
A	ECSF16	615 165 506 0	Hex. 1/4 F		4.0-16	35.4-141.6	840	11.2	0.7	1.5
A	*ECSF06-03	615 166 071 0	Hex. 1/4 F		0.12-0.6	1.1-5.3	285	11.2	0.6	1.3
A	*ECSF2-03	615 166 072 0	Hex. 1/4 F		0.45-1.8	4.0-15.9	285	11.2	0.6	1.3
A	*ECSF4-03	615 166 073 0	Hex. 1/4 F		1.0-4.0	8.8-35.4	285	11.2	0.6	1.3
A	*ECSF7-03	615 166 074 0	Hex. 1/4 F		1.9-7.5	16.8-66.4	1800	11.2	0.7	1.5
A	*ECSF10-03	615 166 075 0	Hex. 1/4 F		2.5-10	22.1-88.5	1340	11.2	0.7	1.5
A	*ECSF16-03	615 166 076 0	Hex. 1/4 F		4.0-16	35.4-141.6	840	11.2	0.7	1.5

*Models with 30cm integrated cable instead of 4 meters



ECS

ACCESSORIES INCLUDED

ITEM	PART NO.
1 Fixed suspension bail for ECS	205 049 537 3

OPTIONAL ACCESSORIES

ITEM	PART NO.
------	----------

ECS / ECSA

2 Reaction handle for ECS	615 397 016 0
3 Stationary suspension bail for ECSA	615 791 080 0
• Tool clamp for ECS	615 396 616 0
4 Pistol grip kit for ECS	615 390 059 0

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

5 Bit Adaptor	103782
6 Spring Loaded Shaft 25mm (1") stroke, 3/8" Sq Drive	108342
7 Shaft Support and Nose Mount	108412

Nose Mounts for ECS-M20/ECSF

8 Nose Mount	205 052 876 3
9 Flange	205 052 875 3

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

6 Spring loaded shaft 25mm (1") stroke, 3/8" square drive	108342
10 Offset Head, Offset 30mm (1.18")	384993

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

11 3/8" Square to 1/4" HexPower Adaptor	108322
---	--------

SOCKETS TRAY & BITS TRAY	PART NO.
• Bit tray (bits not included)	615 929 025 0

CABLE FOR BIT TRAY	PART NO.
Cable 1m (3.3ft)	615 917 265 0
Cable 5m (16ft)	615 917 266 0
Cable 10m (32.8ft)	615 917 267 0

CABLE FOR SOCKET TRAY	PART NO.
Extension cable 2m (6.4ft)	615 917 535 0

EXTENSION CABLE FOR ECS TOOLS	PART NO.
Extension cable 5m (16ft)	615 917 222 0
Extension cable 10m (32.8ft)	615 917 224 0





SLBN screwdrivers controllers

Advanced controller for SLBN screwdrivers

Flexible speed

- Speed adjustment

Protection of the parameters

- Setting locked by key

Universal

- Compatible with all the SLBN range



Fastening Strategies

- PreRun reverse
- Slow start
- Final fastening
- Post run reverse



Batch counting

- Incremental or decremental counting up to 99



INPUTS AND OUTPUTS FOR PLC COMMUNICATION

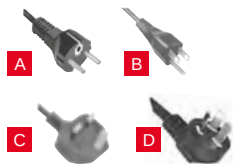
- Inputs :**
- Remote Start
 - Remote Reverse
 - Enable tool A
 - Enable tool B
 - Enable Reverse
 - Reset Batch
 - NOK Acknowledgment
 - Psets 1 to 5
 - PreRun Reverse enable

- Outputs :**
- OK
 - NOK
 - OK Batch
 - Tool running forward
 - Tool running reverse
 - 24/12 Vdc

START-UP KIT to be ordered with the controller

Including : Power cable and plug

PLUG	DESCRIPTION	PART NO.
A	European	615 917 201 0
B	US	615 917 203 0
C	UK	615 917 202 0
D	Chinese	615 917 206 0



PIC REF	MODEL	PART NUMBER	DIMENSIONS						WEIGHT		VOLTAGE VAC	COMPATIBLE TOOLS
			WIDTH		HEIGHT		DEPTH		kg	lb.		
A	ESP1	615 932 635 0	mm	in	mm	in	mm	in	0.50	1.1	100-240	SLBN003/010/012/020
B	ESP1-HT	615 932 637 0	213	8.4	131	5.20	65	2.60	1.80	3.9	100-240	SLBN030/050
B	ESP1-HT PLUS	615 932 707 0	213	8.4	131	5.20	65	2.60	1.63	3.6	100-240	SLBN90/120
C	ESP2-A	615 932 708 0	135	5.3	285	11.2	105	4.1	2.8	4.4	100-240	SLBN003-SLBN120

Low Voltage Screwdriver with clutch shut off - SLBN



Flexibility

- Installation by clamping in the top or in the front by a torque fixing ring

ESD Certification

- Dedicated version for Electrostatic discharge component protection

Productivity

- Speed up to 2000 rpm
- Maintenance free thanks to brushless motor

Ergonomy

- Soft Rubber grip
- Low noise level < 70dB (A)



Standard Version - SLBN

0.02 to 12 Nm (0.18 to 106.2 in.lb) - 160 to 2000 rpm



A



B



C



D



E



F

MODEL	LENGTH		WEIGHT	
	mm	in.	kg	lb.
SLBN001	174	6.8	0.17	0.37
SLBN003/010	182	7.2	0.38	0.34
SLBN012/020	245	9.6	0.58	1.28
SLBN030/050	283	11.1	0.80	1.76
SLBN090/120	301	11.8	1.25	2.76



ACCESSORIES
see page 131

PIC REF	MODEL	PART NUMBER	OUTPUT HEX	FREE SPEED		TORQUE RANGE		TORQUE RECOMMENDED		VOLTAGE VDC	CONTROLLER
				Hi rpm	Lo rpm	Nm	in.lb	Nm	in.lb		

LEVER START - LOW VOLTAGE - CLUTCH CONTROL - SHUT OFF

A	SLBN001-L1000-SWS	615 165 873 0	whing shank	1000	700	0.02-0.14	0.18-1.32	0.10	0.91	15	ESP1.LT included
A	SLBN003-L230-S4Q	615 165 922 0	1/4	230	160	0.07-0.34	0.62-2.99	0.24	2.09	25	ESP1
A	SLBN003-L1000-S4Q	615 165 923 0	1/4	1000	750	0.07-0.34	0.62-2.99	0.24	2.09	25	ESP1
A	SLBN010-L1000-S4Q	615 165 955 0	1/4	1000	750	0.1-1	0.88-8.8	0.70	6.16	25	ESP1
B	SLBN012-L1000-S4Q	615 165 924 0	1/4	1000	750	0.2-1.18	1.76-10.4	0.83	7.28	32	ESP1
B	SLBN012-L2000-S4Q	615 165 925 0	1/4	2000	1500	0.2-1.18	1.76-10.4	0.83	7.28	32	ESP1
B	SLBN020-L1000-S4Q	615 165 926 0	1/4	1000	750	0.29-1.9	2.57-16.8	1.33	11.76	32	ESP1
C	SLBN030-L1000-S4Q	615 165 927 0	1/4	1000	750	1.00-2.9	8.80-25.7	2.03	17.99	40	ESP1-HT
C	SLBN030-L2000-S4Q	615 165 928 0	1/4	2000	1500	1.00-2.9	8.80-25.7	2.03	17.99	40	ESP1-HT
C	SLBN050-L1000-S4Q	615 165 929 0	1/4	1000	750	2.00-4.9	17.7-44.4	3.43	31.08	40	ESP1-HT
D	SLBN090-L800-S4Q	615 165 947 0	1/4	800	600	3.00-9.0	26.6-79.7	6.30	55.79	40	ESP1-HT PLUS
D	SLBN120-L550-S4Q	615 165 948 0	1/4	550	410	4.00-12	35.4-106.2	8.40	74.34	40	ESP1-HT PLUS

PUSH START - LOW VOLTAGE - CLUTCH CONTROL - SHUT OFF

E	SLBN012-A1000-S4Q	615 165 934 0	1/4	1000	750	0.2-1.18	1.76-10.4	0.83	7.28	32	ESP1
E	SLBN012-A2000-S4Q	615 165 935 0	1/4	2000	1500	0.2-1.18	1.76-10.4	0.83	7.28	32	ESP1
E	SLBN020-A1000-S4Q	615 165 936 0	1/4	1000	750	0.29-1.9	2.57-16.8	1.33	11.76	32	ESP1
F	SLBN030-A1000-S4Q	615 165 937 0	1/4	1000	750	1.00-2.9	8.80-25.7	2.03	17.99	40	ESP1-HT
F	SLBN030-A2000-S4Q	615 165 938 0	1/4	2000	1500	1.00-2.9	8.80-25.7	2.03	17.99	40	ESP1-HT
F	SLBN050-A1000-S4Q	615 165 939 0	1/4	1000	750	2.00-4.9	17.7-44.4	3.43	31.08	40	ESP1-HT
D	SLBN090-A800-S4Q	615 165 951 0	1/4	800	600	3.00-9.0	26.6-79.7	6.30	55.79	40	ESP1-HT PLUS
D	SLBN120-A550-S4Q	615 165 952 0	1/4	550	410	4.00-12	35.4-106.2	8.40	74.34	40	ESP1-HT PLUS

ESP C / ESP CA

Advanced controller SLC range

- Auto stop after elapsed time and auto reverse

- OK/NOK with rehit protection

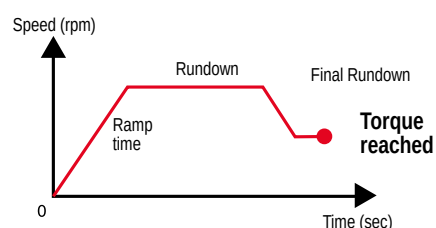
- I/O for integration with PLC for multiple functions



A

- Easy to use
- Flexible keypad
- Multi languages

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



- Replace several tools by one
- Multi torque strategy



B

- Automatic sequence
- Up to 8 programs

- User friendly interface
- Avoid time and Energy lost in programming

- POKE YOKE & Fastening Assurance System

- User friendly interface
- Avoid time and Energy lost in programming

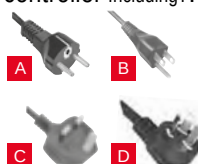


- USB key
- Results saving
- Statistics

- High Torque Phase (HLT)
- For all Self Tapping/ Cutting applications

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

PLUG	DESCRIPTION	PART NO.
A	European	615 917 201 0
B	US	615 917 203 0
C	UK	615 917 202 0
D	Chinese	615 917 206 0

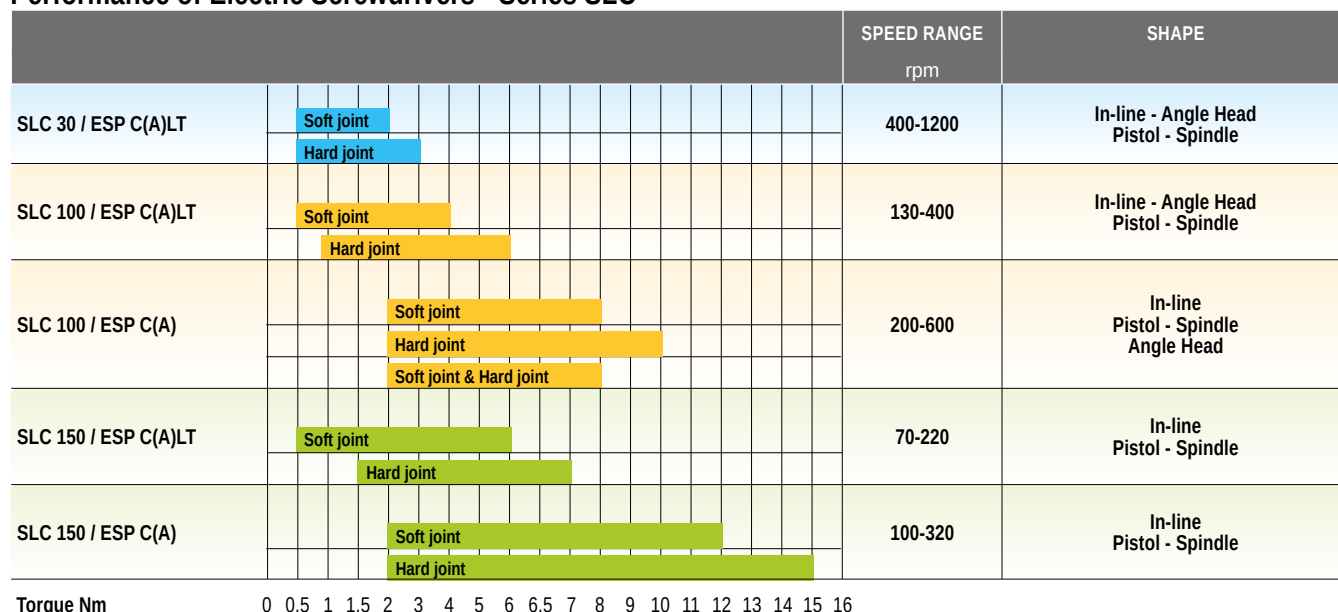


PIC REF	MODEL	PART NUMBER	TORQUE RANGE		SUPPLY VOLTAGE	DIMENSIONS						WEIGHT	
						WIDTH		HEIGHT		DEPTH			
			Nm	in.lb		mm	in.	mm	in.	mm	in.	kg	lb
A	ESP C 220V	615 165 480 0	0.5-15	4.4-132.7	AC 230V 50Hz	195	7.7	89	3.5	154	6.0	3.4	7.4
A	ESP C 110V	615 165 484 0	0.5-15	4.4-132.7	AC 120V 60Hz	195	7.7	89	3.5	154	6.0	3.4	7.4
A	ESP C LT 220V	615 165 481 0	0.5-7.0	4.4-61.9	AC 230V 50Hz	195	7.7	89	3.5	154	6.0	3.4	7.4
A	ESP C LT 110V	615 165 485 0	0.5-7.0	4.4-61.9	AC 120V 60Hz	195	7.7	89	3.5	154	6.0	3.4	7.4
B	ESP CA 220V	615 165 482 0	-	-	AC 230V 50 Hz	208	8.2	120	4.7	206	8.1	3.4	7.5
B	ESP CA LT 220V	615 165 483 0	-	-	AC 230V 50 Hz	208	8.2	120	4.7	206	8.1	3.4	7.5
B	ESP CA 110V	615 165 486 0	-	-	AC 120V 60 Hz	208	8.2	120	4.7	206	8.1	3.4	7.5
B	ESP CA LT 110V	615 165 487 0	-	-	AC 120V 60 Hz	208	8.2	120	4.7	206	8.1	3.4	7.5

High power screwdrivers - SLC

Torque Range

Performance of Electric Screwdrivers - Series SLC



In-line and Angle head screwdrivers - SLC

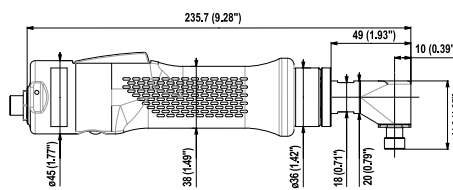
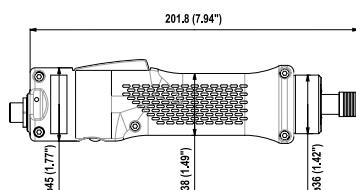
0.5 to 15 Nm (4.4 to 132.7 in.lb) - 70 to 1200 rpm



A



B

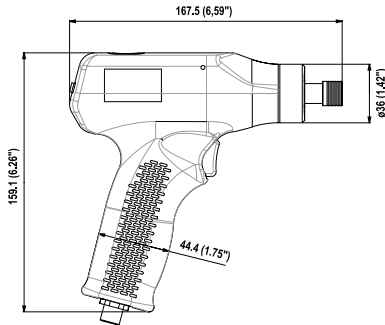


ACCESSORIES
see page 131

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			
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)

Pistol grip screwdrivers - SLC

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



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

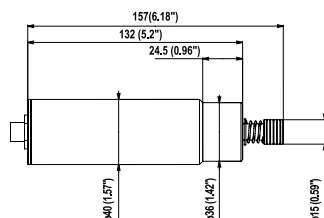
A	SLC030-P1200-C4Q	615 165 488 0	1/4	400-1200	0.5-2	4.4-17.7	0.6-3	5.3-26.5	0.6	1.3	ESP C(A) LT
A	SLC100-P600-C4Q	615 165 462 0	1/4	130-400	0.5-4	4.4-35.4	0.8-6	7.1-53.1	0.6	1.3	ESP C(A) LT
			1/4	200-600	2.0-8	17.7-70.8	2.0-10	17.7-88.5	0.6	1.3	ESP C(A)
A	SLC150-P320-C4Q	615 165 463 0	1/4	70-220	0.5-6	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



PIC REF	MODEL	PART NUMBER	OUTPUT HEX	FREE SPEED	TORQUE RANGE				WEIGHT		CONTROLLER
					SOFT	SOFT	HARD	HARD	kg	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)

SLBN / SLC

ACCESSORIES INCLUDED

	SLBN	SLC
• Suspension bail		615 360 222 0
• Torque fixing ring for SLB003	615 225 053 0	
• Torque fixing ring for SLB012/020	615 548 218 0	
• Torque fixing ring for SLB030/050	615 548 219 0	
• Tool / Controller cable L = 2.5m (8.2ft)	-	615 360 223 0
• Cable L = 1.83m (6ft)	615 397 416 0	

OPTIONAL ACCESSORIES

ITEM	SLBN	SLC
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SLBN Tools

1	Control Box	615 932 709 0
2	Shielded cable 3m for ESP2-A	615 917 721 0
	• Shielded cable 5m	615 917 725 0
	• Shielded cable 10m	615 917 726 0
3	Spiral cable 2m (6.5 ft)	615 360 838 0
4	Pistol grip (Trigger) for SLB030/050	615 397 918 0
4	Pistol grip (Push) for SLB030/050	615 397 919 0
4	Pistol grip (Push) for SLB012/020	77562
	• Cable, 10m (32.8 ft)	615 360 379 0
	• Wall fixing plate for ESP1-HT	615 571 085 5
	• Clamp ring for SLB012/020	615 399 057 0
	• Clamp ring for SLB030/050	615 397 815 0
	• Adaptor M20 SLB012/020	615 548 151 5
	• Adaptor M20 SLB 030/050	615 548 152 5
5	Angle head for SLB012/020	615 398 033 0
5	Angle head for SLB030/050	615 398 034 0

SLC Tools

6	Side Handle	615 397 016 0
7	Color ring (3)	615 397 008 5
	• Cable extension L = 2m (6.6ft)	615 917 593 0
8	Spiral cable L = 2m (6.6ft)	615 917 594 0
	• M20 adaptor	615 567 132 0
9	Bit tray	615 936 068 0
10	Switch box	615 936 069 0

Spring Loaded Shafts and Bearings Support

11	Bit Adaptor	103782
12	Spring Loaded Shaft 25mm (1") stroke, 3/8" Sq Drive	108342
13	Shaft Support and Nose Mount	108412

Nose Mounts for SLC-M20

14	Nose Mount	205 052 876 3
15	Flange	205 052 875 3

Offset Head and Spring Loaded Shaft

12	Spring loaded shaft 25mm (1") stroke, 3/8" square drive	108342
16	Offset Head, Offset 30mm (1.18")	384993

Screwdriver Bit Adaptor

17	3/8" Square to 1/4" HexPower Adaptor	108322
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Balancers and Holster

18	Spring Suspension Balancer	50522
19	Tool holster DTH-42	107892
20	Tool holster DTH90	615 812 119 0

Ergonomic accessories

21	D53 - Linear & Folder arms	see page 199
22	TRA - Telescopic arms	see page 205
23	D57, D58 - Balancing arms	see page 210





Pneumatic fastening tools

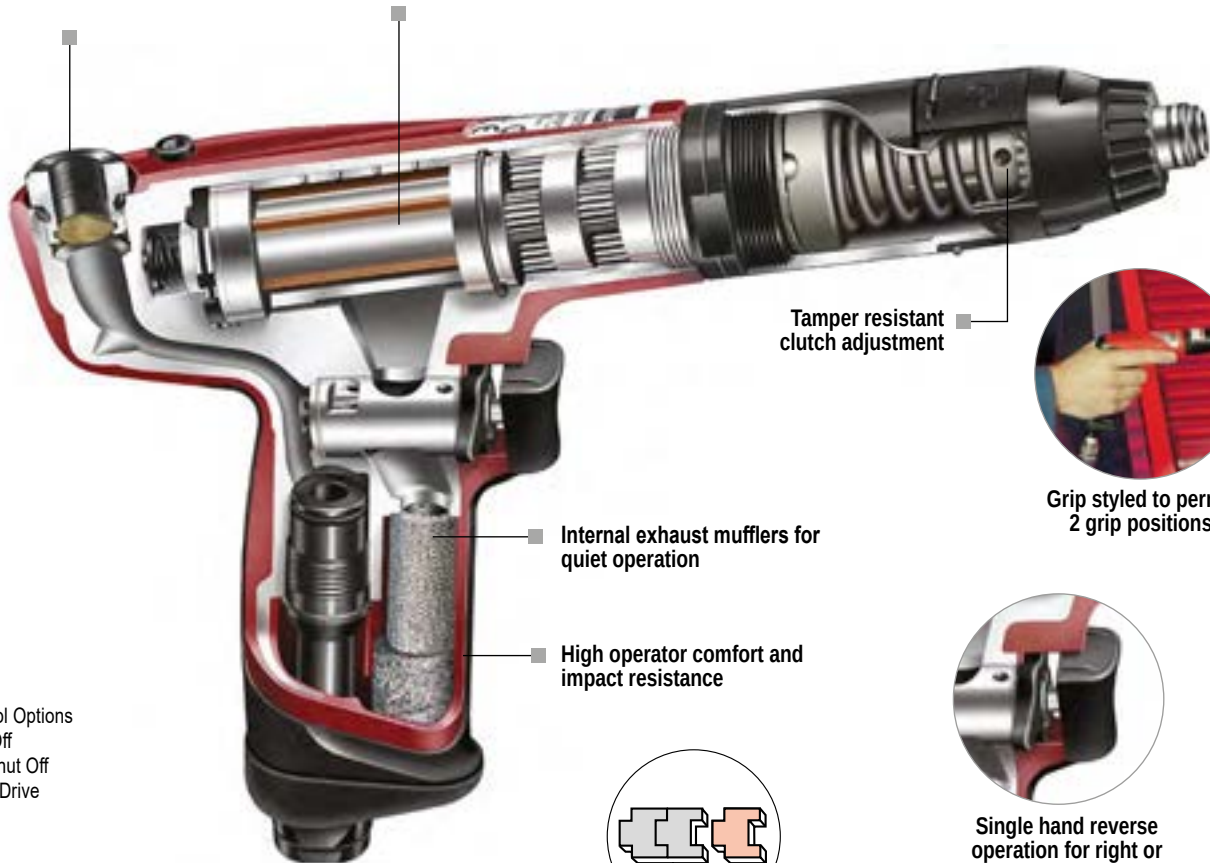
Shut Off, Non Shut Off, Direct Drive, Automatic Reverse



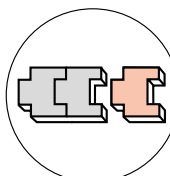
T shape grip for better balance to enhance operator comfort

Powerful, efficient, Dryline™ motor

CLUTCH AND MOTOR PROLONGING TOOL LIFE



3 Control Options
• Shut Off
• Non Shut Off
• Direct Drive



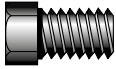
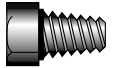
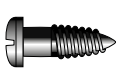
Modularity

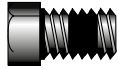
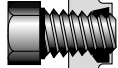
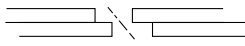
Tool selection

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
Machine Screw/Nut		Shut Off/Impulse/Non Shut Off
Thread Rolling/Forming		Shut Off/HLT/Impulse/Direct Drive
Self Tapping		Non Shut Off/HLT/Direct Drive
Self Tapping in Plastic/ Thin Materials		Shut Off/HLT
Self Drilling		Non Shut Off/HLT/Direct Drive
Wood Screws		Non Shut Off/Direct Drive

FASTENER/COMPONENT		RECOMMENDED TOOL TYPE
Screws with Adhesive		HLT/Non Shut Off/Impulse
Self Lock Nuts		HLT/Non Shut Off/Impulse
Misaligned Holes		HLT
Variable Size Holes		HLT
Fragile Components		HLT/Low Voltage Screwdrivers



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	0.80	1.34	2.2	3.0	3.6	–
M4	1.20	2.00	3.2	4.5	5.4	3.2
M5	2.40	4.00	6.4	9.0	10.7	6.5
M6	4.10	6.80	10.9	15.3	18.3	11
M8	9.80	16.3	26.1	36.8	44.1	26
M10	19.3	32.2	51.5	72	86.9	52
M12	33.6	56.0	90	126	151	91
M14	53.0	89.0	142	200	239	–
M16	82.0	136	218	307	368	–
M18	114	190	304	428	513	–
M20	160	266	426	598	718	–
M22	215	358	573	806	967	–

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 %

Torque values are recommended values for a working pressure of 6,3 bar (90 PSIG)

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

Recommended Maximum Torque Values – UNC Thread

THREAD SIZE	QUALITY P		QUALITY S		QUALITY T	
in.	Nm	ft.lb	Nm	ft.lb	Nm	ft.lb
1/4	5.43	4	10.3	7.6	11	8.2
5/16	11.2	8.3	21.3	15.7	23	16.9
3/8	19.9	14.7	37.9	27.9	40	30.2
7/16	31.9	23.5	60.7	44.8	65	48.31
1/2	48.8	36	92.7	68.4	100	73.8
9/16	70.4	51.9	134	98.8	144	106
5/8	97.4	71.8	185	136.4	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	
in.	Nm	ft.lb	Nm	ft.lb	Nm	ft.lb
1/4	6.3	4.6	11.9	8.8	12.9	9.5
5/16	12.5	9.2	23.8	17.5	25.7	18.9
3/8	22.7	16.7	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
9/16	79	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

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



Productivity and Ergonomics

ACCESS



90° Angle Heads



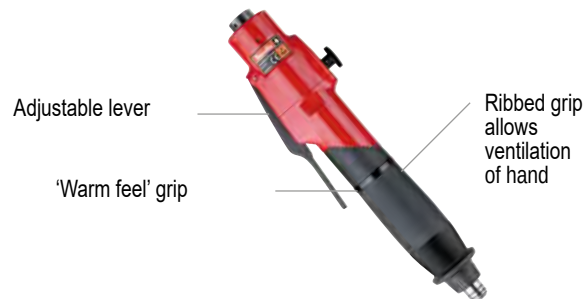
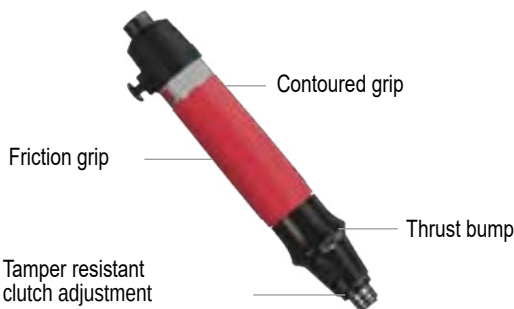
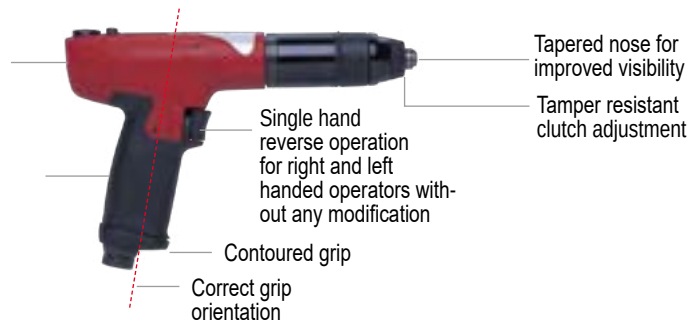
Crowfoot
Open Ended Wrenches

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



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

TOOL ORIENTATION AND OPERATOR PREFERENCE

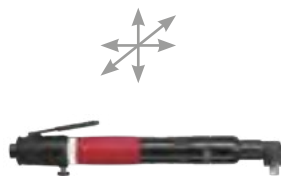


P Shape

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

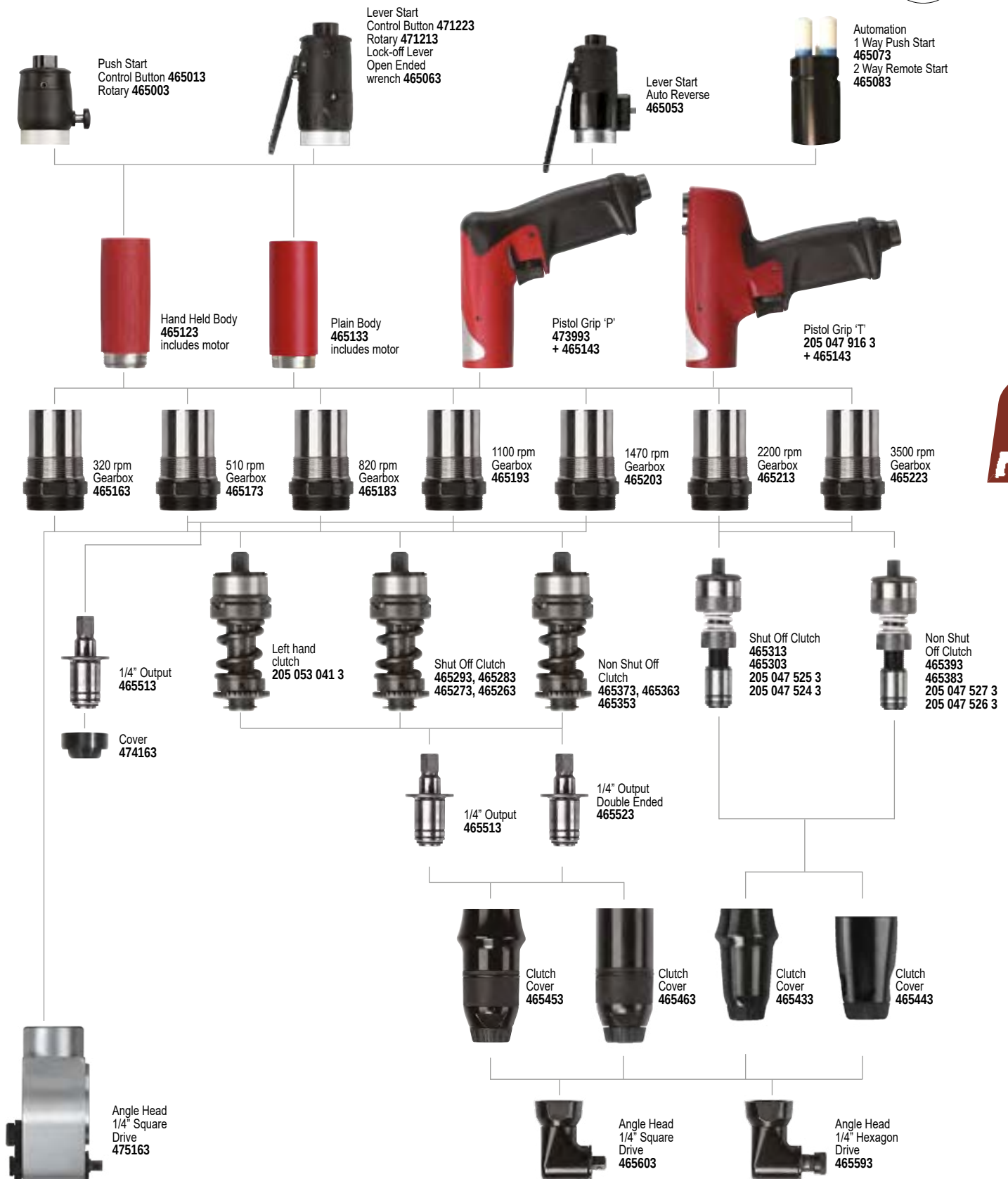
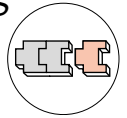
Fast Cycle Rate
Single Hand Operation Required
Need to Align/Position Components First

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



Modularity

SD SERIES

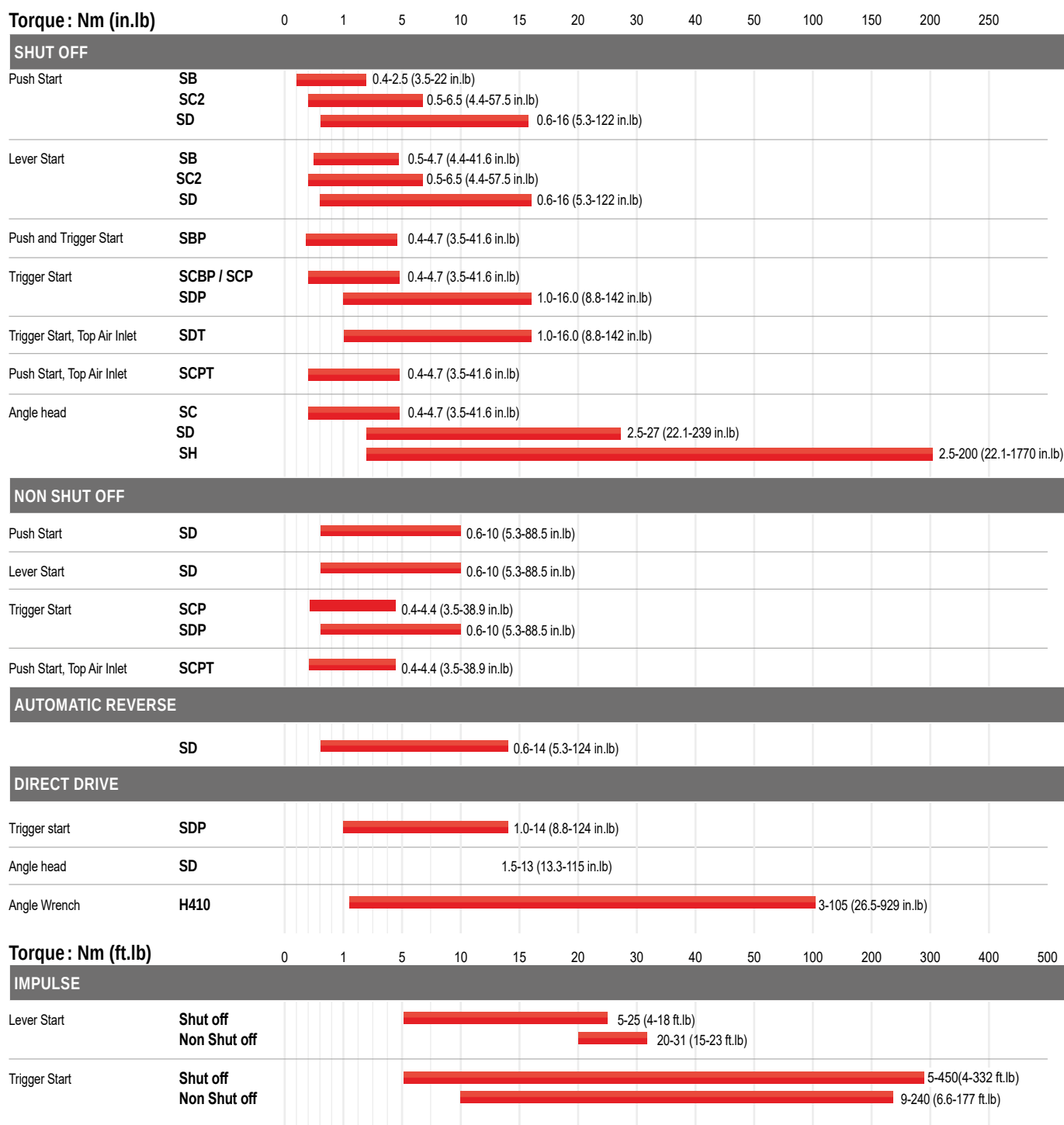


Modularity, a concept for all Desoutter pneumatic screwdrivers range

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

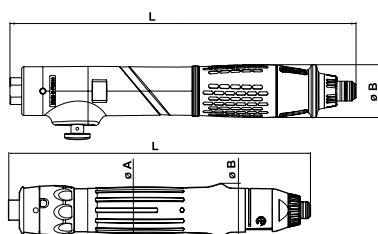


Screwdrivers - Shut off - Push start

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.)
SB..	32 (1.26)	36 (1.42)	197 (7.76)
SC2		37.4 (1.47)	245 (9.65)
SD023..3500	38.7 (1.52)	44 (1.73)	227 (8)
SD035..2200	38.7 (1.52)	44 (1.73)	227 (8)
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)



ACCESSORIES
see page 150

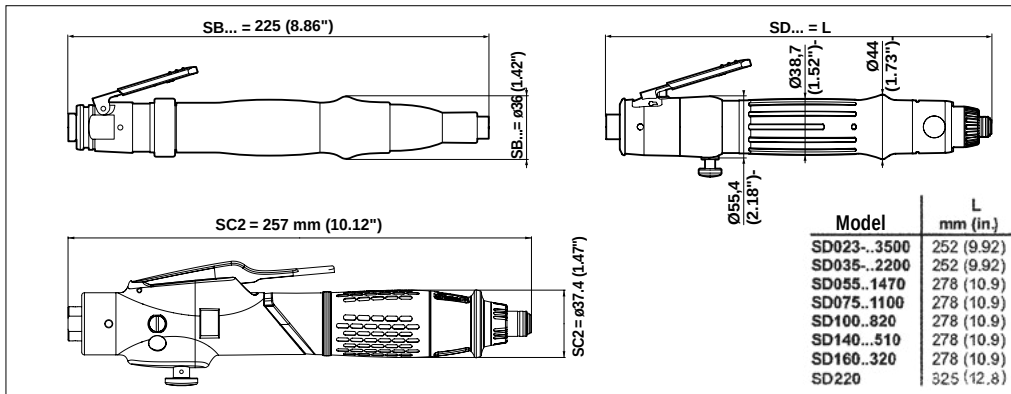
Types A to B, 1/4" double ended and 5mm bit holder optional

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	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	
A	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	
A	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	
A	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	
B	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	
B	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	
B	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	
B	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	
C	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	
C	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	
C	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	
C	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	
C	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	
D	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	
D	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	
D	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	
D	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	
D	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	
D	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	
E	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	
E	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	
E	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	
E	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	
E	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



ACCESSORIES
see page 150

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	SB043-LR1050-S4Q	205 147 507 4	1050	1/4 Hex	0.4-4.3	3.5-38	1.9-4.3	16.7-37.8	0.61	1.34	7.3	15.5	1/8	6	1/4	
A	SB047-LR500-S4Q	205 147 506 4	500	1/4 Hex	0.4-4.7	3.5-41.6	1.9-4.7	16.7-41.4	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 Hex	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 Hex	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 Hex	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 Hex	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 Hex	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	SD055-LB1470-S4Q	1463 074	1470	1/4 Hex	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	1463 064	1100	1/4 Hex	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	1463 054	820	1/4 Hex	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	1463 044	510	1/4 Hex	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	1463 034	320	1/4 Hex	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	1463 024	3500	1/4 Hex	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	SD055-LR1470-S4Q	1463 004	1470	1/4 Hex	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	1462 994	1100	1/4 Hex	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	1462 984	820	1/4 Hex	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	1462 974	510	1/4 Hex	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	1462 964	320	1/4 Hex	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	
E	SD220-LR320-S4Q	205 147 937 4	320	1/4 Hex	9-16	27-142	9-16	27-142	1.4	3.1	8.7	18.4	1/4	10	3/8	
E	SD220-LR320-S10S	205 147 979 4	320	3/8 Sq	9-22	27-198	9-19	27-168	1.4	3.1	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)	SDT035..1100	212 (8.35)
SCBP..	31 (1.22)	182 (7.17)	SDT035..2200	212 (8.35)
SCP..	34 (1.34)	228 (8.97)	SDT055..1470	238 (9.37)
SCPT..	34 (1.34)	230 (9.06)	SDT075..1100	238 (9.37)
SDP023..3400	36 (1.42)	194 (7.64)	SDT100..800	238 (9.37)
SDP035..2100	36 (1.42)	194 (7.64)	SDT140..510	238 (9.37)
SDP055..1400	36 (1.42)	220 (8.66)	SDT160..320	238 (9.37)
SDP075..1050	36 (1.42)	220 (8.66)		
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)		

 **ACCESSORIES**
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Types D and E, Top air inlet

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	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-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	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	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

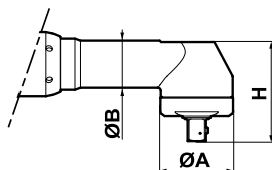
E	SCPT021-A2300-S4Q	1458974	2300	1/4	0.4-2.1	3.5-18.6	0.4-0.9	3.5-7.9	0.86	1.89	6.5	13.8	1/8	6	1/4
E	SCPT043-A1100-S4Q	1458894	1100	1/4	0.4-4.3	3.5-38	0.9-4.3	7.9-38.0	0.86	1.89	6.5	13.8	1/8	6	1/4
E	SCPT047-A550-S4Q	1458854	550	1/4	0.4-4.7	3.5-41.6	0.9-4.7	7.9-41.6	0.86	1.89	6.5	13.8	1/8	6	1/4

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



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 152

PIC REF	MODEL	PART NUMBER	BOLT SIZE	FREE SPEED	SQUARE DRIVE	TORQUE RANGE		LENGTH		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
			mm	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 - Shut off

0.4 to 27 Nm (3.5 to 239 in.lb) - 170 to 2200 rpm



ACCESSORIES
see page 152

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

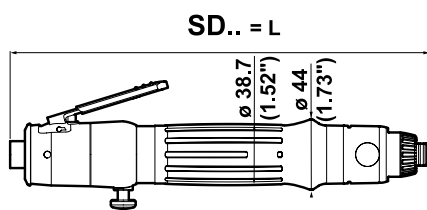
TWO WAY

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	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
B	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
C	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
C	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
C	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
C	SD209-LB370-S90-A10S	1463474	370	3/8 sq	11-19	97.3-168	6-19	53.1-168	376	14.8	1.50	3.31	8.7	18.4	1/4	10	3/8
C	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
C	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
C	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
C	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
C	SD209-LR370-S90-A10S	1463524	370	3/8 sq	11-19	97.3-168	6-19	53.1-168	376	14.8	1.41	3.11	8.7	18.4	1/4	10	3/8
C	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
C	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



Screwdrivers - Non Shut off - Push and Lever start

0.6 to 10 Nm (5.3 to 88.5 in.lb) - 510 to 3500 rpm



Model	L mm (in.)
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)
SD100..510	278 (10.9)



ACCESSORIES
see page 150

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 START

A	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
A	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
A	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

LEVER START

B	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
B	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
B	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
B	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
C	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

Screwdrivers - Non Shut Off - Pistol Grip

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



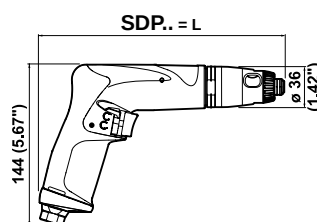
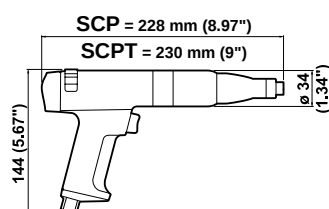
A



B



C



Model	L mm (in.)
SDP023-T3400	222 (8.74)
SDP035-T2100	222 (8.74)
SDP055-T1400	248 (9.76)
SDP075-T1050	248 (9.76)
SDP100-T780	248 (9.76)
SDP100-T490	248 (9.76)
SDP100-T300	248 (9.76)



ACCESSORIES
see page 150

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.

TRIGGER START

A	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
A	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
B	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
B	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
B	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
B	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
B	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
B	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

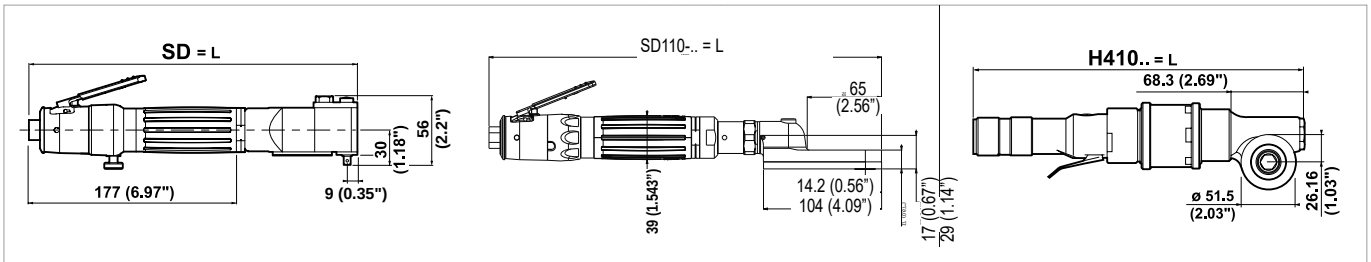
PUSH START, TOP AIR INLET

C	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
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Angle Head - Direct drive

1.5 to 105 Nm (13.3 to 929 in.lb) - 60 to 800 rpm



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



ACCESSORIES
see page 152

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 screwdrivers, it is strongly advised to equip the machines with a reaction bar to compensate against potentially high torque reaction and avoid operator injury

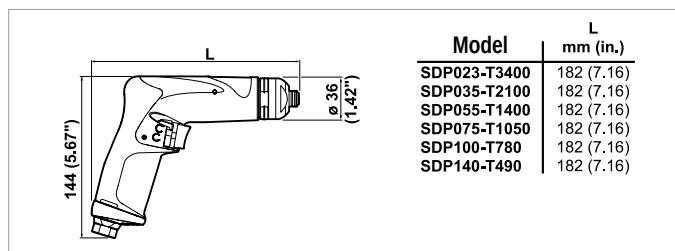
PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT DRIVE	TORQUE RANGE		LENGTH L		WEIGHT		AIR FLOW		AIR INLET	HOSE INT. Ø	
					Nm	in.lb	mm	in.	kg	lb.	l/s	cfm		in.	mm
A	SD130-LB500-D90-A4S	1465974	500	1/4 sq	2-13	17.7-115	326	12.8	1.08	2.38	8.7	18.4	1/4	10	3/8
B	SD110-LX450	205 148 131 4	450	0.445 hex	1.5-11.8	13.3-104	346	13.6	1.34	2.95	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

Screwdrivers - Direct drive Pistol grip

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



A



ACCESSORIES
see page 150

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	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	31-66.3	0.8	1.76	9.0	19.1	1/4	10	3/8
A	SDP100-T780-D4Q	1465674	780	1/4	3.5-10	31-88.5	0.8	1.76	9.0	19.1	1/4	10	3/8
A	SDP140-T490-D4Q	1465664	490	1/4	3.5-14	31-124	0.8	1.76	9.0	19.1	1/4	10	3/8

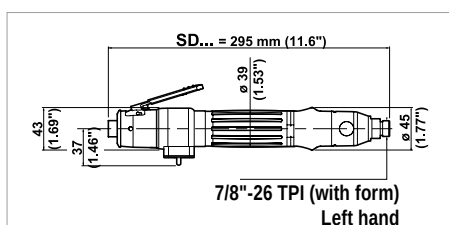
Screwdrivers - Left hand tightening - Shut off Push start Automatic reverse

0.6 to 16 Nm (5.3 to 142 in.lb) - 320 to 1100 rpm



A

Tool shown with optional clutch HSG and bit adaptor



APPLICATIONS

Placement of
Threaded
Fasteners



Tapping in
Blind Holes



Clearing Tapped
Holes after
Painting or
Coating



ACCESSORIES
see page 151

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	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

AUTOMATIC REVERSE



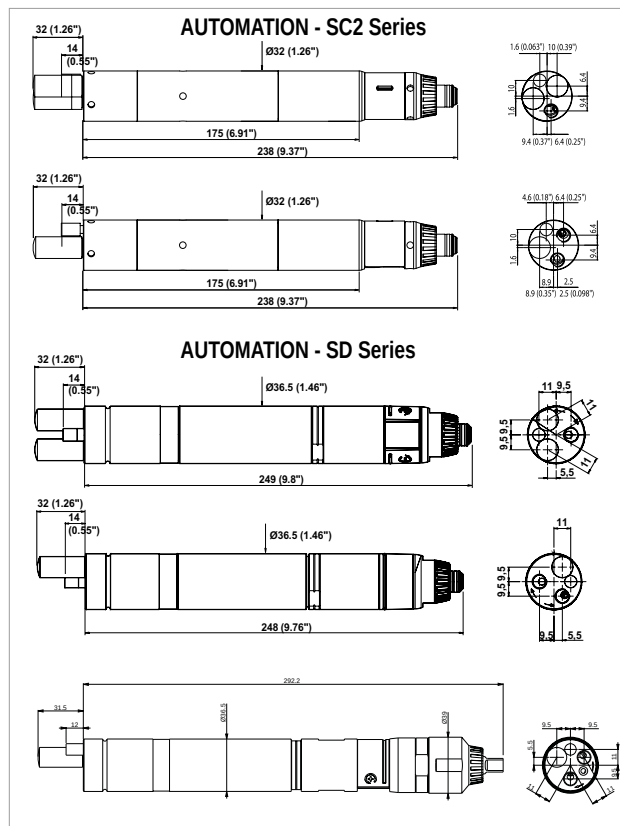
Torque Controlled - Shut Off

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



Signal

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



ACCESSORIES
see page 153

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT DRIVE	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.	

AUTOMATION - PUSH START - SHUT OFF - 1 WAY

A	SC2-025-1AM2200-S4Q	205 147 426 4	2150	1/4 Hex	0.5-2.5	4.4-22	0.5-2.5	4.4-22.1	0.64	1.41	7	14.8	1/8	6	1/4	
A	SC2-035-1AM1500-S4Q	205 147 425 4	1450	1/4 Hex	0.5-3.5	4.4-30.8	1.7-3.5	15-30.9	0.64	1.41	7	14.8	1/8	6	1/4	
A	SC2-045-1AM1000-S4Q	205 147 424 4	1000	1/4 Hex	0.5-4.5	4.4-39.6	1.7-4.5	15-39.8	0.64	1.41	7	14.8	1/8	6	1/4	
A	SC2-055-1AM700-S4Q	205 147 423 4	670	1/4 Hex	0.5-5.5	4.4-48.4	3-5.5	26.5-48.6	0.64	1.41	7	14.8	1/8	6	1/4	
A	SC2-065-1AM500-S4Q	205 147 422 4	470	1/4 Hex	0.5-6.5	4.4-57.2	3-6.5	26.5-57.5	0.64	1.41	7	14.8	1/8	6	1/4	

AUTOMATION - REMOTE START - SHUT OFF - 2 WAY

B	SC2-025-2RM2200-S4Q	205 147 440 4	2150	1/4 Hex	0.5-2.5	4.4-22	0.5-2.5	4.4-22.1	0.64	1.41	7	14.8	1/8	6	1/4	
B	SC2-035-2RM1500-S4Q	205 147 439 4	1450	1/4 Hex	0.5-3.5	4.4-30.8	1.7-3.5	15-30.9	0.64	1.41	7	14.8	1/8	6	1/4	
B	SC2-045-2RM1000-S4Q	205 147 438 4	1000	1/4 Hex	0.5-4.5	4.4-39.6	1.7-4.5	15-39.8	0.64	1.41	7	14.8	1/8	6	1/4	
B	SC2-055-2RM700-S4Q	205 147 437 4	670	1/4 Hex	0.5-5.5	4.4-48.4	3-5.5	26.5-48.6	0.64	1.41	7	14.8	1/8	6	1/4	
B	SC2-065-2RM500-S4Q	205 147 436 4	470	1/4 Hex	0.5-6.5	4.4-57.2	3-6.5	26.5-57.5	0.64	1.41	7	14.8	1/8	6	1/4	

AUTOMATION - PUSH START - SHUT OFF - 1 WAY

C	SD035-1AM2200-S4Q	1464244	2200	1/4 Hex	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	10	3/8	
C	SD055-1AM1470-S4Q	1464234	1470	1/4 Hex	2.0-5.5	18-48.7	2.0-5.5	18-48.7	0.92	2.03	8.7	18.4	1/8	10	3/8	
C	SD075-1AM1100-S4Q	1464224	1100	1/4 Hex	2.5-7.5	22-66.4	2.5-7.5	22-66.4	0.92	2.03	8.7	18.4	1/8	10	3/8	
C	SD100-1AM820-S4Q	1464214	820	1/4 Hex	3.5-10	31-88.5	3.5-10	31-88.5	0.92	2.03	8.7	18.4	1/8	10	3/8	
C	SD140-1AM510-S4Q	1464204	510	1/4 Hex	3.5-14	31-124	3.5-10	31-88.5	0.92	2.03	8.7	18.4	1/8	10	3/8	
C	SD160-1AM320-S4Q	1464194	320	1/4 Hex	3.5-16	31-142	3.5-10	31-88.5	0.92	2.03	8.7	18.4	1/8	10	3/8	

AUTOMATION - REMOTE START - SHUT OFF - 2 WAY

D	SD035-2RM2200-S4Q	1464314	2200	1/4 Hex	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	10	3/8	
D	SD055-2RM1470-S4Q	1464304	1470	1/4 Hex	2.0-5.5	18-48.7	2.0-5.5	18-48.7	0.92	2.03	8.7	18.4	1/8	10	3/8	
D	SD075-2RM1100-S4Q	1464294	1100	1/4 Hex	2.5-7.5	22-66.4	2.5-7.5	22-66.4	0.92	2.03	8.7	18.4	1/8	10	3/8	
D	SD100-2RM820-S4Q	1464284	820	1/4 Hex	3.5-10	31-88.5	3.5-10	31-88.5	0.92	2.03	8.7	18.4	1/8	10	3/8	
D	SD140-2RM510-S4Q	1464274	510	1/4 Hex	3.5-14	31-124	3.5-10	31-88.5	0.92	2.03	8.7	18.4	1/8	10	3/8	
D	SD160-2RM320-S4Q	1464264	320	1/4 Hex	3.5-16	31-142	3.5-10	31-88.5	0.92	2.03	8.7	18.4	1/8	10	3/8	
E	SD220-2RM320-S4Q	205 147 939 4	320	1/4 Hex	9-16	27-142	9-16	27-142	1.4	3.1	8.7	18.4		10	3/8	
E	SD220-2RM320-S10S	205 147 941 4	320	3/8 Sq	9-22	27-198	9-19	27-168	1.4	3.1	8.7	18.4		10	3/8	

Accessories

STRAIGHT - PUSH START & LEVER START

ACCESSORIES INCLUDED

ITEM	SB	SC2	SD
• Suspension bail(s)	443703	205 049 537 3	467003
• Suspension bail internal		205 051 289 3	
• Exhaust hose	443723	205 049 584 3	467073
• Clutch adjustment keys	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	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	50522	50522	52862
5 Hose reel balancer	50552	50552	50562
6 Tool holster DTH-42	107892	107892	107892

Bench Stands (for more information, see pages 153-163)

7 D53-25 Linear arm (tool clamp included)	615 810 702 0	615 810 702 0	615 810 702 0
7 D53-25X Linear arm (tool clamp included)	615 810 703 0	615 810 703 0	615 810 703 0
8 D53-25S Folder arm (tool clamp included)	615 810 708 0	615 810 708 0	615 810 708 0
9 D57 Balancing arm	408903	408903	408903
• Tool clamp	615 396 614 0	615 396 614 0	615 396 614 0
9 D57X Balancing arm	408913	408913	408913
• Tool clamp	615 396 614 0	615 396 614 0	615 396 614 0
10 D58 Balancing arm	408923	408923	408923
• Tool clamp	615 396 614 0	615 396 614 0	615 396 614 0
11 TRA12 / TRA25 Telescopic reaction arm		(see page 156)	

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

12 Vacuum pick up kit (spring only for 2A89)	108892		108892
13 Finder sleeve blank - plastic	464093		464093
• Finder sleeve blank - steel	464103		464103
14 Vacuum source AV201 for use with filter/regulator unit			112063

Miscellaneous

15 Offset exhaust			205 047 623 3
• Clutch case 7/8" LH thread 320-1470 rpm			205 047 478 3
• Clutch case 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 2200-3500 rpm			465443

PISTOL GRIP

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

ITEM	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 Tool holster DTH-90	615 812 119 0	615 812 119 0	615 812 119 0

Bench Stands (for more information, see pages 172-173)

4 D59 Pantographic arm	408933	408933	408933
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Miscellaneous

5 Side handle	70442	70442	467033
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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 Tool holster DTH-42	107892		
4 Tool holster DTH-90		615 812 119 0	
Suspension Shackle			
5 Suspension shackle		70082	615 571 050 0
• Swivel suspension shackle			615 396 229 0
Bench Stands (for more information, see pages 172-173)			
6 D59 Pantographic arm	408933		
Miscellaneous			
7 Side handle	467033		
• Offset exhaust		205 047 623 3	
• 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

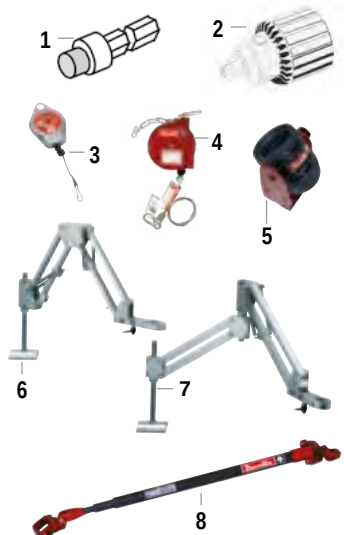
ACCESSORIES INCLUDED

	SD
• Suspension bail(s)	467003
• Side handle	467033
• Clutch adjustment keys	29932

OPTIONAL ACCESSORIES

ITEM	SD
Blind Hole Tapping/ Cleaning - 3 parts Required	
• Bit adaptor*	465513
1 Thread adaptor	96743
2 Chuck capacity 8mm (5/16")	205 053 013 3
Balancers & Tool Holster	
3 Spring suspension balancer	50532
4 Reaction free self-lock balancer	615 813 078 0
5 Tool holster DTH-42	107892
Bench Stands (for more information, see pages 172-173)	
6 D57 Balancing arm	408903
• Tool clamp	615 396 614 0
6 D57X Balancing arm	408913
• Tool clamp	615 396 614 0
7 D58 Balancing arm	408923
• Tool clamp	615 396 614 0
8 TRA25 Telescopic reaction arm	(see page 178)

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



Accessories



ANGLE HEAD

ACCESSORIES INCLUDED

	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

Suspension Shackle

• Suspension shackle	95842	70082		
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Suspension bails

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

Swiveling bails

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

Bench Stands (for more information, see pages 153-163)

6	D53-25 Linear arm (tool clamp included)	615 810 702 0	615 810 702 0	615 810 702 0	615 810 704 0
6	D53-25X Linear arm, extended reach	615 810 703 0	615 810 703 0	615 810 703 0	
7	D53-25S Folder arm (tool clamp included)	615 810 707 0	615 810 707 0	615 810 707 0	615 810 709 0

Bench Stands (for more information, see pages 172-173)

8	D57 Balancing arm	408903	408903	408903	
•	Tool clamp	615 396 614 0	615 396 614 0	615 396 614 0	
8	D57X Balancing arm	408913	408913	408913	
•	Tool clamp	615 396 614 0	615 396 614 0	615 396 614 0	
9	D58 Balancing arm	408923	408923	408923	
•	Tool clamp	615 396 614 0	615 396 614 0	615 396 614 0	
10	TRA12 / TRA25 Telescopic reaction arm		(see page 156)		
11	TT10 / TT25 Torque Tube Arm		(see page 159)		

Miscellaneous

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



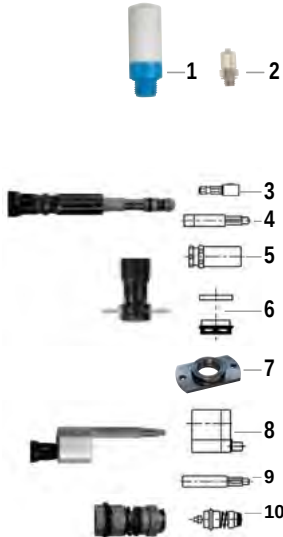
TORQUE CONTROLLED

ACCESSORIES INCLUDED

ITEM		SC2 / SD
1	Muffler	205 045 792 3
2	Straight fitting	444973

OPTIONAL ACCESSORIES

ITEM		PART NO.
• Spring Loaded Shats and Bearings Support (including 3, 4, 5)		
3	Bit Adaptor	103782
4	Spring Loaded Shatf 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



Pulse Tools - Non Shut off and Shut Off range

5 to 172 Nm (3.6 to 127 ft.lb) - 3400 to 6700 rpm



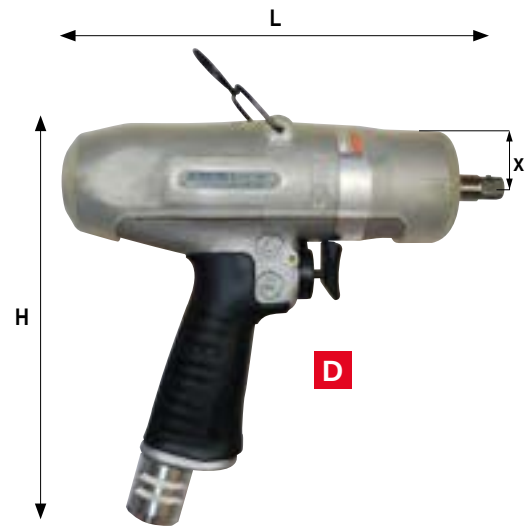
A



B



C



D

Air inlet: All models 1/4" R

PIC REF	MODEL	PART NUMBER	FREE SPEED	OUTPUT DRIVE	TORQUE RANGE		DIMENSIONS						WEIGHT		AIR FLOW		HOSE INT. Ø	
							L		X		H							
			rpm	in.	Nm	ft.lb	mm	in.	mm	in.	mm	in.	kg	lb	l/s	cfm	mm	in.

NON SHUT OFF

A	PTF020-T6700-I4Q	615 172 101 0	6700	1/4 Hex	9-20	6.6-14.7	140	5.5	22	0.87	169	6.6	0.80	1.7	6.0	12.7	6	1/4
A	PTF028-T6300-I4Q	615 172 102 0	6300	1/4 Hex	16-28	11.8-20.7	140	5.5	22	0.87	169	6.6	0.80	1.7	6.7	14.1	6	1/4
A	PTF035-T6700-I4Q	615 172 103 0	6700	1/4 Hex	20-35	14.7-25.8	152	6.0	22	0.87	169	6.6	0.80	1.7	7.0	14.8	10	3/8
B	PTF024-T6700-I10S	615 172 072 0	6700	3/8 Sq	16-24	11.8-17.7	139.5	5.5	22	0.87	165.7	6.5	0.79	1.7	6.0	12.7	6	1/4
B	PTF040-T6300-I10S	615 172 074 0	6300	3/8 Sq	20-40	14.7-29.5	139.5	5.5	22	0.87	165.7	6.5	0.79	1.7	6.7	14.2	10	3/8
B	PTF056-T6700-I10S	615 172 075 0	6700	3/8 Sq	28-56	20.7-41.3	151.5	5.9	22	0.87	165.7	6.5	0.83	1.8	7.0	14.8	10	3/8
B	PTF060-T6100-I10S	615 172 076 0	6100	3/8 Sq	36-60	26.5-44.2	155	6.1	24	0.94	170.0	6.7	1.02	2.2	10.0	21.2	10	3/8
B	PTF096-T4600-I13S	615 172 077 0	4600	1/2 Sq	52-96	38.3-70.8	173	6.8	27	1.06	175.0	6.9	1.45	3.2	10.8	22.9	10	3/8
B	PTF136-T5000-I13S	615 172 078 0	5000	1/2 Sq	80-136	59-100	182.5	7.2	29.5	1.16	186.5	7.3	1.80	4.0	13.3	28.2	10	3/8
B	PTF172-T3800-I13S	615 172 079 0	3800	1/2 Sq	120-172	88-127	191.5	7.6	32	1.26	192.0	7.6	2.10	4.6	14.2	30.1	10	3/8

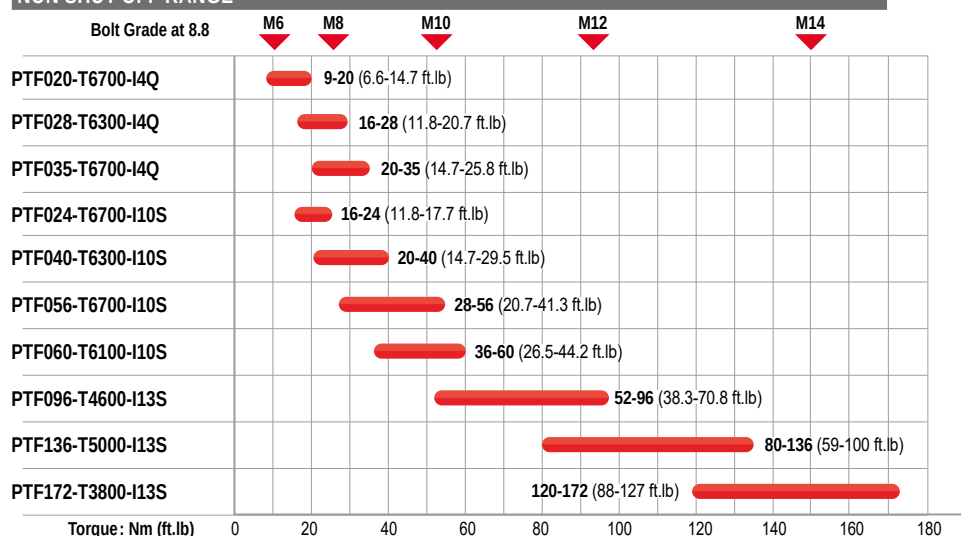
SHUT OFF

A	PTF012-T6200-S4Q	615 172 104 0	6200	1/4 Hex	5-12	3.6-8.8	181	7.1	22	0.87	169	6.6	1.00	2.2	6.7	14.1	6	1/4
A	PTF022-T6500-S4Q	615 172 105 0	6500	1/4 Hex	11-22	8.1-16.2	181	7.1	22	0.87	169	6.6	1.00	2.2	7.5	15.9	6	1/4
A	PTF028-T6300-S4Q	615 172 106 0	6300	1/4 Hex	19-28	14.0-20.5	193	7.6	22	0.87	169	6.6	1.00	2.2	9.2	19.4	10	3/8
C	PTF012-T6200-S10S	615 172 081 0	6200	3/8 Sq	5-12	3.7-8.8	180.5	5.5	22	0.87	164.3	6.5	0.97	2.1	6.7	14.1	6	1/4
C	PTF024-T6500-S10S	615 172 084 0	6500	3/8 Sq	11-24	8.1-17.7	180.5	5.5	22	0.87	164.3	6.5	0.97	2.1	7.5	15.9	10	3/8
C	PTF035-T6300-S10S	615 172 087 0	6300	3/8 Sq	22-35	16.2-25.8	192.5	5.9	22	0.87	164.3	6.5	1.00	2.2	9.2	19.4	10	3/8
D	PTF060-T6100-S10S	615 172 088 0	6100	3/8 Sq	30-55	22.1-40.6	189.5	6.1	24	0.94	169.0	6.7	1.10	2.4	10	21.1	10	3/8
D	PTF085-T4800-S13S	615 172 089 0	4800	1/2 Sq	50-85	36.9-62.7	208.5	6.8	27	1.06	175.0	6.9	1.60	3.5	11.3	24.0	10	3/8
D	PTF130-T4500-S13S	615 172 090 0	4500	1/2 Sq	70-120	51.6-88.5	217.5	7.2	29.5	1.16	186.5	7.3	1.85	4.1	13.3	18.2	10	3/8
D	PTF165-T3400-S13S	615 172 091 0	3400	1/2 Sq	110-155	81-114	227.5	7.6	32	1.26	192.0	7.6	2.10	4.6	14.2	30.0	10	3/8

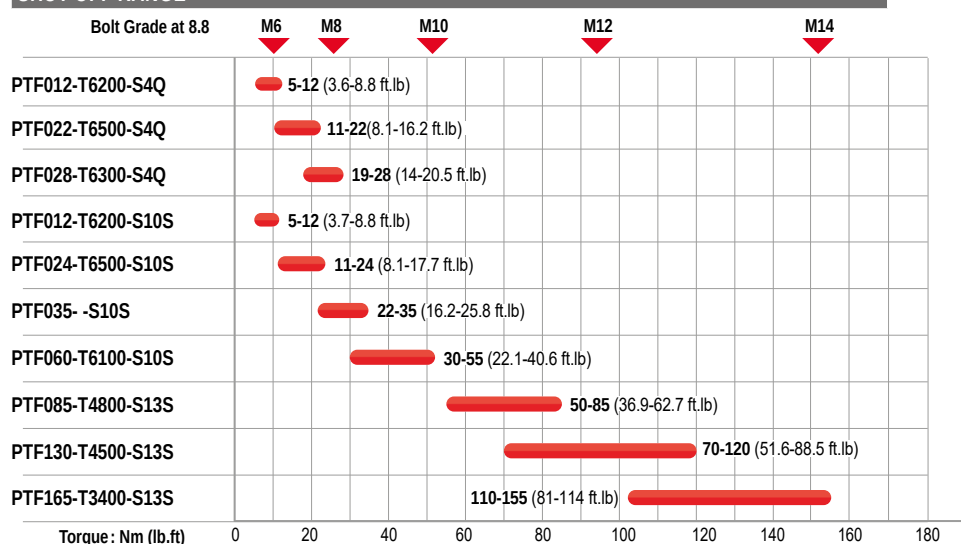
The tool is designed for a working pressure of 6.3 bar 90 PSI.

Pulse Tools - Tool Selection

NON SHUT OFF RANGE



SHUT OFF RANGE



Accessories

ACCESSORIES INCLUDED

	PART NO.
• Air Hose nipple PTF012/024/040	541 205 445 0
• Air Hose nipple (other models)	541 205 445 2
• Suspension bail	541 205 847 4
• Hex pin wrench	-

Pulse Non Shut Off

• Cover protection for PTF020/024/028/040.	541 206 045 6
• Cover protection for PTF060..	541 206 045 8
• Cover protection for PTF056/035.	541 206 045 7
• Cover protection for PTF096..	541 206 045 9
• Cover protection for PTF136..	541 206 046 0
• Cover protection for PTF172..	541 206 046 1

ACCESSORIES INCLUDED

	PART NO.
Pulse Shut Off	
• Cover protection for PTF012/022/024...	541 206 045 0
• Cover protection for PTF035...	541 206 045 1
• Cover protection for PTF060...	541 206 045 2
• Cover protection for PTF085...	541 206 045 3
• Cover protection for PTF130...	541 206 045 4
• Cover protection for PTF165...	541 206 045 5



Specific Nutrunners and Spindles



Specific nutrunners

- Flush socket
- Crowfoot (open or close ended)
- Hold and Drive
- Crowfoot Hold and Drive
- Insulated
- 2 output shafts
- With multiplier
- Quick Change

Specific spindles

- U-Shape
- Specific output shaft
- Second torque transducer

Specific reaction bars

AND MUCH MORE ON REQUEST!

For further information about technical data, please contact your Desoutter representative or Project Manager for assistance

Insulated Solutions

Assembly solutions for electric vehicles

DESOUTTER SOLUTION



During the **assembly of components exposed to high voltage such as busbars and harnesses**, using insulated tools is one of the many important steps to protect from electrical shocks and damages:

- the operators
- the tools
- the battery pack
- the assembly line

The design strictly follows the requirements of the latest International Electro technical Commission (IEC) Norms **IEC60900:2018 & IEC60664-1:2020** that entails to ensure operators are protected against electrical breakdown for currents less than 1000V/AC and 1500V/DC.

Our solution is tested by an external laboratory.

INSULATED TOOLS

1000V RATED

We are allowed to apply the official international 1000-volt rating symbol on the different accessories which are related to the electrical insulation of our tools. This means they prevent electrical breakdown for currents up to 1000 V/AC and 1500 V/DC.



Insulated Solutions

Assembly solutions for electric vehicles

INSULATED TOOLS AND RANGE

- EABCom and B-Flex Series
5 to 50 Nm (3.7 to 37 ft.lb) - 10 to 900 rpm



- EPBCom and B-Flex Series
1.5 to 17 Nm (1.1 to 12.5 ft.lb) - 10 to 1800 rpm



- EABS Series
1.5 to 24 Nm (1.1 to 17.7 ft.lb) - 10 to 1500 rpm



- E-LIT Series
1.5 to 45 Nm (13.3 to 398 in.lb) - 50 to 880 rpm



EABCom eLink and EPBCom are **compatible** with

nex)))onar



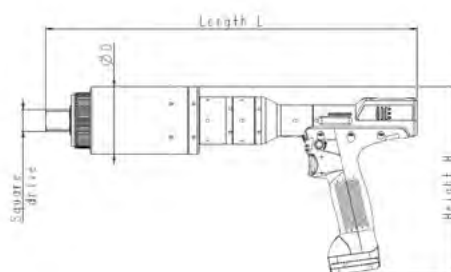
For further information,
please contact your Desoutter
representative for assistance.

EPBx High Torque Series

50 to 2000 Nm (36.9 to 1475.1 ft. lb) - 3.2 to 78 rpm



MODEL	Ø D		LENGTH L		HEIGHT H	
	mm	in.	mm	in.	mm	in.
A	48	1.9	290	11.4	206	8.1
B	48	1.9	311	12.2	206	8.1
C	48	1.9	311	12.2	206	8.1
D	64	2.5	426	16.8	212	8.3
E	84	3.3	460	18.1	222	8.7
F	80	3.1	433	17.0	220	8.6
G	63	2.5	353	13.9	212	8.3



PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE RANGE		MAX SPEED	WEIGHT WITHOUT BATTERY	VOLTAGE
				MIN.	MAX.			
			in	Nm	Nm	rpm	kg	V

PISTOL VERSION 150 NM

A	EPBHT 150-78	8920903996	1/2	50	160	78	1.8	36
A	EPBAHT 150-78	8920904001	1/2	50	160	78	1.8	36
A	EPBCHT 150-78	8920904006	1/2	50	160	78	1.8	36

PISTOL VERSION 300 NM

B	EPBHT 300-20	8920903997	3/4	125	300	20	2.0	36
B	EPBAHT 300-20	8920904002	3/4	125	300	20	2.0	36
B	EPBCHT 300-20	8920904007	3/4	125	300	20	2.0	36

PISTOL VERSION 500 NM

C	EPBHT 500-10	8920903998	3/4	325	500	10	2.0	36
C	EPBAHT 500-10	8920904003	3/4	325	500	10	2.0	36
C	EPBCHT 500-10	8920904008	3/4	325	500	10	2.0	36

PISTOL VERSION 750 NM

G	EPBHT 750-7	8920904995	3/4	512	750	7	2.9	36
G	EPBAHT 750-7	8920904994	3/4	512	750	7	2.9	36
G	EPBCHT 750-7	8920904993	3/4	512	750	7	2.9	36

PISTOL VERSION 1000 NM

D	EPBHT 1000-6	8920904146	1	550	1000	6	4.3	36
D	EPBAHT 1000-6	8920904149	1	550	1000	6	4.3	36
D	EPBCHT 1000-6	8920904033	1	550	1000	6	4.3	36

PISTOL VERSION 1500 NM

E	EPBHT 1000-6	8920904146	1	550	1000	6	4.3	36
E	EPBAHT 1000-6	8920904149	1	550	1000	6	4.3	36
E	EPBCHT 1000-6	8920904033	1	550	1000	6	4.3	36

PISTOL VERSION 2000 NM

F	EPBHT 2000-3	8920904148	1	1350	2000	3.2	6.1	36
F	EPBAHT 2000-3	8920904151	1	1350	2000	3.2	6.1	36
F	EPBCHT 2000-3	8920904035	1	1350	2000	3.2	6.1	36

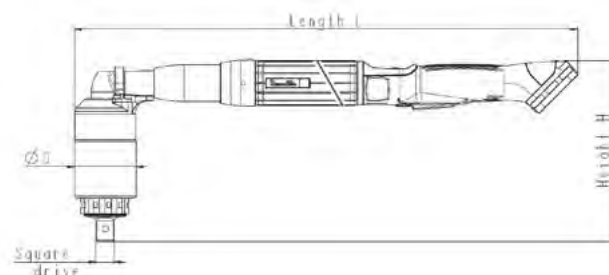
• Battery not included in standard offering

EABx High Torque Series

250 to 1500 Nm (184.4 to 1106.3 ft. lb) - 4 to 10 rpm



MODEL	Ø D		LENGTH L		HEIGHT H	
	mm	in.	mm	in.	mm	in.
A	48	1.9	482	19.0	137	5.4
B	63	2.5	512	20.2	183	7.2
C	84	3.3	529	20.8	298	11.7
D	70	2.8	522	20.6	280	11.0



PIC REF	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE RANGE		MAX SPEED	WEIGHT WITHOUT BATTERY	VOLTAGE
				MIN.	MAX.			
			in	Nm	Nm	rpm	kg	V

ANGLE VERSION 500 NM

A	EABHT 500-10	8920903999	3/4	250	500	10	2.4	36
A	EABAHT 500-10	8920904004	3/4	250	500	10	2.4	36
A	EABCHT 500-10	8920904009	3/4	250	500	10	2.4	36

ANGLE VERSION 1000 NM

B	EABHT 1000-4	8920904000	3/4	500	1050	4	3.6	36
B	EABAHT 1000-4	8920904005	3/4	500	1050	4	3.6	36
B	EABCHT 1000-4	8920904010	3/4	500	1050	4	3.6	36

ANGLE VERSION 1500 NM

C	EABHT 1500-5	8920904152	1	550	1500	5	6.7	36
C	EABAHT 1500-5	8920904153	1	550	1500	5	6.7	36
C	EABCHT 1500-5	8920904047	1	550	1500	5	6.7	36

ANGLE VERSION 2000 NM

C	EABHT 1500-5	8920904152	1	550	1500	5	6.7	36
C	EABAHT 1500-5	8920904153	1	550	1500	5	6.7	36
C	EABCHT 1500-5	8920904047	1	550	1500	5	6.7	36

• Battery not included in standard offering



ACCESSORIES

please contact your Desoutter representative

Multiplus



Options

- Suspension (cable balancer or cylinder)
- Transducer holders
- Variable center distance (manual, automatic by cylinder or motorized)



PART NO.	DESCRIPTION	
615 396 875 0	Handle start horizontal	
615 396 876 0	Handle start vertical	
615 396 877 0	Handle support cpte	
615 396 878 0	Handle reverse	
615 398 135 0	2 additional buttons kit	
615 398 136 0	1 LED + 1 additional button kit	

For further information about technical data, please contact your Desoutter representative or Project Manager for assistance



Customized Machine

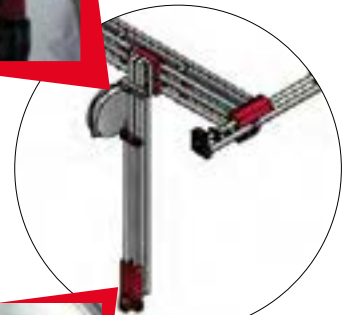
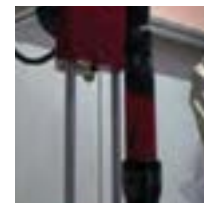
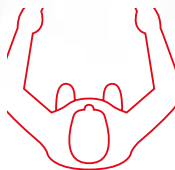
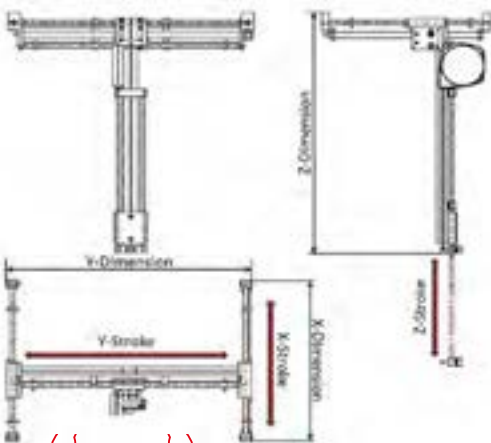
Single spindle, Multi spindles, Manual or automatic center distance adjustment



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



ROLLEX



DESCRIPTION	UNIT	RANGE		
Maximum Torque	Nm	30	60	90
	ft.lb	22.1	44.2	66.4
Maximum Thightening head weight	kg	20	25	25
	lb	44.1	55.1	55.1
X-Stroke (min - max)	mm	250 - 450		
	in.	9.8 - 17.7		
Y-Stroke (min - max)	mm	250 - 750		
	in.	9.8 - 29.5		
Z-Stroke (min - max)	mm	250 - 500		
	in.	9.8 - 19.7		
X-Dimensions	mm	260 + X-Stroke		
	in.	10.2 + X-Stroke		
Y-Dimensions	mm	290 + Y-Stroke		
	in.	11.4 + Y-Stroke		
Z-Dimensions	mm	1070 + Z-Stroke		
	in.	42.1 + Z-Stroke		

For further information about technical data, please contact your Desoutter representative or Project Manager for assistance

Arms and Torque Tubes

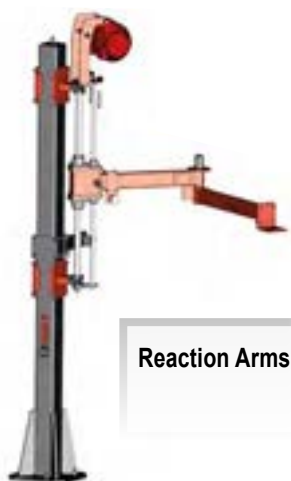
Torque Tubes

- Aluminium (0-250 Nm)
(0-185 ft.lb)
- Steel (250-2000 Nm)
(185-1480 ft.lb)
- Balancer or pneumatic cylinder suspension



Light Torque Tubes

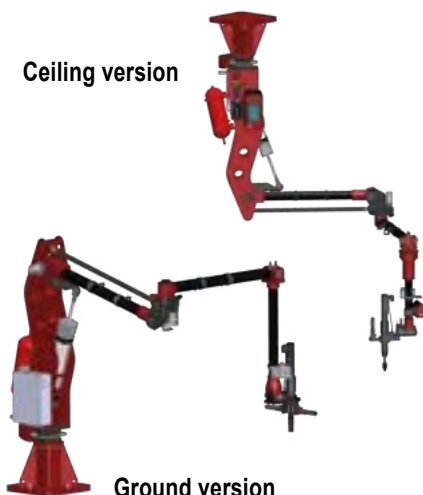
- Steel (250-1000 Nm)
(185-737.5 ft.lb)
- Mono spindle
- Removal cover for balancer maintenance
- Integrated balancer suspension



Reaction Arms

Up to 150 Nm (111 ft.lb)
Balancer suspension
Radius 1200 to 2000 mm (3.94 to 6.56 ft)

Ceiling version



Ground version

Up to 300-600 Nm (221-442 ft.lb)
Zero Gravity Carbon Arm
Easy moving manipulation
Radius 1500 to 2500 mm (4.92 to 8.20 ft)



Up to 300-600-1000-2000 Nm
(221-442-737-1475 ft.lb)
Pneumatic cylinder suspension
Radius 1600 to 4000 mm (5.25 to 13.12 ft)

Options

Arms options

- Controller and accessories stand
- Parking position sensor
- Encoder (possible on each axis)
- Rotating pillar
- Brakes



Controller support

Encoder / brake



Accessories and Options

Tool holders

Fixed tool holder



X-Rotating tool holder



Indexed X-Rotating tool holder



Z-Rotating tool holder



Indexed Z-Rotating tool holder



Y-Rotating tool holder



Indexed Y-Rotating tool holder



CVI3 HMI & Positioning System

CVI3 HMI

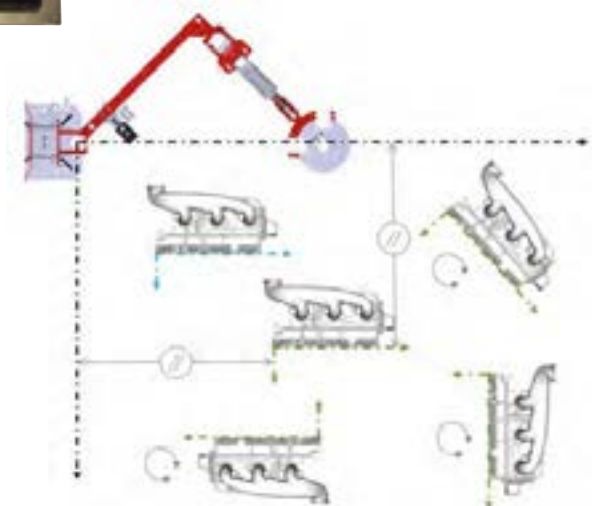
- Standard or specific 4", 7" and 8"
- PC or non PC based
- Plastic or stainless steel enclosure
- From basic input keypad to CVI Advanced HMI
- Multi-tool / Operator guidance working instruction management



CVI3 Positioning System

can be used in many different cases:

- DSM Arms, D53 Linear and Folded arms, TRA or special Arms
- Based on connected encoders, positioning system permit to control & guaranty every tightening in order to prevent to forget some bolts or to tighten a bolt already tightened
- Controlled tightening system
- Standard, "Relative X & Y" or "Relative X & Y + Z Rotating" mode



For further information about technical data, please contact your Desoutter representative or Project Manager for assistance

Customized Solutions

CONTROLLER STAND

- 1 Controller CVI3 and accessories or 2 controllers
- 1 Controller Twin CVI3 and accessories or 2 controllers
- Multi CVI3 - Retractable controller stand
- Different options and cable management included



SPECIAL FUNCTIONS:

- Trombons (vertical and horizontal)
- Special gear boxes simple or with Hold and Drive
- Special gear boxes with 2 spindles



For further information about technical data, please contact your Desoutter representative or Project Manager for assistance



Other Customized Solutions

CUSTOMIZED SOLUTIONS

- 1 spindle with electromagnet and reaction pin with 2 center distances
- Special multi spindle with orientation, center distance adjustment, suspension with brake, ...
- Trolley and arms on trolley

AND MUCH MORE ON REQUEST !



For further information about technical data, please contact your Desoutter representative or Project Manager for assistance

Screwfeeder Solutions - Rapid

SCREW FEEDING SYSTEM

Automation has significantly transformed the manufacturing industry, particularly with the advent of screw feeding systems that have replaced traditional manual tightening stations. Coupled with rapidly advancing handling systems and electrical screwdriver technology, the performance, production capacity, and quality control of tightening stations have reached unprecedented levels.



RAPID SOLUTION FROM DESOUTTER



We recognize the significant impact a screw feeding system can have on the success of a tightening process and the overall performance of the final assembly. As a natural progression of our product range, we developed our in-house designed screw feeding system. Introducing "RAPID", an integrated solution that combines our screwdriver and controller, ensuring perfect compatibility, enhancing project flexibility, and aiding global standardization. This combination boosts productivity and minimizes downtime.

GENERAL INTRODUCTION

A screw feeding system encompasses more than just its two primary components—the feeder unit and tightening module. It also includes a screwdriver, controller, functional accessories, and specific design features, forming a comprehensive system topology. This system is customized to suit your fastener and application using standardized components. Its goal is to automate the tightening process, enhancing cycle time, improving quality, and preventing incorrect operations.



For further information about technical data, please contact your Desoutter representative or Project Manager for assistance

Screwfeeder Solutions - Feeders

BOWL FEEDER

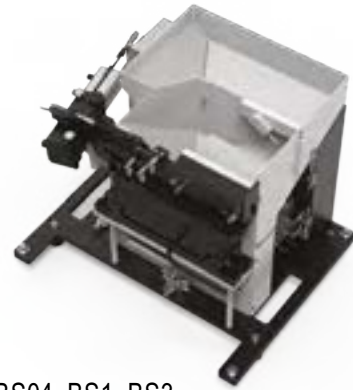
- Fill volume: 0.4L, 1.0L or 3.0L
- Simple structure and easy maintenance



SS2, SS5

STEP FEEDER

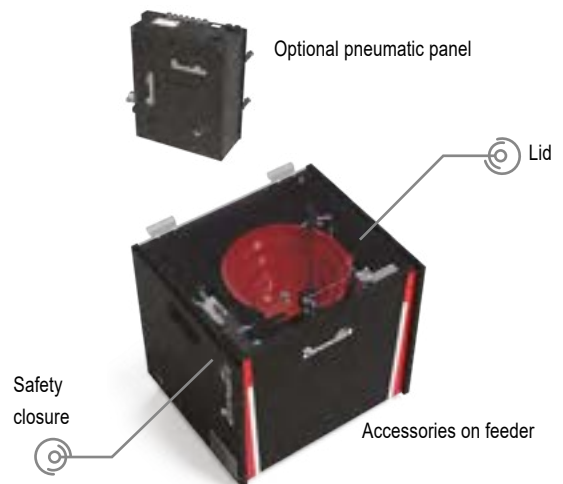
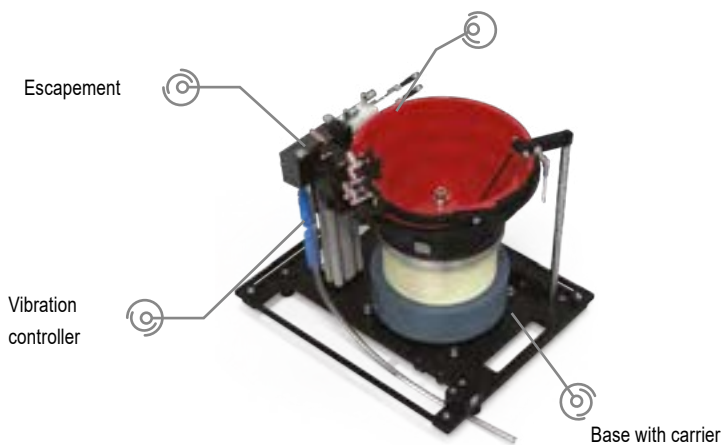
- Fill volume: 2.0L or 5.0L
- Reduced friction, particles and noise



BS04, BS1, BS3

STRUCTURE

- Container that includes:
- Linear rail
- Linear track sensor
- Screw level indicator



CONTAINER AND LINEAR RAIL



LINER RAIL AND ESCAPEMENT



Nut feeding is available as well

Screwfeeder Solutions - Tightening modules

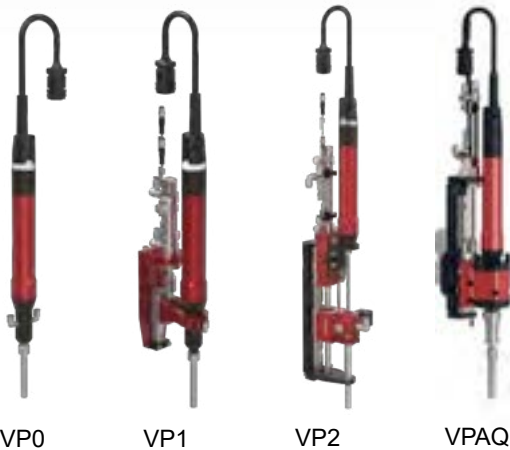
AUTOMATIC STATION AUTO-FEEDING

- With or without Z-axis head stroke;
- Vacuum option for hard-to-reach point;
- Male and female screw recess;
- Best cycle time;
- All tightening directions;



AUTOMATIC STATION PICK& PLACE

- Single or double stroke;
- VP0 on your own Z-axis stroke;
- Wide range of screws;
- Best cost for hard-to-reach points;
- Compact and light weight;



HAND-HELD STATION AUTO-FEEDING AND PICK & PLACE

- VP0 uses for hand-held station;
- Ergonomic design with D53
- Exist for horizontal application

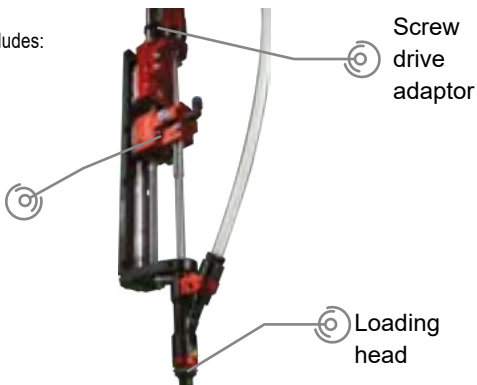


"SWIVEL" LOADING HEAD



Stroke module that includes:

- Pneumatic cylinders;
- Screw bit;
- Vacuum tube;
- Vacuum module;
- Guide rail

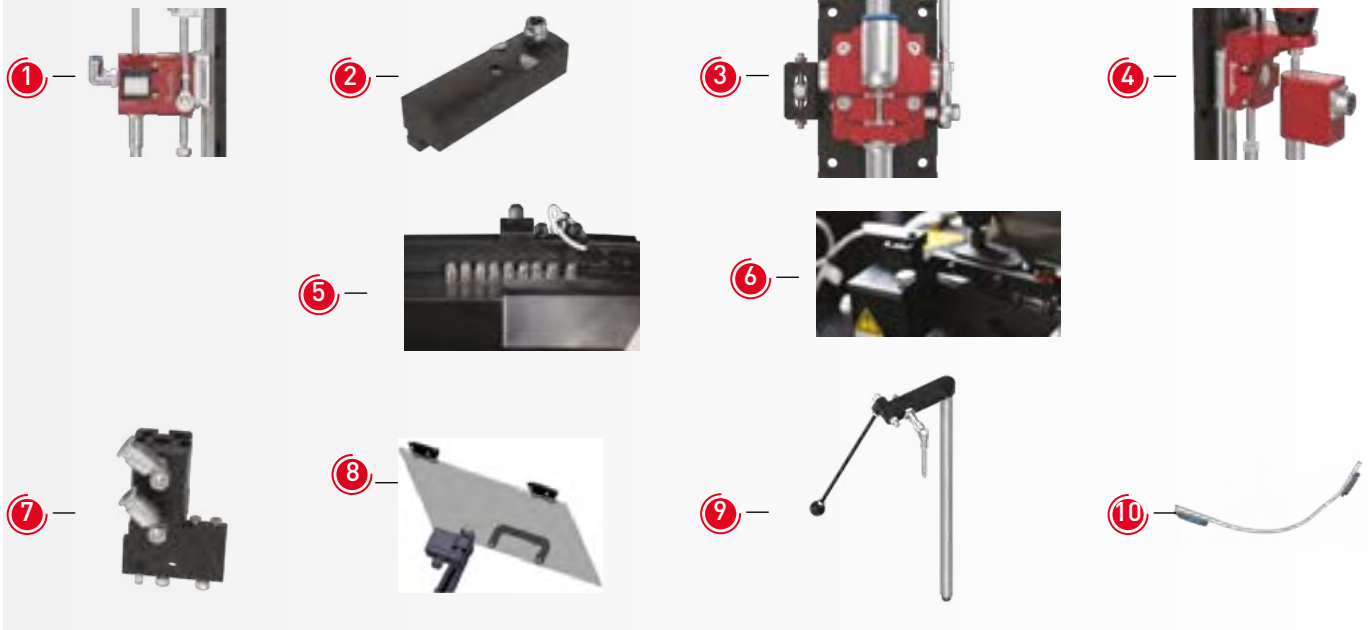


Nut feeding is available as well

For further information about technical data, please contact your Desoutter representative or Project Manager for assistance

Screwdriver Solution - Accessories

	ACCESSORIES	USAGE	FUNCTION
1	Vacuum sensor	module	Check whether vacuum is correctly built up. In case of screw dropping, the sensor should send alert signal.
2	Depth sensor	module	Ensure the tool cylinder has correct stroke for tightening, through analogue signal.
3	Search position sensor	module	Ensure the screw is correctly engaged by the bit.
4	DRT Function	module	Tool torque online calibration
5	Overload ejector	Feeder	Avoid the overload of screws when the rail is full by air blowing.
6	Escapement sensor	Feeder	Ensure the screw presence in the escapement.
7	Screw hammer	Feeder	Ensure correct alignment of screw and washers, by "knocking" the screw head.
8	E-locker	Feeder	Safety closure can only be opened, by sending electrical signal to controller.
9	Screw level monitor	Feeder	Detect the screw level in container and send signal if screws are running out.
10	Feed hose sensor	Feeder	Check the screw presence in the feed hose.



hopper



break unit



shaft length check



distributor



presenter



Particle cleaner

THE MOTION CAPTURE SOLUTION

Solutions

INTELLIGENT WORKER ASSISTANCE FOR POSITION MONITORING OF TOOLS



GOOD TO KNOW

6% of the global population is colour blind or has other colour blindness issues. Nexonar offers an audio support system for these groups of people.

Each work step is explained step by step and makes error-free work possible

OUR OBJECTIVE

- True to the "Poka Yoke" principle, we make error-free work possible.
- Ensuring security within the work process by locking the device in the wrong position and unlocking it in the right one.
- Through visual and auditory feedback, we help the worker to achieve a process in which error prevention and quality control go hand in hand.

YOUR BENEFITS

- Less follow-up remedy of defects
- Easier handling through image, text and sound support system
- Less need for training with frequently changing personnel
- Better cost/benefit ratio in the long term
- Error exclusion in complex and/or monotonous work activities



THE MOTION CAPTURE SOLUTION

Products

IR CAMERA

- Flexible attachment and assembly options
- Various fields of view (up to 4x4m per camera)
- Up to 8 additional cameras at one workstation
- Only receptive to infrared light



BENEFITS OF IR TECHNOLOGY

- Compliant with General Data Protection Regulation (GDPR)
- Possibility of very precise work processes with distances up to 1mm
- Independent from the light condition at the work place



TEACHING TRACKER



TOOL TRACKER



MQ REFERENCE TRACKER



HAND SIZE TRACKER



THE MOTION CAPTURE SOLUTION

Visualization

ASSEMBLY SCOUT

- Visualize the tasks you have to do
- Customized operator instructions
- Monitor dynamically the positions and control your process



3D LASER GUIDANCE

- Visualize the right positions directly on the application
- Movable laser without loss of accuracy
- Possibility to configure customized shapes (arrow, cross, number)



AUGMENTED REALITY

- Visualize the status of an actual system setup
- Movable laser without loss of accuracy
- Help to improve virtual zone positions according to the tool orientation

THE MOTION CAPTURE SOLUTION

Software

ASSEMBLY SCOUT CONFIGURATION

- Worker assistance software
- Dynamic monitoring of the positions
- Error-free work
- Real-time analytics

CONNECTIONS

- ProfiNet
- Ethernet/IP
- Profibus
- Discreet I/O
- Open Protocol
- MQTT
- OPC/UA
- PivotWare (Desoutter)
- OGS (Bosch Rexroth)
- VPG+ (SCS)
- SQS (Atlas Copco)
- AklanS (VW/Audi)

USER INTERFACE



Simple controls



Tracker selection



Definition of the workspace



Create factory recipes



Lots of customization options



Quality Assurance Techniques

Statistical quality assurance techniques help organizations to achieve over 30% defect reduction annually. They reflect a growing trend throughout the industry to become more quantitative about quality.

Activities to implement start from the qualification of your assembly tools in inventory, and the regular tests of their performance over their lifetime.

But over the simple measurement of Power Tools performances, Quality Assurance allows a continuous improvement of processes.

Using Six Sigma for process improvement (DMAIC):

- **DEFINE:** Set the goal
- **MEASURE:** Define the metrics
- **ANALYZE:** Measure where you go
- **IMPROVE:** Improve Processes while you go
- **CONTROL:** Act immediately if going on the wrong path

Measure and Analyze are the main added value of the range exposed in following pages.

Based on your Control Plan, the different solutions we provide in Measurement Techniques allow you to:

- Take control of the Capability and repeatability of Assembly tools from their reception in the factory, and make it sustainable and traceable with Machine Capability Tests and Calibration reports.
- Qualify the selected tools for specific operations in regards to the periodical tests performed.
- Measure in SPC the output of production and get clear guidance to implement preventive maintenance or detect a process deviation on critical operations.
- Enable documentation of your tightening operations from engineering phase to quality audits.

As a manufacturer of Industrial Tools, measurement systems, and service provider Desoutter is your partner to make your investment sustainable and cost effective.

Delta Data Collector and Analyzer

Delta 1D / Delta 6D / Delta 7D

Delta Analyzer is a portable solution to perform Assembly line Audits, measure and detect deviations in SPC, execute Machine Capability Test to prove that the inventory of tools is under control.

Combined with the entire range of standard Desoutter transducers (rotary, static and wrenches) it allows a continuous roll out of the Control Plan in Production and enables calibrations of pulse tools, pneumatic and electric nutrunners, spindles, screwdrivers and wrenches.



MAIN FEATURES

- **Display:** Large color screen shows clear test results, Torque & Angle curves. Real time statistics, Tools description and Routes
- **Connectivity:** Ethernet and USB port for Delta QC software communication and RS232 for communication to controllers (calibrations) or barcode reader
- **Power:** Li-Ion high capacity battery of 16 hours of autonomy or external power supply
- **Transducer:** Standard Desoutter connector for Digital transducers, Analog CMD and GSE transducer connection through optional adapters.
- **Barcode (Delta 7D):** Embedded Barcode for automatic Pset selection or VIN traceability



MAIN BENEFITS

■ Machine Capability Tests (Maintenance Operators)

- Perform tools dynamic on-line verifications with Digital Rotary Transducers with minimal disturbance in production with clear outputs thanks to SPC mode.
- Check the repeatability of tools after adjustment or perform tools transducers calibrations or carry full tool check after repair / maintenance, using Static transducers to report Cm/Cmk.
- Compare Tools performances on a job to define backup solutions.

■ Process Capability Tests (Quality Operators)

- Plan routes and focus to execute a Control Plan on the critical operations where Quality Control is the most valuable to detect deviations and avoid non desired costs due to rejects.
- Carry Joint checks verifications campaigns with a Digital Torque & Angle wrench.
- Measure in real time and with precision the outputs of a tightening tool in production, with a direct access to curves and real time statistics, removing manual work / reports.



Test in static
(PST)



Test in dynamic
(DRT)



Post-production
Joint check (Q-AUDIT)

This range of 3 models delivers 3 levels of usage:

- Basic : DELTA 1D for Torque measurement only.
- Essential : DELTA 6D for Torque & Angle measurements.
- Advanced : DELTA 7D, adding to the Delta 6D model an embedded barcode scanner which makes it the ideal daily companion for both Maintenance operations and Quality Control data collection during line Audits. This model also allows joint analysis with different production strategies, as well as Residual Torque Checks (with Q-AUDIT wrenches), and SPC campaigns.

Delta Data Collector and Analyzer

Delta 1D / Delta 6D / Delta 7D

MODEL	PART NUMBER	POWER REQUIREMENTS		DEPTH		WIDTH		HEIGHT		WEIGHT	
		BATTERY LIFE	CHARGER	mm	in.	mm	in.	mm	in.	kg	lb
Delta 1D	615 935 101 0	16	110/240	45	1.77	95	3.74	192	7.56	0.5	1.1
Delta 6D	615 935 102 0	16	110/240	45	1.77	95	3.74	192	7.56	0.5	1.1
Delta 7D	615 935 147 0	16	110/240	45	1.77	95	3.74	192	7.56	0.5	1.1

All models are supplied with box including Battery, Power Supplier and Delta QC Free Version

	DELTA 1D Basic	DELTA 6D Essential	DELTA 7D Advanced
Onboard Functionalities			
Tool Checks (Power tool, Pulse tool, Wrenches)	✓	✓	✓
Min, Max, Avg, Sigma statistics	✓	✓	✓
Cm/Cmk and SPC	-	✓	✓
Joint Checks / Quality Strategies	-	-	✓
Hardware Capability			
Number of channels	1	1	1
Digital transducers (DRT, PST, FCT, DSTxs)	✓	✓	✓
Analog transducers* (CMD, GSE, 19 pins analog transducers)	✓	✓	✓
Q-Audit for Joint Checks and Analysis	-	-	✓
Size	95 x 192 x 49	95 x 192 x 49	95 x 192 x 49
Keyboard	✓	✓	✓
Color display	✓	✓	✓
Torque	✓	✓	✓
Angle	-	✓	✓
Clamping Force	✓	✓	✓
Embedded Tools database	1	1000	1000
Embedded Psets database	1 in manual	1000	1000
Results storage	1000	5000	5000
Curves storage (visible on display)	10	10	10
Embedded Barcode reader	-	RS232 (not included)	✓
RS232 / RJ45 (Ethernet) & USB port	✓	✓	✓

*Through optional analog/digital adapter

	FREE	LICENSED	ADVANCED
Software			
View / Export results and Curves	✓	✓	✓
Configure Tests strategies	✓	✓	✓
Define Routes (up to 32.000) for a fleet of Delta 6D/7D	-	✓	✓



Main functions of Delta Analyzer

Delta 1D / Delta 6D / Delta 7D



- Connectivity: Ethernet / RS232 / USB Port (Transfer of results in Delta QC SQLite database for an overall traceability from all transducers.)
- Power: Li-Ion high capacity battery (16 hours)
External power supply
- Barcode: For Pset selection / Traceability
- Transducer: Connector to fit a large range of transducers (Rotary / Static / Load transducers and Q-AUDIT wrench)

Digital Transducers:



DRT



PST



DSTxs



FCT



Q-AUDIT

Accessories for Delta

ACCESSORIES INCLUDED

	PART NO.
1 Delta Battery	615 936 142 0
2 Universal Power Supplier	615 936 143 0



— 1



— 2



(belt clip included)

OPTIONAL ACCESSORIES

ITEM		PART NO.
3	Rubber Protection	615 936 141 0
4	Digital 10 pins Cable 2m	615 917 430 0
	• Digital 10 pins Spiral Cable 2m	615 917 432 0
	• Digital 10 pins Cable 5m	615 917 433 0
	• CMD & ST 4000 Adapter	615 917 671 0
	• CMD 5000 Adapter	615 917 672 0
	• RS232 Adapter	615 917 670 0
	• GSE 2500 Adapter	615 917 674 0
	• GSE 8500T Adapter	615 917 675 0
	• GSE 8500T/A Adapter	615 917 676 0
	• Analog 19 pins Adapter	615 935 175 0
5	Delta Demo Case (Empty)	615 936 140 0
6	Delta QC Licensed - 1 user	615 927 651 0
6	Delta QC Licensed - 5 user	615 927 652 0
6	Delta QC Advanced 1 user	615 927 653 0
6	Delta QC Advanced 5 user	615 927 654 0
7	Delta Neck Holder	615 936 530 0



— 3



— 4



— 5



— 6

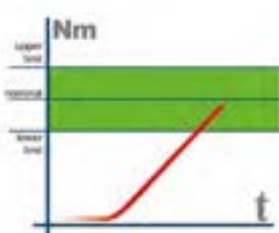


— 7

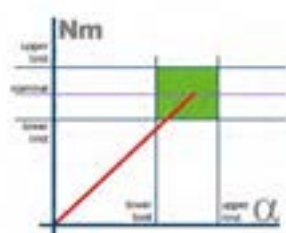
Q-Audit - Wrench

Production & Quality strategies: In combination with Delta 7D, the torque and angle wrench for residual automatic torque check and Joint analysis with Yield point detection.

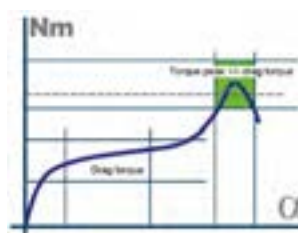
MODEL	PART NUMBER	RANGE		ANGLE	DRIVE		INCLUDED RATCHET	LENGTH		WEIGHT	
		Nm	ft lb		mm	in.		mm	in.	kg	lb
Q-Audit 30	615 221 040 0	3-30	2.21-22.13	✓	9x12	0.35X0.47	3/8	405	15.9	0.765	1.686
Q-Audit 150	615 221 041 0	15-150	11.06-110.6	✓	14x18	0.55x0.70	3/8	420.5	16.55	1.020	2.248
Q-Audit 350	615 221 042 0	35-350	25.81-258.1	✓	14x18	0.55x0.70	3/8	697	27.44	2.168	4.779



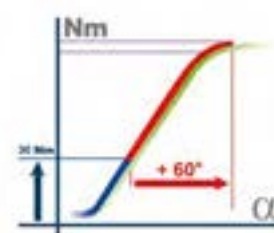
Tightening within torque limits



Tightening within torque and angle limits (tightening to a window)



Prevailing torque automatic compensation

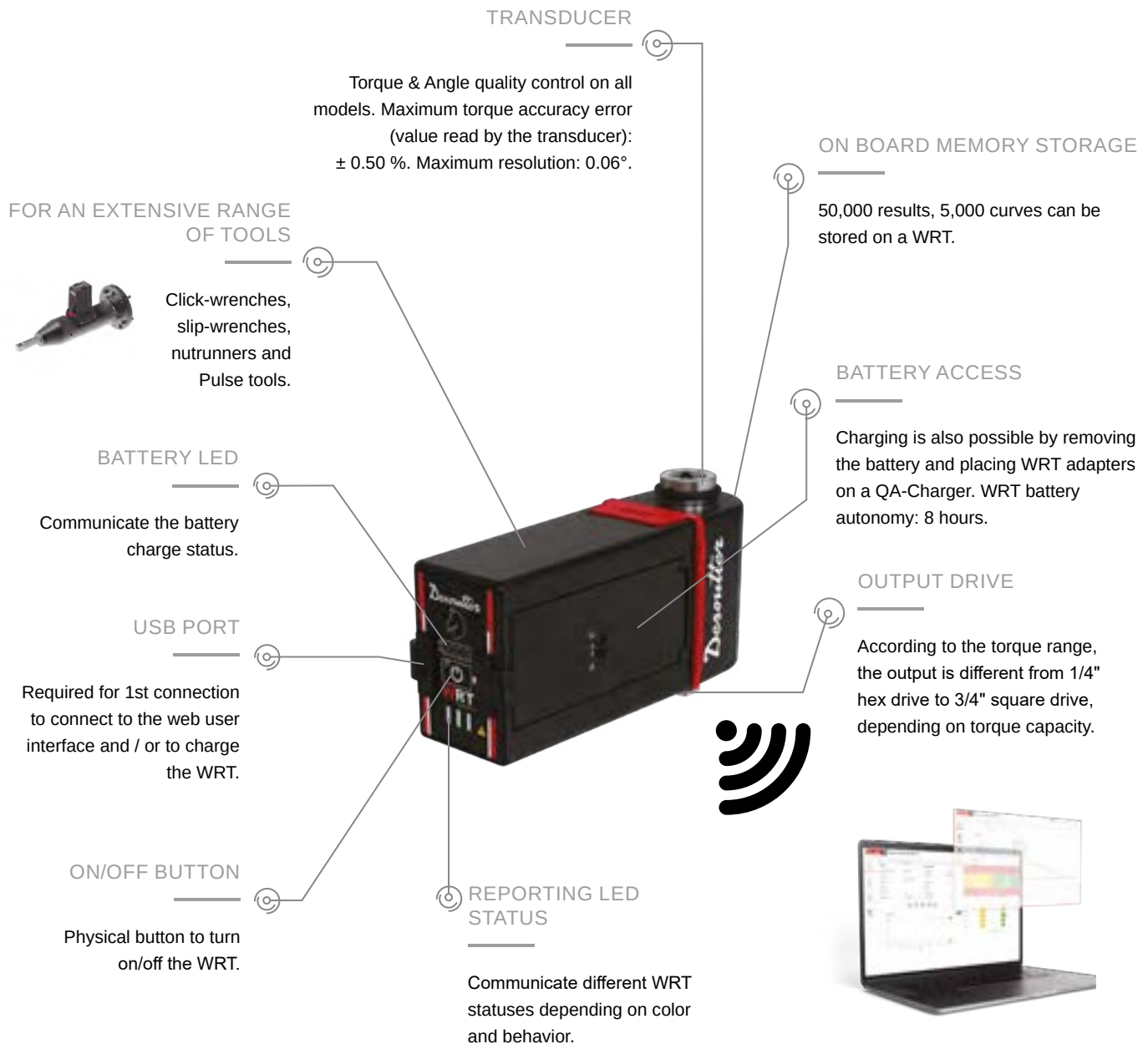


Tightening with torque and additional angle rotation (torque + angle)



Wireless Rotary Transducers & Accessories

Make your tool verification & calibration simple



FEATURES

- Torque range from 0.4 to 500 Nm (0.36 to 368,7 ft.lb).
- Angle counting system 0.06° maximum resolution.
- Strain gauges transducer : - sensitivity 2mV/V - accuracy $\pm 0.5\%$ of value read by the transducer, thanks to magnetic ring technology.
- No cable required, as it's a wireless transducer.
- Dedicated web user interface.
- Memory storage of all torque & angle data with curves (50,000 results and 5,000 curves).
- New design uses optical transmission of all data (brushless system), especially for use with Pulse tools.



BENEFITS

- Easy to use.
- Quick tool verification, especially in hard-to-reach applications with no cables to manage.
- Fast and flexible connection: choose between the built-in access point, a connection to your network or via USB.
- View the results on the device of your choice (computer, tablet, etc.).
- Intuitive web user interface: view results, curves, database, data download facility in a matter of seconds.
- No software required
- Use for all type of tools (Click-wrenches, slip-wrenches, nutrunners) including Pulse tools.



WRT - Wireless Rotary Transducers

Torque & Angle

The WRT is a means of auditing not only the tools (click-wrenches, slip-wrenches, nutrunners or Pulse tools*) but also the assembly process, providing a detailed analysis of torque and angle information.

With the WRT you can:

- Manual & Automatic Calibration (Automatic Adjustment) with CONNECT Smart hub
- SPC (Statistical Process Control)
- CM / CMK
- Demo mode



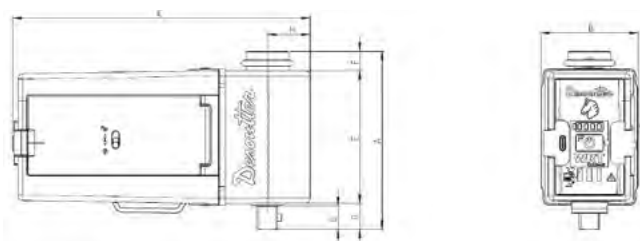
PIC	MODEL	PART NUMBER	OUTPUT DRIVE	TORQUE				WEIGHT	
				MIN.	MAX.*	MIN.	MAX.*		
			in.	Nm	Nm	ft.lb	ft.lb	g	lb
A	WRT4-HEX1/4	615 221 051 0	1/4	0.4	4	0.36	3.6	483.5	1.065
A	WRT10-HEX1/4	615 221 052 0	1/4	1	10	0.88	8.8	484.7	1.068
A	WRT20-HEX1/4	615 221 053 0	1/4	2	20	1.47	14.7	463.2	1.02
B	WRT25-SQ3/8	615 221 054 0	3/8	2.5	25	1.84	18.4	486.4	1.07
B	WRT75-SQ3/8	615 221 055 0	3/8	7.5	75	5.53	55.3	491.4	1.08
C	WRT180-SQ1/2	615 221 056 0	1/2	18	180	13.27	132.7	599.7	1.32
D	WRT500-SQ3/4	615 221 057 0	3/4	50	500	36.87	368.7	1094	2.41

*With Pulse tools, the WRT shall not be used over 50% of the maximum torque.

MODEL	A	B	C	D	E	F	G	H
	mm	mm	mm	mm	mm	mm	mm	mm
WRT4-HEX1/4	115.8	45	138.3	33.8	61.5	20.5	25.5	20
WRT10-HEX1/4	115.8	45	138.3	33.8	61.5	20.5	25.5	20
WRT20-HEX1/4	115.8	45	138.3	33.8	61.5	20.5	25.5	20
WRT25-SQ3/8	82.6	45	138.3	12.1	61.5	9	11	20
WRT75-SQ3/8	82.6	45	138.3	12.1	61.5	9	11	20
WRT180-SQ1/2	90.5	45	141.8	17	61.5	12	15.2	22.5
WRT500-SQ3/4	106	56	151.9	24.6	68	13.4	23	28



WRT4-Hex1/4, WRT10-Hex1/4, WRT20-Hex1/4



WRT25-Sq3/8, WRT75-Sq3/8, WRT180-Sq1/2



WRT500-Sq3/4

WRT - Wireless Rotary Transducers

Torque & Angle

INTUITIVE WEB USER INTERFACE

- View the results with the device of your choice: computer, tablet or smartphone !
- The web user interface gives access to the result data base, curves, live results and the data download facility.

WRT offers three different ways to access its web user interface:

- **EMBEDDED ACCESS POINT (DHCP) / WEB:** WRT hosts an embedded access point. You can update network settings directly through the intuitive Web User Interface and choose between static and DHCP methods for IP address allocation. It's ideal for scenarios where simplicity and self-contained connectivity are paramount.
- **INFRASTRUCTURE MODE:** In this mode, WRT seamlessly integrates into your existing factory network. It's perfect for environments where additional Wi-Fi networks are undesirable or impractical.
- **BY CABLE:** Use the cable for your first connection - it's a one-time requirement - then this old-school approach is also possible from this point forward..



Accessories



ACCESSORIES INCLUDED

	PART NO.
3 WRT Battery	615 936 531 0

OPTIONAL ACCESSORIES

ITEM		PART NO.
1	WRT 2x Adapters	615 936 534 0
2	QA Charger	615 936 461 0
3	WRT Battery	615 936 531 0
4	WRT anti-rotation holder ¹	615 936 535 0
5	CVI KEY ²	615 927 676 0

¹) For angle tools with compatible sizes (tool diameter less than 43 mm, such as EABC 32- 410, EABC 50-450, EABC 60-370, EABC 17-800-4Q, EABC 24-500-4Q, ELS330-300-A, etc.).

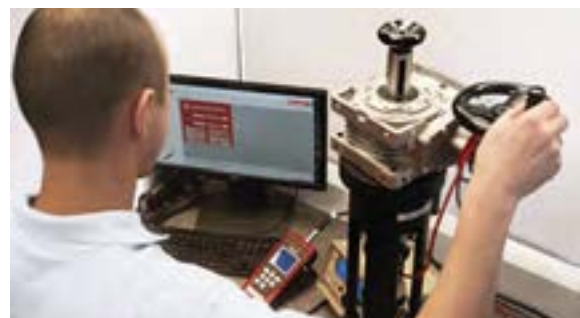
²) The WRT Web User Interface uses a role-based authorization system. User permissions depend on the role assigned to the user with the CVI KEY. Without it, you will only have access to "Demo mode". To create an operation (tool & Pset), you need to enter your CVI KEY.



Accredited Calibration

SAFETY & TRACEABILITY OF YOUR TIGHTENING PROCESS

- Recognised accreditation through the ILAC* agreement
- According to ISO/IEC 17025 specified measurement uncertainty
- Adjustment of the equipment
- Certificates available 24/7 for up to 10 years
- Reminder of next calibration



* ILAC (International Laboratory Accreditation Cooperation): an agreement signed by almost all industrialized countries. Certificates from accredited laboratories of the member states are recognized by other ILAC member countries.



Quality Control and measurement traceability

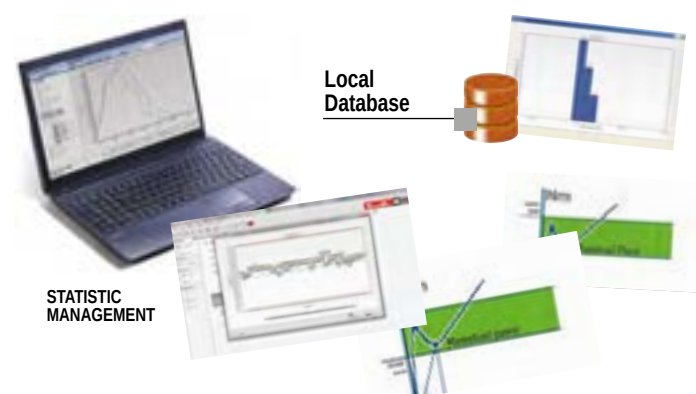
Delta Quality Control

DELTA QC

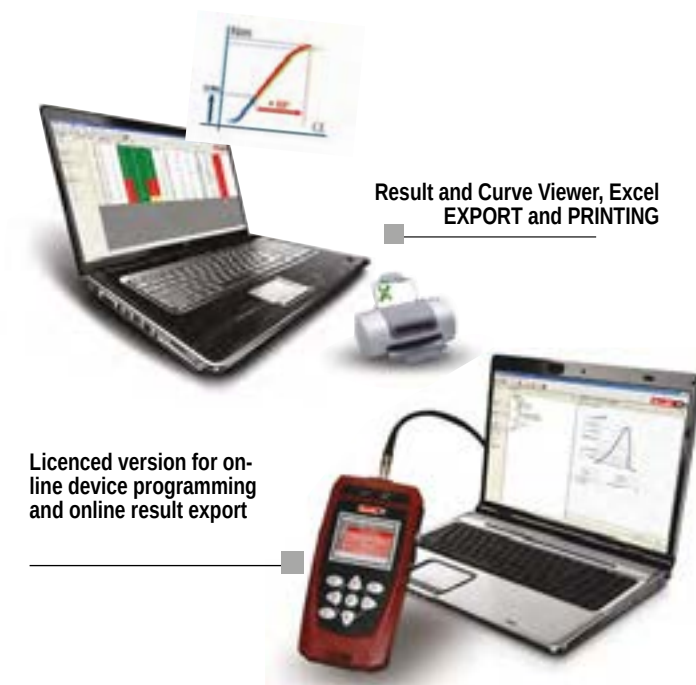
The Delta QC software is the common software platform for all Delta QC measurement equipment. Included features are programming, results and curve viewer ensuring measurement data traceability. Statistical machine capability tool or SPC are also ensured thanks to local database available in the Advanced version.

Delta QC Advanced

Advanced version provides a local result database and offline programming. All results, curves and statistics are available for review, export and reporting in both on line and off line mode. All Tools, Status and Pset are always available in the local SQL DB.



Delta QC Licensed



Delta QC FreeVersion

Delta Wrench and Alpha D product range are supplied with the Delta QC software. Without any registration the Delta QC is able to program Delta Wrench, Delta D and Alpha D, download results, export to excel and print.



MODEL	PART NUMBER
Delta QC Licensed 1 User	615 927 651 0
Delta QC Licensed 5 User	615 927 652 0
Delta QC Advanced 1 User	615 927 653 0
Delta QC Advanced 5 User	615 927 654 0

MAIN FUNCTIONS			
	FREE	LICENSED	ADVANCED
Delta D			
Pset programming	✓	✓	✓
Tool Definition	✓	✓	✓
Route Definition		✓	✓
Transducer Definition	✓	✓	✓
Pset Database		✓	✓
Tool Database		✓	✓
Route Database		✓	✓
Statistic (online only)		✓	✓
Result viewer	✓	✓	✓
Result excel export	✓	✓	✓
Curve viewer		✓	✓
Curve excel, JPEG export		✓	✓
Curve comparison		✓	✓
RESULT Database			✓
Curve Database			✓
Offline statistic			✓

MAIN FUNCTIONS			
	FREE	LICENSED	ADVANCED
QShield-S			
Pset programming	✓	✓	✓
Result viewer	✓	✓	✓
Result excel export	✓	✓	✓
PSet Database		✓	✓
Curve viewer		✓	✓
Result Database			✓
Delta Cart			
Pset programming			✓
Pset Database			✓
Result viewer			✓
Result excel export			✓
Result Database			✓
Offline statistic			✓

MAIN FUNCTIONS			
	FREE	LICENSED	ADVANCED
ALPHA D			
Result viewer	✓	✓	✓
Result excel export	✓	✓	✓
Curve viewer		✓	✓



Digital Rotary Transducers & Accessories

Torque & Angle

The DRT5 series associated with a Delta 6D or Delta 7D are including an Angle measurement encoder to allow both Torque AND Angle quality controls (preferred series in case you are using Angle strategies and/or monitoring).



MODEL	PART NUMBER	TORQUE RANGE		OUTPUT
		Nm	ft lb	
DRT5				
DRT 5 H 2	615 165 218 0	0.2 - 2	0.15 - 1.5	Hex ¼"
DRT 5 H 5	615 165 219 0	0.5 - 5	0.37 - 3.7	Hex ¼"
DRT 5 H 20	615 165 220 0	2 - 20	1.47 - 14.7	Hex ¼"
DRT 5 Sq 20	615 165 221 0	2 - 20	1.47 - 14.7	Sq ¼"
DRT 5 Sq 25	615 165 222 0	2.5 - 25	1.84 - 18.4	Sq ⅜"
DRT 5 Sq 75	615 165 223 0	7.5 - 75	5.53 - 55.3	Sq ⅜"
DRT 5 Sq 180	615 165 224 0	18 - 180	13.2 - 132	Sq ½"
DRT 5 Sq 500	615 165 225 0	50 - 500	36.8 - 368	Sq ¾"
DRT 5 Sq 1400	615 165 226 0	140 - 1400	103.2 - 1032	Sq 1"
DRT 5 Sq 5000	615 165 780 0	500 - 5000	368.5 - 3685	Sq 1-½"

Note: The DRT shall not be used with pulse tools over 50 % of the transducer nominal torque.



FEATURES

- Torque range from 0.2 to 5000 Nm (0.15 to 3685 ft.lb).
- Angle counting system 0.35° resolution.
- Strain gauges transducer: - sensitivity 2mV/V - accuracy +/-0.35% of max. torque.
- Built-in smart chip memory with calibration features: - type of transducer - sensitivity nominal load - serial number.

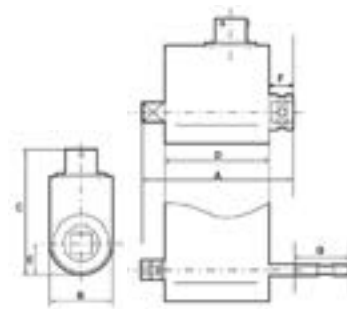


BENEFITS

- Automatic recognition thanks to internal memory chip storing main data values eliminating any setting mistakes and time losses.
- High reliability due to immunity from external noise thanks to digital communication.
- Communication to data analyzer not sensitive to the cable length.
- Long life durability thanks to industrial design from transducer to housing.

SAME SIZE FOR TORQUE OR TORQUE & ANGLE TRANSDUCER

OUTPUT	A		B		C		E		H		F		G	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
Hex ¼"	116	4.56	31	1.22	71.9	2.83	56	2.2	15.5	0.61	39	1.53	25.5	1
Sq ¼"	71.5	2.81	31	1.22	71.9	2.83	56	2.2	15.5	0.61	6	0.24		
Sq ⅜"	77	3.03	31	1.22	71.9	2.83	56	2.2	15.5	0.61	8	0.31		
Sq ½"	87	3.42	42	1.65	82.9	3.26	58	2.28	21	0.83	12	0.47		
Sq ¾"	106	4.17	52	2.05	92.9	3.66	66	2.60	26	1.02	21	0.83		
Sq 1"	125	4.92	65	2.56	104.9	4.13	73	2.87	32.5	1.28	29	1.14		
Sq 1-½"	165	6.5	106	4.17	148.5	5.85	88	3.46	53	2.09	35.2	1.39		



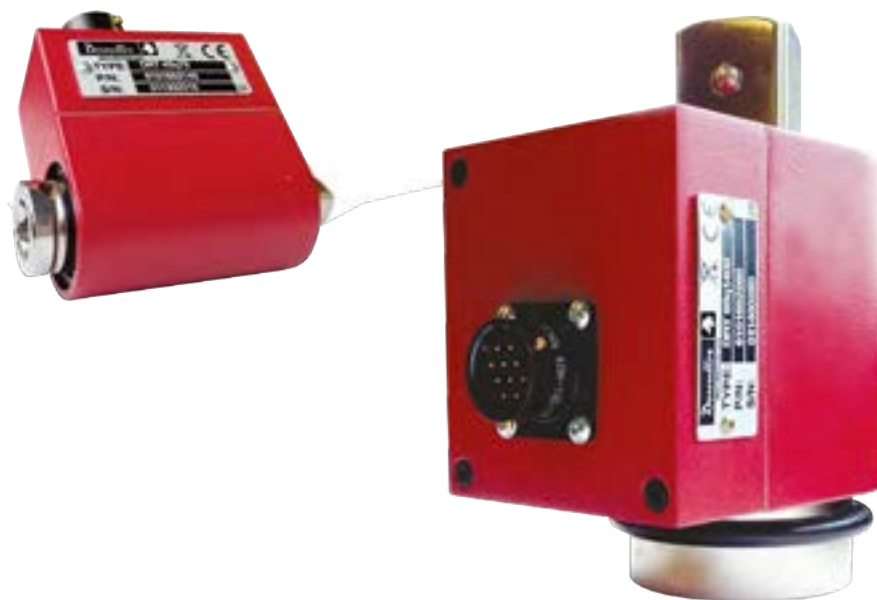
OPTIONAL ACCESSORIES

ITEM	DRT5 / DRT4	PART NO.
• 3/8" TRANS-HOLDER		615 396 426 0
• 1/2" TRANS-HOLDER		615 396 427 0

DRT - Digital Rotary Transducers

Torque

The DRT4 rotary transducer series are designed to measure torque output (Only) of any non-impact assembly tool, directly on your application in dynamic mode.



FEATURES

- Torque range from 0,2 to 10000 Nm (0.15 to 7375 ft.lb).
- Strain gauges transducer: - sensitivity 2mV/V - accuracy +/-0.35% of max. torque.
- Built-in smart chip memory with calibration features: - type of transducer - sensitivity nominal load - serial number.

MODEL	PART NUMBER	TORQUE RANGE		OUTPUT
		Nm	ft lb	
DRT4				
DRT 4 H 2	615 165 209 0	0.2 - 2	0.15 - 1.5	Hex ¼"
DRT 4 H 5	615 165 210 0	0.5 - 5	0.37 - 3.7	Hex ¼"
DRT 4 H 20	615 165 211 0	2 - 20	1.47 - 14.7	Hex ¼"
DRT 4 Sq 20	615 165 212 0	2 - 20	1.47 - 14.7	Sq ¼"
DRT 4 Sq 25	615 165 213 0	2.5 - 25	1.84 - 18.4	Sq ⅜"
DRT 4 Sq 75	615 165 214 0	7.5 - 75	5.53 - 55.3	Sq ⅜"
DRT 4 Sq 180	615 165 215 0	18 - 180	13.2 - 132	Sq ½"
DRT 4 Sq 500	615 165 216 0	50 - 500	36.8 - 368	Sq ¾"
DRT 4 Sq 1400	615 165 217 0	140 - 1400	103.2 - 1032	Sq 1"
DRT 4 Sq 3000	615 165 536 0	300 - 3000	221.1 - 2211	Sq 1-½"
DRT 4 Sq 5000	615 165 540 0	500 - 5000	368.5 - 3685	Sq 1-½"
DRT4 Sq 10000	615 935 164 0	1000 - 10000	736.6 - 7375	Sq 1-½"

Note: The DRT shall not be used with pulse tools over 50 % of the transducer nominal torque

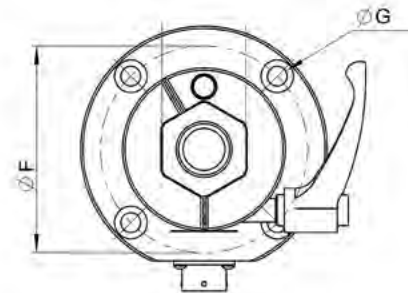
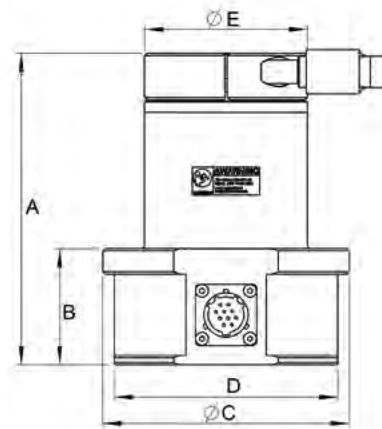
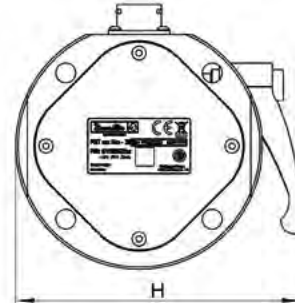
TRANSDUCER CABLES

MODEL	PART NUMBER	DESCRIPTION
2m (78.7") - 10 pins	615 917 430 0	For DRT / PST / DSTxs / FCT - all Delta Models
2m (78.7") spiral - 10 pins	615 917 432 0	For DRT / PST / DSTxs / FCT - all Delta Models
5m (196.8") - 10 pins	615 917 433 0	For DRT / PST / DSTxs / FCT - all Delta Models



PST - Pulse Static Transducer

Designed for testing hand wrenches, click wrenches, Pneumatic Pulse tools and electric nutrunners, the Pulse Static Transducer is the ideal solution to provide a periodic and static mean of control for audit at the station and will cover all your assembly tools in the production area.



(reminder: the joint simulator is required accessory in the case of a shut-off pulse or nutrunner tool test).



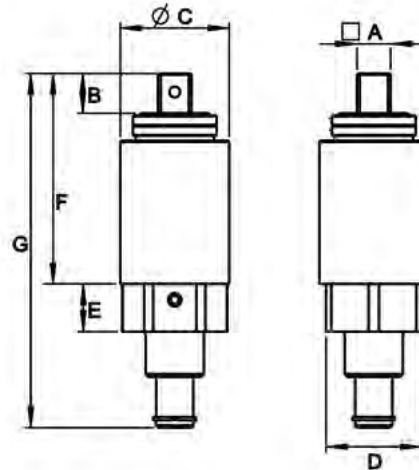
FEATURES

- Torque accuracy $\pm 0.35\%$ of torque max.
- Built-in smart chip memory with calibration features:
 - type of transducer - sensitivity nominal load - serial number
- Lever to clamp the Joint simulator firmly for impulse tools
- Recommended for Pulse tools

MODEL	PART NUMBER	TORQUE RANGE		DIMENSIONS (MM)								INPUT	WEIGHT	
		Nm	ft lb	A	B	C	D	E	F	G	H		kg	lb
PST														
PST 2 Nm - 13	615 935 220 0	0.2 - 2	0.15-1.5	83	39	80	69	45	64	4x Ø 6.5	/	Sq 1/2"	1.4	3.1
PST 5 Nm - 13	615 935 221 0	0.5 - 5	0.37 - 3.7	83	39	80	69	45	64	4x Ø 6.5	/	Sq 1/2"	1.4	3.1
PST 10 Nm - 13	615 935 222 0	1-10	0.74-7.4	83	39	80	69	45	64	4x Ø 6.5	/	Sq 1/2"	1.4	3.1
PST 25 Nm - 36	615 935 223 0	2.5-25	1.8-18	134	50	106	96	70	89	4x Ø 8.5	123	Hex 36	4	8.8
PST 50 Nm - 36	615 935 224 0	5-50	3.7-37	134	50	106	96	70	89	4x Ø 8.5	123	Hex 36	4	8.8
PST 100 Nm - 36	615 935 225 0	10-100	7.4-74	134	50	106	96	70	89	4x Ø 8.5	123	Hex 36	4	8.8
PST 250 Nm - 36	615 935 226 0	25-250	18.4-184	134	50	106	96	70	89	4x Ø 8.5	123	Hex 36	4	8.8
PST 500 Nm - 50	615 935 227 0	50 - 500	36.9-369	170	50	148	136	108	125	6x Ø 8.5	180	Hex 50	10.1	22.3
PST 1000 Nm - 50	615 935 228 0	100-1000	73.8-738	170	50	148	136	108	125	6x Ø 8.5	180	Hex 50	10.1	22.3
PST 2000 Nm - 50	615 935 229 0	200-2000	147.5-1475	170	50	148	136	108	125	6x Ø 8.5	180	Hex 50	10.1	22.3

Joint Simulator

A wide range of mechanical joint simulators are available to reproduce the joint behavior; installing the joint simulator on a transducer allows you to test a tool in the same repeatable working conditions. Each joint simulator reproduces a specific stiffness as described in its torque/angle characteristics. For each capacity, there are two versions: one reproducing a softer joint and one reproducing a harder joint.



MODEL	PART NUMBER	COLOR	DIMENSIONS (MM)						
DJS			A	B	C	D	E	F	G
DJS for DST and PST 2 Nm SOFT	615 165 529 0	YW – YW	HEX ¼"	14	24	Sq. ½"	8	50	71,5
DJS for DST and PST 2 Nm HARD	615 165 530 0	YW – BK	HEX ¼"	14	24	Sq. ½"	8	50	71,5
DJS for DST and PST 5 Nm SOFT	615 165 531 0	GR – YW	HEX ¼"	14	24	Sq. ½"	8	50	71,5
DJS for DST and PST 5 Nm HARD	615 165 571 0	GR – BK	HEX ¼"	14	24	Sq. ½"	8	50	71,5
DJS for PST 10 Nm SOFT	615 936 377 0	RD – YW	HEX ¼"	14	24	Sq. ½"	8	50	71,5
DJS for PST 10 Nm HARD	615 936 378 0	RD – BK	HEX ¼"	14	24	Sq. ½"	8	50	71,5
DJS for PST 25 Nm SOFT	615 936 379 0	RD – YW	Sq. ⅜"	11	34	Hex 36	16,5	70	120,5
DJS for PST 25 Nm HARD	615 936 380 0	RD – BK	Sq. ⅜"	11	34	Hex 36	16,5	70	120,5
DJS for PST 50 Nm SOFT	615 936 381 0	BL – YW	Sq. ½"	15	41	Hex 36	18	84	133,5
DJS for PST 50 Nm HARD	615 936 382 0	BL – BK	Sq. ½"	15	41	Hex 36	18	84	133,5
DJS for PST 100 Nm SOFT	615 936 365 0	VL – YW	Sq. ½"	15	41	Hex 36	18	84	133,5
DJS for PST 100 Nm HARD	615 936 366 0	VL – BK	Sq. ½"	15	41	Hex 36	18	84	133,5
DJS for PST 250 Nm SOFT	615 936 384 0	GY – YW	Sq. ½"	15	41	Hex 36	18	84	133,5
DJS for PST 250 Nm HARD	615 936 385 0	GY – BK	Sq. ½"	15	41	Hex 36	18	84	133,5
DJS for PST 500 Nm SOFT	615 936 369 0	BK – YW	Sq. ¾"	22	59	Hex 50	30	141	224
DJS for PST 500 Nm HARD	615 936 370 0	BK – BK	Sq. ¾"	22	59	Hex 50	30	141	224
DJS for PST 1000 Nm	615 936 386 0	no color	Sq. 1"	28	90	Hex 50	30	179	273
DJS for PST 2000 Nm	615 936 393 0	no color	Sq. 1 ½"	38	138	Hex 50	30	168.2	218.2



ADAPTERS & COUPLINGS

(Accessories for Static transducers & Joint simulators).



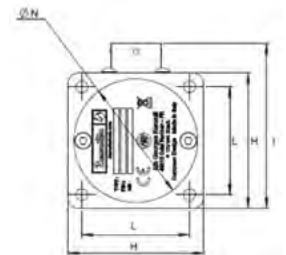
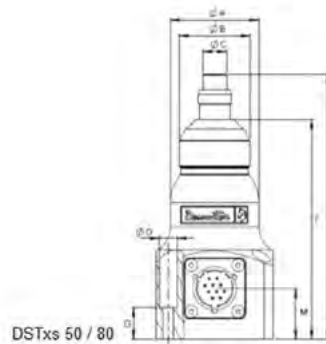
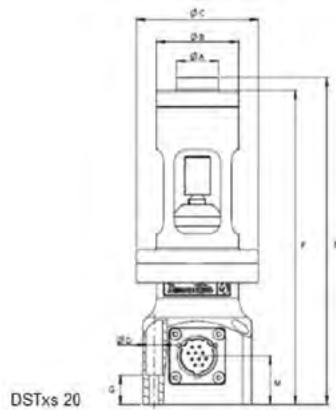
MODEL	PART NO.
HEX 36 M-3/8" F	615 936 398 0
HEX 36 M-1/2" F	615 936 399 0
HEX 50 M-1/2" F	615 936 431 0
HEX 50 M-3/4" F	615 936 432 0
HEX 50 M-1" F	615 936 433 0
HEX 1/4" M-1/4" F	615 936 118 0
HEX 1/4" M-3/8" F	615 936 119 0

Direct adapter for Non shut-off pulse tools and click wrenches (without DJS).

MODEL	PART NO.	MODEL	PART NO.	MODEL	PART NO.
3/4" M-1/4" F	615 397 205 0	1/2" M-3/8" F	615 936 111 0	HEX 1/4" M-1/4" F	615 936 118 0
3/4" M-3/8" F	615 397 206 0	1/2" F-3/8" F	615 936 112 0	HEX 1/4" M-3/8" F	615 936 119 0
1" M-1/2" F	615 397 207 0	1/2" M-1/2" F	615 936 113 0	1" F-3/4" F	615 936 126 0
1" 1/4 M-1/2" F	615 397 208 0	1" 1/4 M-3/4" F	615 936 114 0	3/4" F-1/2" F	615 936 130 0
1" 1/4 M-3/4" F	615 397 209 0	1/4" F-3/8" F	615 936 115 0	1" 1/2 F-1" 1/2 F	615 936 436 0
1/4" F-1/4" F	615 397 210 0	1" 1/4 M-1" F	615 936 116 0	1/2" F-1/2" F	615 165 573 0
3/8" F-3/8" F	615 397 211 0	1" F-1" F	615 936 117 0	3/4" F-3/4" F	615 165 576 0
1" M-3/4" F	615 936 110 0				

DSTxs Series - Digital Static Transducers

Nano-torques applications (< 1 Nm)



Ideal for Nanodrivers.



FEATURES

- Accuracy from 10% to 100% of the nominal torque : $\pm 0,5\%$ FSD (Full Scale Deviation) - Overload at 120% of nominal capacity.
- Stability of Zero offset with temperature: $\leq \pm 0,1\%$ FSD/ $^{\circ}\text{C}$ - Operating temperature: 5 to 40 $^{\circ}\text{C}$.
- Built-in memory with calibration features: Serial Number, Transducer Type, Sensitivity, Nominal Load, Calibration / Maintenance date, Tightening counter, Damage limit.



BENEFITS

- Automatic recognition thanks to internal memory chip storing main data values eliminating any setting mistakes and time losses.
- High reliability due to immunity from external noise thanks to digital communication.
- Communication to data analyzer not sensitive to the cable length.



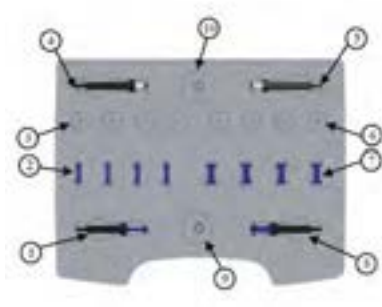
MODEL	PART NUMBER	TORQUE RANGE		SQUARE DRIVE	DIMENSIONS										WEIGHT	
					Ø A		Ø B		Ø C		L		H			
		cNm	in.lbs	in	mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb
DSTxs 20 cNm	615 165 752 0	2-20	0.17-1.77	dia 3mm	20	0.787	39	1.535	58	2.283	41	1.614	51.5	2.027	0.56	1.2
DSTxs 50 cNm	615 165 754 0	5-50	0.44-4.42	Hex 1/4	39	1.535	32	1.259	10.5	0.413	41	1.614	51.5	2.027	0.42	0.9
DSTxs 80 cNm	615 165 764 0	8-80	0.70-7.08	Hex 1/4	39	1.535	32	1.259	10.5	0.413	41	1.614	51.5	2.027	0.42	0.9

JOINT SIMULATOR KITS

(Soft / Hard joints – Min / Max Torques)

MODEL	PART NUMBER	JOINTS COVERED				ADAPTER	SCREW SIZE
		Hard / mini	Soft / mini	Hard / max	Soft / max		
DJSxs 20	615 936 445 0	2-6 cNm	2-6 cNm	20 cNm	20 cNm	dia 3mm	M2
DJSxs 50	615 936 446 0	5-15 cNm	5-15 cNm	50 cNm	50 cNm	Hex 1/4	M2 & M3
DJSxs 80	615 936 447 0	8-24 cNm	8-24 cNm	80 cNm	80 cNm	Hex 1/4	M3

ITEM	CONTENT OF THE DJS KIT SUITCASE
1	DJSxs assembly - min. torque - Soft joint x1
2	Spare compression spacer - min. torque - Soft x4
3	Spare compression spacer - min. torque - Hard x1
4	DJSxs assembly - min. torque - Hard joint x1
5	DJSxs assembly - nominal torque - Hard joint x1
6	Spare compression spacer - nominal torque - Hard joint x1
7	Spare compression spacer - nominal torque - Soft joint x4
8	DJSxs assembly - nominal torque - Soft joint x1
9	DJSxs20 assembly - min./nominal torque - Soft joint - spacer for DSTxs adapter
10	DJSxs20 assembly - min./nominal torque - Hard - spacer for DSTxs adapter



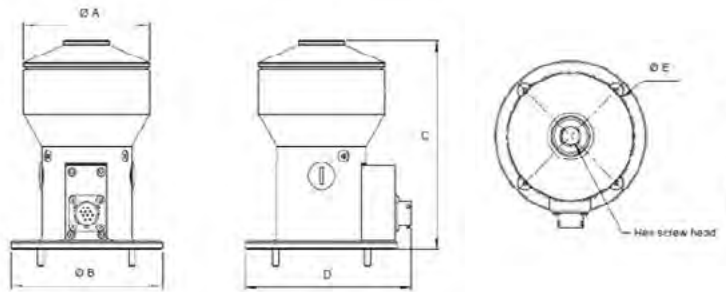
FCT series - Clamp Force Transducers

Measure Pulse Tools repeatability in tension

The purpose of the FCT is to measure the repeatability of a pulse tool in achieving a constant tension independently from the friction effects and detect a deviation over time. Delta 6D/7D can display both the load and equivalent torque.



Ideal for Pulse tools.



ØA		ØB		C		D		ØE	
mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
96	3.779	115	4.779	157.8	6.21	125.8	4.952	98	3.858



FEATURES

- Accuracy +/-0,5% of Applied Force Reading Value.
- Built-in Load Cell.
- Used with Delta xD data collectors and cables.
- Battery powered with up to 12 hours autonomy.
- Allows a display of both Clamping Force and Torque (K factor)
- Up to 2000 Hz filter selection
- RS-232 interface to download readings in "real time"
- Large screen and easy to use menus (5 languages)
- Supplied with screw kit and 3/8" socket SW13



BENEFITS

- Measures the repeatability of pulse tools to achieve a target clamping force.
- By measuring the clamp force instead of the torque delivered, the adverse effects of adding an in-line torque transducer are eliminated.
- As most design offices specify a clamping force, measuring the actual clamping force allows to eliminate the uncertainty linked to the translation in torque of a clamping value.

MODEL	PART NUMBER	TORQUE RANGE		LOAD RANGE		OVERLOAD		WEIGHT	
		Nm	ft.lbs	N	lbf	FORCE	TORQUE	kg	lb
FCT30	615 935 249 0	10-30	7.38-22.13	1800-18000	405-4050	23400	39	2.4	5.3
FCT60	615 935 250 0	20-60	14.75-44.25	2700-27000	607-6070	35100	78	2.4	5.3

ACCESSORIES INCLUDED

		PART NO.
FCT30	1 FCT30 Screw	615 936 484 0
	2 Sleeve Drive Sockets 3/8" - 13mm	615 811 781 0
FCT60	1 FCT60 Screw	615 936 485 0
	2 Sleeve Drive Sockets 3/8" - 18mm	615 811 784 0



Oil recommended to fill the oil bath: 75W-90.

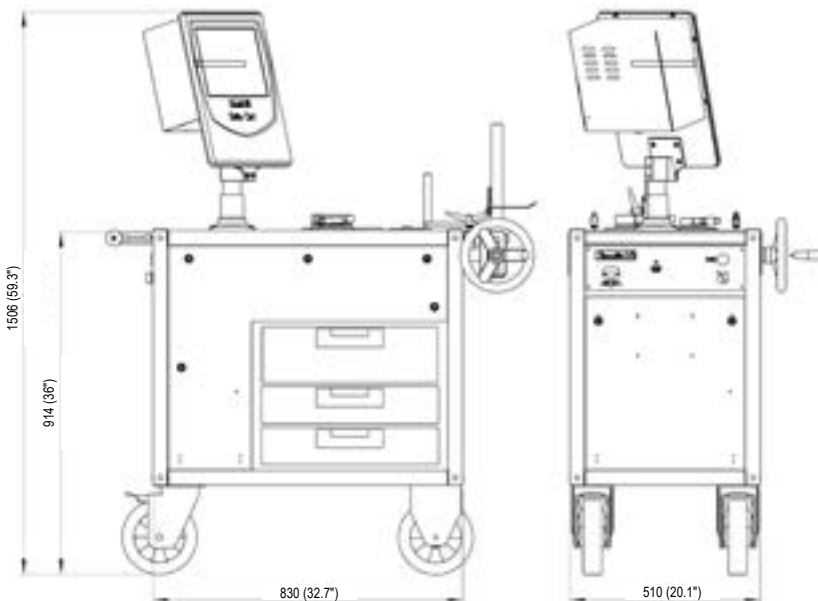
EMBEDDED TRANSDUCERS:

Assembly tools calibration process requires a flexible and versatile solution, high quality performance even in production lines. Desoutter Tools is proud to present the Delta Cart, an ergonomic and attractive solution to improve quality in assembly processes.

- Delta Cart offers a wide torque range since it can be configured up to 4 static transducers to cover from 0.2 Nm to 1 000 Nm (0.15 to 738 ft.lb) in a very compact dimensions (510mm width), making the Delta Cart the ideal solution for tool testing in assembly production lines.
- PST High accuracy static transducers with locking system specially designed for pulse tool calibration
- ISO RIG (mandatory over 200Nm)
System for torque wrench calibration



- Embedded PC equipped with wide 12" color touch screen lets operators to start tool testing in a few seconds and few steps.



- Delta Cart includes all adapters, reaction bars and suitable joint simulators. Optional ISO RIG for torque wrench to eliminate operator influence during calibration, reducing efforts for high torque range.

Each calibration bench is customized to your needs. However, it's also possible to order an existing configuration:

MODEL	PART NUMBER	JOINTS COVERED
6159352520	DC2-25-100	2 cells 2,5-100Nm-NO RIG
6159352550	DC2-5-25-100	3 cells 0,5-100Nm-NO RIG
6159352510	DC2-50-60-100-500	4 cells 5-500Nm-FCT60-NO RIG
6159351980	DC2-10-100-1000-RIG	3 cells 1-1000Nm with RIG
6159352570	DC2-2-10-50-500-RIG	4 cells 0,2-500Nm with RIG
6159352080	DC2-2-25-100-1000-RIG	4 cells 0,2-1000Nm with RIG
6159352560	DC2-5-10-50-250-RIG	4 cells 0,5-250Nm with RIG
6159351160	DC2-10-50-100-500-RIG	4 cells 1-500Nm with RIG
6159352090	DC2-25-100-250-500-RIG	4 cells 2,5-500Nm with RIG
6159352170	DC2-25-50-250-1000-RIG	4 cells 2,5-1000Nm with RIG
6159351970	DC2-50-100-250-500-RIG	4 cells 5-500Nm with RIG
6159352540	DC2-50-250-500-1000-RIG	4 cells 5-1000Nm with RIG
6159352070	DC2-LARGE-25-100-500-RIG	Extd Frame 2,5-500Nm with RIG
6159352530	DC2-LARGE-5-25-100-500-RIG	Extd Frame 0,5-500Nm with RIG
6159351960	DC2-LARGE-10-50-250-1000-RIG	Extd Frame 1-1000Nm with RIG

Delta Cart Tool Calibration

EMBEDDED TRANSDUCERS :

Assembly tools calibration process requires a flexible and versatile solution, high quality performance even in production lines Desoutter Tools is proud to present the Delta Cart, an ergonomic and attractive solution to improve quality in assembly processes.



Electric and Pneumatic Nutrunner



Shut off and non shut off Pulse Tool



Torque wrench



Click wrench

The Delta Cart is able to follow your tools during the complete life span : by performing capacity test (Cm/Cmk) before tool is introduced into production, or monitoring tool performance during production assembly process by performing Statistic Process Control (SPC) test



TECHNICAL FEATURES

- Configurable torque range from 1 Nm to 2000Nm
- Torque reaction bar and joint simulator included
- External DRT communication for in-line calibration
- Angle Strategy with external DRT5
- CVI2 and CVI3 autocalibration
- Double reading calibration with automatic deviation check



Embedded Software with local tool DB (SQL Server)

- Tools Inventory with calibration status and next calibration date (Excel sheet export)



- Calibration STATUS



- Cm/Cmk Reports

- SPC X/R Charts

- USER Management
- login per user



SOFTWARE
see page 185

CLIENT - SERVER Architecture

- Ideal for > 1 cart management
- All Calibration data always synchronized with unique Server database
- Fast Ethernet communication

ROUTE MANAGEMENT

- Send to Delta Cart just the Tool to be tested

SOFTWARE FEATURES

Torque Wrench, Electric or Pneumatic Nutrunner
Test, Pulse Test
Cm/Cmk - ISO 3534

ISO 6789 - ISO 5393

Statistic Control - ISO 8258
Print

Export
Curve

Barcode
Configurable for each test

Languages

Local Test Database up to 30000 Tests - Setting : Nominal Min Max Torque, unit of measure, Test Id, Test Description, Transducer number, Timeout setting
Cm/Cmk, min, max, average, sigma

Automatic test report

X/R Charts for trend control
Direct Printing from Delta Cart PC software

Certificate export to PDF or XLS
Torque/Time or Torque/Angle with external DRT5

External USB
N.m - gf.cm - Kgf.cm - kgf.m - ozf.in - lbf.in - lbf.ft

English, French, Italian, German, Russian



Alpha Low Torque Analyzer

Dedicated torque analyzers for the setting and static test checks of low torque screwdrivers, either pneumatic or electric.



■ Embedded Transducer & Battery



TECHNICAL SPECIFICATION

Torque Transducer	Embedded
Torque Accuracy	+/-1 % of readings
Tools Testing	Torque Wrench, Nutrunner or Pulse Tools
Statistic	Min. Max, Average, Standard Deviation
Results Storage	1000 + 10 curves with DeltaQC Licenced
Multi-units	N.m, Kg.m, Kg.cm, Oz.in, Lb.in, Lb.ft, N.cm
Display	Red, Green, Blue backlight
Power Supply	Embedded Battery External power supply
Battery Autonomy	Up to 12 hours
Languages	French, English, Spanish, Italian, Deutsch, Portuguese
Software	Free Delta QC Software to export by USB result

Alpha Low Torque Analyzer



MAIN FEATURES

- Alpha D Series is designed to monitor and collect torque check results from screwdrivers, torque wrenches or click wrenches.
- Ideal to tune the tools thanks to real time statistics on color display and high capacity torque results storage.
- Traceability with included software result acquisition with time stamp, including PDF or XLS reports.
- Three models with embedded transducer to cover torque range from 0,1 to 16 Nm. All models are provided with two included joint simulators to test nutrunner according to different joint stiffness condition.



■ Backlight RGB color display with acoustic buzzer

■ Hard & Soft Joint Simulator

MODEL	PART NUMBER
DJS for Alpha_D1 Soft	615 936 120 0
DJS for Alpha_D1 Hard	615 936 121 0
DJS for Alpha_D5 Soft	615 936 122 0
DJS for Alpha_D5 Hard	615 936 123 0
DJS for Alpha_D16 Soft	615 936 124 0
DJS for Alpha_D16 Hard	615 936 125 0
Universal Power Supplier	615 936 143 0

MODEL	PART NUMBER	P. CHARGER	TORQUE RANGE		DEPTH		WIDTH		HEIGHT		WEIGHT	
		volts	Nm	in. - lb	mm	in.	mm	in.	mm	in.	kg	lb
Alpha D1	615 935 140 0	110/240V	0.1 - 1	0.88 - 8.85	106	4.17	180	7.09	70	2.76	0.95	2.1
Alpha D5	615 935 141 0	110/240V	0.5 - 5	4.42 - 44.25	106	4.17	180	7.09	70	2.76	0.95	2.1
Alpha D16	615 935 142 0	110/240V	1.6 - 16	14.1 - 141.6	106	4.17	180	7.09	70	2.76	0.95	2.1

All models are supplied with external power supply, suitable hard and soft joint simulators and Delta QC Software

QShield - Standalone

Quality Checks Digital Wrench - Torque & Angle

RFID TAG End-fittings with automatic recognition for ratio management and/or Pset selection

Standard interchangeable heads and reversible ratchets



Digital Twin



Gyroscope
(Angle 1,2° to 250°/s)



Length independent transducer with double bridge strain gauge to guarantee a tightening result regardless of the position of the operator's hand.

Accuracy of +/-1% on Torque reading value
(from 10 to 100% of the nominal torque)

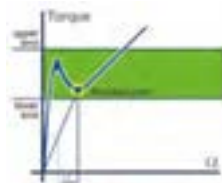


Mini USB port for Configuration, data export to Delta QC software & Calibrations



RGB Color display
Visual feedback AND a complementary configurable vibration for operator guidance

Li-Ion Battery
10 hours autonomy on QShield-S



- ISO 6789:2017 compliance
- Quality Strategies
- Joint Analysis
- Delta QC platform software

Audit & Joint Analysis Digital Wrench

QSHIELD-S SERIES provide a freedom for Quality Operators and Process Engineers to use the wrench in a free mode and independently from production datas: Joint check during audits, conduct Joint analysis on prototypes to or simply retightening mode to secure a joint.

- 5 methods of Residual Torque checks (as per VDI-VDE 2645 part 3).
- Menus are accessible for a versatile usage by a trained staff.
- The vibrating handle (configurable threshold) provides an immediate feedback even in a loud environment of work.
- Results & Curves are stored in the wrench until downloaded on Delta QC (Quality Control Software).



ACCESSORIES
see page 194-195

MODEL	PART NUMBER	RANGE		ANGLE	DRIVE		INCLUDED RATCHET	LENGTH WITHOUT RATCHET		LEVER ARM*		WEIGHT	
		Nm	ft.lbs		mm	in.		mm	in.	mm	in.	kg	lb.
Q-SHIELD 30-S	615 935 210 0	3 - 30	2.21 - 22.13	✓	9x12	0.35x0.47	3/8	402	15.83	320	12.6	0.7	1.5
Q-SHIELD 150-S	615 935 211 0	15 - 150	11.06 - 110.6	✓	14x18	0.55x0.71	1/2	418	16.46	342	13.5	0.8	1.7
Q-SHIELD 200-S	615 935 212 0	20 - 200	14.75 - 147.5	✓	14x18	0.55x0.71	1/2	627	24.7	552	21.75	1.6	3.5
Q-SHIELD 350-S	615 221 038 0	35 - 350	25.81 - 258.1	✓	14x18	0.55x0.71	3/4	694	27.33	625.5	24.62	2.6	5.7
Q-SHIELD 400-S	615 935 213 0	40 - 400	29.5 - 295.0	✓	14x18	0.55x0.71	3/4	1028	40.48	960	37.8	3.2	7.0
Q-SHIELD 500-S	615 935 214 0	50 - 500	36.88 - 368.8	✓	21x26	0.82x1.02	3/4	1137	44.77	1100	43.3	5.5	12.1
Q-SHIELD 800-S	615 935 215 0	80 - 800	59.0 - 590.0	✓	dia 28	dia 1.1	1	1314	51.74	1362	53.62	6.7	14.7
Q-SHIELD 900-S	615 935 216 0	90 - 900	66.38 - 663.8	✓	dia 28	dia 1.1	1	1392	54.8	1440	56.7	8.2	18.0

* Useful length is from Ratchet axis to handle middle

All models are supplied with box including reversible ratchet with TAG (QShield Batteries supplied separately)



PIC REF	MODEL	PART NUMBER	HEIGHT		LENGTH		WIDTH		WEIGHT	
			mm	in	mm	in	mm	in	gr	lb
A	QShield Battery	615 936 500 0	-	-	110	4.33	Ø 22	Ø 8.86	80	0.18
B	QA Charger	615 936 461 0	68	2.67	210	8.26	150	5.90	1290	2.84
C	Q-SHIELD 2x Adapters	615 936 533 0	-	-	-	-	-	-	160	0.35
D	Wrench Protection	615 936 504 0	-	-	-	-	-	-	-	-



SOFTWARE
see page 183

DELTAQC SOFTWARE	FREE	LICENSED	ADVANCED
PSet programming	✓	✓	✓
Result viewer	✓	✓	✓
Result excel export	✓	✓	✓
Curve viewer		✓	✓
Result Database			✓

MODEL	PART NUMBER
DeltaQC Licensed 1 user	615 927 651 0
DeltaQC Licensed 5 users	615 927 652 0
DeltaQC Advanced 1 user	615 927 653 0
DeltaQC Advanced 5 users	615 927 654 0



QShield-S Strategies



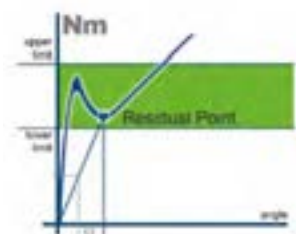
TECHNICAL SPECIFICATION

Standards compliance	ISO 6789:2017 / VDI-VDE 2645-2 & -3
Torque Accuracy	+/-1% of torque reading +/-1 digit from 10 to 100% of nominal torque.
Angle Accuracy	+/-1% from 3°/Sec to 250°/sec
Predefined Pset	250 Psets with T/A defined in Delta QC Software
Batch Count	Up to 99
Results	1000 in memory, last 99 results accessible directly on the wrench display (FIFO) without external PC or software
Curves	25 curves with Delta QC licensed
Quality Audit & Testing Strategies	Residual Torque/Angle Automatic Residual Peak/Torque Residual Torque/Angle Residual Minimum after breakaway Residual Intersection determination Residual Gradient change Residual Loose and Tighten Yield Point (Joint Analysis) Drag Torque
Tightening Strategies	Torque/Time, Torque & Angle, Torque+Angle CW/CCW Tightenings
Extension Management	Torque and Angle bending correction per Pset
USB Communication	Bi-directional communication to Delta QC Software
RGB Display	Red / Green / Blue backlight
Battery	Li-ion battery
Power Autonomy	10 hours on QShield-S
Multi-Units	N.m, kgf.m, lbf.ft, lbf.in, ozf.ft, ozf.in, kp.m, dN.m
Languages	English, Spanish, German, Portuguese, French, Italian
Software	Free Delta QC Software to define Pset and download results (extended capabilities with Licensed and Advanced versions)

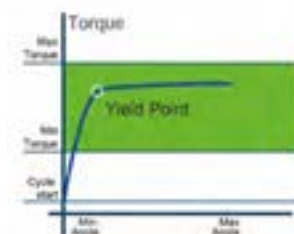


BENEFITS

- Real residual torque value without any special programming or setting from operator
- Save time no PC setting are required
- No risk to release an over loaded fastener as mean value is saved
- Residual value operator independent
- Export data for quality & statistic analysis
- Perfect for fast & accurate pulse tools setting

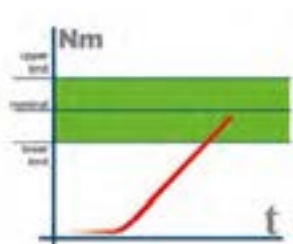


**Residual Torque
(VDI-VDE 2645-3)**

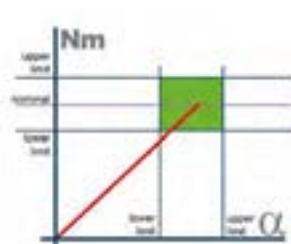


**Yield point
(Joint Analysis)**

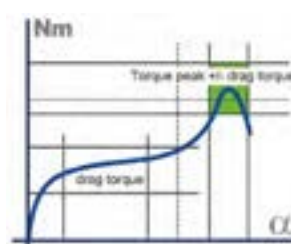
OTHER TIGHTENING STRATEGIES ARE ALSO AVAILABLE



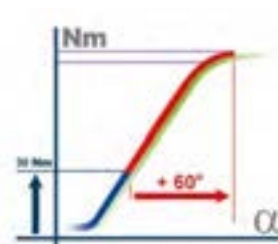
Torque/Time



**Torque & Angle
Torque + Angle**



**Prevailing torque
automatic compensation**



**Tightening with torque and
additional angle rotation
(torque + angle)**

Digital Wrench Accessories

End Fittings with embedded RFID TAG* and NO TAG



OPEN END - metric	TAG	NO TAG
Drive 9x12 Open End 7 mm	615 936 152 0	615 397 055 0
Drive 9x12 Open End 8 mm	615 936 153 0	615 397 056 0
Drive 9x12 Open End 9 mm	615 936 154 0	615 397 057 0
Drive 9x12 Open End 10 mm	615 936 155 0	615 397 058 0
Drive 9x12 Open End 11 mm	615 936 156 0	615 397 059 0
Drive 9x12 Open End 12 mm	615 936 157 0	615 397 060 0
Drive 9x12 Open End 13 mm	615 936 158 0	615 397 061 0
Drive 9x12 Open End 14 mm	615 936 159 0	615 397 062 0
Drive 9x12 Open End 15 mm	615 936 160 0	615 397 063 0
Drive 9x12 Open End 16 mm	615 936 161 0	615 397 064 0
Drive 9x12 Open End 17 mm	615 936 162 0	615 397 065 0
Drive 9x12 Open End 18 mm	615 936 163 0	615 397 066 0
Drive 9x12 Open End 19 mm	615 936 164 0	615 397 067 0
Drive 14x18 Open End 13 mm	615 936 194 0	615 397 131 0
Drive 14x18 Open End 14 mm	615 936 195 0	615 397 132 0
Drive 14x18 Open End 15 mm	615 936 196 0	615 397 133 0
Drive 14x18 Open End 16 mm	615 936 197 0	615 397 134 0
Drive 14x18 Open End 17 mm	615 936 198 0	615 397 135 0
Drive 14x18 Open End 18 mm	615 936 199 0	615 397 136 0
Drive 14x18 Open End 19 mm	615 936 200 0	615 397 137 0
Drive 14x18 Open End 21 mm	615 936 201 0	615 397 138 0
Drive 14x18 Open End 22 mm	615 936 202 0	615 397 139 0
Drive 14x18 Open End 24 mm	615 936 203 0	615 397 140 0
Drive 14x18 Open End 27 mm	615 936 204 0	615 397 141 0
Drive 14x18 Open End 30 mm	615 936 205 0	615 397 142 0
Drive 14x18 Open End 32 mm	615 936 206 0	615 397 143 0
Drive 14x18 Open End 34 mm	615 936 207 0	615 397 144 0

RING BOX END - metric	TAG	NO TAG
Drive 9x12 Ring Box End 7 mm	615 936 165 0	615 397 078 0
Drive 9x12 Ring Box End 8 mm	615 936 166 0	615 397 079 0
Drive 9x12 Ring Box End 10 mm	615 936 167 0	615 397 080 0
Drive 9x12 Ring Box End 11 mm	615 936 168 0	615 397 081 0
Drive 9x12 Ring Box End 12 mm	615 936 169 0	615 397 082 0
Drive 9x12 Ring Box End 13 mm	615 936 170 0	615 397 083 0
Drive 9x12 Ring Box End 14 mm	615 936 171 0	615 397 084 0
Drive 9x12 Ring Box End 15 mm	615 936 172 0	615 397 085 0
Drive 9x12 Ring Box End 16 mm	615 936 173 0	615 397 086 0
Drive 9x12 Ring Box End 17 mm	615 936 174 0	615 397 087 0
Drive 9x12 Ring Box End 18 mm	615 936 175 0	615 397 088 0
Drive 9x12 Ring Box End 19 mm	615 936 176 0	615 397 089 0
Drive 9x12 Ring Box End 21 mm	615 936 177 0	615 397 090 0
Drive 9x12 Ring Box End 22 mm	615 936 178 0	615 397 091 0
Drive 14x18 Ring Box End 13 mm	615 936 208 0	615 397 173 0
Drive 14x18 Ring Box End 14 mm	615 936 209 0	615 397 174 0
Drive 14x18 Ring Box End 15 mm	615 936 210 0	615 397 175 0
Drive 14x18 Ring Box End 16 mm	615 936 211 0	615 397 176 0
Drive 14x18 Ring Box End 17 mm	615 936 212 0	615 397 177 0
Drive 14x18 Ring Box End 18 mm	615 936 213 0	615 397 178 0
Drive 14x18 Ring Box End 19 mm	615 936 214 0	615 397 179 0
Drive 14x18 Ring Box End 21 mm	615 936 215 0	615 397 180 0
Drive 14x18 Ring Box End 22 mm	615 936 216 0	615 397 181 0
Drive 14x18 Ring Box End 24 mm	615 936 217 0	615 397 182 0
Drive 14x18 Ring Box End 27 mm	615 936 218 0	615 397 183 0
Drive 14x18 Ring Box End 30 mm	615 936 219 0	615 397 184 0
Drive 14x18 Ring Box End 32 mm	615 936 220 0	615 397 185 0
Drive 14x18 Ring Box End 34 mm	615 936 221 0	615 397 186 0
Drive 14x18 Ring Box End 36 mm	615 936 222 0	615 397 187 0
Drive 14x18 Ring Box End 41 mm	615 936 223 0	615 397 188 0



FLARED END - metric	TAG	NO TAG
Drive 9x12 Flared End 10 mm	615 936 179 0	615 397 103 0
Drive 9x12 Flared End 11 mm	615 936 180 0	615 397 104 0
Drive 9x12 Flared End 12 mm	615 936 181 0	615 397 105 0
Drive 9x12 Flared End 13 mm	615 936 182 0	615 397 106 0
Drive 9x12 Flared End 14 mm	615 936 183 0	615 397 107 0
Drive 9x12 Flared End 16 mm	615 936 184 0	615 397 108 0
Drive 9x12 Flared End 17 mm	615 936 185 0	615 397 109 0
Drive 9x12 Flared End 18 mm	615 936 186 0	615 397 110 0
Drive 9x12 Flared End 19 mm	615 936 187 0	615 397 111 0
Drive 9x12 Flared End 21 mm	615 936 188 0	615 397 112 0
Drive 9x12 Flared End 22 mm	615 936 189 0	615 397 113 0
Drive 9x12 Flared End 24 mm	615 936 190 0	615 397 114 0

BLANK END	TAG	NO TAG
Drive 9x12 Blank End	615 936 228 0	615 397 130 0
Drive 14x18 Blank End	615 936 226 0	615 397 203 0
Drive 21x26 Blank End	615 936 444 0	615 936 443 0

*These accessories fit QShield / DWTA and Delta wrenches





Digital Wrench Accessories

End Fittings with embedded RFID TAG* and NO TAG



OPEN END - inches	TAG	NO TAG
Drive 9x12 Open End 1/4"	615 936 229 0	615 397 069 0
Drive 9x12 Open End 5/16"	615 936 230 0	615 397 070 0
Drive 9x12 Open End 3/8"	615 936 231 0	615 397 071 0
Drive 9x12 Open End 7/16"	615 936 232 0	615 397 072 0
Drive 9x12 Open End 1/2"	615 936 233 0	615 397 073 0
Drive 9x12 Open End 9/16"	615 936 234 0	615 397 074 0
Drive 9x12 Open End 5/8"	615 936 235 0	615 397 075 0
Drive 9x12 Open End 11/16"	615 936 236 0	615 397 076 0
Drive 9x12 Open End 3/4"	615 936 237 0	615 397 077 0
Drive 14x18 Open End 7/16"	615 221 008 0	615 397 145 0
Drive 14x18 Open End 1/2"	615 221 009 0	615 397 146 0
Drive 14x18 Open End 9/16"	615 221 010 0	615 397 147 0
Drive 14x18 Open End 5/8"	615 221 011 0	615 397 148 0
Drive 14x18 Open End 11/16"	615 221 012 0	615 397 149 0
Drive 14x18 Open End 3/4"	615 221 013 0	615 397 150 0
Drive 14x18 Open End 13/16"	615 221 014 0	615 397 151 0
Drive 14x18 Open End 7/8"	615 221 015 0	615 397 152 0
Drive 14x18 Open End 15/16"	615 221 016 0	615 397 153 0
Drive 14x18 Open End 1"	615 221 017 0	615 397 154 0
Drive 14x18 Open End 1,1/8"	615 221 018 0	615 397 172 0

RING BOX END - inches	TAG	NO TAG
Drive 9x12 Ring Box End 1/4"	615 936 238 0	615 397 092 0
Drive 9x12 Ring Box End 5/16"	615 936 239 0	615 397 093 0
Drive 9x12 Ring Box End 3/8"	615 936 240 0	615 397 094 0
Drive 9x12 Ring Box End 7/16"	615 936 241 0	615 397 095 0
Drive 9x12 Ring Box End 1/2"	615 936 242 0	615 397 096 0
Drive 9x12 Ring Box End 9/16"	615 936 243 0	615 397 097 0
Drive 9x12 Ring Box End 5/8"	615 936 244 0	615 397 098 0
Drive 9x12 Ring Box End 11/16"	615 936 245 0	615 397 099 0
Drive 9x12 Ring Box End 3/4"	615 936 246 0	615 397 100 0
Drive 9x12 Ring Box End 13/16"	615 936 247 0	615 397 101 0
Drive 9x12 Ring Box End 7/8"	615 936 248 0	615 397 102 0
Drive 14x18 Box End 1/2"	615 221 019 0	615 397 189 0
Drive 14x18 Box End 9/16"	615 221 020 0	615 397 190 0
Drive 14x18 Box End 5/8"	615 221 021 0	615 397 191 0
Drive 14x18 Box End 11/16"	615 221 022 0	615 397 192 0
Drive 14x18 Box End 3/4"	615 221 023 0	615 397 193 0
Drive 14x18 Box End 13/16"	615 221 024 0	615 397 194 0
Drive 14x18 Box End 7/8"	615 221 025 0	615 397 195 0
Drive 14x18 Box End 15/16"	615 221 026 0	615 397 196 0
Drive 14x18 Box End 1"	615 221 027 0	615 397 197 0



FLARED END - inches	TAG	NO TAG
Drive 9x12 Flared End 3/8"	615 221 001 0	615 397 115 0
Drive 9x12 Flared End 7/16"	615 221 002 0	615 397 116 0
Drive 9x12 Flared End 1/2"	615 221 003 0	615 397 117 0
Drive 9x12 Flared End 9/16"	615 221 004 0	615 397 118 0
Drive 9x12 Flared End 5/8"	615 221 005 0	615 397 119 0
Drive 9x12 Flared End 11/16"	615 221 006 0	615 397 120 0
Drive 9x12 Flared End 3/4"	615 221 007 0	615 397 121 0

REVERSIBLE RATCHET	TAG	NO TAG
Drive 9x12 Reversible ratchet 1/4"	615 936 191 0	615 397 125 0
Drive 9x12 Reversible ratchet 3/8"	615 936 192 0	615 397 126 0
Drive 9x12 Reversible ratchet 1/2"	615 936 193 0	615 397 127 0
Drive 14x18 Reversible ratchet 1/2"	615 936 224 0	615 397 200 0
Drive 14x18 Reversible ratchet Hd 3/4"	615 936 440 0	615 936 439 0
Drive 21x26 Reversible ratchet 3/4"	615 936 442 0	615 936 441 0
Drive Ø 28 Reversible ratchet 1"	615 936 227 0	615 397 204 0



BITS HOLDER	TAG	NO TAG
Drive 9x12 Bits Holder 1/4"	615 221 028 0	615 397 128 0
Drive 9x12 Bits Holder 5/16"	615 221 029 0	615 397 129 0
Drive 14x18 Bits Holder 5/16"	615 221 030 0	615 397 202 0

FIXED SQUARE DRIVE	TAG	NO TAG
Drive 9x12 Fixed Square Drive 1/4"	-	615 397 122 0
Drive 9x12 Fixed Square Drive 3/8"	-	615 397 123 0
Drive 9x12 Fixed Square Drive 1/2"	-	615 397 124 0
Drive 14x18 Fixed Square Drive 1/2"	-	615 397 198 0
Drive 14x18 Fixed Square Drive 3/4"	-	615 397 199 0

*These accessories fit QShield / DWTa and Delta wrenches



Ensure QA in Tightening requires:

■ Initial **Tool** verification



■ Routine **residual torque** online verification



■ Routine & Reactive **dynamic online** verification



■ Routine **tool transducer** calibration



■ Routine plant **standard calibration**
(in ISO/IEC 17025 Accredited laboratories)



■ **Data retention**



Important elements to consider in selecting your Quality Equipments

- List Torque specifications / Quality Control specifications.
- Classification of your joints (Criticality of assembly operations in the Control Plan).
- Processes for tool testing, joint testing and standard calibration equipment.
- Ensure data is collected, maintained and accessible.



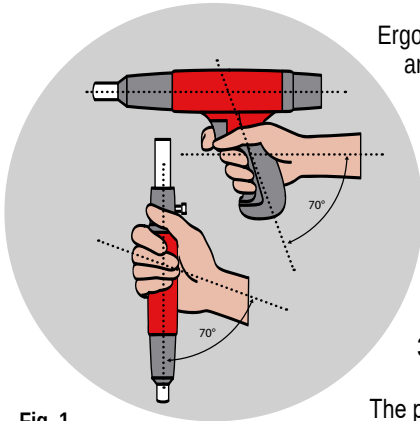


Fig. 1
Holding tools in
an ergonomically
neutral position

Ergonomics 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

Desoutter has been developing products to improve the comfort of use and counter balance some of the below situations:

1. Hand position on the tool: based on application a straight or pistol grip tool is suggested (Fig. 1)
2. Tool position in the workspace: easy to reach and at the right height to minimize the unnecessary movement of the operator (Fig. 2 and 3)
3. Forces exerted: pulling force, torque reaction and the repetitiveness of these forces (Fig. 2 and 3)

The potential benefits of using Desoutter ergonomic accessories together with tools as described in this brochure are:

- Reduce repetitive stress injuries (RSI)
- Reduced operator fatigue
- Greater productivity
- Improved quality
- Reduced handling time
- Greater operator satisfaction
- Lower recruitment costs

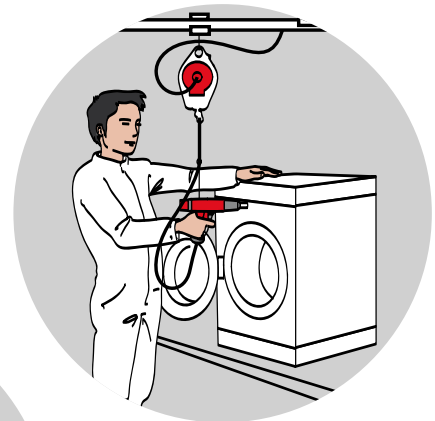


Fig. 2
Desoutter balancer

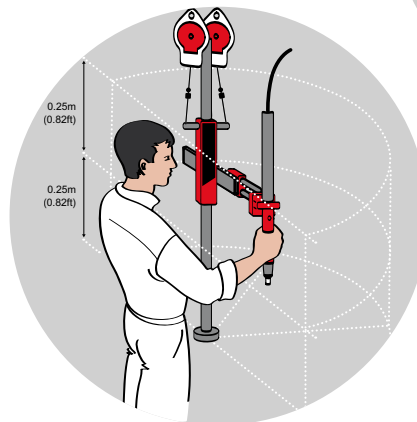
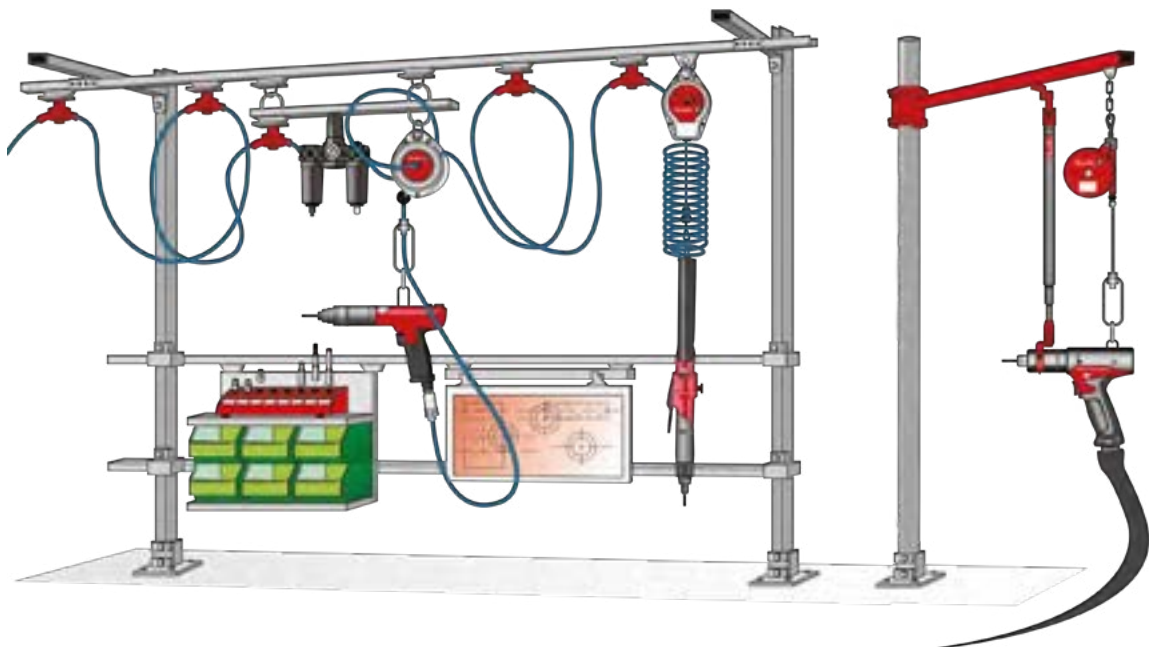
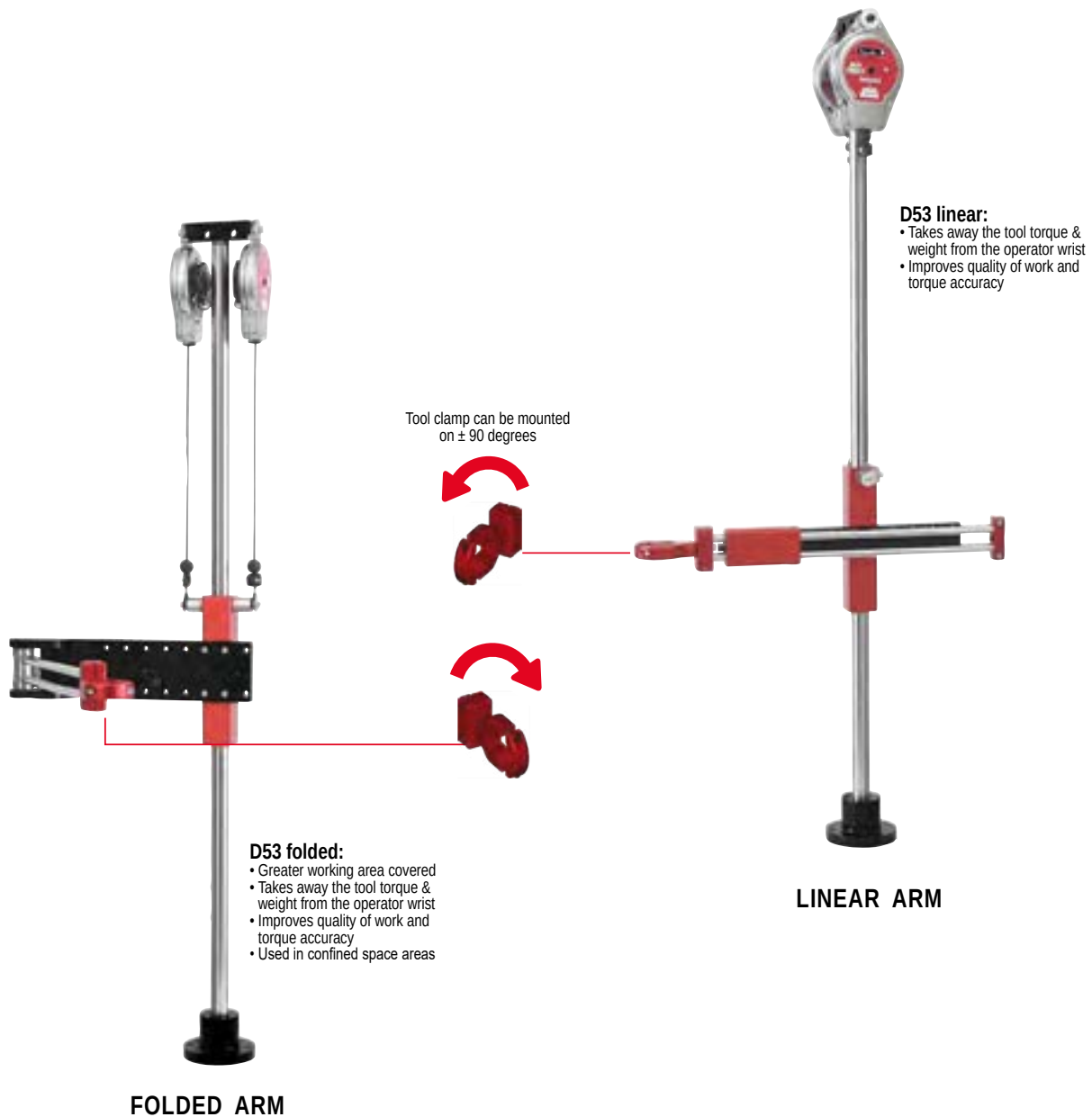


Fig.3
Desoutter torque
reaction arm



Linear and Folded torque reaction arms

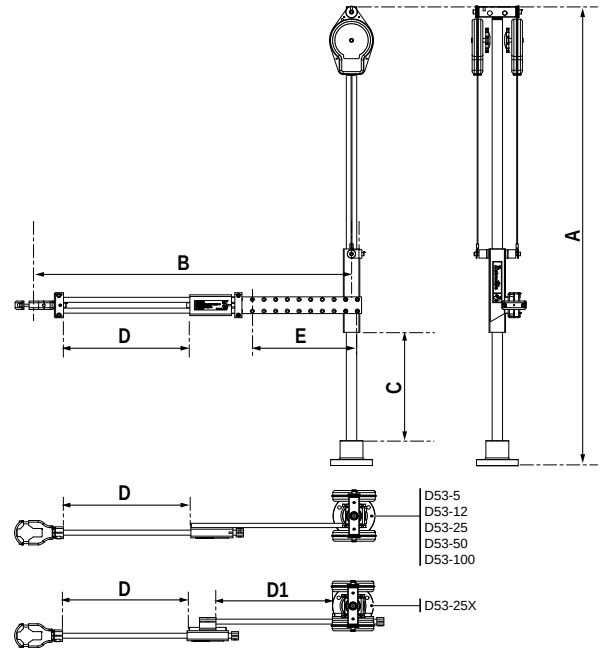
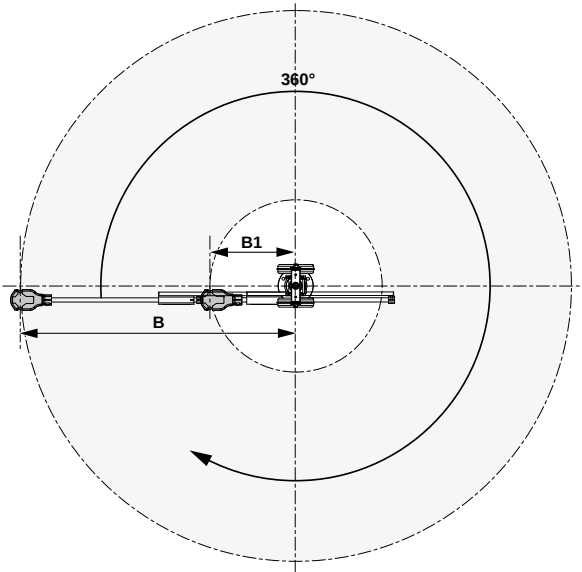


For full tool clamp program, please see details on page 194

MODEL	PART NUMBER	MAXIMUM TORQUE		MAXIMUM TOOL WEIGHT		ARM EQUIPPED WITH	TOOL CLAMP DIAMETER (INCLUDED WITH THE ARM)	
		Nm	ft. lb	kg	lb.		mm	in.
LINEAR ARM								
D53-5*	615 810 700 0	5	3.7	0.8	1.8	1 x 5DU	28.5 - 41	1.12 - 1.62
D53-12*	615 810 701 0	12	8.8	1.5	3.3	2 x 5DU	28.5 - 41	1.12 - 1.62
D53-25*	615 810 702 0	25	18.4	2.5	5.5	2 x 5DU	28.5 - 41	1.12 - 1.62
D53-25X Extended reach*	615 810 703 0	25	18.4	2.2	4.8	2 x 5DU	28.5 - 41	1.12 - 1.62
D53-50	615 810 704 0	50	36.8	5.0	11.0	2 x 15D	To order separately	
D53-100	615 810 705 0	100	73.7	6.0	13.2	2 x 22D		
FOLDED ARM								
D53-5S*	615 810 706 0	5	3.7	0.8	1,8	1 x 5DU	28.5 - 41	1.12 - 1.62
D53-12S*	615 810 707 0	12	8.8	1.5	3,3	2 x 5DU	28.5 - 41	1.12 - 1.62
D53-25S*	615 810 708 0	25	18.4	2.5	5.5	2 x 5DU	28.5 - 41	1.12 - 1.62
D53-50S	615 810 709 0	50	36.8	5.0	11.0	2 x 15D	To order separately	
D53-100S	615 810 710 0	100	73.7	6.0	13.2	2 x 22D		

(*) Universal D53 tool clamp included

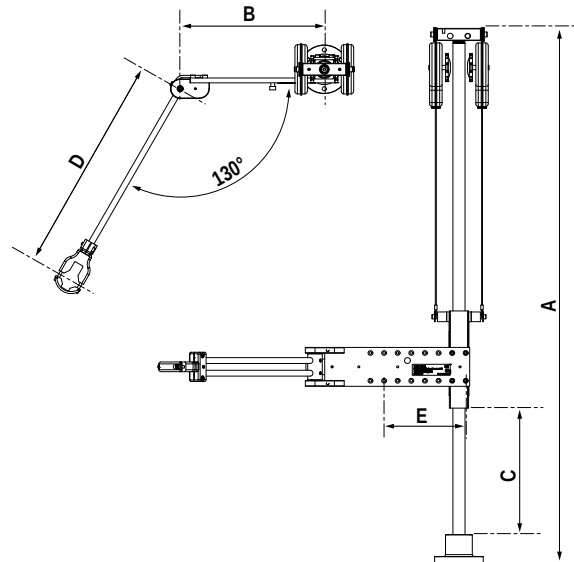
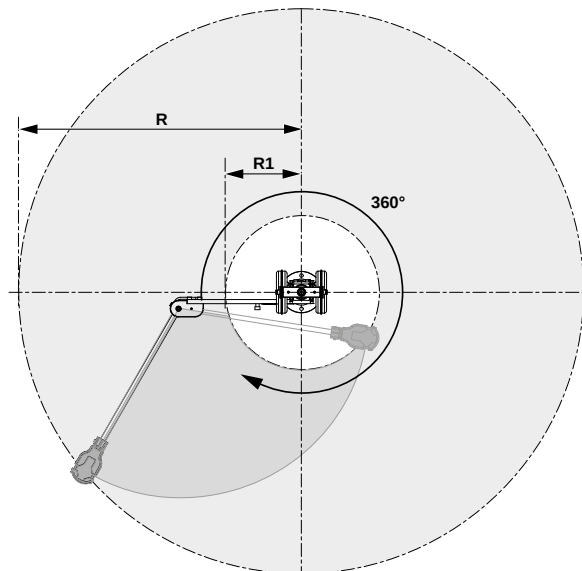
D53 - Dimensions



D53 linear working area product specification

MODEL	PART NUMBER	MAXIMUM TORQUE		HEIGHT A		WIDTH				VERTICAL STROKE		HORIZONTAL STROKE		FIXED STROKE		TOOL WEIGHT	
		Nm	ft. lb	mm	in	MAXI-B	MINI-B	mm	in	C	in	D	in	E	in	kg	lb
D53-5	615 810 700 0	5	3.7	732	28.8	592*	23.3*	220*	8.7*	310	12.2	205	8.1	-	-	0.8	1.76
D53-12	615 810 701 0	12	8.9	888	35.0	710*	28*	260*	10.2*	465	18.3	255	10.0	-	-	1.5	3.3
D53-25	615 810 702 0	25	18.4	1132	44.6	779*	30.7*	231*	9.1*	615	24.2	290	11.4	-	-	2.5	5.5
D53-25X	615 810 703 0	25	18.4	1132	44.6	794*	31.2*	230*	9.0*	615	24.2	290	11.4	275	10.8	2.2	4.85
D53-50	615 810 704 0	50	36.9	1147	45.2	888*	35.0*	267**	10.5**	515	20.3	355	14.0	-	-	5.0	11.0
D53-100	615 810 705 0	100	73.8	1147	45.2	916*	36.0*	255**	10.0**	515	20.3	395	15.6	-	-	6.0	13.2

(*) With clamp - (**) Without clamp



D53 folded working area product specification

MODEL	PART NUMBER	MAXIMUM TORQUE		HEIGHT A		WIDTH B		VERTICAL STROKE C		RADIUS D		FIXED STROKE E		RADIUS R		RADIUS R1		TOOL WEIGHT	
		Nm	ft. lb	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb
D53-5S	615 810 706 0	5	3.7	732	28.8	248	9.76	270	10.6	370*	14.6*	168	6.6	546	21.5	140	5.5	0.8	1.76
D53-12S	615 810 707 0	12	8.9	888	35.0	298	11.73	425	16.7	420*	16.5*	168	6.6	639	25.2	146	5.8	1.5	3.3
D53-25S	615 810 708 0	25	18.4	1132	44.6	296	11.65	580	22.8	470*	18.5*	168	6.6	685	27	183	7.2	2.5	5.5
D53-50S	615 810 709 0	50	36.9	1147	45.2	336	1.1	520	20.5	440**	17.3**	228	9.0	698	27.5	154	6.1	5.0	11.0
D53-100S	615 810 710 0	100	73.8	1147	45.2	391	15.4	500	19.7	490**	19.3**	228	9.0	788	31	158	6.2	6.0	13.2

(*) With clamp - (**) Without clamp

Linear high torque reaction arms



D53-150/1000 linear:

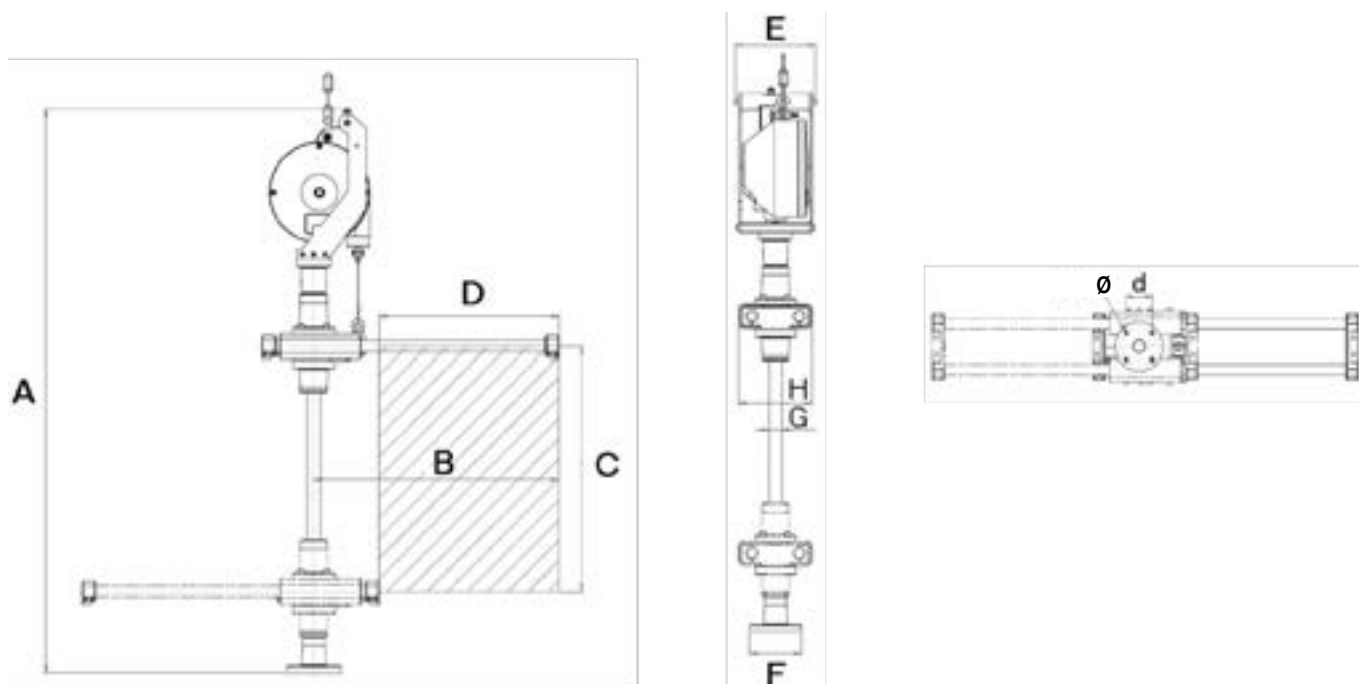
- High torque arms from 150 to 1000Nm (111 to 740 ft.lb)
- Standard and extended versions

MODEL	PART NUMBER	MAXIMUM TORQUE		MAXIMUM TOOL WEIGHT		BALANCER INCLUDED	TOOL CLAMP DIAMETER
		Nm	ft. lb	kg	lb.		
D53-150	615 811 658 0	150	111	7	15.4	1 x 14DF	To order separately contact your Desoutter representatives
D53-150XL	615 811 659 0	150	111	6	13.2	1 x 14DF	
D53-300	615 811 660 0	300	222	14	30.9	1 x 25DF	
D53-300XL	615 811 661 0	300	222	12.5	27.6	1 x 25DF	
D53-500	615 811 662 0	500	370	30	66.2	1 x 35DF	
D53-500XL	615 811 663 0	500	370	27.4	60.4	1 x 45DF	
D53-1000	615 811 664 0	1000	740	21	46.3	1 x 35DF	
D53-1000XL	615 811 665 0	1000	740	17.8	39.3	1 x 45DF	

For D53-150XL, a new reference is needed to fit with the new balancer (615 450 512 5 Upgrade Kit for D53-150(XL)). For others arms, new balancers are suitable with the existing arms



D53HT - Dimensions



MODEL	PART NUMBER	HEIGHT		WIDTH (WO/CLAMP)				VERTICAL STROKE				TOOL WEIGHT	
		A		MIN-B		MAX-B		MIN-C		MAX-C		kg	lb
		mm	in	mm	in	mm	in	mm	in	mm	in		
D53-150	615 811 658 0	1049	41.3	240	9.4	600	23.6	154.5	6.1	644	25.4	7	15.4
D53-150XL	615 811 659 0	1159	45.6	240	9.4	840	33.1	154.5	6.1	754	29.7	6	13.2
D53-300	615 811 660 0	1216	47.9	260	10.2	660	26.0	180.0	7.1	720	28.3	14	30.9
D53-300XL	615 811 661 0	1296	51	260	10.2	860	33.9	180.0	7.1	780	30.7	12.5	27.6
D53-500	615 811 662 0	1346	53	290	11.4	730	28.7	209.5	8.2	815	32.1	30	66.2
D53-500XL	615 811 663 0	1561	61.5	290	11.4	1090	42.9	209.5	8.2	1009	39.7	27.4	60.4
D53-1000	615 811 664 0	1556	61.3	320	12.6	800	31.5	278.5	11.0	968	38.1	21	46.3
D53-1000XL	615 811 665 0	1691	66.6	320	12.6	1120	44.1	278.5	11.0	1078	42.5	18	39.3

MODEL	HORIZONTAL STROKE									
	D		E		F		G		H	
	mm	in	mm	in	mm	in	mm	in	mm	in
D53-150	360	14.4	170	6.7	90	3.5	25	1.0	150	5.9
D53-150XL	600	24	170	6.7	90	3.5	25	1.0	150	5.9
D53-300	400	16	186	7.3	119	4.7	30	1.2	170	6.7
D53-300XL	600	24	186	7.3	119	4.7	30	1.2	170	6.7
D53-500	440	17.6	180	7.1	119	4.7	40	1.6	170	6.7
D53-500XL	800	32	180	7.1	119	4.7	40	1.6	170	6.7
D53-1000	480	19.2	182	7.2	129	5.1	50	2.0	220	8.7
D53-1000XL	800	32	182	7.2	129	5.1	50	2.0	220	8.7

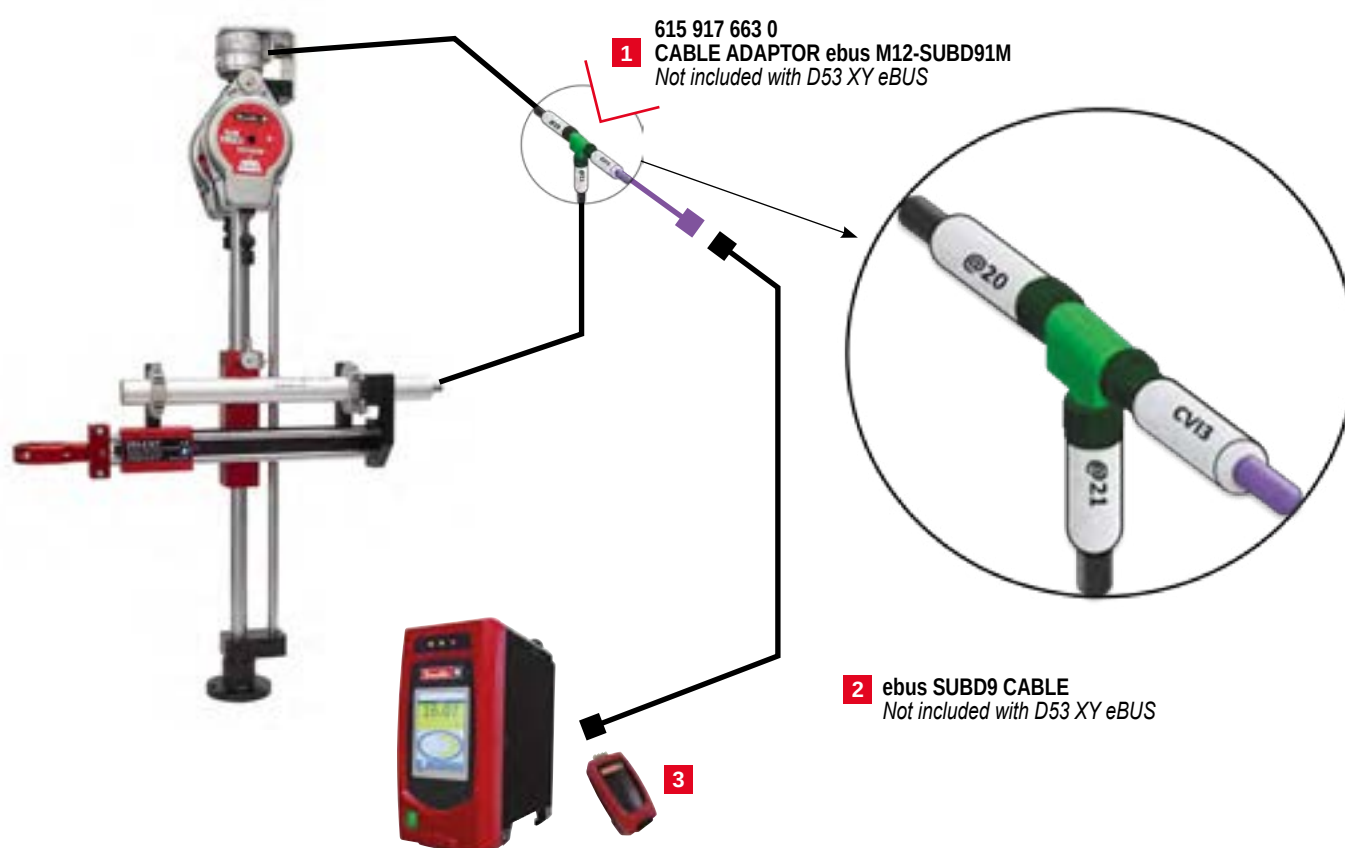
MODEL	D		Ø		ARM WEIGHT	
	mm	in	mm	in	kg	lb
D53-150	50	2.0	11	0.4	12.5	27.6
D53-150XL	50	2.0	11	0.4	13.7	30.2
D53-300	65	2.6	11	0.4	26.7	58.9
D53-300XL	65	2.6	11	0.4	28.2	62.2
D53-500	65	2.6	11	0.4	40.9	90.2
D53-500XL	65	2.6	11	0.4	43.7	96.3
D53-1000	72	2.8	13.5	0.5	57.9	127.7
D53-1000XL	72	2.8	13.5	0.5	61.5	135.7

D53 X/Y – Positioning arms for CVI3

- D53 X/Y CANOpen stands allows to track the tool position during assembly process
- Same tool stand as D53 standard one
- 2 different versions with encoders
- This arm is intended to be used together with our CVI3 controller
- Connected directly to the CVI3 controller
- Needs ePOD 2 or higher
- Easy positioning learning mode

ACCESSORIES NEEDED :

- 1** Cable adaptor EBUS M12 / SUBD9 6159176630
- 2** Select one of them :
 - eBUS SUBD9 cable 3m 6159176080
 - eBUS SUBD9 cable 5m 6159176090
 - eBUS SUBD9 cable 15m 6159176100
- 3** Select one ePOD :
 - ePOD2 6159360760
 - ePOD3 6159360770

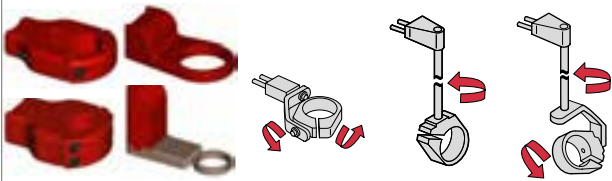


MODEL	PART NUMBER	MAXIMUM TORQUE		MAXIMUM TOOL WEIGHT		ARM EQUIPPED WITH	TOOL CLAMP DIAMETER (INCLUDED WITH THE ARM)	
		Nm	ft. lb	kg	lb.		mm	in.
LINEAR ARM								
D53-5 X/Y-AXLE EBUS	615 812 267 0	5	3.7	0.8	1.8	1 x 5DU	28.5 - 41	1.12 - 1.62
D53-12 X/Y-AXLE EBUS	615 812 268 0	12	8.8	1.5	3.3	2 x 5DU	28.5 - 41	1.12 - 1.62
D53-25 X/Y-AXLE EBUS	615 812 269 0	25	18.4	2.5	5.5	2 x 5DU	28.5 - 41	1.12 - 1.62
D53-50 X/Y-AXLE EBUS	615 812 270 0	50	36.8	5.0	11.0	2 x 15D	To order separately	
D53-100 X/Y-AXLE EBUS	615 812 271 0	100	73.7	6.0	13.2	2 x 22D		
FOLDED ARM								
D53-5S X/Y-AXLE EBUS	615 812 272 0	5	3.7	0.8	1.8	1 x 5DU	28.5 - 41	1.12 - 1.62
D53-12S X/Y-AXLE EBUS	615 812 273 0	12	8.8	1.5	3.3	2 x 5DU	28.5 - 41	1.12 - 1.62
D53-25S X/Y-AXLE EBUS	615 812 274 0	25	18.4	2.5	5.5	2 x 5DU	28.5 - 41	1.12 - 1.62
D53-50S X/Y-AXLE EBUS	615 812 275 0	50	36.8	5.0	11.0	2 x 15D	To order separately	
D53-100S X/Y-AXLE EBUS	615 812 276 0	100	73.7	6.0	13.2	2 x 22D		



Tool clamp guide for D53 arms

Ordering Process:

SELECT YOUR TOOL	SELECT THE ARM ACCORDING TO: - THE TORQUE APPLICATION - THE REACH NEEDED		ADD THE TOOL CLAMP IF NOT INCLUDED WITH THE ARM				ADD ADAPTORS IF YOU USE ROTATION CLAMPS
STEP 1	STEP 2		STEP 3				STEP 4
TOOL MODEL	D53 MODELS		TOOL CLAMP REFERENCES				COMMENTS
	Linear arms	Swiveling arms	Universal Clamp	Spline	Vertical 2 axis rotation clamp Only for D53-12(S) and D53-25(S)	Horizontal 1 axe rotation clamp Only for D53-12(S) and D53-25(S)	Horizontal 2 axis rotation clamp Only for D53-12(S) and D53-25(S)
							
SB/SBP/SC2/SC/ SCP(T)SH70 SLBN SLC(P) Nose mount ECS/ERS/ECD 5	D53-5* / D53-12* / D53-25* * Tool clamp included	D53-5S* / D53-12S* / D53-25S* * Tool clamp included	615 810 835 0 Included (A) 28.5-41mm		615 396 615 0 + 409083 NOT Included To be ordered	615 396 615 0 + 409113 NOT Included To be ordered	615 396 615 0 + 409173 NOT Included To be ordered
SD/SDP/SDT ECP 3/5/10/20	D53-5* / D53-12* / D53-25* * Tool clamp included	D53-5S* / D53-12S* / D53-25S* * Tool clamp included	615 810 835 0 Included (A) 28.5-41mm		615 396 615 0 + 409093 NOT Included To be ordered	615 396 615 0 + 409123 NOT Included To be ordered	615 396 615 0 + 409183 NOT Included To be ordered
SLC Top mount	D53-5 / D53-12	D53-5S D53-12S	615 810 838 0 NOT Included To be ordered (B) 40-50 mm		615 396 615 0 + 409093 NOT Included To be ordered	615 396 615 0 + 409123 NOT Included To be ordered	615 396 615 0 + 409183 NOT Included To be ordered
ECA 15/20/30	D53-5 D53-12 D53-25	D53-5S D53-12S D53-25S	615 810 838 0 NOT Included To be ordered (B) 40-50 mm				
SH 150/200/280/420/500 SH 700/850 ERAL1.5/2 ECS/ERS	D53-25(X) D53-50 D53-100	D53-25S(X) D53-50S D53-100S	615 811 029 0 NOT Included To be ordered (B) 28-55 mm				
ERDL 4 ECD 50/70/120	D53-50 / D53-100	D53-50S D53-100S	615 810 203 0 NOT Included To be ordered (C)				
EID 44-1200 EID 75-900 EID 65-800	D53-50 / D53-100	D53-50S D53-100S	615 812 136 0 NOT Included To be ordered (C)				
ERDL 6	D53-100	D53-100S	615 810 205 0 NOT Included To be ordered (C)				
ECD20/30	D53-25(X) D53-50	D53-25S(X) D53-50S	615 810 628 0 + 615 396 191 0 NOT Included To be ordered (D)				Parts to be welded
ERAL 4-90/110/120 ERAL 6-135 ECA 70... 150	D53-100	D53-100S	615 810 628 0 + 615 396 227 0 NOT Included To be ordered (D)				Parts to be welded
EID25-1200 EID 32-900 EDP/ERDL 1.5/2	D53-50	D53-50S	615 810 628 0 + 615 396 551 5 NOT Included To be ordered (D)				Parts to be welded

For the tools not mentioned in this list, please ask your local Desoutter contact to define the tool clamp.

Tool clamps



A



B



C



D



E

Specific Clamps

MODEL E	PART NUMBER
SD SH70/150/200/280/420/500	615 810 129 0

D53 Tool positionning

Straight tool



Pistol grip tool



Angle nutrunner



TRA - Telescopic reaction arms

Telescopic carbon arm: Ideal for busy workspace!

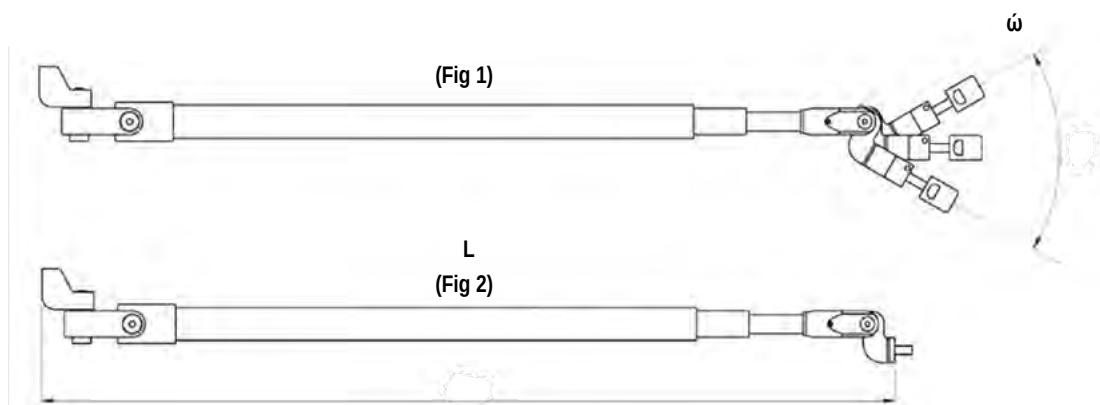
- From 12 up to 200 Nm (8.9 up to 148 ft.lb) torque capacity
- Several lengths available
- 90 degrees tool clamp interface for straight or pistol grip tools
- Limited tool clamp angle rotation to avoid side forces in the operator arm (ω) (Fig 1)

Benefits:

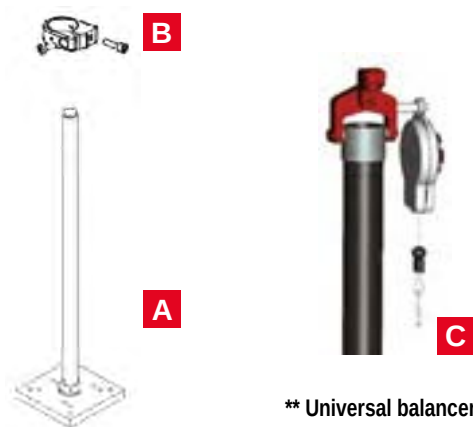
- Extremely lightweight carbon made torque arm for improved comfort of use
- Flexible solution



Need to order
a balancer separately
see page 207



TRA - Telescopic reaction arms



** Universal balancer adaptater

OPTIONAL ACCESSORIES

ITEM	DESCRIPTION	PART NUMBER
A	Bench stand Ø 32mm (1.26") - H 753mm (29.64")	615 810 194 0
B	Bench stand holder Ø 32mm (1.26") for TRA 12/25	615 810 121 0
B	Bench stand holder Ø 32mm (1.26") for TRA 50/100	615 810 140 0
C	Universal balancer adapter	615 397 922 5

MODEL	PART NUMBER	MAXIMUM TORQUE		MAX. MIN LENGTH L		ω (DEG)	WEIGHT		TOOL CLAMP DIAMETER (INCLUDED WITH THE ARM)	
		Nm	ft. lb	mm	in.		kg	lb	mm	in.
TRA12 1150*	615 810 089 0	12	8.9	516-1128	20-44	170	0.46	1.01	28-49	1.10-1.92
TRA12 1600*	615 810 090 0	12	8.9	666-1578	26-62	170	0.51	1.12	28-49	1.10-1.92
TRA12 2100*	615 810 091 0	12	8.9	835-2083	32-82	170	0.57	1.26	28-49	1.10-1.92
TRA25 1150*	615 810 092 0	25	18.4	524-1124	20-44	170	0.60	1.32	28-49	1.10-1.92
TRA25 1600*	615 810 093 0	25	18.4	674-1574	26-62	170	0.70	1.54	28-49	1.10-1.92
TRA25 2100*	615 810 094 0	25	18.4	841-2075	33-82	170	0.77	1.70	28-49	1.10-1.92
TRA25 2600*	615 810 095 0	25	18.4	1007-2573	39-101	170	0.86	1.89	28-49	1.10-1.92
TRA50 1600*	615 810 096 0	50	36.9	712-1624	28-64	40	1.14	2.51	28-50	1.10-1.97
TRA50 2100*	615 810 097 0	50	36.9	878-2125	34-84	40	1.24	2.73	28-50	1.10-1.97
TRA50 2600*	615 810 098 0	50	36.9	1045-2626	41-103	40	1.34	2.95	28-50	1.10-1.97
TRA100 1600	615 810 099 0	100	73.8	722-1628	28-64	30	1.47	3.24	To order separately (see page 200)	
TRA100 2100	615 810 100 0	100	73.8	889-2129	35-83	30	1.41	3.11		
TRA100 2600	615 810 101 0	100	73.8	1056-2630	41-103	30	1.53	3.37		
TRA200 1600	615 810 102 0	200	148	726-1628	28-64	20	1.98	4.36		
TRA200 2100	615 810 103 0	200	148	893-2129	35-84	20	2.18	4.80		
TRA200 2600	615 810 104 0	200	148	1060-2630	41-103	20	2.39	5.27		

(*) Universal TRA tool clamp included (**) Universal balancer adapters: 1 kit = 7 parts for all Desoutter balancer types: Part No. 615 397 922 5



TRA X/Y – Positionning arms for CVI3

Same telescopic arms as the standard one: up to 200Nm (148 ft.lb.) torque capacity

- TRA X/Y CANopen arms allows to track the tool position during assembly process
- 2 different versions:
 - 1 encoder: length measurement
 - 2 encoders: length measurement + angle control
- This arm is intended to be used together with our CVI3 controller
- Accuracy: +/- 5mm
- Connected directly to the CVI3 controller
- Needs ePOD 2 or higher
- Easy positioning learning mode

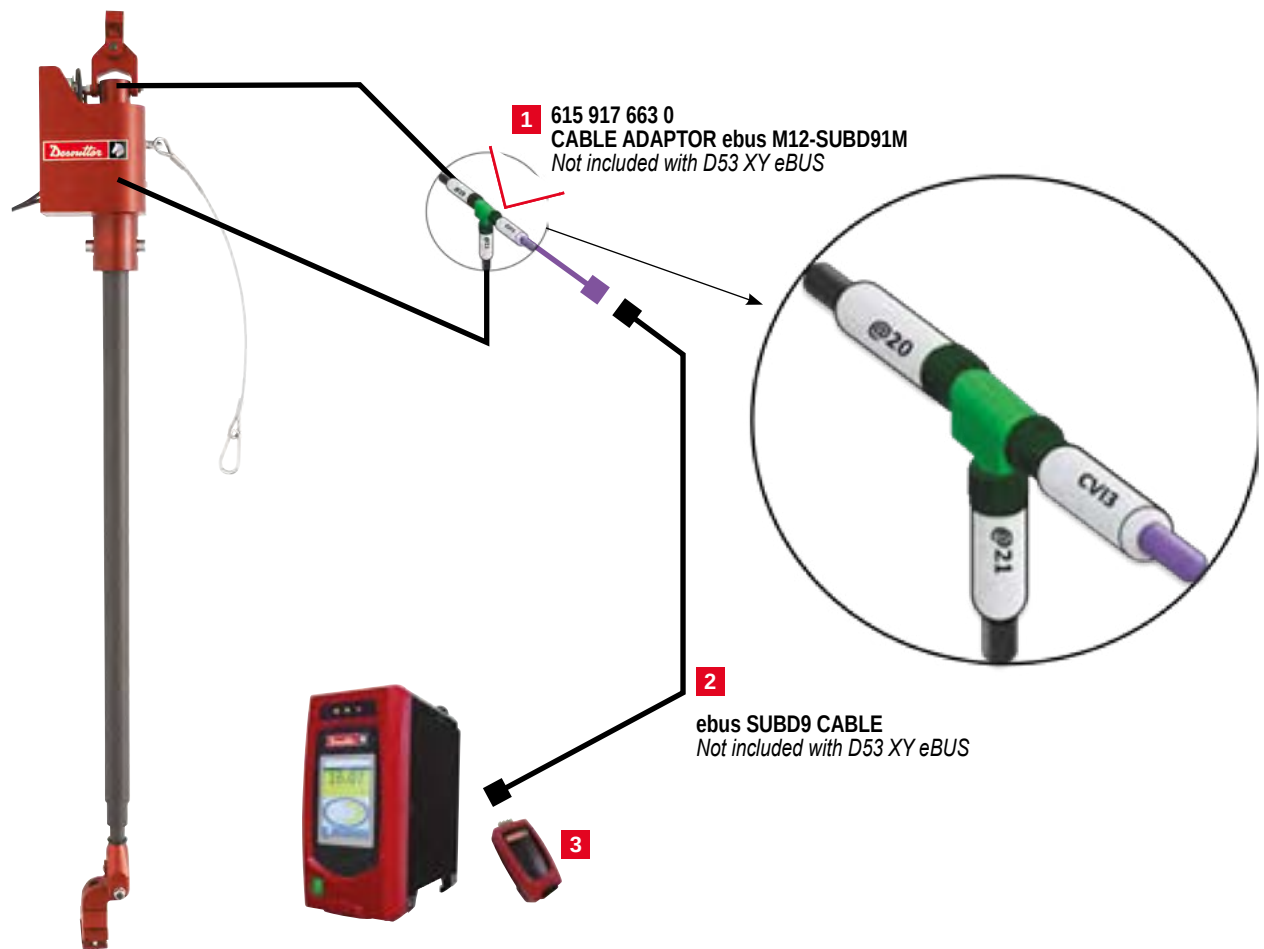
ACCESSORIES NEEDED :

- 1** Cable adaptor EBUS M12 / SUBD9 6159176630
- 2** Select one of them :

eBUS SUBD9 cable 3m	6159176080
eBUS SUBD9 cable 5m	6159176090
eBUS SUBD9 cable 15m	6159176100
- 3** Select one ePOD :

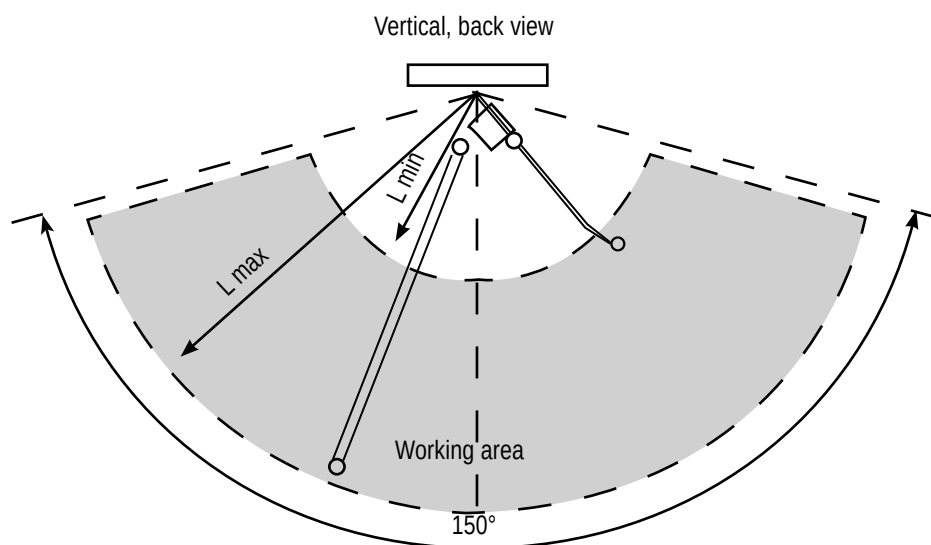
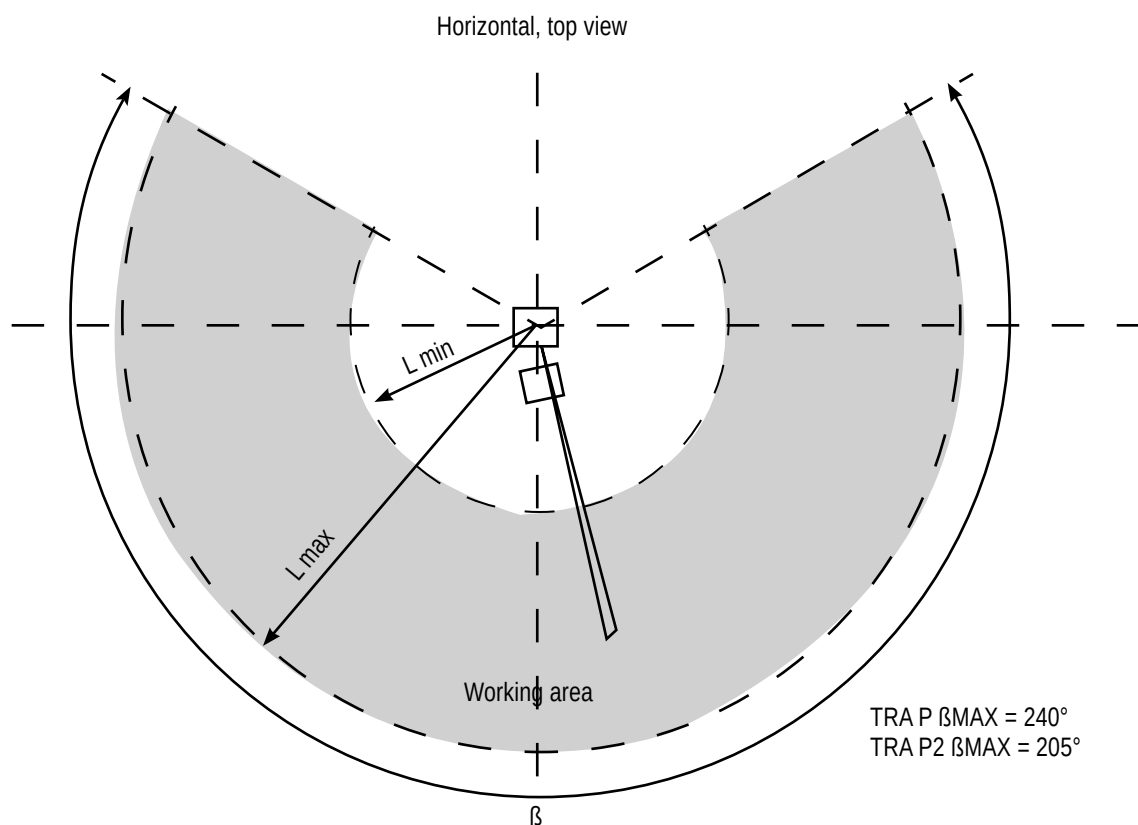
ePOD2	6159360760
ePOD3	6159360770

 - Needs ePOD 2 or higher
 - Easy positioning learning mode



TRA X/Y – Positionning arms for CVI3

TRA X/Y CANopen - Dimensions



The new clamps guide for TRA

Ordering Process:

SELECT YOUR TOOL		SELECT THE ARM ACCORDING TO:- THE TORQUE APPLICATION - THE REACH NEEDED		ADD THE TOOL CLAMP. IF NOT INCLUDED WITH THE ARM	
STEP 1	STEP 2	STEP 3			
TOOL MODEL	TRA MODEL	TOOL CLAMP REFERENCE	DESCRIPTION	PHOTO	
SB/SBP SC2/SCP/SCPT SD/SDP/SDT SH 70/150/200/280 SLBN/SLC/SLCP ECS ECD 5	TRA12* / 25 * * Clamp included with the arm	615 810 118 0 Included with the arm	Universal Clamp 28 - 49mm (1.1 - 1.92")	A	
ERDL 1,5/2 ERAL 4-90	TRA50* / 100 * Clamp included with the arm	6158101370 Included with TRA50. To be ordered for TRA100	Universal Clamp 28 - 50mm (1.1 - 1.97")	B	
SH 420/500	TRA50 TRA100	6158129030 + 6158128940 6158129040 + 6158128940		C	
SH 700	TRA50 TRA100	6158129030 + 6158129000 6158129040 + 6158129000		C	
SH 850	TRA 100	6158128940 + 6158128970		C	
ERAL 1,5/2	TRA50, TRA100	6158129030 + 6158128890 6158129040 + 6158128890		C	
ERAL 4	TRA50, TRA100	6158129030 + 6158128960 6158129040 + 6158128960		C	
ECA 15/20/30	TRA 50	6158129030 + 6158128930		C	
ECA 40/60	TRA 100	6158129040 + 6158128930		C	
EAD 20/32 EAB(C) 26/32/45	TRA50	6158129030 + 6158128880		C	
EAD 50-900	TRA50 TRA100	6158129030 + 6158128910 6158129040 + 6158128910		C	
EAD 70/75/80/95/105 EAB(C) 60	TRA50 TRA100	6158129030 + 6158128950 6158129040 + 6158128950		C	
ERDL 4 - 60/80/135 ECD 50/70/120	TRA100 TRA200	6158102030 for TRA100 6158102020 for TRA200 NOT Included with the arm To be ordered	Spline G1 D40,5	D	
EID 44/65/75	TRA100	6158121360 for TRA100 NOT Included with the arm To be ordered	Spline G1 D40,5	D	
ERDL 6 - 170/220/250	TRA200	6158102040 NOT Included with the arm To be ordered	Spline G1 D50	D	
EDP EID 25/32	TRA 50	6158106280 + 6153965515 NOT Included with the arm To be ordered	Clamp to be welded	E	
ECD 20/30	TRA 50	6158106280 + 6153961910 NOT Included with the arm To be ordered	Clamp to be welded	E	
ECA 70/90/115/125/150	TRA 100	6158129040 + 6158128980		C	
ERAL 4 - 225 ECA 200	TRA200	6158106310 + 6153962300 NOT Included with the arm To be ordered	Clamp to be welded	E	

For the tools not mentioned in this list, please ask your local Desoutter contact to define the tool clamp

TOOL HOLDER EPD FOR REACTION ARMS

TOOL		TOOL HOLDER DESCRIPTION	PART NUMBER	FOR ARM	
EPD7		D53 UNI HOLDER DIAM 28,5-41 (INCLUDED WITH THE ARM)	615 810 835 0	D53-25	615 810 702 0
				D53-25X	615 810 703 0
				D53-25S	615 810 708 0
				D53-25 X/Y-AXLE EBUS	615 812 269 0
				D53-25S X/Y-AXLE EBUS	615 812 274 0
EPD10		TRA UNI HOLDER DIAM 26-49 (INCLUDED WITH THE ARM)	615 810 118 0	TRA25-1150	615 810 092 0
TRA25-1600				615 810 093 0	
TRA25-2100				615 810 094 0	
TRA25-2600				615 810 095 0	
EPD16		TRA UNI HOLDER DIAM 26-49 (INCLUDED WITH THE ARM)	615 810 118 0	TRA25-2100 P2	615 812 108 0
EPD20				TT25-1150/300	615 812 082 0
		TT UNI HOLDER DIAM 28,5-41 (INCLUDED WITH THE ARM)	615 812 161 0	TT25-1150/300	615 812 082 0
				TT25-1600/600	615 812 261 0
	EDP27		D53 50-100 UNI HOLDER DIAM 26-55 (NOT INCLUDED WITH THE ARM)	615 811 029 0	D53-50
D53-50S					615 810 709 0
D53-50 XY AXLE EBUS					615 812 270 0
D53-50S XY AXLE EBUS					615 812 275 0
			RA50-100 UNI HOLDER DIAM 26-50 NCLUDED WITH THE ARM)	615 810 137 0	TRA 50 1600
	TRA 50 2100				615 810 107 0
	TRA 50 2600				615 810 108 0
	TRA 50 2100 UNI P				615 812 104 0
	TRA 50 2100 UNI P2				615 812 109 0
EPD40 EPD70		JOL HOLDER EPD40-70 (OT INCLUDED WITH THE ARM)	615 813 674 0	D53-50	615 810 704 0
				D53-50S	615 810 709 0
				D53-50 XY AXLE EBUS	615 812 270 0
				D53-50S XY AXLE EBUS	615 812 275 0
				TRA 50 1600	615 810 096 0
				TRA 50 2100	615 810 107 0
				TRA 50 2600	615 810 108 0
				TRA 50 2100 UNI P	615 812 1040
				TRA 50 2100 UNI P2	615 812 109 0
				D53-100	615 810 705 0
				D53-100S	615 810 710 0
				D53-100 XY AXLE EBUS	615 812 271 0
				D53-100S XY AXLE EBUS	615 812 276 0
				TRA 100 1600	615 810 099 0
				TRA 100 2100	615 810 100 0
				TRA 100 2600	615 810 101 0
				TRA 100 2100 UNI	615 812 105 0
TRA 100 2100 P2	615 812 110 0				
EPD110		TOOL HOLDER EPD110 (NOT INCLUDED WITH THE ARM)	615 813 675 0	TRA 200 1600	615 810 102 0
				TRA 200 2100	615 810 103 0
				TRA 200 2600	615 810 104 0
				TRA 200 2100 P UNI	615 812 106 0
				TRA 200 2100 P2	615 812 111 0



Balancing arms D57, D58, D59

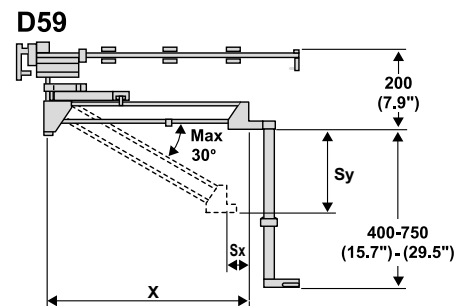
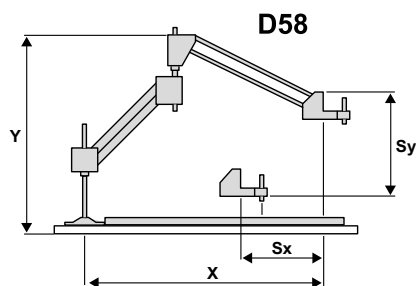
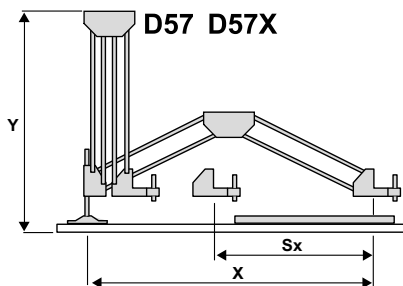
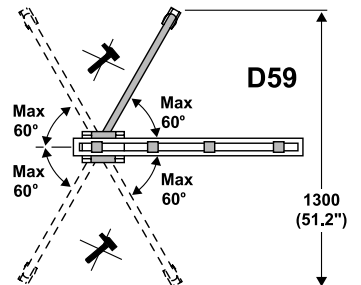


D57/D57X/D58 How To Order

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

D59 How To Order

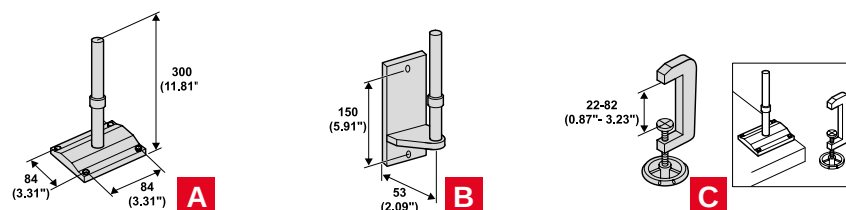
1. Basic Stand
2. Tool Holder
3. Rail (supplied per meter, e.g. for 3m order (3) of PN. 409213)
4. Rail End Stops (2 required per complete rail)
5. Optional Accessories



D57 / 58 / 59 BALANCING ARMS

PIC REF.	MODEL	PART NUMBER	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

Tool clamps



ACCESSORIES

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

must also order top arrestor when using side arrestor

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)	409273 Ø46mm (1.8) (OUTSIDE) Ø30mm (1.18) (INSIDE) 409023 Ø56mm (2.2) (OUTSIDE) Ø40mm (1.57) (INSIDE)

Pneumatic Screwdrivers

SB / SBP	✓		409083	409113	409173	
SC2 / SCP / SCPT	✓		409083	409113	409173	
SD / SDP	✓		409093	409123	409183	
SH70 / SH150	✓		409093	409123	409183	Ring adaptor PN 409273 for SD

Electric Screwdrivers

SLBN	✓		409093	409123	409183	
SLC (nose mount)	✓		409083	409113	409173	
SLC (top mount)		✓	409093	409123	409183	
ECS	✓		409083	409113	409173	
ECD5	✓		409083	409113	409173	
ERD5	✓		409083	409113	409173	

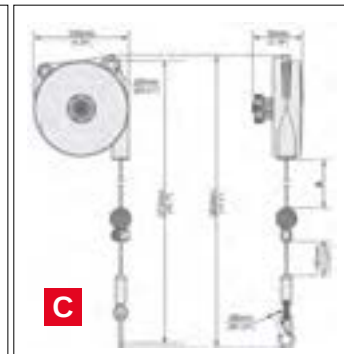
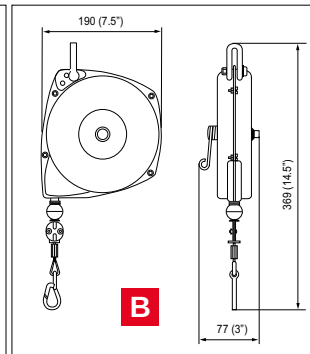
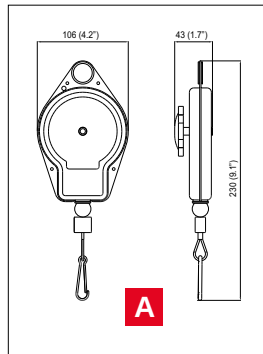
Drills						
DR 300	✓		409083	409113	409173	
DR 350				409113	409173	
DR 750				409123	409183	Ring adaptor PN 409273



Balancers D & HU Series



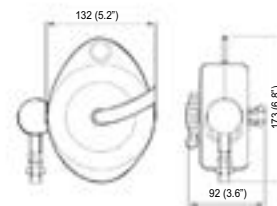
- Steel housing
- Nylon (pic A) Steel (pic B,C) cable
- Additional support chain included
- 10S / 15S / 22S with drum lock
feature: operates only on spring failure



BALANCERS - 1DU - 22S

PIC REF	MODEL	PART NUMBER	LOAD RANGE				CABLE TRAVEL		WEIGHT	
			MIN. CAPACITY		MAX. CAPACITY		m	ft	kg	lb
			kg	lb	kg	lb				
A	1DU	52542	0	0	0.5	1.1	1.5	4.9	0.6	1.3
	2DU	50522	0.5	1.1	1.0	2.2	1.5	4.9	0.6	1.3
	2DUS	54532	0.5	1.1	1.0	2.2	3.0	9.8	0.6	1.3
	3DU	52862	1.0	2.2	1.5	3.3	1.5	4.9	0.6	1.3
	4DU	50532	1.0	2.2	2.0	4.4	1.5	4.9	0.6	1.3
B	5DU	50542	1.4	3.1	2.4	5.3	1.5	4.9	0.6	1.3
	10D	50052	2.5	5.5	5.0	11.0	2.4	7.8	2.7	6.0
	15D	50062	5.0	11.0	7.0	15.4	2.4	7.8	3.2	7.1
	22D	50072	6.0	13.2	10.0	22.0	2.4	7.8	3.2	7.1
	10S*	50572	2.0	4.4	5.0	11.0	2.4	7.8	2.7	6.0
	15S*	50582	5.0	11.0	7.0	15.4	2.4	7.8	3.2	7.1
	22S*	50592	6.0	13.2	10.0	22.0	2.4	7.8	3.2	7.1
C	2DSB	615 812 791 0	0.4	0.88	1	2.2	1.6	5.25	0.57	1.25
	2DSBX	615 812 794 0	0.4	0.88	1	2.2	3	9.84	0.57	1.25
	4DSB	615 812 792 0	1	2.2	2	4.4	1.6	5.25	0.6	1.32

* Balancers with drum lock features



- Steel housing
- Additional support chain included
- Polyurethane hose
- 1/4" thread

HOSE BALANCERS - 1HU - 4HU

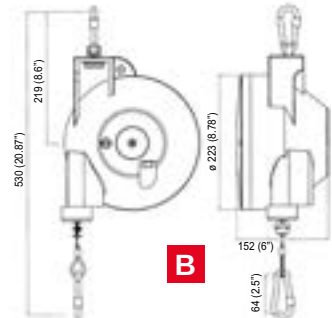
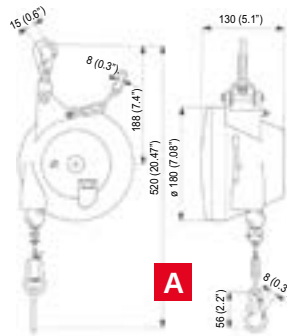
MODEL	PART NUMBER	LOAD RANGE				HOSE TRAVEL		HOSE ID		WEIGHT	
		MIN. CAPACITY		MAX. CAPACITY		m	ft	mm	in.	kg	lb
		kg	lb	kg	lb						
1HU	52552	0	0	0.5	1.1	1.0	3.3	6.5	1/4	1.2	2.6
3HU	50552	0.5	1.1	1.4	3.1	1.0	3.3	6.5	1/4	1.2	2.6
4HU	50562	0.7	1.5	2.0	4.4	1.0	3.3	6.5	1/4	3.3	7.3
4HU-X*	205 148 128 4	0.7	1.5	2.0	4.4	1.5	4.9	6.5	1/4	3.3	7.3

Flow rate: 7.1 l/s (15cfm) - *L= 0.5

Balancers - ZG, DF & DFL Series



- Reaction free: holds the load weightless throughout the entire cable length
- Rigid and impact-resistant plastic and aluminum housing
- 360° swiveling safety hook for isolated suspension
- Screw-type safety hook for load suspension
- Standard safety chain
- Spring fracture safeguard, integrated drum lock



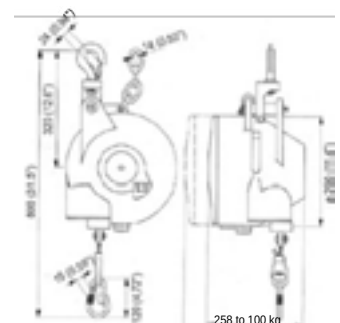
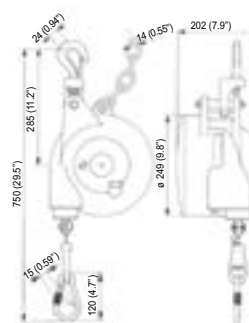
BALANCERS - 5DF - 55 DF

PIC REF	MODEL	PART NUMBER	LOAD RANGE				CABLE TRAVEL		WEIGHT	
			MIN. CAPACITY		MAX. CAPACITY					
			kg	lb	kg	lb	m	ft	kg	lb
A	12ZG	615 813 077 0	0,4	0.88	1,2	2.65	1,6	5.25	1.3	2.87
	26ZG	615 813 078 0	1,2	2.65	2,6	5.73	1,6	5.25	1.4	3.09
	38ZG	615 813 079 0	2,6	5.73	3,8	8.38	1,6	5.25	1.5	3.31
	52ZG	615 813 080 0	3,8	8.38	5,2	11.46	1,6	5.25	1.5	3.31
	65ZG	615 813 081 0	5,2	11.46	6,5	14.33	1,6	5.25	1.5	3.31
	5DF	615 813 705 0	3.0	6.6	5.0	11.0	2.0	6.6	2.9	6.4
	7DF	615 813 706 0	4.5	9.9	7.0	15.4	2.0	6.6	3.1	6.8
	10DF	615 813 707 0	6.0	13.2	10.0	22.0	2.0	6.6	3.2	7.1
	14DF	615 813 708 0	9.0	19.8	14.0	30.9	2.0	6.6	3.4	7.5
	17DF	615 813 709 0	13.0	28.7	17.0	37.5	2.0	6.6	3.6	7.9
B	21DF	615 813 710 0	16.0	35.3	21.0	46.3	2.0	6.6	3.8	8.4
	25DF	615 813 711 0	15.0	33.1	25.0	55.1	2.0	6.6	7.8	17.2
	35DF	615 813 712 0	25.0	55.1	35.0	77.2	2.0	6.6	8.9	16.6
	45DF	615 813 713 0	35.0	77.2	45.0	99.2	2.0	6.6	9.5	20.9
	55DF	615 813 714 0	45.0	99.2	55.0	121.2	2.0	6.6	9.7	21.4

A Plastic housing B Aluminum housing



- Reaction free: holds the load weightless throughout the entire cable length
- Rigid and impact-resistant aluminum housing
- 360° swiveling safety hook
- Cable extension limit stop for overload protection
- Screw-type safety hook for load suspension
- Standard safety chain
- Standard spring fracture safeguard integrated drum lock
- Ferrule for securing cable end
- Freewheel device for protection against handling errors



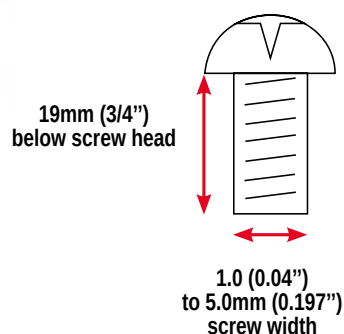
BALANCERS - 20DFL - 200DFL

PIC REF	MODEL	PART NUMBER	LOAD RANGE				CABLE TRAVEL		WEIGHT	
			MIN. CAPACITY		MAX. CAPACITY					
			kg	lb	kg	lb	m	ft	kg	lb
A	20DFL	615 813 715 0	12	26.5	20	44.1	2.0	6.6	14.8	32.6
	30DFL	615 813 716 0	20	44.1	30	66.1	2.0	6.6	15.2	33.5
	45DFL	615 813 717 0	30	66.1	45	99.2	2.0	6.6	16.9	37.2
	60DFL	615 813 718 0	45	99.2	60	132.3	2.0	6.6	17.3	38.1
	75DFL	615 813 719 0	60	132.3	75	165.3	2.0	6.6	18.7	41.2
	90DFL	615 813 720 0	75	165.3	90	198.4	2.0	6.6	19.7	43.4
	100DFL	615 813 721 0	90	198.4	100	220.4	2.0	6.6	20.9	46.1
B	115DFL	615 813 722 0	100	220.4	115	253.5	3.0	9.8	41.8	92.1
	130DFL	615 813 723 0	115	253.5	130	286.6	3.0	9.8	43.2	95.2
	140DFL	615 813 724 0	130	286.6	140	308.6	3.0	9.8	44.6	98.3
	150DFL	615 813 725 0	140	308.6	150	330.7	3.0	9.8	46.0	101.4
	190DFL	615 813 726 0	180	396.8	190	418.9	3.0	9.8	47.0	103.6
	200DFL	615 813 727 0	190	418.9	200	440.9	3.0	9.8	47.3	104.2

ASD - Automatic screw dispenser

TO BE USED FOR THE ASSEMBLY OF:

- Electronics: TV, mobile phones, computers
- Medical products
- Small appliances



Boost your productivity and efficiency

- **Widest range of screw sizes:** between 1.0 (0.04") and 5.0mm (0.197") thread diameters (about 11 different screw sizes) including screws with captive washers and up to 19mm (3/4") screw length (under head)
- **Complete:** supplied with universal feeding rail to avoid buying additional and expensive spare rails
- **Fully adjustable:** vibration time, vibration intensity, and drum rotation time adjustments allow the user to optimize the screw feed rate
- **Quiet operation & easy to service**
- Includes: rail adjustment kit, AC adapter and ground wire

PART NUMBER	POWER PLUG	SCREW RANGE			RAIL ADJUSTMENT KIT	DIMENSIONS						POWER
		SIZE	LENGTH			L		H		W		
			mm	in.		mm	in.	mm	in.	mm	in.	

Automatic Screw Dispenser - ASD

615 810 472 0	UK	M1.0 to M5.0	Up to 19	Up to 3/4"	included	126	5	147	5.8	182	7.2	AC 100 ~ 240V
615 810 473 0	EUR	M1.0 to M5.0	(under head)	(under head)								
615 810 474 0	US	0.04" to 0.197"										



[illegible]



Drilling and Riveting - Selection Guide

TOOL TYPE	PAGE
PNEUMATIC ADVANCED DRILLING UNIT 	228-229
ELECTRIC ADVANCED DRILLING UNITS 	230-232
LIGHT AUTOMATION SOLUTIONS 	233
XPB - Multifunction battery solutions 	234-270
MULTI DRILLS - Pneumatic Quick Release solutions 	271-276
DRILLS - Pneumatic solutions 	277-286
SPECIAL TOOLS - Tapper - Deburring - Rivet Shaver & Rack Feed Drill 	287-290
RIVETING COMPRESSION TOOLS 	291-293
RIVETING HAMMERS 	294-297

Solutions for aerospace Smart Factory

Aerospace is a fantastic and extremely demanding industry, often synonymous with highly skilled personal and cutting-edge technologies. But with a production characterized by relatively small volumes, long cycle times, large components and high variability in the production processes, this industry offers specific challenges when it comes to the dissemination of smart tools and solutions.

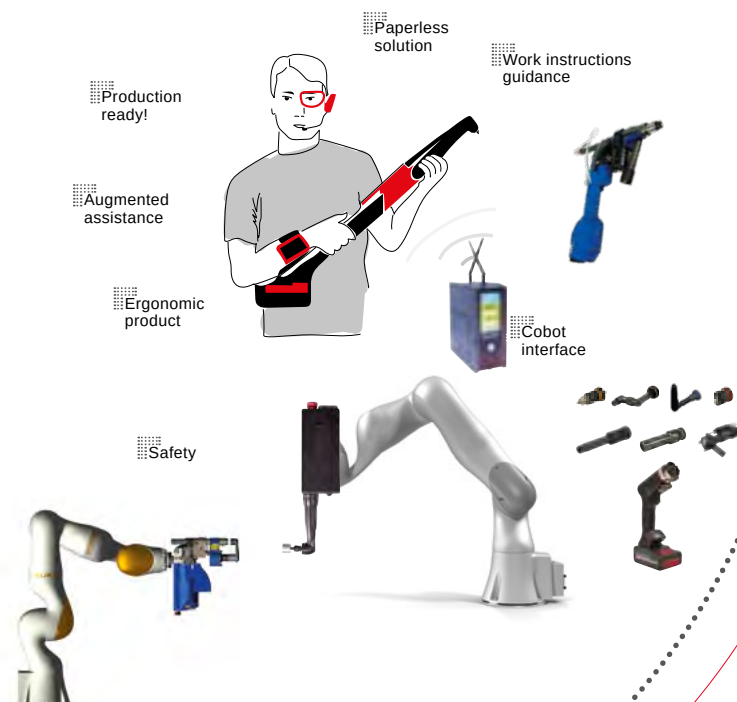
As volumes continue to grow with people travelling more & more, all major OEMs need to increase the overall process efficiency, limit quality costs and cycle times, and exclude human factors as a source of error. With intelligent software and digital networking, assembly tools can now make a key contribution. They offer far greater flexibility and can be fully linked both to each other and to manufacturers' production and quality systems.



Intelligent assembly solutions



DESOUTTER 4.0



Product range

As market leaders for advanced drilling solutions in aerospace, our experts are working daily with the most demanding customers to reach the highest level of quality, productivity and safety necessary in the aerospace market.

The Setitec semi-automated tools have been drilling thousands of holes daily, in any possible configuration, facing the most challenging environments and delivering the highest level of performance.

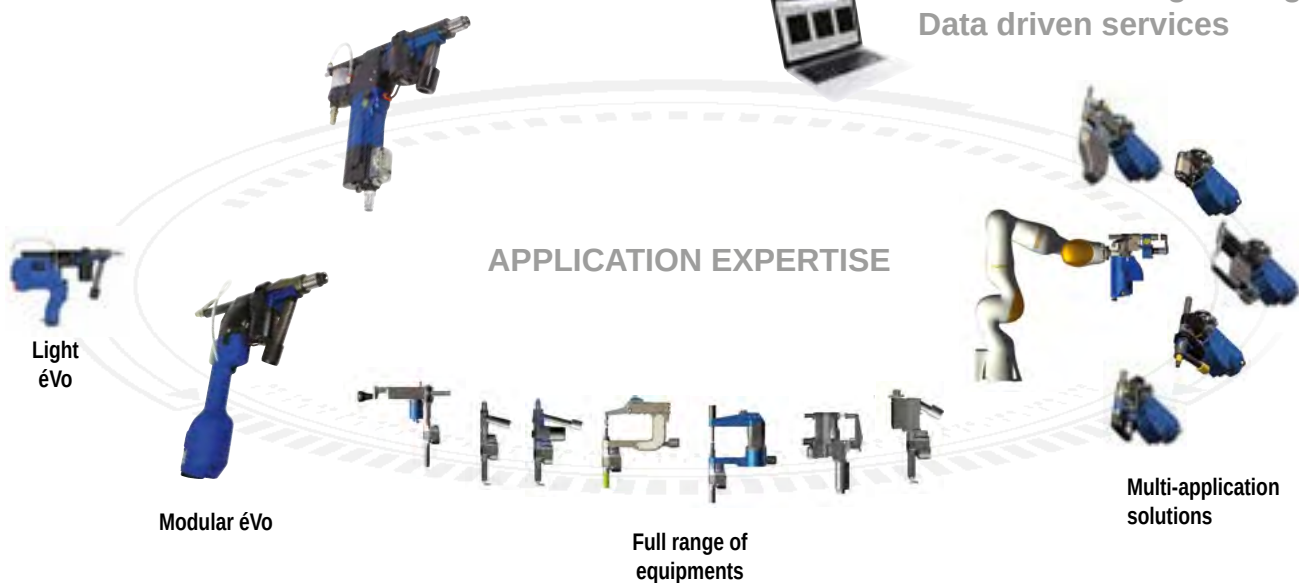
Building on this expertise, and faithful to its philosophy of innovation, modularity, and expertise, Setitec has used combined the potential of electric technology and drilling expertise to develop the electric range éVo, improving even further the drilling operations.

Still driving the innovation, Setitec latest range of light multi-function end-effectors will accelerate the transformation of robotic solutions in the aerospace assembly processes.

Advanced Pneumatic Drilling

Software

Advanced drilling strategies
Data driven services



Advanced Electric Drilling

Light end effector solutions

Full Range Dedicated to Aerospace Applications



		EVO RANGE			
		PNEUMATIC RANGE	SEMI-AUTOMATED ELECTRIC RANGE		ROBOTIC RANGE
			Light EVO	Modular EVO	Drilling
					Other applications (tightening...)
	Drilling strategies	Pneumatic strategies	Electric Advanced strategies		
	Software		Software plateforme		
	Control box		Control box / additional robotic box		
	Cable		Multi-energy cable for éVo range		
	Heads		Shared components between all ranges		
	Support & Service		Setitec & Desoutter service & project team		

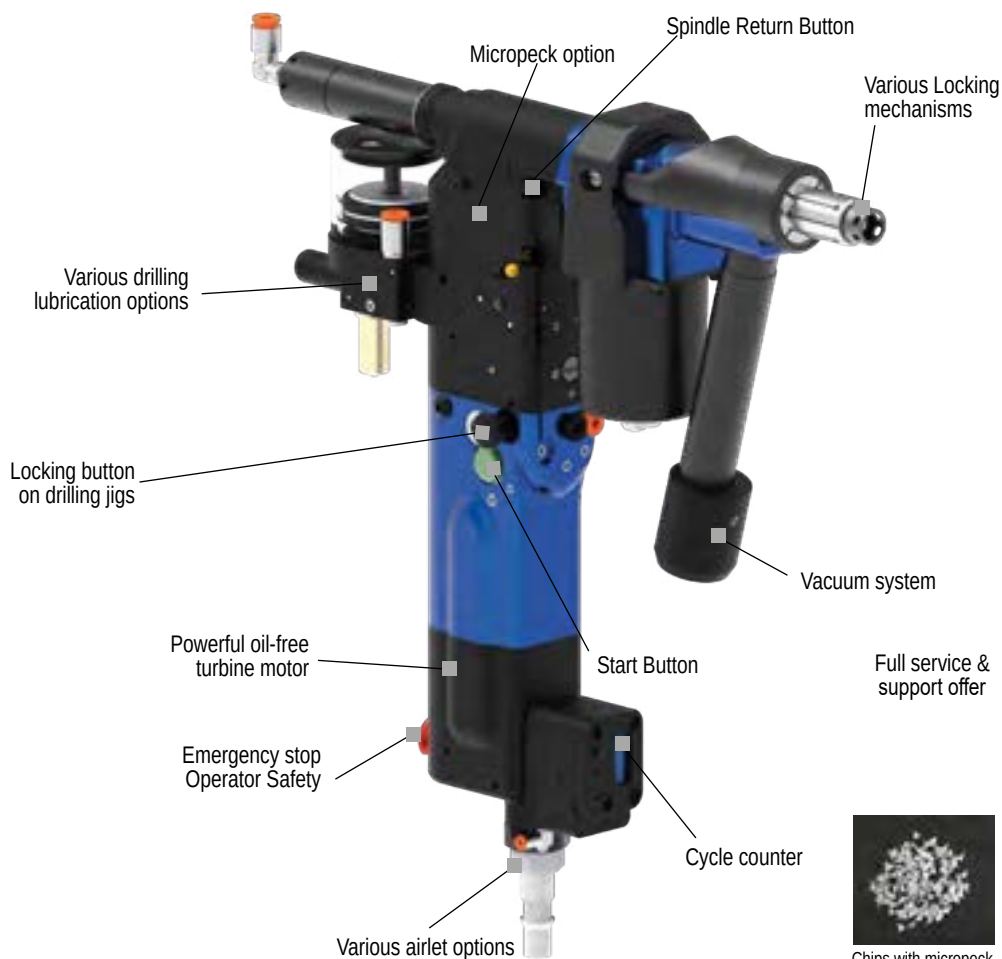
ADU - Automatic Drilling Unit

1 Step operation - Drilling - Reaming - Countersinking



Part of Desoutter product portfolio, ADU line offers best-in class performance, quality and reliability for the most demanding drilling applications worldwide. Setitec solutions have already been adopted by all major Aircraft manufacturers worldwide. This concept is dedicated to highly demanding drilling, reaming, countersinking applications, where quality, precision and repeatability are critical. Its innovative design makes one step drilling, reaming, countersinking possible, and will help driving down your cycle time. Its design based on modularity concept and the wide variety of clamping options will answer most of your applications. In addition to the current ST1200 and ST220 pneumatic range, the Electric Drilling Unit range éVo is raising the drilling performance to a new standard.

1 STEP OPERATION	→	PRODUCTIVITY
DRILLING REAMING	→	QUALITY
COUNTERSINKING	→	SAFETY



Full service & support offer



Chips with micropeck

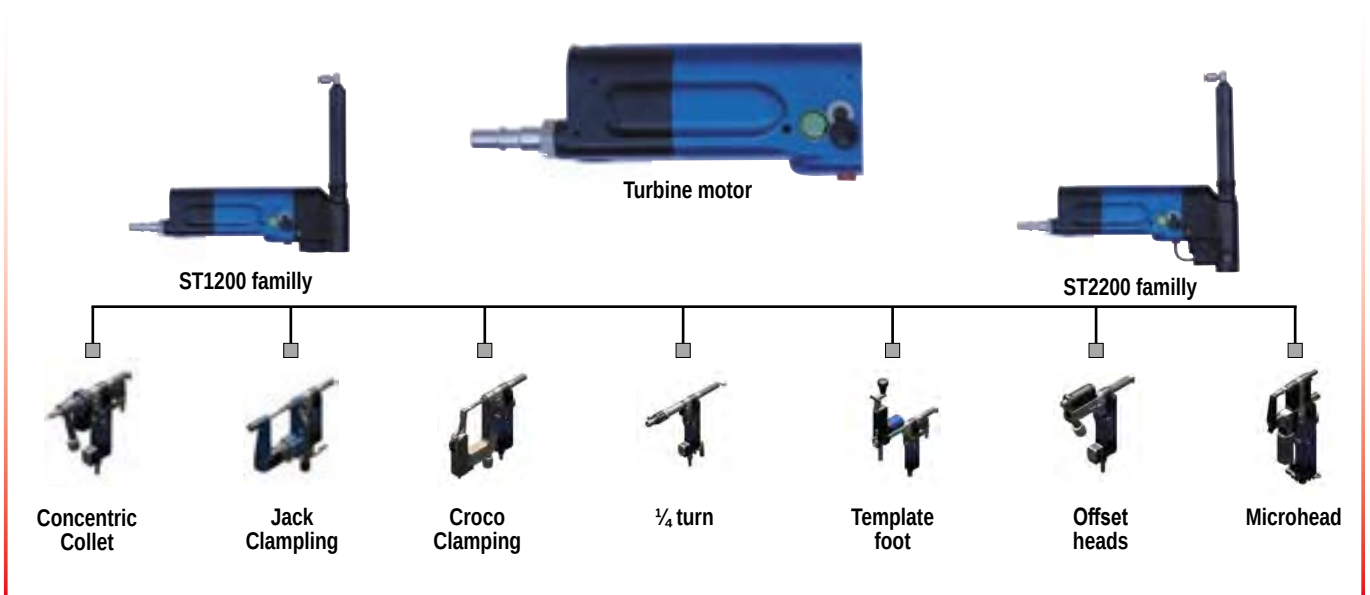


Chips without micropeck



ADU - Automatic Drilling Unit

Modular Concept



Technical information



Any specific requirement can be handled by Setitec Line design team.
Contact your Desoutter representative for assistance.

	ST1200		ST2200	
Power	2.8 HP, with torque limiter at lower speed		4.2 kg (9.2lb)	
Weight	1.5 kg (3.3lb)		Unlimited	
Stroke	Unlimited		Unlimited	
Feed rate	0,010	mm/rev	0,032	mm/rev
	0,021	mm/rev	0,047	mm/rev
	0,038	mm/rev	0,059	mm/rev
	0,058	mm/rev	0,095	mm/rev
	0,077	mm/rev	0,120	mm/rev
	0,095	mm/rev	0,146	mm/rev
	0,115	mm/rev	0,182	mm/rev
	0,154	mm/rev	0,200	mm/rev
	0,35	mm/rev	0,315	mm/rev

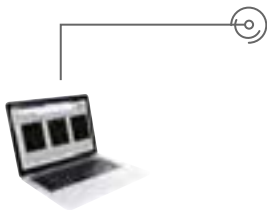
	ST1200		ST2200	
	In Line	Right Angle	In Line	Right Angle
Rotation (RPM)	/	11835	2919	2195
	/	8179	2560	1925
	/	6543	1717	1291
	/	6543	1216	915
	/	6000	2017	1517
	5550	4674	1770	1331
	3514	2959	1187	892
	2811	2367	841	632
	2428	2045	1614	1214
	2008	1691	1416	1065
	1943	1636	949	714
	1554	1309	672	506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

HOLE DIAMETER	ALUMINIUM COMPOSITE	TITANIUM HARD METAL	ALUMINIUM COMPOSITE	TITANIUM
	Straight hole		Countersink hole	
<4,8mm - 3/16"	ST 1200	ST 1200	ST 1200	ST 1200
<6,35mm - 1/4"				
<7,9mm - 5/16"				
<9,5mm - 3/8"				
<11,1mm - 7/16"				
<12,7mm - 1/2"				
<14,3mm - 9/16"				
<15,9mm - 5/8"	ST 2200	ST 2200	ST 2200	ST 2200
<19,5mm - 3/4"				
<22,2mm - 7/8"				
<25,4mm - 1"				
Over 25,4mm - 1"				

	CONCENTRIC COLLET	BAYONET 1/4 TURN	CROCO CLAMP	JACK CLAMP	TEMPLATE FOOT	CROWFOOT
Thick jig	ST1200 ST2200					
Thick jig with rail or screws		ST1200 ST2200				ST1200 ST2200
Thin jig			ST1200	ST1200	ST1200	
No jig (pre-hole)			ST1200	ST1200	ST1200	

EVO range

SOFTWARE SUITE



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

UNIQUE RANGE OF TOOLS

Modular EVO
Light EVO
Robotics



CONTROL BOX

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



HEADS & EQUIPMENTS

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

MULTI ENERGY CABLE

Robust and flexible cable for:
Lubrication
Power
Air
Data

BOOST YOUR FLEXIBILITY

Full Modularity

- One tool to cover various applications
- Wide range of heads managed with Quick change RFID system
- Wide range of equipments, full commonality between pneumatic & electric range
- Easy rebalancing of drilling program between tools

Easy process qualification

- Easily test & optimize your cutting tools
- Easily create & optimize your drilling program

Ready for robotics applications

BOOST YOUR UP TIME

Optimized maintenance

- Cutting tool lifetime management
- Tool & head maintenance management
- Full compatibility between pneumatic/electric/robotic range
- Gain in Overall Equipment Effectiveness with easy reconfiguration of back up heads
- Full service offer

SMART ready

- Open architecture for integration in smart factory
- Ready for smart maintenance

BOOST YOUR PRODUCTIVITY

Cycle time reduction

- Optimized drilling parameters for each material
- Advanced drilling strategies
- Reduced cleaning time with smart lubrication management

Quality focus

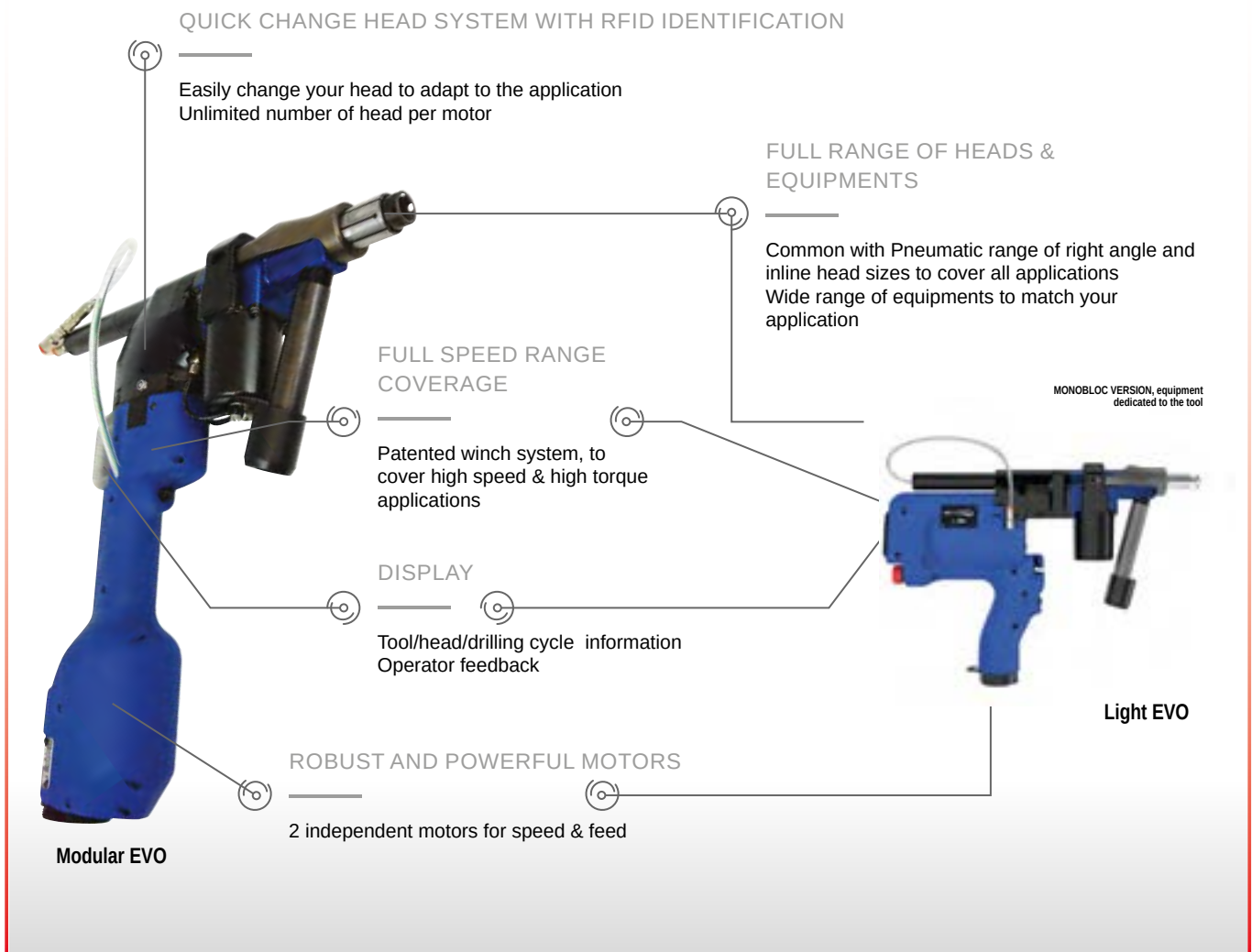
- Advanced drilling strategies
- Poka Yoké system with RFID head identification
- Full traceability with drilling curve storage

Reduce Health & safe issues

- Reduce lubrication on shopfloor
- Low sound levels



Tool range



Tool Range

The choice between Modular & Light EVO needs to be assessed for each application:

■ Modular EVO

This tool can handle a wide range of drilling applications thanks to its modular design.

Depending on the head chosen (S/L/L/XL) the M-EVO can cover all your drilling applications, from small to large holes & from CFRP to Titanium

■ Light EVO

This tool is more suitable for repetitive drilling operations, with smaller holes and less demanding applications

		HOLE DIAMETER			
mm		Ø 4.0 TO 6.4	Ø 6.4 TO 12.7	Ø 12.7 TO 25.4	> Ø 25.4
in.		Ø 4/32 " TO 1/4"	Ø 5/16" TO 1/2"	Ø 1/2 " TO 1"	> Ø 1"
Material drilled	Alu / Alu				
	CFRP / CFRP				
	CFRP/ Al				
	Stack Titanium & hard metal				

L-EVO capability

M-EVO capability

EVO range

Heads & equipments selection

HEAD RECOMMENDATIONS

		STRAIGHT HOLE		COUNTERSINK HOLE	
Hole diameter		Alu/CFRP	Titanium/ Hard metal	Alu/CFRP	Titanium/ Hard metal
mm	in.				
<4,8	<3/16"	Small	Small	Small	Small
<6,35	<1/4"				Small + GEAR
<7,9	<5/16"				
<9,5	<3/8"				
<11,1	<7/16"				
<12,7	<1/2"				
<14,3	<9/16"				
<15,9	<5/8"	Small + GEAR	Large/GEAR	Large	Large/GEAR
<19,05	<3/4"				
<22,2	<7/8"	Large/GEAR	X Large	X Large	X Large
<25,4	<1"				
>25,4	>1"				

HEAD	RIGHT ANGLE	IN-LINE
S		
L		
XL		

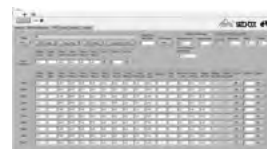
EQUIPMENTS



Smart interface

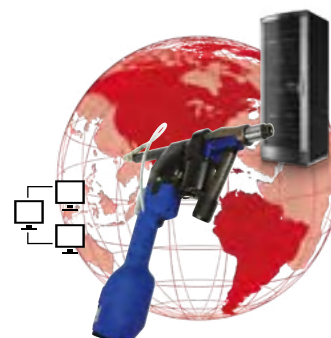


- Setup your tool and heads with dedicated software
- Drilling cycle creation & optimization
Full control over all drilling parameters to optimize cycle time & quality
- Control your cutting tool lifetime and maintenance strategies with dedicated counters
- Life drilling curves visualization
- Advanced drilling strategies

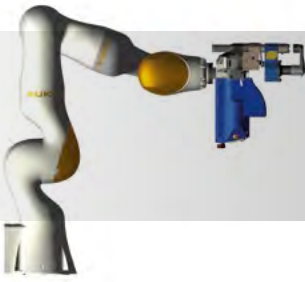


Integration in Smart factory

- Open architecture for integration in SMART Factory
- All drilling curves stored in control box
- Smart curves analysis software package

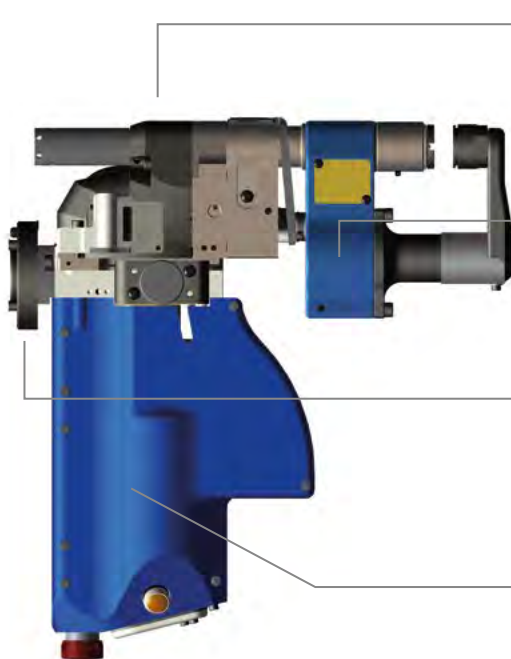


Light automation solutions



Building on its expertise on semi-automated drilling applications with electric EVO and driven by innovation, Setitec is now developing a full range of innovative end-effectors for aerospace applications. Light, flexible, modular, this range will change the way you are integrating robotics in your factory.

Concept



EXTREMELY LIGHT & COMPACT END-EFFECTOR

No need for heavy robotic arm
Extremely flexible in the shopfloor

FULL RANGE OF EQUIPMENTS

Fully customizable to your application
Example shown: J-Clamp with Self clamping

FIX CONNECTION TO ROBOT/COBOT

Customizable to any robot supplier

FULL MODULARITY

Same motor as Modular éVo range
Common equipment with portable éVo range
Same control box as the portable éVo range
Robotics box as "add-on"



SETITEC SOFTWARE PACKAGE

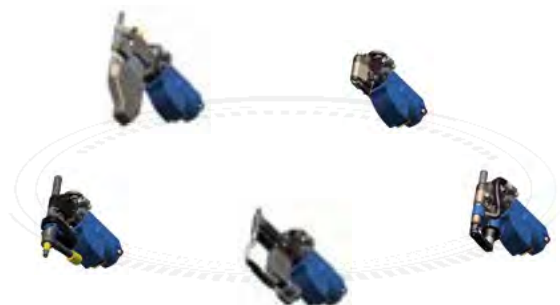
Drilling application managed by Setitec software
Simple & efficient communication between end-effector & master system

Full Modularity with wide range of heads

All current Setitec range of heads & equipments can be adapted to the robotic end-effector.

In addition to drilling, other applications are available:
Temporary fastener installation, riveting...

All solutions can be customized on the application.
Please contact your Desoutter & Setitec representative for more information.



XPB RANGE

Features overview



		XPB ONE	XPB MODULAR
APPLICATIONS	Drilling / Reaming / Countersink	X	X
	Temporary fasteners		X
	Frangible collars		X
FEATURES	Drilling programs	1	Unlimited number of head 1 pset per head (o) 6 pset per head (o)
	Display		X
	RFID head identification		X
	Maintenance counter	X	X
	Cycle counter	X	X
	Progressive trigger	X (o)	X (o)
	Bi-step trigger	X (o)	X (o)
	Working lights	X	X
	Reporting lights		X
	Access to curves		X
	Connectivity		X (o)

X: available (o): optional

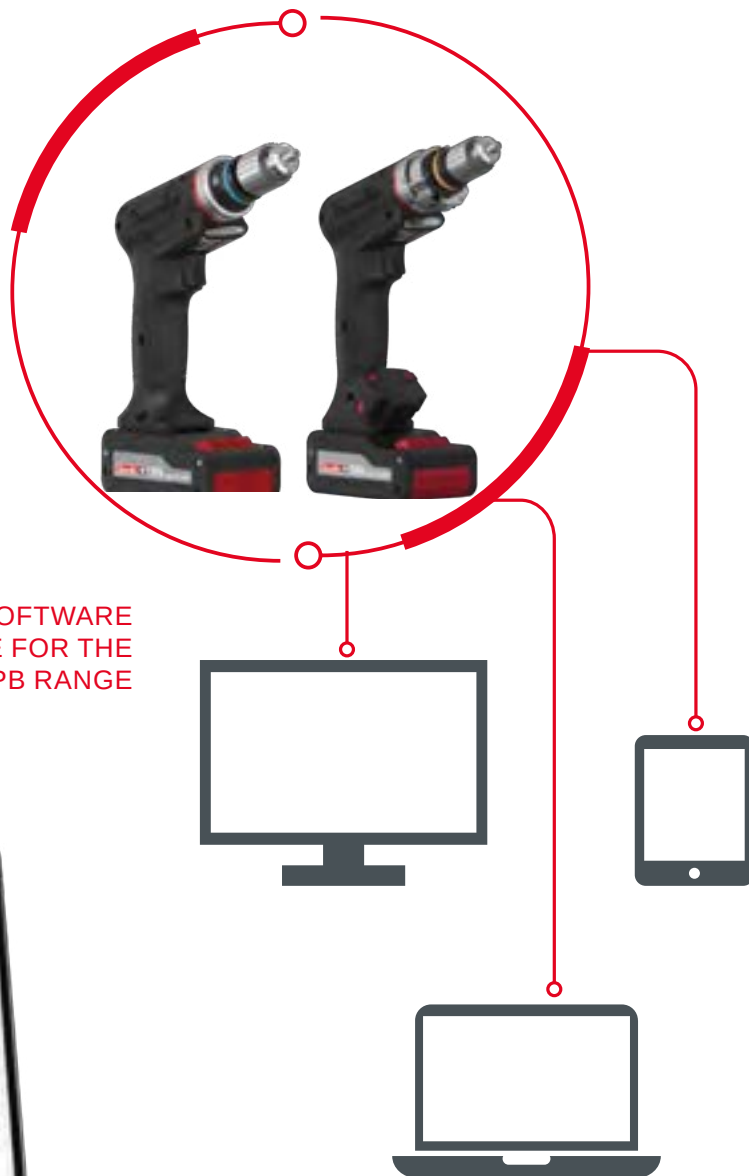
Head / tool selection drilling focus

HOLE DIAMETER								
	mm	Ø 2.4 to 3.2	Ø 3.2 to 4.0	Ø 4.0 to 4.8	Ø 4.8 to 5.6	Ø 5.6 to 6.35	Ø 6.35 to 8	Ø 8 to 9.5
	in.	Ø 3/32" to 1/8"	Ø 1/8" to 5/32"	Ø 5/32" to 3/16"	Ø 3/16" to 7/32"	Ø 7/32" to 1/4"	Ø 1/4" to 5/16"	Ø 5/16" to 3/8"
Material drilled	Al / Al							
	CFRP / CFRP							
	CFRP / Al							
	Ti & Hard metal							

Hole diameter in favor of RPM

HOLE DIAMETER									
	mm	CUTTING SPEED	Ø 2.4 to 3.2	Ø 3.2 to 4.0	Ø 4.0 to 4.8	Ø 4.8 to 5.6	Ø 5.6 to 6.35	Ø 6.35 to 8	Ø 8 to 9.5
	in	(M.MIN-1)	Ø 3/32" to 1/8"	Ø 1/8" to 5/32"	Ø 5/32" to 3/16"	Ø 3/16" to 7/32"	Ø 7/32" to 1/4"	Ø 1/4" to 5/16"	Ø 5/16" to 3/8"
Material drilled	Al / Al	80	7 962	6 369	5 308	4 550	4 012	3 185	2 682
	CFRP / CFRP	100	9 952	7 962	6 635	5 687	5 015	3 981	3 352
	CFRP / Al	80	7 962	6 369	5 308	4 550	4 012	3 185	2 682
	Ti & Hard metal	15	1 493	1 194	995	853	752	597	503

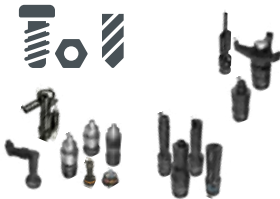
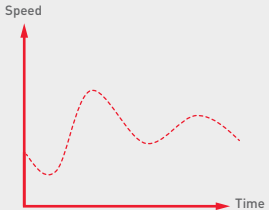


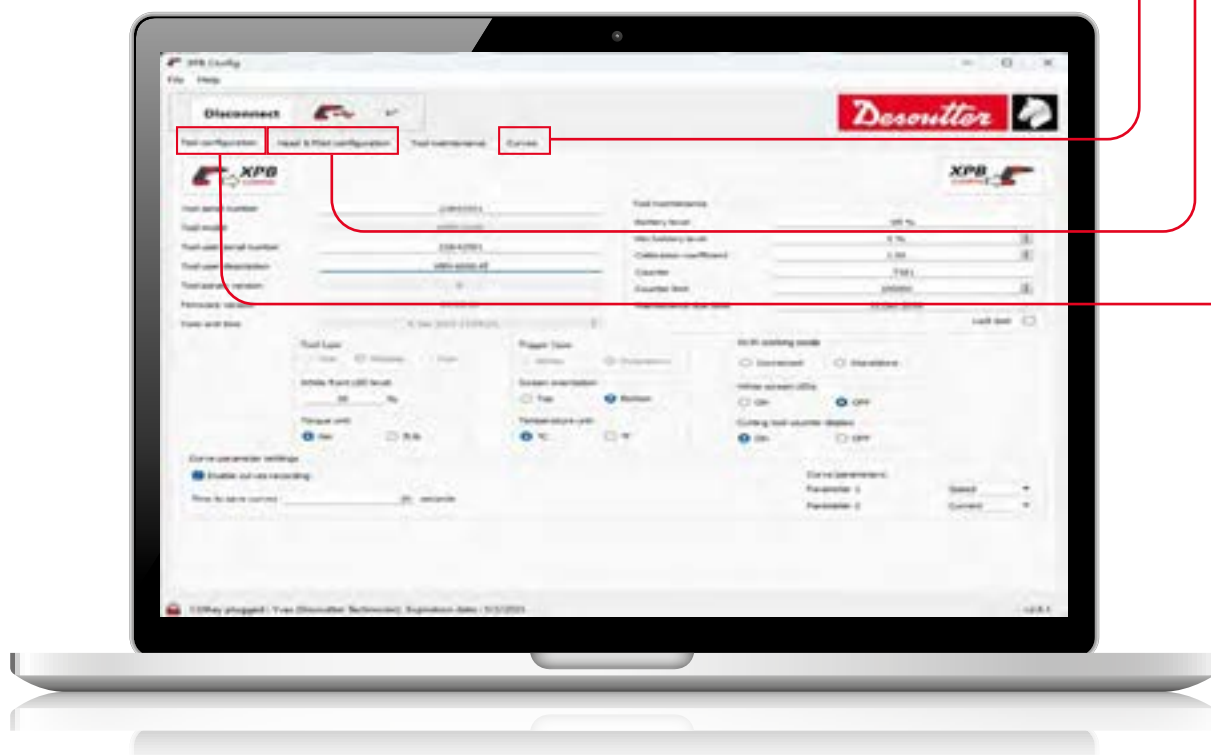


FREE SOFTWARE
SAME SOFTWARE FOR THE
WHOLE XPB RANGE



XPB CONFIG

	XPB-ONE	XPB MODULAR
Setup Tool		
Setup cycle		
Analyze & Improve	/	



XPB CONFIG

Connect the tool

XPB ONE

Connection using

- Mini USB cable
- Desoutter eDock (not delivered with the tool)



eDock + Battery
PN 615 813 400 0

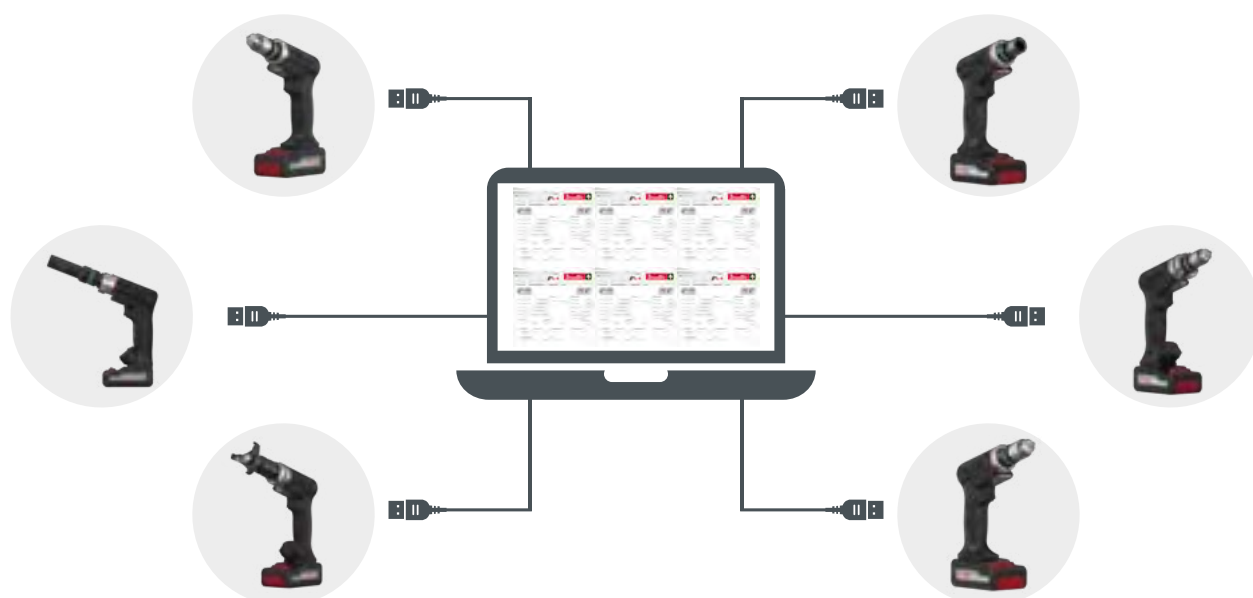
XPB Modular

Connection through the USB connector below display

- 2- Mini USB Cable



Several XPB can be connected at the same time



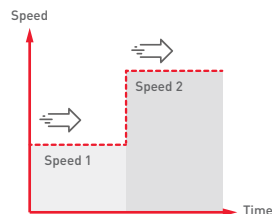
XPB RANGE

Trigger options



BI-STEP TRIGGER

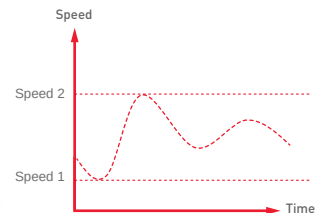
For better control over drilling parameters



- Trigger pulled half way to "hard stop" > tool rotates to speed 1
- Trigger fully pressed, tool rotation changes to speed 2

PROGRESSIVE TRIGGER

For operator feeling



- Rotates in line with trigger pressure
- Ability to setup min/max speed

XPB cycle counter Management



TRIGGER PRESSED
FOR T>500MS

- (Initial start OR speed change)



AFTER THIS 500MS,
CURRENT ABOVE:

- 5A(18V battery)
- 6.5A (36V battery)



+1



Hardware option



XPB RANGE (XPB-M & XPB-ONE) can be delivered (or upgraded) with 2 different trigger blocks, each of them offering a different level of functionality

Compatibility

Trigger Strategy		
	Bistep	Progressive
BI-STEP Trigger block	V	X
PROGRESSIVE Trigger block	V	V

*No hard stop between Speed 1 & Speed 2

XPB-ONE

TOOL OVERVIEW

THE RIGHT TOOL FOR THE RIGHT JOB

Several models to adapt to each application

POWER 400W (0.54HP)
WEIGHT

(without battery): 0.9kg (2lbs)

LOW SOUND LEVELS

Operator comfort

TOOL BALANCE

Perfect drilling position
Winglet for operator comfort

SPEED CHANGE

Easy speed modification via
XPB config software

QUALITY FOCUS

Constant speed for optimum
drilling parameters

TOOL OUTPUT OPTIONS

- 3/8"x24 threaded output to adapt any accessory (chuck, countersink cages...)
- JT1 output for better run-out accuracy
- Standard Quick Release system to adapt all Desoutter pneumatic QR heads

2 TRIGGER OPTIONS

- 2 step trigger perfect for pointing & drilling
- Progressive trigger: the more you press, the faster it rotates

HIGH PERFORMANCE DESOUTTER BATTERY

- Remove air hose
- Compatible with all Desoutter products
- 2 battery positions for balance & ergonomics



Secure Quality



Health and safety



Flexibility



Application focus

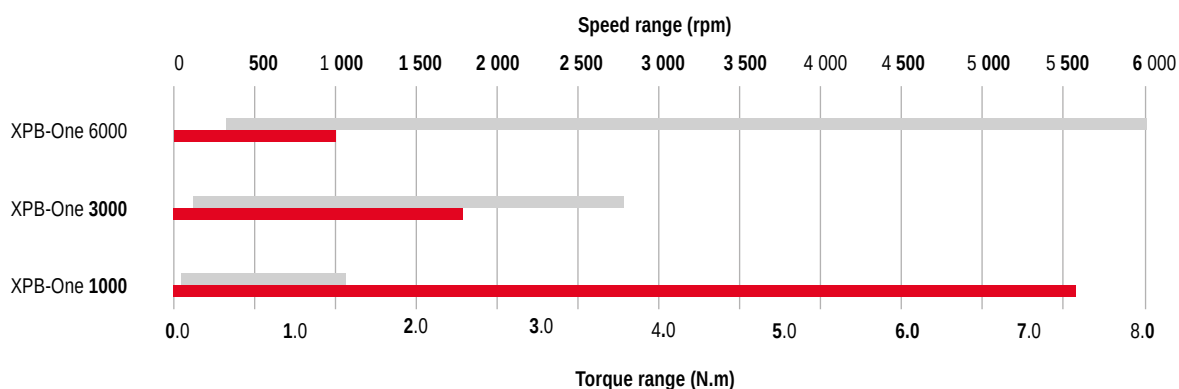
Constant drilling speed	No more accidents linked to air hose	No air hose Use your tool anywhere, anytime	Made for Aerospace From 100 to 6 000 rpm
2 step trigger for control over drilling speed	Great tool Ergonomics	Easy speed modification (Software)	Full tool range to fit each application (Ti / Al / CFRP)
No issues linked to hose inertia	Operator comfort no more trailing hoses	Compatible with all Desoutter batteries	Wide range of outputs available (3/8"x24 / JT1 / QR heads)
	Low noise levels	Compatible with all Desoutter pneumatic heads	
	Low vibrations		





COLOR RING	TOOL NAME	SPEED		MAX TORQUE	
		min	max	Nm	in.lb
	XPB-One 6000	313	6 000	1.3	11.4
	XPB-One 3000	146	2 786	2.3	20.5
	XPB-One 1000	54	1 033	7.4	65.7

XPB ONE RANGE



XPB ONE

Models



A1



A3



B1



B3



C1



C3



1 Keyed chuck, 6.5 mm – 1/4" in. capacity



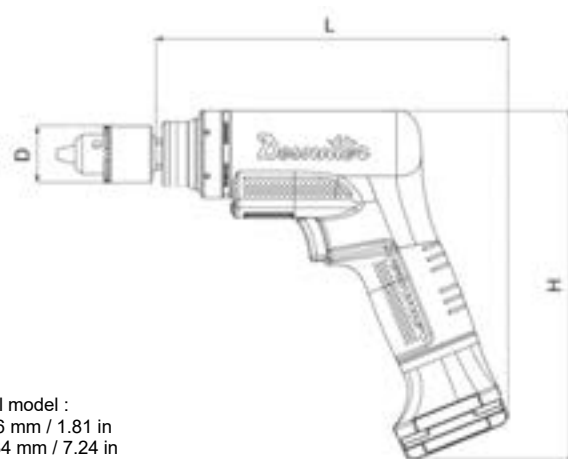
2 No chuck, 3/8"x24 threaded output



3 QR output



4 Keyless chuck output



For all model :
W : 46 mm / 1.81 in
H : 184 mm / 7.24 in

PIC REF	PROGRESSIVE TRIGGER		BI-STEP TRIGGER		OUTPUT	CHUCK CAPACITY		SPEED RANGE		L		WEIGHT	
	PART NUMBER	DESCRIPTION	PART NUMBER	MODEL		mm	in.	min.	max.	mm	in.	kg	lb
A1	615 176 340 0	XPB-6000-C6.5-P	615 176 255 0	XPB-6000-C6.5	Keyed chuck	6.5	1/4"	313	6000	186	7.32	0.90	1.98
A2	615 176 339 0	XPB-6000-P	615 176 217 0	XPB-6000	No chuck- 3/8"x24 output			313	6000	186	7.32	0.78	1.72
A3	615 176 343 0	XPB-6000-QR-P	615 176 291 0	XPB-6000-QR	QR			313	6000	206	8.11	0.78	1.72
A4	615 176 342 0	XPB-6000-K8-P	615 176 258 0	XPB-6000-K8	Keyless chuck	8	5/16"	313	6000	186	7.32	1.06	2.34
B1	615 176 330 0	XPB-3000-C6.5-P	615 176 254 0	XPB-3000-C6.5	Keyed chuck	6.5	1/4"	146	2786	186	7.32	0.89	1.96
B2	615 176 329 0	XPB-3000-P	615 176 215 0	XPB-3000	No chuck- 3/8"x24 output			146	2786	186	7.32	0.77	1.70
B3	615 176 333 0	XPB-3000-QR-P	615 176 290 0	XPB-3000-QR	QR			146	2786	206	8.11	0.77	1.70
B4	615 176 332 0	XPB-3000-K8-P	615 176 257 0	XPB-3000-K8	Keyless chuck	8	5/16"	146	2786	186	7.32	1.05	2.32
C1	615 176 319 0	XPB-1000-C6.5-P	615 176 253 0	XPB-1000-C6.5	Keyed chuck	6.5	1/4"	54	1033	197	7.76	0.96	2.12
C2	615 176 318 0	XPB-1000-P	615 176 213 0	XPB-1000	No chuck- 3/8"x24 output			54	1033	197	7.76	0.82	1.81
C3	615 176 323 0	XPB-1000-QR-P	615 176 289 0	XPB-1000-QR	QR			54	1033	217	8.54	0.82	1.81
C4	615 176 322 0	XPB-1000-K8-P	615 176 256 0	XPB-1000-K8	Keyless chuck	8	5/16"	54	1033	197	7.76	1.16	2.48

*Weight without battery & chuck



AVAILABLE OUTPUTS



- Keyed chuck



- Keyless chuck



- No chuck
- 3/8"x24 threaded output



- No chuck
- JT1 output



- QR output

Other models available on demand

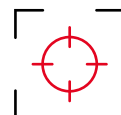
PROGRESSIVE TRIGGER DESCRIPTION	BI-STEP TRIGGER DESCRIPTION	OUTPUT TYPE	CHUCK CAPACITY		SPEED RANGE		L		W		H		WEIGHT	
			mm	in.	min	max	mm	in.	mm	in.	mm	in.	kg	lb
XPB-6000-JT1-P	XPB-6000-JT1	No chuck - JT1 output			313	6 000	186	7.32	46	1.81	184	7.24	0.78	1.72
XPB-4500-C6.5-P	XPB-4500-C6.5	Keyed chuck	6.5	1/4"	240	4 500	186	7.32	46	1.81	184	7.24	0.90	1.98
XPB-4500-P	XPB-4500	No chuck - 3/8"x24 output			240	4 500	186	7.32	46	1.81	184	7.24	0.78	1.72
XPB-4500-QR-P	XPB-4500-QR	QR			240	4 500	206	8.11	46	1.81	184	7.24	0.78	1.72
XPB-4500-K8-P	XPB-4500-K8	Keyless chuck	8	5/16"	240	4 500	186	7.32	46	1.81	184	7.24	1.06	2.34
XPB-3000-JT1-P	XPB-3000-JT1	No chuck - JT1 output			146	2 786	186	7.32	46	1.81	184	7.24	0.77	1.70
XPB-2000-C6.5-P	XPB-2000-C6.5	Keyed chuck	6.5	1/4"	110	2 000	186	7.32	46	1.81	184	7.24	0.96	2.12
XPB-2000-P	XPB-2000	No chuck - 3/8"x24 output			110	2 000	186	7.32	46	1.81	184	7.24	0.82	1.81
XPB-2000-QR-P	XPB-2000-QR	QR			110	2 000	206	8.11	46	1.81	184	7.24	0.82	1.81
XPB-2000-K8-P	XPB-2000-K8	Keyless chuck	8	5/16"	110	2 000	186	7.32	46	1.81	184	7.24	1.16	2.48
XPB-2000-JT1-P	XPB-2000-JT1	No chuck - JT1 output			110	2 000	186	7.32	46	1.81	184	7.24	0.82	1.81
XPB-1000-JT1-P	XPB-1000-JT1	No chuck - JT1 output			54	1 033	197	7.76	46	1.81	184	7.24	0.82	1.81
XPB-600-C6.5-P	XPB-600-C6.5	Keyed chuck	6.5	1/4"	35	600	197	7.76	46	1.81	184	7.24	0.96	2.12
XPB-600-P	XPB-600	No chuck - 3/8"x24 output			35	600	197	7.76	46	1.81	184	7.24	0.82	1.81
XPB-600-QR-P	XPB-600-QR	QR			35	600	217	8.54	46	1.81	184	7.24	0.82	1.81
XPB-600-K8-P	XPB-600-K8	Keyless chuck	8	5/16"	35	600	197	7.76	46	1.81	184	7.24	1.24	2.74
XPB-600-JT1-P	XPB-600-JT1	No chuck - JT1 output			35	600	197	7.76	46	1.81	184	7.24	0.82	1.81

XPB ONE

Quick Release output



FULL RANGE OF DRILLING
OFFSET HEADS AVAILABLE



Flexibility

All QR outputs used with Desoutter pneumatic QR models are compatible with XPB-One QR

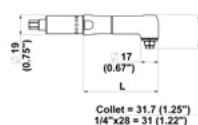
Application focus

Avoid cutter time changing
For a given drilling speed, dedicate one head for each cutter required on the line

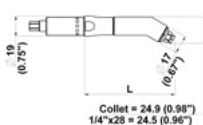


XPB ONE

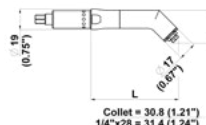
Quick Release output



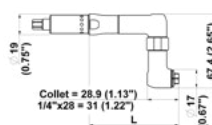
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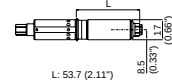
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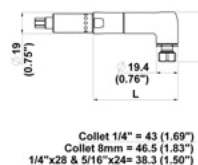
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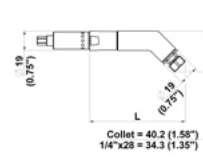
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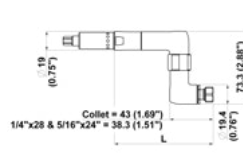
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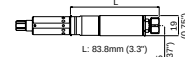
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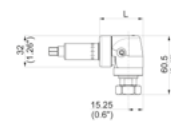
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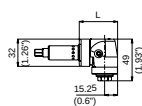
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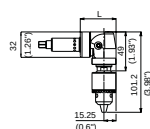
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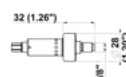
J



K



L



M

PIC REF	DESIGNATION	PART NUMBER	LENGTH L		COLLET MAX. CAPACITY		WEIGHT	
			mm	in.	mm	in.	kg	lb
COMPACT ANGLE HEADS								
A	Short Compact 90° angle head Collet spindle	205 053 981 3	54	2.13	5	3/16	0.15	0.33
A	Compact 90° angle head Collet spindle	205 050 331 3	72	2.83	5	3/16	0.17	0.37
A	Compact 90° angle head 1/4" x 28 spindle	205 050 332 3	72	2.83	-	-	0.17	0.37
B	Compact 30° angle head Collet spindle	205 050 329 3	82.9	3.26	5	3/16	0.17	0.37
B	Compact 30° angle head 1/4" x 28 spindle	205 050 330 3	82.9	3.26	-	-	0.17	0.37
C	Compact 45° angle head Collet spindle	205 050 335 3	81	3.19	5	3/16	0.17	0.37
C	Compact 45° angle head 1/4" x 28 spindle	205 050 336 3	79	3.11	-	-	0.17	0.37
D	Compact 360° angle head Collet spindle	205 050 333 3	81.5	3.21	5	3/16	0.25	0.55
D	Compact 360° angle head 1/4" x 28 spindle	205 050 334 3	85.2	3.35	-	-	0.25	0.55
E	Short compact straight head Collet spindle	615 399 569 5	53.7	2.11	5	3/16	0.14	0.31
E	Short compact straight head 1/4"x28 Spindle	615 399 570 5	53.7	2.11	-	-	0.14	0.31
E	Compact straight head Collet spindle	615 399 571 5	71.7	2.82	5	3/16	0.16	0.35
E	Compact straight head 1/4"x28 Spindle	615 399 572 5	71.7	2.82	-	-	0.16	0.35
STANDARD ANGLE HEADS								
F	Standard 90° angle head Collet spindle	205 050 338 3	75.7	2.98	6.4	1/4	0.23	0.51
F	Standard 90° angle head Collet spindle	205 050 353 3	75.7	2.98	8	5/16	0.23	0.51
F	Standard 90° angle head 1/4" x 28 spindle	205 050 339 3	75.7	2.98	-	-	0.24	0.53
F	Standard 90° angle head 5/16" x 24 spindle	205 050 340 3	75.7	2.98	-	-	0.23	0.51
G	Standard 45° angle head Collet spindle	615 398 702 5	90.7	3.57	6.4	1/4	0.23	0.51
G	Standard 45° angle head 1/4" x 28 spindle	615 398 704 5	87.9	3.46	-	-	0.23	0.51
H	Standard 360° angle head Collet spindle	205 050 341 3	96.8	3.81	6.4	1/4	0.32	0.7
H	Standard 360° angle head 1/4" x 28 spindle	205 050 342 3	94.5	3.72	-	-	0.32	0.7
H	Standard 360° angle head 5/16" x 24 spindle	205 050 343 3	94.5	3.72	-	-	0.32	0.7
I	Standard straight head Collet spindle	615 399 573 5	83.8	3.3	6.4	1/4	0.2	0.44
I	Standard straight head 1/4"x28 Spindle	615 399 574 5	83.8	3.3	-	-	0.2	0.44
HEAVY DUTY HEADS								
J	QR THD 90° Collet output	615 399 575 5	48.8	1.92	8	5/16	0.31	0.68
K	QR HD 90° Cnomo	615 399 576 5	48.8	1.92	-	-	0.3	0.66
L	QR SHD 90° Chuck output	615 399 577 5	48.8	1.92	-	-	0.43	0.95
STRAIGHT HEADS								
M	Chuck mounting 3/8" x 24	205 050 543 3	32.0	1.26	-	-	0.25	0.55

XPB ONE

The Smart Platform

ONE TOOL FOR ALL MANUAL OPERATIONS

Replace X manual tools by 1 single XPB
(Drilling / Reaming / Countersink / Temporary fastener installation / Frangible collar installation...)
Automatic head recognition with RFID technology
Unlimited number of heads per tool

HIGH PERFORMANCE MOTOR

Easy maintenance
Same motor as XPB-One range

ERGONOMY – HEALTH & SAFETY

Perfect balance
Ergonomic handle
Low sound levels

CYCLE COUNTER

Get control over your tool maintenance & cutting tool lifetime (See p.15)

GO ELECTRIC

High performance
Desoutter standard batteries
2 battery positions for better accessibility

WIDE RANGE OF HEADS DEDICATED TO EACH APPLICATION

Wide range of heads covering various applications
All information embedded in each head
Easy tool rebalancing
Up to 6 pset embedded in each head
Fully Customisable heads



2 TRIGGER OPTIONS

2 step trigger: Perfect for pointing & drilling
Progressive trigger: the more you press, the faster it gets (See p.13)

OPERATOR FEEDBACK

Large color display for pset selection & Customisable information

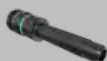
Integrated smart lighting
2 adjustable sets of LED
OK/NOK reporting on tightening



Secure Quality	Cost Savings	Modularity	GO Electric	Smart Factory compatible
Adjustable and variable speed	Reduced Total Cost of ownership (reduced maintenance)	Optimised product range suited for multiple applications with common base motor	Battery tool	Open architecture for integration in smart factory
Adjustable torque and thrust according to application / material	Modularity – reduced quantity of devices to cover applications		No cable	
	Process optimisation – non quality costs savings		Less noise	



ONE TOOL FOR ALL APPLICATIONS

Process step		Current solution	XPB solution
 Prehole Manual drilling	Drill skin through predrilled frame Ø 4.8 (3/16") Speed 5 500 rpm		
 Temporary fastener installation	Install temporary fasteners for skin clamping Temporary fastener Ø 4.8mm (3/16") Torque 3Nm (26.6in.lb) Speed 1 000 rpm		
 Temporary fastener installation	Install Drill jig using dedicated Temporary fasteners Temporary fastener Ø 4.8mm (3/16") Torque 1.5Nm (13.3in.lb) Speed 1 000 rpm		
 Advanced drilling	Drill one shot holes to final size Ø 7,94mm (5/16")		
 Temporary fastener installation	Install temporary fasteners for skin clamping Temporary fastener Ø 7,94mm (5/16") Torque 6Nm (53.2in.lb) Speed 800 rpm		
 Manual drilling	Remove Drill jig		
	Open-up holes from 4.8 (3/16") to 7,94mm (5/16") 2 steps cascade Speed 3 000 rpm		
	Ream hole to final size Ø 7.94.mm / Speed 1 000 rpm		
	Countersink hole Speed 3 000 rpm		
	Install frangible collar		

Application	Current setup	XPB Setup
Manual Drilling	4 tools	2 heads
Advanced drilling	1 tool	1 tool
Temporary fastener installation	3 tools	2 heads
Frangible collar installation	1 tools	1 head
SUM	8 tools	1 XPB Platform 5 heads

XPB M

Drilling head range



FULL RANGE OF STRAIGHT HEADS FOR DRILLING, COUNTERSINKING & REAMING VARIOUS MATERIALS AND HOLE DIAMETERS



FULL RANGE OF ANGLE HEADS



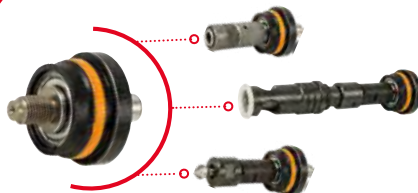
FULL RANGE OF OFFSET DRILLING HEADS



FULL RANGE OF HYDRAULIC CONTROLLED SOLUTIONS (HCU) FOR CFRP APPLICATIONS



VARIOUS OUTPUTS AVAILABLE (3/8"X24, JT1, KEYED & KEYLESS CHUCK)



EASY REUSE OF ALL EXISTING EQUIPMENT



XPB M DRILLING HEAD

Selective guide

HOLE DIAMETER								
	mm	Ø 2.4 to 3.2	Ø 3.2 to 4.0	Ø 4.0 to 4.8	Ø 4.8 to 5.6	Ø 5.6 to 6.35	Ø 6.35 to 8	Ø 8 to 9.5
	in	Ø 3/32 " to 1/8"	Ø 1/8" to 5/32"	Ø 5/32" to 3/16"	Ø 3/16" to 7/32"	Ø 7/32 " to 1/4"	Ø 1/4" to 5/16"	Ø 5/16" to 3/8"
Material drilled	Al / Al							
	CFRP / CFRP							
	CFRP / Al							
	Ti & Hard metal							

HEAD MODEL	COLOR RING	SPEED (RPM)		MAX TORQUE	
		min	max	N.m	in.lb
HDR-10000		1000	10 000	0.4	3.5
HDR-6000		320	6 000	1.3	11.4
HDR-3000		180	3 320	2.3	20.5
HDR-2000		110	2 000	3.8	34.0
HDR-1000		60	1 030	7.4	65.7
HDR-600		30	580	13.1	115.8
HDR-400		30	430	17.6	155.8

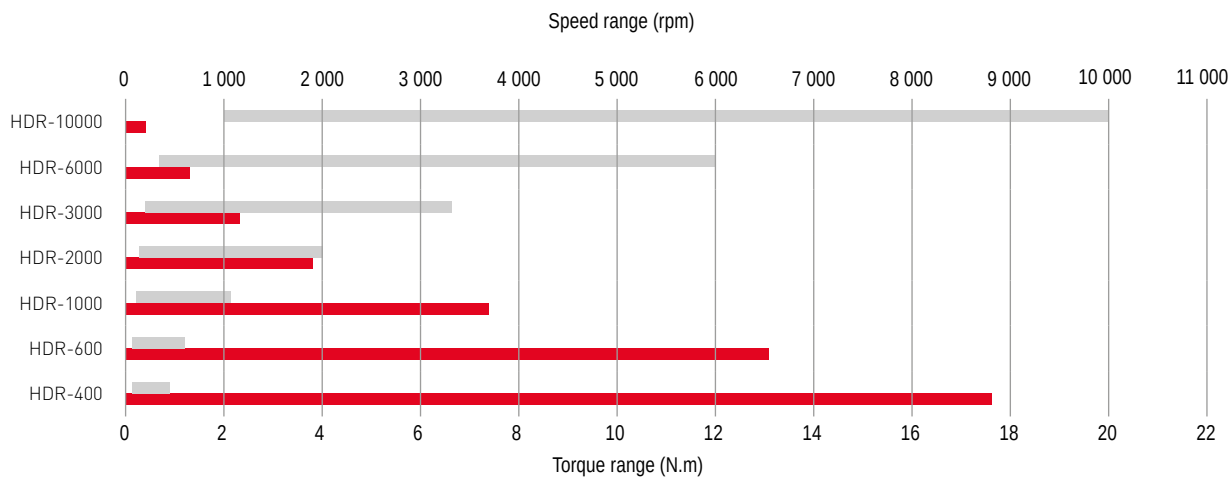


SPEED (RPM)									
	mm	CUTTING SPEED	Ø 2.4 to 3.2	Ø 3.2 to 4.0	Ø 4.0 to 4.8	Ø 4.8 to 5.6	Ø 5.6 to 6.35	Ø 6.35 to 8	Ø 8 to 9.5
	in.	(M.MIN-1)	Ø 3/32" to 1/8"	Ø 1/8" to 5/32"	Ø 5/32" to 3/16"	Ø 3/16" to 7/32"	Ø 7/32" to 1/4"	Ø 1/4" to 5/16"	Ø 5/16" to 3/8"
Material drilled	Al / Al	80	7 962	6 369	5 308	4 550	4 012	3 185	2 682
	CFRP / CFRP	100	9 952	7 962	6 635	5 687	5 015	3 981	3 352
	CFRP / Al	80	7 962	6 369	5 308	4 550	4 012	3 185	2 682
	Ti & Hard metal	15	1 493	1 194	995	853	752	597	503

XPB M

Drilling head range

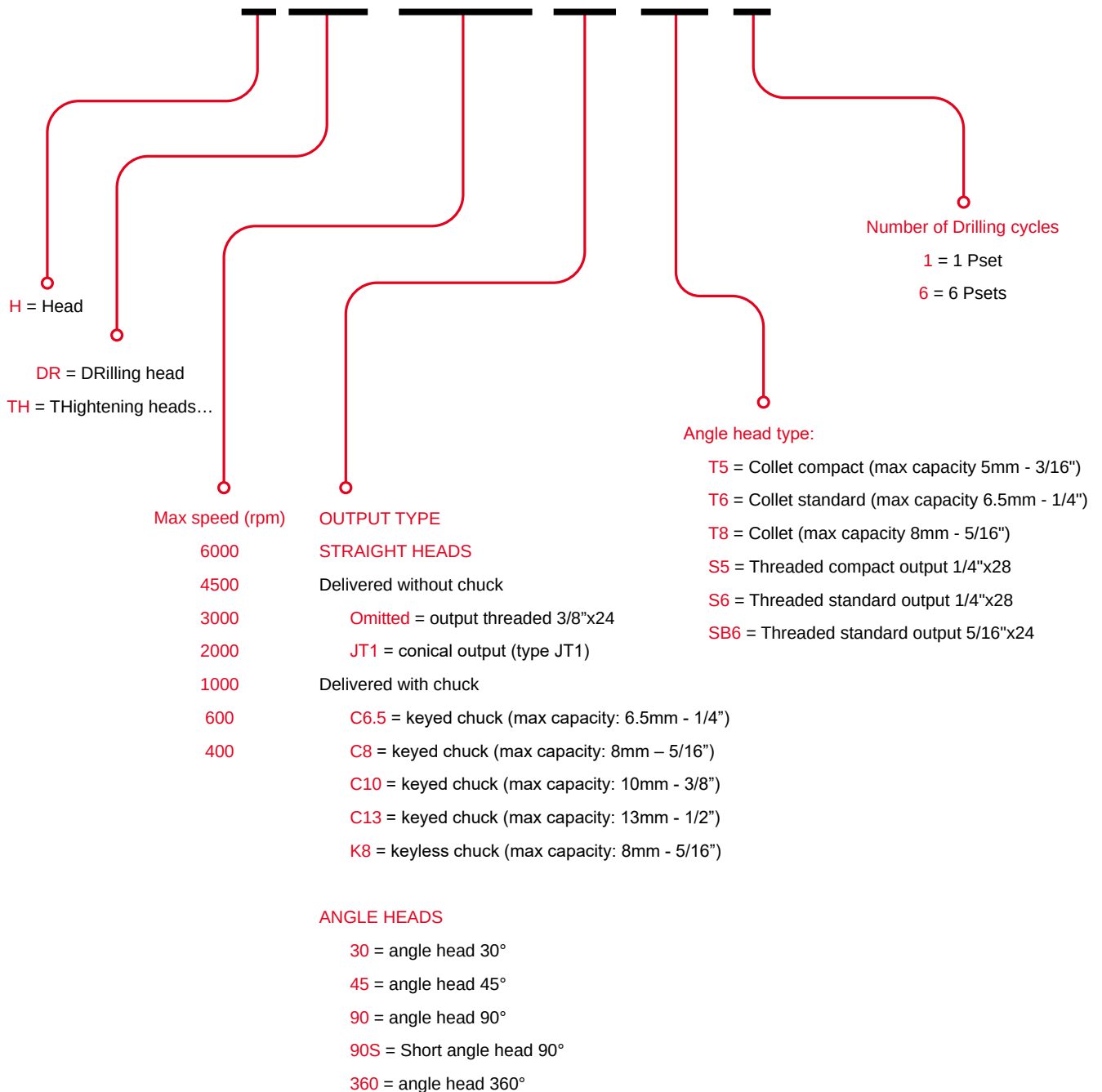
XPB Modular Drilling Head range



HEAD MODEL	COLOR RING	SPEED (RPM)		MAX TORQUE	
		min	max	N.m	in.lb
HDR-10000		1000	10000	0.4	3.5
HDR-6000		320	6000	1.3	11.4
HDR-3000		180	3320	2.3	20.5
HDR-2000		110	2000	3.8	34.0
HDR-1000		60	1030	7.4	65.7
HDR-600		30	580	13.1	115.8
HDR-400		30	430	17.6	155.8

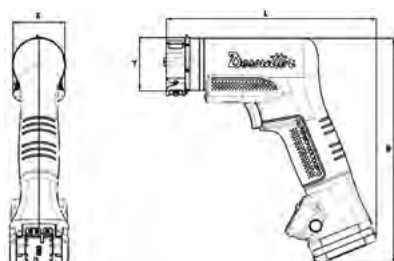
DRILLING HEAD DESCRIPTION KEYS

HDR-3000-90-T5-6



XPB M

Models



PIC	PART NUMBER	PRODUCT DESCRIPTION	TRIGGER TYPE	L		Ø Y		B		X		WEIGHT	
				mm	in.	mm	in.	mm	in.	mm	in.	kg	lb
A	615 176 344 0	XPBM-6000-P	Progressive	174	6.85	47	1.85	198	7.79	47	1.85	0.85	1.87
A	615 176 231 0	XPBM-6000	Bi-Step	174	6.85	47	1.85	198	7.79	47	1.85	0.85	1.87

XPB M

STRAIGHT DRILLING HEADS



A



B



C



D



E



F



G



1

Keyed chuck
6.5 mm / 1/4" capacity



2

No chuck
3/8"x24 threaded output



3

No chuck
JT1 output



4

Keyless chuck
8 mm / 5/16" capacity

Pic ref	Color code	Head type	Output type	Chuck type	Chuck capacity	part Number		Speed range (rpm)		Length		Dia		Weight	
						1 PSET	6 PSET	min	max	mm	in.	mm	in.	kg	lb
A 1		HDR-10000-C6.5	3/8"x24	Keyed chuck	6.5mm - 1/4"	ASC0212019	ASC0212012	1000	10000	72.40	2.85	32.50	1.28	0.22	0.48
A 2		HDR-10000	3/8"x24	No chuck		ASC0212005	ASC0148000	1000	10000	27.90	1.10	32.50	1.28	0.10	0.22
A 3		HDR-10000-JT1	JT1	No chuck		On demand	On demand	1000	10000	27.90	1.10	32.50	1.28	0.10	0.22
B 1		HDR-6000-C6.5	3/8"x24	Keyed chuck	6.5mm - 1/4"	ASC0212020	ASC0212013	320	6000	64.30	2.53	32.50	1.28	0.18	0.4
B 2		HDR-6000	3/8"x24	No chuck		615 401 133 0	615 401 140 0	320	6000	19.80	0.78	32.50	1.28	0.06	0.14
B 3		HDR-6000-JT1	JT1	No chuck		On demand	On demand	320	6000	19.80	0.78	32.50	1.28	0.06	0.14
C 1		HDR-3000-C6.5	3/8"x24	Keyed chuck	6.5mm - 1/4"	ASC0212021	ASC0212014	180	3320	88.40	3.48	38.00	1.50	0.30	0.66
C 2		HDR-3000	3/8"x24	No chuck		615 401 134 0	615 401 141 0	180	3320	43.90	1.73	38.00	1.50	0.18	0.39
C 3		HDR-3000-JT1	JT1	No chuck		On demand	On demand	180	3320	43.90	1.73	38.00	1.50	0.18	0.39
D 1		HDR-2000-C6.5	3/8"x24	Keyed chuck	6.5mm - 1/4"	ASC0212022	ASC0212015	110	2000	88.40	3.48	38.00	1.50	0.30	0.66
D 2		HDR-2000	3/8"x24	No chuck		615 401 135 0	615 401 142 0	110	2000	43.90	1.73	38.00	1.50	0.18	0.39
D 3		HDR-2000-JT1	JT1	No chuck		On demand	On demand	110	2000	43.90	1.73	38.00	1.50	0.18	0.39
E 1		HDR-1000-C6.5	3/8"x24	Keyed chuck	6.5mm - 1/4"	ASC0212023	ASC0212016	60	1030	88.40	3.48	38.00	1.50	0.30	0.66
E 2		HDR-1000	3/8"x24	No chuck		615 401 136 0	615 401 143 0	60	1030	43.90	1.73	38.00	1.50	0.18	0.39
E 3		HDR-1000-JT1	JT1	No chuck		On demand	On demand	60	1030	43.90	1.73	38.00	1.50	0.18	0.39
F 1		HDR-600-C10	3/8"x24	Keyed chuck	10mm - 3/8"	ASC0212024	ASC0212017	30	580	112.70	4.44	38.00	1.50	0.40	0.88
F 2		HDR-600	3/8"x24	No chuck		615 401 137 0	615 401 144 0	30	580	68.20	2.69	38.00	1.50	0.28	0.61
F 3		HDR-600-JT1	JT1	No chuck		On demand	On demand	30	580	68.20	2.69	38.00	1.50	0.28	0.61
G 1		HDR-400-C10	3/8"x24	Keyed chuck	10mm - 3/8"	ASC0212025	ASC0212018	30	430	112.70	4.44	38.00	1.50	0.40	0.88
G 2		HDR-400	3/8"x24	No chuck		615 401 138 0	615 401 145 0	30	430	68.20	2.69	38.00	1.50	0.28	0.61
G 3		HDR-400-JT1	JT1	No chuck		On demand	On demand	30	430	68.20	2.69	38.00	1.50	0.28	0.61

XPB M

DRILLING ANGLE HEADS



For each model, several speed and torque levels are available



A



B



C



D

Pic	COLOR RING	Speed
A	Orange	320 - 6 000
B	Blue	180 - 3 320
C	Red	110 - 2 000
D	Green	60 - 1 030



XPB M

Drilling angle heads 360°



COMPACT HEAD

Pic ref	Color code	Head Type	Output	Collet Capacity		part Number		Speed range (rpm)		Length		Dia.		Height		Weight	
				mm	in.	1 pset	6 pset	min	max	mm	in.	mm	in.	mm	in.	kg	lb
A1	Orange	HDR-6000-360-T5	Collet	5	3/16"	ASC0212063	ASC0212035	320	6 000	101.40	3.99	32.50	1.28	66.50	2.62	0.28	0.62
A2		HDR-6000-360-S5	Threaded spindle*			ASC0212151	ASC0212115			101.40	3.99	32.50	1.28	66.50	2.62	0.28	0.62
B1	Blue	HDR-3000-360-T5	Collet	5	3/16"	ASC0212064	ASC0212036	180	3 320	172.30	6.80	32.50	1.28	66.50	2.62	0.56	1.23
B2		HDR-3000-360-S5	Threaded spindle*			ASC0212152	ASC0212116			172.30	6.80	32.50	1.28	66.50	2.62	0.56	1.23
C1	Red	HDR-2000-360-T5	Collet	5	3/16"	ASC0212065	ASC0212037	110	2 000	172.30	6.80	32.50	1.28	66.50	2.62	0.56	1.23
C2		HDR-2000-360-S5	Threaded spindle*			ASC0212153	ASC0212117			172.30	6.80	32.50	1.28	66.50	2.62	0.56	1.23
D1	Green	HDR-1000-360-T5	Collet	5	3/16"	ASC0212066	ASC0212038	60	1 030	172.30	6.80	32.50	1.28	66.50	2.62	0.56	1.23
D2		HDR-1000-360-S5	Threaded spindle*			ASC0212154	ASC0212118			172.30	6.80	32.50	1.28	66.50	2.62	0.56	1.23

* 1/4"x28 thread



STANDARD HEADS

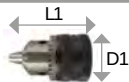
Pic ref	Color code	Head Type	Output	Collet Capacity		part Number		Speed range (rpm)		Length		Dia.		Height		Weight	
				mm	in.	1 pset	6 pset	min	max	mm	in.	mm	in.	mm	in.	kg	lb
A1	Orange	HDR-6000-360-T6	Collet	6.4	1/4"	615 401 146 0	615 401 150 0	320	6 000	115.10	4.52	32.50	1.28	73.19	2.88	0.32	0.70
A2		HDR-6000-360-S6	Threaded spindle*			ASC0212131	ASC0212095			115.10	4.52	32.50	1.28	73.19	2.88	0.32	0.70
B1	Blue	HDR-3000-360-T6	Collet	6.4	1/4"	615 401 148 0	615 401 152 0	180	3 320	186.00	7.33	38.00	1.50	73.19	2.88	0.61	1.34
B2		HDR-3000-360-S6	Threaded spindle*			ASC0212132	ASC0212096			186.00	7.33	38.00	1.50	73.19	2.88	0.61	1.34
C1	Red	HDR-2000-360-T6	Collet	6.4	1/4"	ASC0212053	ASC0212027	110	2 000	186.00	7.33	38.00	1.50	73.19	2.88	0.61	1.34
C2		HDR-2000-360-S6	Threaded spindle*			ASC0212133	ASC0212097			186.00	7.33	38.00	1.50	73.19	2.88	0.61	1.34
D1	Green	HDR-1000-360-T6	Collet	6.4	1/4"	ASC0212054	ASC0212028	60	1 030	186.00	7.33	38.00	1.50	73.19	2.88	0.61	1.34
D2		HDR-1000-360-S6	Threaded spindle*			ASC0212134	ASC0212098			186.00	7.33	38.00	1.50	73.19	2.88	0.61	1.34

*1/4"x28

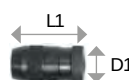
XPB RANGE ACCESSORIES

Chuck models

CHUCK PART NO.	CHUCK MOUNT	CHUCK CAPACITY		DIMENSIONS				WEIGHT		KEY PART NO.
		mm	in.	D1	L1			g	lb	



205 055 272 3	3/8"x24	0.5 - 6.5	1/4	29.3	1.15	42.5	1.67	121	0.27	29182
205 053 013 3	3/8"x24	0.5 - 8	5/16	29.3	1.15	42.5	1.67	120	0.26	410213
205 052 954 3	3/8"x24	1 - 10	3/8	37	1.46	49.5	1.95	204	0.45	29232
473113	3/8"x24	1.5 - 13	1/2	42	1.67	59	2.32	371	0.82	895 101 145 3
29142	1/2"x20	1.5 - 13	1/2	42	1.67	59	2.32	362	0.8	895 101 145 3
29492	1JT	0.5 - 6.5	1/4	29.3	1.15	42.5	1.67	112	0.25	29182
29042	1JT	0.8 - 10	3/8	34.5	1.36	48	1.89	231	0.51	29232
34752	2JT	1 - 10	3/8	42	1.67	61.5	2.4	386	0.85	895 101 145 3
34332	2JT	1.5 - 13	1/2	50	1.97	67.5	2.66	900	1.98	



473433	3/8"x24	0 - 8	5/16	32	1.26	61.5	2.4	285	0.63	
473423	3/8"x24	0.5 - 10	3/8	35.8	1.4	66	2.6	390	0.86	
205 047 819 3	3/8"x24	1 - 13	1/2	40	1.58	76.3	3	559	1.23	
205 056 060 3	1/2"x20	1 - 13	1/2	40	1.58	76.3	3	548	1.21	
524.09	1JT	0 - 6.5	1/4	32	1.26	59.5	2.34	284	0.62	
524.15	1JT	0.5 - 10	3/8	35.8	1.4	66	2.6	390	0.86	
524.1*	2JT	0.5 - 10	3/8	40	1.58	87.5	3.4	636	1.4	
524.16*	2JT	1 - 13	1/2	46	1.8	91	3.6	904	1.99	

- to use 2JT chuck on XPB, add adaptor P/N 12243

ER collet range



COLLET HOLDER

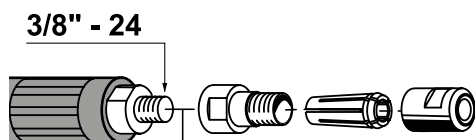
3/8"x24: 615 523 023 0
1/2"x20: 615 523 024 0



COLLETS



COLLET NUT
615 607 144 0



Part Number	DESCRIPTION
615 526 161 0	COLLET Ø3.2mm ERICKSON Series 200
615 526 151 0	COLLET Ø4.0mm ERICKSON Series 200
615 526 152 0	COLLET Ø4.5mm ERICKSON Series 200
615 526 153 0	COLLET Ø5.0mm ERICKSON Series 200
615 526 154 0	COLLET Ø5.5mm ERICKSON Series 200
615 526 162 0	COLLET Ø6.0mm ERICKSON Series 200
615 526 163 0	COLLET Ø1/4" ERICKSON Series 200
615 526 155 0	COLLET Ø7.0mm ERICKSON Series 200
615 526 156 0	COLLET Ø7.5mm ERICKSON Series 200
615 526 164 0	COLLET Ø8.0mm ERICKSON Series 200
615 526 157 0	COLLET Ø8.5mm ERICKSON Series 200
615 526 158 0	COLLET Ø9.0mm ERICKSON Series 200



COLLET FOR ANGLE HEADS

Collet for Compact angle heads (30°, 45°, 90°, 360°)



COLLET CAPACITY	PART NO.
ø 0.8mm	2152
ø 0.9mm	2162
ø 1.0mm	2172
ø 1.1mm	2182
ø 1.2mm	2192
ø 1.3mm	2202
ø 1.4mm	2212
ø 1.5mm	2222
ø 1.6mm	2232
ø 1.7mm	2242

COLLET CAPACITY	PART NO.
ø 1.8mm	2252
ø 1.9mm	2262
ø 2.0mm	2272
ø 2.1mm	2282
ø 2.2mm	2292
ø 2.3mm	2302
ø 2.4mm	2312
ø 2.5mm	2322
ø 2.6mm	2332
ø 2.7mm	2342

COLLET CAPACITY	PART NO.
ø 2.8mm	2352
ø 2.9mm	2362
ø 3.0mm	2372
ø 3.1mm	2382
ø 3.2mm	2392
ø 3.3mm	2402
ø 3.4mm	2412
ø 3.5mm	2422
ø 3.6mm	2432
ø 3.7mm	2442

COLLET CAPACITY	PART NO.
ø 3.8mm	2452
ø 3.9mm	2462
ø 4.0mm	2472
ø 4.1mm	2482
ø 4.2mm	2492
ø 4.3mm	2502
ø 4.4mm	2512
ø 4.5mm	2522
ø 4.6mm	2532
ø 4.7mm	2542

COLLET CAPACITY	PART NO.
ø 4.8mm	2552
ø 4.9mm	2562
ø 5.0mm	2572
ø 1/16"	91442
ø 3/32"	91452
ø 1/8"	91462
ø 5/32"	91472
ø 11/64"	108172
ø 3/16"	91482

Collet for Standard angle heads (45°, 90°, 360°)



COLLET CAPACITY	PART NO.
ø 1.6mm (1/16")	18922
ø 1.8mm	18932
ø 2.0mm (5/64")	18942
ø 2.2mm	18952
ø 2.4mm	18962
ø 2.6mm	18972
ø 2.8mm (7/64")	18982

COLLET CAPACITY	PART NO.
ø 4.4mm (11/64")	19072
ø 4.6mm	19082
ø 4.8mm (3/16")	19092
ø 5.0mm	19102
ø 5.2mm (13/64")	19122
ø 5.4mm	19132
ø 5.6mm (7/32")	19142

COLLET CAPACITY	PART NO.
ø 3.0mm	18992
ø 3.2mm (1/8")	19002
ø 3.4mm	19022
ø 3.6mm (9/64")	19032
ø 3.8mm	19042
ø 4.0mm (5/32")	19052
ø 4.2mm	19062

COLLET CAPACITY	PART NO.
ø 5.8mm	19152
ø 6.0mm (15/64")	19162
ø 6.2mm	19172
ø 6.4mm (1/4")	19182

XPB M

Tightening applications



XPB M concept offers a unique and flexible solution fully designed for aerospace applications.

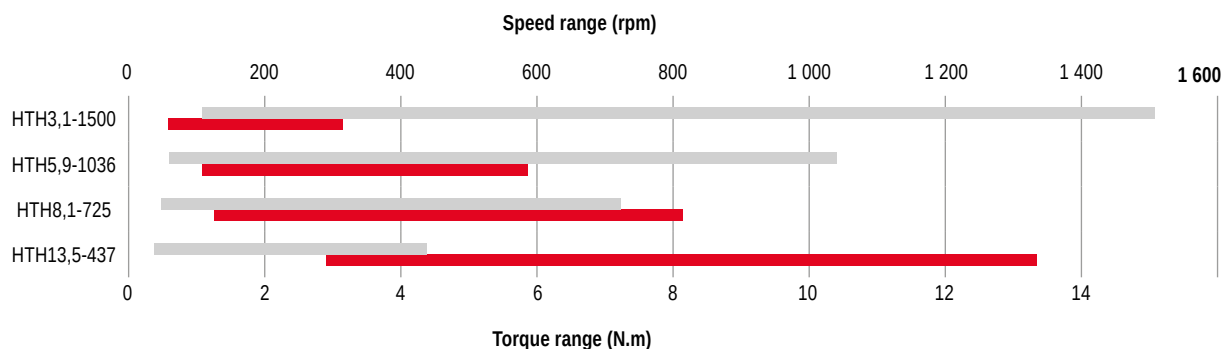
On top of the large number variety of drilling applications that can be tackled, XPB-M covers as well applications tightening.

With its smart RFID head recognition, XPB M automatically identifies a tightening head, and instantly becomes a torque control tool, with a focus on temporary fastener & frangible collar installation.

The tightening heads are common between temporary fastener & frangible collar, but specific cycles can be selected via software to allocate specific strategies for those 2 applications.

Our focus? Help you improve process quality, reduce the tool footprint on the production line, control the process in a better way, streamline the assets, reducing total cost of ownership. XPB-M is the enabler for process improvement for all manual operations, and paves the way to industry 4.0.

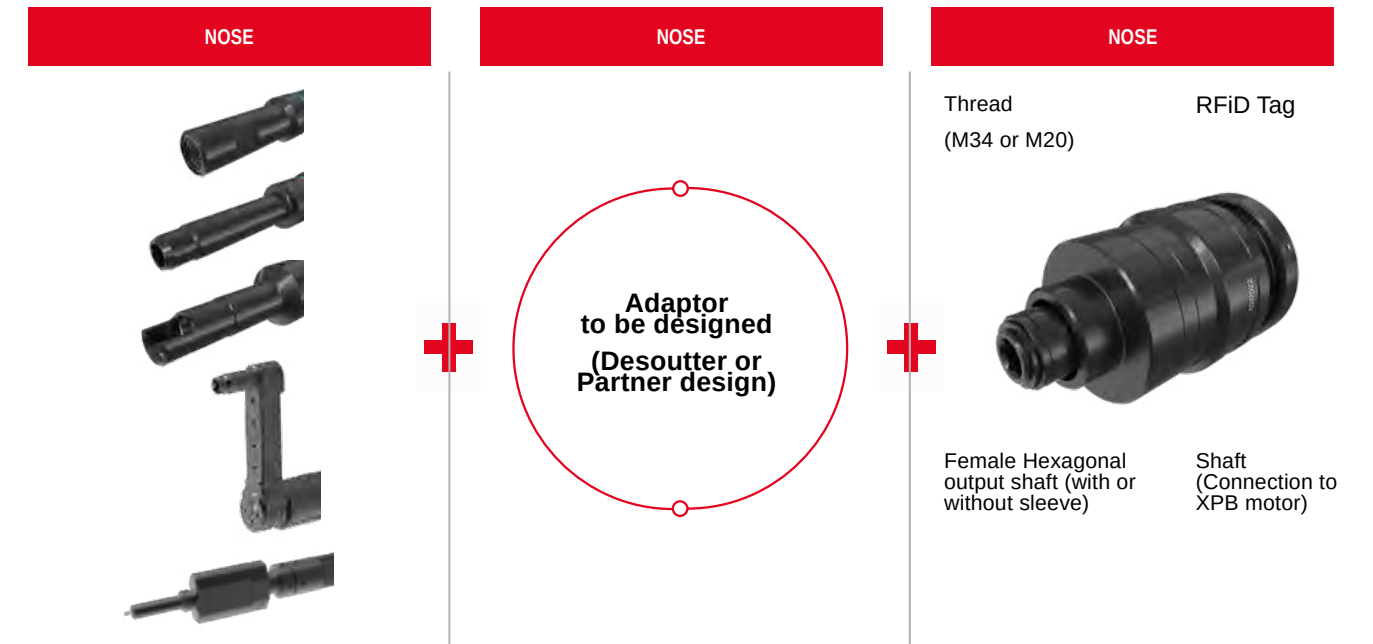
XPB M Tightening head range



HEAD NAME	COLOR RING	SPEED		MINIMUM RUNDOWN TORQUE		MINIMUM RECOMMENDED FINAL TORQUE		MAX TORQUE	
		min	max	Nm	in.lb	Nm	in.lb	Nm	in.lb
HTH3,1-1500		110	1 500	0.6	5.3	1.2	10.6	3.1	27.2
HTH5,9-1036		60	1 030	1.2	10.2	2.3	20.4	5.9	52.4
HTH8,1-725		40	720	1.7	15.4	3.5	30.8	8.1	71.8
HTH13,5-437		30	430	2.9	25.6	5.8	51.2	13.5	119.4

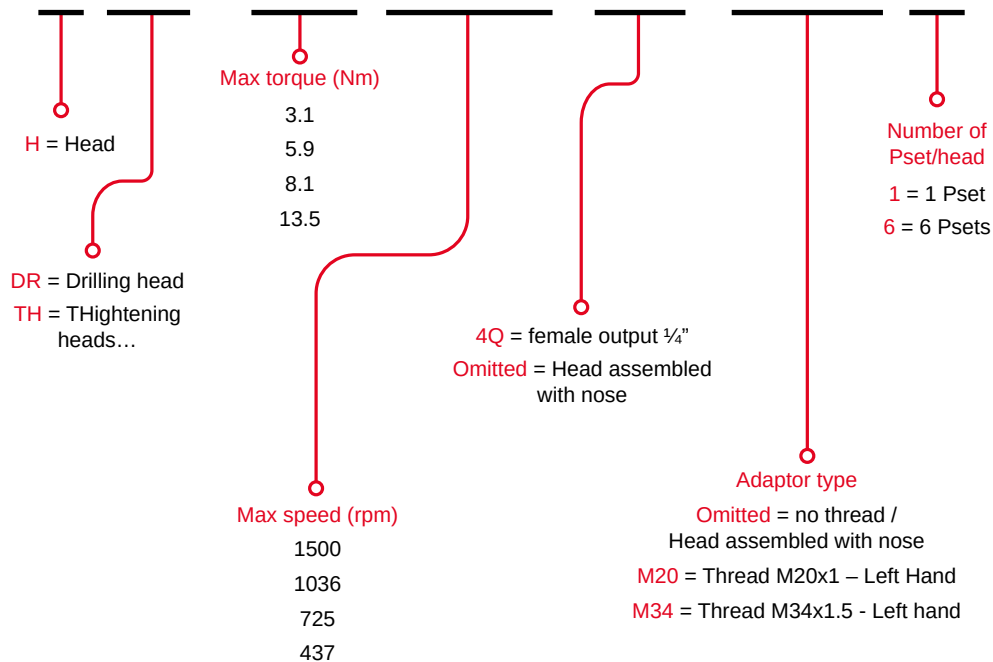


TIGHTENING HEAD CONCEPT



TIGHTENING HEAD DESCRIPTION KEY

HTH-1.9-1500-4Q-M20-6

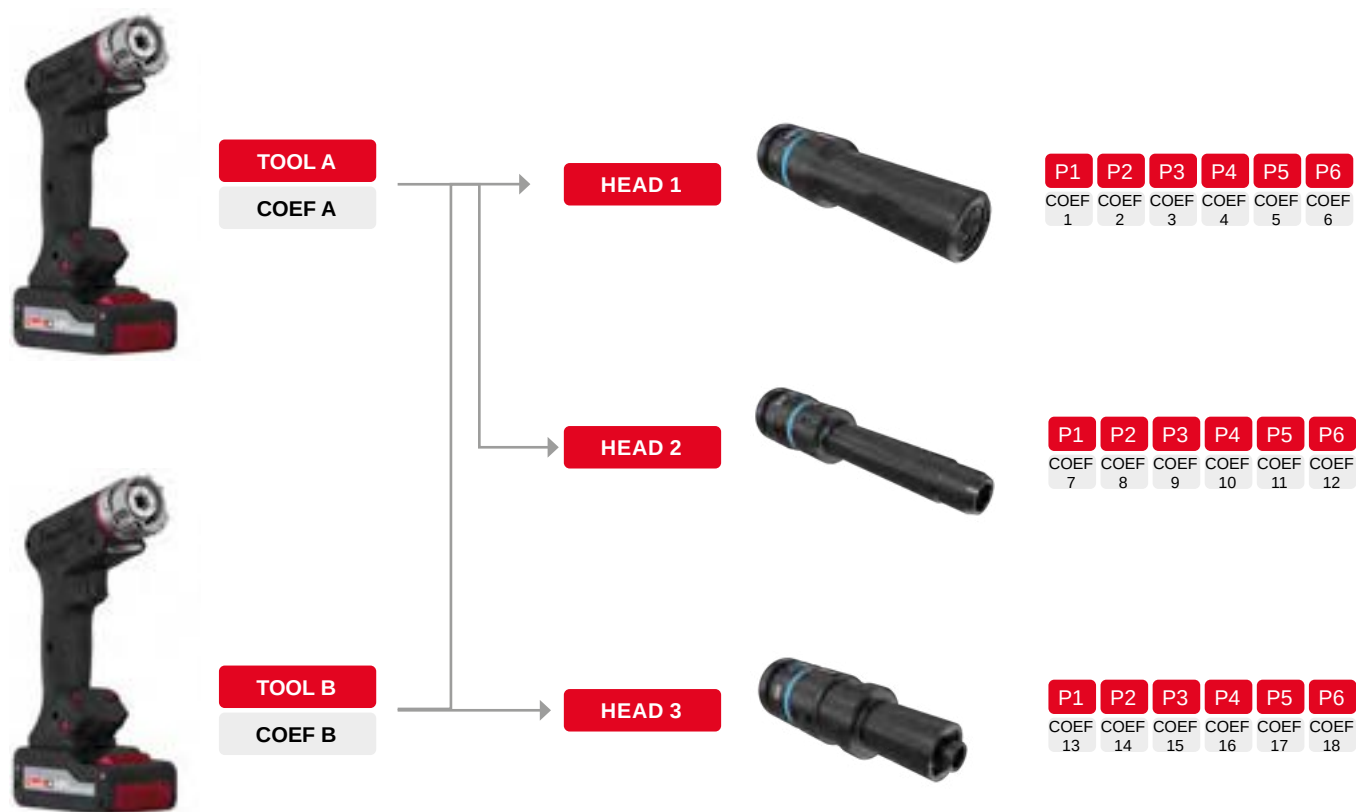


XPB M – CALIBRATION PROCESS

Modularity approach

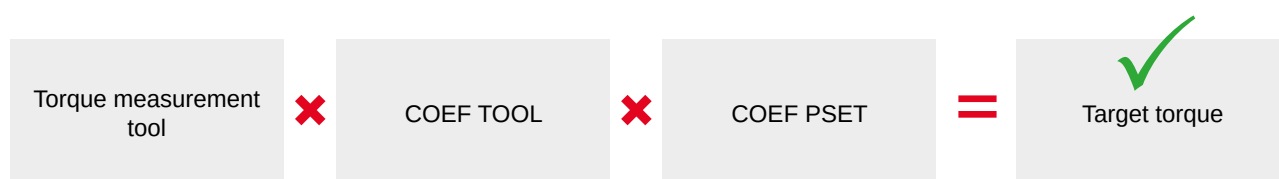
Our target: make sure your fasteners are installed at the required torque. XPB-M unique modularity means several heads installed on different tools.

Quality & process control being key, all those combinations must provide the right torque value for each single fastener installed. This is how we ensure it.



Target torque ✓

TOOL CALCULATION



XPB RANGE

Base tightening heads

XPB solutions for temporary fastener installation can virtually cover the full range of application in your factory.

Either you find exactly the right solution required (Lisi or Monogram), or you just need to order the XPB head, and our project team will support you adapt any output required.

XPB HEAD - ADAPTOR THREAD M20x1 LH



A



B



C



D

Pic	Color code	Speed		Minimum rundown torque		Minimum final Torque		maximum Torque		part number		Length		Dia		Weight	
		min	max	Nm	in.lb	Nm	in.lb	Nm	in.lb	1 Pset	6 Pset	mm	in.	mm	in.	kg	lb
A		110	1 500	0.6	5.3	1.2	10.6	3.1	27.2	615 401 171 0	615 401 178 0	64.90	2.56	38.00	1.50	0.18	0.39
B		60	1 030	1.2	10.2	2.3	20.4	5.9	52.4	615 401 173 0	615 401 180 0	64.90	2.56	38.00	1.50	0.18	0.39
C		40	720	1.7	15.4	3.5	30.8	8.1	71.8	615 401 174 0	615 401 181 0	89.20	3.51	38.00	1.50	0.28	0.61
D		30	430	2.9	25.6	5.8	51.2	13.5	119.4	615 401 175 0	615 401 182 0	89.20	3.51	38.00	1.50	0.28	0.61

XPB HEAD - ADAPTOR THREAD M34x1,5 LH



A



B



C



D

Pic	Color code	Speed		Minimum rundown torque		Minimum final Torque		maximum Torque		part number		Length		Dia.		Weight	
		min	max	Nm	in.lb	Nm	in.lb	Nm	in.lb	1 Pset	6 Pset	mm	in.	mm	in.	kg	lb
A		110	1 500	0.6	5.3	1.2	10.6	3.1	27.2	615 401 156 0	615 401 163 0	64.90	2.56	38.00	1.50	0.18	0.39
B		60	1 030	1.2	10.2	2.3	20.4	5.9	52.4	615 401 158 0	615 401 165 0	64.90	2.56	38.00	1.50	0.18	0.39
C		40	720	1.7	15.4	3.5	30.8	8.1	71.8	615 401 159 0	615 401 166 0	89.20	3.51	38.00	1.50	0.28	0.61
D		30	430	2.9	25.6	5.8	51.2	13.5	119.4	615 401 160 0	615 401 167 0	89.20	3.51	38.00	1.50	0.28	0.61

XPB M

Temporary fastener head range

XPB-M approach is unique: Unlimited number of heads per tool Up to 6 cycles per head Wide range of fasteners covered. Now how does that compare to your current production line



HEADS FOR MONOGRAM
FASTENERS CYLINDRICAL &
HEXAGONAL



lisi



HEADS FOR STANDARD
& ROBOTIC LISI
TEMPORARY FASTENERS



HEADS FOR OTHER
TEMPORARY FASTENERS
AVAILABLE ON DEMAND



HEADS FOR MONOGRAM FASTENERS

MONOGRAM CYLINDRICAL (CBX)



A



B



C



D

Pic	Color code	Speed		Minimum rundown torque		Minimum final Torque		maximum Torque		part number		Length		Dia		Weight	
		min	max	Nm	in.lb	Nm	in.lb	Nm	in.lb	1 Pset	6 Pset	mm	in.	mm	in.	kg	lb
A		110	1 500	0.6	5.3	1.2	10.6	3.1	27.2	ASC0212203	ASC0212187	135.70	5.34	39.00	1.54	0.49	1.09
B		60	1 030	1.2	10.2	2.3	20.4	5.9	52.4	ASC0212205	ASC0212189	135.70	5.34	39.00	1.54	0.49	1.09
C		40	720	1.7	15.4	3.5	30.8	8.1	71.8	ASC0212206	ASC0212190	160.00	6.30	39.00	1.54	0.60	1.31
D		30	430	2.9	25.6	5.8	51.2	13.5	119.4	ASC0212207	ASC0212191	160.00	6.30	39.00	1.54	0.60	1.31

MONOGRAM HEXAGONAL



A



B



C



D

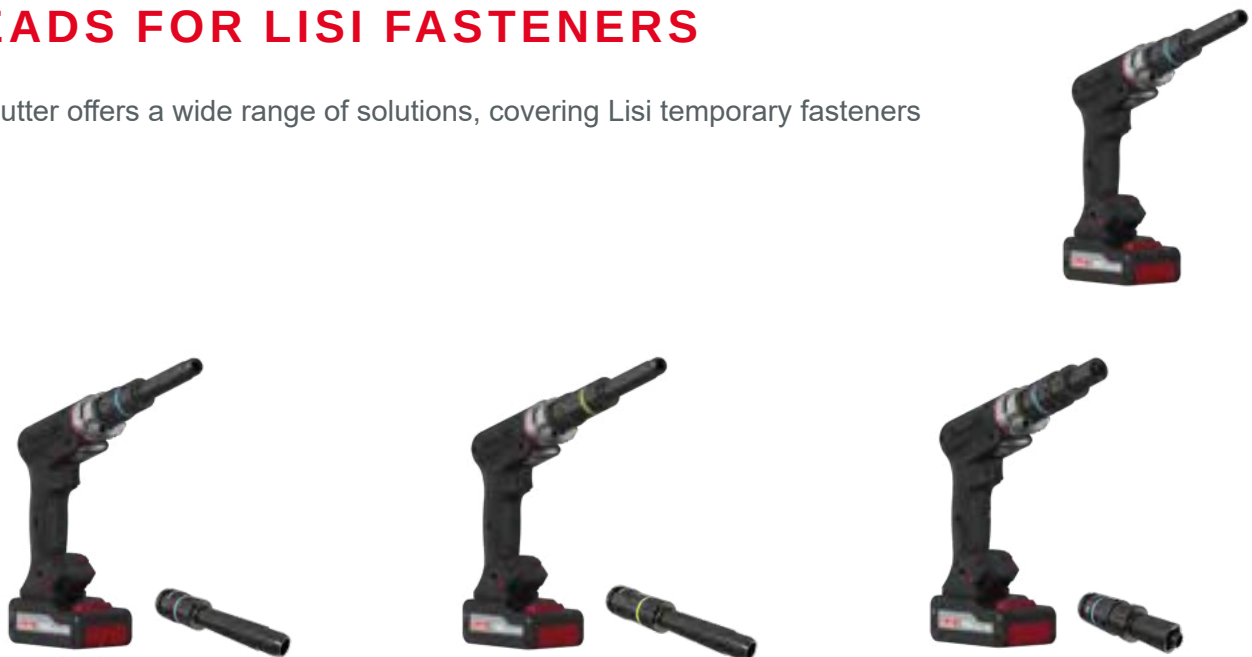
Pic	Color code	Speed		Minimum rundown torque		Minimum final Torque		maximum Torque		part number		Length		Dia.		Weight	
		min	max	Nm	in.lb	Nm	in.lb	Nm	in.lb	1 Pset	6 Pset	mm	in.	mm	in.	kg	lb
A		110	1 500	0.6	5.3	1.2	10.6	3.1	27.2	ASC0212211	ASC0212195	140.70	5.54	39.00	1.54	0.49	1.09
B		60	1 030	1.2	10.2	2.3	20.4	5.9	52.4	ASC0212213	ASC0212197	140.70	5.54	39.00	1.54	0.49	1.09
C		40	720	1.7	15.4	3.5	30.8	8.1	71.8	ASC0212214	ASC0212198	165.00	6.50	39.00	1.54	0.60	1.31
D		30	430	2.9	25.6	5.8	51.2	13.5	119.4	ASC0212215	ASC0212199	165.00	6.50	39.00	1.54	0.60	1.31

XPB M RANGE

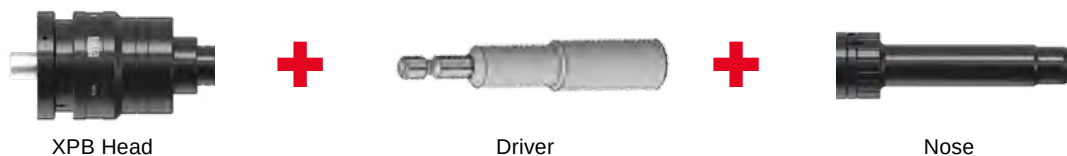
HEADS FOR LISI FASTENERS

HEADS FOR LISI FASTENERS

Desoutter offers a wide range of solutions, covering Lisi temporary fasteners



TEMPORARY FASTENER DESCRIPTION KEY



TF-L-41-H10-H12

OutputType

Omitted = head only – no Fastener

TF = Temporary Fastener

FC = Frangible Collar

Fastener Brand

Omitted = head only – no nose

M = Monogram

L = Lisi

C = Centrix

X = ...

Fastener Type

Omitted = head only – no nose

C = Cylindrical (CBX Monogram)

H = Hexagonal (HNX Monogram)

XXX = Lisi temporary serie

Driver Type

Omitted = not needed

C9.5 = Cylindrical 9.5mm

C10 = Cylindrical 10mm

H9 = Hexagonal 9mm A/F

H10 = Hexagonal 10mm A/F

H13 = Hexagonal 13mm A/F

O8 = Octogonal 8mm A/F

O9.25 = Octogonal 9.25mm A/F

O12.9 = Octogonal 12.9mm A/F

O19.4 = Octogonal 19.4mm A/F

Nose (holder) Type

Omitted: not needed

H12 = Hexagonal 12mm A/F

H14 = Hexagonal 14mm A/F

H18 = Hexagonal 18mm A/F

H20 = Hexagonal 20mm A/F

F16 = Flat 16mm A/F

F26 = Flat 26mm A/F

F32 = Flat 32mm A/F

F38 = Flat 38mm A/F



HEAD SELECTION GUIDE

- 1 Select your temporary fastener series
- 2 Check the nose type required within this series
- 3 Check application torque level to select correct head (criteria: torque range)
- 4 Check if head speed range in line with your requirements
- 5 Select 1 or 6 pset Head option



Series	FASTENER PIC	Nose Type
SERIES 22		D10-H12
SERIES 26		H09-H12*
SERIES 27		H09-H12*
SERIES 28		H09-H12*
SERIES 32		D10-H12
SERIES 41		H10-H12
SERIES 42		D10-H12
SERIES 42S		D10-H12
SERIES 43		H10-H12
SERIES 44H		H10-H12
SERIES 45G		D10-H12
SERIES 45 GH		H10-H12
SERIES 49		D10-H14
SERIES 49G		D10-H14
SERIES 49GH		H10-H12
		H10-H14
SERIES 49H		H10-H14
		H13-H18*
SERIES 51		H10-H12
SERIES 52		D10-H12
SERIES 70		D10-H12
1 SERIES 81	2	D10-H12
		H13-H20*
		H10-H12
SERIES M/MG		H10-H14
		H13-H18*
SERIES R/RG		H10-H12
		H10-H14
		H13-H18*
SERIES 352		*

* Please contact your Desoutter representative, If the Series you needed is not listed above.

COL. CODE	SPEED		MINIMUM RUNDOWN TORQUE		MINIMUM RE-COMMENDED FINAL TORQUE		MAX TORQUE		HEAD		HEX10 / HEX12		HEX10 / HEX14		DIA9.5 / HEX12		DIA10 / HEX12	
	min	max	Nm	in.lb	Nm	in.lb	Nm	in.lb	1 Pset	6 Pset	1 Pset	6 Pset	1 Pset	6 Pset	1 Pset	6 Pset	1 Pset	6 Pset
Blue	110	1500	0.6	5.3	1.2	10.6	3.1	27.2	ASC0212269	ASC0212237	ASC0212277	ASC0212245	ASC0212285	ASC0212253	ASC0212293	ASC0212261		
Green	60	1030	1.2	10.2	2.3	20.4	5.9	52.4	ASC0212271	ASC0212239	ASC0212279	ASC0212247	ASC0212287	ASC0212255	ASC0212295	ASC0212263		
Yellow	40	720	1.7	15.4	3.5	30.8	8.1	71.8	ASC0212272	ASC0212240	ASC0212280	ASC0212248	ASC0212288	ASC0212256	ASC0212296	ASC0212264		
Red	30	430	2.9	25.6	5.8	51.2	13.5	119.4	ASC0212273	ASC0212241	ASC0212281	ASC0212249	ASC0212289	ASC0212257	ASC0212297	ASC0212265		

HEAD SELECTION GUIDE

XPB-M approach is unique:

- Unlimited number of heads per tool
- Up to 6 cycles per head
- Wide range of fasteners covered
- Now how does that compare to your current production line?



RANGE OF HEADS FOR
FRANGIBLE COLLARS (HOLD
& DRIVE)



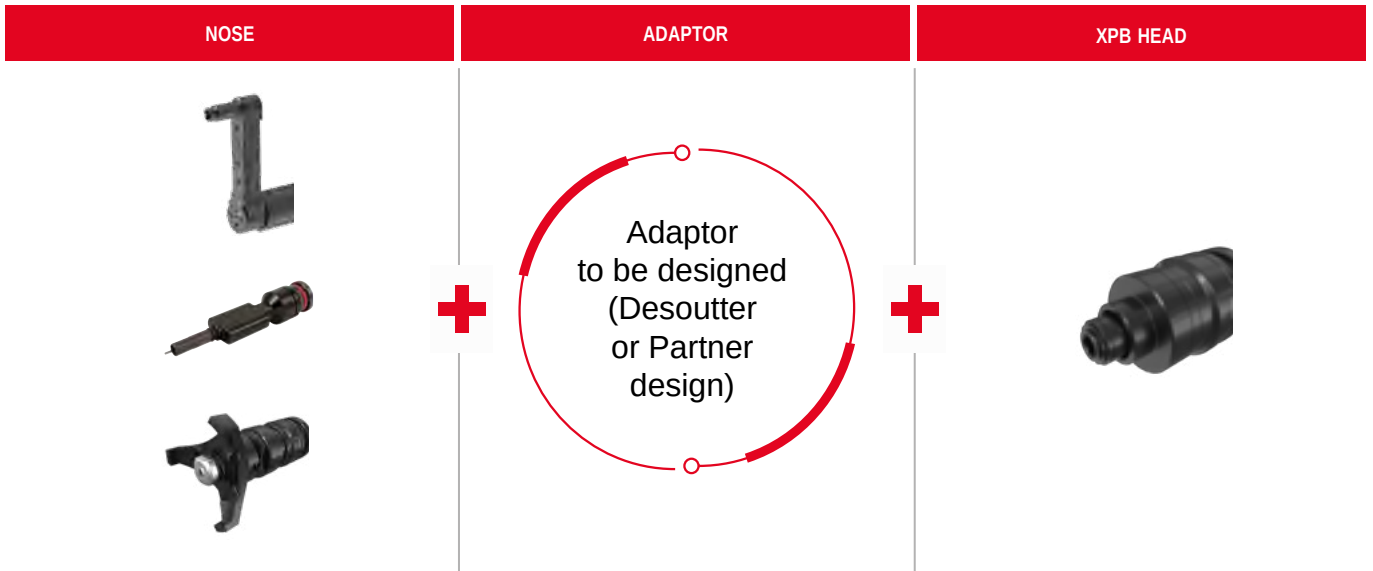
RANGE OF HEADS FOR
FRANGIBLE COLLARS
(WITH INTERFERENCE)



RANGE OF HEADS FOR
VARIOUS BLIND FASTENERS

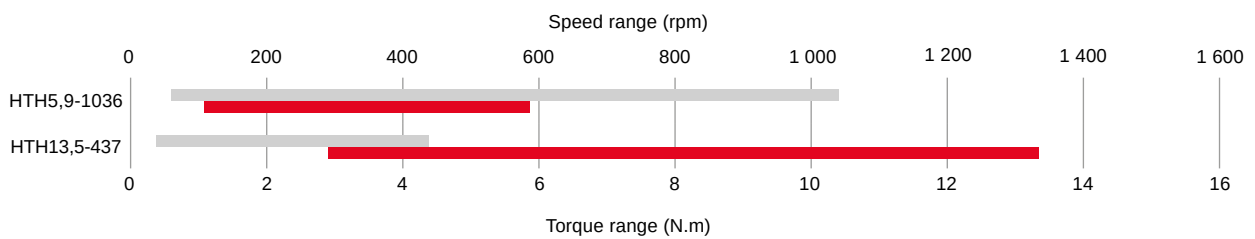


FRANGIBLE HEAD CONCEPT



The XPB M can cover a wide range of frangible collar and blind fastener applications.
Please contact your local Desoutter representative

XPB M Frangible collar head range



COLOR CODE	HEAD	SPEED RANGE (RPM)		MIN RUNDOWN		MIN TORQUE		MAX TORQUE	
		min	max	Nm	in.lb	Nm	in.lb	Nm	in.lb
	HTH5,9-1036	60	1 030	1.2	10.2	2.3	20.4	5.9	52.4
	HTH13,5-437	30	430	2.9	25.6	5.8	51.2	13.5	119.4

XPB RANGE

Battery pack and Charger



BATTERY SAFETY

Compliant with the new European standard on battery safety [IEC 62841]
This standard should be applied USA in 2020



WARRANTY

300 charges or 1 year since the delivery
No warranty doubt about a failed battery (State of health evolution, Number of charge, Error code, aging)



LIFETIME

Our new battery lifetime is increasing by more than 20% in relation to our current one



BATTERY PARK MANAGEMENT

Automatic battery data collection when connecting to wireless communication tools



BATTERY LOAD LEVEL

Load indicator information directly on the battery



STATE OF HEALTH

Information on the state of health of the battery to know if the battery should be replaced or not



ERGONOMY

Wider button [3 finger button] for a better grip



LOAD INDICATOR

Load indicator to know what is the status of the battery charge



WARNING LED

WARNING LED to inform when an error occurred during the charge

COMPATIBILITY

Our current and new battery can be charged with this new charger [new battery could be charged on our current charger as well]



DAISY CHAIN

Possibility daisy chain the chargers to make installation easier. The number of charger is limited by the maximum input current to 10A and it is fuse protected on each charger.

Example: Maximum input current for European mains (230V) is 1A per charger
Maximum 10 chargers linked in daisy chain for 230 Vac
Maximum 5 chargers linked in daisy chain for 115 Vac.

INSTALLATION

4 holes to be able to fix the charger on the wall or in a cabinet



FRANGIBLE HEAD CONCEPT

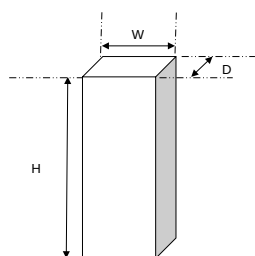


Optional accessories

ITEM	BATTERY TYPE	PART NO.
1	Li-ion battery pack 18V 2.5 Ah - 0.46 kg (1,01lb)	615 813 266 0
2	Li-ion battery pack 36V 2.5 Ah - 0,77 kg (1,70lb)	615 813 267 0
CHARGERS		
3	Charger Universal 18 / 36V	615 813 270 0
•	Power Cord C13-C14 L=0.3m (daisy chain cable)	615 813 383 0
PROTECTIVE COVERS - BATTERY		
6	For Battery 18V 2.5Ah - Clear	615 211 136 0
6	For Battery 18V 2.5Ah - Black	615 211 137 0
6	For Battery 18V 2.5Ah - Red	615 211 138 0
6	For Battery 18V 2.5Ah - Grey	615 211 139 0
6	For Battery 36V 2.5Ah - Clear	615 211 140 0
6	For Battery 36V 2.5Ah - Black	615 211 141 0
6	For Battery 36V 2.5Ah - Red	615 211 142 0
6	For Battery 36V 2.5Ah - Grey	615 211 143 0
MISCELLANEOUS		
8	eDOCK + Battery data interface	615 813 400 0

Charging Cabinet

4 models for different needs



CABINET	DSM0111500	DSM0111600	DSM0111800	DSM0111700
Max capacity	4 chargers	8 chargers	12 chargers	24 chargers
H	600 mm	1000 mm	1500 mm	2100 mm
W	400 mm	800 mm	800 mm	800 mm
D	260 mm	400 mm	400 mm	400 mm
	Workbench or wall mounting		Floor mounting	

XPB RANGE

Service Solutions

MAINTENANCE SOLUTIONS

Reduce breakdowns and extend tool life to boost cost efficiency, uptime and productivity

Basic Care

- A flexible fixed price preventive maintenance program that includes wear parts and labour.

Smart Care*

- A fixed price preventive maintenance plan and repairs included. The maintenance is optimised according to the tool usage. All wear parts are replaced at the right time.

Peace of mind*

- Onsite maintenance and production support that includes: An optimised preventive maintenance plan and repairs included. Plus technical support for trouble shooting, optimisation and operator coaching to maximise the efficiency of your tools.

* Except in case of misuse or abuse



SMART START

High performance, right from the start!

- A fast, high quality installation with no delays that ensures tool accuracy and optimum set-up.

PRODUCTION SUPPORT

On-site support to help boost uptime and productivity

On-site technicians

- Our certified technicians are on hand to quickly solve any on-site issues detected or identify process improvement opportunities.

Certification Training

- Develop your technicians' knowledge on troubleshooting and assembly technics. Improve the interaction with Desoutter for efficient remote support.

BOOST YOUR UPTIME

- Preventive Maintenance significantly reduces breakdowns and therefore production stops. Uptime is improved.
- Our experienced on-site technicians know your applications and are on hand to support your team. This allows early detection and resolution of problems, Your uptime is further improved.

BOOST YOUR MAINTENANCE COST EFFICIENCY

- Preventive Maintenance decreases breakdowns and extends tool life. This significantly reduces repair and administration costs.

BOOST YOUR PRODUCTIVITY

- Desoutter on-site technicians will coach and support your teams on how to get the best from your equipment. This helps to reduce errors and rework, boosting productivity and quality.
- Our on-site technicians will help your team to identify and implement process improvements to help you further boost productivity.

BOOST YOUR FLEXIBILITY

- Desoutter on-site technicians will coach and support your teams on how to get the best from your equipment. This helps to reduce errors and rework, boosting productivity and quality.
- Our on-site technicians will help your team to identify and implement process improvements to help you further boost productivity.



Drill Selection Guide

How to select your tool:

1 Select material 2 Select hole size 3 Define speed

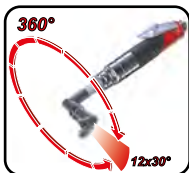
TOOL TYPE	FREE SPEED	TITANIUM	STAINLESS STEEL	HARD CAST IRON, MEDIUM HARD STEEL	SOFT CAST IRON, MILD STEEL	HARD PLASTICS	ALUMINIUM, BRASS, COPPER, BRONZE	COMPOSITE	WOOD, SOFT PLASTICS, CHIPBOARD
	rpm		9-15m/min	10-20m/min	20-35m/min	30-40m/min	50-80m/min	50-100m/min	80-120m/min
Drill ø mm									
STRAIGHT CASE									
DR300-T	20000							4.0 (5/32")	2.0 (5/64")
ø8-10 mm (5/16" - 3/8") cap.	5500						4.0 (5/32")	5.0 (3/16")	6.0 (1/4")
	4500					3.0 (1/8")	6.0 (1/4")		8.0 (5/16")
	3000				4.0 (5/32")	5.0 (3/16")	8.0 (5/16")		
	2000	3.0 (1/8")	4.0 (5/32")	6.0 (1/4")	8.0 (5/16")				
	1000	3.0 (1/8")	4.0 (5/32")	6.0 (1/4")	8.0 (5/16")				
	550	6.0 (1/4")	8.0 (5/16")						
30°, 45°, 90°, 360° COMPACT HEAD									
DR300-QR/-T5-S5	5500	-	-	-	-	3.0 (1/8")	5.0 (3/16")	5.0 (3/16")	5.0 (3/16")
	4500	-	-	-	-	3.0 (1/8")	5.0 (3/16")	5.0 (3/16")	5.0 (3/16")
	3000 3	-	-	-	3.0 (1/8") 2	5.0 (3/16")	5.0 (3/16")	5.0 (3/16")	-
	2000	-	3.0 (1/8")	4.0 (5/32")	5.0 (3/16")	-	-	-	-
	1000	-	4.0 (5/32")	5.0 (3/16")	-	-	-	-	-
45°, 90°, 360° STANDARD HEAD									
DR300-QR/-T6-S6	5500	-	-	-	-	3.0 (1/8")	6.0 (1/4")	5.0 (3/16")	6.5 (1/4")
	4500	-	-	-	-	3.0 (1/8")	6.0 (1/4")	5.0 (3/16")	6.5 (1/4")
	3000	-	-	-	3.0 (1/8")	5.0 (3/16")	6.5 (1/4")	6.5 (1/4")	-
	2000	-	3.0 (1/8")	4.0 (5/32")	6.5 (1/4")	6.5 (1/4")	-	6.5 (1/4")	-
	1000	-	4.0 (5/32")	6.0 (1/4")	6.5 (1/4")	-	-	-	-
	550	6.0 (1/4")	6.5 (1/4")	6.5 (1/4")	-	-	-	-	-
DR450-T6/S6	18500	-	-	-	-	-	-	4.0 (5/32")	2.0 (5/64")
ø8-13 mm (5/16" - 1/2") cap.	5800	-	-	-	-	-	4.0 (5/32")	5.0 (3/16")	6.0 (1/4")
	4300	-	-	-	-	3.0 (1/8")	6.0 (1/4")	10.0 (13/32")	12.0 (1/2")
	2700	-	-	3.0 (1/8")	4.0 (5/32")	5.0 (3/16")	8.0 (5/16")	12.0 (1/2")	-
	1800	-	3.0 (1/8")	4.0 (5/32")	6.0 (1/4")	8.0 (5/16")	10.0 (13/32")	-	-
	1400	-	4.0 (5/32")	5.0 (3/16")	9.0 (11/32")	11.0 (7/16")	-	-	-
90° HEAVY DUTY									
DR300-THD/SHD	2000	-	3.0 (1/8")	3.0 (1/8")	6.0 (1/4")	8.0 (5/16")	8.0 (5/16")	8.0 (5/16")	8.0 (5/16")
	900	-	7.0 (9/32")	8.0 (5/16")	8.0 (5/16")	-	-	-	-
DR450-THD/SHD	2000	-	3.0 (1/8")	3.0 (1/8")	6.0 (1/4")	6.5 (1/4")	6.5 (1/4")	6.5 (1/4")	6.5 (1/4")
	900	-	7.0 (9/32")	8.0 (5/16")	8.0 (5/16")	-	-	-	-
	600	-	8.0 (5/16")	10.0 (13/32")	10.0 (13/32")	8.0 (5/16")	-	-	-
PISTOL GRIP									
DR350	20000							4.0 (5/32")	2.0 (5/64")
ø8-10 mm (5/16" - 3/8") cap.	5500						4.0 (5/32")	5.0 (3/16")	6.0 (1/4")
	4500					3.0 (1/8")	6.0 (1/4")		8.0 (5/16")
	3000				4.0 (5/32")	5.0 (3/16")	8.0 (5/16")		
	2000	3.0 (1/8")	4.0 (5/32")	6.0 (1/4")	8.0 (5/16")	10.0 (13/32")			
	1000	4.0 (5/32")	6.0 (1/4")	8.0 (5/16")					
	550	6.0 (1/4")	8.0 (5/16")						
DR500	18500							4.0 (5/32")	2.0 (5/64")
ø8-13 mm (5/16" - 1/2") cap.	5800						4.0 (5/32")	5.0 (3/16")	6.0 (1/4")
	4300					3.0 (1/8")	6.0 (1/4")	10.0 (13/32")	12.0 (1/2")
	2700			3.0 (1/8")	4.0 (5/32")	5.0 (3/16")	8.0 (5/16")	12.0 (1/2")	
	1800	3.0 (1/8")	4.0 (5/32")	6.0 (1/4")	8.0 (5/16")	10.0 (13/32")			
	1400	4.0 (5/32")	5.0 (3/16")	9.0 (11/32")	11.0 (7/16")				
	1000	5.0 (3/16")	6.0 (1/4")	10.0 (13/32")					
	600	3.0 (1/8")	7.0 (9/32")	8.0 (5/16")	12.0 (1/3")				
	400	6.0 (1/4")	8.0 (5/16")	10.0 (13/32")					
DR750	20000						2.0 (5/64")	2.0 (5/64")	
ø8-13 mm (5/16" - 1/2") cap.	6000						4.0 (5/32")	5.0 (3/16")	6.0 (1/4")
	4100					3.0 (1/8")	6.0 (1/4")	8.0 (5/16")	10.0 (13/32")
	3300				3.0 (1/8")	4.0 (5/32")	8.0 (5/16")	10.0 (13/32")	12.0* (1/2")
	2700			3.0 (1/8")	4.0 (5/32")	5.0 (3/16")	10.0 (13/32")	13.0* (1/2")	15.0* (19/32")
	1300	4.0 (5/32")	5.0 (3/16")	9.0 (11/32")	11.0* (7/16")	19.0* (3/4")	30.0* (13/16")		
	750	3.0 (1/8")	7.0 (9/32")	8.0 (5/16")	15.0* (19/32")	19.0* (3/4")	30.0* (13/16")		
	400	6.0 (1/4")	8.0 (5/16")	10.0 (13/32")					

* above standard chuck capacity

Multi Drills



- Modular product range to boost you productivity
- Full flexibility for difficult access applications
- Lightweight and excellent ergonomics
- Robust built, reliable design and excellent run-out
- New 500W tools available in multi-drill version:
 - Pistol version with DR500-QR
 - Straight version with DR450-QR



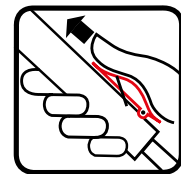
12 positions, 360° orientation

Flexibility
Excellent accessibility



Quick-Release head

Productivity
1 tool for all applications



Safety
Ergonomics
Low weight
Low sound levels
Vacuum kits options

COMPACT HEAD
Collet Ø 5mm (3/16") or 1/4" spindle



STANDARD HEAD
Collet Ø 6.4mm (1/4") / Ø 8mm (5/16") or 1/4" spindle

Heavy Duty head



* Possibility to use ER collets with straight Quick Release attachment See p.225 for all details.

Multi Drills



A

DR350 Series

350 W (0.5hp) / 1000 to 5500 rpm



B

DR500 Series

500 W (0.68hp) / 1000 to 5800 rpm



C

DR300 Series

300 W (0.4hp) / 550 to 5500 rpm



D

DR450 Series

450 W (0.6hp) / 1000 to 5800 rpm



***BRB**

Button + Rear Bumper
available as well as accessory



ACCESSORIES
see page 277

PIC REF	MODEL	PART NUMBER	FREE SPEED	MOTOR POWER		WEIGHT		LENGTH		AIR FLOW		AIR INLET
			rpm	W	hp	kg	lb	mm	in.	l/s	cfm	in.
MULTI-DRILLS - PISTOL												
A	DR350-P5500-QR	205 147 984 4	5500	350	0.5	0.50	1.10	169	6.65	9.5	20	1/4
A	DR350-P4500-QR	205 147 983 4	4500	350	0.5	0.50	1.10	169	6.65	9.5	20	1/4
A	DR350-P3000-QR	205 147 528 4	3000	350	0.5	0.50	1.10	169	6.65	9.5	20	1/4
A	DR350-P1000-QR	205 147 981 4	1000	350	0.5	0.58	1.27	187	7.36	9.5	20	1/4
B	DR500-P5800-QR	615 176 190 0	5800	500	0.68	0.58	1.25	174	6.85	14	30	1/4
B	DR500-P4300-QR	615 176 189 0	4300	500	0.68	0.58	1.25	174	6.85	14	30	1/4
B	DR500-P2700-QR	615 176 188 0	2700	500	0.68	0.58	1.25	174	6.85	14	30	1/4
B	DR500-P1800-QR	615 176 187 0	1800	500	0.68	0.66	1.45	188	7.40	14	30	1/4
B	DR500-P1400-QR	615 176 186 0	1400	500	0.68	0.66	1.45	188	7.40	14	30	1/4
B	DR500-P1000-QR	615 176 185 0	1000	500	0.68	0.66	1.45	188	7.40	14	30	1/4

MULTI-DRILLS - STRAIGHT

C	DR300-T5500-QR	615 176 071 0	5500	300	0.4	0.52	1.14	179	7.05	9.5	20	1/4
C	DR300-T4500-QR	615 176 070 0	4500	300	0.4	0.52	1.14	179	7.05	9.5	20	1/4
C	DR300-T3000-QR	615 176 069 0	3000	300	0.4	0.52	1.14	179	7.05	9.5	20	1/4
C	DR300-T2000-QR	615 176 068 0	2000	300	0.4	0.52	1.14	179	7.05	9.5	20	1/4
C	DR300-T1000-QR	615 176 067 0	1000	300	0.4	0.61	1.34	195.5	7.7	9.5	20	1/4
C	DR300-T1000-QR - BRB*	615 176 118 0	1000	300	0.4	0.64	1.41	217.8	8.57	9.5	20	1/4
C	DR300-T550-QR	615 176 066 0	550	300	0.4	0.61	1.34	195.5	7.7	9.5	20	1/4
D	DR450-T5800-QR	615 176 162 0	5800	450	0.6	0.64	1.41	193	7.60	14	30	1/4
D	DR450-T4300-QR	615 176 161 0	4300	450	0.6	0.64	1.41	193	7.60	14	30	1/4
D	DR450-T2700-QR	615 176 160 0	2700	450	0.6	0.64	1.41	193	7.60	14	30	1/4
D	DR450-T1800-QR	615 176 159 0	1800	450	0.6	0.72	1.58	207	8.15	14	30	1/4
D	DR450-T1400-QR	615 176 158 0	1400	450	0.6	0.72	1.58	207	8.15	14	30	1/4
D	DR450-T1000-QR	615 176 157 0	1000	450	0.6	0.72	1.58	207	8.15	14	30	1/4

All models: Hose int. 6 mm (1/4")

Multi-Drills

Quick release heads

PIC REF	DESIGNATION	PART NUMBER	LENGTH L		COLLET MAX. CAPACITY		WEIGHT	
			mm	in.	mm	in.	kg	lb

COMPACT ANGLE HEADS

A	Short Compact 90° angle head Collet spindle	205 053 981 3	54.0	2.13	5.0	3/16	0.15	0.33
A	Compact 90° angle head Collet spindle	205 050 331 3	72.0	2.83	5.0	3/16	0.17	0.37
A	Compact 90° angle head 1/4" x 28 spindle	205 050 332 3	72.0	2.83	-	-	0.17	0.37
B	Compact 30° angle head Collet spindle	205 050 329 3	82.9	3.26	5.0	3/16	0.17	0.37
B	Compact 30° angle head 1/4" x 28 spindle	205 050 330 3	82.9	3.26	-	-	0.17	0.37
C	Compact 45° angle head Collet spindle	205 050 335 3	81.0	3.19	5.0	3/16	0.17	0.37
C	Compact 45° angle head 1/4" x 28 spindle	205 050 336 3	79.0	3.11	-	-	0.17	0.37
D	Compact 360° angle head Collet spindle	205 050 333 3	81.5	3.21	5.0	3/16	0.25	0.55
D	Compact 360° angle head 1/4" x 28 spindle	205 050 334 3	85.2	3.35	-	-	0.25	0.55
E	Short compact straight head Collet spindle	615 399 569 5	53.7	2.11	5.0	3/16	0.14	0.31
E	Short compact straight head 1/4"x28 Spindle	615 399 570 5	53.7	2.11	-	-	0.14	0.31
E	Compact straight head Collet spindle	615 399 571 5	71.7	2.82	5.0	3/16	0.16	0.35
E	Compact straight head 1/4"x28 Spindle	615 399 572 5	71.7	2.82	-	-	0.16	0.35

STANDARD ANGLE HEADS

F	Standard 90° angle head Collet spindle	205 050 338 3	75.7	2.98	6.4	1/4	0.23	0.51
F	Standard 90° angle head Collet spindle	205 050 353 3	75.7	2.98	8.0	5/16	0.23	0.51
F	Standard 90° angle head 1/4" x 28 spindle	205 050 339 3	75.7	2.98	-	-	0.24	0.53
F	Standard 90° angle head 5/16" x 24 spindle	205 050 340 3	75.7	2.98	-	-	0.23	0.51
G	Standard 45° angle head Collet spindle	615 398 702 5	90.7	3.57	6.4	1/4	0.23	0.51
G	Standard 45° angle head 1/4" x 28 spindle	615 398 704 5	87.9	3.46	-	-	0.23	0.51
H	Standard 360° angle head Collet spindle	205 050 341 3	96.8	3.81	6.4	1/4	0.32	0.70
H	Standard 360° angle head 1/4" x 28 spindle	205 050 342 3	94.5	3.72	-	-	0.32	0.70
H	Standard 360° angle head 5/16" x 24 spindle	205 050 343 3	94.5	3.72	-	-	0.32	0.70
I	Standard straight head Collet spindle	615 399 573 5	83.8	3.3	6.4	1/4	0.2	0.44
I	Standard straight head 1/4"x28 Spindle	615 399 574 5	83.8	3.3	-	-	0.2	0.44

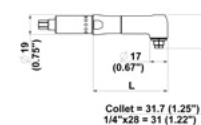
HEAVY DUTY HEADS

J	QR THD 90° Collet output	615 399 575 5	48.8	1.92	8	5/16	0.31	0.68
K	QR HD 90° Cnomo	615 399 576 5	48.8	1.92	-	-	0.3	0.66
L	QR SHD 90° Chuck output	615 399 577 5	48.8	1.92	-	-	0.43	0.95

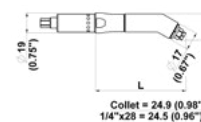
STRAIGHT HEADS

M	Chuck mounting 3/8" x 24	205 050 543 3	32.0	1.26	-	-	0.25	0.55
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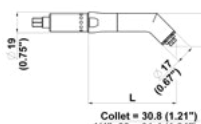
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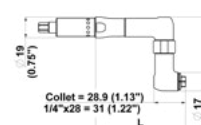
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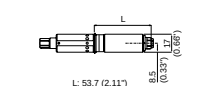
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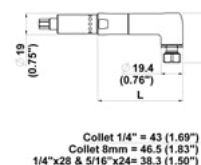
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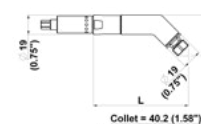
E



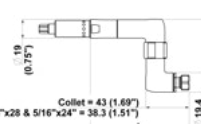
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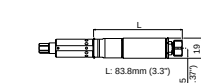
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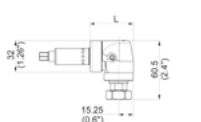
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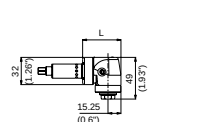
I



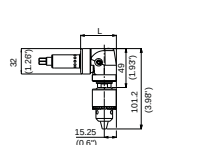
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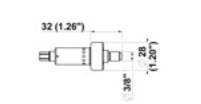
K



L



M



ACCESSORIES
see page 277



Collet for Compact Angle Heads: A, B, C, D, E (30°, 45°, 90°, 360°)



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

Collet for Standard Angle Heads : F, G, H, I (45°, 90°, 360°)



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

Collet for Standard Angle Head: P.N. 205 050 353 3



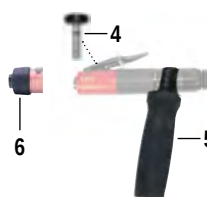
COLLET CAPACITY	PART NO.	COLLET CAPACITY	PART NO.	COLLET CAPACITY	PART NO.	COLLET CAPACITY	PART NO.
ø 2.0mm	615 526 066 0	ø 4.0mm	615 526 071 0	ø 5.9mm	615 526 078 0	ø 7.5mm	615 526 084 0
ø 2.4mm	615 526 067 0	ø 4.5mm	615 526 073 0	ø 6.0mm	615 526 079 0	ø 7.7mm	615 526 085 0
ø 2.5mm	615 526 068 0	ø 5.0mm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

ACCESSORIES INCLUDED

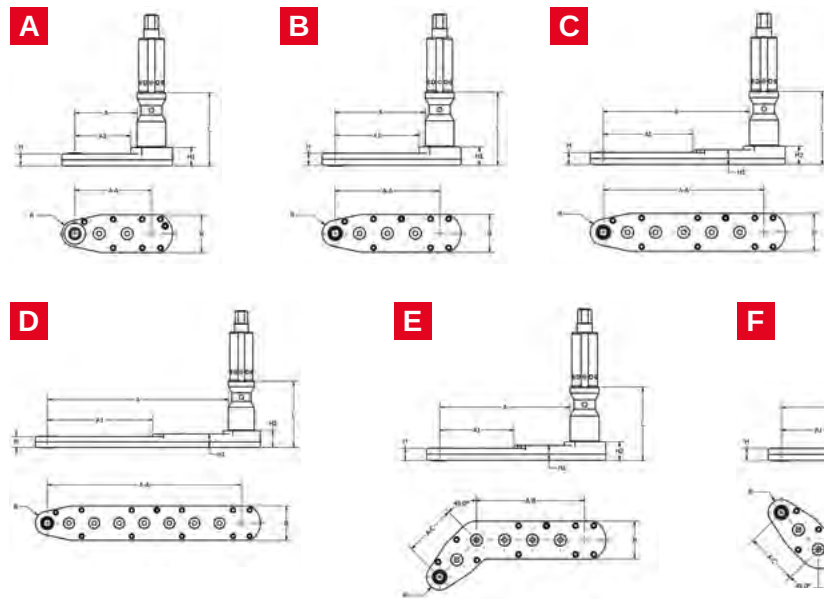
ITEM	PART NO.
With DR300	
2 Safety lever	205 050 288 3
With Angle heads A, B, C, D, E	
3 Collet ø 4.8mm (3/16") capacity	2552
• Flat wrench 8mm	615 802 069 0
• Flat wrench 10mm	615 802 070 0
with Angle heads F, G, H, I	
4 Collet ø 6.4mm (1/4") capacity	19182
• Flat wrenches 10mm	82623
With DR300/350/450/500	
5 Set of color plastic rings	615 399 250 0

OTHER OPTIONAL ACCESSORIES

ITEM	PART NO.
1 Short lever	205 050 299 3
4 Start button	615 399 266 0
5 Side handle	615 399 265 0
• Keyed chuck C6 - 3/8"x24 (Cap. 0.5 to 6.5mm)	205 055 272 3
• Keyed chuck C8 - 3/8"x24 (Cap. 0.5 to 8mm)	205 053 013 3
• Flat wrenches 8-9.5mm for Angle heads A, B, C, D & E	268263
• Flat wrenches 10-15 mm for Angle heads F, G, H & I	82623
6 Kit silencer NPT	615 399 313 0
6 Kit silencer BSP	615 399 311 0
6 Kit Bumper	615 399 312 0



Multi Drills - Accessories



Output



Threaded



Collet

PIC REF	MODEL		DRILLING DIRECTION	MAX DRILLING CAPACITY		H		H1		H2		A		A1		A-A		A-B		A-C		B		R		L		A°
	Thread 9/32"-40	Thread 1/4"x28"		mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	
A	DA13S3-CP2	DA13S2-CP2	Backward	5.0	3/16"	7.9	0.31	12.2	0.48	-	-	40.9	1.61	36.77	1.45	50.4	1.98	-	-	-	-	25	0.98	8.6	0.34	48.21	1.89	-
A	DA13S3-CP6	DA13S2-CP6	Backward	5.0	3/16"	7.9	0.31	12.2	0.48	-	-	40.9	1.61	36.77	1.45	50.4	1.98	-	-	-	-	25	0.98	8.6	0.34	126.9	4.99	-
A	DA23S3-CP2	DA23S2-CP2	Backward	6.35	1/4"	9.8	0.39	12.2	0.48	-	-	40.9	1.61	36.77	1.45	50.4	1.98	-	-	-	-	25	0.98	8.6	0.34	48.21	1.89	-
A	DA23S3-CP6	DA23S2-CP6	Backward	6.35	1/4"	9.8	0.39	12.2	0.48	-	-	40.9	1.61	36.77	1.45	50.4	1.98	-	-	-	-	25	0.98	8.6	0.34	126.9	4.99	-
A	DA33S3-CP2	DA33S2-CP2	Backward	8.0	5/16"	12.2	0.48	-	-	-	-	40.9	1.61	-	-	50.4	1.98	-	-	-	-	25	0.98	8.6	0.34	48.21	1.89	-
A	DA33S3-CP6	DA33S2-CP6	Backward	8.0	5/16"	12.2	0.48	-	-	-	-	40.9	1.61	-	-	50.4	1.98	-	-	-	-	25	0.98	8.6	0.34	126.9	4.99	-
B		DA04S2-CP2	Forward	3.18	1/8"	7.5	0.30	-	-	-	-	34.6	1.36	-	-	45.7	1.80	-	-	-	-	16	0.63	7.5	0.30	43.48	1.71	-
B		DA04S2-CP4	Forward	5	3/16"	7.5	0.30	-	-	-	-	34.72	1.36	-	-	45.7	1.80	-	-	-	-	16	0.63	7.5	0.30	43.48	1.71	-
B	DA14S3-CP2	DA14S2-CP2	Forward	5.0	3/16"	7.9	0.31	12.2	0.48	-	-	59.3	2.33	55.17	2.17	68.8	2.71	-	-	-	-	25	0.98	8.6	0.34	48.21	1.89	-
B	DA14S3-CP6	DA14S2-CP6	Forward	5.0	3/16"	7.9	0.31	12.2	0.48	-	-	59.3	2.33	55.17	2.17	68.8	2.71	-	-	-	-	25	0.98	8.6	0.34	126.9	4.99	-
B	DA24S3-CP2	DA24S2-CP2	Forward	6.35	1/4"	9.8	0.39	12.2	0.48	-	-	59.3	2.33	55.17	2.17	68.8	2.71	-	-	-	-	25	0.98	8.6	0.34	48.21	1.89	-
B	DA24S3-CP6	DA24S2-CP6	Forward	6.35	1/4"	9.8	0.39	12.2	0.48	-	-	59.3	2.33	55.17	2.17	68.8	2.71	-	-	-	-	25	0.98	8.6	0.34	126.9	4.99	-
B	DA34S3-CP2	DA34S2-CP2	Forward	8.0	5/16"	12.2	0.48	-	-	-	-	59.3	2.33	-	-	68.8	2.71	-	-	-	-	25	0.98	8.6	0.34	48.21	1.89	-
B	DA34S3-CP6	DA34S2-CP6	Forward	8.0	5/16"	12.2	0.48	-	-	-	-	59.3	2.33	-	-	68.8	2.71	-	-	-	-	25	0.98	8.6	0.34	126.9	4.99	-
C		DA06S2-CP2	Forward	3.18	1/8"	7.5	0.30	-	-	-	-	57.6	2.26	-	-	68.6	2.70	-	-	-	-	16	0.63	7.5	0.30	43.48	1.71	-
C		DA06S2-CP4	Forward	5.0	3/16"	7.5	0.30	-	-	-	-	57.58	2.26	-	-	68.6	2.70	-	-	-	-	16	0.63	7.5	0.30	43.48	1.71	-
C	DA16S3-CP2	DA16S2-CP2	Forward	5.0	3/16"	7.9	0.31	9.8	0.39	12.2	0.48	96.1	3.78	59.0	2.32	105.6	4.16	-	-	-	-	25	0.98	8.6	0.34	48.21	1.89	-
C	DA16S3-CP6	DA16S2-CP6	Forward	5.0	3/16"	7.9	0.31	9.8	0.39	12.2	0.48	96.1	3.78	59.0	2.32	105.6	4.16	-	-	-	-	25	0.98	8.6	0.34	126.9	4.99	-
C	DA26S3-CP2	DA26S2-CP2	Forward	6.35	1/4"	9.8	0.39	12.2	0.48	-	-	96.1	3.78	59.0	2.32	105.6	4.16	-	-	-	-	25	0.98	8.6	0.34	48.21	1.89	-
C	DA26S3-CP6	DA26S2-CP6	Forward	6.35	1/4"	9.8	0.39	12.2	0.48	-	-	96.1	3.78	59.0	2.32	105.6	4.16	-	-	-	-	25	0.98	8.6	0.34	126.9	4.99	-
C	DA36S3-CP2	DA36S2-CP2	Forward	8.0	5/16"	12.2	0.48	-	-	-	-	96.1	3.78	-	-	105.6	4.16	-	-	-	-	25	0.98	8.6	0.34	48.21	1.89	-
C	DA36S3-CP6	DA36S2-CP6	Forward	8.0	5/16"	12.2	0.48	-	-	-	-	96.1	3.78	-	-	105.6	4.16	-	-	-	-	25	0.98	8.6	0.34	126.9	4.99	-
D		DA08S2-CP2	Forward	3.18	1/8"	7.5	0.30	-	-	-	-	80.44	3.16	-	-	91.4	3.60	-	-	-	-	16	0.63	7.5	0.30	43.48	1.71	-
D	DA18S3-CP2	DA18S2-CP2	Forward	5.0	3/16"	7.9	0.31	9.8	0.39	12.2	0.48	132.9	5.23	77.4	3.05	142.4	5.61	-	-	-	-	25	0.98	8.6	0.34	48.21	1.89	-
D	DA18S3-CP6	DA18S2-CP6	Forward	5.0	3/16"	7.9	0.31	9.8	0.39	12.2	0.48	132.9	5.23	77.4	3.05	142.4	5.61	-	-	-	-	25	0.98	8.6	0.34	126.9	4.99	-
D	DA28S3-CP2	DA28S2-CP2	Forward	6.35	1/4"	9.8	0.39	12.2	0.48	-	-	132.9	5.23	77.4	3.05	142.4	5.61	-	-	-	-	25	0.98	8.6	0.34	48.21	1.89	-
D	DA28S3-CP6	DA28S2-CP6	Forward	6.35	1/4"	9.8	0.39	12.2	0.48	-	-	132.9	5.23	77.4	3.05	142.4	5.61	-	-	-	-	25	0.98	8.6	0.34	126.9	4.99	-
D	DA38S3-CP2	DA38S2-CP2	Forward	8.0	5/16"	12.2	0.48	-	-	-	-	132.9	5.23	-	-	142.4	5.61	-	-	-	-	25	0.98	8.6	0.34	48.21	1.89	-
D	DA38S3-CP6	DA38S2-CP6	Forward	8.0	5/16"	12.2	0.48	-	-	-	-	132.9	5.23	-	-	142.4	5.61	-	-	-	-	25	0.98	8.6	0.34	126.9	4.99	-
E		DA06R2-CP2	Forward	3.18	1/8"	7.5	0.30	-	-	-	-	49.41	1.94	-	-	-	-	45.7	1.80	22.9	0.90	16	0.63	7.5	0.30	43.48	1.71	50°
E		DA06R2-CP4	Forward	5.0	3/16"	7.5	0.30	-	-	-	-	49.41	1.94	-	-	-	-	45.7	1.80	22.9	0.90	16	0.63	7.5	0.30	43.48	1.71	50°
E	DA16R3-CP2	DA16R2-CP2	Forward	5.0	3/16"	7.9	0.31	9.8	0.39	12.2	0.48	86.02	3.39	59.0	2.32	-	-	71.2	2.80	34.4	1.35	25	0.98	8.6	0.34	48.21	1.89	45°
E	DA16R3-CP6	DA16R2-CP6	Forward	5.0	3/16"	7.9	0.31	9.8	0.39	12.2	0.48	86.02	3.39	59.0	2.32	-	-	71.2	2.80	34.4	1.35	25	0.98	8.6	0.34	126.9	4.99	45°
E	DA26R3-CP2	DA26R2-CP2	Forward	6.35	1/4"	9.8	0.39	12.2	0.48	-	-	86.02	3.39	59.0	2.32	-	-	71.2	2.80	34.4	1.35	25	0.98	8.6	0.34	48.21	1.89	45°
E	DA26R3-CP6	DA26R2-CP6	Forward	6.35	1/4"	9.8	0.39	12.2	0.48	-	-	86.02	3.39	59.0	2.32	-	-	71.2	2.80	34.4	1.35	25	0.98	8.6	0.34	126.9	4.99	45°
E	DA36R3-CP2	DA36R2-CP2	Forward	8.0	5/16"	12.2	0.48	-	-	-	-	86.02	3.39	-	-	-	-	71.2	2.80	34.4	1.35	25	0.98	8.6	0.34	48.21	1.89	45°
E	DA36R3-CP6	DA36R2-CP6	Forward	8.0	5/16"	12.2	0.48	-	-	-	-	86.02	3.39	-	-	-	-	71.2	2.80	34.4	1.35	25	0.98	8.6	0.34	126.9	4.99	45°
F		DA06L2-CP2	Forward	3.18	1/8"	7.5	0.30	-	-	-	-	49.41	1.94	-	-	-	-	45.7	1.80	22.9	0.90	16	0.63	7.5	0.30	43.48	1.71	50°
F		DA06L2-CP4	Forward	5.0	3/16"	7.5	0.30	-	-	-	-	49.41	1.94	-	-	-	-	45.7	1.80	22.9	0.90	16	0.63	7.5	0.30	43.48	1.71	50°
F	DA16L3-CP2	DA16L2-CP2	Forward	5.0	3/16"	7.9	0.31	9.8	0.39	12.2	0.48	86.02	3.39	59.0	2.32	-	-	71.2	2.80	34.4	1.35	25	0.98	8.6	0.34	48.21	1.89	45°
F	DA16L3-CP6	DA16L2-CP6	Forward	5.0	3/16"	7.9	0.31	9.8	0.39	12.2	0.48	86.02	3.39	59.0	2.32	-	-	71.2	2.80	34.4	1.35	25	0.98	8.6	0.34	126.9	4.99	45°
F	DA26L3-CP2	DA26L2-CP2	Forward	6.35	1/4"	9.8	0.39	12.2	0.48	-	-	86.02	3.39	59.0	2.32	-	-	71.2	2.80	34.4	1.35	25	0.98	8.6	0.34	48.21	1.89	45°
F	DA26L3-CP6	DA26L2-CP6	Forward	6.35	1/4"	9.8	0.39	12.2	0.48	-	-	86.02	3.39	59.0	2.32	-	-	71.2	2.80	34.4	1.35	25	0.98	8.6	0.34	126.9	4.99	45°
F	DA36L3-CP2	DA36L2-CP2	Forward	8.0	5/16"	12.2	0.48	-	-	-	-	86.02	3.39	-	-	-	-	71.2	2.80	34.4	1.35	25	0.98	8.6	0.34	48.21	1.89	45°
F	DA36L3-CP6	DA36L2-CP6	Forward	8.0	5/16"	12.2	0.48	-	-	-	-	86.02	3.39	-	-	-	-	71.2	2.80	34.4	1.35	25	0.98	8.6	0.34	126.9	4.99	45°

Angle Drills

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



A DR300-T...-T/S5-30 Series
300 W (0.4hp) / 1000 to 5500 rpm



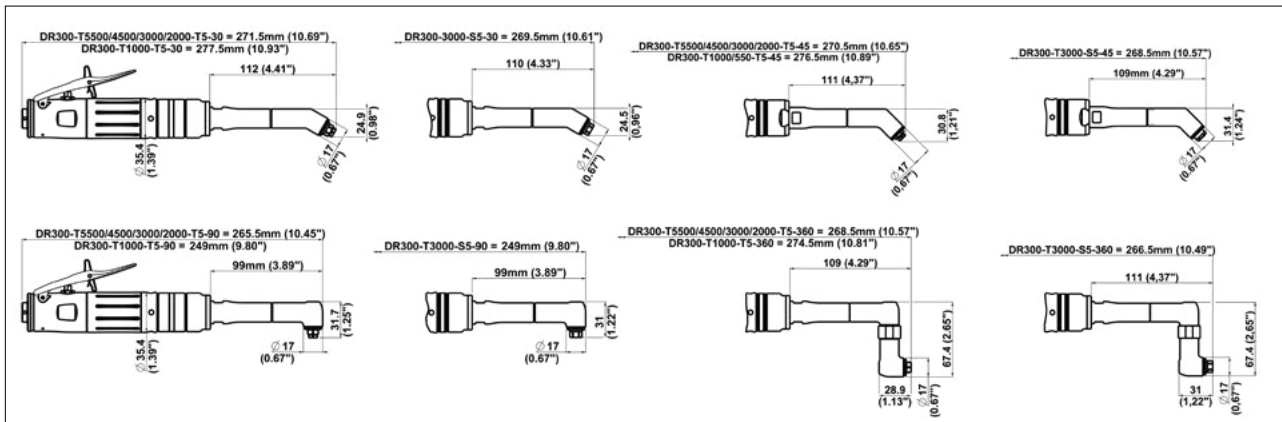
B DR300-T...-T/S5-45 Series
300 W (0.4hp) / 550 to 5500 rpm



C DR300-T...-T/S5-90 Series
300 W (0.4hp) / 1000 to 5500 rpm



D DR300-T...-T/S5-360 Series
300 W (0.4hp) / 1000 to 5500 rpm



*BRB
Button + Rear Bumper
available as well as accessory



ACCESSORIES
see page 282

PIC REF	MODEL	PART NUMBER	MODEL	PART NUMBER	FREE SPEED	MOTOR POWER		WEIGHT	
					rpm	W	hp	kg	lb
30° - COLLET SPINDLE			30° - 1/4" x 28 SPINDLE		Max. capacity: 5mm (3/16")				
A	DR300-T5500-T5-30	615 176 077 0	DR300-T5500-S5-30	615 176 133 0	5500	300	0.4	0.66	1.45
A	DR300-T4500-T5-30	615 176 076 0	DR300-T4500-S5-30	615 176 132 0	4500	300	0.4	0.66	1.45
A	DR300-T3000-T5-30	615 176 074 0	DR300-T3000-S5-30	615 176 075 0	3000	300	0.4	0.66	1.45
A	DR300-T3000-T5-30 - BRB*	615 176 119 0			3000	300	0.4	0.66	1.45
A	DR300-T2000-T5-30	615 176 073 0	DR300-T2000-S5-30	615 176 131 0	2000	300	0.4	0.66	1.45
A	DR300-T1000-T5-30	615 176 072 0	DR300-T1000-S5-30	615 176 130 0	1000	300	0.4	0.76	1.67
45° - COLLET SPINDLE			45° - 1/4" x 28 SPINDLE		Max. capacity: 5mm (3/16")				
B	DR300-T5500-T5-45	615 176 096 0	DR300-T5500-S5-45	615 176 146 0	5500	300	0.4	0.67	1.47
B	DR300-T4500-T5-45	615 176 095 0	DR300-T4500-S5-45	615 176 145 0	4500	300	0.4	0.67	1.47
B	DR300-T3000-T5-45	615 176 093 0	DR300-T3000-S5-45	615 176 094 0	3000	300	0.4	0.67	1.47
B	DR300-T2000-T5-45	615 176 092 0	DR300-T2000-S5-45	615 176 144 0	2000	300	0.4	0.67	1.47
B	DR300-T1000-T5-45	615 176 091 0	DR300-T1000-S5-45	615 176 143 0	1000	300	0.4	0.76	1.67
B	DR300-T550-T5-45	615 176 090 0	DR300-T550-S5-45	615 176 142 0	550	300	0.4	0.76	1.67
90° - COLLET SPINDLE			90° - 1/4" x 28 SPINDLE		Max. capacity: 5mm (3/16")				
C	DR300-T5500-T5-90	615 176 083 0	DR300-T5500-S5-90	615 176 137 0	5500	300	0.4	0.68	1.5
C	DR300-T4500-T5-90	615 176 082 0	DR300-T4500-S5-90	615 176 136 0	4500	300	0.4	0.68	1.5
	DR300-T4500-T5-90 - BRB*	615 176 120 0			4500	300	0.4	0.68	1.5
C	DR300-T3000-T5-90	615 176 080 0	DR300-T3000-S5-90	615 176 081 0	3000	300	0.4	0.68	1.5
C	DR300-T2000-T5-90	615 176 079 0	DR300-T2000-S5-90	615 176 135 0	2000	300	0.4	0.68	1.5
C	DR300-T1000-T5-90	615 176 078 0	DR300-T1000-S5-90	615 176 134 0	1000	300	0.4	0.78	1.72
360° - COLLET SPINDLE			360° - 1/4" x 28 SPINDLE		Max. capacity: 5mm (3/16")				
D	DR300-T5500-T5-360	615 176 089 0	DR300-T5500-S5-360	615 176 141 0	5500	300	0.4	0.74	1.63
D	DR300-T4500-T5-360	615 176 088 0	DR300-T4500-S5-360	615 176 140 0	4500	300	0.4	0.74	1.63
D	DR300-T3000-T5-360	615 176 086 0	DR300-T3000-S5-360	615 176 087 0	3000	300	0.4	0.74	1.63
D	DR300-T2000-T5-360	615 176 085 0	DR300-T2000-S5-360	615 176 139 0	2000	300	0.4	0.74	1.63
D	DR300-T1000-T5-360	615 176 084 0	DR300-T1000-S5-360	615 176 138 0	1000	300	0.4	0.84	1.85

All models: Air flow: 9.5 l/s (20 cfm) - Air inlet 1/4" - Hose int. 6 mm (1/4")

Angle Drills

Standard Head - Max capacity: 6.4mm (1/4") Collet & 1/4" x 28 Spindle



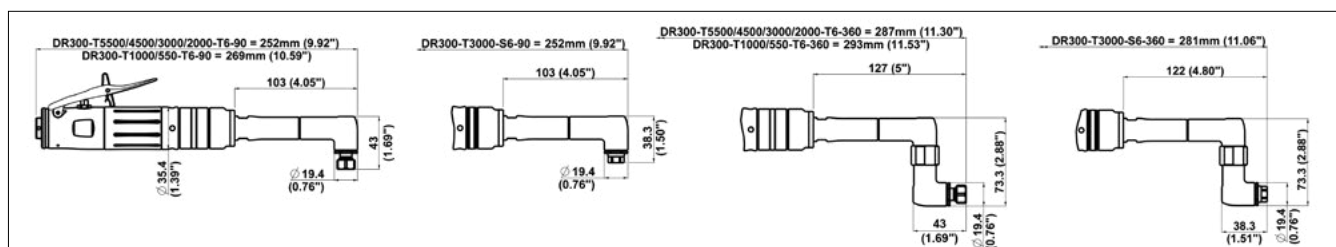
A DR300-T...-T/S6-90 Series
300 W (0.4hp) / 550 to 5500 rpm



C DR300-T...-T/S6-360 Series
300 W (0.4hp) / 550 to 5500 rpm



B DR450-T...-T/S6-90 Series
450 W (0.6hp) / 1400 to 5800 rpm



*BRB
Button + Rear Bumper
available as well as accessory



ACCESSORIES
see page 282

PIC REF	MODEL	PART NUMBER	MODEL	PART NUMBER	FREE SPEED	MOTOR POWER		WEIGHT	
					rpm	W	hp	kg	lb
90° - COLLET SPINDLE			90° - 1/4" x 28 SPINDLE		Max. capacity: 6.4mm (1/4")				
A	DR300-T5500-T6-90	615 176 103 0	DR300-T5500-S6-90	615 176 151 0	5500	300	0.4	0.7	1.54
A	DR300-T4500-T6-90	615 176 102 0	DR300-T4500-S6-90	615 176 150 0	4500	300	0.4	0.7	1.54
A	DR300-T4500-T6-90 - BRB*	615 176 124 0							
A	DR300-T3000-T6-90	615 176 100 0							
A	DR300-T3000-T6-90 - BRB*	615 176 123 0	DR300-T3000-S6-90	615 176 101 0	3000	300	0.4	0.7	1.54
A	DR300-T2000-T6-90	615 176 099 0	DR300-T2000-S6-90	615 176 149 0	2000	300	0.4	0.7	1.54
A	DR300-T2000-T6-90 - BRB*	615 176 122 0							
A	DR300-T1000-T6-90	615 176 098 0	DR300-T1000-S6-90	615 176 148 0	1000	300	0.4	0.79	1.74
A	DR300-T1000-T6-90 - BRB*	615 176 121 0							
A	DR300-T550-T6-90	615 176 097 0	DR300-T550-S6-90	615 176 147 0	550	300	0.4	0.79	1.74
B	DR450-T5800-T6-90	615 176 167 0	DR450-T5800-S6-90	615 176 172 0	5800	450	0.6	0.76	1.67
B	DR450-T4300-T6-90	615 176 166 0	DR450-T4300-S6-90	615 176 171 0	4300	450	0.6	0.76	1.67
B	DR450-T2700-T6-90	615 176 165 0	DR450-T2700-S6-90	615 176 170 0	2700	450	0.6	0.76	1.67
B	DR450-T1800-T6-90	615 176 164 0	DR450-T1800-S6-90	615 176 169 0	1800	450	0.6	0.85	1.87
B	DR450-T1400-T6-90	615 176 163 0	DR450-T1400-S6-90	615 176 168 0	1400	450	0.6	0.85	1.87
360° - COLLET SPINDLE			360° - 1/4" x 28 SPINDLE		Max. capacity: 6.4mm (1/4")				
C	DR300-T5500-T6-360	615 176 110 0	DR300-T5500-S6-360	615 176 156 0	5500	300	0.4	0.82	1.81
C	DR300-T4500-T6-360	615 176 109 0	DR300-T4500-S6-360	615 176 155 0	4500	300	0.4	0.82	1.81
C	DR300-T3000-T6-360	615 176 107 0	DR300-T3000-S6-360	615 176 108 0	3000	300	0.4	0.82	1.81
C	DR300-T3000-T6-360 - BRB*	615 176 125 0							
C	DR300-T2000-T6-360	615 176 106 0	DR300-T2000-S6-360	615 176 154 0	2000	300	0.4	0.82	1.81
C	DR300-T1000-T6-360	615 176 105 0	DR300-T1000-S6-360	615 176 153 0	1000	300	0.4	0.91	2
C	DR300-T550-T6-360	615 176 104 0	DR300-T550-S6-360	615 176 152 0	550	300	0.4	0.91	2

All models: Air flow: 9.5 l/s (20 cfm) - Air inlet 1/4" - Hose int. 6 mm (1/4")



Angle Drills

Heavy Duty 90° Angle Head



A
DR300-T...-THD-90 Series
300 W (0.4hp) / 900 & 2000 rpm



B
DR300-T...-SHD-90 Series
300 W (0.4hp) / 900 & 2000 rpm



C
DR450-T...-THD-90 Series
300 W (0.4hp) / 900 & 2000 rpm



D
DR450-T...-SHD-90 Series
300 W (0.4hp) / 900 & 2000 rpm

PIC REF	MODEL	PART NUMBER	FREE SPEED	MOTOR POWER		WEIGHT		LENGTH		AIR FLOW		AIR INLET
			rpm	W	hp	kg	lb	mm	in.	l/s	cfm.	in.
90° - COLLET SPINDLE Max capacity: 8mm (5/16")												
A	DR300-T2000-THD-90	615 176 111 0	2000	300	0.4	0.73	1.61	189.5	7.46	9.5	20	1/4
A	DR300-T900-THD-90	615 176 112 0	900	300	0.4	0.83	1.83	206	8.11	9.5	20	1/4
A	DR300-T600-THD-90	615 176 116 0	600	300	0.4	0.83	1.83	206	8.11	9.5	20	1/4
C	DR450-T3000-THD-90	615 176 176 0	3000	450	0.6	0.8	1.76	191.5	7.54	14	30	1/4
C	DR450-T1800-THD-90	615 176 175 0	1800	450	0.6	0.8	1.76	191.5	7.54	14	30	1/4
C	DR450-T1000-THD-90	615 176 174 0	1000	450	0.6	0.89	1.96	205.5	8.09	14	30	1/4
C	DR450-T650-THD-90	615 176 173 0	650	450	0.6	0.89	1.96	205.5	8.09	14	30	1/4
90° - KEY CHUCK Max capacity: 8mm (5/16")												
B	DR300-T2000-SHD-90	615 176 113 0	2000	300	0.4	0.86	1.89	189.5	7.46	9.5	20	1/4
B	DR300-T900-SHD-90	615 176 114 0	900	300	0.4	0.96	2.11	206	8.11	9.5	20	1/4
B	DR300-T600-SHD-90	615 176 117 0	600	300	0.4	0.96	2.11	206	8.11	9.5	20	1/4
D	DR450-T3000-SHD-90	615 176 180 0	3000	450	0.6	0.92	2.03	191.5	7.54	14	30	1/4
D	DR450-T1800-SHD-90	615 176 179 0	1800	450	0.6	0.92	2.03	191.5	7.54	14	30	1/4
D	DR450-T1000-SHD-90	615 176 178 0	1000	450	0.6	1.02	2.25	205.5	8.09	14	30	1/4
D	DR450-T650-SHD-90	615 176 177 0	650	450	0.6	1.02	2.25	205.5	8.09	14	30	1/4

All models: Air flow: Hose int. 6 mm (1/4")

Accessories for Angle Drills

Collet for Compact Angle Drills DR300-T5.. - Maximum capacity: 5 mm (3/16")



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

Collet for Standard Angle Drills DR300-T6.. - Maximum capacity: 6.4 mm (1/4")



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

Collet for Heavy Duty Angle Drills DR300-THD.. - Maximum capacity: 8 mm (5/16")



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

ACCESSORIES INCLUDED

ITEM	COMPACT DR300-T5..	STANDARD DR300-T6..	COMPACT DR300-S5	STANDARD DR300-S6	HEAVY DUTY DR300-THD	HEAVY DUTY DR300-SHD
	COLLET SPINDLE		1/4" X 28 SPINDLE		COLLET	CHUCK
1 ø 4.8mm (3/16") capacity collet	2552					
2 ø 6.4mm (1/4") capacity collet		19182				
3 ø 8mm (5/16") capacity collet					2872	
4 Chuck threaded 3/8" UNF - cap 8mm (5/16") with key						205 053 013 3
• Chuck key						410213
5 Safety lever	205 050 288 3	205 050 288 3	205 050 288 3	205 050 288 3	205 050 288 3	205 050 288 3
• Flat wrench 8-9.5mm	268263					
• Flat wrenches 10-15mm		82623				

OTHER OPTIONAL ACCESSORIES

ITEM	DR300-T5.. DR300-S5..	DR300-T6.. DR300-S6..	DR300-THD..	DR300-SHD..
6 Inlet button with lever recess plugs	615 399 266 0	615 399 266 0	615 399 266 0	
7 Short lever	205 050 299 3	205 050 299 3	205 050 299 3	205 050 299 3
8 Side handle				615 399 265 0
9 Kit silencer NPT	615 399 313 0	615 399 313 0	615 399 313 0	615 399 313 0
9 Kit silencer BSP	615 399 311 0	615 399 311 0	615 399 311 0	615 399 311 0
9 Kit Bumper	615 399 312 0	615 399 312 0	615 399 312 0	615 399 312 0



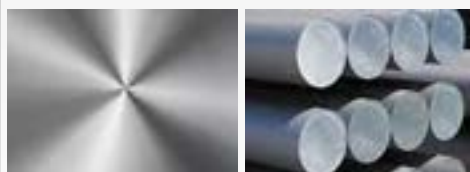


Pistol Grip Drills

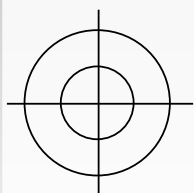


■ Wide range of pistol drills with best in class power-to-weight ratio

■ How to make the right selection?



1
Material
drilled



2
Diameter



3
Tool power & speed



4
Accessory for
each application

■ Tool range

Our range covers a wide range of applications to answer all your requirements



DR350



DR500



DR750



Pistol Grip Drills



A
DR350 Series
350 W (0.5hp) / 550 to 20000 rpm



B
DR500 Series
500 W (0.68hp) / 400 to 18500 rpm



C
DR750 Series
750 W (1hp) / 400 to 20000 rpm



D

Color rings to identify your tools speed



Model	D		H	
	mm	in.	mm	in.
DR350-P..	35	1.38	135	5.3
DR500-P	36.5	1.44	135	5.3
DR750-P..	47	1.85	146	5.75

PIC REF	MODEL	PART NUMBER	MODEL	PART NUMBER	FREE SPEED	MOTOR POWER		STALL TORQUE		WEIGHT W/O CHUCK		LENGT L	
					rpm	W	hp	Nm	in.lb	kg	lb	mm	in.
DR350 - KEY CHUCK			DR350 - WITHOUT CHUCK										
A	DR350-P20000-C8	205 147 252 4	DR350-P20000*	205 147 359 4	20000	350	0.5	0.6	5.3	0.49	1.1	120	4.72
A	DR350-P5500-C8	205 147 250 4	DR350-P5500*	205 147 358 4	5500	350	0.5	2.3	20.4	0.49	1.1	136	5.35
A	DR350-P4500-C8	205 147 382 4	DR350-P4500*	205 147 384 4	4500	350	0.5	2.7	23.9	0.49	1.1	136	5.35
A	DR350-P3000-C8	205 147 248 4	DR350-P3000*	205 147 357 4	3000	350	0.5	4.0	35.4	0.49	1.1	136	5.35
A	DR350-P2000-C8	205 147 246 4	DR350-P2000*	205 147 356 4	2000	350	0.5	5.4	47.8	0.49	1.1	136	5.35
A	DR350-P1000-C10	205 147 244 4	DR350-P1000*	205 147 355 4	1000	350	0.5	12.7	112.4	0.57	1.3	154	6.06
A	DR350-P550-C10	205 147 242 4	DR350-P550*	205 147 354 4	550	350	0.5	18.6	164.6	0.57	1.3	154	6.06

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

DR500 - KEY CHUCK					DR500 - WITHOUT CHUCK									
B	DR500-P18500-C8	205 147 676 4	DR500-P18500*	205 147 678 4	18500		500	0.68	1.0	8.85	0.56	1.2	141	5.55
B	DR500-P5800-C8	205 147 673 4	DR500-P5800*	205 147 675 4	5800		500	0.68	3.1	27.4	0.56	1.2	141	5.55
B	DR500-P4300-C8	205 147 670 4	DR500-P4300*	205 147 672 4	4300		500	0.68	4.2	37.2	0.56	1.2	141	5.55
B	DR500-P2700-C8	205 147 667 4	DR500-P2700*	205 147 669 4	2700		500	0.68	6.9	61.1	0.56	1.2	141	5.55
B	DR500-P1800-C10	205 147 664 4	DR500-P1800*	205 147 666 4	1800		500	0.68	9.9	87.6	0.64	1.4	155	6.1
B	DR500-P1400-C10	205 147 661 4	DR500-P1400*	205 147 663 4	1400		500	0.68	13.4	118.6	0.64	1.4	155	6.1
B	DR500-P1000-C10	205 147 658 4	DR500-P1000*	205 147 660 4	1000		500	0.68	18.0	159	0.64	1.4	155	6.1
B	DR500-P600-C13	205 147 655 4	DR500-P600*	205 147 657 4	600		500	0.68	28.7	254	0.64	1.4	155	6.1
B	DR500-P400-C13	205 147 652 4	DR500-P400*	205 147 654 4	400		500	0.68	46.0	407	0.64	1.4	155	6.1

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

DR750 - KEY CHUCK					DR750 - WITHOUT CHUCK									
C	DR750-P20000-C8	205 146 659 4	DR750-P20000*	205 147 458 4	20000		750	1	1.6	14.2	0.9	2.0	152	5.98
C	DR750-P6000-C8	1465124	DR750-P6000*	205 147 417 4	6000		750	1	5.3	46.9	0.9	2.0	152	5.98
C	DR750-P4100-C8	1465114	DR750-P4100*	205 147 456 4	4100		750	1	7.1	62.8	0.9	2.0	152	5.98
C	DR750-P3300-C10	1465104	DR750-P3300*	205 147 455 4	3300		750	1	9.6	85.0	0.9	2.0	152	5.98
C	DR750-P2700-C10	1465094	DR750-P2700*	205 147 416 4	2700		750	1	11.1	98.2	0.9	2.0	152	5.98
C	DR750-P1300-C10	1465084	DR750-P1300*	205 147 415 4	1300		750	1	23.9	211	1.15	2.5	184	7.24
C	DR750-P750-C13	1465074	DR750-P750*	205 147 452 4	750		750	1	41.0	363	1.15	2.5	184	7.24
C	DR750-P400-C13	205 146 658 4	DR750-P400**	205 147 451 4	400		750	1	55.0	487	1.15	2.5	184	7.24

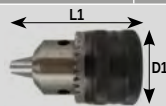
DR750 - JACOBS TAPER 1 SPINDLE - WITHOUT CHUCK

D	DR750-P20000-JT1	205 146 667 4	20000	750	1	1.6	14.2	0.9	2.0	152	5.98
D	DR750-P6000-JT1	205 146 666 4	6000	750	1	5.3	46.9	0.9	2.0	152	5.98
D	DR750-P3300-JT1	205 146 664 4	3300	750	1	9.6	85.0	0.9	2.0	152	5.98
D	DR750-P2700-JT1	205 146 663 4	2700	750	1	11.1	98.2	0.9	2.0	152	5.98
D	DR750-P1300-JT1	205 146 662 4	1300	750	1	23.9	211	1.15	2.5	184	7.24
D	DR750-P750-JT1	205 146 661 4	750	750	1	41.0	363	1.15	2.5	184	7.24
D	DR750-P400-JT1	205 146 660 4	400	750	1	55.0	487	1.15	2.5	184	7.24

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

Accessories

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

CHUCK PART NO.	CHUCK MOUNT	CHUCK CAPACITY		DIMENSIONS				WEIGHT		PART NO. KEY	DR3...P...C8	DR3...P...C10	DR500-P...C13	DR750-P..	
				D1		L1					DR500-P...C8	DR500-P...C10	DR750-P...C13	JT1	
		mm	in.	mm	in.	mm	in.	g	lb						
															
205 055 272 3	3/8"-24	0.5 - 6.5	1/4	29.3	1.15	42.5	1.67	121	0.27	29182	O	O	O		
205 053 013 3	3/8"-24	0.5 - 8	5/16	29.3	1.15	42.5	1.67	120	0.26	410213	L				
205 052 954 3	3/8"-24	1 - 10	3/8	37	1.46	49.5	1.95	204	0.45	29232		L			
473113	3/8"-24	1.5 - 13	1/2	42	1.67	59	2.32	371	0.82	895 101 145 3			L		
29142	1/2"-20	1.5 - 13	1/2	42	1.67	59	2.32	362	0.80	895 101 145 3			L		
29492	1JT	0.5 - 6.5	1/4	29.3	1.15	42.5	1.67	112	0.25	29182				O	
34752	2JT	1 - 10	3/8	42	1.67	61.5	2.4	386	0.85	895 101 145 3				O*	
34332	2JT	1 - 13	1/2	50	1.97	67.5	2.66	900	1.98					O*	
															
473433	3/8"-24	0 - 8	5/16	32	1.26	61.5	2.4	285	0.63		O	O			
473423	3/8"-24	0.5 - 10	3/8	35.8	1.4	66	2.6	390	0.86			O			
205 047 819 3	3/8"-24	1 - 13	1/2	40	1.58	76.3	3	559	1.23				O		
205 056 060 3	1/2"-20	1 - 13	1/2	40	1.58	76.3	3	548	1.21				O		
524.09	1JT	0 - 6.5	1/4	32	1.26	59.5	2.34	284	0.62					O	
524.15	1JT	0.5 - 10	3/8	35.8	1.4	66	2.6	390	0.86					O	
524.10	2JT	0.5 - 10	3/8	40	1.58	87.5	3.4	636	1.4					O*	
524.16	2JT	1 - 13	1/2	46	1.8	91	3.6	904	1.99					O*	

* To use 1JT to 2JT adaptor : P/N 12243

☒ INCLUDED WITH THE TOOL
☐ OPTIONAL ACCESSORIES

ACCESSORIES INCLUDED		DR350-P...C8 DR500-P...C8 DR750-P...C8.	DR350-P...C10 DR500-P...C10 DR750-P...C10	DR500-P...C13 DR750-P...C13
ITEM				
1	Chuck guard for DR350-P...C8	205 049 275 3		
1	Chuck guard for DR500-P...C8	205 049 486 3		
1	Chuck guard for DR750-P...C8 & C10	473143	473133	
2	Side handle for DR350-P550 & P1000	205 049 446 3	205 049 446 3	
2	Side handle for DR500-P400 to P1800		205 053 102 3	205 053 102 3
2	Side handle for DR750-P	473173	473173	473173
3	Suspension bail for DR750-P	473153	473153	473153
With DR300/350/450/500				
4	Set of color plastic rings	615 399 250 0		



OTHER OPTIONAL ACCESSORIES

ITEM		DR350-P...	DR500-P...	DR750-P...	DR750-P...JT1 MOUNT
	• Chuck guard for DR750-P...JT1 with chuck key - cap 6.5mm (1/4")				473143
2	Side handle for DR350 / 500	205 049 446 3	205 053 102 3	473133	
	• Adaptor - JT1 female to JT2 male (for DR750-P...JT1)				12243
	• Flat wrench, 12.7mm (1/2")				15533



Straight Grip Drills



A

DR300 Series
300 W (0.4hp) / 550 to 20000 rpm

PIC REF	MODEL	PART NUMBER	MODEL	PART NUMBER	FREE SPEED	MOTOR POWER		STALL TORQUE		WEIGHT W/O CHUCK		LENGHT W/O CHUCK	
					rpm	W	hp	Nm	in.lb	kg	lb	mm	in.
DR300 - KEY CHUCK			DR300 - WITHOUT CHUCK										
A	DR300-T20000-C8	615 176 065 0	DR300-T20000	615 176 064 0	20000	300	0.4	0.6	5.3	0.44	0.97	138	7.28
A	DR300-T5500-C8	615 176 063 0	DR300-T5500	615 176 062 0	5500	300	0.4	2.3	20.4	0.49	1.08	167	6.57
A	DR300-T4500-C8	615 176 061 0	DR300-T4500	615 176 060 0	4500	300	0.4	2.7	23.9	0.49	1.08	167	6.57
A	DR300-T3000-C8	615 176 059 0	DR300-T3000	615 176 058 0	3000	300	0.4	4.0	35.4	0.49	1.08	167	6.57
A	DR300-T2000-C8	615 176 057 0	DR300-T2000	615 176 056 0	2000	300	0.4	5.4	47.8	0.49	1.08	167	6.57
A	DR300-T1000-C10	615 176 055 0	DR300-T1000	615 176 054 0	1000	300	0.4	12.7	112.4	0.60	1.32	184	7.24
A	DR300-T550-C10	615 176 053 0	DR300-T550	615 176 052 0	550	300	0.4	18.6	164.6	0.60	1.32	184	7.24

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

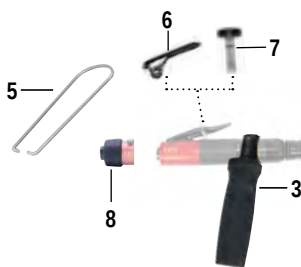


ACCESSORIES INCLUDED

ITEM	DR300-P...C8	DR300-P...C10
1 Keyed chuck 3/8" UNF - cap 8mm (5/16") (with key)	205 053 013 3	-
1 Keyed chuck 3/8" UNF - cap 10mm (3/8") (with key)	-	205 052 954 3
• Chuck key	410213	29232
2 Chuck guard for DR300-P...C8	615 049 275 3	-
3 Side handle for DR300-T...C10	-	205 049 446 3
4 Safety lever for DR300-T...	205 050 288 3	205 050 288 3
• Exhaust hose for DR300-T...	205 051 259 3	205 051 259 3



DESCRIPTION	PART NO.
DR300 Set of color plastic rings	615 399 250 0



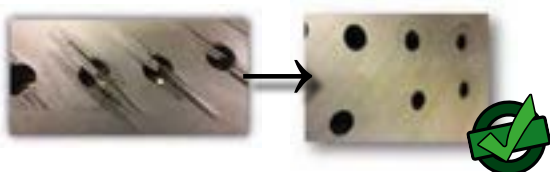
OPTIONAL ACCESSORIES

ITEM	DR300
3 Side handle for DR300	615 399 265 0
5 Suspension Bail	280893
6 Short lever	205 050 299 3
7 Kit inlet button	615 399 266 0
8 Kit silencer NPT	615 399 313 0
8 Kit silencer BSP	615 399 311 0
8 Kit Bumper	615 399 312 0

Controlled drilling



- Full range of solutions for composite drilling applications
- Avoid quality issues with thrust limitation device, which eliminates:
 - Composite delamination
 - Breakout burrs
 - Excessive wear on cutters
 - Operator dependence
- Easily adaptable to standard Desoutter pistol & straight drills
- Fully customizable (bushing, Vacuum...)
- Easy cutter change



Adjustable thrust limitation force
Option: activation of thrust limitation only at exit point

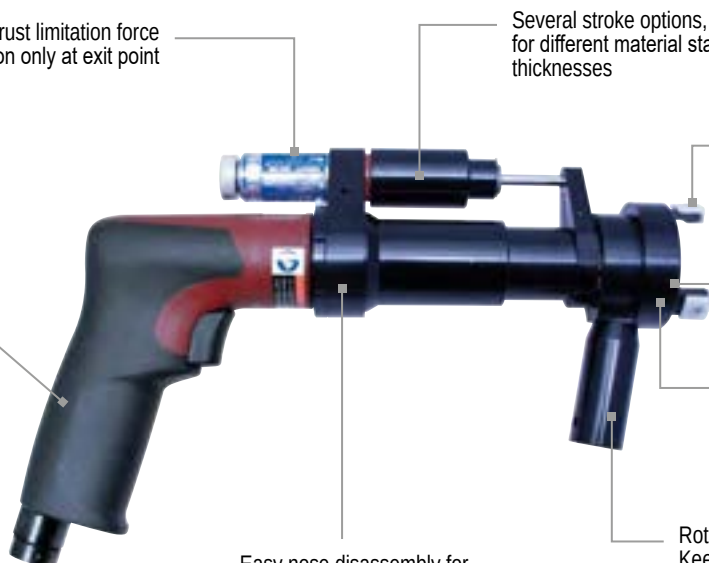
Several stroke options,
for different material stack
thicknesses

Nylon Protective Tripod Feet
Protects drilling surface

Wide range of tools,
shapes and speeds
Easy adaptation to
Desoutter drill range

Rotating Tripod Foot
Ensures perpendicularity

Guided Drill Bushing
Ensures perfect Run-Out



Easy nose disassembly for
cutter replacement

Rotating Vacuum Shroud
Keeps working area
clean and safe

How to order:

DR500-P18500 - STR25 - 4.5 NVT



1 Tool power & ergonomics
Pistol tools: see page 206
DR350: 350W (0,5hp)
DR500: 500W (0,68hp)
Straight tools: see page 206
DR300: 300W (0,4hp)
DR450: 450W (0,6hp)

2 Tool Speed
3 HCU Unit Stroke
STR25: 25mm (1")
STR37 : 37mm (1.5")
* More strokes available on demand

4 Cutter size
Collets Series 200

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

5 Nose type
N: No tripod
V: Vacuum
T: Tripod





A

T500 Series
0.5kW (0.68hp) / 400 & 600 rpm



B

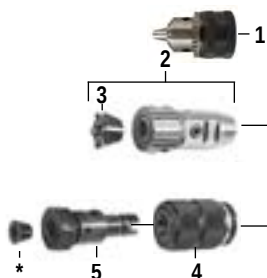
T450 Series
0.5kW (0.68hp) / 400 & 600 rpm

PIC REF	MODEL	PART NUMBER	FREE SPEED	RE-VERSE SPEED	MOTOR POWER		MAX. TAPPING TORQUE		WEIGHT		LENGTH		AIR FLOW		AIR INLET
			rpm	rpm	kW	hp	STEEL	ALUMINIUM	kg	lb	mm	in.	l/s	cfm	in.

TAPPERS

A	T500-P400	205 147 995 4	400	800	0.5	0.68	M10	M12	0.64	1.4	263	10.35	14	30	1/4
A	T500-P600	205 147 996 4	600	1200	0.5	0.86	M10	M12	0.64	1.4	263	10.35	14	30	1/4
B	T450-T400	615 176 181 0	400	800	0.5	0.68	M10	M12	0.64	1.4	263	10.35	14	30	1/4
B	T450-T600	615 176 182 0	600	1200	0.5	0.86	M10	M12	0.64	1.4	263	10.35	14	30	1/4

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



OPTIONAL ACCESSORIES

ITEM		PART NO.
1	Keyed chuck (1JT) - 0,5 to 6,5mm (1/4") (with key) T500-P600	29492
	• Chuck key - T500-P400	29232
	• Chuck key - T500-P600	29182
2	Precision collet tap holder (including collet cap. M3 to M8)	29452
	• Collet capacity M3 to M7 (1/8" to 9/32")	29482
	• Collet capacity M4 to M8 (5/32" to 5/16")	29472
3	Collet capacity M6 to M12 (15/64" to 15/32")	97982
4	Quick Release Chuck (1 JT)	16852
5	Quick Release Tap Holder (1 JT)	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

*2mm A/F hexagon key for Tap Holder grub screws

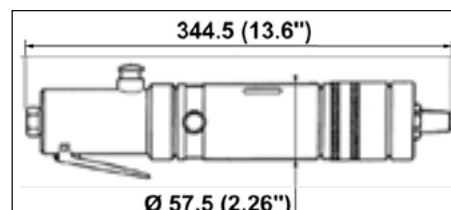
29443

206773



A

2H16 Series
Variable speed setting
90 to 500 rpm - 47 to 240 Nm



PIC REF	MODEL	PART NUMBER	LOW SPEED SETTING	HIGH SPEED SETTING	MAX. TAPPING TORQUE		WEIGHT		AIR FLOW		AIR INLET
			rpm	rpm	LOW SPEED	HIGH SPEED	kg	lb	l/s	cfm	

TAPPERS

A	2H16-L-160/500-B18	1434264	160	500	140	103	47	34.7	3.1	6.8	15.6	33	3/8
A	2H16-L-90/250-B18	1434344	90	250	240	177	90	66.4	3.1	6.8	15.6	33	3/8

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

Deburring tools & Rivet Shaver



A

C27-LX-1450
1450 rpm
Collet size 6,4mm (1/4")



C

C27-LX300/400-T6-90 - BRB
300-400 rpm
Collet size 6,4mm (1/4")



E

RS450 Series
18500 rpm



B

C27-LX300-T6-45 - BRB
300 rpm
Collet size 6,4mm (1/4")



D

C27-LX300-QR
300 rpm
Collet size 6,4mm (1/4")



F

RS500 Series
18500 rpm



***BRB**
Button + Rear Bumper
available as well as accessory

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.

HOLE DEBURRING TOOLS

A	C27-LX-1450	615 176 115 0	1450	6.4 (1/4")*	—	—	0.68	1.5	220.5	8.68	9.5	20	1/4	6	1/4
B	C27-LX300-T6-45 - BRB*	615 176 126 0	300	6.4 (1/4")*	—	—	0.82	1.81	291.5	11.48	8	17	1/4	6	1/4
C	C27-LX300-T6-90 - BRB*	615 176 128 0	300	6.4 (1/4")*	—	—	0.82	1.81	291.5	11.48	8	17	1/4	6	1/4
C	C27-LX400-T6-90 - BRB*	615 176 127 0	400	6.4 (1/4")*	—	—	0.82	1.81	291.5	11.48	8	17	1/4	6	1/4
D	C27-LX300-QR	615 176 129 0	300	6.4 (1/4")*	—	—	0.58	1.27	187	7.36	8	17	1/4	6	1/4

RIVET SHAVER

E	RS450-T-18500 (1/4"UNF)	615 176 184 0	18500	1/4"-28 UNF	14.3	9/16	1.2	2.64	216	8.5	14	30	1/4		
E	RS450-T-18500 (1/4"WHIT)	615 176 183 0	18500	1/4"-26 WHIT	14.3	9/16	1.2	2.64	216	8.5	14	30	1/4		
F	RS500-P18500 (1/4"UNF)	205 148 129 4	18500	1/4"-28 UNF	14.3	9/16	1.2	2.64	216	8.5	14	30	1/4	10	3/8
F	RS500-P18500 (1/4"WHIT)	205 148 130 4	18500	1/4"-26 WHIT	14.3	9/16	1.2	2.64	216	8.5	14	30	1/4	10	3/8

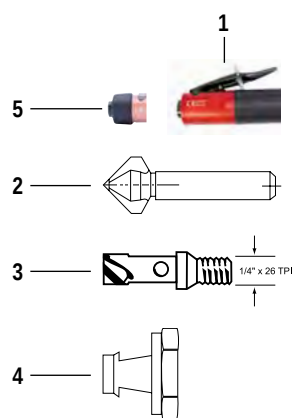
*: If speed adjustment is needed, you can do it with flow regulator PN LC121737

ACCESSORIES INCLUDED

ITEM	C27-LX-1450	RS450 / 500
• ø 6.4mm (1/4") capacity collet	615 526 163 0	
1 Safety lever	205 050 288 3	
2 Cutter (90° point) – 10mm dia	91572	
3 Cutter – carbide tipped (11.1mm 7/16" dia)		70602
4 Cutter Guard		18822
• Wrench 19A/F	615 801 005 0	
• Collet Spindle Wrench	615 801 076 0	15533
• Cutter Guard Wrench		38873

OPTIONAL ACCESSORIES

ITEM	RS450 / 500
3 Cutter – carbide tipped ø6.4mm (ø1/4")	70572
3 Cutter – carbide tipped ø7.9mm (ø5/16")	70582
3 Cutter – carbide tipped ø9.5mm (ø3/8")	70592
3 Cutter – carbide tipped ø12.7mm (ø1/2")	70622
4 Cutter Guard ø6.4mm (ø1/4")	18782
4 Cutter Guard ø7.9mm (ø5/16")	18792
4 Cutter Guard ø9.5mm (ø3/8")	18802
4 Cutter Guard ø12.7mm (ø1/2")	18832
4 Cutter Guard ø14.3mm (ø9/16")	18842
5 Kit silencer NPT	615 399 313 0
5 Kit silencer BSP	615 399 311 0
5 Kit Bumper	615 399 312 0



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.



■ RFD-100

Speed range 60 to 2800 rpm
102mm (4") adjustable stroke
13mm (1/2") chuck capacity

■ RFD-125

Speed range 60 to 800 rpm
127mm (5") adjustable stroke
No. 2 Morse taper spindle



For a Vacuum Kit option, please contact your local Desoutter representative

How to select your tool?

1 Select material

2 Select hole size

3 Select tool

RFD Selection

DRILL Ø	TOOL TYPE - RPM			
	Inconel	1 Titanium	Mild Steel	Aluminium
3mm - 1/8"	RFD(T)-330/500	RFD(T)-500	RFD-2800	RFD-2800
5mm - 3/16"	RFD(T)-140/330	RFD(T)-330/500	RFD-1850	RFD-2800
6mm - 1/4"	RFD(T)-140	RFD(T)-140/330	RFD(T)-800	RFD-1850
8mm - 5/16"	RFD(T)-140	RFD(T)-140/330	RFD(T)-800	RFD(T)-800
10mm - 3/8" 2	RFD(T)-85/140	RFD(T)-140 3	RFD(T)-800	RFD(T)-800
13mm - 1/2"	RFD(T)-60/85	RFD(T)-85/140	RFD(T)-500	RFD(T)-800
16mm - 5/8"		RFD(T)-85/140	RFD(T)-330	RFD(T)-800
19mm - 3/4"		RFD(T)-60/85	RFD(T)-85/140	RFD(T)-330/500
25mm - 1"			RFD(T)-60/85	RFD(T)-140/330

Use selection data as a guide only

MODEL	PART NUMBER	FREE SPEED	MAX STROKE		OUTPUT SPINDLE	CHUCK SPINDLE	LENGTH		WEIGHT		AIR FLOW		AIR INLET
		rpm	mm	in.		in.	mm	in.	kg	lb	l/s	cfm	in.
RFD													
RFD-100-2800	681214	2800	102	4		1/2-20 UNF	652	25.67	3.9	8.6	11.8	25	1/4
RFD-100-1850	681394	1850	102	4		1/2-20 UNF	652	25.67	3.9	8.6	11.8	25	1/4
RFD-100-800	680084	800	102	4	Chuck	5/8-16 UNF	652	25.67	3.9	8.6	11.8	25	1/4
RFD-100-500	680164	500	102	4	13mm	5/8-16 UNF	652	25.67	3.9	8.6	11.8	25	1/4
RFD-100-330	680244	330	102	4	(1/2") capacity	5/8-16 UNF	652	25.67	3.9	8.6	11.8	25	1/4
RFD-100-140	1457364	140	102	4		5/8-16 UNF	652	25.67	3.9	8.6	11.8	25	1/4
RFD-100-85	1457374	85	102	4		5/8-16 UNF	652	25.67	3.9	8.6	11.8	25	1/4
RFD-100-60	1457384	60	102	4		5/8-16 UNF	652	25.67	3.9	8.6	11.8	25	1/4

RFD-125

RFD-125-800	1445654	800	127	5			764	30.08	5.5	12.1	11.8	25	1/4
RFD-125-500	1445664	500	127	5	No. 2		764	30.08	5.5	12.1	11.8	25	1/4
RFD-125-330	1445674	330	127	5	Morse		764	30.08	5.5	12.1	11.8	25	1/4
RFD-125-140	1445504	140	127	5	Taper		764	30.08	5.5	12.1	11.8	25	1/4
RFD-125-85	1445514	85	127	5			764	30.08	5.5	12.1	11.8	25	1/4
RFD-125-60	1445524	60	127	5			764	30.08	5.5	12.1	11.8	25	1/4

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

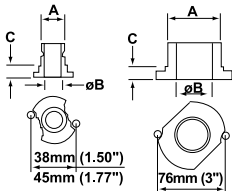
Accessories

ACCESSORIES INCLUDED

	PART NUMBER	
	RFD	RFD T
• Chuck with key capacity 13mm (5/8"x16)	29122	-
• Chuck with key capacity 13mm (1/2")	29142	-
• Extended Nose (1" x 14 LH nose thread)	251043	-
• Bayonet Plate – 45mm (1.77") centres	251063	-
• Bayonet Plate – 76mm (2.99") centres	-	35223

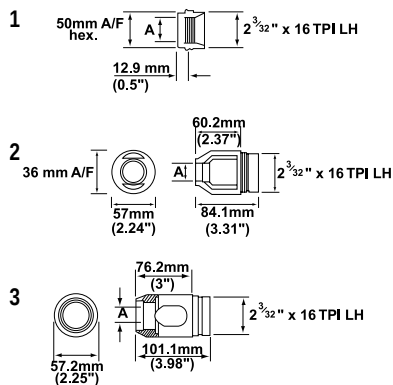
OPTIONAL ACCESSORIES

For more details on the following Part Numbers, please contact your local Desoutter representative



Bayonet Plates

	A	Ø B	C
Locating centres – 38mm (1.50")	3/4" x 16 (LH)	14.2mm (0.559")	9.5mm (3/8")
Locating centres – 45mm (1.77")	1" x 14 (LH)	19.05mm (3/4")	9.5mm (3/8")
Locating centres – 45mm (1.77")	1 1/8" x 20 (LH)	19.05mm (3/4")	9.5mm (3/8")
Locating centres – 76mm (2.99")	23/32" x 16 (LH)	38.1mm (1.150")	12.7mm (1/2")



Nose Attachments

NOSE TYPE	TO SUIT BAYONET PLATE CENTRES	THREAD 'A'
1	38mm (1.50")	3/4" x 16 (LH)
2	38mm (1.50")	3/4" x 16 (LH)
2	45mm (1.77")	1" x 14 (LH)
3	-	1-1/4" x 12 (LH)
3	-	1-1/4" x 12 (LH)
3	-	2" x 16 (LH)

Extension Tubes

NOMINAL STROKE AVAILABLE TO DRILL	LENGTH 'A'
• 80mm (3.15")	170mm (6.69")

Jig Plates

CENTRE "A"
38mm (1.50")
45mm (1.77")

Drill bushes

ATTACHMENT	"Ø B"
Ø 14.2mm	Ø 10 to 14mm
Ø 19.05mm	Ø 10 to 18mm
Ø 38.01mm	Ø 22 to 35mm

For dimension 'ØB' please ask for details of our range of drill bushes



Compression Tools



SQUEEZERS

- Wide range of Alligator Jaws & C-Yokes tools.
- Excellent power-to-weight ratio.
- Fast and slow approach.
- Robust and reliable design.

How to select the right tool?



1

Rivet

Material
Diameter



2

Application

Accessibility
Customer specification



3

Select tool

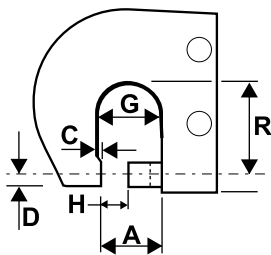
Power required
C-Yoke or Alligator
Gap & Reach figures



4

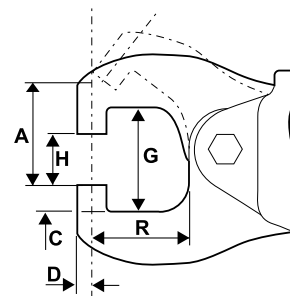
Select Rivet set & shims

Rivet set shank
Rivet set type
Rivet set length



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
CP0214FAXEL	44	1-3/4	-	-	5	3/16	44	1-3/4	17.5	11/16	50.8	2.5
CP0214FAREL-5	36	1,417	-	-	8	0,313	36	1,417	17/20	0,669	50	1,969
CP0214 CEREL-5	36	1,417	-	-	8	0,313	36	1,417	17/20	0,669	50	1,969

ALLIGATOR MODEL	A		D		G		H		R	
	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
CP0214ENCCEL-5	48	1-7/8	5.5	7/32	54	2-1/8	22	7/8	57	2-1/4
CP0214ANBEL	38	1-1/2	5.5	7/32	41	1-5/8	22	7/8	38	1-1/2
CP0214ENBEL	38	1-1/2	5.5	7/32	41	1-5/8	22	7/8	38	1-1/2
CP0351ASVEL	62	2-7/16	5.5	7/32	56	2-3/16	19	3/4	232	9-1/8
CP0351ESVEL	62	2-7/16	5.5	7/32	56	2-3/16	19	3/4	232	9-1/8
CP0351ESREL	81	3-3/16	5.5	7/32	51	2	38	1-1/2	178	7
CP0351ASKEL	57	2-1/4	5.5	7/32	41	1-5/8	22	7/8	127	5
CP0351ESKEL	57	2-1/4	5.5	7/32	41	1-5/8	22	7/8	127	5
CP0351ASGEL	38	1-1/2	5.5	7/32	41	1-5/8	22	7/8	73	2-7/8
CP0351ESGEL	38	1-1/2	5.5	7/32	41	1-5/8	22	7/8	73	2-7/8

Riveting Compression Tools



A



B



C



D



E

CP0214

CP0351

CP0341 - Pneumatic TM --> Full power through the full stroke

New available adjustable rivet set holders for C-Yoke & Alligator tools.
Comes with 5mm rivet set shank.
Search for the "-5" tools in the list below.

PIC REF	MODEL	PART NUMBER	CAPACITY				MAX FORCE (90 PSI/ 6.3 BAR)		MOVING PLUNGER				STANDARD YOKE DIMENSIONS				LENGTH		WEIGHT	
			LIGHT		HARD				MAX TRAVEL		FINAL PART OF STROKE AT MAX. FORCE		REACH R		CLOSED HEIGHT H					
			mm	in.	mm	in.	kN	lb	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	kg	lb

C-YOKE (single cylinder)

A	CP0214CELEL*	T012344	3.2	1/8	2.4	3/32	13.35	3,000	14.3	9/16	1.3	0.050	38.1	1-1/2	17.5	11/16	262	10.3	2.0	4.41
A	CP0214CEREL-5	6151710160	3.2	1/8	2.4	3/32	13.35	3,000	14.3	9/16	1.3	0.050	50	1,969	17/20	0,669/0,787	262	10.3	2.0	4.41
	CP0214CENEL	T018677	Same power unit as above without yoke																	
B	CP0351CUDEL*	T008955	4.8	3/16	4.0	5/32	26.70	6,000	14.3	9/16	3.2	0.125	54	2-1/8	19.8	25/32	445	17.5	5.7	12.6
	CP0351CUNEL	T007772	Same power unit as above without yoke																	

C-YOKE (tandem cylinder)

A	CP0214FALEL*	T013152	4.8	3/16	4.0	5/32	26.70	6,000	14.3	9/16	1.6	0.063	38.1	1-1/2	17.5	11/16	356	14	2.5	5.5
A	CP0214FALEL-5	6151710150	4.8	3/16	4.0	5/32	26.70	6,000	14.3	9/16	1.6	0.063	50	1,969	17/20	0,669/0,787	356	14	2.5	5.5
A	CP0214FAXEL*	T022528	4.8	3/16	4.0	5/32	26.70	6,000	14.3	9/16	1.6	0.063	50.8	2.5	17.5	11/16	366	14.4	2.6	5.7
	CP0214FANEL	T018430	Same power unit as above without yoke																	
A	CP0214KETEL**	T023475	4.8	3/16	4.0	5/32	26.70	6,000	14.3	9/16	1.6	0.063	38.1	1-1/2	17.5	11/16	356	14	2.5	5.5
B	CP0351FUDEL*	T012608	6.4	1/4	5.6	7/32	53.40	12,000	14.3	9/16	3.2	0.125	54	2-1/8	19.8	25/32	552	21.7	6.9	15.2

ALLIGATOR (single cylinder)

C	CP0214ANBEL*	T012343	3.2	1/8	2.4	3/32	13.35	3,000	15.9	5/8	1.3	0.050	38.1	1-1/2	22.2	7/8	233	9.17	1.7	3.75
C	CP0214ANFEL*	T018671	2.4	3/32	2.4	3/32	9.79	2,200	22.2	7/8	2.4	0.094	57.1	2-1/4	22.2	7/8	254	10	1.9	4.18
C	CP0214ANGEL*	T018672	2.4	3/32	1.6	1/16	8.01	1,800	31.8	1-1/4	1.4	0.056	76.2	3	22.2	7/8	273	10.7	2.0	4.41
	CP0214ANPEL	T019138	Same power unit as above without yoke																	
D	CP0351ASGEL*	T007783	4.0	5/32	3.2	1/8	23.14	5,200	15.9	5/8	3.2	0.125	73	2-7/8	22.2	7/8	495	19.5	7.1	15.6
D	CP0351ASKEL*	T007773	3.2	1/8	2.4	3/32	15.13	3,400	34.0	1-3/8	4.8	0.188	127	5	22.2	7/8	549	21.6	9.0	19.8
D	CP0351ASVEL*	T009582	3.2	1/8	2.4	3/32	13.35	3,000	42.9	1-11/16	1.6	0.063	232	9-1/8	19.1	3/4	654	25.7	11.9	26.2

ALLIGATOR (tandem cylinder)

C	CP0214ENGEL*	T018164	3.2	1/8	2.4	3/32	15.13	3,400	31.8	1-1/4	2.6	0.104	76.2	3	22.2	7/8	343	13.5	2.5	5.51
C	CP0214ENFEL*	T018163	4.0	5/32	3.2	1/8	19.14	4,300	22.2	7/8	2.4	0.094	57.1	2-1/4	22.2	7/8	324	12.8	2.4	5.28
C	CP0214ENCENEL-5	6151710170	4.0	5/32	3.2	1/8	19.14	4,300	22.2	7/8	2.4	0.094	57.1	2-1/4	17.2/22.2	0.68/0.87	324	12.8	2.4	5.28
C	CP0214ENBEL*	T018678	4.8	3/16	4.0	5/32	26.70	6,000	15.9	5/8	1.6	0.063	38.1	1-1/2	22.2	7/8	303	11.9	2.2	4.85
D	CP0351ESKEL*	T012603	4.8	3/16	4.0	5/32	30.26	6,800	34.0	1-3/8	4.8	0.188	127	5	22.2	7/8	657	25.9	10.2	22.5
D	CP0351ESREL*	T012604	4.8	3/16	4.0	5/32	26.70	6,000	42.9	1-11/16	4.8	0.188	178	7	38.1	1-1/2	708	27.9	12.2	26.9
D	CP0351ESVEL*	T012605	4.8	3/16	4.0	5/32	26.70	6,000	42.9	1-11/16	1.6	0.063	232	9-1/8	19.1	3/4	762	30	13.2	29.1
D	CP0351ESGEL*	T012602	6.4	1/4	4.8	3/16	46.28	10,400	15.9	5/8	3.2	0.125	73	2-7/8	22.2	7/8	603	23.7	8.4	18.5

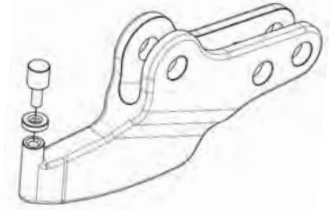
C-YOKE (pneumatic™)

E	CP0341CUDEL**	T022512	7.1	9/32	6.4	1/4	60.1	13,500	31.8	1-1/4	Full stroke
	CP0341CUNEL	T022493	Same power unit as above without yoke								

* CR1 / ** CR2 // -5 = 5mm rivet set shank

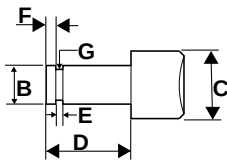
Riveting Compression Tools

Rivet set shank (CR1/CR2)



SHANK DIMENSIONS FOR RIVET SETS

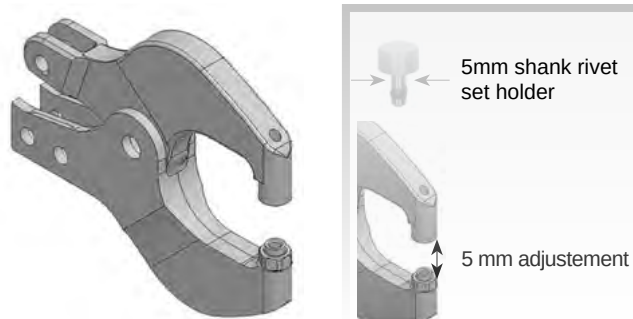
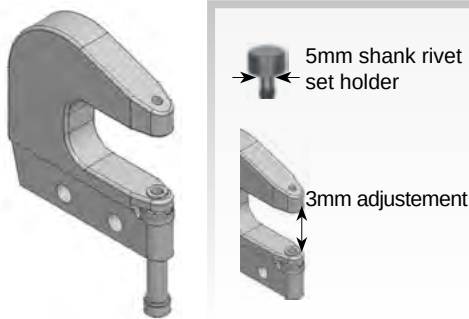
For CP0214, CP0351 and CP0341 Compression Riveters



TYPE OF RIVET SET SHANK	B		C*		D		E		F		G	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
CR-1 (ø 4.8mm 3/16")	4.75-4.72	0.187-0.186	12.7	1/2	12.7	1/2	3.45-3.38	0.136-0.133	1.6	1/16	3.23-3.12	0.127-0.123
CR-2 (ø 6.4mm 1/4")	6.42-6.40	0.249-0.248	15.9	5/8	15.9	5/8	3.45-3.38	0.136-0.133	2.4	3/32	4.80-4.70	0.189-0.185

* 'C' dimension is for flush set only. 'C' varies on cupped sets according to rivet size and type of head.

Adjustable Rivet set shank 5mm



Rivet set length calculation

To develop maximum power, the riveter must drive (set) the rivet at the end of the riveter's stroke
For maximum power the combined length of the two rivet sets must be of the correct length

$$A1 + A2 = H - M - Z$$

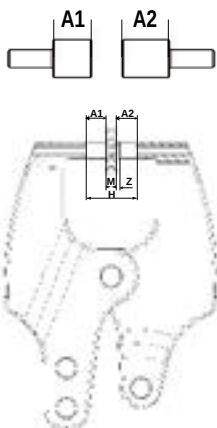
A1: Rivet set thickness (mobile jaw)

A2: Rivet set thickness (fix jaw)

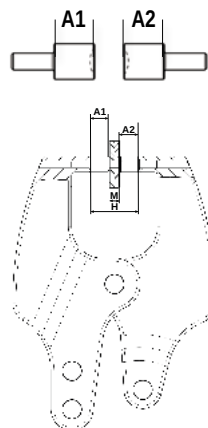
H= Opening at the end of the riveting

M= Total thickness of material to be assembled

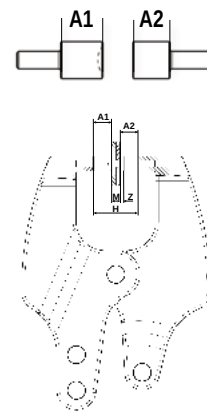
Z= height of finished rivet head (flush)



Two Flushed rivet sets



Two cupped rivet sets Z = 0



1 flushed rivet + cupped rivet set

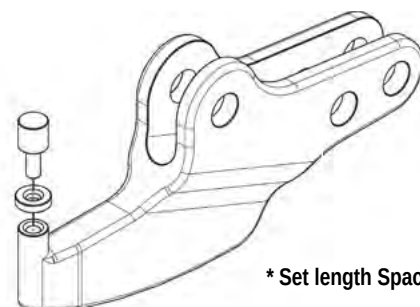
Compression Tools - Rivet sets

Rivet set Selection

SET LENGTH SPACER SHIMS

TYPE OF RIVET SET SHANK	PART NUMBER OF HARDENED SHIMS	
	0.4mm (1/64")	0.8mm (1/32")
CR-1	P083254	P083255

RIVET SET
* SHIM



* Set length Spacer Shims



Riveting Hammers



- Wide range of hammers suitable for all applications.
- Recoilless series for better operator's comfort.
- Progressive trigger for better control.

How to select the right tool?



1

Rivet
Light/Hard Material
Diameter



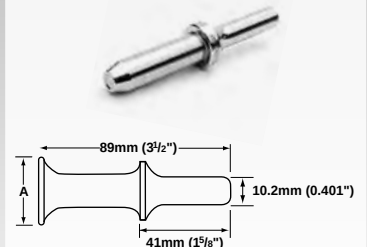
2

Application
accessibility



3

Operation repetitiveness
Low vibration level



4

Rivet set
selection

Tool range

Our range covers a wide range of applications to answer all your requirements

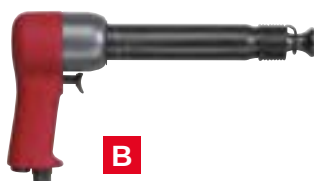


Riveting Hammers

Selection guide



A



B



C



D



E

PIC REF	MODEL	PART NUMBER	AIR FRAME REF	BLOW PER MI-NUTE	BORE & STROKE	ENERGY PER BLOW		CHISEL SHANK		RIVET CAPACITY		WEIGHT		AIR INLET	HOSE INT. Ø	
					mm (in.)	J	ft.lb	mm	in.	mm (in.)	mm (in.)	kg	lb	in.	mm	in.

Standard

A	CP4444-1	205 147 938 4	2X (200)	2580	15 x 40 (19/32 x 1.47)	4.4	3.2	10.2	0.401	3.2 (1/8)	2.4 (3/32)	1.2	2.6	1/8	10	3/8
A	CP4444-RURAB	T022961	2X (200)	2580	12.7 x 50.8 (1/2 x 2)	4.0	2.9	10.2	0.401	3.2 (1/8)	2.4 (3/32)	1.0	2.2	1/4	10	3/8
A	CP4444-RUSAB	T022962	3X (300)	2160	12.7 x 76.2 (1/2 x 3)	6.1	4.5	10.2	0.401	4.8 (3/16)	4.0 (5/32)	1.1	2.3	1/4	10	3/8
A	CP4444-RUTAB	T022963	4X (240)	1740	12.7 x 101.6 (1/2 x 4)	8.1	6.0	10.2	0.401	6.4 (1/4)	4.8 (3/16)	1.3	2.7	1/4	10	3/8
B	CP4447-RUSAB	T022965	5XB (500)	1560	19.1 x 68.3 (3/4 x 2-11/16)	12.3	9.1	12.7	0.498	6.4 (1/4)	4.8 (3/16)	2.2	4.7	1/4	10	3/8
B	CP4447-RUTAB	T022912	7XB (700)	1140	19.1 x 98.4 (3/4 x 3-7/8)	17.8	13.1	12.7	0.498	7.9 (5/16)	6.4 (1/4)	2.3	5.1	1/4	10	3/8
B	CP4447-RUVAB	T022964	9XB (800)	900	19.1 x 147.6 (3/4 x 5-13/16)	26.6	19.6	12.7	0.498	9.5 (3/8)	7.9 (5/16)	2.7	9.0	1/4	10	3/8

Vibration reduced

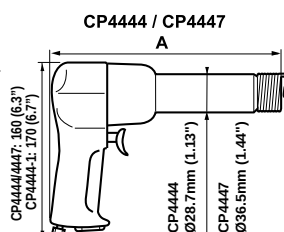
C	CP4450-2	T025189	2X (200)	2580	12.7 x 50.8 (1/2 x 2)	4.0	2.9	10.2	0.401	3.2 (1/8)	2.4 (3/32)	1.2	2.7	1/4	10	3/8
C	CP4450-3	T025190	3X (300)	2160	12.7 x 76.2 (1/2 x 3)	6.1	4.5	10.2	0.401	4.8 (3/16)	4.0 (5/32)	1.3	2.8	1/4	10	3/8
C	CP4450-4	T025191	4X (400)	1740	12.7 x 101.6 (1/2 x 4)	8.1	6.0	10.2	0.401	6.4 (1/4)	4.8 (3/16)	1.5	3.2	1/4	10	3/8
D	CP4475-3	T025241	5XB (500)	2000	19.1 x 76.2 (3/4 x 3)	13.7	10.1	12.7	0.498	6.4 (1/4)	4.8 (3/16)	1.8	3.9	1/4	10	3/8
D	CP4475-4	T025242	7XB (700)	1700	19.1 x 101.6 (3/4 x 4)	18.3	13.5	12.7	0.498	7.9 (5/16)	6.4 (1/4)	2.4	5.3	1/4	10	3/8
D	CP4475-6	T025243	9XB (800)	1250	19.1 x 152.4 (3/4 x 6)	27.5	20.3	12.7	0.498	9.5 (3/8)	7.9 (5/16)	2.8	6.2	1/4	10	3/8
E	CP4450-S-2	205 146 712 4	2X	2580	12.7 x 50.8 (1/2 x 2)	4.0	2.9	10.2	0.401	3.2 (1/8)	2.4 (3/32)	1.25	2.8	1/4	10	3/8
E	CP4450-S-3	205 146 713 4	3X	2160	12.7 x 76.2 (1/2 x 3)	6.1	4.5	10.2	0.401	4.8 (3/16)	4.0 (5/32)	1.35	3.0	1/4	10	3/8
E	CP4450-S-4	205 146 714 4	4X	1740	12.7 x 101.6 (1/2 x 4)	8.1	6.0	10.2	0.401	6.4 (1/4)	4.8 (3/16)	1.45	3.2	1/4	10	3/8

* LIGHT: Aluminium 2017 / 2117 (DCJ-DXJ / D-AD)

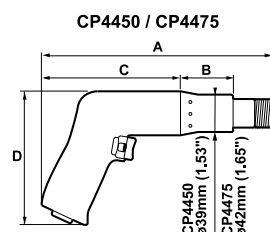
** HARD: Aluminium 7050 (DKJ / KE / E) (M) (T)

Dimensions

Model	A	
	mm	in.
CP4444-1	111	4.4
CP4444-RURAB	170	6.7
CP4444-RUSAB	186	7.3
CP4444-RUTAB	211	8.3
CP4447-RUSAB	227	8.9
CP4447-RUTAB	252	9.9
CP4447-RUVAB	303	11.9



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



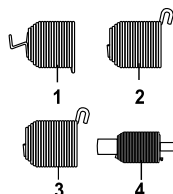
CP4444 / CP4447 / CP4450 / CP4475

ACCESSORIES INCLUDED

	PART NUMBER		
	CP4444-1	CP4444 CP4450	CP4447 CP4475
• Light wire quick change retainer	205 053 564 3	A046095	-
• Wire quick change retainer	-	-	A047095

OPTIONAL ACCESSORIES

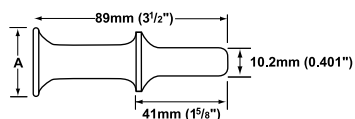
ITEM	CP4444 CP4450	CP4447 CP4475
1 Zip-Quick retainer	A046094	-
2 Beehive retainer	A046096	-
3 Beehive retainer	-	A047096



CP4444 / CP4450

TYPE I FLUSH RIVET SETS Ø 10.2MM (.401")

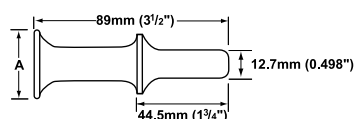
	ØA MM (IN.)	CP4444/4450 Ø10.2 (0.401") SHANK
•	25.4 (1)	A046090
•	44.5 (1-3/4)	A046091



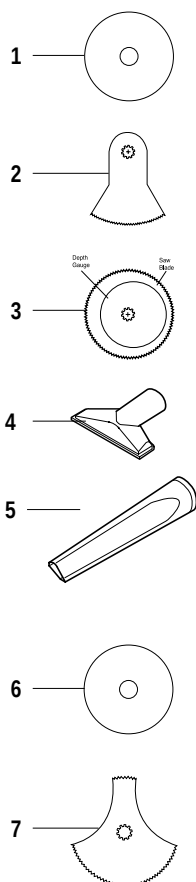
CP4447 / CP4475

TYPE I FLUSH RIVET SETS Ø 12.7MM (.498")

	ØA MM (IN.)	SHANK Ø12.7MM (0.498")
•	31.8 (1-1/4)	A047091



Accessories



D144-T-.. / D172-L / AV101

ACCESSORIES INCLUDED

ITEM		APPLICATION	PART NO.		
			D144-T	D172-L	AV101
	• Spindle Wrench		164433	15533	
	• Clamp Nut Wrench		29443		
	• 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")			
1	Saw Blade 64mm (2.5") dia.	Plastics		90762	
1	Saw Blade – teflon coated 80mm (3.15") 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	D172-L
6	Saw Blade 64mm (2.5") dia.	Wood	34252	
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
7	Saw Blade 63.5mm (2.5") dia. 60mm (2.36") + 16mm (5/8") segments	Soft Wood		90842





A



B



C

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	615 170 526 0	3100		64	2.5	0.83	1.83	214	8.43	9.4	19.9	1/4 BSP	10	3/8
OSCILLATING SAW															
C	D172	615 170 527 0	-	20000	80	3.2	0.76	1.67	265.2	10.44	9.5	20	1/4 BSP	10	3/8
VACUUM CLEANER															
B	AV101	128534	-	-	-	-	0.7	1.54	202	7.95	5.9	12.5	1/4 BSP	6	1/4



Desoutter Air Line Accessories are specially developed to be used with Desoutter Tools & Equipments.

Desoutter Air Line Accessories can also be used with other pneumatic products.

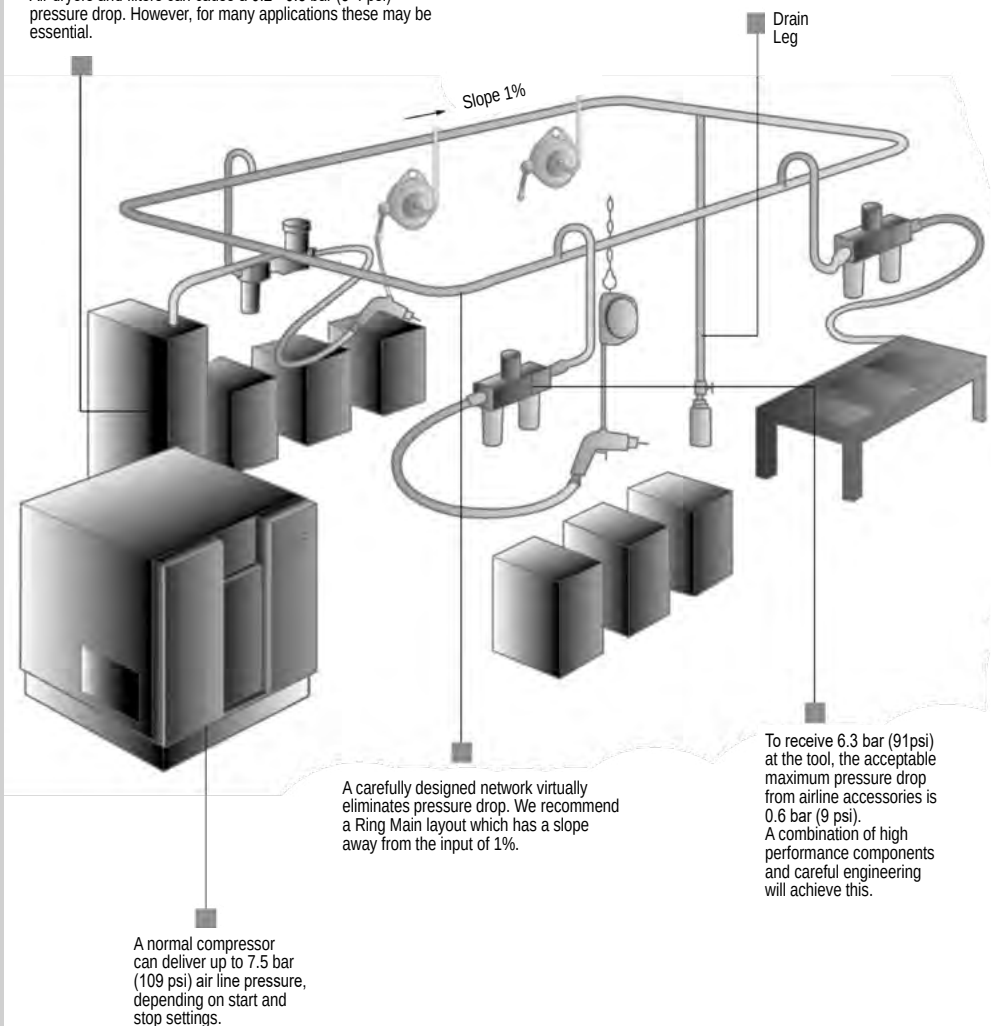
All accessories can be used for other applications with any pneumatic equipments.

Desoutter Air Preparation Units are designed to help you get maximum performance from your tools.

They ensure minimal pressure drop and thus minimum energy losses in the air distribution system, benefiting the environment and cutting your operating costs.

The lifetimes of your tools will be extended by using air preparation units and with that comes lower repair costs and less downtime. A correct air installation guarantees productivity and good total economy.

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.



When developing the Desoutter Air Line Accessories range, we have focused on Performance, Quality, Ergonomics and Safety. Based on this, we now offer a wide range of accessories for optimal air line installation.

Our accessories enable to reach higher productivity with lower energy consumption, a sustainable reduction of energy costs and an extended lifetime of your tools.

Performance

In order to get the best performance out of your air line installation it is key to supply air at a constant pressure (6.3 bar) This, together with minimizing the pressure drop, is the primary focus when designing the Desoutter couplings, hoses and FRLs.

The result is not only a better performance in terms of a reduction of energy costs but also in a better lifetime of the tools.

Ergonomics and Safety

To further improve the comfort of use for our customers we now offer hoses in our EFFI line with lower weight and more flexible. In combination with Easy Flow, Safety couplings, Airflex and high quality balancers you can build up a workplace where the operators' safety and ergonomics are in focus.

Quality

All our products are developed to perform in industrial applications. Desoutter Accessories are made with the highest quality materials to ensure the best possible performance and lifetime of the tools.

Hoses

Desoutter offers the highest quality of PVC, Rubber and Polyurethane hoses in the Industrial Line to cover the different needs of applications with Power Tools.

In addition to this, the EFFI series is designed with special features such as low weight and flexibility, to meet the highest ergonomic demands, as well as antistatic for applications with ESD demands.

HOSES

HOSERECOMMENDATIONS

DESCRIPTION	EFFI MAX	POLYURETHAN	RUBBER
Flexibility	++	++	+
Lightweight	++	++	+
Outdoor	+++	+	+++
Spark resistant	+++	-	+++
Rough environment	+++	++	+++
Antistatic	+++	-	+++
Temperature range	-40 to +194F° -40 to +90°C	-22 to +176F° -30 to +80°C	-40 to +194F° -40 to +90°C



At recommended air flow the pressure drop is 0.2 bar (2.9 PSI) with a hose length of 5m (16ft).
Recommendation is to upgrade one size in diameter for every 10m (32.8ft) of hose length

EFFI Series

EFFI is a unique premium line of hoses designed with special features such as antistatic, extreme low weight, resistance and durability that will help the operator to maximize the tool productivity.

EFFIMAXHOSES

Aimed to generic grinding applications

- Extreme low weight
- Antistatic
- Rubber hose
- Soft and flexible
- Welding spatter resistant



DIMENSIONS (IDxOD)		LENGTH		MAX WORKING PRESSURE*	AIR FLOW		WEIGHT PER 20M / 65.6FT		PART NUMBER
in. ID	mm	ft	m	PSI (bar)	cfm	l/s	lb	kg	
3/8	9.5x12.5	65.6	20		27.6	13	6.4	2.9	894 016 992 1
1/2	13x18.6	65.6	20	232 (16)	44.5	21	8.6	3.9	615 810 900 0
5/8	16x22.5	65.6	20	232 (16)	91.1	43	10.6	4.8	615 810 901 0
3/4	20x26.1	65.6	20	232 (16)	159	75	11.9	5.4	615 810 902 0

RUBBERHOSES

Aimed to the most demanding tasks in construction, mining, shipyards, foundries etc.

- Durable
- Antistatic
- Grinding and welding spatter resistant



DIMENSIONS (IDxOD)		LENGTH		MAX WORKING PRESSURE*	AIR FLOW		WEIGHT PER 20M / 65.6FT		PART NUMBER
in. ID	mm	ft	m	PSI (bar)	cfm	l/s	lb	kg	
3/8	10x16	65.6	20	232 (16)	27.5	13	7.9	3.6	615 810 864 0
1/2	12.5x19.1	65.6	20	232 (16)	44.5	21	10.4	4.7	615 810 865 0
5/8	16x23	65.6	20	232 (16)	91.1	43	13.4	6.1	615 810 866 0
3/4	20x26.6	65.6	20	232 (16)	159	75	17.2	7.8	615 810 868 0
1	25x34	65.6	20	232 (16)	265	125	26.0	11.8	615 810 870 0

POLYURETHANEHOSES

Aimed to heavy duty applications for indoor and outdoor use

- Oil resistant
- Flexible
- Long service life
- PVC free: Environment friendly



DIMENSIONS (IDxOD)		LENGTH		MAX WORKING PRESSURE*	AIR FLOW		WEIGHT PER 25M / 82FT		PART NUMBER
in. ID	mm	ft	m	PSI (bar)	cfm	l/s	lb	kg	
1/4	6.5x10	82	25	290 (20)	8.5	4.0	2.9	1.3	615 804 623 0
5/16	8x12	82	25	290 (20)	15.9	7.5	4.8	2.2	615 804 624 0
3/8	9.5x13	82	25	232 (16)	27.5	13.0	5.5	2.5	615 804 625 0
1/2	13x18	82	25	188 (13)	44.5	21.0	8.8	4.0	615 804 626 0

* With a safety factor of 37.4 psi at 68F° (3 bar at 20°C)

(at the max temp of +140F° (+60°C) the working pressure should be reduced by 50%)



HOSE KITS

Hose kits are equipped with end thread fittings and available in short length, ready to connect and ready to use.



DIMENSIONS (IDxOD)		MALE	LENGHT		PART NUMBER		HOSE MATERIAL
in. ID	mm	in.	ft	m	NPT	BSP	
1/4	6.5x10	1/4	26.2	8	615 811 213 0	615 804 627 0	PU
5/16	8x12	1/4	26.2	8	615 811 214 0	615 804 628 0	PU
3/8	10x13	1/4	26.2	8		615 804 629 0	PU
3/8	10x13	3/8	26.2	8	615 811 240 0	615 811 238 0	PU
1/2	13x18	1/2	26.2	8	615 811 216 0	615 804 630 0	PU
1/2	13x18	3/8	26.2	8	615 811 241 0	615 811 239 0	PU
5/8	16x23	1/2	26.2	8	615 811 268 0	615 811 267 0	Rubber

EFFI MAX WHIPS

Always use a hose whip between the tool and the air supply hose. It provides safety and longer tool air inlet life.



HOSE DIAM.		THREAD SIZE		HOSE LENGHT		PART NUMBER	
in.	mm	in.	ft	m	NPT	BSP	
1/4	6.5	1/4	2.0	0.6			
3/8	10	1/4	2.0	0.6	CA047270	615 811 192 0	
1/2	13	3/8	2.0	0.6	CA049271	615 811 264 0	
1/2	13	1/2	2.0	0.6	CA049270	615 811 193 0	
5/8	16	1/2	2.0	0.6	615 811 266 0	615 811 265 0	

POLYURETHANE SPIRAL HOSE

Spiral hose are especially adapted for tools used at varying distances. Vertically or horizontally, together with a balancer spiral hose, it is a step forward in ergonomics. Equipped with ball bearing at one end (except the 11x16), they can be directly connected at the tool outlet, avoiding the hose to twist

- Self retractable
- Light and flexible
- Strong and durable

DIMENSIONS (IDxOD)		MALE THREADS		WORKING LENGTH		LENGHT			PARTNUMBER	
in. ID	mm	in.	ft	m	A	B	C		NPT	BSP
1/4	6.5x10	1/4	6.6	2	19.7 (500)	5.5 (140)	5.9 (150)		615 810 967 0	615 804 635 0
1/4	6.5x10	1/4	13.1	4	19.7 (500)	13 (330)	5.9 (150)		615 810 968 0	615 804 636 0
1/4	6.5x10	1/4	19.7	6	19.7 (500)	20.1 (510)	5.9 (150)		615 810 969 0	615 804 637 0
1/4	6.5x10	1/4	26.2	8	19.7 (500)	27.6 (700)	5.9 (150)		615 810 970 0	615 804 638 0
5/16	8x12	3/8	6.6	2	19.7 (500)	5.1 (130)	5.9 (150)		615 810 971 0	615 804 639 0
5/16	8x12	3/8	13.1	4	19.7 (500)	11.8 (300)	5.9 (150)		615 810 972 0	615 804 640 0
5/16	8x12	3/8	19.7	6	19.7 (500)	18.1 (460)	5.9 (150)		615 810 973 0	615 804 641 0
5/16	8x12	3/8	26.2	8	19.7 (500)	24.8 (630)	5.9 (150)		615 810 974 0	615 804 642 0
7/16	11x16	3/8	6.6	2	19.7 (500)	4.7 (120)	5.9 (150)		615 810 975 0	615 804 643 0
7/16	11x16	3/8	13.1	4	19.7 (500)	10.6 (270)	5.9 (150)		615 810 976 0	615 804 644 0
7/16	11x16	3/8	19.7	6	19.7 (500)	16.5 (420)	5.9 (150)		615 810 977 0	615 804 645 0
7/16	11x16	3/8	26.2	8	19.7 (500)	22.4 (570)	5.9 (150)		615 810 978 0	615 804 646 0



AIR FLEX

AIR FLEX RANGE



THE NEW AIR FLEX MAKES ALL RIGID HOSES FLEXIBLE AND MULTI-DIRECTIONAL.

Easy: less effort due to hose rigidity, makes work easier in hard to reach areas. Less wear: no more premature hose wear. Comfort and safety: no twisting, the hose remains in the ideal working position and lower the risk of tendinitis.

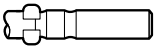
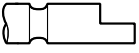
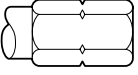
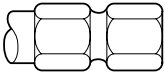
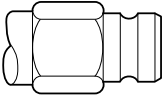
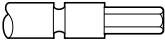
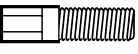
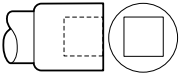
AIR FLEX

Aimed to improve the working ergonomics, Air flex connectors can rotate 360° eliminating efforts when working in cramped spaces

MULTI DIRECTION SWIVEL CONNECTOR	MAX RECOMMENDED FLOW		LENGTH		PART NUMBER		
	cfm	l/s	mm	in.	BSP	NPT	R
Air Flex 1/4"	25	12	67	2.63	615 804 746 0	615 804 747 0	615 995 559 0
Air Flex 3/8"	74	35	82	3.23	615 804 748 0	615 804 749 0	615 995 557 0
Air Flex 1/2"	74	35	82	3.23	615 804 750 0	615 804 751 0	615 995 558 0



Fastening accessories

Fastener Head Type	Drivers	Output
 POZIDRIV/SUPADRIV	 4mm Wing Shank	Exx TORX SOCKET SIZE XX
 PHILLIPS	 5mm Wing Shank	SWxx SOCKET SIZE XX
 TORX	 4mm Halfmoon	T TORX SIZE XX
 TORXTAMPERPROOF	 1/4" Hex** Insert (C6.3) (ISO1173/ DIN3126)	INxx HEX BIT SIZE XX
 TORXPLUS	 1/4" Hex Power Drive (E6.3) (ISO1173/ DIN3126)	XZNxx TORX 12 BIT SIZE XX
 INTERNALHEX	 5/16" Hex Power Drive	
 EXTERNALHEX	 3mm Hex Power Drive (A3) (ISO1173)	
 SLOT	 Thread Drive	
 TRI-WING	 Square Drive	

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

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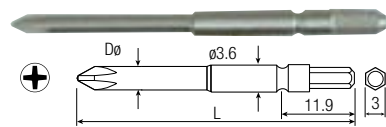
ACR®, Pozidriv®, Torq-Set®, Tri-Wing® are registered trademarks of Phillips Screw Co.

We can propose today a high quality range of bits and sockets with the latest Technology Support and Quality controls.

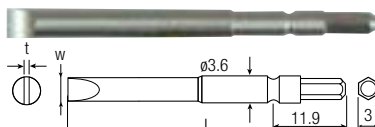


Bits for precision screw

Drive: $\emptyset$ 3mm Hex drive

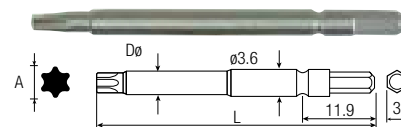


PH	D ø		LENGTH L		PART NO
	mm	in	mm	in	10 pcs
0	2.5	0.10	50	1.97	615 820 227 0
1	4.0	0.16	50	1.97	615 820 228 0

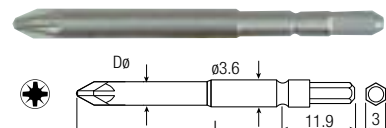


W	t		LENGTH L		PART NO
	mm	in	mm	in	10 pcs
3	0.5	0.02	50	1.97	615 820 232 0*
4	0.8	0.03	50	1.97	615 820 236 0

* Production upon your order.

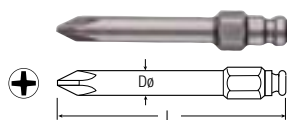


T	A		D ø		LENGTH L		PART NO
	mm	in	mm	in	mm	in	10 pcs
T6	1.7	0.06	2.2	0.09	50	1.97	615 820 240 0
T10	2.7	0.11	3.0	0.12	50	1.97	615 820 243 0

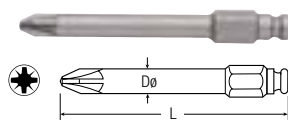


PZ	D ø		LENGTH L		PART NO
	mm	in	mm	in	10 pcs
0	3	0.12	50	1.97	615 820 238 0
1	4	0.16	50	1.97	615 820 239 0

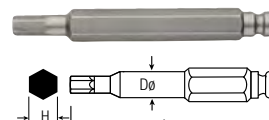
Drive: 5/16" = 8mm Hex drive



PH	Dø		LENGTH L		PART NO
	mm	in	mm	in	10 pcs
1	4.5	0.18	50	1.97	615 820 645 0
2	6.0	0.24	50	1.97	615 820 646 0
2	-	-	93	3.66	615 820 721 0
3	-	-	93	3.66	615 820 722 0



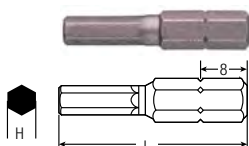
PZ	Dø		LENGTH L		PART NO
	mm	in	mm	in	10 pcs
1	-	-	92	3.62	615 820 724 0
2	6.0	0.24	50	1.97	615 820 647 0
2	6.0	0.24	92	3.62	615 820 355 0



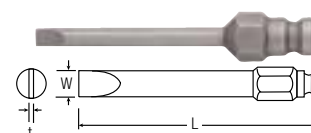
H	Dø		LENGTH L		PART NO
	mm	in	mm	in	10 pcs
H4	6.0	0.24	50	1.97	615 820 328 0*
H5	8.0	0.31	50	1.97	615 820 329 0
H6	8.0	0.31	50	1.97	615 820 330 0
H8	8.0	0.31	50	1.97	615 820 331 0*

* Production upon your order.

Drive: 11mm Hex drive



H	LENGTH L		PART NO
	mm	in	10 pcs
H6	70	2.76	615 820 650 0



W	t		LENGTH L		PART NO
	mm	in	mm	in	10 pcs
3	0.5	0.02	76	2.99	615 820 209 0
8.8	1.3	0.05	52	2.05	615 820 728 0



Bits for precision screw

Drive: $\varnothing$ 4mm shank drive - Wing shank



W	t	l	LENGTH	TOOLS	PART NO
mm	in	mm	in	mm	in
2	0.3	0.01	20 0.79	40 1.57	SLB001 615 820 423 0
2.5	0.3	0.01	20 0.79	40 1.57	SLB001 615 820 424 0
3	0.4	0.02	20 0.79	40 1.57	SLB001 615 820 048 0
4	0.5	0.02	- -	40 1.57	SLB001 615 820 425 0

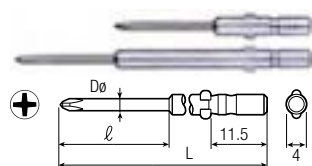


H	Dø	l	LENGTH	TOOLS	PART NO
mm	in	mm	in	mm	in
H1.5	2	0.08	20 0.79	60 2.36	SLB001 615 820 426 0
H2	3	0.12	20 0.79	60 2.36	SLB001 615 820 427 0
H2.5	3	0.12	20 0.79	60 2.36	SLB001 615 820 428 0
H3	4	0.16	- -	60 2.36	SLB001 615 820 429 0



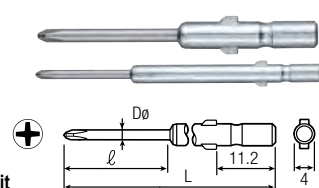
PZ	Dø		LENGTH L		TOOLS	PART NO
	mm	in	mm	in		
0	4	0.16	60	2.36	SLB001	615 820 369 0
1	4	0.16	60	2.36	SLB001	615 820 370 0
2	4	0.16	60	2.36	SLB001	615 820 383 0

Drive: $\varnothing$ 4mm shank drive - Wing shank

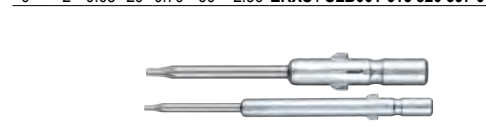
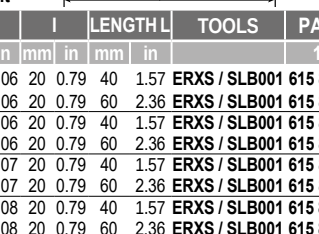


PH	Dø	l	LENGTH	TOOLS	PART NO
mm	in	mm	in	mm	in
00	1.2	0.05	20 0.79	40 1.57	ERXS / SLB001 615 820 027 0
00	1.5	0.06	20 0.79	40 1.57	ERXS / SLB001 615 820 412 0
00	1.5	0.06	20 0.79	60 2.36	SLB001 615 820 413 0
00	2.0	0.08	20 0.79	40 1.57	ERXS / SLB001 615 820 414 0
00	2.0	0.08	20 0.79	60 2.36	SLB001 615 820 415 0
0	1.4	0.06	20 0.79	40 1.57	ERXS / SLB001 615 820 028 0
0	1.4	0.06	20 0.79	60 2.36	SLB001 615 820 029 0
0	1.7	0.07	20 0.79	40 1.57	ERXS / SLB001 615 820 416 0
0	1.7	0.07	20 0.79	60 2.36	ERXS / SLB001 615 820 417 0
0	2.0	0.08	20 0.79	40 1.57	ERXS / SLB001 615 820 030 0
0	2.0	0.08	20 0.79	60 2.36	ERXS / SLB001 615 820 031 0
0	2.0	0.08	20 0.79	80 3.15	ERXS / SLB001 615 820 032 0
0	2.0	0.08	20 0.79	100 3.94	SLB001 615 820 033 0
0	2.5	0.10	20 0.79	40 1.57	ERXS / SLB001 615 820 418 0
0	2.5	0.10	20 0.79	60 2.36	ERXS / SLB001 615 820 419 0
0	2.5	0.10	20 0.79	80 3.15	SLB001 615 820 034 0
0	2.5	0.10	20 0.79	100 3.94	SLB001 615 820 035 0
1	3.0	0.12	20 0.79	40 1.57	SLB001 615 820 420 0
1	3.0	0.12	20 0.79	60 2.36	ERXS / SLB001 615 820 036 0
1	3.0	0.12	20 0.79	80 3.15	SLB001 615 820 037 0
1	3.0	0.12	20 0.79	100 3.94	SLB001 615 820 038 0
1	3.0	0.12	20 0.79	120 4.72	SLB001 615 820 442 0
1	4.0	0.16	- -	40 1.57	SLB001 615 820 421 0
1	4.0	0.16	- -	60 2.36	SLB001 615 820 039 0
2	4.0	0.16	- -	40 1.57	SLB001 615 820 422 0
2	4.0	0.16	- -	60 2.36	ERXS / SLB001 615 820 040 0
2	4.0	0.16	- -	80 3.15	SLB001 615 820 041 0
2	4.0	0.16	- -	100 3.94	SLB001 615 820 042 0
2	4.0	0.16	- -	120 4.72	SLB001 615 820 043 0

Shockless Bit

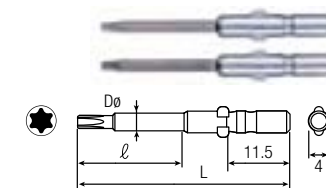


PH	Dø	l	LENGTH	TOOLS	PART NO
mm	in	mm	in	mm	in
00	1.5	0.06	20 0.79	40 1.57	ERXS / SLB001 615 820 390 0
00	1.5	0.06	20 0.79	60 2.36	ERXS / SLB001 615 820 391 0
0	1.5	0.06	20 0.79	40 1.57	ERXS / SLB001 615 820 392 0
0	1.5	0.06	20 0.79	60 2.36	ERXS / SLB001 615 820 393 0
0	1.7	0.07	20 0.79	40 1.57	ERXS / SLB001 615 820 394 0
0	1.7	0.07	20 0.79	60 2.36	ERXS / SLB001 615 820 395 0
0	2	0.08	20 0.79	40 1.57	ERXS / SLB001 615 820 396 0
0	2	0.08	20 0.79	60 2.36	ERXS / SLB001 615 820 397 0

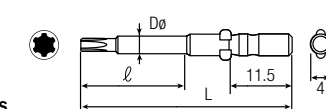


Shockless Bit

T	Dø	l	LENGTH	TOOLS	PART NO
mm	in	mm	in	mm	in
T5	2	0.08	20 0.79	40 1.57	ERXS / SLB001 615 820 398 0
T5	2	0.08	20 0.79	60 2.36	ERXS / SLB001 615 820 399 0
T6	2	0.08	20 0.79	40 1.57	ERXS / SLB001 615 820 400 0
T6	2	0.08	20 0.79	60 2.36	ERXS / SLB001 615 820 401 0



T	Dø	l	LENGTH	TOOLS	PART NO
mm	in	mm	in	mm	in
T1	1.5	0.06	20 0.79	40 1.57	SLB001 615 820 670 0
T2	1.5	0.06	20 0.79	40 1.57	SLB001 615 820 671 0
T3	1.7	0.07	20 0.79	40 1.57	SLB001 615 820 672 0
T4	1.8	0.07	20 0.79	40 1.57	ERXS / SLB001 615 820 673 0
T5	2.0	0.08	20 0.79	40 1.57	SLB001 615 820 049 0
T5	2.0	0.08	20 0.79	60 2.36	SLB001 615 820 050 0
T6	2.0	0.08	20 0.79	40 1.57	ERXS / SLB001 615 820 051 0
T6	2.0	0.08	20 0.79	60 2.36	ERXS / SLB001 615 820 052 0
T7	2.0	0.08	20 0.79	60 2.36	SLB001 615 820 053 0
T8	3.0	0.12	20 0.79	40 1.57	SLB001 615 820 674 0
T8H	4.0	0.16	- -	60 2.36	SLB001 615 820 054 0
T9	3.0	0.12	20 0.79	40 1.57	ERXS / SLB001 615 820 675 0
T10	3.0	0.12	20 0.79	40 1.57	ERXS / SLB001 615 820 676 0
T10H	4.0	0.16	- -	60 2.36	ERXS / SLB001 615 820 055 0

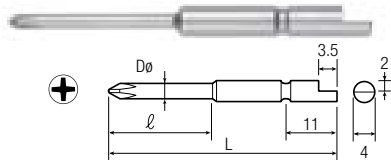


Torx Plus

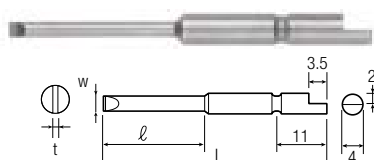
IP	Dø	l	LENGTH	TOOLS	PART NO
mm	in	mm	in	mm	in
4IP	1.8	0.07	20 0.79	60 2.36	ERXS / SLB001 615 820 371 0
5IP	2.0	0.08	20 0.79	60 2.36	ERXS / SLB001 615 820 372 0
6IP	2.5	0.10	20 0.79	60 2.36	ERXS / SLB001 615 820 373 0
8IP	3.0	0.12	20 0.79	60 2.36	ERXS / SLB001 615 820 374 0
10IP	3.0	0.12	20 0.79	60 2.36	ERXS / SLB001 615 820 375 0

Bits for precision screw

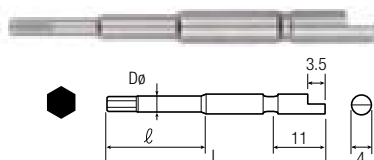
Drive: $\varnothing$ 4mm - Halfmoon



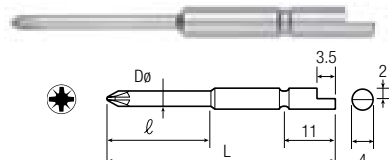
PH	Dø		I	LENGTH L	PART NO
	mm	in	mm	in	10 pcs
00	1.5	0.06	20	0.79	44 1.73 615 820 406 0
00	1.5	0.06	20	0.79	64 2.52 615 820 407 0
00	2.0	0.08	20	0.79	64 2.52 615 820 078 0
0	1.8	0.07	20	0.79	44 1.73 615 820 076 0
0	1.8	0.07	20	0.79	64 2.52 615 820 077 0
0	2.0	0.08	20	0.79	44 1.73 615 820 408 0
0	2.0	0.08	20	0.79	64 2.52 615 820 409 0
0	2.5	0.10	20	0.79	44 1.73 615 820 079 0
0	2.5	0.10	20	0.79	64 2.52 615 820 080 0
1	3.0	0.12	20	0.79	44 1.73 615 820 410 0
1	3.0	0.12	20	0.79	64 2.52 615 820 411 0
1	4.0	0.16	20	0.79	44 1.73 615 820 081 0
1	4.0	0.16	20	0.79	64 2.52 615 820 082 0
2	4.0	0.16	20	0.79	44 1.73 615 820 083 0
2	4.0	0.16	20	0.79	64 2.52 615 820 084 0



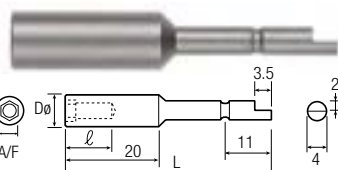
w	t	I	LENGTH L	PART NO
mm	in	mm	in	10 pcs
2	0.3	0.01	20 0.79 44 1.73	615 820 086 0
2.5	0.3	0.01	20 0.79 44 1.73	615 820 087 0
3	0.4	0.02	20 0.79 44 1.73	615 820 088 0
4	0.5	0.02	- - 44 1.73	615 820 089 0



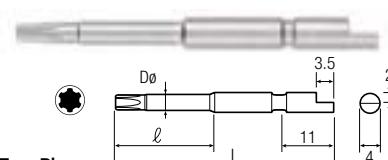
H	Dø	I	LENGTH L	PART NO
mm	in	mm	in	10 pcs
H1.5	2.0	0.08	20 0.79 44 1.73	615 820 091 0
H2	3.0	0.12	20 0.79 44 1.73	615 820 092 0
H2.5	3.0	0.12	20 0.79 44 1.73	615 820 093 0
H3	4.0	0.16	- - 44 1.73	615 820 094 0



PZ	Dø	I	LENGTH L	PART NO
mm	in	mm	in	10 pcs
0	2.5	0.10	20 0.79 44 1.73	615 820 377 0
0	2.5	0.10	20 0.79 64 2.52	615 820 378 0
1	4.0	0.16	- - 44 1.73	615 820 379 0
1	4.0	0.16	- - 64 2.52	615 820 380 0

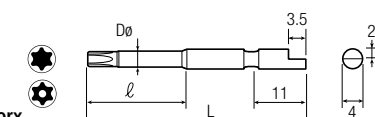


AF	Dø	I	LENGTH L	PART NO
mm	in	mm	in	10 pcs
A/F2.3	4.0	0.16	5 0.20 44 1.73	615 820 095 0
A/F2.5	4.0	0.16	5 0.20 44 1.73	615 820 096 0
A/F3	5.0	0.20	8 0.31 44 1.73	615 820 097 0
A/F4	7.0	0.28	10 0.39 44 1.73	615 820 098 0
A/F4.5	7.0	0.28	10 0.39 44 1.73	615 820 099 0
A/F5	8.0	0.31	15 0.59 44 1.73	615 820 100 0
A/F5.5	8.0	0.31	15 0.59 44 1.73	615 820 101 0



Torx Plus

IP	Dø	I	LENGTH L	PART NO
mm	in	mm	in	10 pcs
2IP	1.5	0.06	20 0.79 44 1.73	615 820 381 0
2IP	1.5	0.06	20 0.79 64 2.52	615 820 382 0
3IP	1.7	0.07	20 0.79 44 1.73	615 820 383 0
3IP	1.7	0.07	20 0.79 64 2.52	615 820 384 0
4IP	1.8	0.07	20 0.79 44 1.73	615 820 385 0
4IP	1.8	0.07	20 0.79 64 2.52	615 820 386 0
5IP	2.0	0.08	20 0.79 44 1.73	615 820 387 0
5IP	2.0	0.08	20 0.79 64 2.52	615 820 388 0
6IP	2.5	0.10	20 0.79 44 1.73	615 820 389 0
6IP	2.5	0.10	20 0.79 64 2.52	615 820 390 0
8IP	3.0	0.12	20 0.79 44 1.73	615 820 391 0
8IP	3.0	0.12	20 0.79 64 2.52	615 820 392 0
10IP	3.0	0.12	20 0.79 44 1.73	615 820 393 0
10IP	3.0	0.12	20 0.79 64 2.52	615 820 394 0



Torx

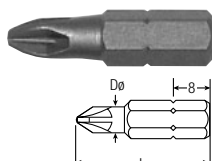
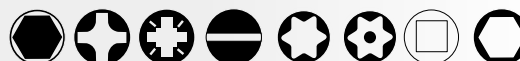
Torx Taper Proof

T	Dø	I	LENGTH L	PART NO
mm	in	mm	in	10 pcs
T1	1.5	0.06	20 0.79 44 1.73	615 820 663 0
T2	1.5	0.06	20 0.79 44 1.73	615 820 664 0
T3	1.7	0.07	20 0.79 44 1.73	615 820 665 0
T4	1.8	0.07	20 0.79 44 1.73	615 820 666 0
T5	2.0	0.08	20 0.79 44 1.73	615 820 102 0
T5	2.0	0.08	20 0.79 64 2.52	615 820 103 0
T6	2.0	0.08	20 0.79 44 1.73	615 820 104 0
T6	2.0	0.08	20 0.79 64 2.52	615 820 105 0
T8	3.0	0.12	20 0.79 44 1.73	615 820 668 0
T8H	3.0	0.12	20 0.79 44 1.73	615 820 106 0
T8H	3.0	0.12	20 0.79 64 2.52	615 820 107 0
T9	3.0	0.12	20 0.79 44 1.73	615 820 669 0
T10H	3.0	0.12	20 0.79 44 1.73	615 820 108 0
T10H	3.0	0.12	20 0.79 64 2.52	615 820 109 0
T15H	4.0	0.16	20 0.79 64 2.52	615 820 110 0

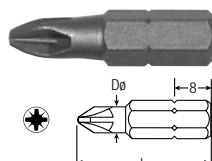
Insert bits

Drive: 1/4" = 6.35mm

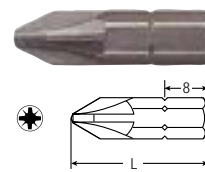
Hex shank DIN3126-C6.3



PH	Dø	LENGTH L	PART NO
mm	in	mm	10 pcs
2	6.0	0.24 25.4 1.00	615 820 518 0

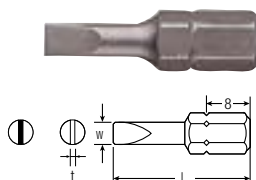


PZ	Dø	LENGTH L	PART NO
mm	in	mm	10 pcs
1	4.5	0.18 25.0 0.98	615 820 690 0
2	6.0	0.24 25.0 0.98	615 820 450 0
2	6.0	0.24 50.0 1.97	615 820 694 0
3	6.0	0.24 25.0 0.98	615 820 693 0

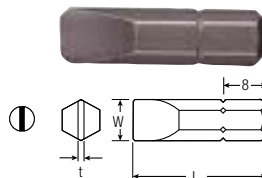


PZ	LENGTH L	PART NO
mm	in	10 pcs
1	25.4 1.00	615 820 449 0
2	25.4 1.00	615 820 450 0
3	50.0 1.97	615 820 522 0

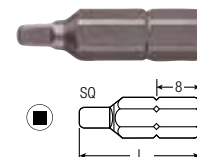
Drive: 1/4" = 6.35mm
Hex shank DIN3126-C6.3



w	t	LENGTH L	PART NO
mm	in	mm	in
4	0.6	0.02	25.0 0.98
5	0.8	0.03	25.0 0.98

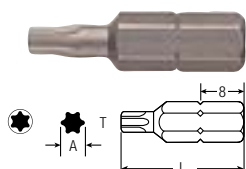


w	t	LENGTH L	PART NO
mm	in	mm	in
4.76	0.9	0.03	25.4 1.00
5.55	1.0	0.04	25.4 1.00
6.35	1.1	0.04	25.4 1.00
7.14	1.2	0.05	25.4 1.00
7.93	1.3	0.05	25.4 1.00

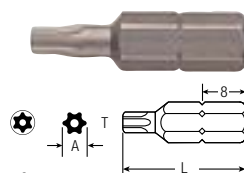


SQ	LENGTH L	PART NO
mm	in	10 pcs
1 (3/32")	25.4	1.00
2 (1/8")	25.4	1.00
3 (9/64")	25.4	1.00

* Production upon your order.



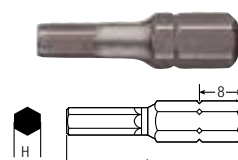
T	A	LENGTH L	PART NO
mm	in	mm	in
T3	1.1	0.04	25.0 0.98
T5	1.4	0.05	25.0 0.98
T6	1.7	0.06	25.0 0.98
T7	2.0	0.08	25.0 0.98
T8	2.3	0.09	25.0 0.98
T9	2.5	0.10	25.0 0.98
T10	2.7	0.11	25.0 0.98
T15	3.3	0.13	25.0 0.98
T20	3.8	0.15	25.0 0.98
T25	4.4	0.17	25.0 0.98
T27	5.0	0.20	25.0 0.98
T30	5.5	0.22	25.0 0.98
T40	6.6	0.26	25.0 0.98



Torx Tamper Proof

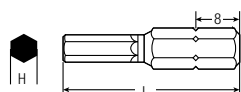
T	A	LENGTH L	PART NO
mm	in	mm	in
T10H	2.7	0.11	25.0 0.98
T20H	3.8	0.15	25.0 0.98
T25H	4.4	0.17	25.0 0.98
T27H	5.0	0.20	25.0 0.98

* Production upon your order.



H	LENGTH L	PART NO
mm	in	10 pcs
H1.5	25.0	0.98
H2	25.0	0.98
H2.5	25.0	0.98
H3	25.0	0.98
H4	25.0	0.98
H5	25.0	0.98
H6	25.0	0.98
H8	25.0	0.98

Drive: 5/16" = 8mm Hex.
DIN3126-C8

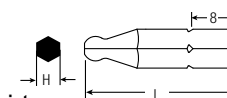


H	LENGTH L	PART NO
mm	in	10 pcs
H5	34.0	1.34
H6	34.0	1.34



Torx Plus

IP	A	LENGTH L	PART NO
mm	in	mm	in
6IP	1.7	0.06	25.0 0.98
8IP	2.3	0.09	25.0 0.98
10IP	2.7	0.11	25.0 0.98
15IP	3.3	0.13	25.0 0.98
20IP	3.8	0.15	25.0 0.98
25IP	4.4	0.17	25.0 0.98
30IP	5.5	0.22	25.0 0.98
40IP	6.6	0.26	25.4 1.00

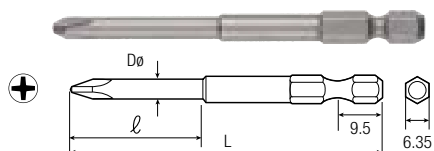


Ball Point

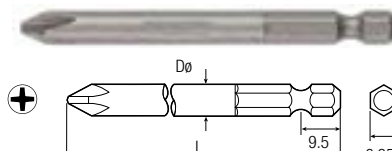
H	LENGTH L	PART NO
mm	in	10 pcs
H2	25.0	0.98
H2.5	25.0	0.98
H3	25.0	0.98
H4	25.0	0.98
H5	25.0	0.98
H6	25.0	0.98
H8	25.0	0.98

Power bits

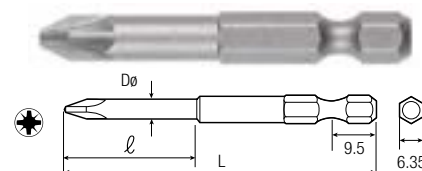
Drive: 1/4" = 6.35mm
Hex drive - DIN3126-E6.3



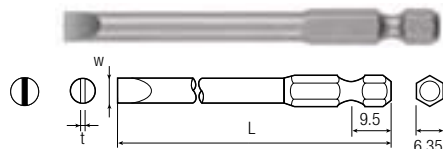
PH	Dø		l		LENGTH L		PART NO
	mm	in	mm	in	mm	in	10 pcs
00	1.2	0.05	20	0.8	60	2.4	615 820 056 0
00	1.6	0.06	-	-	49	1.9	615 820 125 0
00	1.6	0.06	-	-	70	2.8	615 820 348 0
00	1.5	0.06	20	0.8	60	2.4	615 820 057 0
00	1.7	0.07	20	0.8	60	2.4	615 820 058 0
00	2	0.08	40	1.57	60	2.36	615 820 059 0
0	1.4	0.06	30	1.2	60	2.4	615 820 061 0
0	1.7	0.07	40	1.6	80	3.1	615 820 064 0
0	2.5	0.10	20	0.8	60	2.4	615 820 067 0
0	2.5	0.10	30	1.2	100	3.9	615 820 068 0
0	3.0	0.12	20	0.8	60	2.4	615 820 069 0
0	3.0	0.12	30	1.2	100	3.9	615 820 070 0
0	3.2	0.12	-	-	49	1.9	615 820 464 0



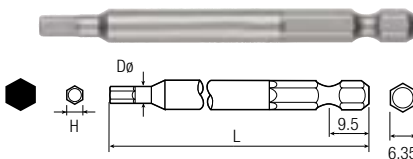
PH	Dø		LENGTH L		PART NO
	mm	in	mm	in	10 pcs
1	4.8	0.19	49	1.93	615 820 465 0
1	4.76	0.19	70	2.76	615 820 466 0
1	4.76	0.19	89	3.50	615 820 467 0
1	4.5	0.18	150	5.91	615 820 659 0
1	4.76	0.19	152	5.98	615 820 468 0
2	4.76	0.19	49	1.93	615 820 126 0
2	6.35	0.25	49	1.93	615 820 469 0
2	6.35	0.25	70	2.76	615 820 470 0
2	6.35	0.25	89	3.50	615 820 471 0
2	6.0	0.24	100	3.94	615 820 561 0
2	6.0	0.24	127	5.00	615 820 127 0
2	6.0	0.24	150	5.91	615 820 660 0
2	6.35	0.25	152	5.98	615 820 472 0
2	6.0	0.24	200	7.87	615 820 129 0
3	7.9	0.31	70	2.76	615 820 474 0
3	7.9	0.31	89	3.50	615 820 475 0
3	8.0	0.31	150	5.91	615 820 128 0



PZ	Dø		l		LENGTH L		PART NO
	mm	in	mm	in	mm	in	10 pcs
0	3.17	0.12	-	-	70	2.76	615 820 314 0
0	2.00	0.08	20	0.79	60	2.36	615 820 715 0
0	3.00	0.12	20	0.79	60	2.36	615 820 716 0
0	2.0	0.08	30	1.18	100	3.94	615 820 322 0
1	4.76	0.19	-	-	49	1.93	615 820 131 0
1	4.76	0.19	-	-	70	2.76	615 820 352 0
1	4.76	0.19	-	-	89	3.50	615 820 478 0
1	4.50	0.18	-	-	100	3.94	615 820 483 0
1	4.76	0.19	50	1.97	152	5.98	615 820 481 0
2	6.35	0.25	-	-	49	1.93	615 820 311 0
2	6.0	0.24	22	0.87	50	1.97	615 820 712 0
2	6.35	0.25	-	-	70	2.76	615 820 476 0
2	6.35	0.25	-	-	89	3.50	615 820 479 0
2	6.0	0.24	-	-	100	3.94	615 820 558 0
2	6.0	0.24	-	-	150	5.91	615 820 661 0
2	6.35	0.25	50	1.97	152	5.98	615 820 482 0
2	6.0	0.24	-	-	200	7.87	615 820 711 0
4	8.0	0.31	-	-	51	2.01	615 820 714 0



W	t		LENGTH L		PART NO
	mm	in	mm	in	10 pcs
3.0	0.50	0.02	51	2.01	615 820 566 0
3.4	0.66	0.03	70	2.76	615 820 135 0
3.8	0.76	0.03	76	2.99	615 820 137 0
4.0	0.60	0.02	51	2.01	615 820 567 0
4.75	0.86	0.03	76	2.99	615 820 138 0
5.5	0.80	0.03	51	2.01	615 820 568 0
6.35	0.91	0.04	49	1.93	615 820 489 0
3.1	0.56	0.02	102	4.02	615 820 144 0
3.1	0.56	0.02	76	2.99	615 820 136 0
3.1	0.56	0.02	49	1.93	615 820 132 0
9.1	1.27	0.05	102	4.02	615 820 152 0
4.75	0.86	0.03	102	4.02	615 820 147 0
3.8	0.55	0.02	102	4.02	615 820 146 0
3.4	1.27	0.05	102	4.02	615 820 145 0
9.1	1.17	0.05	76	2.99	615 820 143 0
7.9	1.067	0.04	76	2.99	615 820 142 0
6.98	0.96	0.04	76	2.99	615 820 141 0
5.46	1.27	0.05	76	2.99	615 820 139 0
9.1	1.17	0.05	49	1.93	615 820 493 0
7.9	1.067	0.04	49	1.93	615 820 492 0
6.98	0.96	0.04	49	1.93	615 820 491 0
6.35	0.91	0.04	49	1.93	615 820 490 0
5.46	0.86	0.03	49	1.93	615 820 488 0
3.8	0.55	0.02	49	1.93	615 820 134 0
3.4	0.66	0.03	49	1.93	615 820 133 0

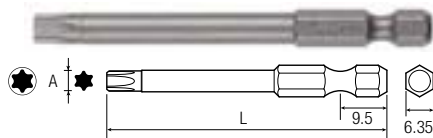


H	Dø		LENGTH L		PART NO
	mm	in	mm	in	10 pcs
H2	7.0	0.28	75	2.95	615 820 001 0
H2	7.0	0.28	100	3.94	615 820 002 0
H2	3.5	0.14	49	1.93	615 820 353 0
H2.5	7.0	0.28	75	2.95	615 820 003 0
H2.5	7.0	0.28	100	3.94	615 820 004 0
H2.5	7.0	0.28	150	5.91	615 820 014 0
H2.5	3.5	0.14	49	1.93	615 820 495 0
H3	3.5	0.14	49	1.93	615 820 496 0
H3	7.0	0.28	75	2.95	615 820 005 0
H3	7.0	0.28	100	3.94	615 820 006 0
H3	7.0	0.28	150	5.91	615 820 015 0
H4	4.6	0.18	49	1.93	615 820 497 0
H4	7.0	0.28	75	2.95	615 820 007 0
H4	7.0	0.28	100	3.94	615 820 008 0
H4	7.0	0.28	150	5.91	615 820 016 0
H5	5.8	0.23	49	1.93	615 820 498 0
H5	7.0	0.28	75	2.95	615 820 009 0
H5	7.0	0.28	100	3.94	615 820 010 0
H5	7.0	0.28	150	5.91	615 820 017 0

H	Dø		LENGTH L		PART NO
	mm	in	mm	in	10 pcs
H6	-	-	49	1.93	615 820 499 0
H6	7.0	0.28	75	2.95	615 820 011 0
H6	7.0	0.28	100	3.94	615 820 012 0
H6	7.0	0.28	150	5.91	615 820 018 0
H7	10	0.39	70	2.76	615 820 569 0
H8	-	-	49	1.93	615 820 315 0
H8	10	0.39	70	2.76	615 820 570 0
H8	10	0.39	150	5.91	615 820 019 0
H9	11	0.43	70	2.76	615 820 571 0
H10	-	-	49	1.93	615 820 354 0
H10	12	0.47	70	2.76	615 820 572 0
H1/4"	-	-	49	1.93	615 820 494 0

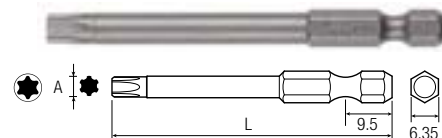
Drive: 1/4" = 6.35mm

Hex drive - DIN3126-E6.3



T	A		LENGTH L		PART NO
	mm	in	mm	in	10 pcs
T5	1.37	0.05	49	1.93	615 820 153 0
T5	1.37	0.05	70	2.76	615 820 154 0
T6	1.65	0.06	49	1.93	615 820 156 0
T6	1.65	0.06	70	2.76	615 820 157 0
T7	1.97	0.08	70	2.76	615 820 161 0
T7	1.97	0.08	89	3.50	615 820 162 0
T8	2.30	0.09	49	1.93	615 820 166 0
T8	2.30	0.09	70	2.76	615 820 167 0
T8	2.30	0.09	90	3.54	615 820 168 0
T8	2.30	0.09	152	5.98	615 820 169 0
T9	2.48	0.10	70	2.76	615 820 171 0
T9	2.48	0.10	90	3.54	615 820 172 0
T9	2.48	0.10	152	5.98	615 820 176 0
T10	2.72	0.11	49	1.93	615 820 177 0
T10	2.72	0.11	70	2.76	615 820 178 0
T10	2.72	0.11	90	3.54	615 820 179 0
T10	2.72	0.11	152	5.98	615 820 180 0
T15	3.26	0.13	49	1.93	615 820 181 0
T15	3.26	0.13	70	2.76	615 820 183 0
T15	3.26	0.13	90	3.54	615 820 186 0
T15	3.26	0.13	152	5.98	615 820 187 0*
T20	3.84	0.15	49	1.93	615 820 188 0
T20	3.84	0.15	70	2.76	615 820 189 0
T20	3.84	0.15	90	3.54	615 820 190 0
T20	3.84	0.15	152	5.98	615 820 191 0
T25	4.40	0.17	49	1.93	615 820 192 0
T25	4.40	0.17	70	2.76	615 820 193 0
T25	4.40	0.17	152	5.98	615 820 316 0*
T27	4.96	0.20	90	3.54	615 820 356 0
T27	4.96	0.20	152	5.98	615 820 695 0
T30	5.49	0.22	49	1.93	615 820 163 0
T30	5.49	0.22	70	2.76	615 820 174 0
T30	5.49	0.22	90	3.54	615 820 184 0
T30	5.49	0.22	152	5.98	615 820 194 0
T40	6.60	0.26	49	1.93	615 820 164 0
T40	6.60	0.26	70	2.76	615 820 175 0
T40	6.60	0.26	90	3.54	615 820 185 0
T40	6.60	0.26	152	5.98	615 820 195 0

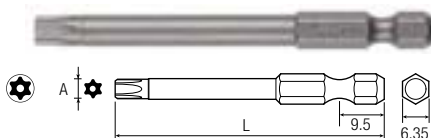
* Production upon your order.



Torx Plus

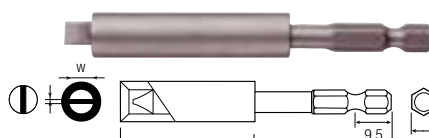
IP	A		LENGTH L		PART NO
	mm	in	mm	in	10 pcs
5IP	1.37	0.05	49	1.93	615 820 265 0
5IP	1.37	0.05	70	2.76	615 820 266 0
6IP	1.65	0.06	152	5.98	615 820 270 0
7IP	1.97	0.08	49	1.93	615 820 271 0
7IP	1.97	0.08	70	2.76	615 820 272 0
7IP	1.97	0.08	90	3.54	615 820 273 0
7IP	1.97	0.08	152	5.98	615 820 274 0
8IP	2.30	0.09	49	1.93	615 820 275 0
8IP	2.30	0.09	90	3.54	615 820 277 0
8IP	2.30	0.09	152	5.98	615 820 278 0
9IP	2.48	0.10	49	1.93	615 820 280 0
9IP	2.48	0.10	70	2.76	615 820 281 0*
9IP	2.48	0.10	90	3.54	615 820 286 0*
9IP	2.48	0.10	152	5.98	615 820 279 0*
10IP	2.72	0.11	49	1.93	615 820 287 0
10IP	2.72	0.11	152	5.98	615 820 294 0
15IP	3.26	0.13	49	1.93	615 820 295 0
15IP	3.26	0.13	90	3.54	615 820 301 0*
15IP	3.26	0.13	152	5.98	615 820 302 0
20IP	3.84	0.15	49	1.93	615 820 303 0
20IP	3.84	0.15	70	2.76	615 820 304 0
20IP	3.84	0.15	90	3.54	615 820 305 0*
20IP	3.84	0.15	152	5.98	615 820 306 0
25IP	4.40	0.17	49	1.93	615 820 282 0*
25IP	4.40	0.17	70	2.76	615 820 283 0*
25IP	4.40	0.17	90	3.54	615 820 284 0*
25IP	4.40	0.17	152	5.98	615 820 285 0*
27IP	4.96	0.20	49	1.93	615 820 289 0
27IP	4.96	0.20	90	3.54	615 820 291 0*
30IP	5.49	0.22	49	1.93	615 820 297 0*
30IP	5.49	0.22	70	2.76	615 820 298 0*
30IP	5.49	0.22	90	3.54	615 820 299 0*
30IP	5.49	0.22	152	5.98	615 820 300 0
40IP	6.60	0.26	49	1.93	615 820 307 0*
40IP	6.60	0.26	70	2.76	615 820 308 0*
40IP	6.60	0.26	90	3.54	615 820 309 0*
40IP	6.60	0.26	152	5.98	615 820 310 0

* Production upon your order.



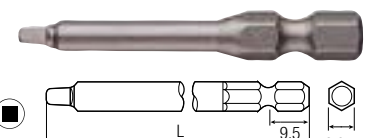
Torx Tamper Proof

T	A		LENGTH L		PART NO
	mm	in	mm	in	10 pcs
T10H	2.72	0.11	49	1.93	615 820 196 0
T10H	2.72	0.11	70	2.76	615 820 198 0
T20H	3.84	0.15	49	1.93	615 820 197 0
T20H	3.84	0.15	70	2.76	615 820 199 0



Finder Sleeve Combined

W	t		screw head	LENGTH L		PART NO
	mm	in		mm	in	10 pcs
4.90	0.91	0.04	4-5	95	3.74	111062
0.91	0.91	0.04	5-6	95	3.74	615 820 503 0
6.12	0.97	0.04	6-8	95	3.74	111072
7.37	1.07	0.04	8-10	95	3.74	615 804 741 0
8.89	1.17	0.05	10-12	95	3.74	615 804 742 0
10.03	1.27	0.05	12-14	98	3.86	615 804 743 0



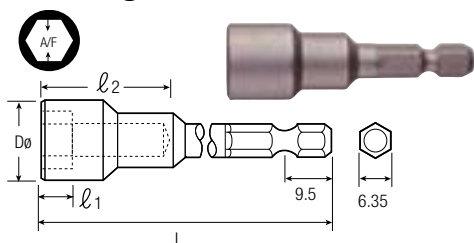
SQ	LENGTH L		PART NO
	mm	in	10 pcs
1 (3/32")	70	2.76	615 820 500 0
3 (9/64")	70	2.76	615 820 502 0

Nut setters

Drive: 1/4" = 6.35mm
Hex drive - DIN3126-E6.3

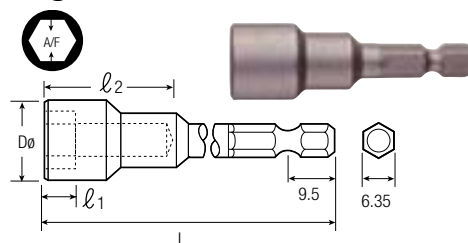


Non magnetic nut setters



A/F		Dø		l1		l2		LENGTH L		PART NO
mm	in	mm	in	mm	in	mm	in	mm	in	10 pcs
4.0	0.2	8.0	0.3	3.0	0.1	15.0	0.6	50	2.0	615 820 573 0
4.0	0.2	8.0	0.3	3.0	0.1	25.0	1.0	100	3.9	615 820 599 0
4.5	0.2	8.0	0.3	3.0	0.1	15.0	0.6	50	2.0	615 820 574 0*
4.5	0.2	8.0	0.3	3.0	0.1	25.0	1.0	100	3.9	615 820 600 0
5.0	0.2	8.5	0.3	3.5	0.1	15.0	0.6	50	2.0	615 820 575 0*
5.0	0.2	8.5	0.3	3.5	0.1	25.0	1.0	75	3.0	615 820 588 0
5.0	0.2	8.5	0.3	3.5	0.1	25.0	1.0	100	3.9	615 820 601 0
5.0	0.2	8.5	0.3	3.5	0.1	25.0	1.0	150	5.9	615 820 210 0
5.5	0.2	9.0	0.4	3.5	0.1	15.0	0.6	50	2.0	615 820 576 0
5.5	0.2	9.0	0.4	3.5	0.1	25.0	1.0	75	3.0	615 820 589 0
5.5	0.2	9.0	0.4	3.5	0.1	25.0	1.0	100	3.9	615 820 602 0
5.5	0.2	9.0	0.4	3.5	0.1	25.0	1.0	150	5.9	615 820 211 0
6.0	0.2	10.0	0.4	4.0	0.2	15.0	0.6	50	2.0	615 820 577 0
6.0	0.2	10.0	0.4	4.0	0.2	25.0	1.0	75	3.0	615 820 590 0
6.0	0.2	10.0	0.4	4.0	0.2	25.0	1.0	100	3.9	615 820 603 0
6.0	0.2	10.0	0.4	4.0	0.2	25.0	1.0	150	5.9	615 820 212 0
7.0	0.3	13.0	0.5	5.0	0.2	15.0	0.6	50	2.0	615 820 578 0
7.0	0.3	13.0	0.5	5.0	0.2	25.0	1.0	75	3.0	615 820 591 0
7.0	0.3	13.0	0.5	5.0	0.2	25.0	1.0	100	3.9	615 820 604 0
7.0	0.3	13.0	0.5	5.0	0.2	25.0	1.0	150	5.9	615 820 213 0
8.0	0.3	13.0	0.5	5.0	0.2	15.0	0.6	50	2.0	615 820 579 0
8.0	0.3	13.0	0.5	5.0	0.2	30.0	1.2	75	3.0	615 820 592 0
8.0	0.3	13.0	0.5	5.0	0.2	30.0	1.2	100	3.9	615 820 605 0
8.0	0.3	13.0	0.5	5.0	0.2	30.0	1.2	150	5.9	615 820 214 0
9.0	0.4	14.0	0.6	5.5	0.2	15.0	0.6	50	2.0	615 820 580 0
9.0	0.4	14.0	0.6	5.5	0.2	30.0	1.2	75	3.0	615 820 593 0
9.0	0.4	14.0	0.6	5.5	0.2	30.0	1.2	100	3.9	615 820 606 0
10.0	0.4	16.0	0.6	6.5	0.3	15.0	0.6	50	2.0	615 820 581 0
10.0	0.4	16.0	0.6	6.5	0.3	30.0	1.2	75	3.0	615 820 594 0
10.0	0.4	16.0	0.6	6.5	0.3	30.0	1.2	100	3.9	615 820 607 0
10.0	0.4	16.0	0.6	6.5	0.3	30.0	1.2	150	5.9	615 820 215 0
11.0	0.4	17.0	0.7	7.0	0.3	15.0	0.6	50	2.0	615 820 582 0
11.0	0.4	17.0	0.7	7.0	0.3	30.0	1.2	75	3.0	615 820 595 0
11.0	0.4	17.0	0.7	7.0	0.3	30.0	1.2	100	3.9	615 820 608 0
12.0	0.5	18.0	0.7	7.5	0.3	30.0	1.2	75	3.0	615 820 596 0
12.0	0.5	18.0	0.7	7.5	0.3	30.0	1.2	100	3.9	615 820 609 0
12.0	0.5	18.0	0.7	7.5	0.3	30.0	1.2	150	5.9	615 820 216 0
13.0	0.5	19.0	0.7	8.0	0.3	15.0	0.6	50	2.0	615 820 584 0
13.0	0.5	19.0	0.7	8.0	0.3	30.0	1.2	100	3.9	615 820 610 0
13.0	0.5	19.0	0.7	8.0	0.3	30.0	1.2	150	5.9	615 820 217 0
14.0	0.6	20.0	0.8	8.0	0.3	15.0	0.6	50	2.0	615 820 585 0
14.0	0.6	20.0	0.8	8.0	0.3	30.0	1.2	75	3.0	615 820 598 0
14.0	0.6	20.0	0.8	8.0	0.3	30.0	1.2	100	3.9	615 820 611 0

Magnetic nut setters

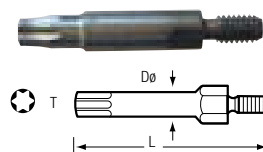


A/F		Dø		l1		LENGTH L		PART NO
mm	in	mm	in	mm	in	mm	in	10 pcs
5.0	0.2	8.5	0.3	3.5	0.1	50	2.0	615 820 612 0
5.0	0.2	8.5	0.3	3.5	0.1	75	3.0	615 820 623 0
5.0	0.2	8.5	0.3	3.5	0.1	100	3.9	615 820 634 0
5.0	0.2	8.5	0.3	3.5	0.1	150	5.9	615 820 218 0
5.5	0.2	9.0	0.4	3.5	0.1	50	2.0	615 820 613 0
5.5	0.2	9.0	0.4	3.5	0.1	75	3.0	615 820 624 0*
6.0	0.2	10.0	0.4	4.0	0.2	50	2.0	615 820 614 0
6.0	0.2	10.0	0.4	4.0	0.2	75	3.0	615 820 625 0
6.0	0.2	10.0	0.4	4.0	0.2	100	3.9	615 820 636 0
6.0	0.2	10.0	0.4	4.0	0.2	150	5.9	615 820 220 0
7.0	0.3	13.0	0.5	4.5	0.2	50	2.0	615 820 615 0
7.0	0.3	13.0	0.5	4.5	0.2	75	3.0	615 820 626 0
7.0	0.3	13.0	0.5	4.5	0.2	100	3.9	615 820 637 0
7.0	0.3	13.0	0.5	5.0	0.2	150	5.9	615 820 221 0
8.0	0.3	13.0	0.5	5.0	0.2	50	2.0	615 820 616 0
8.0	0.3	13.0	0.5	5.0	0.2	75	3.0	615 820 627 0
8.0	0.3	13.0	0.5	5.0	0.2	100	3.9	615 820 638 0
8.0	0.3	13.0	0.5	5.0	0.2	150	5.9	615 820 222 0
9.0	0.4	14.0	0.6	5.5	0.2	50	2.0	615 820 617 0
9.0	0.4	14.0	0.6	5.5	0.2	75	3.0	615 820 628 0
9.0	0.4	14.0	0.6	5.5	0.2	100	3.9	615 820 639 0
10.0	0.4	16.0	0.6	6.5	0.3	50	2.0	615 820 618 0
10.0	0.4	16.0	0.6	6.5	0.3	75	3.0	615 820 629 0
10.0	0.4	16.0	0.6	6.5	0.3	100	3.9	615 820 640 0
10.0	0.4	16.0	0.6	6.5	0.3	150	5.9	615 820 223 0
11.0	0.4	17.0	0.7	7.0	0.3	50	2.0	615 820 619 0
11.0	0.4	17.0	0.7	7.0	0.3	75	3.0	615 820 630 0
11.0	0.4	17.0	0.7	7.0	0.3	100	3.9	615 820 641 0
12.0	0.5	18.0	0.7	7.5	0.3	50	2.0	615 820 620 0
12.0	0.5	18.0	0.7	7.5	0.3	75	3.0	615 820 631 0
12.0	0.5	18.0	0.7	7.5	0.3	100	3.9	615 820 642 0
12.0	0.5	18.0	0.7	7.5	0.3	150	5.9	615 820 224 0
13.0	0.5	19.0	0.7	8.0	0.3	50	2.0	615 820 621 0
13.0	0.5	19.0	0.7	8.0	0.3	75	3.0	615 820 632 0
13.0	0.5	19.0	0.7	8.0	0.3	100	3.9	615 820 643 0
13.0	0.5	19.0	0.7	8.0	0.3	150	5.9	615 820 225 0
14.0	0.6	20.0	0.8	8.0	0.3	50	2.0	615 820 622 0
14.0	0.6	20.0	0.8	8.0	0.3	75	3.0	615 820 633 0
14.0	0.6	20.0	0.8	8.0	0.3	100	3.9	615 820 644 0

* Production upon your order.

Screw shanks

Screw shank driver bit



PH	M	LENGTH L		PART NO
		mm	in	10 pcs
2	M4	34	1.34	615 820 654 0
2	M5	34	1.34	615 820 657 0

PZ	M	LENGTH L		PART NO
		mm	in	10 pcs

2	M5	34	1.34	615 820 658 0
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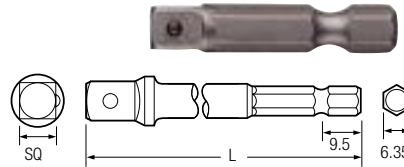
T	M	Dø		LENGTH L		PART NO
		mm	in	mm	in	10 pcs
T10	M4	6	0.24	33	1.3	105782
T20	M4	6	0.24	33	1.3	105802
T15	M5	7	0.28	33	1.3	105842
T20	M5	7	0.28	33	1.3	105852
T25	M5	7	0.28	33	1.3	105862
T30	M5	7	0.28	33	1.3	105882

* Production upon your order.



Adapters

Drive: 1/4" = 6.35mm Hex drive - DIN3126-E6.3



SQ	LENGTH L		PART NO
	mm	in	
1/4"	35	1.38	95352
1/4"	51	2.01	615 820 508 0
1/4"	76	2.99	615 820 509 0
1/4"	102	4.02	615 820 510 0
1/4"	152	5.98	615 820 511 0
3/8"	43	1.69	95362
3/8"	51	2.01	615 820 512 0
3/8"	76	2.99	615 820 513 0
3/8"	102	4.02	615 820 514 0
3/8"	152	5.98	615 820 515 0

Bits holders

Drive: 1/4" = 6.35mm
Hex drive - DIN3126-C6.3



TIP SIZE	LENGTH L		PART NO
	mm	in	
T10	49	1.93	615 820 340 0
T10	70	2.76	615 820 341 0
T15	49	1.93	615 820 702 0
T20	49	1.93	615 820 342 0
T20	75	2.95	615 820 343 0
T20	150	5.91	615 820 344 0
T25	49	1.93	615 820 704 0
T25	70	2.76	615 820 705 0



TIP SIZE	LENGTH L		MAGNETIC	PART NO
	mm	in		
T10	33	1.30	yes	615 820 247 0
T15	33	1.30	yes	615 820 245 0
T20	33	1.30	yes	615 820 246 0
T25	33	1.30	yes	615 820 253 0
PH1	33	1.30	yes	615 820 248 0
PH2	33	1.30	yes	615 820 249 0
PZ1	33	1.30	yes	615 820 250 0
PZ2	33	1.30	yes	615 820 251 0

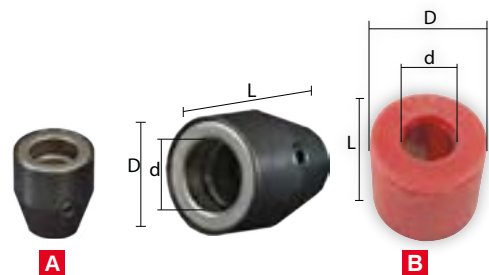


	PART NO	TIP SIZE	DRIVE	LENGTH L		DIAMETER Ø		MAGNETIC	DIN 3126-C6.3	DIN 3126-E6.3	DOUBLE ENDED BITS DIN 3126-E6.3	DOUBLE ENDED BITS DIN 3126-C6.3	SPECIFIC BIT
				mm	in	mm	in						
	615 820 557 0		5/16"	70	2.8	12.7	0.51	Yes	X				
	11502		5/16"	54	2.2	11.1	0.44	Yes	X				
	615 820 556 0		5/16"	50	2.0	11.1	0.44	No	X				
	615 820 443 0		1/4"	71	2.8	17	0.68	Yes	X				
	615 820 404 0		1/4"	60	2.4	11.1	0.44	Yes	X				
	615 820 555 0		1/4"	75	3.0	9.1	0.36	Yes			X		
	110102		1/4"	150	6.0	11.1	0.44	Yes	X				
	615 820 506 0		1/4"	100	4.0	11.1	0.44	Yes	X				
	615 820 402 0		1/4"	60	2.4	11.1	0.44	No			X		
	615 820 504 0		1/4"	100	4.0	11.1	0.44	No	X				
	615 820 505 0		1/4"	150	6.0	11.1	0.44	No	X				
	615 820 405 0		1/4"	62	2.5	14.4	0.58	Yes				X	
	615 820 403 0		1/4"	62	2.5	14.4	0.58	No				X	
	615 820 254 0	T10	1/4"	49	2.0	-	-	Yes					X
	615 820 255 0	T10	1/4"	70	2.8	-	-	Yes					X
	615 820 698 0	T15	1/4"	49	2.0	-	-	Yes					X
	615 820 256 0	T20	1/4"	49	2.0	-	-	Yes					X
	615 820 244 0	T20	1/4"	75	3.0	-	-	Yes					X
	615 820 252 0	T20	1/4"	150	6.0	-	-	Yes					X
	615 820 700 0	T25	1/4"	49	2.0	-	-	Yes					X
	615 820 701 0	T25	1/4"	70	2.8	-	-	Yes					X

Sockets and adaptors range

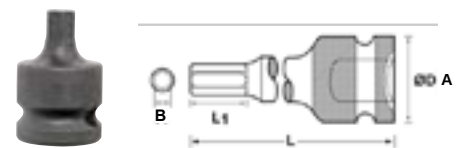
Ring magnet sleeves

PICTURE	d Max		D		L		PART NO
	mm	in	mm	in	mm	in	
A	3.1	0.12	9	0.35	16	0.63	615 811 423 0
	3.8	0.15	9	0.35	16	0.63	615 811 424 0
	4.5	0.18	9	0.35	16	0.63	615 811 425 0
	5	0.2	9	0.35	16	0.63	615 811 426 0
	6.1	0.26	11	0.43	16	0.63	615 811 427 0
	7.1	0.28	14	0.55	16	0.63	615 811 428 0
	8.2	0.32	14	0.55	16	0.63	615 811 429 0
	14	0.55	23.5	0.93	18	0.71	615 811 432 0
B	7	0.27	14	0.54	13	0.51	615 804 978 0



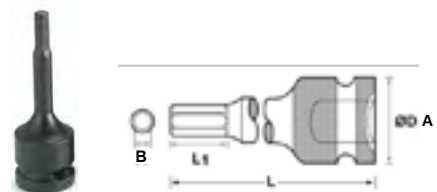
3/8" Hexagonal drives

A	B		L		L1		ØD		PART NO.
	mm	in	mm	in	mm	in	mm	in	
3/8"	4	0.16	60	1.97	16	0.63	19	0.75	909 201 378 1
3/8"	5	0.2	60	1.97	16	0.63	19	0.75	909 201 381 1
3/8"	8	0.31	60	1.97	16	0.63	19	0.75	909 201 387 1
3/8"	10	0.39	60	1.97	16	0.63	19	0.75	909 201 390 1



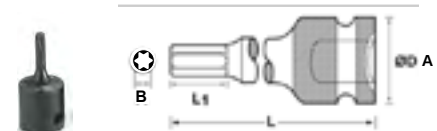
1/2" Hexagonal drives

A	B		L		L1		ØD		PART NO
	mm	in	mm	in	mm	in	mm	in	
1/2"	6	0.24	78	3.1	9	0.4	25	0.98	615 811 763 0
1/2"	8	0.31	78	3.1	16	0.6	25	0.98	909 201 396 1
1/2"	10	0.39	78	3.1	16	0.6	25	0.98	909 201 399 1
1/2"	14	0.55	78	3.1	20	0.8	25	0.98	909 201 405 1



Internal Torx drives

A	B	L		L1		ØD		PART NO.
		mm	in	mm	in	mm	in	
3/8"	T25	40	2.95	3	0.12	22	0.87	615 811 434 0
3/8"	T30	40	2.95	3.8	0.15	22	0.87	615 811 435 0
3/8"	T40	40	2.95	3.8	0.15	22	0.87	615 811 436 0
1/2"	T40	55	2.95	3.8	0.15	25	0.98	615 811 437 0

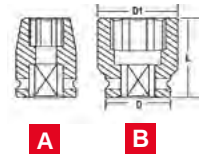


Sockets and adaptors range

1/4" = 6.35mm Square drive sockets

1/4" Standard

MODEL	OUTPUT SIZE		SHAPE	D		D1		L		PART NO.
	mm	in		mm	in	mm	in	mm	in	
S2055M	5.5	0.22	A	13	0.51	9.4	0.37	23.1	0.91	894 016 367 5
S208M	8	0.31	A	13	0.51	12.2	0.48	23.1	0.91	894 016 367 8
S210M	10	0.39	B	13	0.51	14.7	0.58	23.1	0.91	894 016 368 0
S213M	13	0.51	B	13	0.51	18.8	0.74	23.1	0.91	894 016 368 3

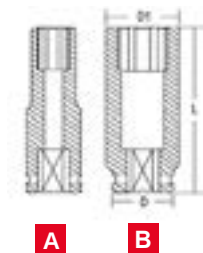


A

B

1/4" Deep

MODEL	OUTPUT SIZE		SHAPE	D		D1		L		PART NO.
	mm	in		mm	in	mm	in	mm	in	
S210MD	10	2.5	B	13	0.51	14.7	0.58	50.0	1.97	894 016 370 4

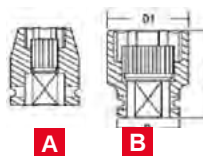


A

B

1/4" Magnetic

MODEL	OUTPUT SIZE		SHAPE	D		D1		L		PART NO.
	mm	in		mm	in	mm	in	mm	in	
S208MG	8	2	A	13	0.51	12.2	0.48	23.1	0.91	894 016 374 3

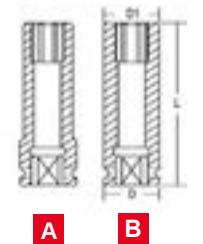


A

B

1/4" Deep Magnetic

MODEL	OUTPUT SIZE		SHAPE	D		D1		L		PART NO.
	mm	in		mm	in	mm	in	mm	in	
S208MDG	8	0.31	A	13	0.51	12.2	0.48	50.0	1.97	894 016 376 5
S210MDG	10	0.39	B	13	0.51	14.5	0.57	50.0	1.97	894 016 376 7



A

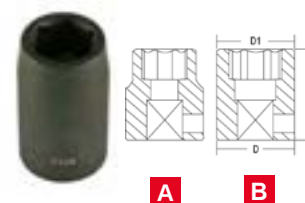
B

Sockets and adaptors range

3/8" = 9.52mm Square drive sockets

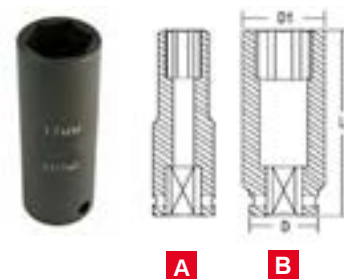
3/8" Standard

MODEL	OUTPUT SIZE		DESSIN	DIMENSIONS						PART NO.
				D		D1		L		
	mm	in		mm	in	mm	in	mm	in	
S310M	10	0.39	A	19.0	0.75	15.2	0.6	29.5	1.16	894 016 378 8
S311M	11	0.43	A	19.0	0.75	17.0	0.67	29.5	1.16	894 016 378 9
S312M	12	0.47	B	19.0	0.75	19.0	0.75	29.5	1.16	894 016 379 0
S313M	13	0.51	B	19.0	0.75	19.0	0.75	29.5	1.16	894 016 379 1
S314M	14	0.55	B	20.0	0.79	20.0	0.79	29.5	1.16	894 016 379 2
S315M	15	0.59	B	22.1	0.87	22.1	0.87	29.5	1.16	894 016 379 3
S316M	16	0.63	B	23.6	0.93	23.6	0.93	30.0	1.18	894 016 379 4
S317M	17	0.67	B	23.9	0.94	23.9	0.94	30.0	1.18	894 016 379 5
S318M	18	0.71	B	24.9	0.98	24.9	0.98	30.0	1.18	894 016 379 6
S319M	19	0.75	B	25.9	1.02	25.9	1.02	30.0	1.18	894 016 379 7
S322M	22	0.87	B	30.0	1.18	30.0	1.18	30.0	1.18	894 016 380 0



3/8" Deep

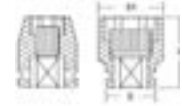
MODEL	OUTPUT SIZE		SHAPE	DIMENSIONS						PART NO.
				D		D1		L		
	mm	in		mm	in	mm	in	mm	in	
S308MD	8	0.31	A	19.0	0.75	12.7	0.50	65.0	2.56	894 016 381 4
S310MD	10	0.39	A	19.0	0.75	15.2	0.60	65.0	2.56	894 016 381 6
S311MD	11	0.43	A	19.0	0.75	17.0	0.67	65.0	2.56	894 016 381 7
S313MD	13	0.51	B	19.0	0.75	19.0	0.75	65.0	2.56	894 016 381 9
S317MD	17	0.67	B	23.9	0.94	23.9	0.94	65.0	2.56	894 016 382 3



Sockets and adaptors range

3/8" Magnetic

MODEL	OUTPUT SIZE		SHAPE	D		D1		L		PART NO.
	mm	in		mm	in	mm	in	mm	in	
S310MG	10	0.39	A	19.0	0.75	15.2	0.6	29.5	1.16	894 016 389 5
S313MG	13	0.51	A	22.1	0.87	19.3	0.8	29.5	1.16	894 016 389 8
S314MG	14	0.55	A	22.1	0.87	20.3	0.8	29.5	1.16	894 016 389 9

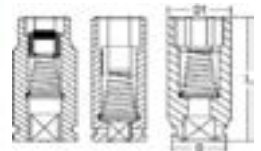


A

B

3/8" Deep magnetic

MODEL	OUTPUT SIZE		SHAPE	D		D1		L		PART NO.
	mm	in		mm	in	mm	in	mm	in	
S313MDG	13	0.51	B	19.0	0.75	18.8	0.74	63	2.5	894 016 392 0



A

B

C

1/2" = 12.7mm Square drive sockets

1/2" Standard

MODEL	OUTPUT SIZE		SHAPE	D		D1		L		PART NO.
	mm	in		mm	in	mm	in	mm	in	
S408M	8	0.31	A	22.1	0.87	14.5	0.57	38.1	1.5	894 016 395 0
S409M	9	0.35	A	22.1	0.87	15.5	0.61	38.1	1.5	894 016 395 1
S410M	10	0.39	A	22.1	0.87	16.8	0.66	38.1	1.5	894 016 395 2
S412M	12	0.47	A	22.1	0.87	19.0	0.75	38.1	1.5	894 016 395 4
S413M	13	0.51	A	23.8	0.94	20.3	0.8	38.1	1.5	894 016 395 5
S415M	15	0.59	A	24.9	0.98	23.1	0.91	38.1	1.5	894 016 395 7
S417M	17	0.67	B	25.9	1.02	25.9	1.02	38.1	1.5	894 016 395 9
S418M	18	0.71	B	26.4	1.04	26.4	1.04	38.1	1.5	894 016 396 0
S419M	19	0.75	B	27.9	1.1	27.9	1.1	38.1	1.5	894 016 396 1
S420M	20	0.79	B	30.0	1.18	30.0	1.18	38.1	1.5	894 016 396 2
S421M	21	0.83	B	30.0	1.18	30.0	1.18	38.1	1.5	894 016 396 3
S422M	22	0.87	B	32.0	1.26	32.0	1.26	38.1	1.5	894 016 396 4
S424M	24	0.94	B	34.0	1.34	34.0	1.34	38.1	1.5	894 016 396 6
S426M	26	1.02	B	36.0	1.42	36.0	1.42	38.1	1.5	894 016 396 8
S427M	27	1.06	B	38.1	1.5	38.1	1.50	39.9	1.57	894 016 396 9
S428M	28	1.10	B	39.8	1.57	39.9	1.57	39.9	1.57	894 016 397 0
S429M	29	1.14	B	39.8	1.57	39.9	1.57	39.9	1.57	894 016 397 1
S430M	30	1.18	C	38.1	1.5	41.9	1.65	39.9	1.57	894 016 397 2
S431M	31	1.22	C	38.1	1.5	43.9	1.73	39.9	1.57	894 016 397 3
S432M	32	1.26	C	38.1	1.5	43.9	1.73	39.9	1.57	894 016 397 4

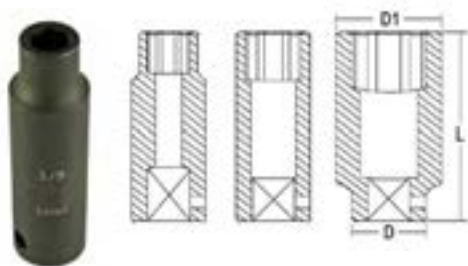


A

B

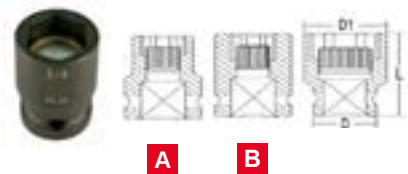
C

Sockets and adaptors range



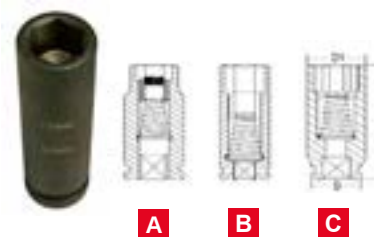
1/2" Deep

MODEL	OUTPUT SIZE		SHAPE	DIMENSIONS						PART NO.
				D		D1		L		
	mm	in		mm	in	mm	in	mm	in	
S409MD	9	0.35	A	22.1	0.87	15.5	0.61	78.0	3.07	894 016 399 9
S411MD	11	0.43	A	22.1	0.87	18.0	0.71	78.0	3.07	894 016 400 1
S412MD	12	0.47	A	22.1	0.87	19.0	0.75	78.0	3.07	894 016 400 2
S413MD	13	0.51	A	23.9	0.94	20.3	0.8	78.0	3.07	894 016 400 3
S414MD	14	0.55	A	23.9	0.94	21.6	0.85	78.0	3.07	894 016 400 4
S415MD	15	0.59	B	23.9	0.94	23.9	0.94	78.0	3.07	894 016 400 5
S416MD	16	0.63	B	24.9	0.98	24.9	0.98	78.0	3.07	894 016 400 6
S417MD	17	0.67	B	25.9	1.02	25.9	1.02	78.0	3.07	894 016 400 7
S418MD	18	0.71	B	25.9	1.02	25.9	1.02	78.0	3.07	894 016 400 8
S419MD	19	0.75	B	27.9	1.1	27.9	1.1	78.0	3.07	894 016 400 9
S420MD	20	0.79	B	30.0	1.18	30.0	1.18	78.0	3.07	894 016 772 2
S421MD	21	0.83	B	30.0	1.18	30.0	1.18	78.0	3.07	894 016 401 0
S422MD	22	0.87	B	32.0	1.26	32.0	1.26	78.0	3.07	894 016 772 3
S423MD	23	0.91	B	32.0	1.26	32.0	1.26	78.0	3.07	894 016 772 4
S424MD	24	0.94	B	34.0	1.34	34.0	1.34	78.0	3.07	894 016 772 5
S425MD	25	0.98	B	36.1	1.42	36.1	1.42	78.0	3.07	894 016 772 6
S427MD	27	1.06	B	38.1	1.5	38.1	1.5	78.0	3.07	894 016 401 2
S430MD	30	1.18	C	38.1	1.5	41.9	1.65	78.0	3.07	894 016 401 5
S431MD	31	1.22	C	38.1	1.5	43.9	1.73	78.0	3.07	894 016 401 6
S432MD	32	1.26	C	38.1	1.5	43.9	1.73	78.0	3.07	894 016 401 7
S433MD	33	1.3	C	38.1	1.5	45.0	1.77	78.0	3.07	894 016 401 8
S434MD	34	1.34	C	38.1	1.5	46.0	1.81	78.0	3.07	894 016 401 9
S435MD	35	1.38	C	38.1	1.5	50.0	1.97	78.0	3.07	894 016 402 0
S436MD	36	1.42	C	38.1	1.5	50.0	1.97	78.0	3.07	894 016 402 1



1/2" Magnetic

MODEL	OUTPUT SIZE		SHAPE	DIMENSIONS						PART NO.
	mm	in		D		D1		L		
S419MG	19	0.75	A	29.9	1.18	27.9	1.1	38.1	1.5	894 016 410 2
S421MG	21	0.83	B	29.9	1.18	29.9	1.18	38.1	1.5	894 016 410 4



1/2" Deep Magnetic

MODEL	OUTPUT SIZE		SHAPE	DIMENSIONS						PART NO.
	mm	in		D		D1		L		
S414MDG	14	0.55	A	24.90	98.21	60.85	78	3.07	894 016 412 0	

3/4" = 19mm Square Drive Sockets

3/4" Standard

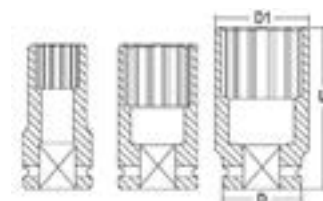


MODEL	OUTPUT SIZE		SHAPE	DIMENSIONS						PART NO.
	mm	in		D		D1		L		
	mm	in		mm	in	mm	in	mm	in	
S620M	20	0.79	A	38.1	1.5	31.0	1.22	52.1	2.05	894 016 418 1
S622M	22	0.87	A	38.1	1.5	34.0	1.34	52.1	2.05	894 016 418 3
S623M	23	0.91	A	38.1	1.5	35.0	1.38	52.1	2.05	894 016 418 4
S624M	24	0.94	A	38.1	1.5	36.0	1.42	52.1	2.05	894 016 418 5
S625M	25	0.98	B	38.1	1.5	38.1	1.5	52.1	2.05	894 016 418 6
S626M	26	1.02	B	39.8	1.57	39.9	1.57	52.1	2.05	894 016 418 7
S627M	27	1.06	B	39.8	1.57	39.9	1.57	52.1	2.05	894 016 418 8
S628M	28	1.1	B	41.9	1.65	41.9	1.65	52.1	2.05	894 016 418 9
S629M	29	1.14	B	41.9	1.65	41.9	1.65	52.1	2.05	894 016 419 0
S630M	30	1.18	B	43.9	1.73	43.9	1.73	52.1	2.05	894 016 419 1
S631M	31	1.22	B	43.9	1.73	43.9	1.73	55.9	2.2	894 016 419 2
S632M	32	1.26	B	43.9	1.73	43.9	1.73	55.9	2.2	894 016 419 3
S633M	33	1.3	C	43.9	1.73	47.0	1.85	55.9	2.2	894 016 419 4
S634M	34	1.34	C	43.9	1.73	48	1.89	55.9	2.2	894 016 419 5
S635M	35	1.38	C	43.9	1.73	50.0	1.97	55.9	2.2	894 016 419 6
S636M	36	1.42	C	43.9	1.73	51.0	2.01	55.9	2.2	894 016 419 7
S637M	37	1.46	C	43.9	1.73	52.1	2.05	55.9	2.2	894 016 419 8
S638M	38	1.5	C	43.9	1.73	53.1	2.09	55.9	2.2	894 016 419 9
S640M	40	1.57	C	43.9	1.73	55.9	2.2	62.0	2.44	894 016 420 0
S641M	41	1.61	C	43.9	1.73	57.9	2.28	62.0	2.44	894 016 420 1
S642M	42	1.65	C	43.9	1.73	61.0	2.4	62.0	2.44	894 016 420 2
S643M	43	1.69	C	43.9	1.73	63.0	2.48	63.0	2.48	894 016 420 3
S644M	44	1.73	C	43.9	1.73	65.0	2.56	63.0	2.48	894 016 420 4
S646M	46	1.81	C	43.9	1.73	67.0	2.64	63.0	2.48	894 016 420 5

Sockets and adaptors range

3/4" Deep

MODEL	OUTPUT SIZE		SHAPE	DIMENSIONS						PART NO.
				D		D1		L		
	mm	in		mm	in	mm	in	mm	in	
S619MD	19	0.75	A	38.1	1.5	30.0	1.18	85.1	3.35	894 016 424 8
S621MD	21	0.83	A	38.1	1.5	32.0	1.26	85.1	3.35	894 016 425 0
S622MD	22	0.87	A	38.1	1.5	34.0	1.34	85.1	3.35	894 016 425 1
S623MD	23	0.91	A	38.1	1.5	35.0	1.38	85.1	3.35	894 016 425 2
S624MD	24	0.94	A	38.1	1.5	36.0	1.42	85.1	3.35	894 016 425 3
S625MD	25	0.98	B	38.1	1.5	38.1	1.5	85.1	3.35	894 016 425 4
S627MD	27	1.06	B	39.9	1.57	39.9	1.57	85.1	3.35	894 016 425 6
S630MD	30	1.18	B	43.9	1.73	43.9	1.73	85.1	3.35	894 016 425 9
S631MD	31	1.22	B	43.9	1.73	43.9	1.73	85.1	3.35	894 016 426 0
S632MD	32	1.26	B	43.9	1.73	43.9	1.73	85.1	3.35	894 016 426 1
S633MD	33	1.3	C	43.9	1.73	47.0	1.85	85.1	3.35	894 016 426 2
S634MD	34	1.34	C	43.9	1.73	48.0	1.89	85.1	3.35	894 016 426 3
S635MD	35	1.38	C	43.9	1.73	50.0	1.97	85.1	3.35	894 016 426 4
S636MD	36	1.42	C	43.9	1.73	51.0	2.01	85.1	3.35	894 016 426 5
S638MD	38	1.5	C	43.9	1.73	53.1	2.09	85.1	3.35	894 016 426 7
S640MD	40	1.57	C	43.9	1.73	55.9	2.2	85.1	3.35	894 016 426 8
S641MD	41	1.61	C	43.9	1.73	57.9	2.28	85.1	3.35	894 016 426 9
S642MD	42	1.65	C	43.9	1.73	60.1	2.4	85.1	3.35	894 016 427 0
S643MD	43	1.69	C	43.9	1.73	63.0	2.48	95.0	3.74	894 016 427 1
S644MD	44	1.73	C	43.9	1.73	65.0	2.56	95.0	3.74	894 016 427 2
S646MD	46	1.81	C	43.9	1.73	67.1	2.64	95.0	3.74	894 016 427 3



A

B

C

1" = 25.4mm Square Drive Sockets

1" Standard

MODEL	OUTPUT SIZE		SHAPE	DIMENSIONS						PART NO.
				D		D1		L		
	mm	in		mm	in	mm	in	mm	in	
S819M	19	0.75	A	51.0	2.01	36.1	1.42	57.9	2.28	894 016 432 3
S821M	21	0.83	A	51.0	2.01	38.1	1.5	57.9	2.28	894 016 432 4
S822M	22	0.87	A	51.0	2.01	39.1	1.54	57.9	2.28	894 016 432 5
S823M	23	0.91	A	51.0	2.01	39.9	1.57	57.9	2.28	894 016 432 6
S824M	24	0.94	A	51.0	2.01	39.9	1.57	57.9	2.28	894 016 432 7
S825M	25	0.98	A	51.0	2.01	40.9	1.61	57.9	2.28	894 016 432 8
S827M	27	1.06	A	51.0	2.01	43.9	1.73	57.9	2.28	894 016 433 0
S828M	28	1.1	A	51.0	2.01	45.0	1.77	57.9	2.28	894 016 433 1
S829M	29	1.14	A	51.0	2.01	46.0	1.81	59.9	2.36	894 016 433 2
S830M	30	1.18	A	51.0	2.01	48.0	1.89	59.9	2.36	894 016 433 3
S832M	32	1.26	B	51.0	2.01	51.0	2.01	59.9	2.36	894 016 433 4
S833M	33	1.3	C	52.1	2.05	53.1	2.09	62.0	2.44	894 016 433 5
S835M	35	1.38	C	52.1	2.05	54.1	2.13	62.0	2.44	894 016 433 6
S836M	36	1.42	C	52.1	2.05	55.9	2.2	62.0	2.44	894 016 433 7
S838M	38	1.5	C	52.1	2.05	57.9	2.28	62.0	2.44	894 016 433 8
S840M	40	1.57	C	52.1	2.05	59.9	2.36	62.0	2.44	894 016 433 9
S841M	41	1.61	C	52.1	2.05	61.5	2.42	62.0	2.44	894 016 434 0
S843M	43	1.69	C	52.0	2.05	64.8	2.55	64.0	2.52	894 016 434 2
S844M	44	1.73	C	57.9	2.28	65.8	2.59	64.0	2.52	894 016 434 3
S846M	46	1.81	C	57.9	2.28	68.1	2.68	64.0	2.52	894 016 434 5



A

B

C

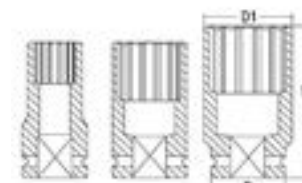
Sockets and adaptors range

1" Standard

MODEL	OUTPUT SIZE		SHAPE	DIMENSIONS						PART NO.
				D		D1		L		
	mm	in		mm	in	mm	in	mm	in	
S852M	52	2.05	C	57.9	2.28	74.9	2.95	70.1	2.76	894 016 434 7
S854M	54	2.13	C	57.9	2.28	78.0	3.07	70.1	2.76	894 016 434 8
S855M	55	2.17	C	62.0	2.44	79.0	3.11	71.9	2.83	894 016 434 9
S856M	56	2.2	C	61.2	2.44	80.0	3.15	73.9	2.91	894 016 435 0
S858M	58	2.28	C	61.0	2.44	85.1	3.35	74.9	2.95	894 016 435 1
S860M	60	2.36	C	61.0	2.44	87.1	3.43	78.0	3.07	894 016 435 2
S865M	65	2.56	C	61.0	2.44	93.0	3.66	80.0	3.15	894 016 435 3
S870M	70	2.76	C	62.0	2.44	98.0	3.86	85.1	3.35	894 016 435 4

1" Deep

MODEL	OUTPUT SIZE		SHAPE	DIMENSIONS						PART NO.
	mm	in		D		D1		L		
	mm	in		mm	in	mm	in	mm	in	
S821MD	21	0.83	A	51.0	2.01	38.1	1.5	89.9	3.54	894 016 440 4
S824MD	24	0.94	A	51.0	2.01	39.9	1.57	89.9	3.54	894 016 440 7
S827MD	27	1.06	A	51.0	2.01	43.9	1.73	89.9	3.54	894 016 441 0
S829MD	29	1.14	A	51.0	2.01	46.0	1.81	89.9	3.54	894 016 441 2
S830MD	30	1.18	A	51.0	2.01	48.0	1.89	89.9	3.54	894 016 441 3
S832MD	32	1.26	B	51.0	2.01	51.0	2.01	89.9	3.54	894 016 441 4
S833MD	33	1.3	C	52.1	2.05	53.1	2.09	89.9	3.54	894 016 441 5
S834MD	34	1.34	C	52.1	2.05	54.1	2.13	89.9	3.54	894 016 441 6
S835MD	35	1.38	C	52.1	2.05	54.1	2.13	89.9	3.54	894 016 441 7
S836MD	36	1.42	C	52.1	2.05	55.9	2.2	89.9	3.54	894 016 441 8
S838MD	38	1.5	C	52.1	2.05	57.9	2.28	91.9	3.62	894 016 441 9
S841MD	41	1.61	C	52.1	2.05	61.5	2.42	91.9	3.62	894 016 442 1
S842MD	42	1.65	C	52.1	2.05	63.0	2.48	91.9	3.62	894 016 442 2
S843MD	43	1.69	C	52.1	2.05	65.0	2.56	91.9	3.62	894 016 442 3
S844MD	44	1.73	C	57.9	2.28	66.0	2.6	91.9	3.62	894 016 442 4
S845MD	45	1.77	C	57.9	2.28	67.0	2.64	91.9	3.62	894 016 442 5
S846MD	46	1.81	C	57.9	2.28	68.0	2.68	91.9	3.62	894 016 442 6
S850MD	50	1.97	C	57.9	2.28	72.9	2.87	95.0	3.74	894 016 442 7
S852MD	52	2.05	C	57.9	2.28	74.9	2.95	95.0	3.74	894 016 442 8
S854MD	54	2.13	C	57.9	2.28	78.0	3.07	95.0	3.74	894 016 442 9
S855MD	55	2.17	C	62.0	2.44	79.0	3.11	100.1	3.94	894 016 443 0
S856MD	56	2.2	C	62.0	2.44	80.0	3.15	100.1	3.94	894 016 443 1
S858MD	58	2.28	C	62.0	2.44	85.1	3.35	104.9	4.13	894 016 443 2
S860MD	60	2.36	C	62.0	2.44	87.1	3.43	104.9	4.13	894 016 443 3
S865MD	65	2.56	C	62.0	2.44	93.0	3.66	119.9	4.72	894 016 443 4
S831D*	1-15/16"		C	57.9	2.28	71.9	2.83	91.9	3.62	894 016 437 4
S832D*	2"		C	57.9	2.28	73.9	2.91	95.0	3.74	894 016 437 5
S833D*	2-1/16"		C	57.9	2.28	74.9	2.95	95.0	3.74	894 016 437 6
S835D*	2-3/16"		C	62.0	2.44	80.0	3.15	100.1	3.94	894 016 437 8
S836D*	2-1/4"		C	62.0	2.44	84.1	3.31	100.1	3.94	894 016 437 9
S837D*	2-5/16"		C	62.0	2.44	86.1	3.39	104.9	4.13	894 016 438 0
S839D*	2-7/16"		C	62.0	2.44	88.9	3.5	110.0	4.33	894 016 438 2
S840D*	2-1/2"		C	62.0	2.44	90.9	3.58	110.0	4.33	894 016 438 3
S841D*	2-9/16"		C	62.0	2.44	93.0	3.66	119.9	4.72	894 016 438 4
S843D*	2-11/16"		C	62.0	2.44	97.0	3.82	123.9	4.88	894 016 438 6



A

B

C

Sockets and adaptors range

O-Ring & Retaining Pins

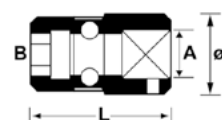
A		ØB		PART NO.
mm	in	mm	in	O-Ring
19.05	3/4	31.7	1 1/4	C155467
19.05	3/4	36.5	1 4/9	C155468
19.05	3/4	41.3	1 5/8	C134690
19.05	3/4	44.4	1 3/4	C134691
25.4	1	44.4	1 3/4	C155470
25.4	1	50.8	2	C155471
25.4	1	54.0	2 1/8	C155472
25.4	1	57.1	2 1/4	C134692
38.1	1 1/2	73.0	2 7/8	C134693
38.1	1 1/2	85.7	3 3/8	C134694
38.1	1 1/2	98.4	3 7/8	C134695
38.1	1 1/2	111.1	4 3/8	C134696



Bit Adaptors

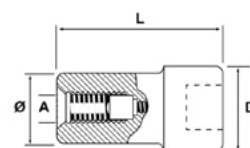
A		B		L		Ø MAX		RETENTION	PART NO.
mm	in	mm	in	mm	in	mm	in		
3/8"		Hex 1/4" (D6.3)*		32	1.26	16	0.63	Ball retention	21792
3/8"		Hex 1/4" (F6.3)**		46	1.81	22	0.87	Q/R	108052
1/2"		Hex 1/4" (D6.3)*		45	1.77	22	0.87	Q/R	615 812 306 0

*Insert **Direct



Stud Runners

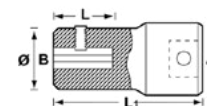
A		B		L		Ø		D		PART NO.
mm	in	mm	in	mm	in	mm	in	mm	in	
3/8"		M5 x 80		50	2	15	0.59	19	0.75	615 811 727 0
3/8"		M6 x 100		50	2	15	0.59	19	0.75	615 811 728 0
3/8"		M8 x 125		50	2	17	0.67	19	0.75	615 811 729 0
3/8"		M10 x 150		50	2	19	0.75	24	0.94	615 811 730 0
1/2"		M6 x 100		55	2.2	22	0.87	24	0.94	615 811 731 0
1/2"		M8 x 125		55	2.2	24	0.94	24	0.94	615 811 732 0
1/2"		M10 x 125		55	2.2	24	0.94	24	0.94	615 811 733 0
1/2"		M10 x 150		55	2.2	24	0.94	24	0.94	615 811 734 0
1/2"		M12 x 175		55	2.2	24	0.94	24	0.94	615 811 735 0
1/2"		M14 x 150		55	2.2	24	0.94	24	0.94	615 811 736 0
1/2"		M14 x 200		55	2.2	24	0.94	24	0.94	615 811 737 0
1/2"		M16 x 200		55	2.2	24	0.94	24	0.94	615 811 738 0



Sockets and adaptors range

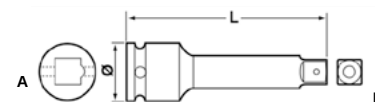
Bit Adaptors - Positive Retention

A	B	L		Ø MAX		L1		PART NO.
		mm	in	mm	in	mm	in	
3/8"	Hex 1/4"	14	0.55	14	0.55	38	1.5	615 812 206 0



Extension Bars

A	B	L		ØD		PART NO.
		mm	in	mm	in	
3/8"	3/8"	45	1.77	19	0.75	894 016 598 5
3/8"	3/8"	75	2.95	19	0.75	894 016 598 6
3/8"	3/8"	150	5.91	19	0.75	894 016 598 7
1/2"	1/2"	75	2.95	30	1.18	894 016 599 4
1/2"	1/2"	127	5	30	1.18	894 016 599 5
1/2"	1/2"	178	7.01	30	1.18	894 016 599 6
1/2"	1/2"	254	10	30	1.18	894 016 599 7
3/4"	3/4"	75	2.95	44	1.73	894 016 600 4
3/4"	3/4"	175	6.89	44	1.73	894 016 600 5
3/4"	3/4"	254	10	44	1.73	894 016 600 6
3/4"	3/4"	330	12.99	44	1.73	894 016 600 7
1"	1"	178	7.01	54	2.13	894 016 601 2
1"	1"	254	10	54	2.13	894 016 601 3
1"	1"	330	12.99	54	2.13	894 016 601 4



Adaptors

A	B	L		Ø		PART NO.
		mm	in	mm	in	
1/4"	3/8"	13	0.51	26	1.02	894 016 597 8
3/8"	1/4"	22	0.87	32	1.26	894 016 598 3
3/8"	1/2"	22	0.87	32	1.26	894 016 598 4
1/2"	3/8"	25	0.98	38	1.5	894 016 599 2
1/2"	3/4"	30	1.18	48	1.89	894 016 599 3
3/4"	1/2"	44	1.73	56	2.2	894 016 600 1
3/4"	1"	44	1.73	63	2.48	894 016 600 2
1"	3/4"	54	2.13	75	2.95	894 016 600 9



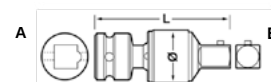
Universal Joints

A	B	L		Ø		PART NO.
		mm	in	mm	in	
1/4"	1/4"	44	1.73	20	0.79	894 016 598 2
1/2"	1/2"	63	2.48	34	1.34	894 016 599 8
3/4"	3/4"	90	3.54	49.2	1.94	894 016 600 8
1"	1"	114	4.49	59.2	2.33	894 016 601 5



Quick Change Adapters

A	B	L		ØD		PART NO.
		mm	in	mm	in	
3/8"	3/8"	46	1.81	19	0.75	615 811 589 0
1/2"	1/2"	60	2.36	25	0.98	615 811 590 0
3/4"	3/4"	78	3.07	44	1.73	615 811 591 0
3/8"	1/2"	60	2.36	20	0.79	615 811 592 0
1/2"	3/8"	54	2.13	25	0.98	615 811 593 0
3/4"	1/2"	70	2.76	44	1.73	615 811 595 0



Sleeve drive socket - Pulse tools*

For Desoutter PTF models and all Japanese pulse tools

Drive 3/8"

OUTPUT SIZE				DIMENSIONS						PART NO.
		D2		D1		L2		L		
mm	in	mm	in	mm	in	mm	in	mm	in	
8	0.31	19	0.75	13	0.51	7	0.28	43	1.69	615 811 777 0
10	0.39	19	0.75	16	0.63	7	0.28	43	1.69	615 811 778 0
11	0.43	19	0.75	17.5	0.69	8	0.31	43	1.69	615 811 779 0
12	0.47	19	0.75	18.5	0.73	9	0.35	43	1.69	615 811 780 0
13	0.51	22	0.87	20	0.79	9	0.35	43	1.69	615 811 781 0
14	0.55	22	0.87	21	0.83	9	0.35	43	1.69	615 811 782 0
17	0.67	22	0.87	25	0.98	12	0.47	43	1.69	615 811 783 0
18	0.71	22	0.87	26	1.02	12	0.47	43	1.69	615 811 784 0
19	0.75	22	0.87	27	1.06	12	0.47	43	1.69	615 811 785 0

*Not suitable for Desoutter PT models



Drive 1/2"

OUTPUT SIZE		DIMENSIONS								PART NO.
A		D2		D1		L2		L		
mm	in	mm	in	mm	in	mm	in	mm	in	
12	0.47	25	0.98	20	0.79	12	0.47	52	2.05	615 811 788 0
13	0.51	25	0.98	21	0.83	12	0.47	52	2.05	615 811 789 0
14	0.55	25	0.98	22.5	0.89	12	0.47	52	2.05	615 811 790 0
15	0.59	30	1.18	23.5	0.93	12	0.47	52	2.05	615 811 791 0
16	0.63	30	1.18	25	0.98	12	0.47	52	2.05	615 811 792 0
17	0.67	30	1.18	26	1.02	13	0.51	52	2.05	615 811 793 0
18	0.71	30	1.18	27.5	1.08	13	0.51	52	2.05	615 811 794 0
19	0.75	30	1.18	28.5	1.12	13	0.51	52	2.05	615 811 795 0
21	0.83	30	1.18	31	1.22	14	0.55	52	2.05	615 811 797 0
22	0.87	30	1.18	32	1.26	14	0.55	52	2.05	615 811 798 0
23	0.91	30	1.18	34	1.34	14	0.55	52	2.05	615 811 799 0
24	0.94	30	1.18	35	1.38	15	0.59	52	2.05	615 811 800 0
25	0.98	30	1.18	36	1.42	15	0.59	57	2.24	615 811 801 0
27	1.06	30	1.18	38.5	1.52	17	0.67	57	2.24	615 811 803 0
30	1.18	30	1.18	42	1.65	18	0.71	57	2.24	615 811 806 0
32	1.26	30	1.18	44	1.73	20	0.79	62	2.44	615 811 807 0



3/8" Hexagonal Drives

OUTPUT SIZE		DIMENSIONS						PART NO.
A		D2		L1		L		
mm	in	mm	in	mm	in	mm	in	
4	0.16	22	0.87	11	0.43	75	2.95	615 811 824 0
5	0.20	22	0.87	11	0.43	75	2.95	615 811 825 0
6	0.24	22	0.87	11	0.43	75	2.95	615 811 826 0
8	0.31	22	0.87	16	0.63	75	2.95	615 811 827 0
10	0.39	22	0.87	16	0.63	75	2.95	615 811 828 0



1/2" Hexagonal Drives

OUTPUT SIZE		DIMENSIONS						PART NO.
A		D2		L1		L		
mm	in	mm	in	mm	in	mm	in	
6	0.24	25	0.98	15	0.59	75	2.95	615 811 829 0
8	0.31	25	0.98	25	0.98	75	2.95	615 811 830 0
10	0.39	25	0.98	25	0.98	75	2.95	615 811 831 0
17	0.67	25	0.98	25	0.98	75	2.95	615 811 833 0
19	0.75	25	0.98	25	0.98	75	2.95	615 811 834 0



Sleeve drive socket - Pulse tools*

For Desoutter PTF models and all Japanese pulse tools

Internal Torx

DRIVE A	OUTPUT SIZE TORX B	D2		DIMENSIONS L1		L		PART NO.
		mm	in	mm	in	mm	in	
3/8"	T20	22	0.87	2.8	0.11	75	2.95	615 811 841 0
3/8"	T25	22	0.87	3	0.12	75	2.95	615 811 842 0
3/8"	T30	22	0.87	3.8	0.15	75	2.95	615 811 843 0
3/8"	T40	22	0.87	3.8	0.15	75	2.95	615 811 844 0
1/2"	T40	25	0.98	3.8	0.15	75	2.95	615 811 845 0



External Torx

DRIVE A	OUTPUT B	D2		D1		L2		L		PART NO.
		mm	in	mm	in	mm	in	mm	in	
3/8"	E8	19	0.75	11	0.43	6.5	0.26	43	1.69	615 811 846 0
3/8"	E10	19	0.75	13	0.51	7.5	0.30	43	1.69	615 811 847 0
3/8"	E12	19	0.75	15.5	0.61	8.5	0.33	43	1.69	615 811 848 0
3/8"	E14	22	0.87	17.5	0.69	10	0.39	43	1.69	615 811 849 0
1/2"	E10	25	0.98	14	0.55	7.5	0.30	52	2.05	615 811 8500
1/2"	E12	25	0.98	16	0.63	8.5	0.33	52	2.05	615 811 851 0
1/2"	E14	25	0.98	18	0.71	10	0.39	52	2.05	615 811 852 0
1/2"	E16	25	0.98	20	0.79	11	0.43	52	2.05	615 811 853 0
1/2"	E18	25	0.98	22	0.87	12.5	0.49	52	2.05	615 811 854 0



Extension Bars

DRIVE A	OUTPUT B	D2		L		PART NO.
		mm	in	mm	in	
3/8"	3/8	22	0.87	75	2.95	615 811 859 0
3/8"	3/8	22	0.87	125	4.92	615 811 861 0
3/8"	3/8	22	0.87	250	9.84	615 811 864 0
1/2"	1/2	-	-	75	2.95	615 811 865 0
1/2"	1/2	-	-	125	4.92	615 811 867 0
1/2"	1/2	-	-	175	6.89	615 811 869 0
1/2"	1/2	25	0.98	250	9.84	615 811 871 0



Sleeve drive socket - Pulse tools*

For Desoutter PTF models and all Japanese pulse tools

Stud setter sockets

DRIVE A	OUTPUT B	D2		D1		L		PART NO.
		mm	in	mm	in	mm	in	
3/8"	M6 x P1	22	0.87	12.5	0.49	50	1.97	615 811 876 0
3/8"	M8 x P1.25	22	0.87	14.5	0.57	50	1.97	615 811 877 0
3/8"	M10 x P1.5	22	0.87	17	0.67	50	1.97	615 811 878 0
1/2"	M6 x P1	25	0.98	13	0.51	75	2.95	615 811 879 0
1/2"	M8 x P1.25	25	0.98	15	0.59	75	2.95	615 811 880 0
1/2"	M10 x P1.5	25	0.98	17	0.67	75	2.95	615 811 881 0
1/2"	M12 x P1.75	25	0.98	19	0.75	75	2.95	615 811 882 0
1/2"	M14 X P2	25	0.98	22	0.87	75	2.95	615 811 883 0
1/2"	M16 x P2	30	1.18	27	1.06	75	2.95	615 811 884 0



Bit adaptors

DRIVE A	OUTPUT B	D2		L		PART NO.
		mm	in	mm	in	
3/8"	1/4	22	0.87	52	2.05	615 811 885 0
1/2"	1/4	25	0.98	60	2.36	615 811 887 0

*Not suitable for Desoutter PT models



Safety Instructions

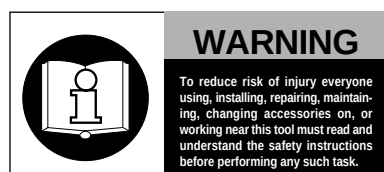
General Safety Instructions for the Operation of Power Tools

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, 8NTC1.2.

Sound levels +/- 3dB(A)* are measured in accordance with EN ISO15744. Vibration values* are measured in accordance with ISO8662 & ISO28927.

*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.

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.



Safety Instructions

Specific Safety Instructions for Power Tool Groups

- 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.



PULSE TOOLS

- 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.

All products in this catalog are subject to Californian Proposition 65.



Warning

Cancer and reproductive harm - <http://www.P65warnings.ca.gov>.

[illegible]

Conversion table

LENGTH

1 in.	=	0.0254 m
1 m	=	39.3701 in / 3.2808 ft
1 mm	=	0.0393701 in

WEIGHT

1 lb	=	0.4536 kg
1 kg	=	2.2046 lb

TORQUE

1 kpm	=	9.8067 Nm
1 ft-lb	=	1.3558 Nm
1 in-lb	=	0.1130 Nm
1 Nm	=	0.1020 kpm
1 Nm	=	0.7376 ft-lbs

POWER

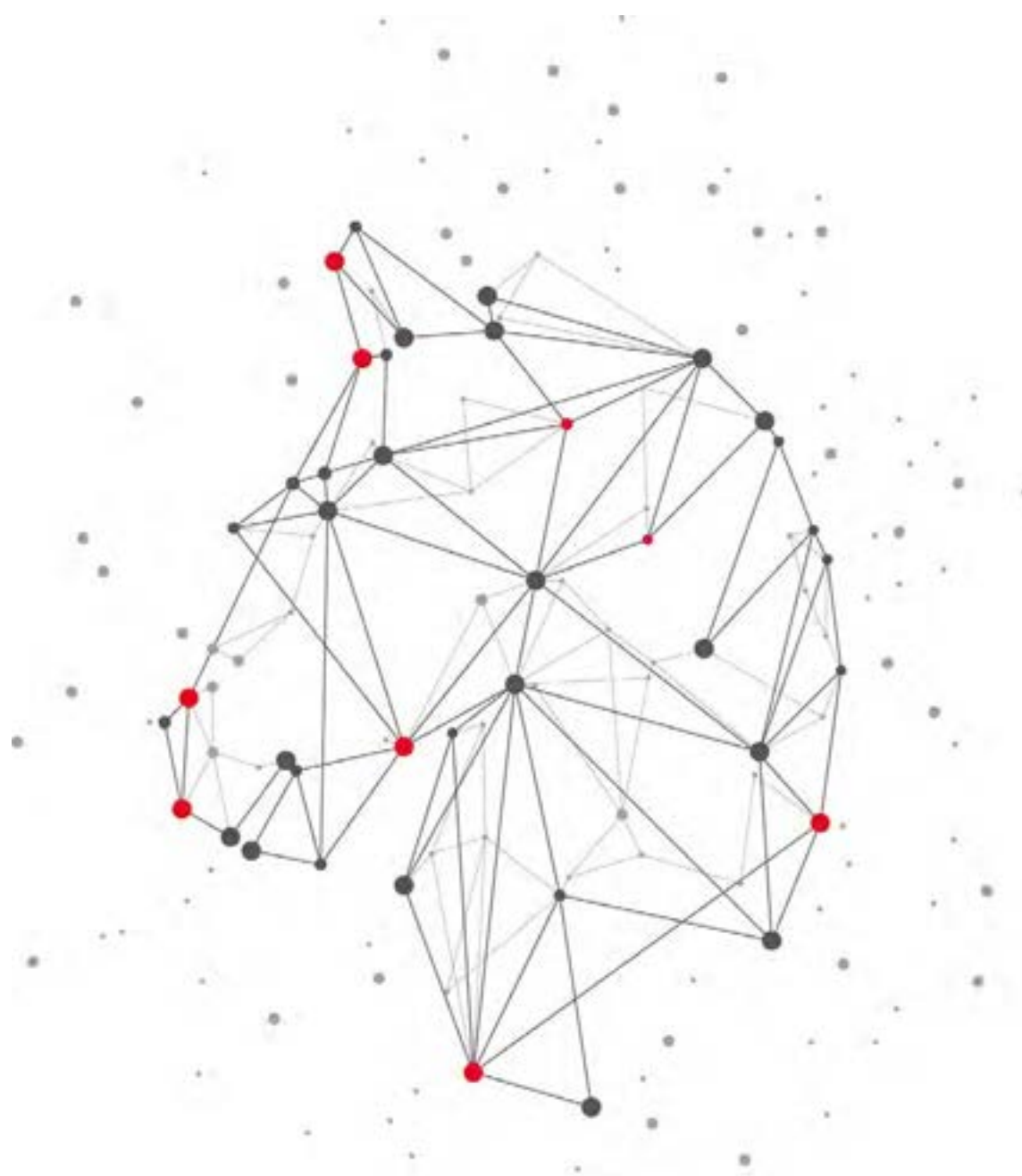
1 kpm/s	=	9.8067 W
1 hp	=	745.7 W
1 hp	=	101.972 kpm/s
1 KW	=	1.3410 hp

AIR PRESSURE

1 bar	=	100 kPa
1 kp/cm ² (at)	=	98.0665 kPa
1 psi	=	6.8948 kPa
1 kPa	=	0.0101972 kp/cm ² (at)

AIR FLOW

1 m ³ /min	=	16.6667 l/s
1 cfm	=	0.4720 l/s
1m ³ /h	=	0.2778 l/s
1 l/s	=	2.1189 cfm



DESOUTTER 4.0

www.desouttertools.com/industry-4-0/desoutter-4-0

More Than Productivity