

Desoutter



Industrial Tools



More Than Productivity



YEARS OF INNOVATION



EASY TO FIND QUICK TO GET



Product brochures, exploded views, certificates of conformity,
CAD files...
Find all the Technical documentation that you need !

GET TO KNOW DESOUTTER INDUSTRIAL TOOLS
from another perspective and stay in touch with us !

[LinkedIn](#) [YouTube](#)



iOS | ANDROID
available now !

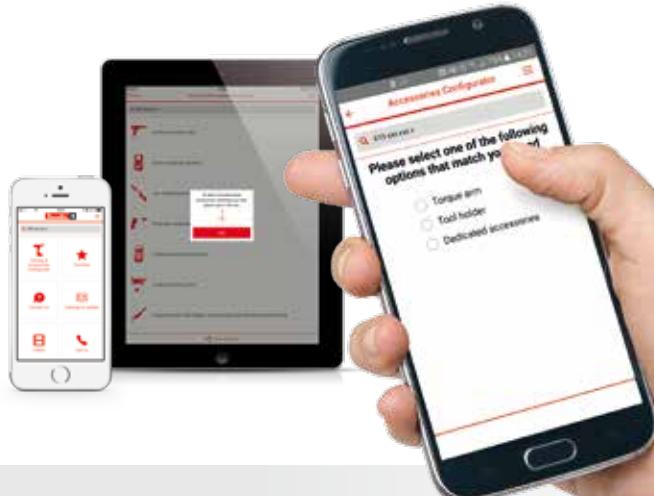


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Unless specified all inlet threads are BSP or NPT dependent of market

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".



Philippe Artzet,
President

Foundation
of Desoutter
Desoutter 
First Duralumin
artificial limbs
are created



1918
Foundation of
Georges Renault


Spare parts for portable
pneumatic tools are
manufactured



1930

Patents approved for
torque controlled
angle wrench



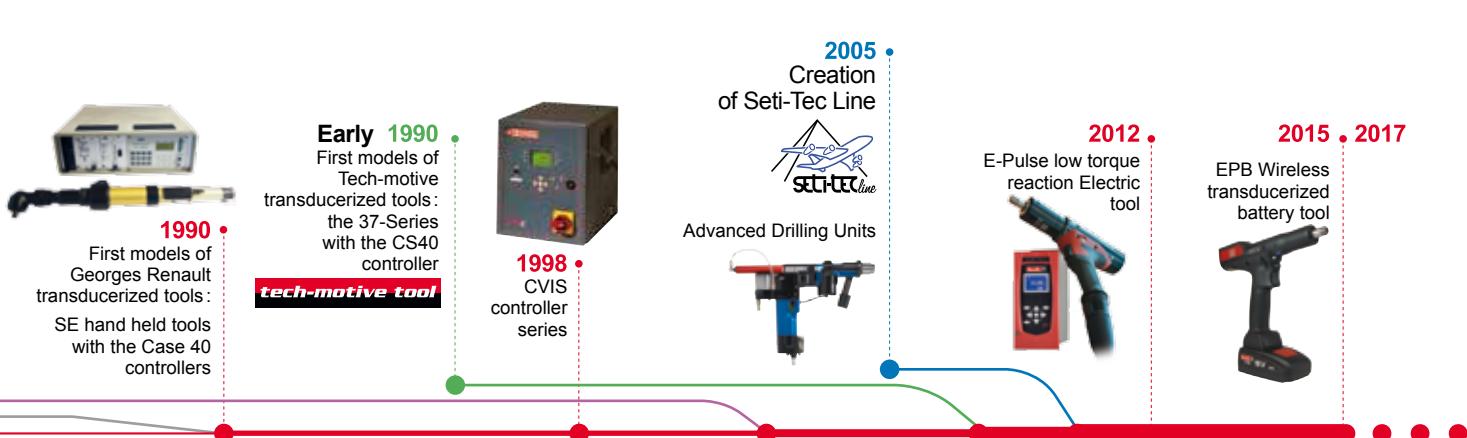
1960
Scan Rotor is founded
SCANROTOR

1914





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



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...

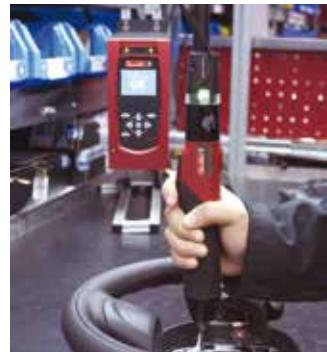
We know that finding the best solution is about much more than just picking a new tool. That is why we start every project by opening our ears, not our catalog.

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.



PEACE OF MIND YOU CAN COUNT ON...

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

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.



Desoutter Smart start

High performance, right from the start

Start-up



Installation

- Desoutter takes responsibility
- Avoid loss of warranty

1



Programming

- Experienced technicians
- Optimised programming / setup

2



Functional test

- Ensures tool performance
- Preliminary acceptance

3



Station backup

- Data safety for fast restoring
- Easier line rebalancing

4



Capability test

- Proves process capability
- Final acceptance

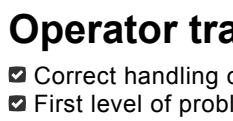
7

6



Production monitoring

- Supports production ramp up
- Minimises production risks



Operator training

- Correct handling of tools
- First level of problem solving

Minimising your risks



Avoid delay on the production plan



Avoid production ramp-up issues



Avoid loss of Warranty





Performance validation

Desoutter

Performance Validation

Customer: XylFex

PRODUCTS EAD32-900 587462564
CV13 Vision 15AB15429

Results collected between 2015/10/01 and 2015/11/30

Desoutter

Performance Validation

User info pareto

| Category | Percentage |
|----------|------------|
| new user | 31.1% |
| old user | 26.3% |
| guest | 14.6% |
| agent | 10.3% |
| admin | 6.9% |
| operator | 3.5% |
| customer | 2.1% |
| support | 1.0% |
| other | 0.6% |

Gaussian distribution

Bonjour aux personnes assurées aujourd'hui devant leur déjeuner magnifique ou officiellement en ce qui concerne l'objectif n°1.

See more, even more details. Come on us, que nulla est re virtutem vocationis et oblationis dianthus aut nobis modis parum varum, nemusque que prodest ministrum, qui non premeret officia sua conveva.

Reject Reports Trend

Absip met well
Officiis quam laeseris
quibusdam actis tem sequitur cuncte

Efficiency Gap Analysis

| Priority | Value |
|---------------|-------|
| High Priority | 100% |
| Low Priority | 80% |
| High Priority | 90% |
| Low Priority | 70% |
| High Priority | 100% |
| Low Priority | 60% |
| High Priority | 90% |
| Low Priority | 50% |

Conclusion

Actions:

- Identify and prioritize areas for improvement. Consider the impact of each action on the outcome.
- Team composition review & look for training for team #1 as well as an incoming successor for the position.
- Review current maintenance plan and frequency #16.
- Ergonomics: monitor placement of a better position on November 30.
- Quick operational training done on November 30.

Recommendations:

- Plan a detailed training on basic module setting.
- Increase the time between step 1 and step 2. This can be done after validation by maintenance during next visit in December.

**Use data collected from the controllers after start up
and during full production**

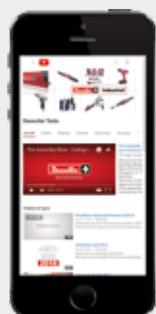
- To get formal internal handover from Project to Production and Maintenance
 - To Detect programming optimisation
 - To Improve operators performance
 - To Support on root cause analysis

Contact your local sales representative for more information

Standardisation for Global Customers

- ✓ Streamlines and optimises the Start-up process globally
 - ✓ Allows efficient programming to be replicated worldwide
 - ✓ Minimises Start-up risks

Discover our Service solutions videos



Maintenance solutions

Focus on tools reliability

| Basic Care | |
|--|---|
| Increase your tools performance | |
| Preventive Maintenance labour | ✓ |
| Preventive Maintenance wear out spare parts included | ✓ |
| Calibration | ✓ |
| Repair at Desoutter workshop | — |
| Repair spare parts included* | — |
| Phone support | — |
| On-site Repairs | — |
| Maintenance KPIs | — |
| On-site production support | — |

| Smart Care | |
|--|---|
| Streamline your repair process | |
| Preventive Maintenance labour | ✓ |
| Preventive Maintenance wear out spare parts included | ✓ |
| Calibration | ✓ |
| Repair at Desoutter workshop | ✓ |
| Repair spare parts included* | ✓ |
| Phone support | ✓ |
| On-site Repairs | — |
| Maintenance KPIs | — |
| On-site production support | — |

| Peace Of Mind | |
|--|---|
| Focus on your core business | |
| Preventive Maintenance labour | ✓ |
| Preventive Maintenance wear out spare parts included | ✓ |
| Calibration | ✓ |
| Repair at Desoutter workshop | ✓ |
| Repair spare parts included* | ✓ |
| Phone support | ✓ |
| On-site Repairs | ✓ |
| Maintenance KPIs | ✓ |
| On-site production support | ✓ |

BENEFITS

(Fixed Price)

- Ensures tools reliability and assembly quality
- Reduces tools breakdown (higher availability)
- Minimises production stoppage risk
- Longer tool life cycle at lower repair costs
- Reduces the Total Cost of Ownership

BENEFITS

(Fixed Price)

- Basic Care benefits
- Predictable maintenance budget
- Complete equipment care
- Streamlined repair flow

BENEFITS

(Fixed Price)

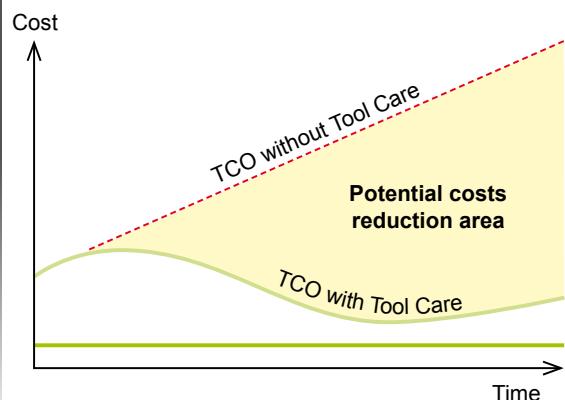
- Smart Care benefits
- Uptime optimisation
- Shorter repair Turn Around Time
- Quick on-site support (problem solving)
- Customer focus on core business

*All spare parts included (except in case of tool abuse or misuse)

Without a Maintenance Solution...



Total cost of ownership (TCO)





Production support

Increases assembly process performance



On-site technicians

Our certified field technicians are at your disposal to support you with solving on-site issues or assist in identifying process improvement opportunities



Performance validation (PV)

Aims to identify improvements opportunities and predict eventual issues, ensuring the assembly system performance at full production conditions



Certification training

Develop your technicians knowledge on troubleshooting and assembly techniques and improve the interaction with our technicians when using the remote service

BENEFITS

- Quick response time for technical support
- Solves problems on-site (minimises tools transfers)
- Increases equipment uptime
- Reduces Total Cost of Ownership
- Identifies process improvement opportunities

BENEFITS

- Optimises programming (higher productivity)
- Implements Predictive Maintenance
- Supports the root cause analysis
- Identifies competence gaps

BENEFITS

- Enhances customer's knowledge on troubleshooting
- Autonomy to solve less complex technical issues
- Faster production recovery (increase uptime)
- Validates any remote solution prior to implementation
- Better technical communication with our technicians

Contact your local sales representative for more information

Service driven by KPIs



Cost of Ownership

- Unplanned downtime
- Production loss
- Overtime
- Quality problems
- Warranty
- Re-work
- Recall
- Higher repair costs
- Inefficient repair flow

Smart Care

Remote Service



Desoutter remote service (via phone or CVI3 controller connection) allows faster diagnosis of problems and more efficient support

Desoutter Virtual Showroom



Desoutter Industrial Tools introduces the Virtual Showroom!

Discover Desoutter Industrial Tools exhaustive Assembly and Drilling Solutions while navigating in the Virtual Showroom.

Easily find all our products, applications and service support or contact the nearest Desoutter representative for a demonstration or a quote.

Stay up-to-date with our products, watch videos and access direct links to our product specifications and user manuals.

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showroom.desouttertools.com



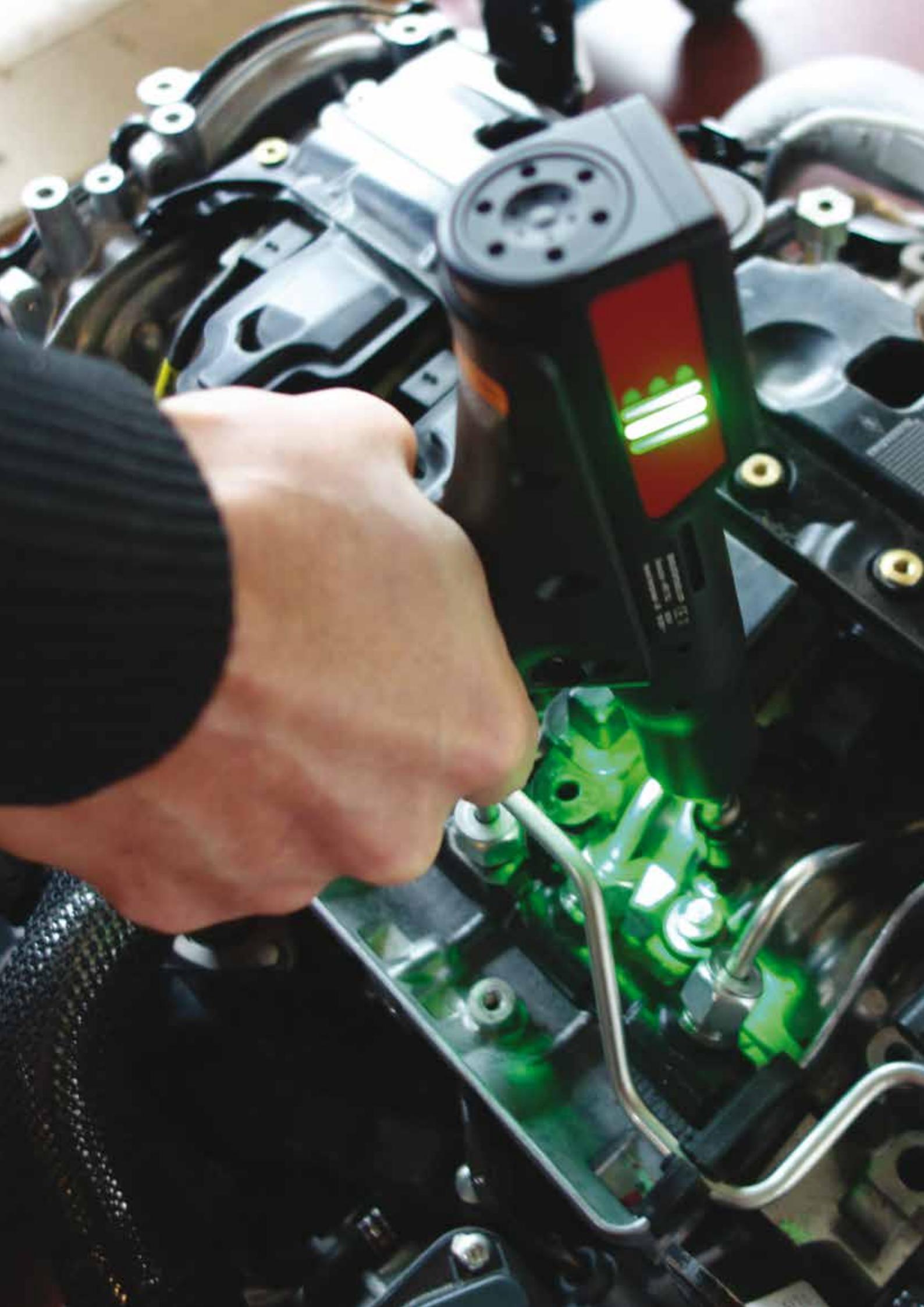
desoutter.info/showroomIPad



desoutter.info/showroomAndroid

Assembly Tools - Selection guide

| | TOOL TYPE | PAGE |
|--|--|---------|
| BATTERY TOOLS |  | 14-24 |
| ELECTRIC NUTRUNERS |  | 25 |
| ELECTRIC TRANSDUCERIZED DC TOOLS - PC & Networks/Software - CVI3 |  | 26-51 |
| ELECTRIC TRANSDUCERIZED DC TOOLS - PC & Networks/Software - CVIR II / MULTICVIL II / CVIL II |  | 52-67 |
| ELECTRIC CURRENT CONTROLLED DC TOOLS - CVIC / POSCO |  | 68-85 |
| ELECTRIC FASTENING TOOLS |  | 86-93 |
| PNEUMATIC FASTENING TOOLS |  | 94-123 |
| TORQUE MEASUREMENT SYSTEMS - Software |  | 124-141 |
| CUSTOMIZED SOLUTIONS : Screwfeeders - Multiplus - Arms |  | 142-152 |



E-LIT Series - Optimize your performance

Clutch Battery Tool range



desoutter.info/E-LIT

FOCUS



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

Tool management device

Speed setting / For ELS and ELC models

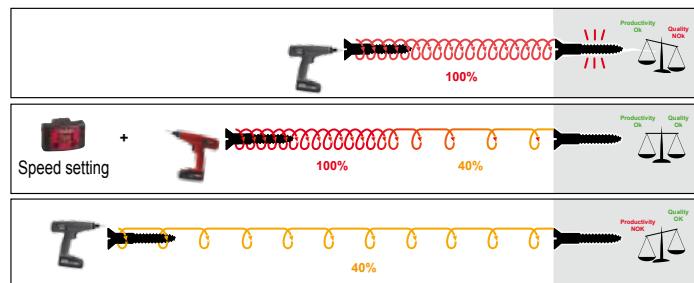
Two speed setting easily controlled by external module



Everything needed to optimize your assembly process

Guarantee quality and keep high productivity

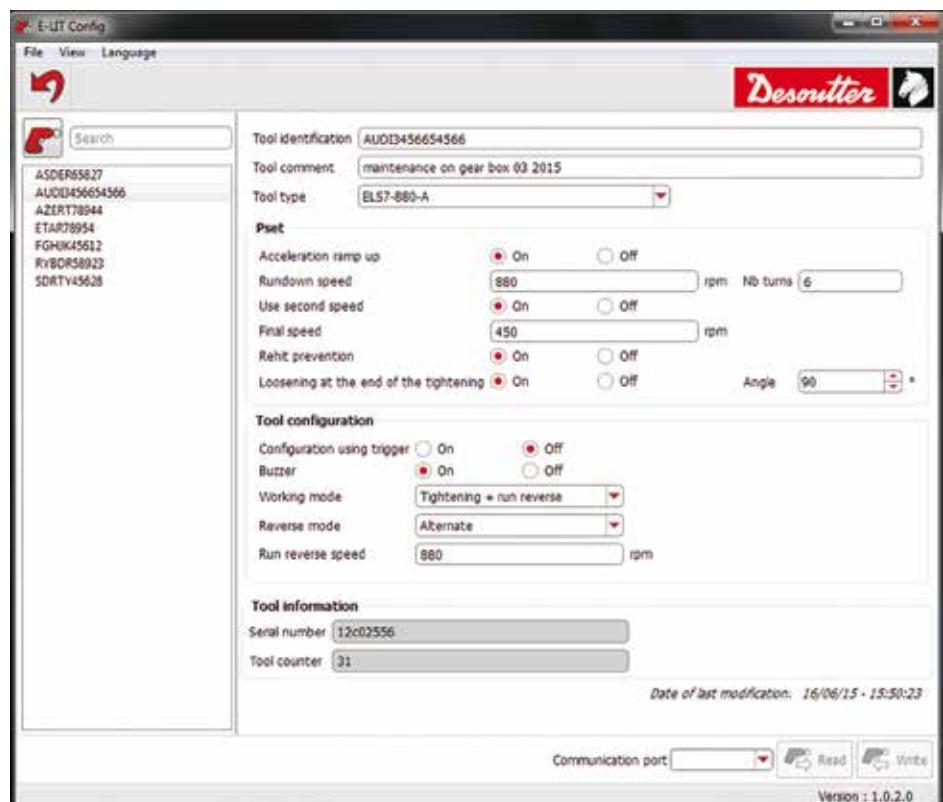
- Decrease final speed to ensure tightening quality
- Avoid quality defects in your final product
- Decrease starting speed to facilitate bolt engagement



E-LIT CONFIG software

Manage your E-LIT tools

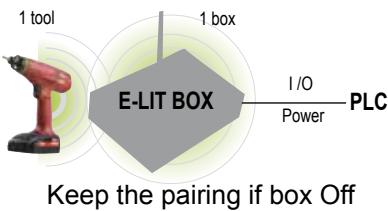
- Save your E-LIT tool setting
- Use your own tool ID
- Upload saved setting on new tools
- Go further on the setting possibility



E-LIT BOX

For Poka-Yoke application

FOCUS



Wireless communication
IEEE 802.15.4 standard Fast
reconnection time & Low
consumption

Pairing
• Easy Pairing with dedicated button
• Keep the pairing if box Off

Poka-Yoke application
• OK/NOK Management
• Batch count: up to 4 different batch settings
• Batch count strategy
• Cross thread prevention

Connection
• Integrated power supply switch (24 V power switch)
• M12 male connector 24 V power supply and 4 digital INPUTS
• M12 female connector 8 Digital OUTPUTS
• USB port for an easy and fast connection to setting software



1
2
3
4



EASY PAIRING PROCESS

1. Press the "Easy Pairing" Button

2. Power on the E-LIT BOX



3. Press both, tool trigger and reverse, while inserting battery pack



4. Pairing completed



NO DATA LOSS

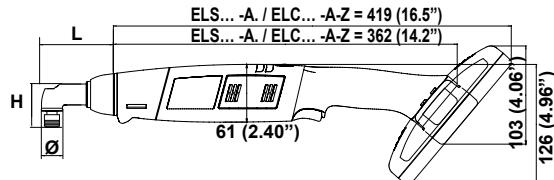
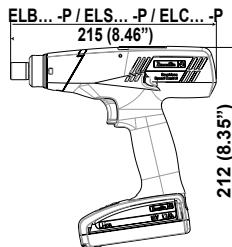


Integrated buffer memory
up to 25 results

When wireless communication
is stopped, reports are stored
within ELC tool

You can decide to lock (or not) tool when
memory buffer is full in order to prevent
loosing reports

Accessories



| MODEL | H | | L | | \emptyset | |
|---------------|------|------|-------|------|-------------|------|
| | mm | in | mm | in | mm | in |
| ELS7 / ELC7 | 45.5 | 1.79 | 75.7 | 2.98 | 22 | 0.87 |
| ELS15 / ELC15 | 41.5 | 1.63 | 75.7 | 2.98 | 22 | 0.87 |
| ELS30 / ELC30 | 45.5 | 1.79 | 134.2 | 5.28 | 28 | 1.10 |
| ELS45 / ELC45 | 51.1 | 2.01 | 144.6 | 5.69 | 35 | 1.38 |
| ELS60 / ELC60 | 57.1 | 2.25 | 158.5 | 6.24 | 40 | 1.57 |

OPTIONAL ACCESSORIES



| ITEM | PISTOL | ANGLE HEAD 18V | ANGLE HEAD 36V | ELC TOOLS | PART NO. |
|---|--------|----------------|----------------|-----------|---------------|
| Battery type | | | | | |
| 1 Li-ion Battery 18V 2.1 Ah - 0.35 kg (0.77lb) | ✓ | ✓ | | ✓ | 615 812 099 0 |
| 2 Li-ion Battery 18V 4.2 Ah - 0.60 kg (1.32lb) | ✓ | ✓ | | ✓ | 615 812 100 0 |
| 3 Li-ion Battery 36V 2.1 Ah - 0.60 kg (1.32lb) | | | ✓ | ✓ | 615 811 924 0 |
| Chargers | | | | | |
| 4 For Li-ion Battery 18 / 36V - 100 / 240V | ✓ | ✓ | ✓ | ✓ | 615 811 654 5 |
| Protective covers - Tools | | | | | |
| 5 For Pistol - Clear | ✓ | | | ✓ | 615 396 870 0 |
| 5 For Pistol - Black | ✓ | | | ✓ | 615 211 030 0 |
| 5 For Pistol - Blue | ✓ | | | ✓ | 615 211 031 0 |
| 5 For Pistol - Red | ✓ | | | ✓ | 615 211 032 0 |
| 5 For Pistol - Grey | ✓ | | | ✓ | 615 211 033 0 |
| 5 For Body angle head - Black | | ✓ | ✓ | ✓ | 615 211 004 0 |
| 5 For Body angle head - Blue | | ✓ | ✓ | ✓ | 615 211 025 0 |
| 5 For Body angle head - Red | | ✓ | ✓ | ✓ | 615 211 026 0 |
| 5 For Body angle head - Grey | | ✓ | ✓ | ✓ | 615 211 027 0 |
| 6 For Angle < 15Nm - Black | | ✓ | | ✓ | 615 397 672 0 |
| 6 For Angle 30Nm - Black | | | ✓ | ✓ | 615 573 214 0 |
| 6 For Angle 45Nm - Black | | | ✓ | ✓ | 615 573 215 0 |
| 6 For Angle 60Nm - Black | | | ✓ | ✓ | 615 211 005 0 |
| Protective covers - Battery | | | | | |
| 7 For Battery 18V 2.1Ah - Clear | ✓ | ✓ | | ✓ | 615 396 871 0 |
| 7 For Battery 18V 2.1Ah - Black | ✓ | ✓ | | ✓ | 615 211 041 0 |
| 7 For Battery 18V 2.1Ah - Blue | ✓ | ✓ | | ✓ | 615 211 042 0 |
| 7 For Battery 18V 2.1Ah - Red | ✓ | ✓ | | ✓ | 615 211 043 0 |
| 7 For Battery 18V 2.1Ah - Grey | ✓ | ✓ | | ✓ | 615 211 044 0 |
| 7 For Battery 18V 4.2Ah / 36V 2.1Ah - Clear | ✓ | ✓ | ✓ | ✓ | 615 396 872 0 |
| 7 For Battery 18V 4.2Ah / 36V 2.1Ah - Black | ✓ | ✓ | ✓ | ✓ | 615 211 046 0 |
| 7 For Battery 18V 4.2Ah / 36V 2.1Ah - Blue | ✓ | ✓ | ✓ | ✓ | 615 211 047 0 |
| 7 For Battery 18V 4.2Ah / 36V 2.1Ah - Red | ✓ | ✓ | ✓ | ✓ | 615 211 048 0 |
| 7 For Battery 18V 4.2Ah / 36V 2.1Ah - Grey | ✓ | ✓ | ✓ | ✓ | 615 211 049 0 |
| Miscellaneous | | | | | |
| • Kit Overmould Presto (x10 pcs) | | | | | 615 211 057 5 |
| 8 Speed Setting Module (ELS/ELC version) | ✓ | ✓ | ✓ | ✓ | 615 396 829 0 |
| 9 Pistol tool holster | ✓ | | | ✓ | 615 804 914 0 |
| 10 Side handle - Pistol | ✓ | | | ✓ | 615 396 757 0 |
| 11 Suspension bail - Pistol | ✓ | | | ✓ | 443 703 |
| 12 Kit colour rings - Pistol (7 colors: white, yellow, orange, green, blue, purple, grey) | ✓ | | | ✓ | 615 396 742 5 |
| 12 Kit colour rings - Angle tools (8 colors: white, yellow, orange, green, blue, purple, grey, black) | | ✓ | ✓ | ✓ | 615 970 114 5 |
| 13 Kit Nose Crowfoot | ✓ | | | ✓ | 615 810 695 0 |
| 14 E-LIT BOX-V2 | | | | ✓ | 615 936 310 0 |
| 15 Power supply E-LIT BOX | | | | ✓ | 615 927 053 0 |
| 16 eDOCK | ✓ | ✓ | ✓ | ✓ | 615 811 976 0 |
| • E-LIT CONFIG software | ✓ | ✓ | ✓ | ✓ | - |
| Desoutter Tool Holsters | | | | | |
| 17 DTH-42 | ✓ | | | ✓ | 107892 |
| 18 DTH-90 | ✓ | | | ✓ | 615 812 119 0 |
| 19 DTH TWIN (single) without rail | | ✓ | ✓ | ✓ | 615 811 411 0 |
| 20 DTH TWIN rail kit with 2 Twin holders | | ✓ | ✓ | ✓ | 615 811 412 5 |
| 21 DTH TWIN stand kit with 2 Twin holders | | ✓ | ✓ | ✓ | 615 811 413 5 |
| • License Elit PC Level 1 | | | | ✓ | 615 927 685 0 |

E-LIT series

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



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

E-LIT PLUS - ELECTRONIC BRUSHLESS MOTOR

| | | | | | | | | | |
|---|----------------|---------------|---------|----------|------|------------|-----|------|----|
| A | ELB 2.5-1250-P | 615 165 415 0 | 0.4-2.5 | 3.5-22 | 1250 | Hex. 1/4 F | 0.8 | 1.76 | 18 |
| A | ELB 6-900-P | 615 165 416 0 | 0.8-6 | 7.1-53 | 900 | Hex. 1/4 F | 0.8 | 1.76 | 18 |
| A | ELB 6-670-P | 615 165 440 0 | 0.8-6 | 7.1-53 | 670 | Hex. 1/4 F | 0.8 | 1.76 | 18 |
| A | ELB 8-670-P | 615 165 417 0 | 1.5-8 | 13.3-70 | 670 | Hex. 1/4 F | 0.8 | 1.76 | 18 |
| A | ELB 12-600-P | 615 165 418 0 | 3-12 | 26.5-106 | 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 | 0.4-2.5 | 3.5-22 | 500-1550 | Hex. 1/4 F | 0.8 | 1.76 | 18 |
| A | ELS 6-1000-P | 615 165 420 0 | 0.8-6 | 7.1-53 | 300-1000 | Hex. 1/4 F | 0.8 | 1.76 | 18 |
| A | ELS 8-400-P | 615 165 605 0 | 1.5-8 | 13.3-70 | 120-400 | Hex. 1/4 F | 0.8 | 1.76 | 18 |
| A | ELS 8-800-P | 615 165 421 0 | 1.5-8 | 13.3-70 | 300-765 | Hex. 1/4 F | 0.8 | 1.76 | 18 |
| A | ELS 8-400-P4S | 615 165 825 0 | 1.5-8 | 13.3-70 | 120-400 | Sq. 1/4 | 0.8 | 1.76 | 18 |
| A | ELS 12-600-P | 615 165 422 0 | 3-12 | 26.5-106 | 250-570 | Hex. 1/4 F | 0.8 | 1.76 | 18 |
| A | ELS 12-400-P4S | 615 165 826 0 | 3-12 | 26.5-106 | 120-400 | Sq. 1/4 | 0.8 | 1.76 | 18 |
| B | ELS 7-360-A4S | 615 165 725 0 | 1.5-7 | 13.3-62 | 120-360 | Sq. 1/4 | 1.2 | 2.6 | 18 |
| B | ELS 7-880-A | 615 165 628 0 | 1.5-7 | 13.3-62 | 400-880 | Hex. 1/4 F | 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 | 10-30 | 88.5-265 | 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 WITH E-LIT BOX

| | | | | | | | | | |
|---|-----------------|---------------|-------|----------|----------|------------|------|------|----|
| A | ELC 6-1000-P-Z | 615 165 701 0 | 3-6 | 26.5-53 | 300-1000 | Hex. 1/4 F | 0.8 | 1.76 | 18 |
| A | ELC 8-400-P-Z | 615 165 702 0 | 3-8 | 26.5-70 | 120-400 | Hex. 1/4 F | 0.8 | 1.76 | 18 |
| A | ELC 8-800-P-Z | 615 165 703 0 | 3-8 | 26.5-70 | 300-765 | Hex. 1/4 F | 0.8 | 1.76 | 18 |
| A | ELC 12-600-P-Z | 615 165 704 0 | 3-12 | 26.5-106 | 250-570 | Hex. 1/4 F | 0.8 | 1.76 | 18 |
| B | ELC 7-360-A4S-Z | 615 165 726 0 | 3-7 | 26.5-62 | 150-360 | Sq. 1/4 | 1.2 | 2.6 | 18 |
| B | ELC 7-880-A-Z | 615 165 707 0 | 3-7 | 26.5-62 | 400-880 | Hex. 1/4 F | 1.2 | 2.6 | 18 |
| B | ELC 15-480-A-Z | 615 165 708 0 | 5-15 | 44.2-133 | 200-480 | Sq. 3/8 | 1.2 | 2.6 | 18 |
| C | ELC 30-300-A-Z | 615 165 709 0 | 10-30 | 88.5-265 | 100-300 | Sq. 3/8 | 1.5 | 3.3 | 36 |
| C | ELC 45-180-A-Z | 615 165 710 0 | 20-45 | 177-398 | 50-180 | Sq. 3/8 | 1.5 | 3.3 | 36 |
| D | ELC 60-160-A-Z | 615 165 711 0 | 25-60 | 220-530 | 50-160 | Sq.1/2 | 1.97 | 4.33 | 36 |

Battery not included in standard offering

B-FLEX: Performance and flexibility

FOCUS



KEY POINTS

| 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: Ergonomics and control



desoutter.info/B-FLEX

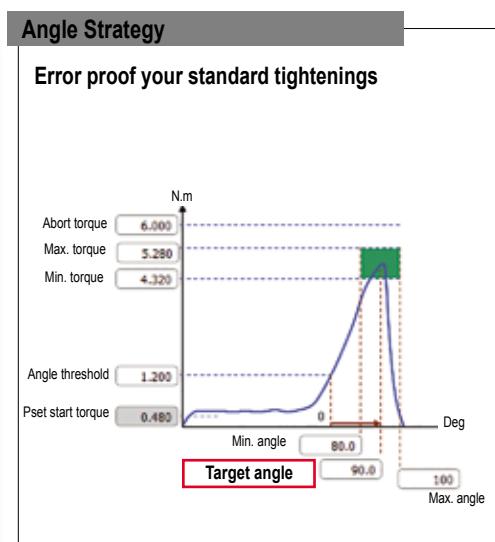
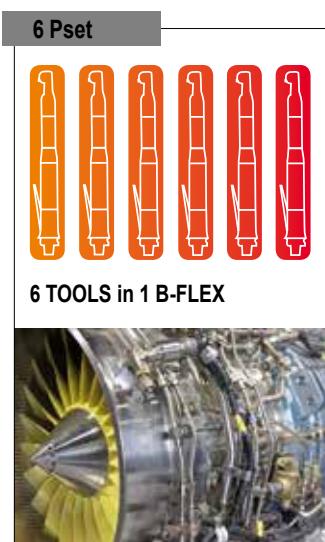
ERROR PROOF QUALITY CONTROL

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

No PC needed



B-FLEX ADVANCED (Standard features +)



B-FLEX Series - Pistol grip

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

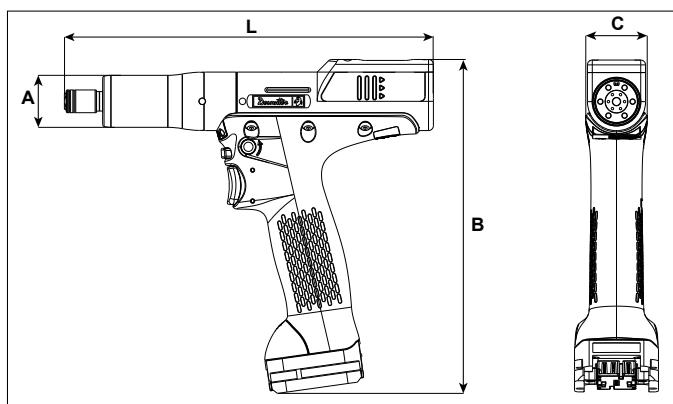


A



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 24

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

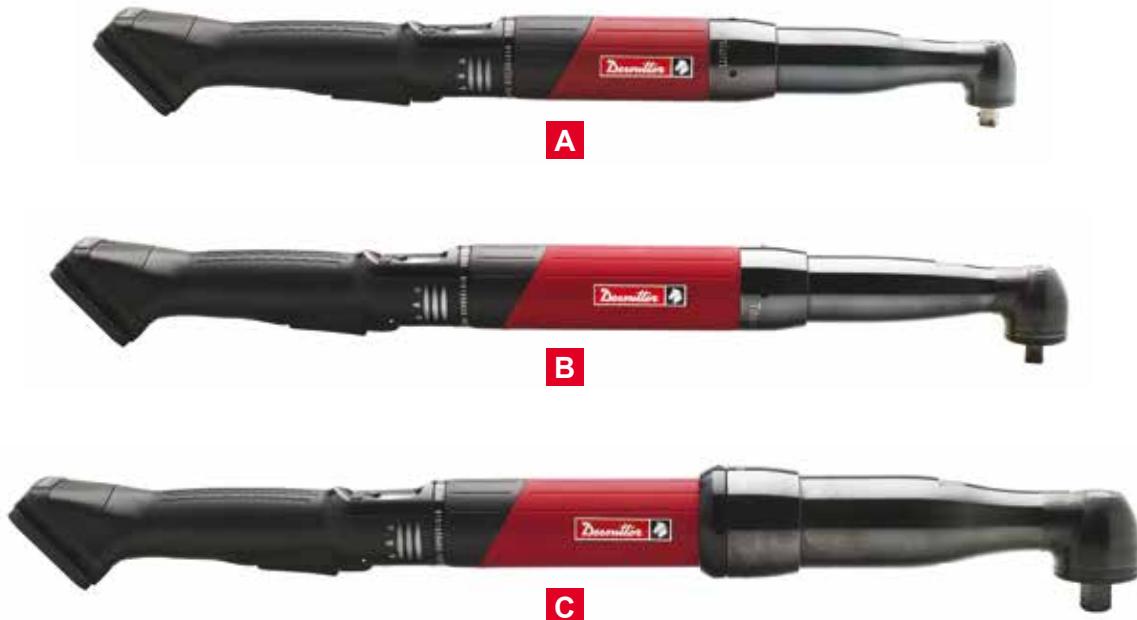
| | | | | | | | | | | | | | | |
|---|-----------------|---------------|---------|-----|----|----|-----|-----|------|-----|------|---|-----|-------|
| A | EPBA 8-1800-4Q | 615 165 972 0 | Hex.1/4 | 1.5 | 7 | 8 | 1.1 | 5.2 | 5.9 | 900 | 1800 | 1 | 2.2 | 18/36 |
| B | EPBA 8-1800-10S | 615 165 971 0 | Sq.3/8 | 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, 2.1Ah - Weight: 0.35kg (0.77lb) / 18V, 4.2Ah & 36V, 2.1Ah - Weight: 0.60kg (1.32lb)

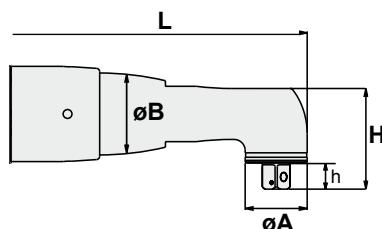
B-FLEX Series - Angle head

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



| 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 24

| PIC REF | MODEL | PART NUMBER | SQUARE DRIVE | TORQUE RANGE | | | | | | ROTATIONAL SPEED | WEIGHT WITHOUT BATTERY | VOLTAGE |
|------------|-------|----------------|-----------------|--------------|------------------|------|------|------------------|--------|---------------------|------------------------------|---------|
| | | | | MIN. | RECOM- MENDED | MAX. | MIN. | RECOM- MENDED | MAX. | | | |
| | | | | in. | Nm | Nm | Nm | ft. lb | ft. lb | rpm | kg | lb |
| | | | | | | | | | | | | |

B-FLEX - TRANSDUCERIZED BATTERY TOOL

| | | | | | | | | | | | | | |
|---|------------|---------------|-----|----|----|----|-----|-----|----|-----|------|------|----|
| • | 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 - 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, 2.1Ah - Weight: 0.60 kg

Accessories



EPB / EAB

ACCESSORIES INCLUDED

| | EPB/EPBA |
|-------------------------------|---------------|
| • Pistol protective cover Red | 615 211 022 0 |

OPTIONAL ACCESSORIES

| ITEM | EAB/EABA | EPB/EPBA |
|--|---------------|---------------|
| Battery type | | |
| 1 Li-ion Battery 18V 2.1 Ah - 0.35 kg (0.77lb) | | 615 812 099 0 |
| 2 Li-ion Battery 18V 4.2 Ah - 0.60 kg (1.32lb) | | 615 812 100 0 |
| 3 Li-ion Battery 36V 2.1 Ah - 0.60 kg (1.32lb) | 615 811 924 0 | 615 811 924 0 |
| Charger | | |
| 4 For Li-ion Battery 18 / 36V - 100 / 240V | 615 811 654 5 | 615 811 654 5 |
| Protective covers - Tools | | |
| 5 For Angle head EAB 15 | | 615 211 003 0 |
| 5 For Angle head EAB 26/32 | | 615 573 207 0 |
| 5 For Angle head EAB 45/50 | | 615 573 208 0 |
| 5 For Angle head EAB 60 | | 615 573 209 0 |
| 5 For Angle head EAB 75/95 | | 615 573 210 0 |
| 6 Pistol protective cover Black | | 615 211 019 0 |
| Protective covers - Battery | | |
| 7 For Battery 18V 2.1Ah - Clear | | 615 396 871 0 |
| 7 For Battery 18V 2.1Ah - Black | | 615 211 041 0 |
| 7 For Battery 18V 2.1Ah - Blue | | 615 211 042 0 |
| 7 For Battery 18V 2.1Ah - Red | | 615 211 043 0 |
| 7 For Battery 18V 2.1Ah - Grey | | 615 211 044 0 |
| 7 For Battery 18V 4.2Ah / 36V 2.1Ah - Clear | 615 396 872 0 | 615 396 872 0 |
| 7 For Battery 18V 4.2Ah / 36V 2.1Ah - Black | 615 211 046 0 | 615 211 046 0 |
| 7 For Battery 18V 4.2Ah / 36V 2.1Ah - Blue | 615 211 047 0 | 615 211 047 0 |
| 7 For Battery 18V 4.2Ah / 36V 2.1Ah - Red | 615 211 048 0 | 615 211 048 0 |
| 7 For Battery 18V 4.2Ah / 36V 2.1Ah - Grey | 615 211 049 0 | 615 211 049 0 |
| Miscellaneous | | |
| 8 Nose crowfoot adapter for EPB | | 615 565 518 0 |
| 9 eDOCK | 615 811 976 0 | 615 811 976 0 |
| 10 Side handle | | 615 397 016 0 |
| Desoutter Tool holster | | |
| 11 DTH TWIN (single) without rail | | 615 811 411 0 |
| 12 DTH TWIN rail kit with 2 Twin holders | | 615 811 412 5 |
| 13 DTH TWIN stand kit with 2 Twin holders | | 615 811 413 5 |
| 14 DTH90 | | 615 812 119 0 |

Advanced tightening systems

ELECTRIC TRANSDUCER CORDLESS

ELECTRIC TRANSDUCER CORD



CVIL II



Adaptor CVI II for ERx tools
and EME tools (except ELRT)

ERP..LT, ERF,
cable included

CVIR II H4



Module ERS to connect
CVI3 controllers

CVIR II



Cable included

CVIXS



EABcom
5 - 95 Nm

EPBcom
1.5 - 17 Nm



EAD
3 - 660 Nm

EID
3 - 270 Nm

EFDE / EFDS
1-1900 Nm

EFDA
12 - 580 Nm

ELRT
10-45 Nm

ERAL
2 - 480 Nm

ERDL
0.5 - 250 Nm

ERP
0.35 - 42 Nm

EME
1 - 1900 Nm

EMEL
10 - 800 Nm

EME OF
4 - 350 Nm

ERF
0.35-30 Nm

ERP HT
75-1700 Nm

ERS (M20)
0.6 - 22 Nm

ERSA
0.6 - 27 Nm

ERSF
1.5 - 12 Nm

ERXS
6 - 80 Ncm



ELECTRIC CURRENT CONTROL

CVIC II-L2
CVIC II-H2



Cable included

ECP..LT, cable
included

EC cable

MC cable

EC cable

MC cable

MC cable

ECS (M20)
0.12 - 16 Nm

ECSA
0.55 - 11.5 Nm

ECSF
0.12 - 16 Nm

ECP..L
1 - 20 Nm

ECA15
5 - 15 Nm

ECD5
2 - 6 Nm

MC35-10
2.5 - 8 Nm



ECA
7 - 200 Nm

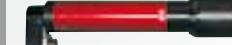
ECD
7 - 120 Nm

ECP
ECP HT

7 - 4000 Nm



MC
5 - 135 Nm



CVIC II-L4
CVIC II-H4





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



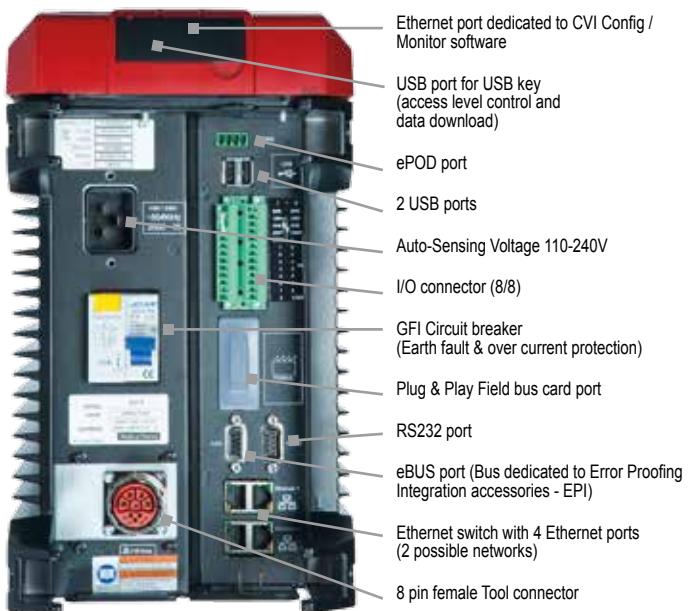
UNMATCHED FLEXIBILITY



USER-FRIENDLY INTERFACE



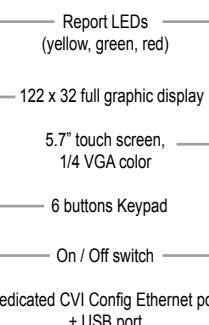
Technical features



CVI3 Function



CVI3 Vision



| FEATURES | CVI3 FUNCTION | CVI3 VISION | TWINCVI3 SYNCHRO/ASYNCHRO |
|--|---------------|-------------|------------------------------|
| CONTROLLERS | | | |
| Weight - kg (lbs) | 9.3 (20.5) | 9.3 (20.5) | 15 (33.1) |
| Volume (dm³) | 19.5 | 19.5 | 29.6 |
| Color touchscreen | ✓ (5.7") | ✓ (5.7") | |
| STORAGE | | | |
| Pset results (torque, angle, date, time, report) | 10000 | 10000 | 10000/20000 |
| Pset curves (OK/NOK) | 20 | 20 | 20/40 |
| Assembly Process results | 1000 | 1000 | 1000/2000 |
| Event log storage (number of events) | 500 | 500 | 500 |
| BASIC FUNCTIONS | | | |
| Nbr of Psets | 250 | 250 | 250 |
| Nbr of steps per Pset | 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 4 different identifiers) | ✓ | ✓ | ✓ |
| Number of Assembly Process | 250 | 250 | 250 |
| Advanced Soft PLC (in option with CVILOGIX) | ✓ | ✓ | ✓ |
| 1 Network/Fieldbus Access point per group of up to 14 controllers | ✓ | ✓ | ✓ |
| Full synchronized control for a group of up to 14 controllers (static/dynamic) | ✓ | ✓ | ✓ |
| TIGHTENING STRATEGIES | | | |
| Control: torque, angle, torque OR angle, torque AND angle, yield point, torque rate, seating detection | ✓ | ✓ | ✓ |
| Monitoring: yield point, torque rate, 2nd torque, 2nd angle, 2nd part angle, current, slip off, stick slip | ✓ | ✓ | ✓ |
| CONNECTIVITY | | | |
| Configurable I/O | 8/8 | 8/8 | 8/8 |
| USB ports (2 + 1 front) | ✓ | ✓ | ✓ |
| Embedded Ethernet switch (4 ports + 1 front – 2 networks) | ✓ | ✓ | ✓ |
| Dedicated Bus for integrated positionning management | ✓ | ✓ | ✓ |
| OPTIONAL FIELDBUS | | | |
| Plug & Play Fieldbus card port (EthernetIP, Profinet A/B, Modbus TCP, DeviceNet, Profibus, CC-Link) | ✓ | ✓ | ✓ |
| Fieldbus dynamic memory mapping | ✓ | ✓ | ✓ |

Controllers



desoutter.info/CVI3



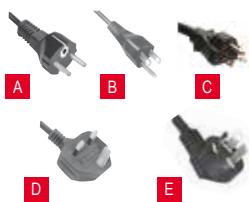
| PIC REF | MODEL | PART NUMBER | CONSUMPTION (CURRENT) | | MAIN SUPPLY | DIMENSIONS | | | | WEIGHT | |
|---------|---------------------|---------------|-----------------------|------|--------------|------------|------|-----|------|--------|------|
| | | | 115V | 220V | | mm | in. | mm | in. | kg | lb. |
| A | CVI3 Vision | 615 932 691 0 | 4A | 2A | Single-phase | 175 | 6.9 | 361 | 14.2 | 310 | 12.2 |
| A | CVI3 Vision eSTOP | 615 932 694 0 | 4A | 2A | Single-phase | 175 | 6.9 | 361 | 14.2 | 310 | 12.2 |
| B | TWINCVI3 | 615 932 697 0 | 8A | 4A | Single-phase | 265 | 10.4 | 361 | 14.2 | 310 | 12.2 |
| B | TWINCVI3 eSTOP | 615 932 698 0 | 8A | 4A | Single-phase | 265 | 10.4 | 361 | 14.2 | 310 | 12.2 |
| C | CVI3 Function | 615 932 690 0 | 4A | 2A | Single-phase | 175 | 6.9 | 361 | 14.2 | 310 | 12.2 |
| C | CVI3 Function eSTOP | 615 932 693 0 | 4A | 2A | Single-phase | 175 | 6.9 | 361 | 14.2 | 310 | 12.2 |

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 |



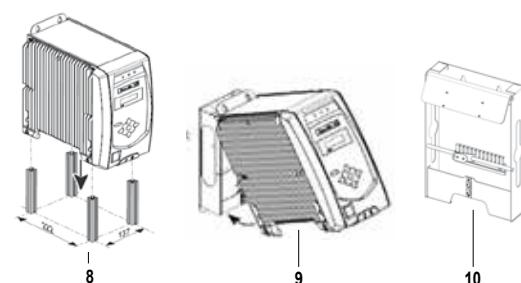
OPTIONAL ACCESSORIES

| 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 |
| ePOD | |
| 7 ePOD1 | 615 936 075 0 |
| 7 ePOD2 | 615 936 076 0 |
| 7 ePOD3 | 615 936 077 0 |
| 7 ePOD2C | 615 936 311 0 |
| 7 ePOD3C | 615 936 318 0 |
| 7 ePOD4C | 615 936 312 0 |
| Others Accessories | |
| 8 Table mounting | 615 397 399 5 |
| 9 Wall mounting CVI3 Function/Vision | 615 397 631 5 |
| 10 Wall mounting TWINCVI3 | 615 811 897 0 |

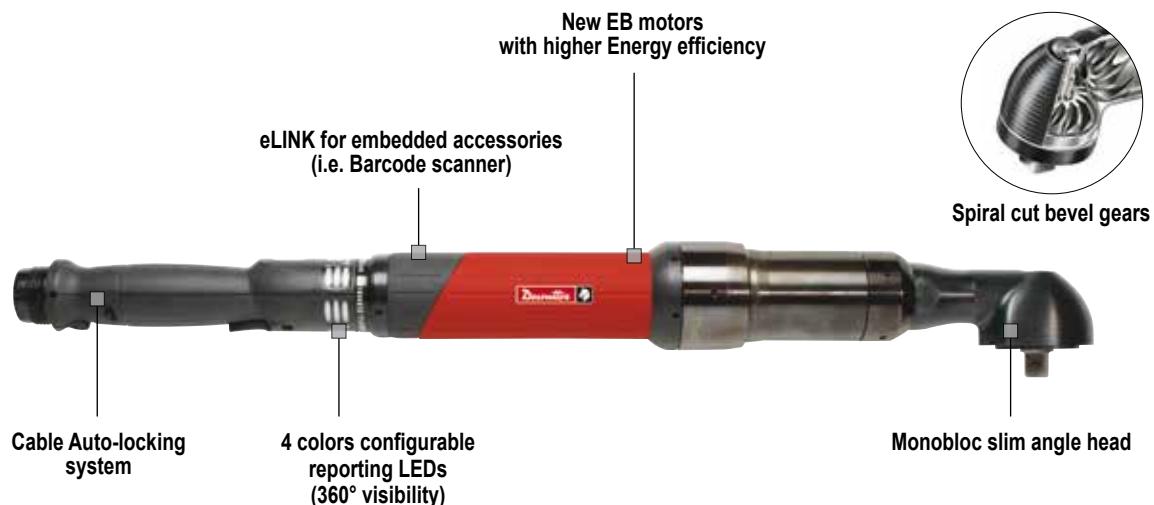


OPTIONAL ACCESSORIES

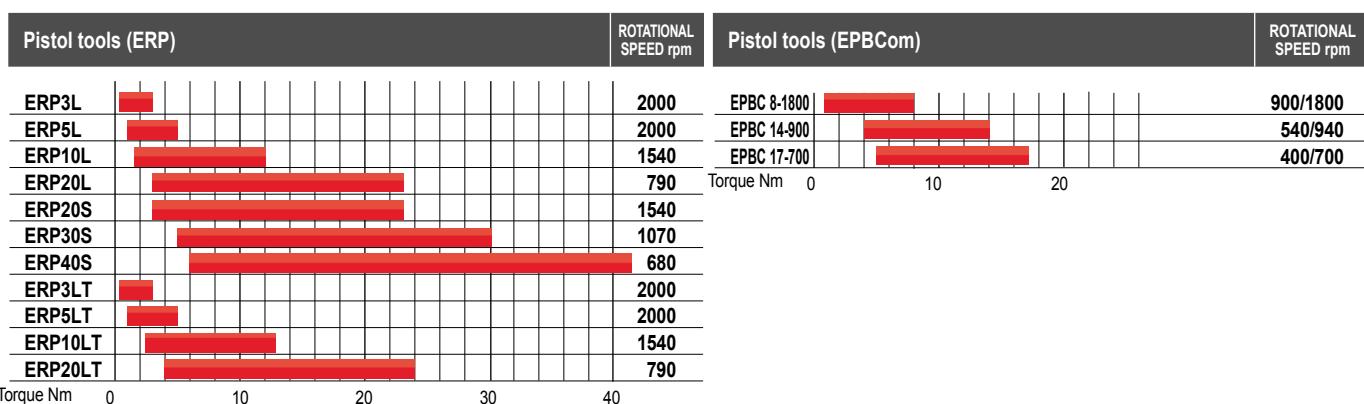
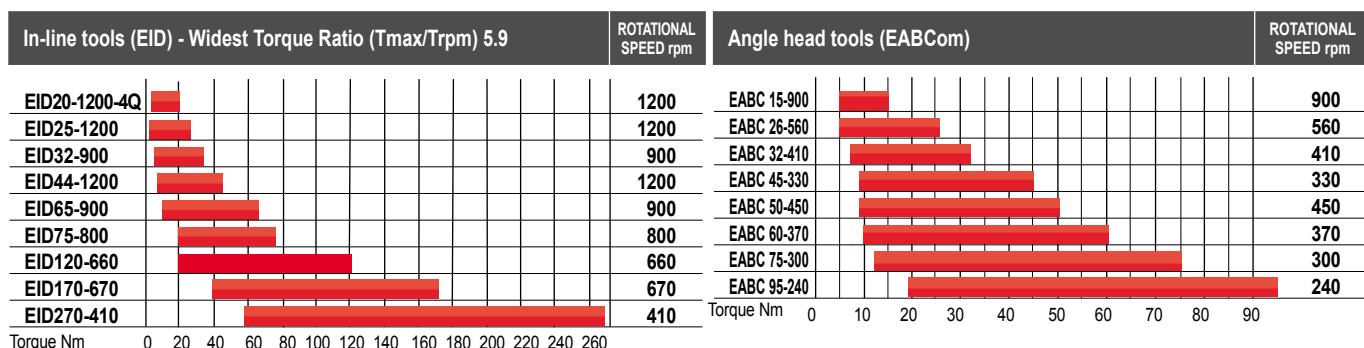
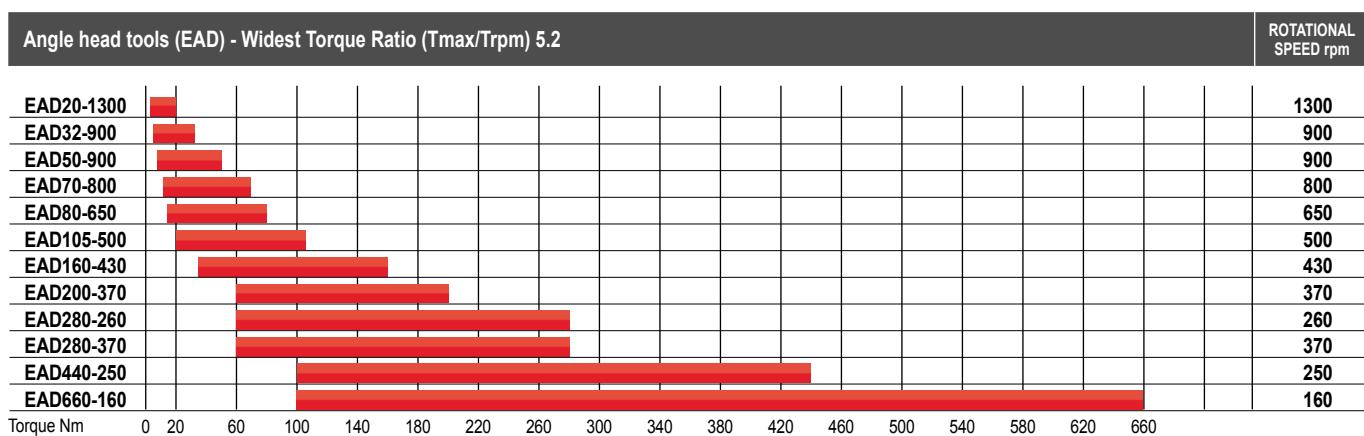
| | PART NO. |
|--|---------------|
| Software | |
| • CVI CONFIG - 1 user | 615 927 699 0 |
| • CVI CONFIG - 5 users | 615 927 700 0 |
| • CVI CONFIG - 25 users | 615 927 701 0 |
| • CVI ANALYZER - 1 user | 615 927 696 0 |
| • CVI ANALYZER - 5 users | 615 927 697 0 |
| • CVINET WEB - 1 cont. | 615 927 698 0 |
| • CVINET WEB - 10 cont. | 615 927 736 0 |
| • CVINET WEB - 25 cont. | 615 927 737 0 |
| • CVINET WEB - 50 cont. | 615 927 738 0 |
| • CVINET WEB - 100 cont. | 615 927 739 0 |
| • CVINET WEB - 200 cont | 615 927 747 0 |
| • CVINET WEB - Open Protocol Adapter | 615 927 748 0 |
| • CVINET WEB - Notifier | 615 927 076 0 |
| • Upgrade from CVI NET to CVINET WEB 1 cont. | 615 927 740 0 |
| • Upgrade from CVI NET to CVINET WEB 10 cont. | 615 927 741 0 |
| • Upgrade from CVI NET to CVINET WEB 25 cont. | 615 927 742 0 |
| • Upgrade from CVI NET to CVINET WEB 50 cont. | 615 927 743 0 |
| • Upgrade from CVI NET to CVINET WEB 200 cont. | 615 927 744 0 |
| • CVIKEY (access level management on USB key) | 615 927 676 0 |



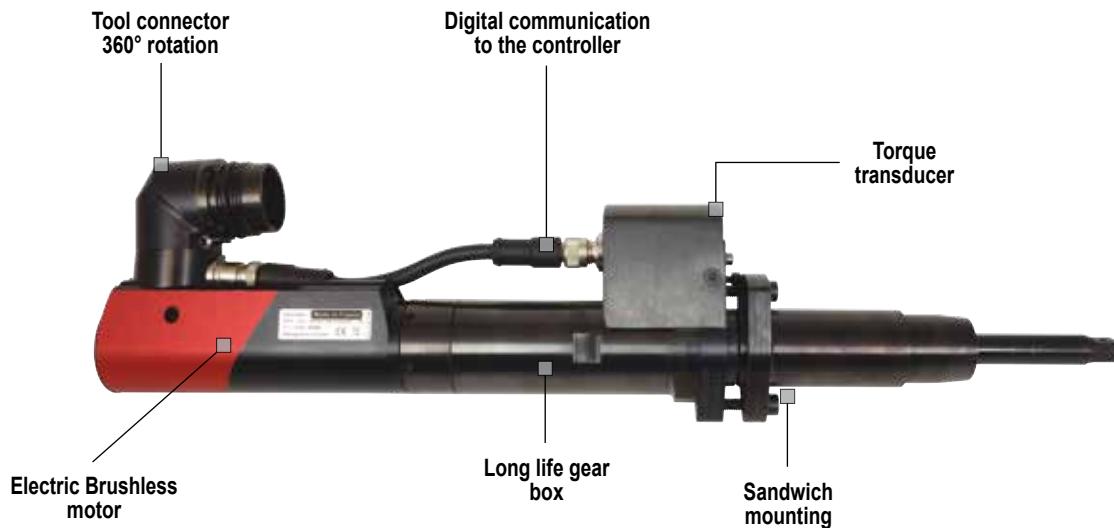
Torque Range - Portable electric nutrunners



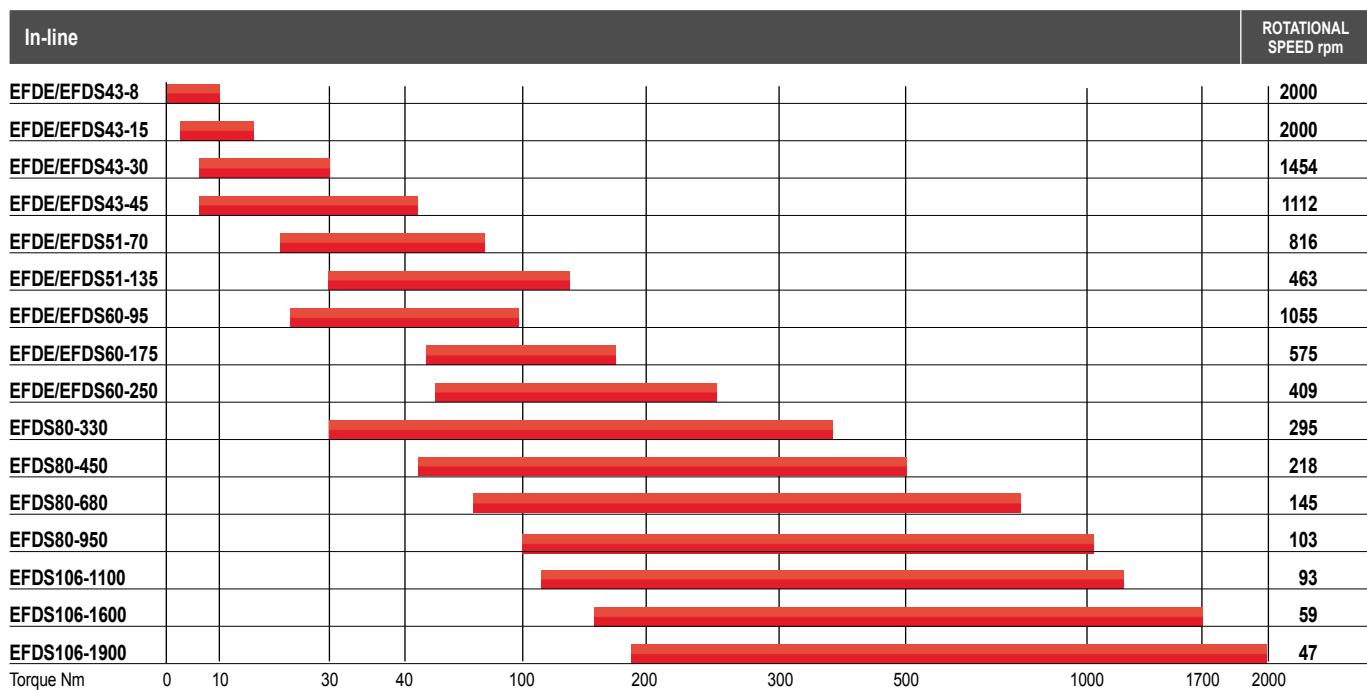
Performance of Portable electric nutrunners - EAD, EID, EABC, EPBC and ERP



Torque Range - Fixtured electric spindles



Performance of Fixtured electric spindles - Series EFDE, EFDS and EFDA



*On request, contact your Desoutter representative

Pistol grip electric nutrunners - CVI3

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



A



B



C



D



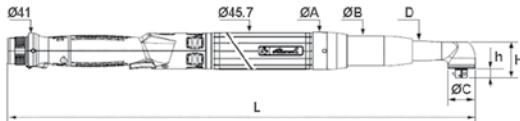
ACCESSORIES
see pages 46-47

CVI II Adapter needed

| PIC REF | MODEL | PART NUMBER | OUTPUT DRIVE | TORQUE | | | | | | ROTATIONAL SPEED | LENGTH | | WEIGHT | |
|---------|---------|---------------|--------------|--------|--------------|------|-------|--------------|-------|------------------|--------|-----|--------|-----|
| | | | | MIN. | RECOM-MENDED | MAX. | MIN. | RECOM-MENDED | MAX. | | rpm | mm | in. | kg |
| | | | in. | Nm | Nm | Nm | ft.lb | ft.lb | ft.lb | | | | | |
| A | ERP3L | 615 165 193 0 | Hex. 1/4 F | 0.35 | 3 | 3.3 | 0.26 | 2.2 | 2.4 | 2000 | 196 | 7.7 | 1.0 | 2.2 |
| A | ERP5L | 615 165 194 0 | Hex. 1/4 F | 0.5 | 5 | 5.5 | 0.37 | 3.7 | 4 | 2000 | 196 | 7.7 | 1.0 | 2.2 |
| A | ERP10L | 615 165 195 0 | Hex. 1/4 F | 1.5 | 10 | 12 | 1.1 | 7.4 | 8.8 | 1540 | 196 | 7.7 | 1.1 | 2.4 |
| A | ERP20L | 615 165 196 0 | Hex. 1/4 F | 3 | 20 | 23 | 2.2 | 14.7 | 17 | 790 | 196 | 7.7 | 1.1 | 2.4 |
| A | ERP20S | 615 165 197 0 | Hex. 1/4 F | 3 | 20 | 23 | 2.2 | 14.7 | 17 | 1540 | 221 | 8.7 | 1.2 | 2.6 |
| B | ERP30S | 615 165 198 0 | Sq. 3/8 | 5 | 30 | 30 | 3.7 | 22.1 | 22 | 1070 | 217 | 8.5 | 1.2 | 2.6 |
| C | ERP40S | 615 165 263 0 | Sq. 3/8 | 6 | 40 | 42 | 4.4 | 29.5 | 31 | 680 | 274 | 11 | 1.7 | 3.7 |
| D | ERP3LT | 615 165 227 0 | Hex. 1/4 F | 0.35 | 3 | 3.3 | 0.26 | 2.2 | 2.4 | 2000 | 196 | 7.7 | 1.0 | 2.2 |
| D | ERP5LT | 615 165 228 0 | Hex. 1/4 F | 0.5 | 5 | 5.5 | 0.37 | 3.7 | 4 | 2000 | 196 | 7.7 | 1.0 | 2.2 |
| D | ERP10LT | 615 165 229 0 | Hex. 1/4 F | 1.5 | 10 | 12 | 1.1 | 7.4 | 8.8 | 1540 | 196 | 7.7 | 1.1 | 2.4 |
| D | ERP20LT | 615 165 230 0 | Hex. 1/4 F | 3 | 20 | 23 | 2.2 | 14.7 | 17 | 790 | 196 | 7.7 | 1.1 | 2.4 |

Angle head electric nutrunners - 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 |
| 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 |

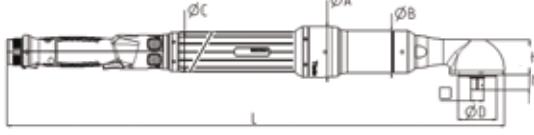


ACCESSORIES
see pages 46-47

| MODEL | PART NUMBER | SQUARE DRIVE | TORQUE | | | | | | ROTATIONAL SPEED | LENGTH | | WEIGHT | |
|------------|---------------|--------------|--------|--------------|------|------|--------------|------|------------------|--------|------|--------|------|
| | | | MIN. | RECOM-MENDED | MAX. | MIN. | RECOM-MENDED | MAX. | | mm | in. | kg | lb. |
| EAD20-1300 | 615 165 606 0 | 3/8 | 3 | 18 | 20 | 2.2 | 13.3 | 14.8 | 1300 | 481 | 19.2 | 1.4 | 3.08 |
| EAD32-900 | 615 165 607 0 | 3/8 | 5 | 30 | 32 | 3.7 | 22.1 | 23.6 | 900 | 481 | 19.2 | 1.4 | 3.08 |
| EAD50-900 | 615 165 609 0 | 3/8 | 8 | 45 | 50 | 5.9 | 33.2 | 40.6 | 900 | 531 | 20.9 | 1.8 | 3.96 |
| EAD70-800 | 615 165 611 0 | 3/8 | 12 | 65 | 70 | 8.9 | 47.9 | 51.6 | 800 | 544 | 21.4 | 2.0 | 4.40 |
| EAD70-800 | 615 165 882 0 | 1/2 | 12 | 65 | 70 | 8.9 | 47.9 | 51.6 | 800 | 544 | 21.4 | 2.0 | 4.40 |
| EAD80-650 | 615 165 612 0 | 1/2 | 15 | 75 | 80 | 11.1 | 55.3 | 59 | 650 | 567 | 22.3 | 2.4 | 5.72 |
| EAD105-500 | 615 165 613 0 | 1/2 | 20 | 90 | 105 | 14.8 | 66.4 | 77.4 | 500 | 567 | 22.3 | 2.4 | 5.72 |

Angle head electric nutrunners - 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 |

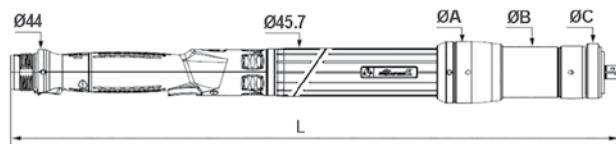


ACCESSORIES
see pages 46-47

| MODEL | PART NUMBER | SQUARE DRIVE | TORQUE | | | | | | ROTATIONAL SPEED | LENGTH | | WEIGHT | |
|------------|---------------|--------------|--------|--------------|------|------|--------------|------|------------------|--------|------|--------|------|
| | | | MIN. | RECOM-MENDED | MAX. | MIN. | RECOM-MENDED | MAX. | | mm | in. | kg | lb. |
| 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 - 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 |



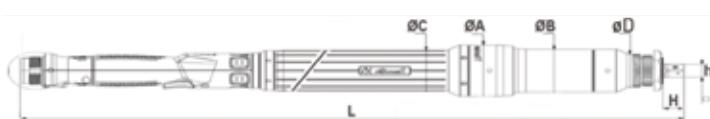
ACCESSORIES
see pages 46-47

| MODEL | PART NUMBER | OUTPUT DRIVE | TORQUE | | | | | | ROTATIONAL SPEED | LENGTH | | WEIGHT | |
|----------------|---------------|--------------|--------|--------------|------|------|--------------|------|------------------|--------|------|--------|------|
| | | | MIN. | RECOM-MENDED | MAX. | MIN. | RECOM-MENDED | MAX. | | mm | in. | kg | lb. |
| EID20-1200-4Q* | 615 165 992 0 | Hex. 1/4 F | 3 | 18 | 21 | 2.2 | 13.3 | 15.5 | 1200 | 430 | 16.9 | 1.20 | 2.64 |
| EID25-1200* | 615 165 614 0 | Sq. 3/8 | 3 | 20 | 25 | 2.2 | 14.8 | 18.4 | 1200 | 430 | 16.9 | 1.20 | 2.64 |
| EID32-900* | 615 165 615 0 | Sq. 3/8 | 5 | 30 | 32 | 3.7 | 22.1 | 25.1 | 900 | 430 | 16.9 | 1.20 | 2.64 |
| EID44-1200* | 615 165 616 0 | Sq. 3/8 | 7 | 40 | 44 | 5.2 | 29.5 | 33.2 | 1200 | 489 | 19.3 | 1.95 | 4.29 |
| EID65-900 | 615 165 617 0 | Sq. 1/2 | 10 | 60 | 65 | 7.4 | 44.3 | 47.9 | 900 | 489 | 19.3 | 1.95 | 4.29 |
| EID75-800 | 615 165 618 0 | Sq. 1/2 | 20 | 70 | 75 | 14.8 | 51.6 | 57.5 | 800 | 489 | 19.3 | 1.95 | 4.29 |

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

In-line electric nutrunners - CVI3

20 to 270 Nm (15 to 199 ft.lb) - 410 to 670 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 pages 46-47

| MODEL | PART NUMBER | SQUARE DRIVE | TORQUE | | | | | | ROTATIONAL SPEED | LENGTH | | WEIGHT | |
|------------|---------------|--------------|--------|--------------|------|------|--------------|------|------------------|--------|------|--------|------|
| | | | MIN. | RECOM-MENDED | MAX. | MIN. | RECOM-MENDED | MAX. | | mm | in. | kg | lb. |
| 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 |

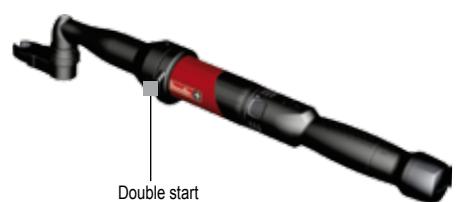
Crowfoot and tube nut tools



Offset Closed



Offset Open



Double start



In line Closed



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.

Wireless transducerized battery tool

Multi Battery Tools

Virtual controllers management by Desoutter

Optimized footprint - free from cable - Full Traceability

Access point



WITH 1 CVI3 VISION
ADD UP TO 3 VIRTUAL CONTROLLERS
GET UP TO 4 BATTERY TOOLS CONNECTED

EPOD 2C

up to 2 battery tools



EPOD 3C

up to 3 battery tools



EPOD 4C

up to 4 battery tools



Configuration with cable tool: 1 cable tool with up to 2 battery tools
Configuration with cable tool: 1 cable tool with up to 3 battery tools

Accessories can be dedicated to
only one virtual controller or to the
whole virtual controllers

Tool overview



Pistol Version : additional features



- Torque 1,5-17 Nm
- Compatible with both 18v and 36V batteries
- White LED activated by movement



ADVANCED ERGONOMICS

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



INCREASED PRODUCTIVITY

- High speed tool and increased autonomy with 36V battery & 2.1 Ah capacity
- Embedded display for pset selection
- Strong & efficient wireless communication, tested in industrial environment



EASY INTEGRATION

- Quick wireless installation - Directly on an existing CVI3 controller
- Data collection through wireless communication
- Improve error-proofing control with advanced tightening strategies
- Easy attachment for crowfoot & tubenuts



OPTIMIZED MAINTENANCE

- Long life batteries, no memory effect on Li-ion battery
- Dust & oil proof trigger
- Common spare parts with all CVI3 range

EPBcom Series

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

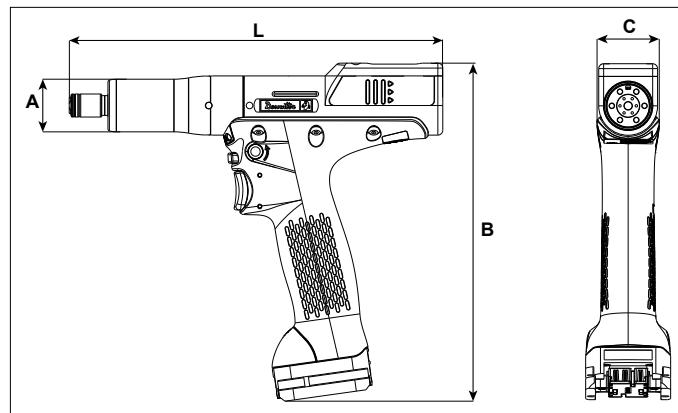


A



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 39

| PIC REF | MODEL | PART NUMBER | OUTPUT DRIVE | TORQUE RANGE | | | | | | ROTATIONAL SPEED (RPM) | | WEIGHT WITHOUT BATTERY | VOLTAGE | |
|------------|-------|----------------|-----------------|--------------|------------------|------|------|------------------|-------|---------------------------|-----|------------------------------|---------|--|
| | | | | MIN. | RECOM- MENDED | MAX. | MIN. | RECOM- MENDED | MAX. | ft.lb | 18V | 36V | | |
| | | | | in. | Nm | Nm | Nm | ft.lb | ft.lb | kg | 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, 2.1 Ah: 0.35 kg (0.77lb) / 18V, 4.2 Ah & 36V, 2.1Ah: 0.60 kg (1.32lb)

EABcom Series

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



A



B



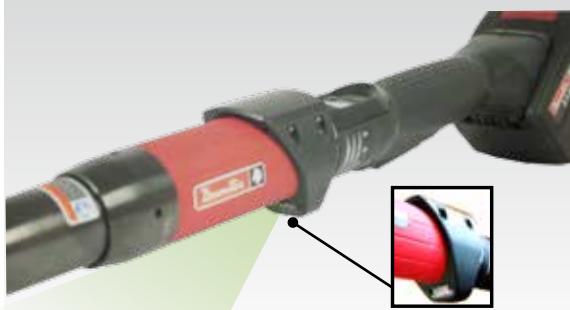
C

NEW

eLINK range

Angle head tool with integrated task light

(with LED color code reporting)



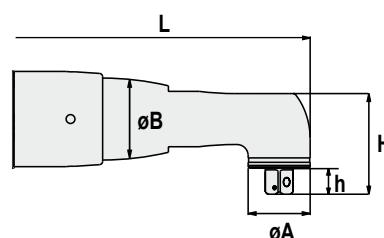
Barcode reader ready



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

| 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



| PIC REF | MODEL | PART NUMBER EABCOM | PART NUMBER EABCOM eLINK | SQUARE DRIVE | TORQUE RANGE | | | | ROTATIONAL SPEED | | WEIGHT WITHOUT BATTERY | | VOLTAGE | |
|---------|-------|--------------------|--------------------------|--------------|--------------|-------------|------|-------|------------------|-------|------------------------|----|---------|---|
| | | | | | MIN. | RECOMMENDED | MAX. | MIN. | RECOMMENDED | MAX. | rpm | kg | lb | |
| | | | | in. | Nm | Nm | Nm | ft.lb | ft.lb | ft.lb | rpm | kg | lb | V |

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, 2.1Ah - Weight: 0.60 kg (1.32lb)

Accessories



EPBcom / EABcom

ACCESSORIES INCLUDED

| | EPBcom |
|-----------------------------------|---------------|
| • Pistol protective cover - Black | 615 211 019 0 |

OPTIONAL ACCESSORIES

| ITEM | EABcom | EPBcom |
|------|--------|--------|
|------|--------|--------|

Battery type

| | | |
|---|--|--------------------------------|
| 1 | Li-ion Battery 18V 2.1 Ah - 0.35 kg (0.77lb) | 615 812 099 0 |
| 2 | Li-ion Battery 18V 4.2 Ah - 0.60 kg (1.32lb) | 615 812 100 0 |
| 3 | Li-ion Battery 36V 2.1 Ah - 0.60 kg (1.32lb) | 615 811 924 0 615 811 924 0 |

Charger

| | | | |
|---|--|---------------|---------------|
| 4 | For Li-ion Battery 18 / 36V - 100 / 240V | 615 811 654 5 | 615 811 654 5 |
|---|--|---------------|---------------|

Protective covers - Tools

| | | |
|---|--------------------------|---------------|
| 5 | For Angle head EAB 15 | 615 211 003 0 |
| 5 | For Angle head EAB 26/32 | 615 573 207 0 |
| 5 | For Angle head EAB 45/50 | 615 573 208 0 |
| 5 | For Angle head EAB 60 | 615 573 209 0 |
| 5 | For Angle head EAB 75/95 | 615 573 210 0 |
| 6 | For Pistol EPB - Red | 615 211 022 0 |

Protective covers - Battery

| | | |
|---|---|---------------|
| 7 | For Battery 18V 2.1Ah - Clear | 615 396 871 0 |
| 7 | For Battery 18V 2.1Ah - Black | 615 211 041 0 |
| 7 | For Battery 18V 2.1Ah - Blue | 615 211 042 0 |
| 7 | For Battery 18V 2.1Ah - Red | 615 211 043 0 |
| 7 | For Battery 18V 2.1Ah - rey | 615 211 044 0 |
| 7 | For Battery 18V 4.2Ah / 36V 2.1Ah - Clear | 615 396 872 0 |
| 7 | For Battery 18V 4.2Ah / 36V 2.1Ah - Black | 615 211 046 0 |
| 7 | For Battery 18V 4.2Ah / 36V 2.1Ah - Blue | 615 211 047 0 |
| 7 | For Battery 18V 4.2Ah / 36V 2.1Ah - Red | 615 211 048 0 |
| 7 | For Battery 18V 4.2Ah / 36V 2.1Ah - Grey | 615 211 049 0 |

Miscellaneous

| | | |
|----|--|---------------|
| 8 | Nose crowfoot adapter for EPB. | 615 565 518 0 |
| 9 | eDOCK | 615 811 976 0 |
| 10 | Barcode reader for EPBC (1D/2D/QR) | 615 812 281 0 |
| 11 | Barcode reader for EABC-eLINK (1D/2D/QR) | 615 813 038 0 |
| 12 | Access point Wifi 802.11N-US: | 615 811 417 5 |
| 13 | Access point Wifi 802.11N-EU: | 615 811 419 5 |
| 14 | Access point Wifi 802.11N-N | 615 811 650 5 |
| 15 | Plug UK | 615 917 202 0 |
| 16 | Side handle | 615 397 016 0 |

Desoutter Tool holster

| | | |
|----|--|---------------|
| 12 | DTH TWIN (single) without rail | 615 811 411 0 |
| 13 | DTH TWIN rail kit with 2 Twin holders | 615 811 412 5 |
| 14 | DTH TWIN stand kit with 2 Twin holders | 615 811 413 5 |
| 15 | DTH90 | 615 812 119 0 |

Virtual controllers management

| PART NUMBER | Maximum number of tools | Maximum number of | |
|-----------------|-------------------------|-------------------|---------------|
| | | cable tools | Battery tools |
| 16 without ePOD | - | 2 | 1 |
| 16 ePOD2C | 615 936 311 0 | 3 | 1 |
| 16 ePOD3C | 615 936 318 0 | 3 | 1 |
| 16 ePOD4C | 615 936 312 0 | 4 | 1 |



Workgroup System

A multi spindle machine up to 14 fixtured spindles

One TWINCVI3 or One CVI3 Vision as a primary controller to synchronize and collect results from all controllers

Several TWINCVI3 or/and CVI3 Vision or/and CVI3 Function as Secondary controllers

All connection to the Primary :

- Ethernet network (CVI3 Config, CVI NET Web, Open protocol, HMI, etc...)
- Fieldbus like Profibus, Profinet, Ethernet IP, Devicenet, etc...
- 8 inputs and 8 outputs and much more with I/O expander
- eBus for:
 - Operator panel
 - Stack light
 - Socket tray
 - I/O expander

FIXTURED SPINDLES

EFDE: straight with telescopic output

EFDS: straight without telescopic output

EFDA: angle head

Fully compatible with EME range via the adaptor



ACCESSORIES

PART NO.

Cables for EF Dx tools

| | |
|------------------------|---------------|
| Toolcable 2.5m (8.2ft) | 615 917 651 0 |
| Toolcable 5m (16ft) | 615 917 652 0 |
| Toolcable 10m (32.8ft) | 615 917 654 0 |
| Toolcable 15m (49.2ft) | 615 917 655 0 |

Extension cable

| | |
|------------------------------|---------------|
| Extension cable 8m (26.2ft) | 615 917 581 0 |
| Extension cable 16m (52.5ft) | 615 917 584 0 |
| Extension cable 32m (105ft) | 615 917 587 0 |
| Extension cable 50m (164ft) | 615 917 589 0 |

Transducer holders for EFDE tools

| | |
|----------------------------------|---------------|
| 3/8" Square drive EFDE43 | 615 396 426 0 |
| 1/2" Square drive EFDE51/60-95 | 615 396 427 0 |
| 3/4" Square drive EFDE60-175/250 | 615 396 428 0 |

Miscellaneous

| | |
|---|---------------|
| Spare transducer cable length 340mm (13.4") | 615 917 426 0 |
|---|---------------|



BENEFITS

Flexibility thanks to the use of standard controllers with an additional ePod3

Synchronization of the controllers via the integrated Ethernet network



Workgroup System



Advanced monitoring

- The primary controller displays all tightening results and events and its own tightening curves.
- Each controller displays its own results, curves and events.

Advanced Process control

- Multi tightening programs, 250 Psets with 40 steps, for all spindles or per group of spindles, action/retry in case of NOK.
- Assembly Process to manage multi Pset and simple processes.
- A soft PLC (CVI Logix) is integrated for more complex processes

Fixtured electric spindles - CVI3

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



A



B

| MODEL | LENGTH | | | | D | | WEIGHT | | | |
|-------------------------|--------|------|-----------|-----|----|------|--------|------|--------|------|
| | TOOL-L | | MODULE-L1 | | | | TOOL | | MODULE | |
| | mm | in. | mm | in. | mm | in. | kg | lb. | kg | lb. |
| EFDE/EFDS 43-8 | 276 | 10.9 | 165 | 6.5 | 10 | 0.39 | 2.1 | 4.6 | 0.65 | 1.43 |
| EFDE EFDS 43-15 | 276 | 10.9 | 165 | 6.5 | 10 | 0.39 | 2.1 | 4.6 | 0.65 | 1.43 |
| EFDE/EFDS 43-30 | 311 | 12.2 | 165 | 6.5 | 10 | 0.39 | 2.3 | 5.1 | 0.65 | 1.43 |
| EFDE/EFDS 43-45 | 311 | 12.2 | 165 | 6.5 | 10 | 0.39 | 2.3 | 5.1 | 0.65 | 1.43 |
| EFDE/EFDS 51-70 | 357 | 14.0 | 183 | 7.2 | 16 | 0.63 | 3.9 | 8.6 | 1.45 | 3.20 |
| EFDE/EFDS 51-135 | 357 | 14.0 | 183 | 7.2 | 16 | 0.63 | 3.9 | 8.6 | 1.45 | 3.20 |
| EFDE/EFDS 60-95 | 373 | 14.7 | 183 | 7.2 | 16 | 0.63 | 5.3 | 11.7 | 1.45 | 3.20 |
| EFDE/EFDS 60-175 | 373 | 14.7 | 203 | 8.0 | 16 | 0.63 | 5.3 | 11.7 | 1.87 | 4.12 |
| EFDE/EFDS 60-250 | 373 | 14.7 | 203 | 8.0 | 16 | 0.63 | 5.3 | 11.7 | 1.87 | 4.12 |
| EFDS 80-330 | 435 | 17 | - | - | - | - | 10.2 | 22.5 | - | - |
| EFDS 80-450 | 435 | 17 | - | - | - | - | 10.2 | 22.5 | - | - |
| EFDS 80-680 | 435 | 17 | - | - | - | - | 10.2 | 22.5 | - | - |
| EFDS 80-950 | 435 | 17 | - | - | - | - | 10.2 | 22.5 | - | - |
| EFDS 106-1100 | 476 | 19 | - | - | - | - | 15.3 | 33.7 | - | - |
| EFDS 106-1600 | 511 | 20 | - | - | - | - | 15.9 | 35 | - | - |
| EFDS 106-1900 | 511 | 20 | - | - | - | - | 15.9 | 35 | - | - |



ACCESSOIRES
see page 46

| PIC REF | MODEL | PART NUMBER | SQUARE DRIVE | TORQUE | | | | | | ROTATIONAL SPEED | TELESCOPIC STROKE | | MIN.CENTRE DISTANCE | | |
|---------|-------|-------------|--------------|--------|--------------|------|------|--------------|-------|------------------|-------------------|-------|---------------------|----|-----|
| | | | | MIN. | RECOM-MENDED | MAX. | MIN. | RECOM-MENDED | MAX. | | ft.lb | ft.lb | rpm | mm | in. |
| | | | | in. | Nm | Nm | Nm | ft.lb | ft.lb | | | | | mm | in. |

EFDE – With removable telescopic module

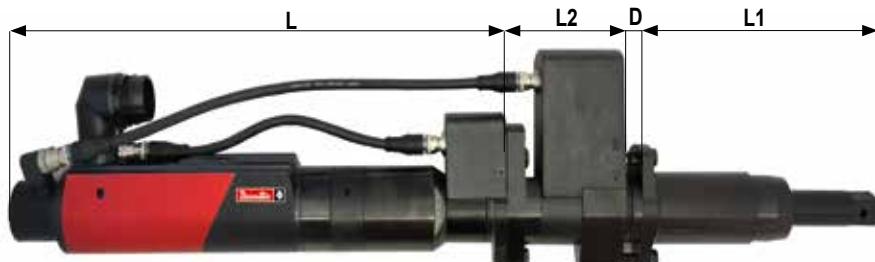
| | | | | | | | | | | | | | | |
|---|-------------|---------------|-----|----|-----|-----|------|-------|-------|------|----|------|----|------|
| A | EFDE 43-8 | 615 165 864 0 | 3/8 | 1 | 8 | 10 | 0.7 | 5.9 | 7.4 | 2000 | 50 | 1.97 | 43 | 1.69 |
| A | EFDE 43-15 | 615 165 865 0 | 3/8 | 3 | 15 | 17 | 2.2 | 11,1 | 12,5 | 2000 | 50 | 1.97 | 43 | 1.69 |
| A | EFDE 43-30 | 615 165 866 0 | 3/8 | 7 | 30 | 32 | 5,2 | 22,1 | 23,6 | 1454 | 50 | 1.97 | 43 | 1.69 |
| A | EFDE 43-45 | 615 165 867 0 | 3/8 | 7 | 45 | 50 | 5,2 | 33,2 | 36,9 | 1112 | 50 | 1.97 | 43 | 1.69 |
| A | EFDE 51-70 | 615 165 868 0 | 1/2 | 20 | 70 | 80 | 14,7 | 51,6 | 59,0 | 816 | 50 | 1.97 | 51 | 2.01 |
| A | EFDE 51-135 | 615 165 869 0 | 1/2 | 30 | 135 | 150 | 22,1 | 99,6 | 111,0 | 463 | 50 | 1.97 | 51 | 2.01 |
| A | EFDE 60-95 | 615 165 870 0 | 1/2 | 22 | 95 | 105 | 16,2 | 70,1 | 77,4 | 1055 | 50 | 1.97 | 60 | 2.36 |
| A | EFDE 60-175 | 615 165 871 0 | 3/4 | 50 | 175 | 190 | 36,9 | 129,0 | 140,0 | 575 | 50 | 1.97 | 60 | 2.36 |
| A | EFDE 60-250 | 615 165 872 0 | 3/4 | 55 | 250 | 280 | 40,6 | 184,0 | 206,0 | 409 | 50 | 1.97 | 60 | 2.36 |

EFDS – With integrated telescopic output

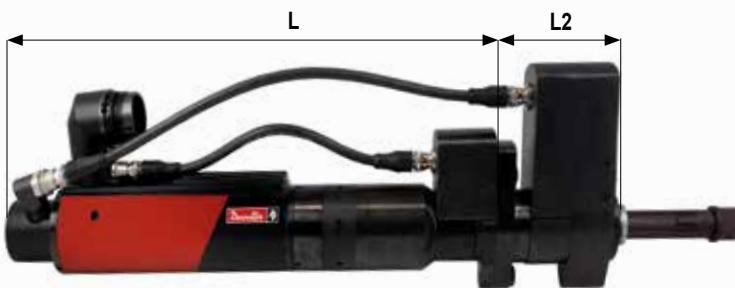
| | | | | | | | | | | | | | | |
|---|---------------|---------------|-------|-----|------|------|-------|--------|--------|------|----|------|-----|------|
| B | EFDS 43-8 | 615 165 907 0 | 3/8 | 1 | 8 | 10 | 0.7 | 5.9 | 7.4 | 2000 | 50 | 1.97 | 43 | 1.69 |
| B | EFDS 43-15 | 615 165 908 0 | 3/8 | 3 | 15 | 17 | 2.2 | 11,1 | 12,5 | 2000 | 50 | 1.97 | 43 | 1.69 |
| B | EFDS 43-30 | 615 165 909 0 | 3/8 | 7 | 30 | 32 | 5,2 | 22,1 | 23,6 | 1454 | 50 | 1.97 | 43 | 1.69 |
| B | EFDS 43-45 | 615 165 910 0 | 3/8 | 7 | 45 | 50 | 5,2 | 33,2 | 36,9 | 1112 | 50 | 1.97 | 43 | 1.69 |
| B | EFDS 51-70 | 615 165 911 0 | 1/2 | 20 | 70 | 80 | 14,7 | 51,6 | 59 | 816 | 50 | 1.97 | 51 | 2.01 |
| B | EFDS 51-135 | 615 165 912 0 | 1/2 | 30 | 135 | 150 | 22,1 | 99,6 | 111 | 463 | 50 | 1.97 | 51 | 2.01 |
| B | EFDS 60-95 | 615 165 913 0 | 1/2 | 22 | 95 | 105 | 16,2 | 70,1 | 77,4 | 1055 | 50 | 1.97 | 60 | 2.36 |
| B | EFDS 60-175 | 615 165 914 0 | 3/4 | 50 | 175 | 190 | 36,9 | 129 | 140 | 575 | 50 | 1.97 | 60 | 2.36 |
| B | EFDS 60-250 | 615 165 915 0 | 3/4 | 55 | 250 | 280 | 40,6 | 184 | 206 | 409 | 50 | 1.97 | 60 | 2.36 |
| B | EFDS 80-330 | 615 166 033 0 | 3/4 | 30 | 330 | 360 | 22,1 | 243,4 | 265,5 | 299 | 60 | 1.97 | 80 | 3.15 |
| B | EFDS 80-450 | 615 166 034 0 | 3/4 | 45 | 450 | 500 | 33,2 | 331,9 | 368,8 | 218 | 60 | 1.97 | 80 | 3.15 |
| B | EFDS 80-680 | 615 166 035 0 | 1 | 70 | 680 | 740 | 51,6 | 501,5 | 545,8 | 145 | 60 | 1.97 | 80 | 3.15 |
| B | EFDS 80-950 | 615 166 036 0 | 1 | 100 | 950 | 1050 | 73,8 | 700,7 | 774,4 | 103 | 60 | 1.97 | 80 | 3.15 |
| B | EFDS 106-1100 | 615 166 037 0 | 1 | 110 | 1100 | 1150 | 81,1 | 811,3 | 848,2 | 93 | 60 | 1.97 | 106 | 4.17 |
| B | EFDS 106-1600 | 615 166 038 0 | 1 1/2 | 160 | 1600 | 1700 | 118,0 | 1180,1 | 1253,9 | 59 | 60 | 1.97 | 106 | 4.17 |
| B | EFDS 106-1900 | 615 166 039 0 | 1 1/2 | 190 | 1900 | 2000 | 140,1 | 1401,4 | 1475,1 | 47 | 60 | 1.97 | 106 | 4.17 |

Fixtured electric spindles - CVI3

5 to 250 Nm (0.7 to 206 ft.lb) - 409 to 2000 rpm



A



B

| MODEL | LENGTH | | | | D | | WEIGHT | | | | | | | |
|---------------------|--------|------|-----------|-----|-----------|------|--------|------|--------|------|-----------|------|------|------|
| | TOOL-L | | MODULE-L1 | | MODULE-L2 | | TOOL | | MODULE | | MODULE TA | | | |
| | mm | in. | mm | in. | mm | in. | kg | lb. | kg | lb. | kg | lb. | | |
| EFDE/EFDS 43-8-TA | 276 | 10.9 | 165 | 6.5 | 90 | 3,54 | 10 | 0.39 | 2.1 | 4.63 | 0.65 | 1.43 | 1.45 | 3.20 |
| EFDE/EFDS 43-15-TA | 276 | 10.9 | 165 | 6.5 | 90 | 3,54 | 10 | 0.39 | 2.1 | 4.63 | 0.65 | 1.43 | 1.45 | 3.20 |
| EFDE/EFDS 43-30-TA | 311 | 12.2 | 165 | 6.5 | 90 | 3,54 | 10 | 0.39 | 2.3 | 5.07 | 0.65 | 1.43 | 1.45 | 3.20 |
| EFDE/EFDS 43-45-TA | 311 | 12.2 | 165 | 6.5 | 90 | 3,54 | 10 | 0.39 | 2.3 | 5.07 | 0.65 | 1.43 | 1.45 | 3.20 |
| EFDE/EFDS 51-70-TA | 357 | 14.0 | 183 | 7.2 | 98 | 3,86 | 16 | 0.63 | 3.9 | 8.60 | 1.45 | 3.20 | 2 | 4.41 |
| EFDE/EFDS 51-135-TA | 357 | 14.0 | 183 | 7.2 | 98 | 3,86 | 16 | 0.63 | 3.9 | 8.60 | 1.45 | 3.20 | 2 | 4.41 |
| EFDE/EFDS 60-95-TA | 373 | 14.7 | 183 | 7.2 | 98 | 3,86 | 16 | 0.63 | 5.3 | 11.7 | 1.45 | 3.20 | 2.8 | 6.17 |
| EFDE/EFDS 60-175-TA | 373 | 14.7 | 203 | 8.0 | 98 | 3,86 | 16 | 0.63 | 5.3 | 11.7 | 1.87 | 4.12 | 2.8 | 6.17 |
| EFDE/EFDS 60-250-TA | 373 | 14.7 | 203 | 8.0 | 98 | 3,86 | 16 | 0.63 | 5.3 | 11.7 | 1.87 | 4.12 | 2.8 | 6.17 |



ACCESSOIRES
see page 46

| PIC REF | MODEL | PART NUMBER | SQUARE DRIVE | TORQUE | | | | | | ROTATIONAL SPEED | TELESCOPIC STROKE | MIN.CENTRE DISTANCE | | |
|---------|-------|-------------|--------------|--------|-------------|------|-------|-------------|-------|------------------|-------------------|---------------------|----|-----|
| | | | | MIN. | RECOMMENDED | MAX. | MIN. | RECOMMENDED | MAX. | | | | | |
| | | | in. | Nm | Nm | Nm | ft.lb | ft.lb | ft.lb | rpm | mm | in. | mm | in. |
| | | | | | | | | | | | | | | |

EFDE-TA – With removable telescopic module & second transducer

| | | | | | | | | | | | | | | |
|---|----------------|---------------|-----|----|-----|-----|------|-------|-------|------|----|------|----|------|
| A | EFDE 43-15-TA | 615 166 002 0 | 3/8 | 5 | 15 | 17 | 3,7 | 11,1 | 12,5 | 2000 | 50 | 1.97 | 43 | 1,69 |
| A | EFDE 43-30-TA | 615 166 003 0 | 3/8 | 7 | 30 | 32 | 5,2 | 22,1 | 23,6 | 1454 | 50 | 1.97 | 43 | 1,69 |
| A | EFDE 43-45-TA | 615 166 004 0 | 3/8 | 7 | 45 | 50 | 5,2 | 33,2 | 36,9 | 1112 | 50 | 1.97 | 43 | 1,69 |
| A | EFDE 51-70-TA | 615 166 005 0 | 1/2 | 20 | 70 | 80 | 14,7 | 51,6 | 59,0 | 816 | 50 | 1.97 | 51 | 2,01 |
| A | EFDE 51-135-TA | 615 166 006 0 | 1/2 | 30 | 135 | 150 | 22,1 | 99,6 | 111,0 | 463 | 50 | 1.97 | 51 | 2,01 |
| A | EFDE 60-95-TA | 615 166 007 0 | 1/2 | 22 | 95 | 105 | 16,2 | 70,1 | 77,4 | 1055 | 50 | 1.97 | 60 | 2,36 |
| A | EFDE 60-175-TA | 615 166 008 0 | 3/4 | 50 | 175 | 190 | 36,9 | 129,0 | 140,0 | 575 | 50 | 1.97 | 60 | 2,36 |
| A | EFDE 60-250-TA | 615 166 009 0 | 3/4 | 55 | 250 | 280 | 40,6 | 184,0 | 206,0 | 409 | 50 | 1.97 | 60 | 2,36 |

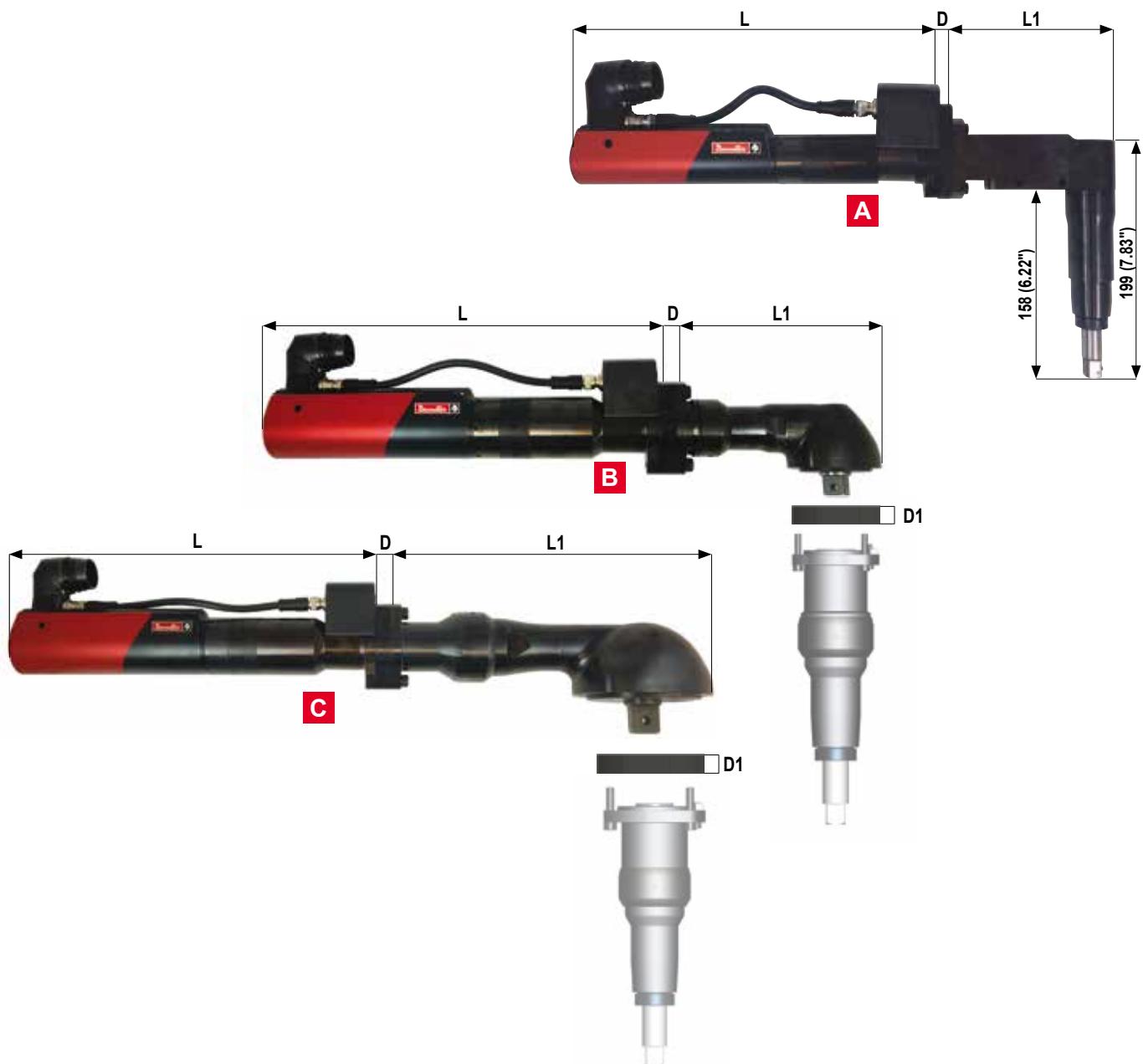
EFDS-TA – With integrated telescopic output & second transducer

| | | | | | | | | | | | | | | |
|---|----------------|---------------|-----|----|-----|-----|------|-------|-------|------|----|------|----|------|
| B | EFDS 43-8-TA | 615 166 010 0 | 3/8 | 5 | 8 | 10 | 3,7 | 5,9 | 7,4 | 2000 | 50 | 1.97 | 43 | 1,69 |
| B | EFDS 43-15-TA | 615 166 011 0 | 3/8 | 5 | 15 | 17 | 3,7 | 11,1 | 12,5 | 2000 | 50 | 1.97 | 43 | 1,69 |
| B | EFDS 43-30-TA | 615 166 012 0 | 3/8 | 7 | 30 | 32 | 5,2 | 22,1 | 23,6 | 1454 | 50 | 1.97 | 43 | 1,69 |
| B | EFDS 43-45-TA | 615 166 013 0 | 3/8 | 7 | 45 | 50 | 5,2 | 33,2 | 36,9 | 1112 | 50 | 1.97 | 43 | 1,69 |
| B | EFDS 51-70-TA | 615 166 014 0 | 1/2 | 20 | 70 | 80 | 14,7 | 51,6 | 59,0 | 816 | 50 | 1.97 | 51 | 2,01 |
| B | EFDS 51-135-TA | 615 166 015 0 | 1/2 | 30 | 135 | 150 | 22,1 | 99,6 | 111,0 | 463 | 50 | 1.97 | 51 | 2,01 |
| B | EFDS 60-95-TA | 615 166 016 0 | 1/2 | 22 | 95 | 105 | 16,2 | 70,1 | 77,4 | 1055 | 50 | 1.97 | 60 | 2,36 |
| B | EFDS 60-175-TA | 615 166 017 0 | 3/4 | 50 | 175 | 190 | 36,9 | 129,0 | 140,0 | 575 | 50 | 1.97 | 60 | 2,36 |
| B | EFDS 60-250-TA | 615 166 018 0 | 3/4 | 55 | 250 | 280 | 40,6 | 184,0 | 206,0 | 409 | 50 | 1.97 | 60 | 2,36 |



Fixtured electric spindles - CVI3

12 to 580 Nm (0.7 to 206 ft.lb) - 170 to 719 rpm



| TELESCOPIC STROKE mm in. | LENGTH L2 | | D1 | | PART NO. | FOR MODEL | D |
|--------------------------------|-----------|-----|------|---------------|-------------|-----------|------|
| | mm | in. | mm | in. | | | |
| 40 1.57 | 203 8.0 | 12 | 0.47 | 615 398 076 0 | EFDA51-110 | 16 | 0.63 |
| 40 1.57 | 217 8.5 | 12 | 0.47 | 615 398 077 0 | EFDA63-190 | 16 | 0.63 |
| 40 1.57 | 215 8.4 | 15 | 0.59 | 615 398 078 0 | EFDA76-300 | 16 | 0.63 |
| 50 1.97 | 270 10.6 | 15 | 0.59 | 615 398 161 0 | EFDA107-450 | 16 | 0.63 |



ACCESSOIRES
see page 46

| PIC REF | MODEL | PART NUMBER | SQUARE DRIVE in. | TORQUE | | | | | | ROTATIONAL SPEED | MIN.CENTRE DISTANCE | LENGTH | | WEIGHT | |
|---------|-------|-------------|---------------------|------------|------------------------|------------|---------------|---------------------------|---------------|------------------|---------------------|--------------|---------------------|--------|--|
| | | | | MIN. Nm | RECOM- MENDED Nm | MAX. Nm | MIN. ft.lb | RECOM- MENDED ft.lb | MAX. ft.lb | | | TOOL L mm | ANGLE HEAD L1 mm | | |
| | | | | | | | | | | | | | | | |

EFDA - Angle headed tools with integrated telescopic module

| | | | | | | | | | | | | | | | | | | |
|---|-----------|---------------|-----|----|----|----|-----|------|------|-----|----|------|-----|------|-----|-----|-----|-----|
| A | EFDA40-55 | 615 165 858 0 | 1/2 | 12 | 55 | 65 | 8.9 | 40.6 | 47.9 | 719 | 40 | 1.57 | 311 | 12.2 | 139 | 5.5 | 3.7 | 8.1 |
|---|-----------|---------------|-----|----|----|----|-----|------|------|-----|----|------|-----|------|-----|-----|-----|-----|

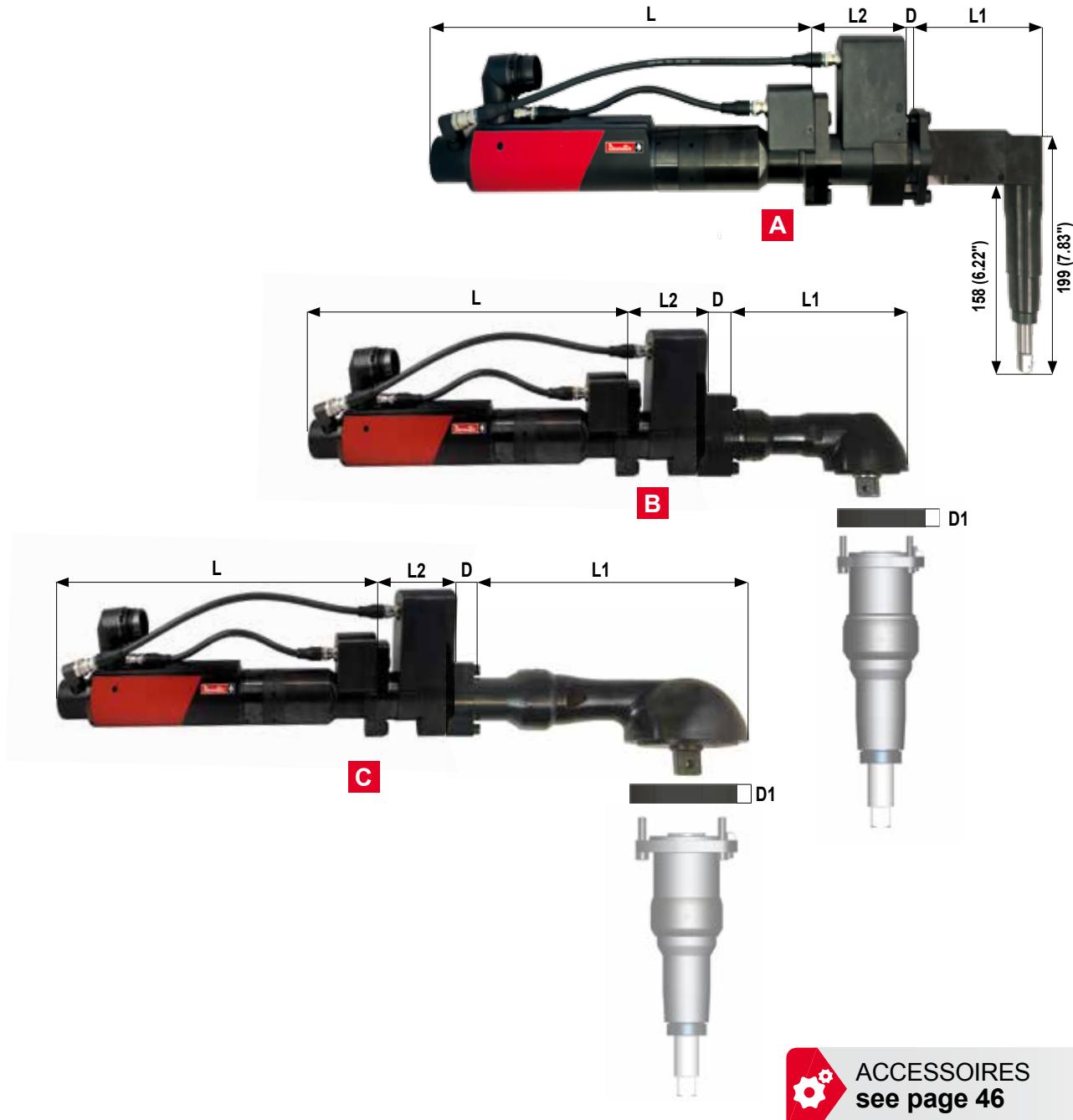
EFDA - Angle headed tools without telescopic module

| | | | | | | | | | | | | | | | | | | |
|---|-------------|---------------|-----|-----|-----|-----|-------|------|-----|-----|-----|------|-----|------|-----|------|------|------|
| B | EFDA51-110* | - | 1/2 | 45 | 110 | 150 | 33.2 | 81.1 | 111 | 590 | 51 | 2.01 | 373 | 14.7 | 168 | 6.6 | 7.2 | 15.8 |
| B | EFDA63-190 | 615 165 860 0 | 3/4 | 80 | 190 | 250 | 59 | 140 | 184 | 320 | 63 | 2.48 | 373 | 14.7 | 191 | 7.5 | 8.1 | 17.8 |
| B | EFDA76-300* | - | 3/4 | 100 | 300 | 380 | 73.7 | 221 | 280 | 270 | 76 | 2.99 | 373 | 14.7 | 284 | 11.2 | 9.7 | 21.3 |
| C | EFDA107-450 | 615 165 862 0 | 1 | 150 | 450 | 580 | 110.6 | 332 | 428 | 170 | 107 | 4.21 | 373 | 14.7 | 322 | 12.7 | 12.4 | 27.3 |

*On request, contact your Desoutter representative

Fixtured electric spindles - CVI3

12 to 580 Nm (0.7 to 206 ft.lb) - 174 to 719 rpm



ACCESSOIRES
see page 46

| PIC REF | MODEL | PART NUMBER | SQUARE DRIVE | TORQUE | | | | | | ROTATIONAL SPEED | MIN. CENTRE DISTANCE | LENGTH | | WEIGHT | | | | | | |
|------------|-------|----------------|-----------------|--------|------------------|------|------|------------------|-------|---------------------|----------------------------|-----------|------------------|------------------|------|-----------|----|-----|----|-----|
| | | | | MIN. | RECOM- MENDED | MAX. | MIN. | RECOM- MENDED | MAX. | | | TOOL L | ANGLE HEAD L1 | MODULE TA L-2 | TOOL | MODULE TA | | | | |
| | | | | in. | Nm | Nm | Nm | ft.lb | ft.lb | rpm | mm | in. | mm | in. | mm | in. | kg | lb. | kg | lb. |

EFDA - Angle headed tools with integrated telescopic module

| | | | | | | | | | | | | | | | | | | | | | |
|----------------|---------------|-----|----|----|----|-----|------|------|-----|----|------|-----|------|-----|-----|----|------|-----|-----|------|------|
| A EFDA40-55-TA | 615 166 019 0 | 1/2 | 12 | 55 | 65 | 8.9 | 40.6 | 47.9 | 719 | 41 | 1.59 | 311 | 12.2 | 139 | 5.5 | 90 | 3,54 | 3.7 | 8.1 | 1.35 | 2.98 |
|----------------|---------------|-----|----|----|----|-----|------|------|-----|----|------|-----|------|-----|-----|----|------|-----|-----|------|------|

EFDA - Angle headed tools & second transducer

| | | | | | | | | | | | | | | | | | | | | | |
|------------------|---------------|-----|-----|-----|-----|-------|-------|-------|-----|-----|------|-----|------|-----|------|----|------|------|------|-----|------|
| B EFDA63-190-TA | 615 166 020 0 | 3/4 | 80 | 190 | 250 | 59 | 140.1 | 184.4 | 319 | 63 | 2.5 | 373 | 14.7 | 191 | 7.5 | 98 | 3,86 | 8.1 | 17.8 | 2.5 | 5.51 |
| C EFDA107-450-TA | 615 166 021 0 | 1 | 150 | 450 | 580 | 110.6 | 331.9 | 427.8 | 174 | 107 | 4.21 | 373 | 14.7 | 322 | 12.7 | 98 | 3,86 | 12.4 | 27.3 | 2.5 | 5.51 |

Accessories

Cable for ERP / EAD / EID / EFDE / EFDS / EFDA

| CABLE FOR ERP TOOLS | PART NO. |
|------------------------------|---------------|
| Nutrunner cable 2.5m (8.2ft) | 615 917 570 0 |
| Nutrunner cable 5m (16ft) | 615 917 492 0 |
| Nutrunner cable 10m (32.8ft) | 615 917 494 0 |
| Nutrunner cable 15m (49.2ft) | 615 917 495 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 EFDE & EFDA TOOLS | PART NO. |
|-----------------------------|---------------|
| 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 EAD - EID - EFDE & EFDA 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 1m (3.3ft) | 615 917 621 0 |
| eBUS cable 3m (9.9ft) | 615 917 622 0 |
| eBUS cable 5m (16.4ft) | 615 917 623 0 |
| eBUS cable 15m (49.2ft) | 615 917 624 0 |
| eBUS Termination plug | 615 917 625 0 |

| TRANSDUCER HOLDERS FOR EFDE TOOLS | PART NO. |
|-----------------------------------|---------------|
| 3/8" Square drive EFDE43 | 615 396 426 0 |
| 1/2" Square drive EFDE51/60-95 | 615 396 427 0 |
| 3/4" Square drive EFDE60-175/250 | 615 396 428 0 |

Accessories



CVI3 Controllers

OPTIONAL ACCESSORIES

| ITEM | PART NO. |
|--------------------|---------------|
| Controllers | |
| 1 | 615 936 095 0 |
| • 2 | 615 936 071 0 |
| 2 | 615 398 035 5 |
| 3 | 615 398 083 5 |
| 4 | 615 936 080 0 |
| 5 | 615 936 072 0 |
| 6 | 615 936 073 0 |
| 7 | 615 936 074 0 |
| • 8 | 615 917 620 0 |

ERP / EAD / EID

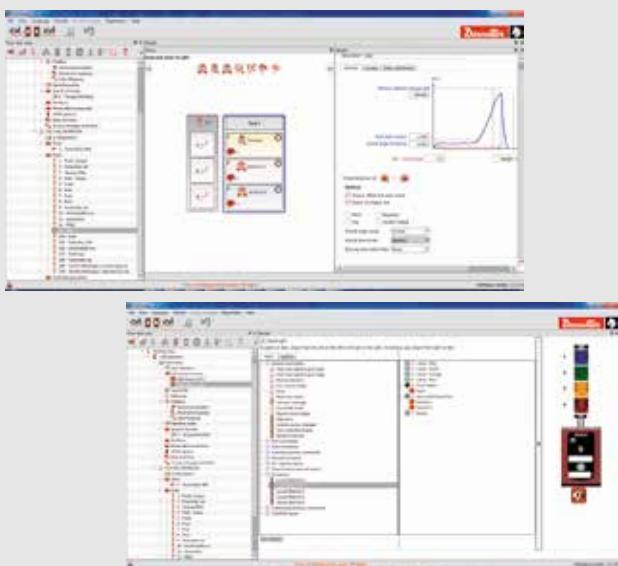
OPTIONAL ACCESSORIES

| ITEM | PART NO. |
|--|-------------------|
| Suspension bail | |
| 8 | 615 397 412 0 |
| 9 | 615 397 413 0 |
| 9 | 615 571 072 0 |
| Front trigger | |
| 10 | 615 397 812 5 |
| (must be mounted on tool by authorized Desoutter service technician) | |
| 10 | 615 911 013 5 |
| 10 | 615 911 012 5 |
| Telescopic output for EID tools | |
| 11 | 615 397 811 0 |
| 11 | 615 398 178 0 |
| 11 | 615 398 079 0 |
| 11 | 615 398 080 0 |
| 11 | 615 398 081 0 |
| Telescopic output for EAD / EFDA tools | |
| 12 | 615 398 076 0 |
| 12 | 615 398 077 0 |
| 12 | 615 398 078 0 |
| 12 | 615 398 161 0 |
| Angle head protection for EAD tools | |
| 13 | 615 573 207 0 |
| 13 | 615 573 208 0 |
| 13 | 615 573 209 0 |
| 13 | 615 573 210 0 |
| In-line protection for EID tools | |
| 14 | 615 573 211 0 |
| 14 | 615 573 212 0 |
| Finger Protection for EAD tools | |
| 15 | 615 397 635 0 |
| 15 | 615 397 636 0 |
| 15 | 615 397 637 0 |
| Miscellaneous | |
| 16 | 615 397 831 0 |
| 17 | 615 397 842 0 |
| 18 | 615 812 138 0 |
| 19 | 615 812 139 0 |
| • 20 | Contact Desoutter |
| Desoutter Tool Holster | |
| 20 | 107892 |
| 21 | 615 812 119 0 |
| 22 | 615 811 411 0 |
| 23 | 615 811 412 5 |
| 24 | 615 811 413 5 |
| • 25 | See page 152 |
| • 26 | See page 162 |
| • 27 | See page 172 |
| ADAPTER FOR ERAL/ERDL/ERP / EME AND ERS | |
| 25 | 615 936 070 0 |
| 26 | 615 936 537 0 |



Programming and Real Time Monitoring Software

CVI CONFIG - PROGRAMMING (INCLUDING CVI MONITOR)



CVIKEY - ACCESS LEVEL MANAGEMENT



FEATURES

CVI CONFIG 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 & learning mode
- 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

Advanced process control

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

High flexibility

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

CVI MONITOR (included in CVI CONFIG) to monitor results, maintenance and diagnostic in real time

Real-time Monitor

- Results
- Curves
- Statistics
- Export in csv format

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

User info History

- Alarms history (logs)
- Problem solving guidance

CVIKEY 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 for the right

Traceability and Data Collection Software

CVI ANALYZER - TIGHTENING DATA ANALYSIS

CVI NET WEB - DATA COLLECTION

FEATURES

CVI ANALYZER to import tightening data and analyze results thanks to customized filter and report.

Flexibility

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

Traceability

- Unlimited CVI3 results and curves collection in local DB through plant network
- Complete back-up solution
- PSet history
- Including data import from USB key
- Result and Curve export in csv format

Analysis

- OK/NOK distribution
- NOK distribution reasons analysis

CVI NET WEB to collect in real time 100 % tightening data in server database and review with web based interface. Any PC connected to network can access to results without any software installation on different client, it's enough to type web page address.

Full Traceability

- Real Time result and curve collection
- Real Time tightening errors
- Data storage in Server architecture
- SQL Server, Oracle, MySQL support
- Automatic uploading of missing data from Controller
- Alarm in case of disconnection and FIFO inside controllers
- Curve overlay

Statistical Analysis and Documentation

- Advanced OK/NOK reports and control charts
- Advanced NOK pareto analysis
- Cm/Cmk analysis according different standards (ISO, CNOMÓ, NF)
- Error Code Analysis & CVI3 User Info pareto diagram
- Team productivity report

Flexibility

- Administrator User
- Customized views and Filters
- Groups and Teams management
- Complete Plant layout definition
- Smart Identifier filtering
- Quick VIN result filtering

Report printing

- Export all results and curve directly from web page
- PDF, csv or txt export format
- Direct Printing from web page
- Printing of all tightening of a vehicle or a components by scanning the proper bar code
- CVI3 Assembly Process result and complete report in PDF, xls format

Open Protocol Adapter License

- To collect results from any controller having Open Protocol capability
- To collect results from Delta Wrench WLAN

Notifier License

- To send customized email or on-line notification triggered by specific CVI3 User Info



PivotWare - Advanced Process control

Process Control Platform

INFINITY

Process Control Management Suite

FUSION



Watch our videos on
www.youtube.com/DESOUTTERTOOLS



Software



Fusion Management Suite for
configuring stations & pro-
cesses, deployment control and
remote monitoring



**Production
Management** Module

Production Management Module to manage products, sequencing and build requirements in each station.



Structured sequence of work instructions and visual guidance delivered to operator for product variant requirements in station



**Customer Line Control
System**

Integration with line control systems for data exchange, product in station, line running/start/stop signals and TAKT requirements

Station 1

start

warm

stop

start

| | | FOR FUSION PROGRAMMATION SOFTWARE (per user) includes 1 reporting licence | FOR INFINITY STATIONS | | PART NO. |
|---------|--|---|--------------------------|---|--|
| | FUSION client Management & Monitoring of Processes, Devices & Installation | | | | |
| | Core engine Traceability, data storage | additional process reporting pack (per user) | 6159277840 | 1x station 5x stations 10x stations 25x stations 50x stations 100x stations 200x stations | 6159277990 6159278000 6159278010 6159278020 6159278030 6159278040 6159278050 |
| Modules | PMS Production Management System Builder/Planner/Tracker | To set the stations (per User) | 6159277860 | 1x station 5x stations 10x stations 25x stations 50x stations 100x stations 200x stations | 6159278200 6159278210 6159278220 6159278230 6159278240 6159278250 6159278260 |
| | QMS Quality Management system Shared steps, ... | To set the stations (per User) | 6159277870 | 1x station 5x stations 10x stations 25x stations 50x stations 100x stations 200x stations | 6159278060 6159278070 6159278080 6159278090 6159278100 6159278110 6159278120 |



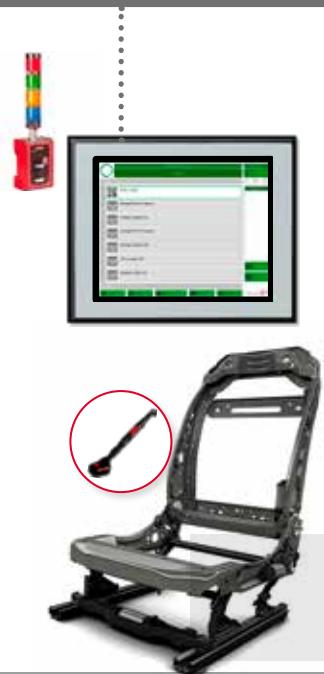
Centralised storage and packaged services to manage collection and synchronisation of data



Fusion Management Suite for interrogation and analysis of production data and product histories



Dynamic Tooling option providing up to 8 tools operating in parallel on a single product in station

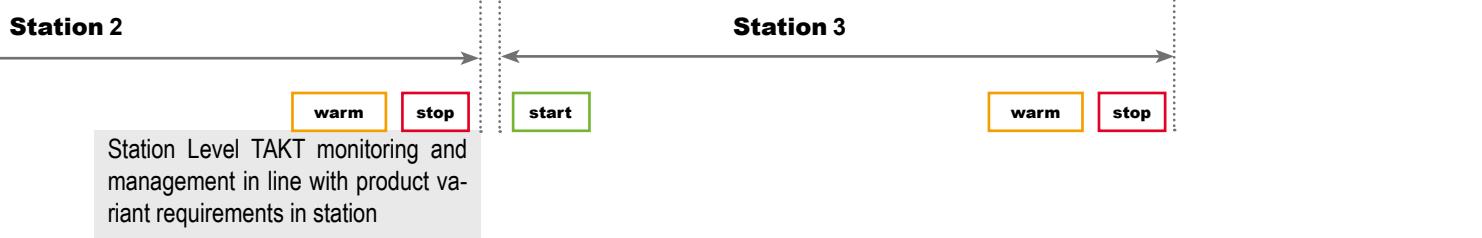


Quality Checking & Repair Station utilising Quality Management System modules & services



Quality Management Module

On line rework of missed items using the QMS Shared Step features



Station Level TAKT monitoring and management in line with product variant requirements in station



Transducerized Tools

Handheld Tools

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

Fixture electric spindles

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



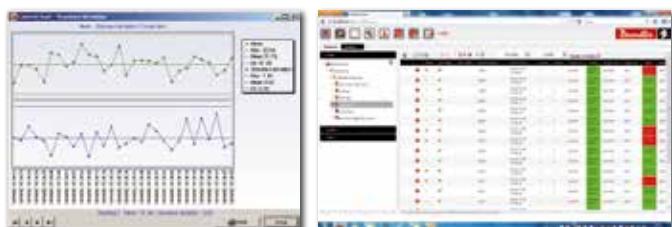
Controllers



Communication

CVIPC2000 software is a user friendly tool able to program tightening cycles, collect and display results and curves

CVINET WEB to collect & store 100 % tightening data in real-time database with advanced analytics via a web based software in service mode from all Desoutter tightening controllers



Controller - CVIR II-H4



| MAIN FUNCTIONS | | CVIR II H4 |
|---|--|------------|
| Programming modes | | |
| Number of cycles | 50 | |
| Number of phases | 15 | |
| Reverse | ✓ | |
| 1 sequence | 8 cycles | |
| Batch count | 999 | |
| Barcode reading (cycle selection) | ✓ | |
| LCD screen and display | ✓ | |
| CVIPC software | ✓ | |
| Phases characteristics | | |
| Search sequence | ✓ | |
| Run down speed phase | ✓ | |
| Final speed phase | ✓ | |
| Jump to another phase | ✓ | |
| Cycle characteristics | | |
| Autorized directions | ✓ | |
| Disengagement parameters | ✓ | |
| Tightening results | | |
| Led "Low", "OK", "High" Torque | ✓ | |
| Led "Low", "OK", "High" Angle | ✓ | |
| Torque+Angle+Date+Time+Report | 2000 to 10000 according to configuration | |
| Number of curves | 10 | |
| Tightening strategies | | |
| Torque control | ✓ | |
| Torque control + Angle monitoring | ✓ | |
| Angle control + Torque monitoring | ✓ | |
| Maintenance | | |
| Access to all tool memory parameters | ✓ | |
| Autotest of the complete system | ✓ | |
| Calibration of the tool (supervisor mode) | ✓ | |

| MODEL | PART NUMBER | TOOLS | CONSUMPTION (CURRENT) | MAINS SUPPLY | DIMENSIONS | | | | | | WEIGHT | |
|------------|---------------|--------|----------------------------|-----------------------------|------------|------------|-----------|-------------|-----------|-------------|--------|-----|
| | | | | | WIDTH | | HEIGHT | | DEPTH | | kg | lb. |
| CVIR II H4 | 615 932 685 0 | ERP-HT | 115 V 230 V 4A 2A | 50/60 hertz Single-phase | mm 130 | in. 5.1 | mm 278 | in. 10.9 | mm 291 | in. 11.5 | 5.9 | 13 |

Software, 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 |



Software

| MODEL | PART NO. |
|------------------------------|---------------|
| CVI PC2000-STD 1 install | 615 927 522 0 |
| CVI PC2000 advance 1 install | 615 927 523 0 |
| CVINET WEB 1 controller | 615 927 736 0 |
| Open protocol 1 license | 615 927 830 0 |



OPTIONAL ACCESSORIES

| PART NO. |
|---------------|
| 615 932 684 5 |
| 615 397 403 5 |
| 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 High torque - CVIR II

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



desoutter.info/ERP

| PIC REF | MODEL | PART NUMBER | OUTPUT DRIVE | TORQUE RANGE | | | | MAX RUNDOWN TORQUE | SPEED | GEARBOX DIAMETER | | LENGTH | | 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 |

OPTIONAL 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 |

| EXTENSION CABLE | | PART NO. |
|-------------------------|--|---------------|
| Ext. cable 5m (16ft) | | 615 917 222 0 |
| Ext. cable 10m (32.8ft) | | 615 917 224 0 |



Sliding drive C-C

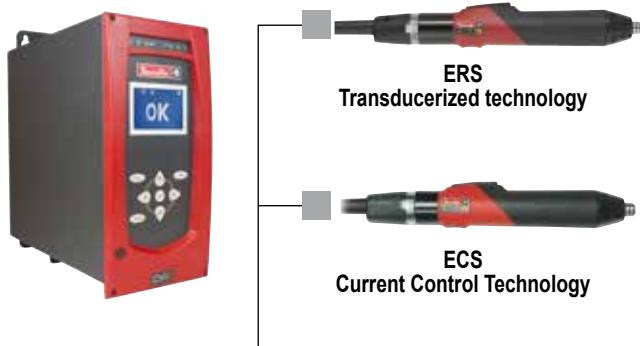
| PART NO. | C MIN | C MAX |
|---------------|-----------|------------|
| | mm (in.) | mm (in.) |
| 615 812 113 5 | 70 (2.76) | 120 (4.72) |
| 615 812 062 5 | 76 (3) | 126 (4.96) |
| 615 812 063 5 | 82 (3.23) | 218 (8.58) |
| 615 812 064 5 | 80 (3.15) | 125 (4.92) |
| 615 812 065 5 | 82 (3.23) | 218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

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



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 | | |
|---------|---------------|---------|-----------------------|--------------|-------------|----|--------|----|-------|----|--------|-----|----|
| | | | | | WIDTH | | HEIGHT | | DEPTH | | kg | lb. | |
| CVIR II | 615 932 681 0 | ERS/ECS | 4A | 230 V | 50/60 hertz | mm | in. | mm | in. | mm | in. | 5 | 11 |

Software, 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 |



Software

| MODEL | PART NO. |
|------------------------------|---------------|
| CVI PC2000-STD 1 install | 615 927 522 0 |
| CVI PC2000 advance 1 install | 615 927 523 0 |
| CVINET WEB 1 controller | 615 927 736 0 |
| Open protocol 1 license | 615 927 830 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



A



B



C

Visible & Programmable reporting LED System



Good Report



Bad Report



Programmable

Tool Ready, Tool in Cycle,
Maintenance Alert, and more.



ACCESSORIES
see page 67

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 | ft.lb | ft.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

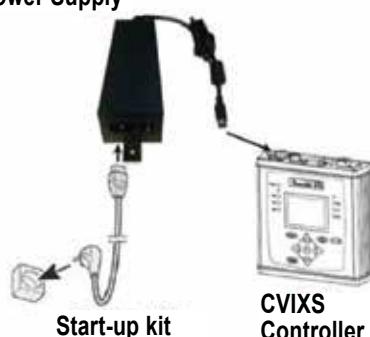
Electric transducerised Very Low Torque – CVIXS



| 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 | ✓ |
| Pervailing 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 |

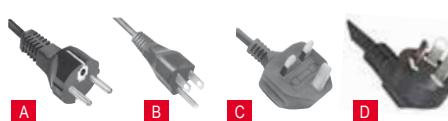
Controller features

Power Supply

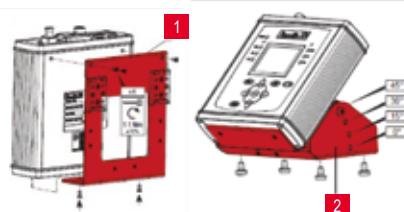


Start-up kit

| 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 |

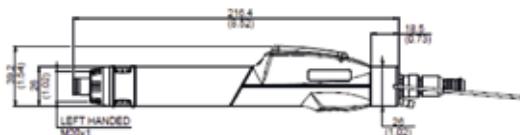
CVIXS fieldbus communication: order fieldbus module + fieldbus protocol

| FIELDBUS PROTOCOL | MODEL | PART NO. | MODEL | PART NUMBER | TOOLS | CONSUMPTION (CURRENT) | SUPPLY VOLTAGE | DIMENSIONS | | | | WEIGHT |
|-------------------|-----------------------------|---------------|-------|-------------|-------|-----------------------|----------------|---------------|-------|--------|-------------|--|
| | | | | | | | | W | mm | in. | mm | |
| | 1 Fieldbus Module | 615 932 721 0 | | | | | | | | | | |
| | 2 Ethernet IP Module | 615 929 051 0 | | | | | | | | | | |
| | 3 Profibus DP Module | 615 929 052 0 | | | | | | | | | | |
| | 4 Profinet Module (1 port) | 615 929 053 0 | | | | | | | | | | |
| | 5 Profinet Module (2 ports) | 615 929 054 0 | | | | | | | | | | |
| | 6 CC-Link Module | 615 929 055 0 | | | | | | | | | | |
| | 7 Devicenet Module | 615 929 056 0 | | | | | | | | | | |
| | 8 MODBUS TCP Slave | 615 929 057 0 | | | | | | | | | | |
| | | | | | | 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)

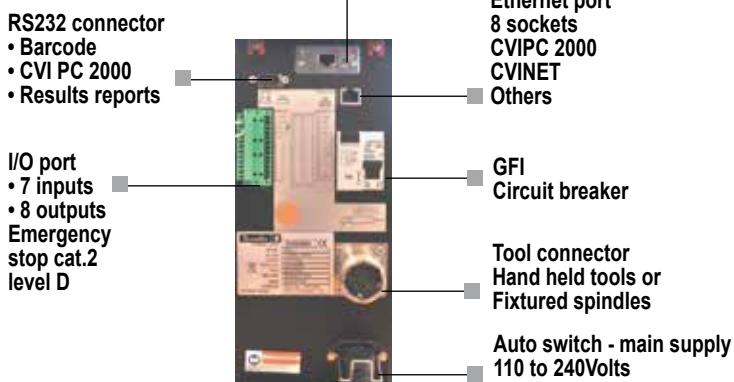
ACCESSORIES

| ITEM | PART NUMBER |
|--|---------------|
| Vacuum solution | |
| 1 "Blank nozzle short: 40mm. To be machined according to screw" | |
| 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 | |
| 7 Refer to accessories catalogue | - |
| Miscellaneous | |
| 8 Flange M20 for automatization | 205 052 875 3 |
| 9 DTH42 Tool holster | 107892 |



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 | Single-phase | 130 | 5.1 | 278 | 10.9 | 291 | 11.5 | 5.9 | 13 |

Software, 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 |



Software

| MODEL | PART NO. |
|------------------------------|---------------|
| CVI PC2000-STD 1 install | 615 927 522 0 |
| CVI PC2000 advance 1 install | 615 927 523 0 |
| CVINET WEB 1 controller | 615 927 736 0 |
| Open protocol 1 license | 615 927 830 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 |
| Profinet 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 25 Nm (7.4 to 18.4 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



desoutter.info/ELRT



ACCESSORIES
see page 67

| 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. | |
| 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 | ELRT045-P4900-10S | Sq 3/8 | Trough hole | 20 | 45 | 14.8 | 33.2 | 4900 | 244 | 9.6 | 1.7 | 3.7 | N/A |
| F | 615 166 042 0 | ELRT045T-10S-5 | Sq 3/8 | Trough hole | 20 | 45 | 14.8 | 33.2 | 4900 | 271 | 10.7 | 3.0 | 6.6 | 5 meters |
| F | 615 166 049 0 | ELRT045T-10S-1 | Sq 3/8 | Trough hole | 20 | 45 | 14.8 | 33.2 | 4900 | 271 | 10.7 | 2.5 | 5.5 | 1 meter |

Handheld electric tools

Pistol grip electric nutrunners

| MODEL | PART NUMBER | OUTPUT DRIVE | COUPLE | | | | | | ROTA-TIONAL 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 | | | | |
| ERP3L | 615 165 193 0 | Hex. 1/4 F | 0.35 | 3 | 3.3 | 0.26 | 2.2 | 2.4 | 2000 | 196 | 7.7 | 1.0 | 2.2 |
| ERP5L | 615 165 194 0 | Hex. 1/4 F | 0.5 | 5 | 5.5 | 0.37 | 3.7 | 4.0 | 2000 | 196 | 7.7 | 1.0 | 2.2 |
| ERP10L | 615 165 195 0 | Hex. 1/4 F | 1.5 | 10 | 12 | 1.1 | 7.4 | 8.8 | 1540 | 196 | 7.7 | 1.1 | 2.4 |
| ERP20L | 615 165 196 0 | Hex. 1/4 F | 3.0 | 20 | 23 | 2.2 | 14.7 | 17 | 790 | 196 | 7.7 | 1.1 | 2.4 |
| ERP20S | 615 165 197 0 | Hex. 1/4 F | 3.0 | 20 | 23 | 2.2 | 14.7 | 17 | 1540 | 221 | 8.7 | 1.2 | 2.6 |
| ERP30S | 615 165 198 0 | Sq. 3/8 | 5.0 | 30 | 30 | 3.7 | 22.1 | 22 | 1070 | 217 | 8.5 | 1.2 | 2.6 |
| ERP40S | 615 165 263 0 | Sq. 3/8 | 6.0 | 40 | 42 | 4.4 | 29.5 | 31 | 680 | 274 | 10.8 | 1.7 | 3.7 |
| ERP3LT | 615 165 227 0 | Hex. 1/4 F | 0.35 | 3 | 3.3 | 0.26 | 2.2 | 2.4 | 2000 | 196 | 7.7 | 1.0 | 2.2 |
| ERP5LT | 615 165 228 0 | Hex. 1/4 F | 0.5 | 5 | 5.5 | 0.37 | 3.7 | 4 | 2000 | 196 | 7.7 | 1.0 | 2.2 |
| ERP10LT | 615 165 229 0 | Hex. 1/4 F | 1.5 | 10 | 12 | 1.1 | 7.4 | 8.8 | 1540 | 196 | 7.7 | 1.1 | 2.4 |
| ERP20LT | 615 165 230 0 | Hex. 1/4 F | 3.0 | 20 | 23 | 2.2 | 14.7 | 17 | 790 | 196 | 7.7 | 1.1 | 2.4 |



Angle head electric nutrunners

| MODEL | PART NUMBER | OUTPUT DRIVE | TORQUE | | | | | | ROTA-TIONAL 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 | | | | |
| ERAL1.5-15 | 615 165 356 0 | Sq. 3/8 | 2 | 15 | 18 | 1.5 | 11 | 13.3 | 1511 | 408 | 16.1 | 1.35 | 3.0 |
| ERAL1.5-25 | 615 165 357 0 | Sq. 3/8 | 3 | 20 | 25 | 2.2 | 14.7 | 18.4 | 1511 | 408 | 16.1 | 1.35 | 3.0 |
| ERAL2.30 | 615 165 362 0 | Sq. 3/8 | 5 | 20 | 30 | 3.7 | 14.7 | 22 | 1511 | 433 | 17 | 1.55 | 3.4 |
| ERAL2.40 | 615 165 363 0 | Sq. 3/8 | 7 | 30 | 40 | 5.2 | 22 | 29.5 | 1169 | 433 | 17 | 1.6 | 3.5 |
| ERAL2-60 | 615 165 364 0 | Sq. 3/8 | 8 | 45 | 60 | 5.9 | 33 | 44 | 918 | 443 | 17.5 | 1.7 | 3.7 |
| ERAL2-80 | 615 165 365 0 | Sq. 3/8 | 10 | 65 | 80 | 7.4 | 48 | 59 | 750 | 455 | 17.9 | 1.8 | 4.0 |
| ERAL2-80 SQ1/2 | 615 165 406 0 | Sq. 1/2 | 10 | 65 | 80 | 7.4 | 48 | 59 | 750 | 455 | 17.9 | 1.8 | 4.0 |
| ERAL4-90 | 615 165 384 0 | Sq. 1/2 | 15 | 70 | 90 | 11 | 51.6 | 66 | 690 | 552 | 21.7 | 3.5 | 7.7 |
| ERAL4-110 | 615 165 385 0 | Sq. 1/2 | 20 | 90 | 110 | 14.7 | 66 | 81 | 540 | 552 | 21.7 | 3.5 | 7.7 |
| ERAL4-120 | 615 165 386 0 | Sq. 1/2 | 25 | 115 | 120 | 18.4 | 85 | 88.4 | 380 | 552 | 21.7 | 3.5 | 7.7 |
| ERAL4-140 | 615 165 387 0 | Sq. 1/2 | 30 | 125 | 140 | 22 | 92 | 103 | 360 | 554 | 21.8 | 3.7 | 8.1 |
| ERAL4-170 | 615 165 388 0 | Sq. 1/2 | 35 | 150 | 170 | 26 | 110.5 | 125 | 300 | 554 | 21.8 | 3.7 | 8.1 |
| ERAL4-225 | 615 165 389 0 | Sq. 3/4 | 60 | 200 | 225 | 44 | 147 | 166 | 220 | 604 | 23.8 | 3.9 | 8.6 |
| ERAL6-135 | 615 165 390 0 | Sq. 1/2 | 30 | 125 | 135 | 22 | 92 | 100 | 640 | 639 | 25.2 | 6.2 | 13.7 |
| ERAL6-170 | 615 165 441 0 | Sq. 1/2 | 30 | 150 | 170 | 22 | 110 | 125 | 520 | 639 | 25.2 | 6.2 | 13.7 |
| ERAL6-280 | 615 165 391 0 | Sq. 3/4 | 50 | 250 | 280 | 37 | 184 | 206 | 300 | 661 | 26 | 6.3 | 13.9 |
| ERAL6-350 | 615 165 392 0 | Sq. 3/4 | 75 | 300 | 350 | 55 | 221 | 258 | 250 | 702 | 27.6 | 8.0 | 17.6 |
| ERAL6-480 | 615 165 393 0 | Sq. 3/4 | 100 | 400 | 480 | 73 | 295 | 354 | 190 | 702 | 27.6 | 8.0 | 17.6 |



In-line electric nutrunners

| MODEL | PART NUMBER | OUTPUT DRIVE | COUPLE | | | | | | ROTA-TIONAL 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 | | | | |
| ERD5J | 615 165 060 0 | Hex. 1/4 F | 0.5 | 6 | 8 | 0.37 | 4.4 | 5.9 | 2070 | 379 | 14.9 | 1.3 | 2.9 |
| ERDL1.5-12 | 615 165 366 0 | Hex. 1/4 F | 2 | 10 | 12 | 1.5 | 7.4 | 8.8 | 1586 | 365 | 14.4 | 1.3 | 2.9 |
| ERDL1.5-20 | 615 165 367 0 | Hex. 1/4 F | 3 | 15 | 20 | 2.2 | 11 | 14.7 | 1586 | 365 | 14.4 | 1.3 | 2.9 |
| ERDL1.5-30 | 615 165 368 0 | Sq. 3/8 | 5 | 20 | 30 | 3.7 | 14.7 | 22 | 1586 | 357 | 14 | 1.3 | 2.9 |
| ERDL2-40 | 615 165 369 0 | Sq. 3/8 | 7 | 30 | 40 | 5.2 | 22 | 29.5 | 1159 | 382 | 15 | 1.5 | 3.3 |
| ERDL2-50 | 615 165 370 0 | Sq. 3/8 | 8 | 40 | 50 | 5.9 | 29.5 | 36.9 | 898 | 382 | 15 | 1.5 | 3.3 |
| ERDL4-60 | 615 165 407 0 | Sq. 3/8 | 20 | 50 | 60 | 14.7 | 36.8 | 44.2 | 1030 | 475 | 18.7 | 2.8 | 6.2 |
| ERDL4-80 | 615 165 394 0 | Sq. 1/2 | 20 | 70 | 80 | 14.7 | 51.6 | 59 | 650 | 475 | 18.7 | 2.8 | 6.2 |
| ERDL4-135 | 615 165 395 0 | Sq. 1/2 | 30 | 120 | 135 | 22.1 | 88.4 | 99.6 | 400 | 502 | 19.8 | 3.3 | 7.3 |
| ERDL6-170 | 615 165 396 0 | Sq. 1/2 | 40 | 150 | 170 | 29.5 | 110.5 | 125.3 | 530 | 590 | 23.2 | 5.9 | 13 |
| ERDL6-220 | 615 165 397 0 | Sq. 3/4 | 50 | 200 | 220 | 36.8 | 147.4 | 162 | 380 | 597 | 23.5 | 5.9 | 13 |
| ERDL6-250 | 615 165 398 0 | Sq. 3/4 | 60 | 230 | 250 | 44.2 | 169 | 184 | 290 | 597 | 23.5 | 5.9 | 13 |



ACCESSORIES
see page 67

MultiCIVIL II - Main Features

MULTICHANNEL SYSTEM

Drive up to 32 fixtured spindles
One CIVIL Master + x times CIVIL Slave

Through CVIPC2000 (to Master only)

Cycles Phases management

- 31 different cycles
- Combines up to 20 phases in a fastening cycle

Data collection

- CVIPC2000
- CVINET WEB

Fieldbuses

- By additional modules
 - By Ethernet ports
 - Flexible mapping
- Isagraf, embedded PLC software to manage :
- Assembly station
 - HMI

FIXTURED SPINDLES

- From 1 to 1900Nm
- EME straight
- EMEOF with Offset for close center distance application
- EMEL "L" shape reduces the height of the tool
- High accuracy
- A10 class
- Digital communication between the tool and controller
- Memory chip with all characteristics of the tool: transducer sensitivity, gear ratio, maintenance info, etc...

ONE CABLE

- Motor power
- Digital connection of the transducer and memory device
- Up to 45 meters
- Design to be used in robot applications



Flexibility of tightening process

EASY PROGRAMMING OF THE TIGHTENING SEQUENCE WITH FULL SYNCHRONIZATION

Run Down phase

Spindle 1-2-3-4-5-6-7-8-9-10

Final Speed phase

Spindle 1-2

Final Speed phase

Spindle 3-4-5-6

Final Speed phase

Spindle 7-8-9-10

Automatic Repair Action

Reverse all spindles and retry once
Jump to phase 2

End of the cycle

Reporting



CVIPC



| MAIN FUNCTIONS | MULTICIVIL II |
|---|-----------------|
| Number of channels | 1 to 32 |
| Number of cycles | 31 |
| Number of phases | 20 |
| Batch count | 999 |
| Bar code reading via RS232 port | |
| Tightening results | |
| Torque + Angle + Date + Time + Report | up to 32 000 |
| Number of curves (per channel) | 10 |
| Tightening strategies | |
| Torque control + angle monitoring | ✓ |
| Angle control + torque monitoring | ✓ |
| T control + (Angle + torque rate) monitoring | ✓ |
| Angle control + (Torque + torque rate) monitoring | ✓ |
| Yield point strategy | ✓ |
| Stall torque | ✓ |
| Prevailing torque | ✓ |
| Current monitoring | ✓ |
| Reverse at Angle control | ✓ |
| Tightening connectivity | |
| Input/Output | 8/8 |
| RS232 port | OK |
| Ethernet RJ45 | 8 sockets |
| Fieldbuses | Optional module |
| Embedded PLC software | OK |
| IP54 | Optional module |
| Emergency stop | 2 channels |

Controllers - MultiCVIL II



| MODEL | PART NUMBER | CONSUMPTION (CURRENT) | | MAINS SUPPLY | DIMENSIONS | | | | WEIGHT | | |
|--------------------|---------------|-----------------------|-------|--------------|------------|-----|-----|------|--------|------|-----|
| | | 115 V | 230 V | | mm | in. | mm | in. | mm | in. | |
| CVIL II M (Master) | 615 932 682 0 | 4A | 2A | Single phase | 130 | 5.1 | 278 | 10.9 | 291 | 11.5 | 5.9 |
| CVIL II S (Slave) | 615 932 683 0 | 4A | 2A | Single phase | 130 | 5.1 | 278 | 10.9 | 291 | 11.5 | 5.9 |
| Multicombox | 615 929 044 0 | | | | | | | | | | 13 |

OPTIONAL ACCESSORIES



| | PART NO. |
|------------|---------------|
| • Kit IP54 | 615 932 684 0 |

Fieldbus module

| 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 |
| • Devicenet Module | 615 927 599 0 |
| • MODBUS TCP Slave | 615 927 615 0 |
| • Shelf support - Aluminium profile | 615 397 403 5 |

Kit version



One CVIL-Master



n.CVIL-Slaves



Software CVIPC 2000
+ Power cord



Multicombox

Contact your Desoutter representative for assistance



Also available:
Specially designed a frame to secure controllers and ensure safe and tidy wiring

Turn Key Solution



One CVIL-Master



n.CVIL-Slaves



Software CVIPC 2000
+ Network cables & Power cord



One power box supply with
E Stop - Ethernet switches
Multicombox - Circuit breakers

Powerbox depending
on power supply



Fixtured electric spindles

High durability of EME tools

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

| MODEL | PART NUMBER | SQUARE DRIVE | TORQUE RANGE | | ROTATIONAL SPEED | MIN. CENTRE DISTANCE | | LENGTH | | WEIGHT | |
|------------|---------------|--------------|--------------|----------|------------------|----------------------|-----|--------|------|--------|------|
| | | | in. | Nm | | mm | in. | mm | in. | kg | lb |
| EME35-10J | 615 165 423 0 | 3/8 | 1-8 | 0.7-5.9 | 2067 | 43.2 | 1.7 | 283 | 11.1 | 1.7 | 3.7 |
| EME35-20J | 615 165 424 0 | 3/8 | 4-15 | 2.1-11 | 2067 | 43.2 | 1.7 | 308 | 12.1 | 2.0 | 4.4 |
| EME38-10J | 615 165 425 0 | 3/8 | 9-30 | 6.6-22 | 1287 | 43.2 | 1.7 | 355 | 14 | 2.0 | 4.4 |
| EME38-20J | 615 165 426 0 | 3/8 | 10-45 | 7.4-33 | 1092 | 43.2 | 1.7 | 355 | 14 | 2.0 | 4.4 |
| EME51-10J | 615 165 427 0 | 1/2 | 20-70 | 15-52 | 650 | 51.2 | 2.0 | 374 | 14.7 | 2.9 | 6.4 |
| EME51-20J | 615 165 428 0 | 1/2 | 30-135 | 22-99 | 403 | 51.2 | 2.0 | 401 | 15.8 | 3.5 | 7.7 |
| EME60-10J | 615 165 429 0 | 1/2 | 20-95 | 15-70 | 923 | 60.2 | 2.4 | 431 | 16.9 | 4.8 | 10.6 |
| EME60-20J | 615 165 430 0 | 3/4 | 50-175 | 37-129 | 507 | 60.2 | 2.4 | 431 | 16.9 | 4.8 | 10.6 |
| EME60-30J | 615 165 431 0 | 3/4 | 70-250 | 52-184 | 299 | 60.2 | 2.4 | 467 | 18.4 | 5.2 | 11.5 |
| EME80-10J | 615 165 432 0 | 3/4 | 80-300 | 59-221 | 286 | 80.2 | 3.2 | 494 | 19.5 | 9.8 | 21.6 |
| EME80-20J | 615 165 433 0 | 3/4 | 120-450 | 88-221 | 195 | 80.2 | 3.2 | 494 | 19.5 | 9.8 | 21.6 |
| EME80-30J | 615 165 434 0 | 1 | 180-650 | 133-479 | 130 | 80.2 | 3.2 | 494 | 19.5 | 9.8 | 21.6 |
| EME80-40J | 615 165 435 0 | 1 | 220-800 | 162-590 | 91 | 80.2 | 3.2 | 494 | 19.5 | 9.8 | 21.6 |
| EME80-50J | 615 165 436 0 | 1 | 220-1000 | 162-737 | 72 | 80.2 | 3.2 | 494 | 19.5 | 9.8 | 21.6 |
| EME106-10J | 615 165 437 0 | 1 | 430-1500 | 317-1105 | 52 | 106.2 | 4.2 | 564 | 22.2 | 15 | 33.1 |
| EME106-20J | 615 165 438 0 | 1 | 540-1900 | 398-1400 | 39 | 106.2 | 4.2 | 564 | 22.2 | 15 | 33.1 |



EMEL shape for close access

| MODEL | PART NUMBER | SQUARE DRIVE | TORQUE RANGE | | ROTATIONAL SPEED | MIN. CENTRE DISTANCE | | LENGTH | | WEIGHT | |
|------------|---------------|--------------|--------------|----------|------------------|----------------------|-----|--------|-----|--------|------|
| | | | in. | Nm | | mm | in. | mm | in. | kg | lb |
| EMEL38-20J | 615 165 517 0 | 3/8 | 10-45 | 7.4-33.2 | 1092 | 43.2 | 1.7 | 140.5 | 5.5 | 3.0 | 6.6 |
| EMEL51-20J | 615 165 518 0 | 1/2 | 30-135 | 22-99.5 | 403 | 51.2 | 2.0 | 166 | 6.5 | 4.0 | 8.8 |
| EMEL60-20J | 615 165 519 0 | 3/4 | 50-175 | 37-129 | 481 | 60.2 | 2.4 | 178 | 7 | 6.0 | 13.2 |
| EMEL60-30J | 615 165 520 0 | 3/4 | 70-250 | 52-184 | 312 | 60.2 | 2.4 | 178 | 7 | 6.0 | 13.2 |
| EMEL80-40J | 615 165 521 0 | 1 | 220-800 | 162-590 | 91 | 80.2 | 3.2 | 241 | 9.5 | 11 | 24.2 |



EME Offset with torque transducer in line with the output shaft

Increase access by using smallest CC distances offered

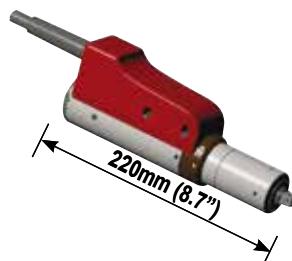
| MODEL | PART NUMBER | SQUARE DRIVE | TORQUE RANGE | | ROTATIONAL SPEED | MIN. CENTRE DISTANCE | | LONGUEUR | | LENGTH | |
|--------------|---------------|--------------|--------------|--------|------------------|----------------------|------|----------|------|--------|------|
| | | | in. | Nm | | mm | in. | mm | in. | kg | lb |
| EME24-20 OF | 615 165 512 0 | 3/8 | 4-20 | 2.9-15 | 1225 | 24 | 0.95 | 375.2 | 14.8 | 2.7 | 5.9 |
| EME26-50 OF | 615 165 513 0 | 3/8 | 7-50 | 5.2-40 | 985 | 26 | 1.02 | 387.5 | 15.2 | 2.7 | 5.9 |
| EME30-80 OF | 615 165 514 0 | 1/2 | 10-80 | 7.4-59 | 580 | 30 | 1.18 | 414.3 | 16.3 | 3.9 | 8.6 |
| EME36-140 OF | 615 165 515 0 | 1/2 | 19-140 | 14-103 | 375 | 36 | 1.42 | 454.4 | 17.7 | 4.7 | 10.4 |
| EME40-180 OF | 615 165 516 0 | 3/4 | 25-180 | 18-133 | 475 | 40 | 1.57 | 481.7 | 18.9 | 6.4 | 14.1 |
| EME44-300 OF | 615 165 602 0 | 3/4 | 80-300 | 59-221 | 217 | 45 | 1.77 | 632.5 | 24.9 | 11 | 24.2 |



Fixtured electric spindles ERF

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

| 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 |



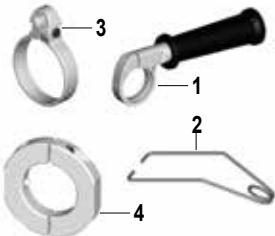
For further information about the technical data see pages 61 and 73



ACCESSORIES
see page 67

Accessories

ERP / ERAL / ERDL



ACCESSORIES INCLUDED

| ITEM | | ERP | ERAL | ERLD |
|------|------------------------------------|--------|---------------|---------------|
| 1 | Side handle | 467033 | | |
| 2 | Suspension bail | 467003 | | |
| 3 | Horizontal bail ERAL - ERDL1.5 / 2 | | 615 396 562 0 | 615 396 562 0 |
| 4 | Reaction bar ring ERDL1.5 / 2 | | | 615 396 551 5 |
| 4 | Reaction bar ERDL4 | | | 615 595 259 0 |
| 4 | Reaction bar ERDL6 | | | 615 396 297 0 |
| 4 | Reaction bar ERAL6- 350/-480 | | | 615 396 302 0 |

OPTIONAL ACCESSORIES



| ITEM | | ERP | ERAL | ERDL |
|-------------------------------|--|---------------|---------------|---------------|
| 5 | Long lever start (included with ERD5J) | | | 615 396 584 0 |
| 6 | 2nd lever start ERAL-ERDL1.5 / 2 | | 615 396 553 0 | 615 396 553 0 |
| 7 | High resistance side handle ERP | 615 397 012 0 | | |
| 7 | Side reaction handle ERAL-ERDL1.5 / ERDL2 | | 615 396 554 0 | 615 396 554 0 |
| 8 | Suspension ring ERA1.5-2 | | 615 571 063 0 | |
| 8 | Suspension ring ERA1.5 | | 615 571 070 0 | |
| 8 | Suspension ring ERA6 | | 615 571 064 0 | |
| 9 | Reaction bar ring for ERA1.5-2 | | 615 396 622 0 | |
| 9 | Reaction bar ring ERA1.5-15 / ERA1.5-25 | | 615 396 227 0 | |
| 9 | Reaction bar ring ERA1.5-30 / ERA1.5-40 | | 615 396 230 0 | |
| 10 | Reaction bar ring ERA1.5-60 | | 615 396 299 0 | 615 396 299 0 |
| 11 | Reaction bar ring ERA1.5-80 | | 615 396 865 0 | 615 396 865 0 |
| 11 | Reaction bar ring ERA1.5-100 | | 615 396 866 0 | 615 396 866 0 |
| 11 | Mounting plate with telescopic spindle ERDL1.5 / ERDL2 | | | 615 396 547 0 |
| Plastic cover | | | | |
| 12 | Plastic cover ERP.S | | | 615 573 074 0 |
| 12 | Plastic cover ERP.L | 615 573 075 0 | | |
| 12 | Plastic cover ERP.LT | 615 573 076 0 | | |
| 13 | Plastic cover AH1 for ERA1.5-15 / 25 / ERA1.5-30 / 40 | 615 573 064 0 | | |
| 13 | Plastic cover AH2 for ERA1.5-60 | | 615 573 065 0 | |
| 13 | Plastic cover AH3 for ERA1.5-80 | | 615 573 066 0 | |
| 14 | Plastic cover AH4 for ERA1.5-100 / 110 / 120 | | 615 573 069 0 | |
| 14 | Plastic cover AH5 for ERA1.5-140 / 170 / ERA1.5-170 | | 615 573 070 0 | |
| 14 | Plastic cover AH6 for ERA1.5-225 | | 615 573 071 0 | |
| 15 | Plastic cover for ERDL1.5 / 2 | | | 615 573 067 0 |
| Desoutter Tool Holster | | | | |
| 16 | DTH TWIN (single) without rail | | 615 811 411 0 | 615 811 411 0 |
| 17 | DTH TWIN rail kit with 2 Twin holders | | 615 811 412 5 | 615 811 412 5 |
| 18 | DTH TWIN stand kit with base & 2 Twin holders | | 615 811 413 5 | 615 811 413 5 |
| 19 | DTH90 | 615 812 119 0 | | |

| CABLE FOR ERP / ERAL / ERDL TOOLS | PART NO. |
|-----------------------------------|---------------|
| Nutrunner cable 5m (16ft) | 615 917 492 0 |
| Nutrunner cable 10m (32ft) | 615 917 494 0 |
| Nutrunner cable 15m (49.2ft) | 615 917 495 0 |

| HEAVY DUTY CABLE FOR ERP / ERAL / ERDL TOOLS | PART NO. |
|--|---------------|
| Cable 2.5m (8.2ft) | 615 917 570 0 |
| Cable 5m (16ft) | 615 917 571 0 |
| Cable 10m (32ft) | 615 917 572 0 |

| HEAVY DUTY EXTENTION CABLE FOR ERP / ERAL / ERDL 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 |

| SOCKET TRAY | | | | |
|--------------------------------------|---------------|---------------|---------------|---------------|
| • Socket tray (sockets not included) | | | | 615 936 005 0 |
| CABLE LENGTH: | 1m (3.3ft) | 5m (16ft) | 10m (32.8ft) | 15m (49.2ft) |
| • Cable for sockets tray | 615 917 265 0 | 615 917 266 0 | 615 917 267 0 | 615 917 268 0 |



Accessories



ERS / ERSA / ERSF / ELRT

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 | |
| • Torque tubes | see page 169 | |
| 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 |
| • 1" square drive EME80.30/40/50 / EME106 | 615 396 430 0 |

| EME ADAPTATION ON EXISTING APPLICATION (SEPARATED CABLE TORQUE + MOTOR CABLE) | PART NO |
|---|---------------|
| • EME adaptation on old cable | 615 917 539 0 |



| CABLE FOR EME TOOLS - MULTICIVIL & CIVIL 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 - MULTICIVIL & CIVIL 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 |

Protocol, Software

| MODEL | PART NUMBER |
|---|---------------|
| Reporting to toolsnet open protocol 5 licences | 615 927 577 0 |
| Reporting to toolsnet open protocol 10 licences | 615 927 578 0 |
| Reporting to toolsnet open protocol 25 licences | 615 927 579 0 |
| Reporting to toolsnet open protocol 50 licences | 615 927 580 0 |

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

| MODEL | PART NUMBER |
|---------------------------|---------------|
| 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 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 |



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

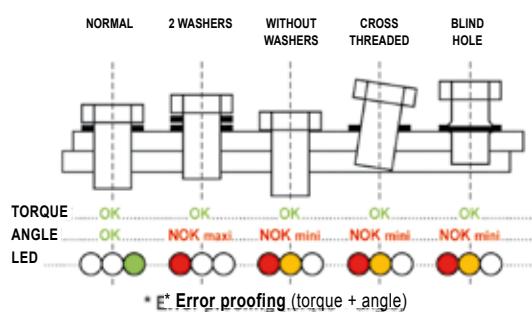
Set up a batch count to ensure all bolts are tightened with correct strategy.



Quality of tightening

Control torque and angle with multi phases strategies.

Control torque & angle



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 | 6 | 6 |
| PC Software Windows | | | | |
| program cycles, collect, display and save results, run statistics, curves | | | | |
| CVIPC2000 *: Connection 'point to point' (RS232) | ✓ | ✓ | ✓ | ✓ |
| Connection through ethernet | ✓ | ✓ | ✓ | ✓ |
| <i>*All CVIPC2000 versions are compatible with CVICs</i> | | | | |
| MAINTENANCE | | | | |
| Access to all tool parameters (tool memory) | ✓ | ✓ | ✓ | ✓ |
| Autotest of the complete system | ✓ | ✓ | ✓ | ✓ |
| Spindle rotation test | ✓ | ✓ | ✓ | ✓ |
| Input/Output selection | ✓ | ✓ | ✓ | ✓ |
| Date of the last maintenance operation | ✓ | ✓ | ✓ | ✓ |
| Total and partial cycle counters | ✓ | ✓ | ✓ | ✓ |
| PERIPHERALS | | | | |
| Input/Output | 8/8 | 8/8 | 8/8 | 8/8 |
| Serial port RS232 (PC transfer, Bar code, Report output) | ✓ | ✓ | ✓ | ✓ |
| Ethernet connection (CVIPC2000 / CVInet) | ✓ | ✓ | ✓ | ✓ |
| MODEL | | | | |
| CONTROLLER for low torque tools | CVIC II L-2 | CVIC II H-2 | | |
| CONTROLLER for the other tools | CVIC II L-4 | CVIC II H-4 | CVIC II L-4 | CVIC II H-4 |
| MAINS SUPPLY | | | | |
| Single-phase, automatic switching 110V/230V | ✓ | ✓ | ✓ | ✓ |

Controllers - CVIC

Electric current control



| | |
|---------------------------|--|
| ECS (M20) 0.12 - 16 Nm | |
| ECSA 0.55 - 11.5 Nm | |
| ECSF 0.12 - 16 Nm | |
| ECPL/LT 1 - 20 Nm | |
| ECFL 1 - 20 Nm | |
| ECA15 5 - 15 Nm | |
| ECD5 2 - 6 Nm | |
| MC35-10 2.5 - 8 Nm | |
| ECA 7 - 200 Nm | |
| ECD 7 - 120 Nm | |
| ECP 7 - 40 Nm | |
| ECFS 7 - 30 Nm | |
| ECP HT 30 - 4000 Nm | |
| MC 5 - 135 Nm | |

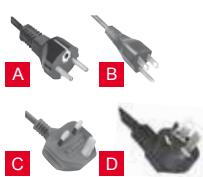
| MODEL | PART NUMBER | TOOLS | CONSUMPTION (current) | MAINS SUPPLY | DIMENSIONS | | WEIGHT | |
|-------|-------------|-------|-----------------------|--------------|------------|----------|----------|----------|
| | | | | | WIDTH | HEIGHT | DEPTH | kg |
| | | | 115V 230V | 50/60 hertz | mm in. | mm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

CVIC II CONTROLLERS

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

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

| PLUG | DESCRIPTION | PART NO. |
|------|-------------|---------------|
| A | 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

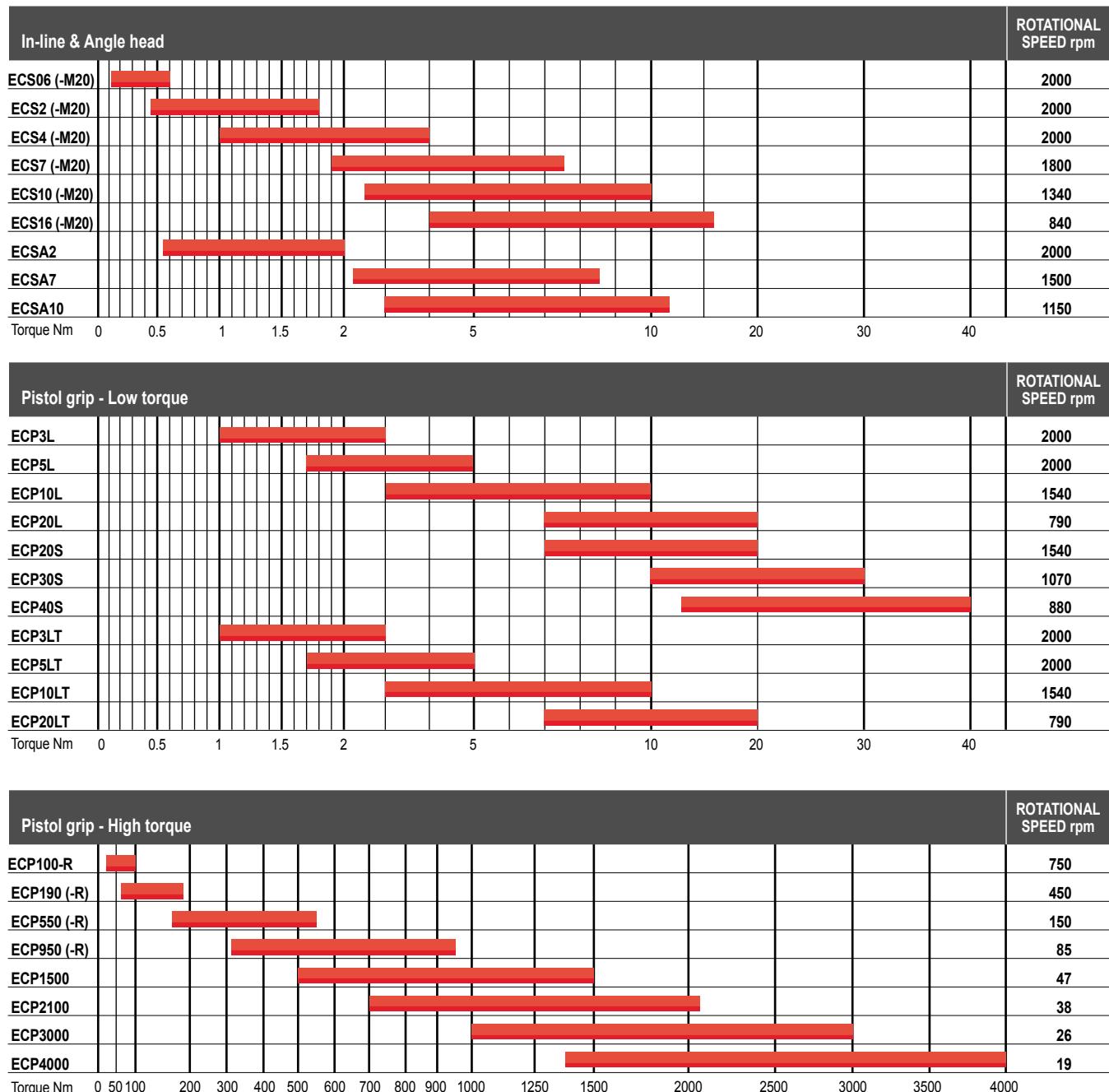
| MODEL | PART NO. |
|---------------------------|---------------|
| Ethernet IP Module | 615 927 594 0 |
| Profibus DP Module | 615 927 595 0 |
| Profinet Module (1 port) | 615 927 596 0 |
| Profinet Module (2 ports) | 615 927 597 0 |
| CC-Link Module | 615 927 598 0 |
| Devicenet Module | 615 927 599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

Software

| MODEL | PART NO. |
|-----------------------------------|---------------|
| CVIPC2000 for CVIS/CVIC 1 Install | 615 927 521 0 |
| CVIPC2000 for CVIS/CVIC 2 Install | 615 927 534 0 |
| CVINET WEB 1 controller | 615 927 736 0 |
| Open protocol 1 license | 615 927 830 0 |

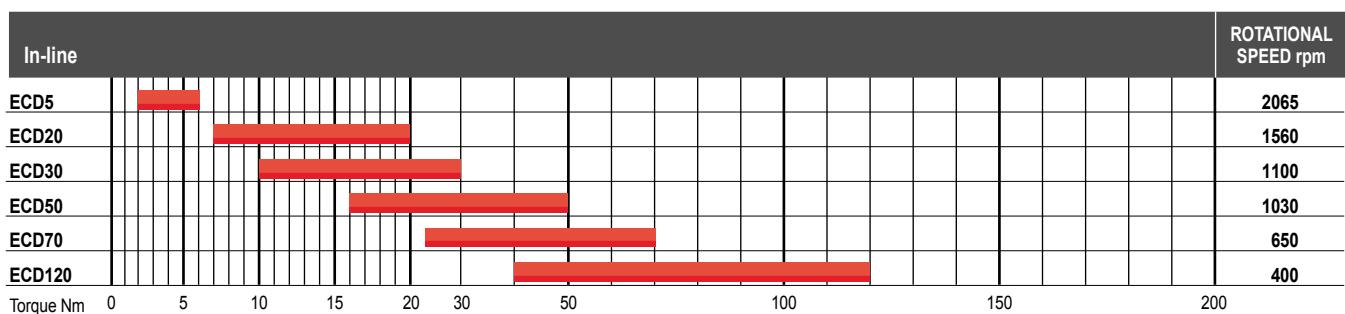
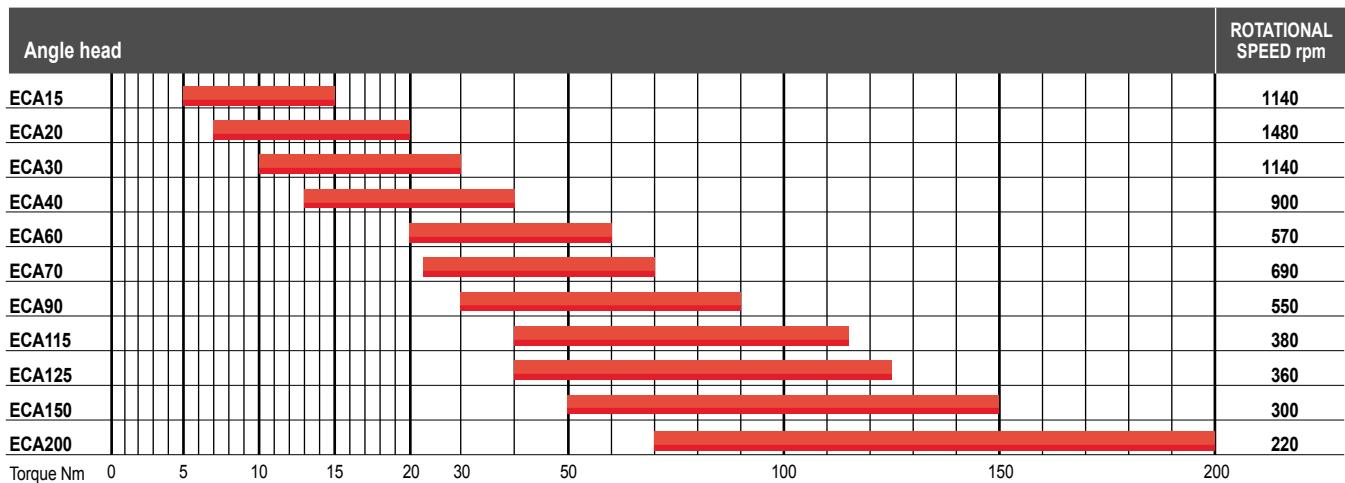
Torque range

Performances of Portable electric nutrunners
ECS, ECSA and ECP Series

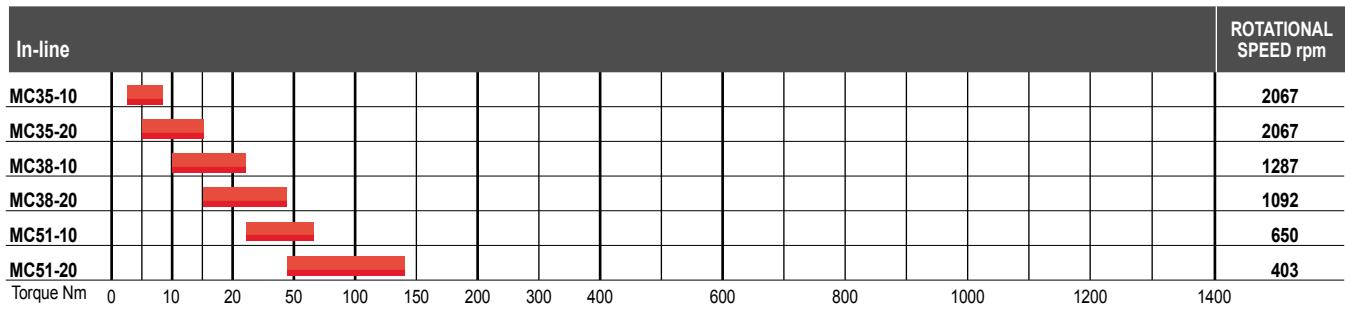
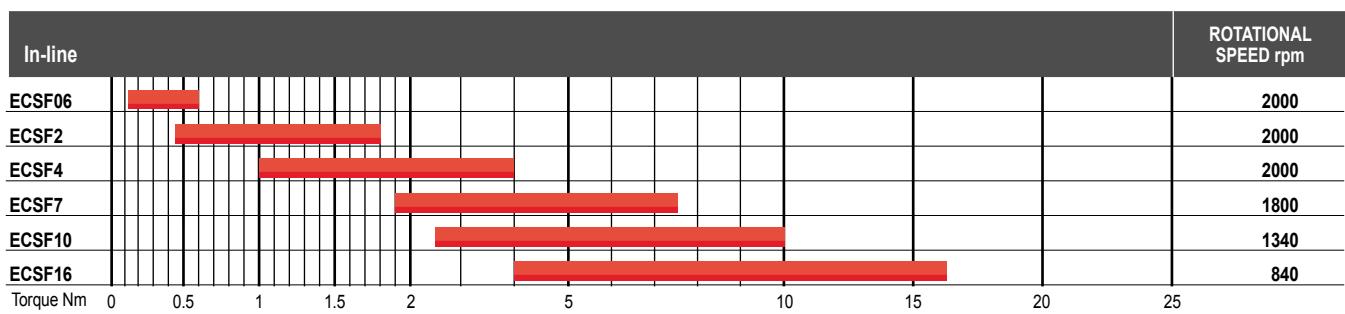


Torque range

Performances of Portable electric nutrunners
ECA and ECD Series



Performances of Fixtured electric spindles
ECSF and MC Series



Electric screwdrivers - CVIC

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

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



Improve your joint visibility



A



Adapt your tool with accessories



B



C

6.2
(0.24")
40.7 (1.60")
Ø22
(0.87")



OK



NOK



BATCH OK

Get the best tightening feedback directly on the tool



ACCESSORIES
see pages 84-85

| 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 | mm | in. | kg | lb. |

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 |

ELECTRIC SCREWDRIVERS - IN-LINE

| | | | | | | | | | | | | |
|---|-----------|---------------|------------|------|-----|------|-------|------|-----|------|-----|-----|
| B | ECS06-M20 | 615 165 454 0 | Hex. 1/4 F | 0.12 | 0.6 | 1.1 | 5.3 | 2000 | 285 | 11.2 | 0.6 | 1.3 |
| B | ECS2-M20 | 615 165 455 0 | Hex. 1/4 F | 0.45 | 1.8 | 4 | 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 | 0.6 | 1.3 |
| C | ECSA7 | 615 165 448 0 | Hex. 1/4 F | 2.2 | 8.5 | 19.5 | 75.2 | 1500 | 329 | 12.9 | 0.7 | 1.5 |
| C | ECSA10 | 615 165 449 0 | Hex. 1/4 F | 3 | 11.5 | 26.6 | 101.8 | 1150 | 329 | 12.9 | 0.7 | 1.5 |

Pistol grip electric nutrunners - CVIC

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



A



B



C



D



ACCESSORIES
see pages 84-85

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

Electric high torque pistol grip - CVIC

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



Over 360°Swivel
for operator safety
and comfort



For your quality-critical applications

Impact and impulse tools have been a production favourite for many years.

This current controlled swing bar tool allows you a 1st step to switch from pneumatic to DC tools, error-proof your high torque tightenings in medium duty applications, save on energy costs and reduce your carbon footprint.

Offering all benefits of Electric Brushless Tools

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



| PIC REF | MODEL | PART NUMBER | SQUARE DRIVE | TORQUE RANGE | | | | ROTATIONAL SPEED | LENGTH | | WEIGHT | | |
|------------|-------|----------------|-----------------|--------------|------|------|-------|---------------------|--------|-----|--------|-----|-----|
| | | | | MIN. | MAX. | MIN. | MAX. | | mm | in. | kg | lb. | |
| | | | | in. | Nm | Nm | ft.lb | ft.lb | rpm | mm | in. | kg | lb. |

NON REVERSIBLE

| | | | | | | | | | | | | |
|---|---------|---------------|-------|------|------|-----|------|-----|-----|------|------|------|
| A | ECP190 | 615 165 399 0 | 1/2 | 60 | 190 | 44 | 140 | 450 | 314 | 12.4 | 3.0 | 6.6 |
| A | ECP550 | 615 165 400 0 | 3/4 | 175 | 550 | 129 | 405 | 150 | 351 | 13.8 | 3.7 | 8.1 |
| A | ECP950 | 615 165 401 0 | 1 | 310 | 950 | 228 | 700 | 85 | 379 | 14.9 | 4.0 | 8.8 |
| B | ECP1500 | 615 165 524 0 | 1 | 500 | 1500 | 368 | 1105 | 47 | 413 | 16.3 | 6.9 | 15.2 |
| C | ECP2100 | 615 165 525 0 | 1-1/2 | 700 | 2100 | 516 | 1548 | 38 | 485 | 19.1 | 14.2 | 31.3 |
| C | ECP3000 | 615 165 526 0 | 1-1/2 | 1000 | 3000 | 737 | 2212 | 26 | 485 | 19.1 | 14.2 | 31.3 |
| C | ECP4000 | 615 165 527 0 | 1-1/2 | 1330 | 4000 | 980 | 2950 | 19 | 485 | 19.1 | 14.2 | 31.3 |

REVERSIBLE

| | | | | | | | | | | | | |
|---|----------|---------------|-----|-----|-----|-----|-----|-----|-----|------|-----|------|
| D | ECP100-R | 615 165 523 0 | 1/2 | 30 | 100 | 22 | 73 | 750 | 328 | 12.9 | 3.4 | 7.5 |
| D | ECP190-R | 615 165 451 0 | 1/2 | 60 | 190 | 44 | 140 | 450 | 328 | 12.9 | 3.4 | 7.5 |
| D | ECP550-R | 615 165 452 0 | 3/4 | 175 | 550 | 129 | 405 | 150 | 365 | 14.4 | 4.3 | 9.5 |
| D | ECP950-R | 615 165 453 0 | 1 | 310 | 950 | 228 | 700 | 85 | 395 | 15.6 | 4.6 | 10.2 |

Electric high torque pistol grip - CVIC

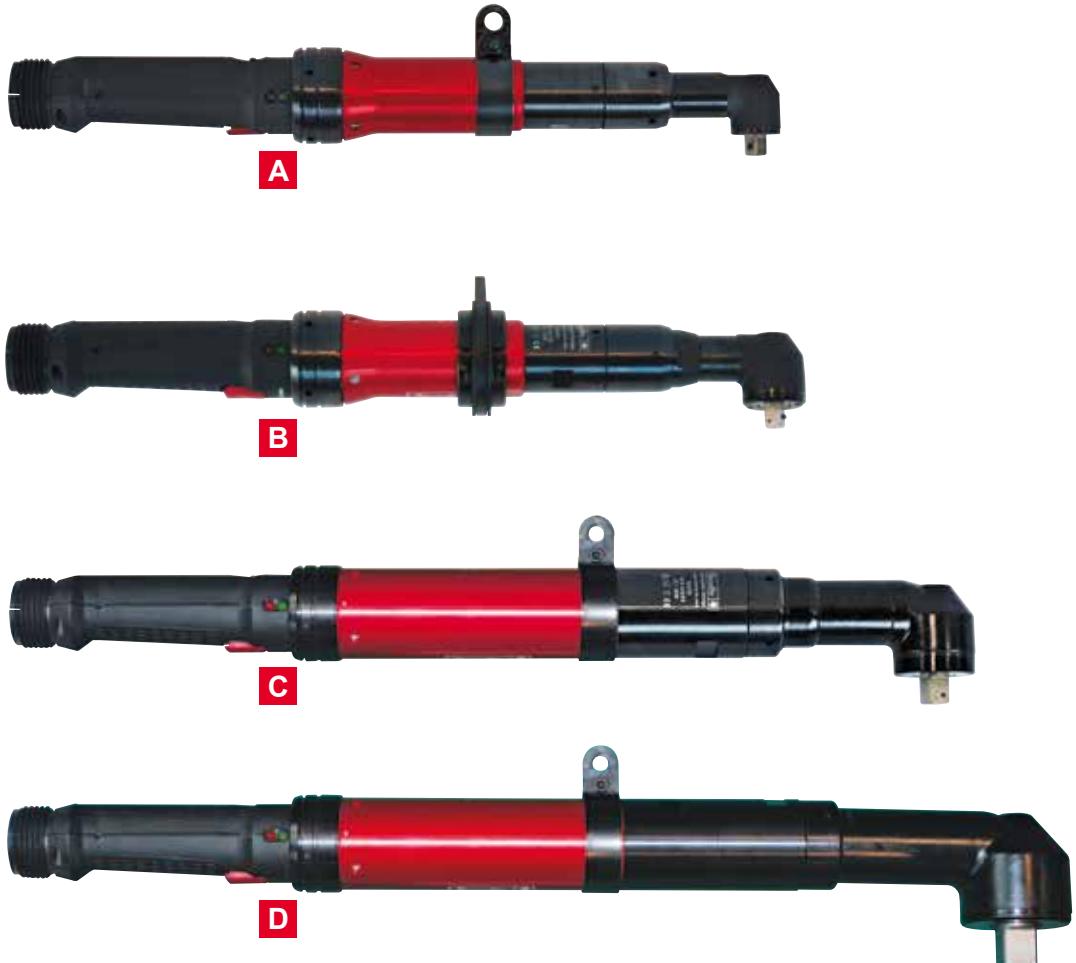


| OPTIONAL ACCESSORIES | 1 | 2 | 3 | 4 | 5 | 6 |
|------------------------------|--------------------------|-----------------------|------------------------|-------------------------------|--------------------|----------------------|
| | STRAIGHT REACTION BAR | BLANK REACTION BAR | S TYPE REACTION BAR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

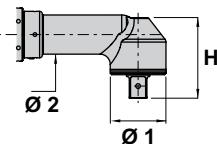


Angle head electric nutrunners - CVIC

5 to 200 Nm (3.7 to 147 ft.lb) - 200 to 1480 rpm



| MODEL | H | | Ø1 | | Ø2 | |
|------------------------|------|-----|----|------|------|------|
| | mm | in. | mm | in. | mm | in. |
| ECA15 | 45.5 | 1.8 | 28 | 1.10 | 27 | 1.06 |
| ECA20 - ECA30 | 45.5 | 1.8 | 28 | 1.10 | 27 | 1.06 |
| ECA40 | 51.5 | 2.0 | 35 | 1.40 | 27 | 1.06 |
| ECA60 | 57.5 | 2.3 | 40 | 1.60 | 30.5 | 1.20 |
| ECA70 - ECA90 - ECA115 | 66.0 | 2.6 | 45 | 1.77 | 37 | 1.46 |
| ECA125 - ECA150 | 69.0 | 2.7 | 50 | 1.97 | 42 | 1.65 |
| ECA200 | 86.0 | 3.4 | 60 | 2.36 | 42 | 1.65 |



 ACCESSORIES
see pages 84-85

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

In-line electric nutrunners - CVIC

2 to 120 Nm (1.5 to 88 ft.lb) - 400 to 2065 rpm



A



B



C



ACCESSORIES
see pages 84-85

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

Fixtured electric spindles - CVIC

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



A



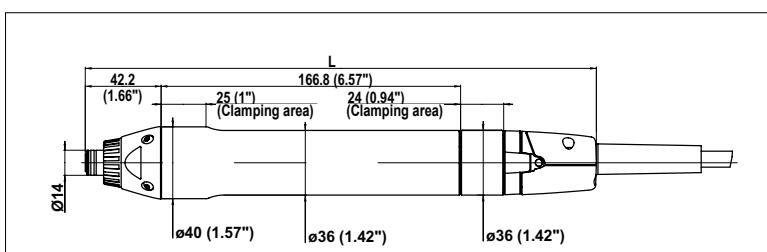
Offset head for application with close centers
(minimum 19mm)



Automatically adjust the stroke for multispindle
applications with spring loaded shafts



Mount your spindle easily on a support
using the adapted flange



ACCESSORIES
see page 84-85

| 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 | 2000 | 285 | 11.2 | 0.6 | 1.3 |
| A | ECSF2 | 615 165 502 0 | Hex. 1/4 F | 0.45-1.8 | 4.0-15.9 | 2000 | 285 | 11.2 | 0.6 | 1.3 |
| A | ECSF4 | 615 165 503 0 | Hex. 1/4 F | 1.0-4.0 | 8.8-35.4 | 2000 | 285 | 11.2 | 0.6 | 1.3 |
| A | ECSF7 | 615 165 504 0 | Hex. 1/4 F | 1.9-7.5 | 16.8-66.4 | 1800 | 285 | 11.2 | 0.7 | 1.5 |
| A | ECSF10 | 615 165 505 0 | Hex. 1/4 F | 2.5-10 | 22.1-88.5 | 1340 | 285 | 11.2 | 0.7 | 1.5 |
| A | ECSF16 | 615 165 506 0 | Hex. 1/4 F | 4.0-16 | 35.4-141.6 | 840 | 285 | 11.2 | 0.7 | 1.5 |
| A | *ECSF06-03 | 615 166 071 0 | Hex. 1/4 F | 0.12-0.6 | 1.1-5.3 | 2000 | 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 | 2000 | 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 | 2000 | 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 | 285 | 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 | 285 | 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 | 285 | 11.2 | 0.7 | 1.5 |

*Models with 30cm integrated cable instead of 4 meters

Fixtured electric spindles - CVIC

2.5 to 135 Nm (1.8 to 99 ft.lb) - 403 to 2067 rpm



A



B



ACCESSORIES
see page 84-85

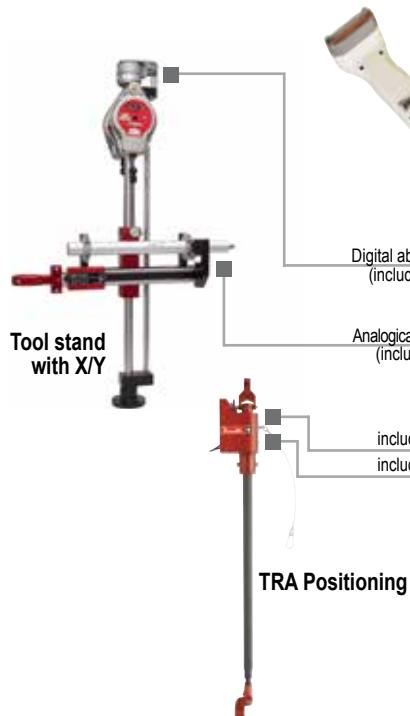
For MC.tools with Offset heads, please contact your local Desoutter sales engineer for more information

| PIC REF | MODEL | PART NUMBER | SQUARE DRIVE | TORQUE RANGE | | ROTATIONAL SPEED AT | | TELESCOPIC | | MIN CENTRE DISTANCE | | LENGTH | | WEIGHT | |
|------------|---------|----------------|-----------------|-----------------|---------|------------------------|-----------|------------|------|------------------------|-----|--------|------|--------|-----|
| | | | | in. | Nm | ft.lb | rpm/230 V | rpm/110 V | mm | in. | mm | in. | mm | in. | kg |
| A | MC35-10 | 615 165 107 0 | 3/8 | 2.5-8 | 1.8-5.9 | 2067 | 2067 | 50 | 1.97 | 43.2 | 1.7 | 276 | 10.9 | 1.7 | 3.7 |
| A | MC35-20 | 615 165 108 0 | 3/8 | 5-15 | 3.7-11 | 2067 | 2067 | 50 | 1.97 | 43.2 | 1.7 | 301 | 11.8 | 2.0 | 4.4 |
| A | MC38-10 | 615 165 109 0 | 3/8 | 10-30 | 7.4-22 | 1287 | 1287 | 50 | 1.97 | 43.2 | 1.7 | 347 | 13.7 | 2.0 | 4.4 |
| A | MC38-20 | 615 165 110 0 | 3/8 | 15-45 | 11-33 | 1092 | 1092 | 50 | 1.97 | 43.2 | 1.7 | 347 | 13.7 | 2.0 | 4.4 |
| B | MC51-10 | 615 165 111 0 | 1/2 | 25-70 | 18-52 | 650 | 650 | 50 | 1.97 | 51.2 | 2.0 | 366 | 14.4 | 2.9 | 6.4 |
| B | MC51-20 | 615 165 112 0 | 1/2 | 45-135 | 33-99 | 403 | 403 | 50 | 1.97 | 51.2 | 2.0 | 393 | 15.4 | 3.5 | 7.7 |

Posco 500 Positioning system

Flexibility and control

Used in conjunction with encoders equipped arms stand or carbon arm, the system ensures that the tool is positioned at the right screw during the operation. An output signal will confirm to your PLC that the job is done.



Easy programming

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

Optional Bit-Tray



615 917 508 0
(not needed if Bit tray used)

615 936 0470
Optional AC/DC adapter
Not needed if power taken from CVlx



| POSCO 500 BOX | PART NO. |
|--|---------------|
| Posco 500 controller desk | 615 932 656 0 |
| Posco 500 controller desk with I/O extension | 615 932 658 0 |
| Posco500 controller wall with I/O extension | 615 932 659 0 |
| AC/DC adapter 90-260V/24V 30W | 615 936 047 0 |
| I/O add-on board | 615 929 026 0 |

| CABLE | PART NO. |
|-------------------------------------|---------------|
| Cable Posco 500 / I-O CVI | 615 917 508 0 |
| Cable Posco 500 / Bit-Tray | 615 917 533 0 |
| Cable Y RS232 | 615 917 536 0 |
| Cable Posco 500 / Bit-Tray / CVlxII | 615 917 508 0 |
| I/O Adapter for CVlx II controllers | 615 919 003 0 |

| OTHERS | PART NO. |
|-----------------|---------------|
| Bit tray module | 615 929 025 0 |
| Mounted set | 615 930 777 0 |

| SOFTWARES & LICENCES | PART NO. |
|--------------------------------|---------------|
| Barcode license | 615 927 571 0 |
| Advanced Programming Licence | 615 927 572 0 |
| PC Connection licence 1 User | 615 927 573 0 |
| PC Connection licence 5 Users | 615 927 574 0 |
| PC Connection licence 10 Users | 615 927 575 0 |
| FAS support licence | 615 936 048 0 |

How to order?





Accessories

ECS / ECP / ECA / ECD



ACCESSORIES INCLUDED

| ITEM | PART NO. |
|--|---------------|
| 1 Side handle for ECP.L/S/LT versions | 467033 |
| 2 Fixed suspension bail for ECP.LT | 467003 |
| 3 Fixed suspension bail for ECS | 205 049 537 3 |
| 4 Stationary suspension bail for ECA15/20/30/40/60 / ECD | 615 571 056 0 |
| 5 Stationary suspension bail for ECA90/115/125/150/200 | 615 571 050 0 |
| 6 Socket ball retainer 3/8" for ECA15/20/30/40/60 | 615 770 028 0 |
| 7 Reaction bar for ECD20/30 | 615 396 191 0 |
| 8 Reaction bar for ECD50/70/120 | 615 595 259 0 |

OPTIONAL ACCESSORIES

| ITEM | PART NO. |
|--|---------------|
| ECP | |
| 5 High resistance Side handle for ECP L/S/LT versions | 615 397 012 0 |
| 6 Rotary right angle tool connector | 615 396 300 0 |
| 7 Suspension bail on a swivel for ECP L/S | 615 396 121 0 |
| 8 Suspension bail on a swivel for ECP HT | 615 571 072 0 |
| 9 Top cable length 4m for ECP.LT | 615 917 420 0 |
| 10 Protection sleeve for ECP HT | 615 573 131 5 |
| 11 Tool holster DTH90 | 615 812 119 0 |
| ECA / ECD | |
| 6 Rotary right angle tool connector | 615 396 300 0 |
| 10 Suspension bail on a swivel for ECA20/30/40/60 / ECD5/20/30 | 615 396 228 0 |
| 10 Suspension bail on a swivel for ECA70/90/115/125/150/200 / ECD5 | 615 396 229 0 |
| • Reaction bar ring for ECD20/30 | 615 396 191 0 |
| 11 Reaction bar ring for ECA60 | 615 396 226 0 |
| 11 Reaction bar ring for ECA70/90/115/125/150 | 615 396 227 0 |
| • Reaction bar ring for ECA200 | 615 396 230 0 |
| 12 Long lever start for ECA / ECD | 615 396 584 0 |
| • Tool clamp for ECD5 | 615 396 616 0 |
| ECS / ECSA | |
| 13 Reaction handle for ECS | 615 397 016 0 |
| 13 Stationary suspension bail for ECSA | 615 791 080 0 |
| • Tool clamp for ECS | 615 396 616 0 |
| 14 Pistol grip kit for ECS | 615 390 059 0 |
| Spring Loaded Shafts and Bearings Support for ECS-M20/ECSF | |
| 15 Bit Adaptor | 103782 |
| 16 Spring Loaded Shaft 25mm (1") stroke, 3/8" Sq Drive | 108342 |
| 17 Shaft Support and Nose Mount | 108412 |
| Nose Mounts for ECS-M20/ECSF | |
| 18 Nose Mount | 205 052 876 3 |
| 19 Flange | 205 052 875 3 |
| Offset Head and Spring Loaded Shaft for ECS-M20/ECSF | |
| 16 Spring loaded shaft 25mm (1") stroke, 3/8" square drive | 108342 |
| 20 Offset Head, Offset 30mm (1.18") | 384993 |
| Screwdriver Bit Adaptor for ECS/ECSA/ECS-M20/ECSF | |
| 21 3/8" Square to 1/4" HexPower Adaptor | 108322 |

Accessories



ECS / ECP / ECA / ECD

SOCKETS TRAY & BITS TRAY

- Socket tray (sockets not supplied)
- Bit tray (bits not included)

PART NO.

615 936 005 0
615 929 025 0

CABLE FOR SOCKET TRAY

PART NO.

| | |
|--------------------|----------------------|
| Cable 1m (3.3ft) | 615 917 241 0 |
| Cable 5m (16ft) | 615 917 242 0 |
| Cable 10m (32.8ft) | 615 917 244 0 |
| Cable 15m (49.2ft) | 615 917 245 0 |

CABLE FOR BIT TRAY

PART NO.

Extension cable 2m (6.4ft) **615 917 508 0**



CABLE FOR ECP / ECA / ECD TOOLS

PART NO.

| | |
|----------------------------|----------------------|
| Nutrunner cable 3m (9.8ft) | 615 917 461 0 |
| Nutrunner 5m (16ft) | 615 917 462 0 |
| Nutrunner 10m (32.8ft) | 615 917 464 0 |
| Nutrunner 15m (49.2ft) | 615 917 465 0 |

EXTENSION CABLE FOR ECS / ECP / ECA / ECD TOOLS

PART NO.

Extension cable 5m (16ft) **615 917 222 0**

Extension cable 10m (32.8ft) **615 917 224 0**

MC

OPTIONAL ACCESSORIES



- Motor/In-line connector assembly kit for MC35-10 to MC51-20

PART NO.

615 396 198 0

Transducer-holder from MC tool

- 3/8" square drive MC35/MC38
- 1/2" square drive MC51-10

615 396 426 0

615 396 427 0



CABLE FOR MC TOOLS

PART NO.

| | |
|-------------------------|----------------------|
| Tool cable 5m (16ft) | 615 917 232 0 |
| Tool cable 10m (32.8ft) | 615 917 234 0 |
| Tool cable 15m (49.2ft) | 615 917 235 0 |

EXTENSION CABLE FOR MC TOOLS

PART NO.

Tol extension cable 5m (16ft) **615 917 222 0**

Tool estension cable 10m (32.8ft) **615 917 224 0**



SLBN screwdrivers controllers

Advanced controller for SLBN screwdrivers

Flexible speed

- Speed adjustment



Fastening Strategies

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

Protection of the parameters

- Setting locked by key



Universal

- Compatible with all the SLBN range

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 | 160 | 6.3 | 75 | 2.95 | 55 | 2.17 | 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

Ergonomics

- 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 93

| PIC REF | MODEL | PART NUMBER | OUTPUT HEX | FREE SPEED | | TORQUE RANGE | | TORQUE RECOMMENDED | | VOLTAGE VDC | CONTROLLER |
|---------|-------|-------------|------------|------------|--------|--------------|-------|--------------------|-------|-------------|------------|
| | | | in | 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

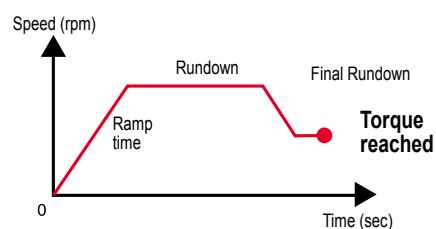
- OK/NOK with rehit protection

- I/O for integration with PLC for multiple functions



- 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

- Automatic sequence
- Up to 8 programs

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

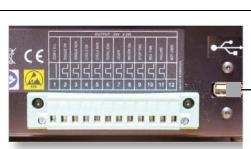
- POKE YOKE & Fastening Assurance System



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

- USB key
- Results saving
- Statistics

- High Torque Phase (HTL)
- 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 |

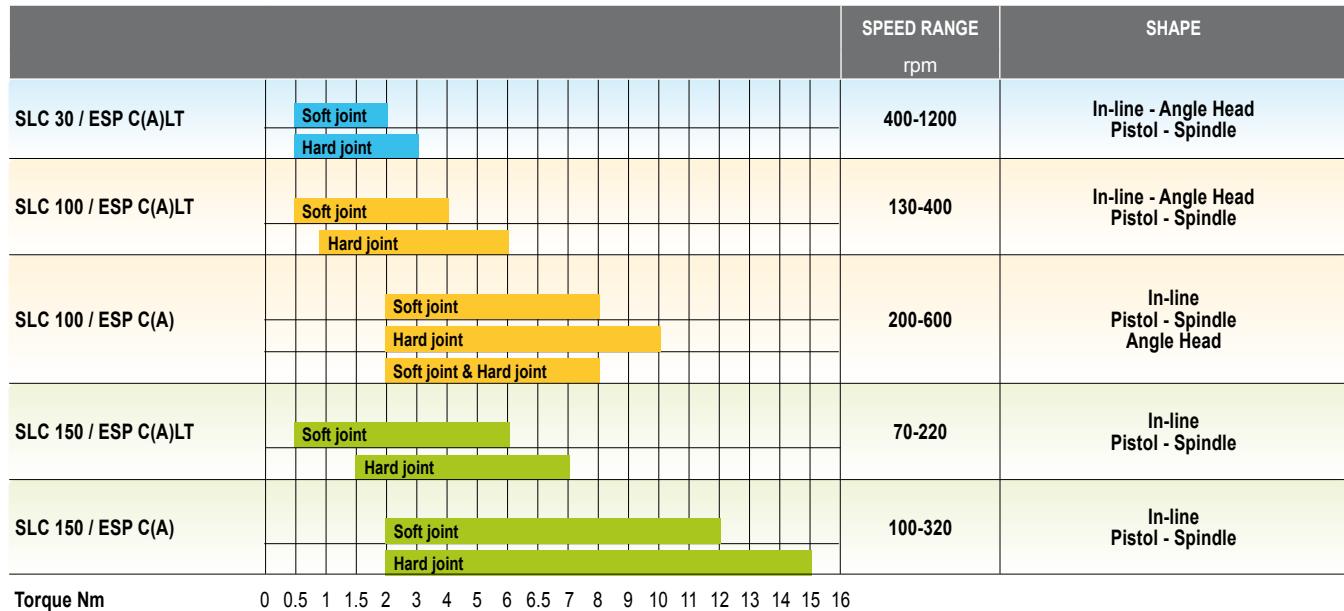


| PIC REF | MODEL | PART NUMBER | TORQUE RANGE | | SUPPLY VOLTAGE | DIMENSIONS | | | | | | WEIGHT | |
|---------|----------------|---------------|--------------|-----------|----------------|------------|-----|-----|-----|-----|-----|--------|-----|
| | | | Nm | in.lb | | mm | in. | mm | in. | mm | in. | 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



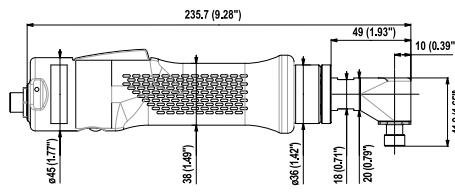
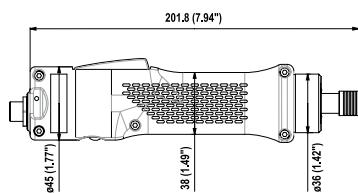
0.5 to 15 Nm (4.4 to 132.7 in.lb) - 70 to 1200 rpm



A



B



ACCESSORIES
see page 93

| PIC REF | MODEL | PART NUMBER | OUTPUT HEX | FREE SPEED | TORQUE RANGE | | | | WEIGHT | | CONTROLLER |
|------------|-------|----------------|---------------|---------------|--------------|-------|------|-------|--------|----|------------|
| | | | | | SOFT | SOFT | HARD | HARD | kg | lb | |
| | | | in. | rpm | Nm | in.lb | Nm | in.lb | kg | lb | |

IN-LINE - LOW VOLTAGE - CURRENT CONTROL - SHUT OFF

| | | | | | | | | | | | |
|---|------------------|---------------|-----|----------|-------|-----------|--------|-----------|-----|-----|-------------|
| A | SLC030-L1200-C4Q | 615 165 500 0 | 1/4 | 400-1200 | 0.5-2 | 4.4-17.7 | 0.6-3 | 5.3-26.5 | 0.5 | 1.1 | ESP C(A) LT |
| A | SLC100-L600-C4Q | 615 165 466 0 | 1/4 | 130-400 | 0.5-4 | 4.4-35.4 | 0.8-6 | 7.1-53.1 | 0.5 | 1.1 | ESP C(A) LT |
| A | SLC150-L320-C4Q | 615 165 467 0 | 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 |

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 |

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 | |

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 |
| A | SLC100-P600-C4Q | 615 165 462 0 | 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 |
| A | SLC150-P320-C4Q | 615 165 463 0 | 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 |
| B | SLC100-T600-C4Q | 615 165 464 0 | 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 |
| B | SLC150-T320-C4Q | 615 165 465 0 | 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 | SOFT | TORQUE RANGE | | | WEIGHT | | CONTROLLER |
|------------|-------|----------------|---------------|---------------|------|--------------|------|------|--------|----|------------|
| | | | | | | 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 |
| A | SLC100-F600-C4Q | 615 165 468 0 | 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 |
| A | SLC150-F320-C4Q | 615 165 469 0 | 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) |

Accessories



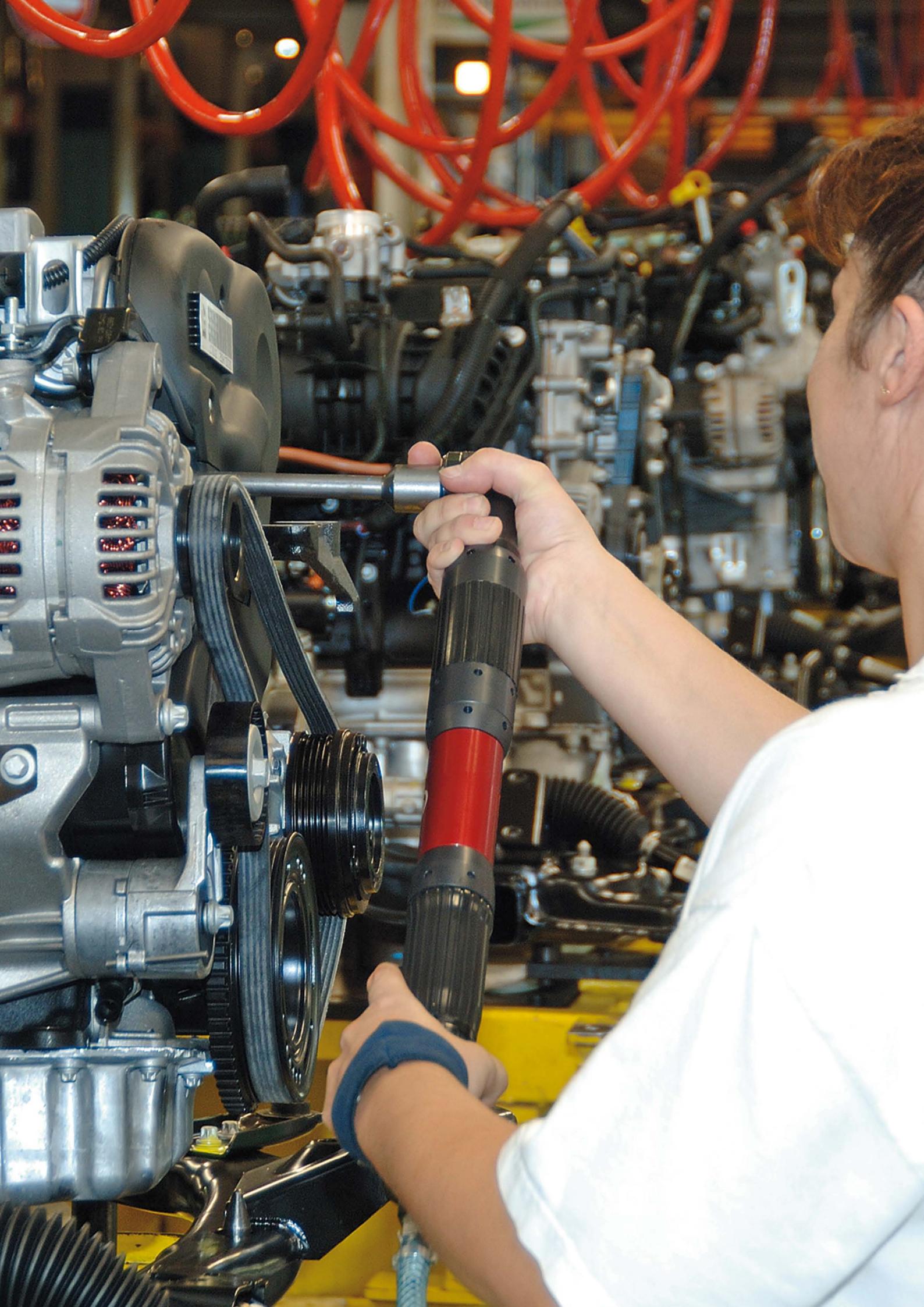
SLBN / SLC

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 | |

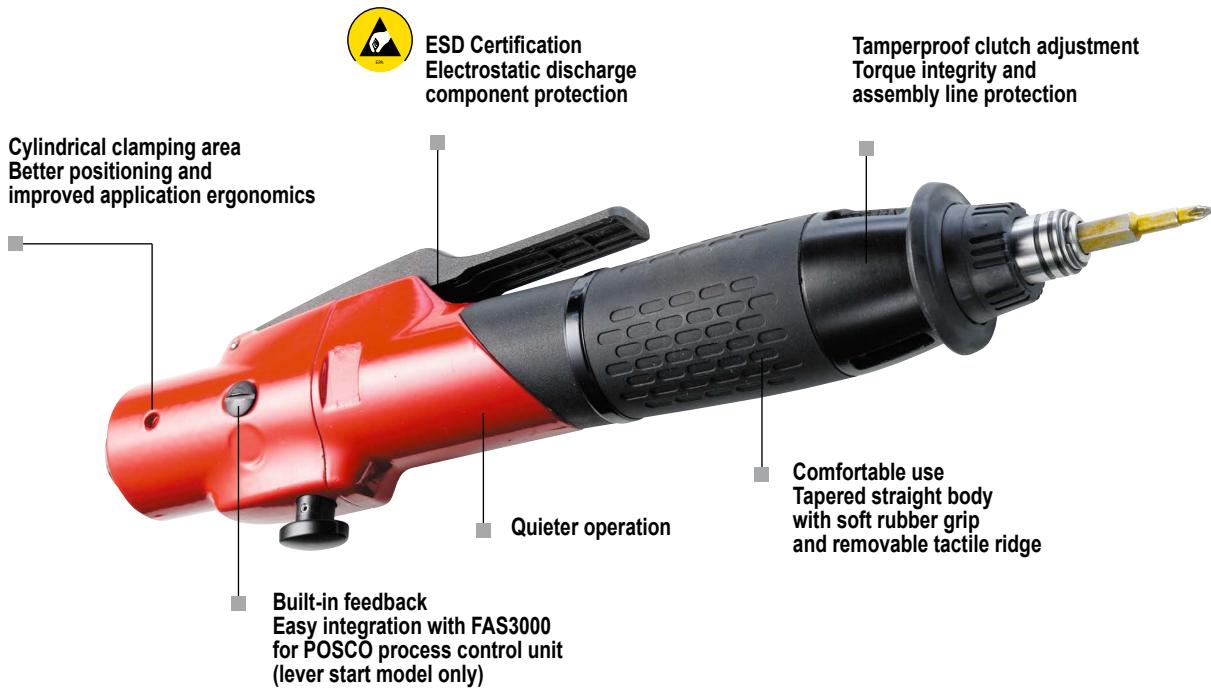
OPTIONAL ACCESSORIES

| ITEM | SLBN | SLC |
|---|---------------|-----|
| SLBN Tools | | |
| 1 Control Box | 615 932 709 0 | |
| 2 Shielded cable 3m for ESP2-A | 615 917 721 0 | |
| 3 Spiral cable 3m (9.9 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") strocke, 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 | |
| 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 153 | |
| 22 TRA - Telescopic arms | see page 165 | |
| 23 D57, D58 - Balancing arms | see page 170 | |
| 24 Torque tube | see page 169 | |



Pneumatic fastening tools

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

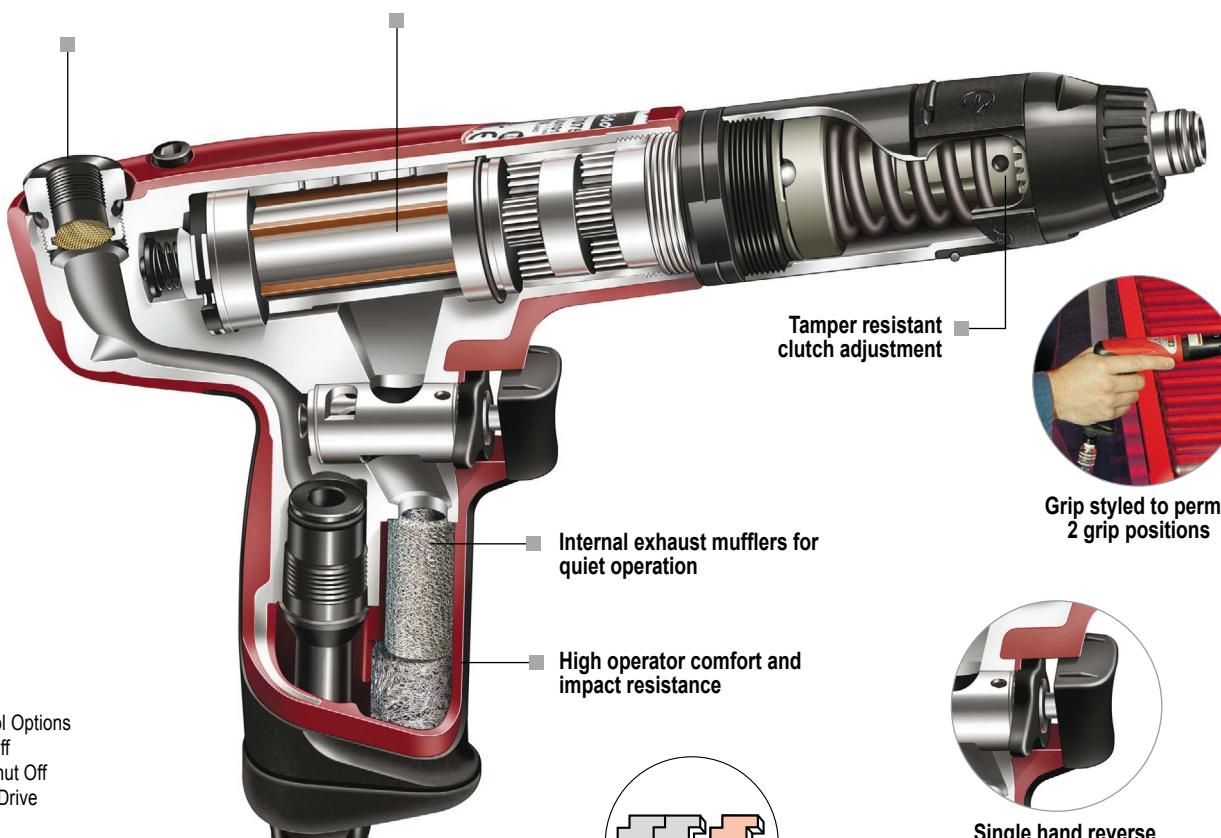


T shape grip for better balance to enhance operator comfort

Powerful, efficient, Dryline™ motor

CLUTCH AND MOTOR PROLONGING TOOL LIFE

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

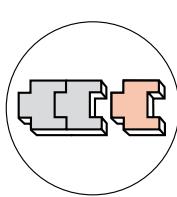


Modularity

Single hand reverse operation for right or left handed operators



Grip styled to permit 2 grip positions



Tool selection

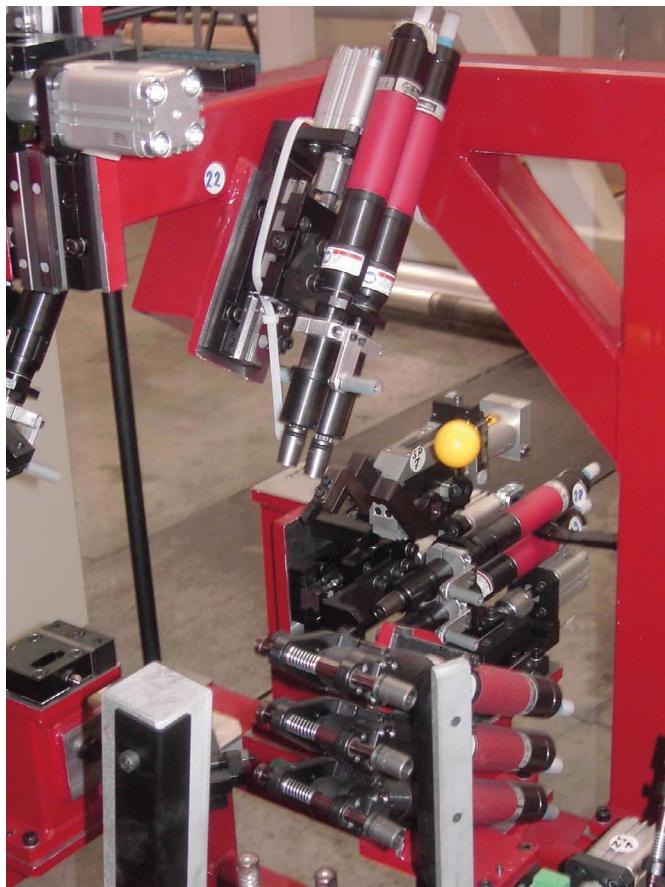
CRITERIA

- 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 |



Tool selection

FASTENER TORQUE VALUES

| ISO | MACHINE SCREWS | | | | | THREAD FORMING/ ROLLING SCREWS |
|----------------|----------------------------|------|------|------|------|-----------------------------------|
| | 4.6 | 5.8 | 8.8 | 10.9 | 12.9 | |
| 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 | |

| 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

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



Productivity and Ergonomics

ACCESS



90° Angle Heads



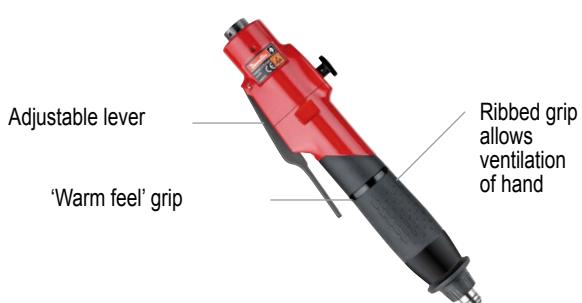
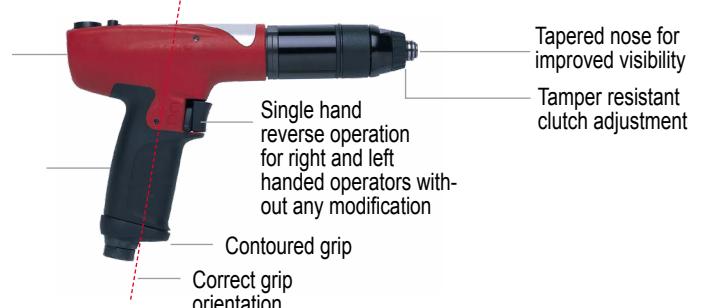
Crowfoot
Open Ended Wrenches

ERGONOMIC BENEFITS

- Lightweight
- Short Length
- Light Start Load

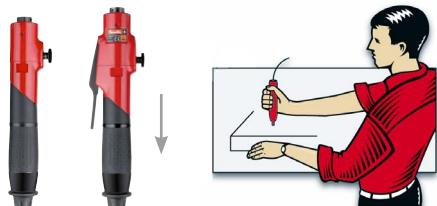
Pistol options of 'P' or 'T' style to suit the application and operator preference

'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

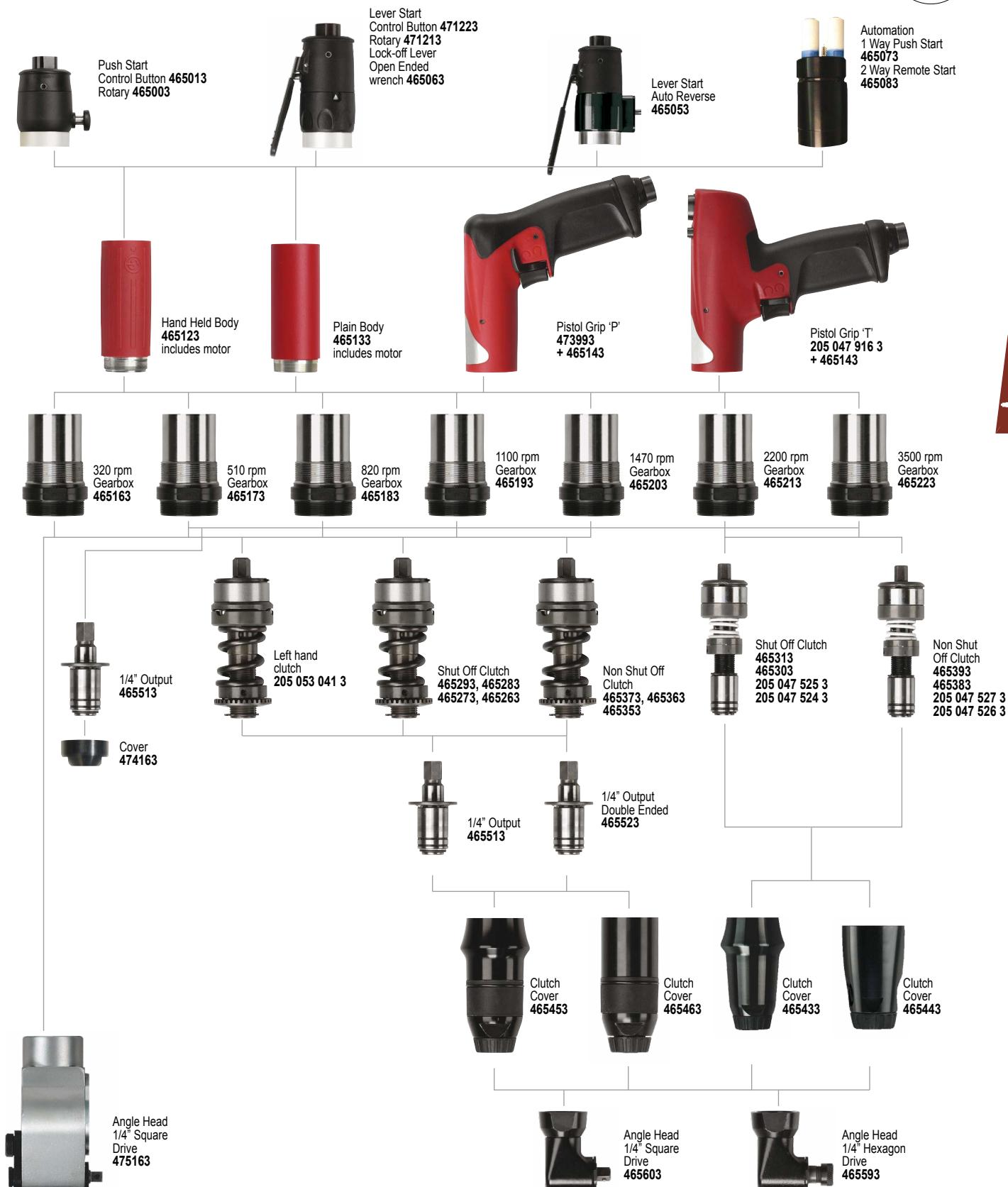
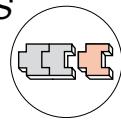
Push Start versus Lever Start

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



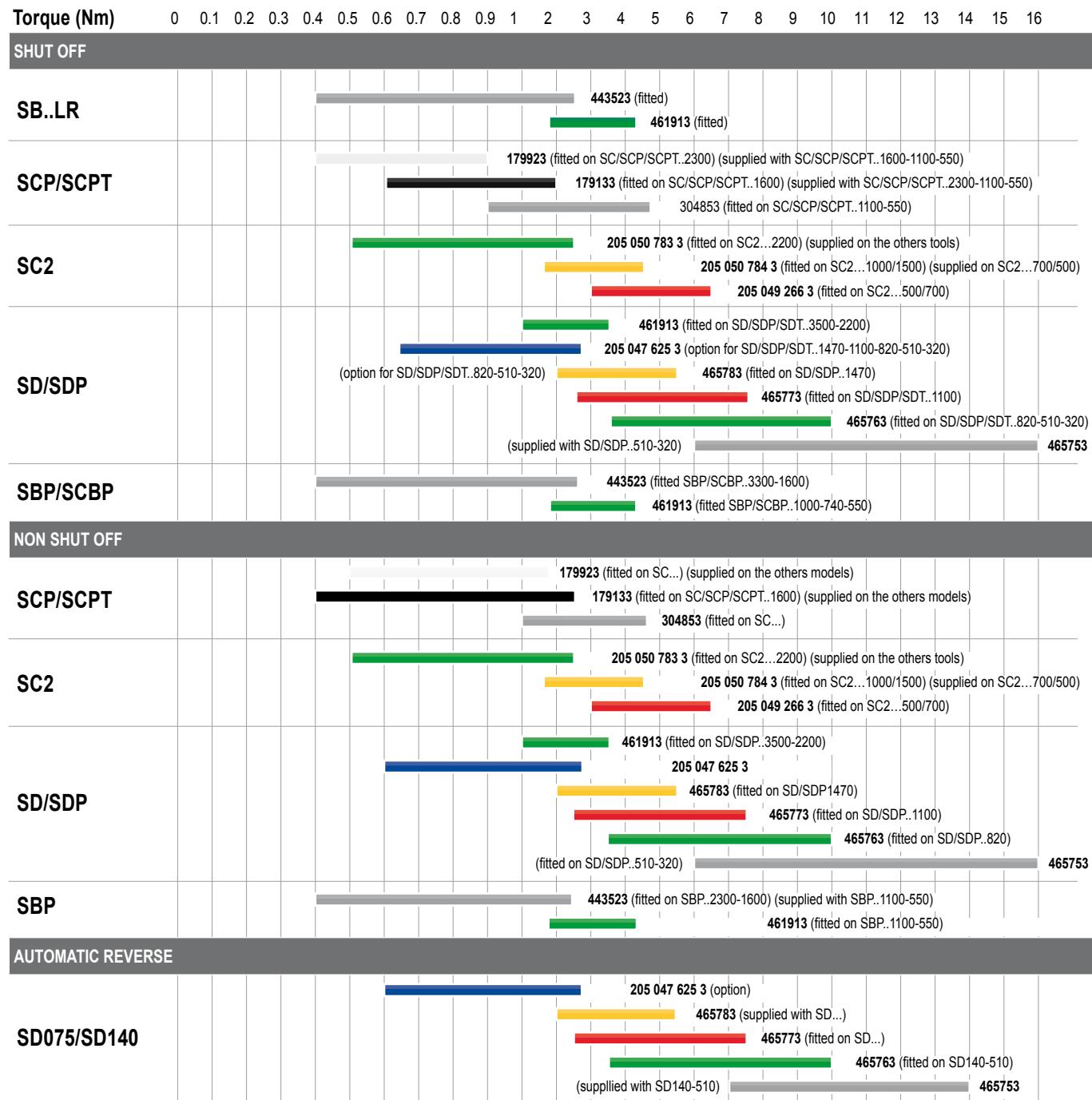
Modularity, a concept for all Desoutter pneumatic screwdrivers range

Screwdriver Torque Ranges

Torque output of the range of shut off and non shut off screwdrivers is controlled by the type of spring in the clutch assembly.

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

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



Tool Types and Torque Ranges

Torque : Nm (in.lb)

SHUT OFF

| | | 0 | 1 | 5 | 10 | 15 | 20 | 30 | 40 | 50 | 100 | 150 | 200 | 250 |
|------------------------------|-------------------|---|---|---------------------------|--------------------------|---------------------------|----|----|----|----|-----|-----|-----|-----|
| Push Start | 2A89 | | | 0.09-0.78 (0.8-6.9 in.lb) | | | | | | | | | | |
| | SB | | | 0.4-2.5 (3.5-22 in.lb) | | | | | | | | | | |
| | SC2 | | | 0.5-6.5 (4.4-57.5 in.lb) | | | | | | | | | | |
| | SD | | | | 0.6-16 (5.3-122 in.lb) | | | | | | | | | |
| Lever Start | SB | | | 0.5-4.7 (4.4-41.6 in.lb) | | | | | | | | | | |
| | SC2 | | | 0.5-6.5 (4.4-57.5 in.lb) | | | | | | | | | | |
| | SD | | | | 0.6-16 (5.3-122 in.lb) | | | | | | | | | |
| Push and Trigger Start | SBP | | | 0.4-4.7 (3.5-41.6 in.lb) | | | | | | | | | | |
| Trigger Start | SCBP / SCP | | | 0.4-4.7 (3.5-41.6 in.lb) | | | | | | | | | | |
| | SDP | | | | 1.0-16.0 (8.8-142 in.lb) | | | | | | | | | |
| Trigger Start, Top Air Inlet | SDT | | | | 1.0-16.0 (8.8-142 in.lb) | | | | | | | | | |
| Push Start, Top Air Inlet | SCPT | | | 0.4-4.7 (3.5-41.6 in.lb) | | | | | | | | | | |
| Angle head | SC | | | 0.4-4.7 (3.5-41.6 in.lb) | | | | | | | | | | |
| | SD | | | | 2.5-27 (22.1-239 in.lb) | | | | | | | | | |
| | SH | | | | | 2.5-200 (22.1-1770 in.lb) | | | | | | | | |

HTL SHUT OFF

| | |
|------------|--------------------------|
| SC | 0.4-4.7 (3.5-41.6 in.lb) |
| SCP | 0.4-4.7 (3.5-41.6 in.lb) |

NON SHUT OFF

| | | |
|------------------------------|-------------|--------------------------|
| Push Start | SC2 | 0.5-6.5 (4.4-57.5 in.lb) |
| | SD | 0.6-10 (5.3-88.5 in.lb) |
| Lever Start | SC2 | 0.5-6.5 (4.4-57.5 in.lb) |
| | SD | 0.6-10 (5.3-88.5 in.lb) |
| Push and Trigger Start | SBP | 0.4-4.4 (3.5-38.9 in.lb) |
| Trigger Start | SCP | 0.4-4.4 (3.5-38.9 in.lb) |
| | SDP | 0.6-10 (5.3-88.5 in.lb) |
| Trigger Start, Top Air Inlet | SDT | 1-10 (8.9-88.5 in.lb) |
| Push Start, Top Air Inlet | SCPT | 0.4-4.4 (3.5-38.9 in.lb) |
| Angle head | SC | 0.4-4.4 (3.5-38.9 in.lb) |
| | SD | 2.5-19 (22.1-168 in.lb) |

AUTOMATIC REVERSE

| | |
|-----------|------------------------|
| SD | 0.6-14 (5.3-124 in.lb) |
|-----------|------------------------|

DIRECT DRIVE

| | | |
|---------------|-------------|-------------------------|
| Trigger start | SDP | 1.0-14 (8.8-124 in.lb) |
| Angle head | SD | 1.5-13 (13.3-115 in.lb) |
| Angle Wrench | H410 | 3-105 (26.5-929 in.lb) |

Torque : Nm (ft.lb)

IMPULSE

| | | |
|---------------|---------------------|-----------------------|
| Lever Start | Shut off | 5-25 (4-18 ft.lb) |
| | Non Shut off | 20-31 (15-23 ft.lb) |
| Trigger Start | Shut off | 5-450(4-332 ft.lb) |
| | Non Shut off | 9-240 (6.6-177 ft.lb) |

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) | |



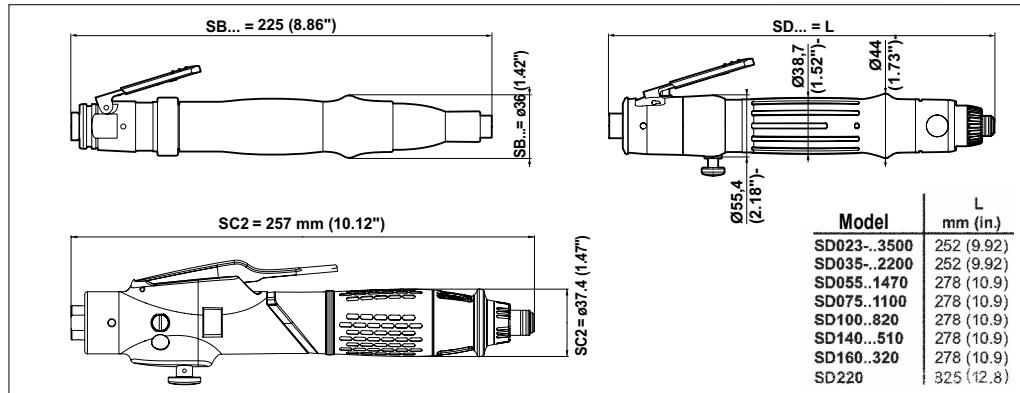
ACCESSORIES
see page 116

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. | nm |
| 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 | SD023-AB3500-S4Q | 1462834 | 3500 | 1/4 | 1.0-2.3 | 8.9-20.3 | 1.0-2.3 | 8.9-20.3 | 0.73 | 1.61 | 8.7 | 18.4 | 1/4 | 10 | 3/8 | |
| 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 | SD023-AR3500-S4Q | 1462764 | 3500 | 1/4 | 1.0-2.3 | 8.9-20.4 | 1.0-2.3 | 8.9-20.4 | 0.73 | 1.61 | 8.7 | 18.4 | 1/4 | 10 | 3/8 | |
| E | SD035-AR2200-S4Q | 1462754 | 2200 | 1/4 | 1.0-3.5 | 8.9-31 | 1.0-3.5 | 8.9-31 | 0.73 | 1.61 | 8.7 | 18.4 | 1/4 | 10 | 3/8 | |
| 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 116

| 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. |
| A | SB021-LR1400-S4Q | 205 147 508 4 | 1400 | 1/4 Hex | 0.5-2.1 | 4.4-18.6 | 0.5-2.1 | 4.4-18.6 | 0.61 | 1.34 | 7.3 | 15.5 | 1/8 | 6 | 1/4 |
| A | SB043-LR1050-S4Q | 205 147 507 4 | 1050 | 1/4 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 | SD023-LB3500-S4Q | 1463 094 | 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 |
| C | SD035-LB2200-S4Q | 1463 084 | 2200 | 1/4 Hex | 1.0-3.5 | 8.9-31 | 1.0-3.5 | 8.9-31 | 0.76 | 1.67 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD055-LB1470-S4Q | 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 | SD035-LR2200-S4Q | 1463 014 | 2200 | 1/4 Hex | 1.0-3.5 | 8.9-31 | 1.0-3.5 | 8.9-31 | 0.76 | 1.67 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| D | SD055-LR1470-S4Q | 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 | 205147937 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 | 205147979 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 | $\varnothing A$ mm (in.) | L mm (in.) | | Model | L mm (in.) |
|---|--------------|-----------------------------|---------------|--|--------------|---------------|
| SBP.. = 147 (5.79") Others = 144 (5.67") | 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) | | | |



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

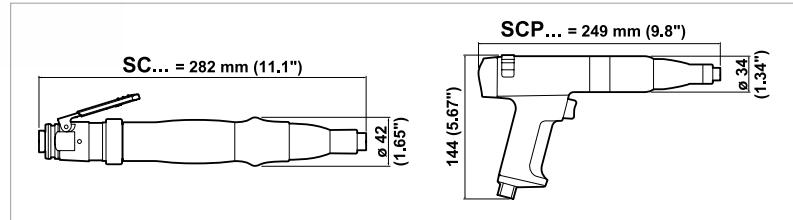
| | | | | | | | | | | | | | | | |
|---|-------------------|------------|------|-----|---------|-----------|---------|-----------|------|------|-----|------|-----|----|-----|
| A | SCBP021-T2300-S4Q | 1466374 | 2300 | 1/4 | 0.4-2.1 | 3.5-18.6 | 0.4-2.1 | 3.5-18.6 | 0.82 | 1.81 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| A | SCBP021-T1600-S4Q | 1466364 | 1600 | 1/4 | 0.4-2.1 | 3.5-18.6 | 0.4-2.1 | 3.5-18.6 | 0.82 | 1.81 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| A | SCBP043-T1100-S4Q | 1466354 | 1100 | 1/4 | 0.4-4.3 | 3.5-38 | 1.8-4.3 | 15.9-38 | 0.82 | 1.81 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| A | SCBP044-T740-S4Q | 1466344 | 740 | 1/4 | 0.4-4.4 | 3.5-39 | 1.8-4.4 | 15.9-39 | 0.82 | 1.81 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| A | SCBP047-T550-S4Q | 1466334 | 550 | 1/4 | 0.4-4.7 | 3.5-41.6 | 1.8-4.7 | 15.9-41.6 | 0.82 | 1.81 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| B | SCP021-T2300-S4Q | 1456734 | 2300 | 1/4 | 0.4-2.1 | 3.5-18.6 | 0.4-0.9 | 3.5-7.9 | 0.86 | 1.89 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| B | SCP021-T1600-S4Q | 1456744 | 1600 | 1/4 | 0.4-2.1 | 3.5-18.6 | 0.6-2.1 | 5.3-18.6 | 0.86 | 1.89 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| B | SCP043-T1100-S4Q | 1456754 | 1100 | 1/4 | 0.4-4.3 | 3.5-38 | 0.9-4.3 | 7.9-38 | 0.86 | 1.89 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| B | SCP047-T550-S4Q | 1456764 | 550 | 1/4 | 0.4-4.7 | 3.5-41.6 | 0.9-4.7 | 7.9-41.6 | 0.86 | 1.89 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| C | SDP023-T3400-S4Q | 1465574 | 3400 | 1/4 | 1.0-2.3 | 8.9-20.3 | 1.0-2.3 | 8.9-20.3 | 0.9 | 1.98 | 9.0 | 19.1 | 1/4 | 10 | 3/8 |
| C | SDP035-T2100-S4Q | 1465564 | 2100 | 1/4 | 1.0-3.5 | 8.9-31 | 1.0-3.5 | 8.9-31 | 0.9 | 1.98 | 9.0 | 19.1 | 1/4 | 10 | 3/8 |
| C | SDP055-T1400-S4Q | 1465554 | 1400 | 1/4 | 1.0-5.5 | 8.9-48.7 | 1.0-5.5 | 8.9-48.7 | 1.0 | 2.20 | 9.0 | 19.1 | 1/4 | 10 | 3/8 |
| C | SDP075-T1050-S4Q | 1465544 | 1050 | 1/4 | 0.6-7.5 | 5.3-66.4 | 2.5-7.5 | 22.1-66.4 | 1.0 | 2.20 | 9.0 | 19.1 | 1/4 | 10 | 3/8 |
| C | SDP100-T780-S4Q | 1465534 | 780 | 1/4 | 0.6-10 | 5.3-88.5 | 3.5-10 | 31.0-88.5 | 1.0 | 2.20 | 9.0 | 19.1 | 1/4 | 10 | 3/8 |
| C | SDP140-T490-S4Q | 1465524 | 490 | 1/4 | 0.6-14 | 5.3-124 | 3.5-10 | 31.0-88.5 | 1.0 | 2.20 | 9.0 | 19.1 | 1/4 | 10 | 3/8 |
| C | SDP160-T300-S4Q | 1465514 | 300 | 1/4 | 0.6-16 | 5.3-142 | 3.5-10 | 31.0-88.5 | 1.0 | 2.20 | 9.0 | 19.1 | 1/4 | 10 | 3/8 |
| C | SDP045-T180-S4Q | 2051467064 | 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 | 2051476234 | 1100 | 1/4 | 1.0-3.5 | 8.9-31 | 1.0-3.5 | 8.9-31 | 1.0 | 2.20 | 9.0 | 19.1 | 1/4 | 10 | 3/8 |
| D | SDT035-T2200-S4Q | 1465774 | 2200 | 1/4 | 1.0-3.5 | 8.9-31 | 1.0-3.5 | 8.9-31 | 1.1 | 2.42 | 9.0 | 19.1 | 1/4 | 10 | 3/8 |
| D | SDT055-T1470-S4Q | 1465764 | 1470 | 1/4 | 2.0-5.5 | 17.7-48.7 | 2.0-5.5 | 17.7-48.7 | 1.1 | 2.42 | 9.0 | 19.1 | 1/4 | 10 | 3/8 |
| D | SDT075-T1100-S4Q | 1465754 | 1100 | 1/4 | 2.5-7.5 | 22.1-66.4 | 2.5-7.5 | 22.1-66.4 | 1.1 | 2.42 | 9.0 | 19.1 | 1/4 | 10 | 3/8 |
| D | SDT100-T820-S4Q | 1465744 | 820 | 1/4 | 3.5-10 | 31.0-88.5 | 3.5-10 | 31.0-88.5 | 1.1 | 2.42 | 9.0 | 19.1 | 1/4 | 10 | 3/8 |
| D | SDT140-T510-S4Q | 1465734 | 510 | 1/4 | 3.5-14 | 31.0-124 | 3.5-10 | 31.0-88.5 | 1.1 | 2.42 | 9.0 | 19.1 | 1/4 | 10 | 3/8 |
| D | SDT160-T320-S4Q | 1465724 | 320 | 1/4 | 3.5-16 | 31.0-142 | 3.5-10 | 31.0-88.5 | 1.1 | 2.42 | 9.0 | 19.1 | 1/4 | 10 | 3/8 |

PUSH START, TOP AIR INLET

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

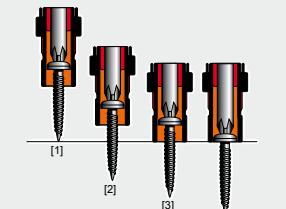
Screwdrivers - Shut off HLT

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

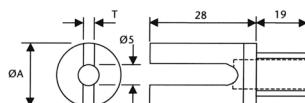
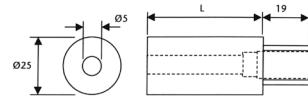
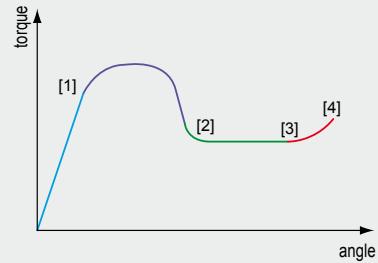


TYPICAL HLT CYCLE

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



Depth stop changes tool from direct drive to clutch operation



DEPTH STOPS

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

| PIC REF | PART NUMBER | T | ØA |
|---------|-------------|---|----|
| D | 440863* | 5 | 25 |

* Supplied with tools

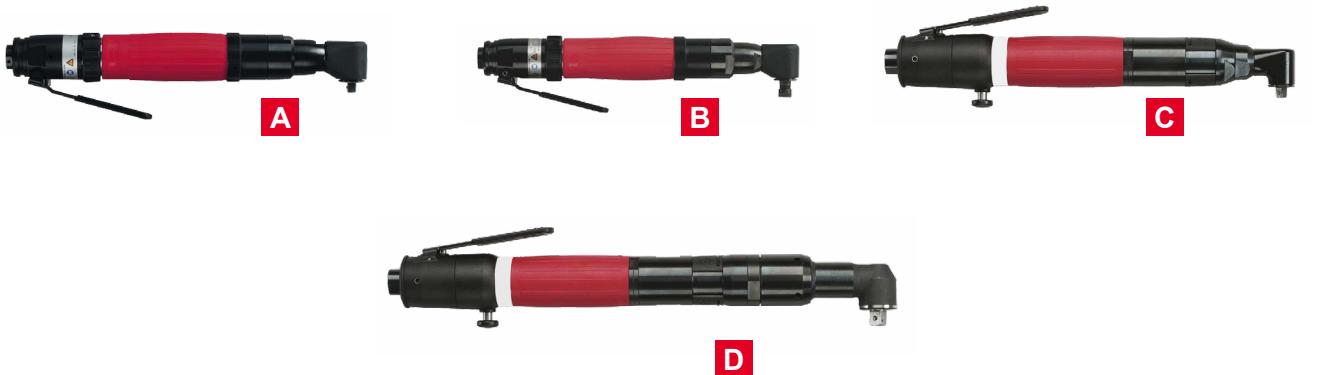


ACCESSORIES
see page 116

| 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 | SC021-L1600-HLT4M | 1459614 | 1600 | 1/4 | 0.6-2.1 | 5.3-18.6 | 0.6-2.1 | 5.3-18.6 | 0.79 | 1.74 | 7 | 15.4 | 1/8 | 6 | 1/4 |
| A | SC022-L1100-HLT4M | 1459654 | 1100 | 1/4 | 0.6-2.1 | 5.3-18.6 | 0.6-2.1 | 5.3-18.6 | 0.79 | 1.74 | 7 | 15.4 | 1/8 | 6 | 1/4 |
| A | SC022-L550-HLT4M | 1459664 | 550 | 1/4 | 0.6-2.1 | 5.3-18.6 | 0.6-2.1 | 5.3-18.6 | 0.79 | 1.74 | 7 | 15.4 | 1/8 | 6 | 1/4 |
| A | SC043-L1100-HLT4M | 1459624 | 1100 | 1/4 | 0.9-4.3 | 7.9-38.0 | 0.9-4.3 | 7.9-38.0 | 0.79 | 1.74 | 7 | 15.4 | 1/8 | 6 | 1/4 |
| A | SC047-L550-HLT4M | 1459634 | 550 | 1/4 | 0.9-4.7 | 7.9-41.6 | 0.9-4.7 | 7.9-41.6 | 0.79 | 1.74 | 7 | 15.4 | 1/8 | 6 | 1/4 |
| B | SCP021-T1600-HLT4M | 1459714 | 1600 | 1/4 | 0.6-2.1 | 5.3-18.6 | 0.6-2.1 | 5.3-18.6 | 1.00 | 2.20 | 7 | 15.4 | 1/8 | 6 | 1/4 |
| B | SCP043-T1100-HLT4M | 1459734 | 1100 | 1/4 | 0.9-4.3 | 7.9-38.0 | 0.9-4.3 | 7.9-38.0 | 1.00 | 2.20 | 7 | 15.4 | 1/8 | 6 | 1/4 |
| B | SCP047-T550-HLT4M | 1459754 | 550 | 1/4 | 0.9-4.7 | 7.9-41.6 | 0.9-4.7 | 7.9-41.6 | 1.00 | 2.20 | 7 | 15.4 | 1/8 | 6 | 1/4 |

Angle Head - Shut off

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



ACCESSORIES
see page 118

| 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 | SC021-L2000-S90A4S | 1459154 | 2000 | 1/4 sq | 0.4-2.1 | 3.5-18.6 | 0.4-0.9 | 3.5-7.9 | 275 | 10.8 | 0.84 | 1.85 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| A | SC021-L1400-S90A4S | 1459144 | 1400 | 1/4 sq | 0.4-2.1 | 3.5-18.6 | 0.6-2.1 | 5.3-18.6 | 275 | 10.8 | 0.84 | 1.85 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| A | SC043-L950-S90A4S | 1459134 | 950 | 1/4 sq | 0.4-4.3 | 3.5-38 | 0.9-4.3 | 7.9-38 | 275 | 10.8 | 0.84 | 1.85 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| A | SC047-L500-S90A4S | 1459124 | 500 | 1/4 sq | 0.4-4.7 | 3.5-41.5 | 0.9-4.7 | 7.9-41.5 | 275 | 10.8 | 0.84 | 1.85 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| B | SC021-L2000-S90A4H | 1459074 | 2000 | 1/4 hex | 0.4-2.1 | 3.5-18.6 | 0.4-0.9 | 3.5-7.9 | 275 | 10.8 | 1.12 | 2.47 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| B | SC021-L1400-S90A4H | 1459064 | 1400 | 1/4 hex | 0.4-2.1 | 3.5-18.6 | 0.6-2.1 | 5.3-18.6 | 275 | 10.8 | 1.12 | 2.47 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| 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 | SD070-LB1100-S90-A4H | 1463254 | 1100 | 1/4 hex | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.12 | 2.47 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LB820-S90-A4H | 1463244 | 820 | 1/4 hex | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.12 | 2.47 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LB510-S90-A4H | 1463234 | 510 | 1/4 hex | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.12 | 2.47 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LB320-S90-A4H | 1463224 | 320 | 1/4 hex | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.12 | 2.47 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LR1100-S90-A4H | 1463294 | 1100 | 1/4 hex | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LR510-S90-A4H | 1463274 | 510 | 1/4 hex | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LR320-S90-A4H | 1463264 | 320 | 1/4 hex | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LB1100-S90-A4S | 1463374 | 1100 | 1/4 sq | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LB820-S90-A4S | 1463364 | 820 | 1/4 sq | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LB510-S90-A4S | 1463354 | 510 | 1/4 sq | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LB320-S90-A4S | 1463344 | 320 | 1/4 sq | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LR1100-S90-A4S | 1463414 | 1100 | 1/4 sq | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LR820-S90-A4S | 1463404 | 820 | 1/4 sq | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LR510-S90-A4S | 1463394 | 510 | 1/4 sq | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LR320-S90-A4S | 1463384 | 320 | 1/4 sq | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 305 | 12.0 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LR170-S90-A4S | 205 146 705 4 | 170 | 1/4 sq | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 306 | 12.0 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| 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 |
| D | 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 |
| D | 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 |
| D | SD209-LB370-S90-A10S | 1463474 | 370 | 3/8 sq | 6-19 | 53.1-168 | 6-19 | 53.1-168 | 376 | 14.8 | 1.50 | 3.31 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| D | 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 |
| D | 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 |
| D | 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 |
| D | 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 |
| D | SD209-LR370-S90-A10S | 1463524 | 370 | 3/8 sq | 6-19 | 53.1-168 | 6-19 | 53.1-168 | 376 | 14.8 | 1.41 | 3.11 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| D | 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 |
| D | SD300-LR180-S90-A10S | 205 146 704 4 | 180 | 3/8 sq | 11-27 | 97.3-239 | 11-27 | 97.3-239 | 375 | 14.8 | 1.50 | 3.30 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |

SH range - Angle head - Shut off

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



A



B



C

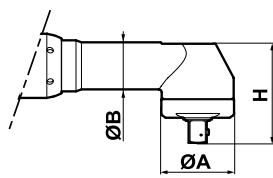


D



E

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 118

| PIC REF | MODEL | PART NUMBER | BOLT SIZE | FREE SPEED | SQUARE DRIVE | TORQUE RANGE | | LENGTH | | WEIGHT | | AIR FLOW | | AIR INLET | HOSE INT. Ø | |
|------------|-----------------------|----------------|--------------|---------------|-----------------|-----------------|-----------|--------|------|--------|-----|-------------|-----|--------------|----------------|------|
| | | | | | | Nm | in.lb | mm | in. | kg | lb. | l/s | cfm | | | |
| 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 |

Screwdrivers - Non Shut off - Push and Lever start

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



| SC2 = 257 mm (10.12") | SD.. = L | 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 116

Types A, B and F - 5/16" hex 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. |

PUSH START

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

LEVER START

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

Screwdrivers - Non Shut Off - Pistol Grip

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



| | | |
|---|---|--|
| | | |
| Model L 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) | Model L SDT023..3500 212 (8.35) SDT035..2200 212 (8.35) SDT055..1470 238 (9.37) SDT075..1100 238 (9.37) SDT100..800 238 (9.37) SDT140..510 238 (9.37) SDT160..320 238 (9.37) | |



ACCESSORIES
see page 116

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

PUSH AND TRIGGER START

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

TRIGGER START

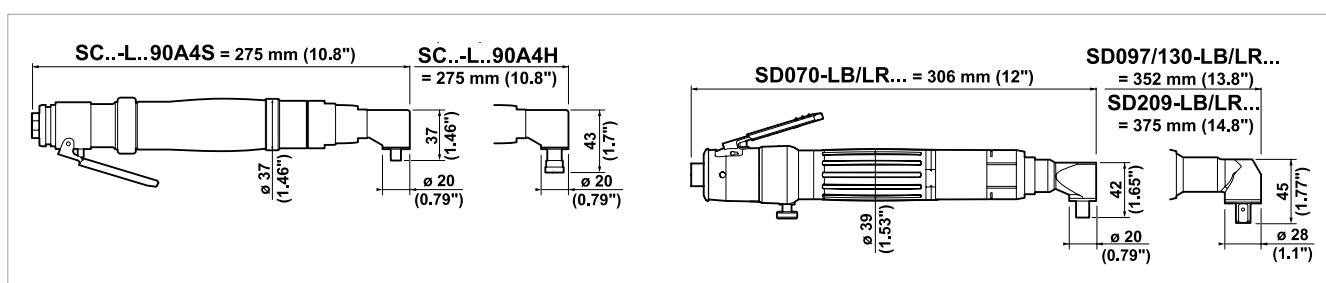
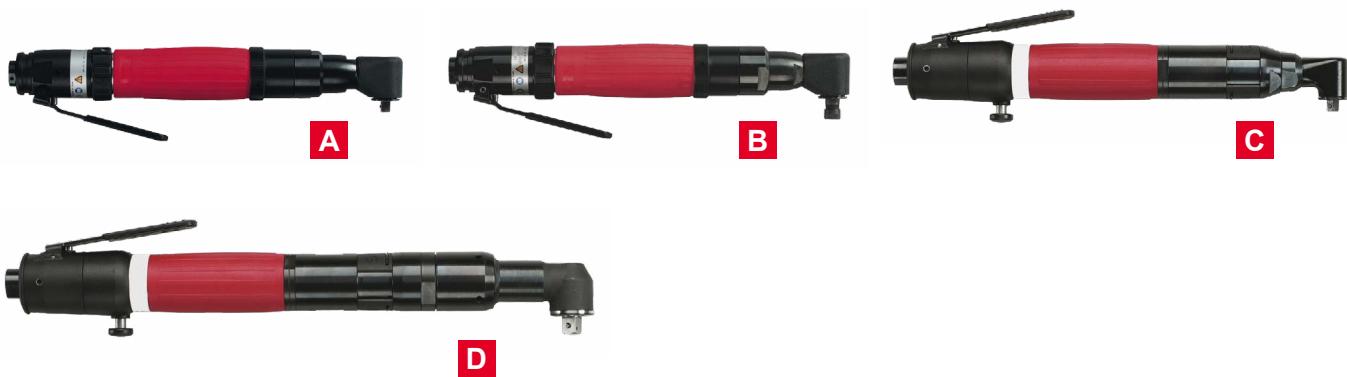
| | | | | | | | | | | | | | | | |
|---|------------------|---------------|------|-----|---------|-----------|---------|-----------|------|------|-----|------|-----|----|-----|
| B | SCP022-T1600-R4Q | 1456784 | 1600 | 1/4 | 0.5-2.2 | 4.4-19.4 | 0.8-2.2 | 7.1-19.4 | 0.86 | 1.89 | 6.5 | 13.8 | 1/8 | 6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

PUSH START, TOP AIR INLET

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

Angle head - Non Shut off

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



ACCESSORIES
see page 118

| 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. |
| A | SC024-L2000-R90A4S | 1459194 | 2000 | 1/4 sq | 0.5-2.4 | 4.4-21.2 | 0.5-1.8 | 4.4-15.9 | 0.84 | 1.85 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| A | SC022-L1400-R90A4S | 1459184 | 1400 | 1/4 sq | 0.5-2.2 | 4.4-19.5 | 0.8-2.2 | 7.1-19.5 | 0.84 | 1.85 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| A | SC044-L950-R90A4S | 1459174 | 950 | 1/4 sq | 0.4-4.4 | 3.5-38.9 | 1.3-4.4 | 11.5-38.9 | 0.84 | 1.85 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| A | SC044-L500-R90A4S | 1459164 | 500 | 1/4 sq | 0.4-4.4 | 3.5-38.9 | 1.4-4.4 | 8.9-38.9 | 0.84 | 1.85 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| B | SC024-L2000-R90A4H | 1459114 | 2000 | 1/4 hex | 0.5-2.4 | 4.4-21.2 | 0.5-1.8 | 4.4-15.9 | 0.84 | 1.85 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| B | SC044-L950-R90A4H | 1459094 | 950 | 1/4 hex | 0.4-4.4 | 3.5-38.9 | 1.3-4.4 | 11.5-38.9 | 0.84 | 1.85 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| B | SC044-L500-R90A4H | 1459084 | 500 | 1/4 hex | 0.4-4.4 | 3.5-38.9 | 1.4-4.4 | 8.9-38.9 | 0.84 | 1.85 | 6.5 | 13.8 | 1/8 | 6 | 1/4 |
| C | SD070-LB1100-R90-A4H | 1463334 | 1100 | 1/4 hex | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 1.12 | 2.47 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LB820-R90-A4H | 1463324 | 820 | 1/4 hex | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 1.12 | 2.47 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LB510-R90-A4H | 1463314 | 510 | 1/4 hex | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 1.12 | 2.47 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LR320-R90-A4H | 1463624 | 320 | 1/4 hex | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 1.12 | 2.47 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LB1100-R90-A4S | 1463454 | 1100 | 1/4 sq | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LB510-R90-A4S | 1463434 | 510 | 1/4 sq | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| C | SD070-LR320-R90-A4S | 1463664 | 320 | 1/4 sq | 2.5-7 | 22-61.9 | 2.5-7 | 22-61.9 | 1.11 | 2.45 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| D | SD097-LB1080-R90-A10S | 1463584 | 1080 | 3/8 sq | 3-9.7 | 26.5-85.8 | 3-9.7 | 26.5-85.8 | 1.41 | 3.11 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| D | SD130-LB600-R90-A10S | 1463574 | 600 | 3/8 sq | 4.5-12 | 39.8-106 | 4.5-12 | 39.8-106 | 1.41 | 3.11 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| D | SD209-LB370-R90-A10S | 1463564 | 370 | 3/8 sq | 6-19 | 53.1-168 | 6-19 | 53.1-168 | 1.50 | 3.31 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| D | SD097-LR1080-R90-A10S | 1463724 | 1080 | 3/8 sq | 3-9.7 | 26.5-85.8 | 3-9.7 | 26.5-85.8 | 1.41 | 3.11 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| D | SD130-LR600-R90-A10S | 1463714 | 600 | 3/8 sq | 4.5-12 | 39.8-106 | 4.5-12 | 39.8-106 | 1.41 | 3.11 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| D | SD209-LR370-R90-A10S | 1463704 | 370 | 3/8 sq | 6-19 | 53.1-168 | 6-19 | 53.1-168 | 1.50 | 3.31 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |

Angle Head - Direct drive

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



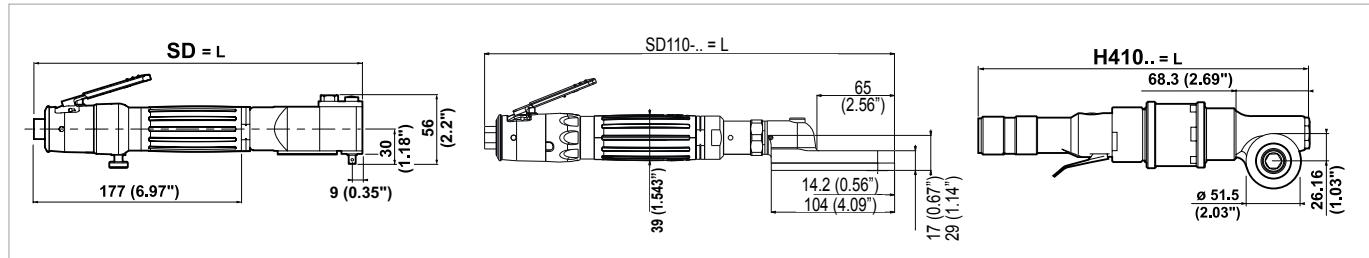
A



B



C



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



ACCESSORIES
see page 118

| MODEL | REGULATOR POSITION | | | | | | | OPEN |
|---------------------------------|--------------------|-----|-----|-----|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | | |
| 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 | | | | | | | | | | OPEN |
|---------------------------------|--------------------|------|------|------|------|------|------|------|------|-----|------|
| | 10 % | 20 % | 30 % | 40 % | 50 % | 60 % | 70 % | 80 % | 90 % | | |
| 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 | |
|---------|---------------------|---------------|------------|--------------|--------------|----------|----------|------|--------|------|----------|------|-----------|-------------|-----|
| | | | rpm | in. | Nm | in.lb | mm | in. | kg | lb. | l/s | cfm | in. | mm | in. |
| A | SD130-LB500-D90-A4S | 1465974 | 500 | 1/4 sq | 2-13 | 17.7-115 | 326 | 12.8 | 1.08 | 2.38 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
| A | SD096-LB800-D90-A4S | 1465984 | 800 | 1/4 sq | 1.5-9.6 | 13.3-85 | 326 | 12.8 | 1.08 | 2.38 | 8.7 | 18.4 | 1/4 | 10 | 1/4 |
| B | 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

| Model | L mm (in.) |
|--------------|---------------|
| SDP023-T3400 | 182 (7.16) |
| SDP035-T2100 | 182 (7.16) |
| SDP055-T1400 | 182 (7.16) |
| SDP075-T1050 | 182 (7.16) |
| SDP100-T780 | 182 (7.16) |
| SDP140-T490 | 182 (7.16) |



ACCESSORIES
see page 117

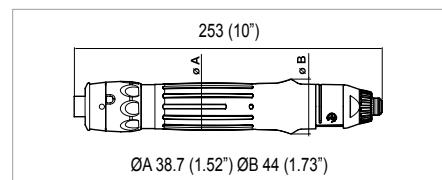
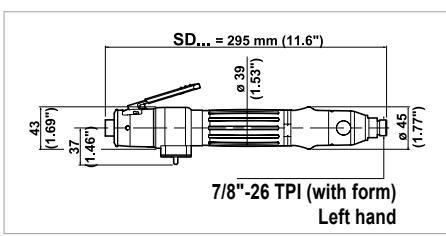
| PIC REF | MODEL | PART NUMBER | FREE SPEED | OUTPUT HEX | TORQUE RANGE | | WEIGHT | | AIR FLOW | | AIR INLET | HOSE INT. Ø |
|------------|------------------|----------------|---------------|---------------|-----------------|----------|--------|------|-------------|------|--------------|----------------|
| A | SDP023-T3400-D4Q | 1465714 | 3400 | 1/4 | 1.0-2.3 | 8.9-20.3 | 0.8 | 1.76 | 9.0 | 19.1 | 1/4 | 10 |
| 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 |
| 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 |
| 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 |
| 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 |
| A | SDP140-T490-D4Q | 1465664 | 490 | 1/4 | 3.5-14 | 31-124 | 0.8 | 1.76 | 9.0 | 19.1 | 1/4 | 10 |

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

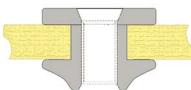


Tool shown with optional clutch HSG and bit adaptor

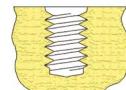


APPLICATIONS

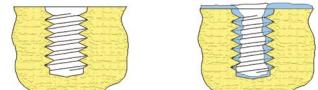
Placement of
Threaded
Fasteners



Tapping in
Blind Holes



Clearing Tapped
Holes after
Painting or
Coating



ACCESSORIES
see page 116

| 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. |

LEFT HAND TIGHTENING - SHUT OFF - PUSH START

| | | | | | | | | | | | | | | | |
|---|------------------|---------------|-----|-----|--------|---------|--------|---------|------|------|-----|------|-----|----|-----|
| A | SD160L-AR320-S4Q | 205 147 799 4 | 320 | 1/4 | 0.6-16 | 5.3-142 | 3.5-10 | 31-88.5 | 0.89 | 1.96 | 8.7 | 18.4 | 1/4 | 10 | 3/8 |
|---|------------------|---------------|-----|-----|--------|---------|--------|---------|------|------|-----|------|-----|----|-----|

AUTOMATIC REVERSE

| | | | | | | | | | | | | | | | |
|---|-----------------|---------|------|-------------|---------|----------|---|---|-----|-----|-----|------|-----|----|-----|
| B | 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 |
| B | 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 |



Crowfoot and Tube nut tools - Angle head

16 to 41 Nm (142 to 363 in.lb) - 330 to 430 rpm

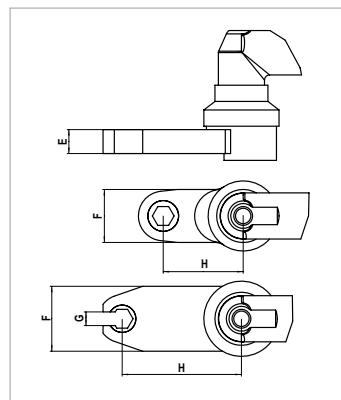


| MODEL | ACROSS FLATS | E | | F | | G | | H | |
|-----------------------|--------------|----|------|-----|------|------|------|------|------|
| | | mm | mm | in. | mm | in. | mm | in. | mm |
| SH330-LB430-CE13-CC53 | 13 | 19 | 0.75 | 32 | 1.26 | N/A | 52.8 | 2.07 | |
| SH410-LB400-CE17-CC68 | 17 | 19 | 0.75 | 39 | 1.54 | N/A | 67.6 | 2.66 | |
| SH330-LB330-OE11-CC53 | 11 | 18 | 0.71 | 40 | 1.57 | 10.4 | 0.41 | 52.9 | 2.08 |
| SH330-LB330-OE11-CC75 | 11 | 18 | 0.71 | 40 | 1.57 | 10.4 | 0.41 | 75.3 | 2.96 |
| SH330-LB330-OE13-CC53 | 13 | 18 | 0.71 | 40 | 1.57 | 10.4 | 0.41 | 52.9 | 2.08 |
| SH330-LB330-OE13-CC75 | 13 | 18 | 0.71 | 40 | 1.57 | 10.4 | 0.41 | 75.3 | 2.96 |

* Up to 14mm sockets possible as an option

* Possibility to have extension drive sockets

* Contact your local Desoutter sales engineer for all other requests



ACCESSORIES
see page 118

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

OFFSET CROWFOOT TOOLS - SHUT OFF

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

OFFSET TUBE NUT TOOLS - SHUT OFF

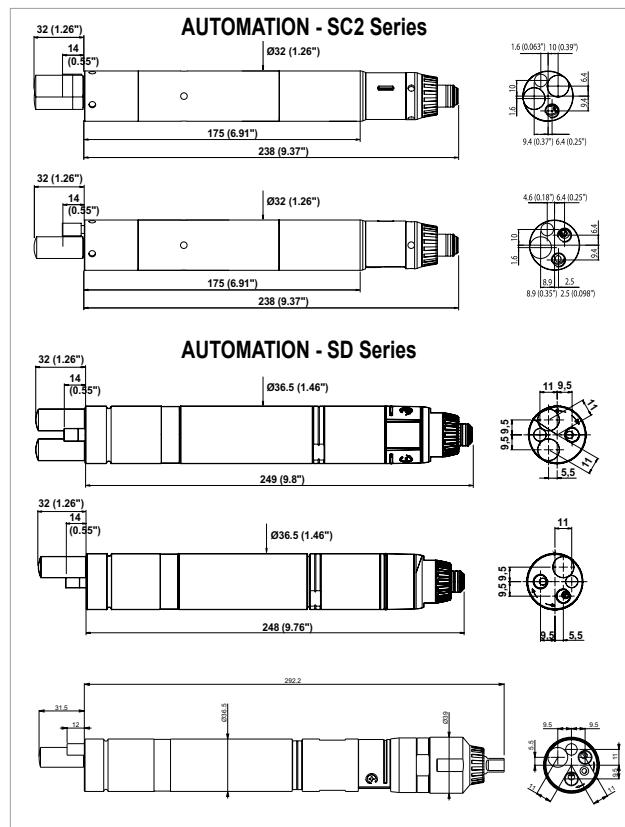
| | | | | | | | | | | | | | | | |
|---|-----------------------|---------------|-----|----|---------|---------|-------|------|-----|-----|----|------|-----|----|-----|
| B | SH330-LB330-OE11-CC53 | 205 147 818 4 | 330 | 11 | 16.5-33 | 146-292 | 498.3 | 19.6 | 2.7 | 5.9 | 18 | 38.1 | 1/4 | 10 | 3/8 |
|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

Torque Controlled - Shut Off

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



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



ACCESSORIES
see page 119

| 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 | SD023-2RM3500-S4Q | 1464324 | 3500 | 1/4 Hex | 1.0-2.3 | 8.8-20.4 | 1.0-2.3 | 8.8-20.4 | 0.92 | 2.03 | 8.7 | 18.4 | 1/8 | 10 | 3/8 |
| 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) |
| 12 TT10 / TT25 Torque Tube Arm | | | (see page 159) |
| Vacuum Pick Up - Order Pick Up kit, Finder Sleeve & Vacuum Source | | | |
| 13 Vacuum pick up kit (spring only for 2A89) | 108892 | | 108892 |
| 14 Finder sleeve blank - plastic | 464093 | | 464093 |
| • Finder sleeve blank - steel | 464103 | | 464103 |
| 15 Vacuum source AV201 for use with filter/regulator unit | | | 112063 |
| Miscellaneous | | | |
| 16 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 & HLT

ACCESSORIES INCLUDED



| ITEM | 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 |
|---|---------------|---------------|---------------|
| 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 |
| Miscellaneous | | | |
| 5 Side handle | 70442 | 70442 | 467033 |

Accessories

DIRECT DRIVE

ACCESSORIES INCLUDED

| | SDP | SD | H410 |
|----------------------|--------|--------|-------|
| • Suspension bail(s) | 473153 | 467003 | 70042 |
| • 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 |
|---|----------------|
| Placement of Threaded Inserts | |
| 1 M3 x 0.5 Nose kit | 76552 |
| 1 M4 x 0.7 Nose kit | 76562 |
| 1 M5 x 0.8 Nose kit | 76572 |
| 1 M6 x 1.0 Nose kit | 76582 |
| 1 M8 x 1.25 Nose kit | 76592 |
| Blind Hole Tapping/ Cleaning - 3 parts Required | |
| • Bit adaptor* | 465513 |
| 2 Thread adaptor | 96743 |
| 3 Chuck capacity 8mm (5/16") | 205 053 013 3 |
| Balancers & Tool Holster | |
| 4 Spring suspension balancer | 50532 |
| 5 Reaction free self-lock balancer | 54432 |
| 6 Tool holster DTH-42 | 107892 |
| Bench Stands (for more information, see pages 172-173) | |
| 7 D57 Balancing arm | 408903 |
| • Tool clamp | 615 396 614 0 |
| 7 D57X Balancing arm | 408913 |
| • Tool clamp | 615 396 614 0 |
| 8 D58 Balancing arm | 408923 |
| • Tool clamp | 615 396 614 0 |
| 9 TRA25 Telescopic reaction arm | (see page 165) |

* 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 | |
| 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 |
| • Bench mounted swing arm | 66542 | 66542 | 66542 | 66542 |
| 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 |

OPEN ENDED WRENCHES

ACCESSORIES INCLUDED

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

OPTIONAL ACCESSORIES

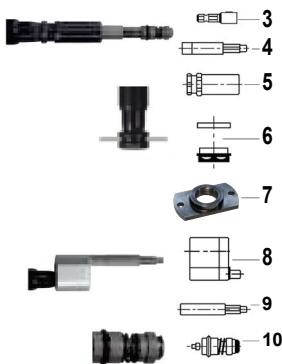
| ITEM | SD |
|---|---------------|
| Balancers | |
| 1 Spring suspension balancer | 50542 |
| 2 Hose reel balancer | 50562 |
| Suspension Shackle | |
| 3 Suspension shackle | 70082 |
| Bench Stands (for more information, see pages 160-161) | |
| 4 D57 Balancing arm | 408903 |
| • Tool clamp | 615 396 614 0 |
| 4 D57X Balancing arm | 408913 |
| • Tool clamp | 615 396 614 0 |
| 5 D58 Balancing arm | 408923 |
| • Tool clamp | 615 396 614 0 |
| Miscellaneous | |
| • Offset exhaust | 205 047 623 3 |

TORQUE CONTROLLED



ACCESSORIES INCLUDED

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



OPTIONAL ACCESSORIES

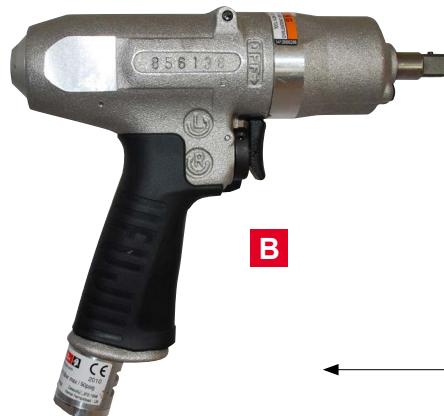
| ITEM | PART NO. |
|--|---------------|
| • Spring Loaded Shafts and Bearings Support (including 3, 4, 5) | |
| 3 Bit Adaptor | 103782 |
| 4 Spring Loaded Shaft 25mm (1") | 108342 |
| 5 Shaft Support and Nose Mount | 108412 |
| 6 Nose Mounts | 205 052 876 3 |
| 7 Flange M20 | 205 052 875 3 |
| • Offset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

Pulse Tools - Non Shut off and Shut Off range

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



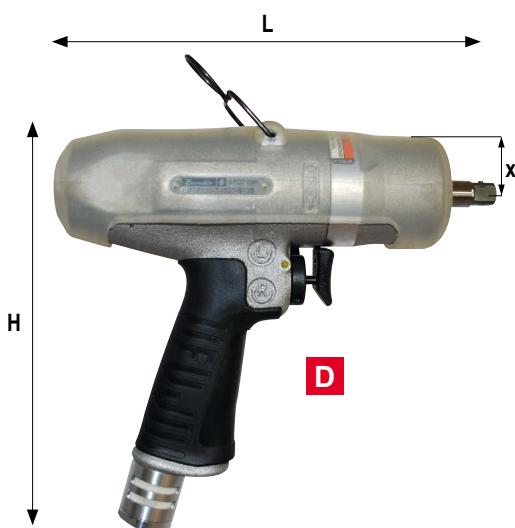
A



B



C



H

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 | |
|------------|-------|----------------|---------------|-----------------|-----------------|-----|------------|-------|----|-----|--------|-----|-------------|-----|----------------|----|
| | | | | | rpm | in. | Nm | ft.lb | mm | in. | mm | in. | mm | in. | kg | lb |

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 |

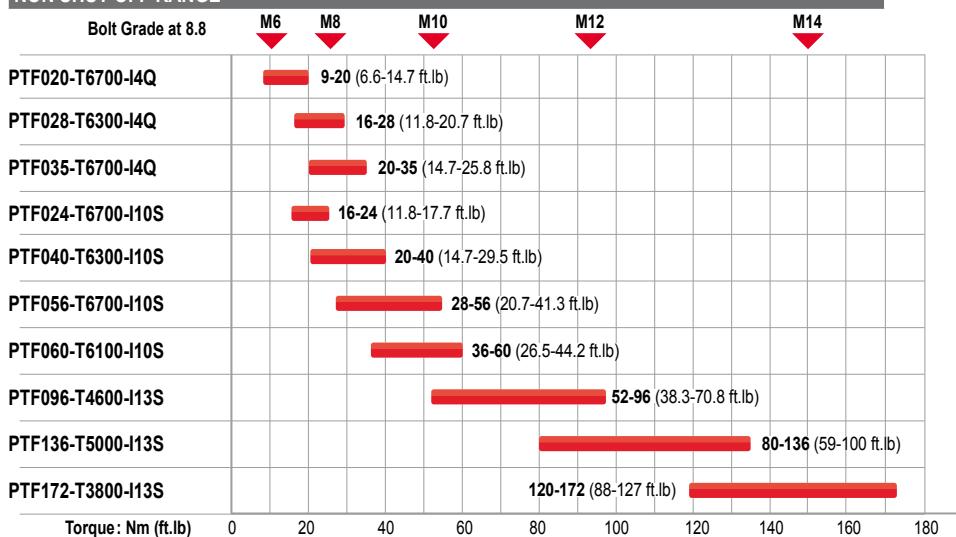
SHUT OFF

| | | | | | | | | | | | | | | | | | | |
|---|-------------------|---------------|------|---------|---------|-----------|-------|-----|------|------|-------|-----|------|-----|------|------|----|-----|
| 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 |

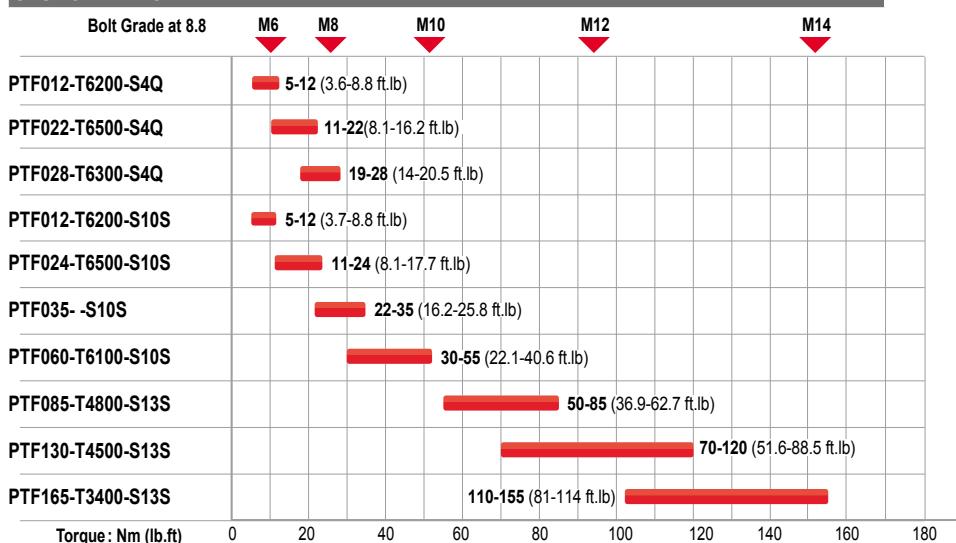
The tool is designed for a working pressure of 6.3 bar 90 PSI.

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

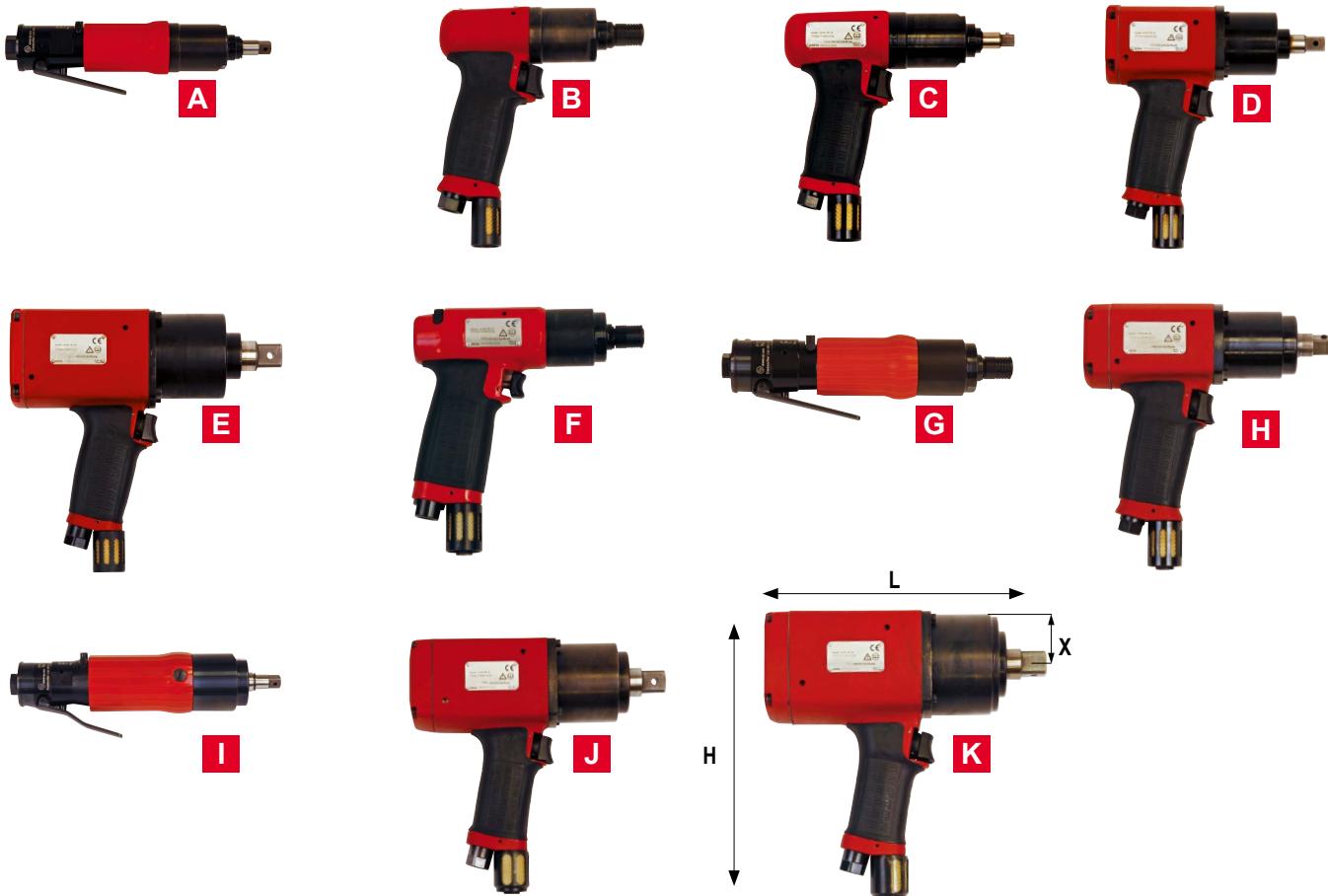
| | |
|---|---------------|
| • Cover protection for PTF020/024/028/040.. | 541 206 045 6 |
| • Cover protection for PTF060.. | 541 206 045 8 |
| • Cover protection for PTF056/035.. | 541 206 045 7 |
| • Cover protection for PTF096.. | 541 206 045 9 |
| • Cover protection for PTF136.. | 541 206 046 0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

Pulse Tools - Non Shut Off and Shut Off range

5 to 450 Nm (3.7 to 332 ft.lb) - 2800 to 10000 rpm



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

| PIC REF | MODEL | PART NUMBER | FREE SPEED | OUTPUT DRIVE | TORQUE RANGE | | DIMENSIONS | | | | WEIGHT | | AIR FLOW | | HOSE INT. Ø | | | |
|---------------------|-------------------|----------------|---------------|-----------------|-----------------|---------|------------|-------|----|------|--------|-----|-------------|-----|----------------|----|----|------|
| | | | | | rpm | in. | Nm | ft.lb | mm | in. | mm | in. | mm | in. | kg | lb | Ø | in. |
| NON SHUT OFF | | | | | | | | | | | | | | | | | | |
| A | PT031-L10000-I10S | 205 147 466 4 | 10000 | 3/8 Sq | 20-31 | 15-23 | 221 | 8.7 | 22 | 0.87 | - | - | 0.7 | 1.5 | 8 | 17 | 8 | 5/16 |
| B | PT028-T9000-I4Q | 205 147 789 4 | 9000 | 1/4 Hex | 17-28 | 13-21 | 150 | 5.9 | 22 | 0.87 | 175 | 6.9 | 0.8 | 1.8 | 8 | 17 | 8 | 5/16 |
| C | PT031-T9000-I10S | 205 147 467 4 | 9000 | 3/8 Sq | 20-31 | 15-23 | 152 | 6.0 | 22 | 0.87 | 175 | 6.9 | 0.8 | 1.8 | 8 | 17 | 8 | 5/16 |
| C | PT052-T7000-I10S | 205 147 468 4 | 7000 | 3/8 Sq | 30-52 | 22-38 | 174 | 6.8 | 23 | 0.90 | 175 | 6.9 | 1.0 | 2.0 | 9 | 19 | 10 | 3/8 |
| D | PT070-T6000-I13S | 205 147 469 4 | 6000 | 1/2 Sq | 50-70 | 37-52 | 168 | 6.6 | 26 | 1.02 | 190 | 7.5 | 1.3 | 2.9 | 11 | 23 | 10 | 3/8 |
| D | PT110-T4500-I13S | 205 147 470 4 | 4500 | 1/2 Sq | 65-110 | 48-81 | 178 | 7.0 | 29 | 1.14 | 198 | 7.8 | 1.6 | 3.5 | 12 | 25 | 10 | 3/8 |
| D | PT160-T3500-I13S | 205 147 471 4 | 3500 | 1/2 Sq | 110-160 | 81-118 | 188 | 7.4 | 34 | 1.34 | 209 | 8.2 | 2.4 | 5.3 | 14 | 30 | 13 | 1/2 |
| E | PT240-T2800-I19S | 205 147 472 4 | 2800 | 3/4 Sq | 160-240 | 118-177 | 205 | 8.1 | 37 | 1.46 | 212 | 8.3 | 3.3 | 7.3 | 15 | 32 | 13 | 1/2 |
| SHUT OFF | | | | | | | | | | | | | | | | | | |
| F | PT010-T5500-S4Q | 205 146 227 4 | 5500 | 1/4 Hex | 5-10 | 3.7-7.4 | 205 | 8.1 | 21 | 0.80 | 178 | 7.0 | 0.95 | 2.1 | 6 | 13 | 8 | 5/16 |
| G | PT010-L5000-S4Q | 205 146 225 4 | 5000 | 1/4 Hex | 5-10 | 3.7-7.4 | 212 | 8.3 | 21 | 0.83 | - | - | 0.9 | 1.9 | 6 | 13 | 8 | 5/16 |
| F | PT014-T6000-S4Q | 205 146 228 4 | 6000 | 1/4 Hex | 8-14 | 5.9-10 | 205 | 8.1 | 21 | 0.83 | 178 | 7.0 | 1.0 | 2.2 | 6 | 13 | 8 | 5/16 |
| G | PT014-L6000-S4Q | 205 146 226 4 | 6000 | 1/4 Hex | 8-14 | 5.9-10 | 212 | 8.3 | 21 | 0.83 | - | - | 0.9 | 2.0 | 6 | 13 | 8 | 5/16 |
| H | PT025-T4500-S10S | 205 147 462 4 | 4500 | 3/8 Sq | 13-25 | 10-18 | 177 | 7.0 | 26 | 1.02 | 192 | 7.6 | 1.3 | 2.9 | 7 | 15 | 8 | 5/16 |
| I | PT025-L4500-S10S | 205 147 463 4 | 4500 | 3/8 Sq | 13-25 | 10-18 | 236 | 9.3 | 25 | 0.98 | - | - | 1.2 | 2.5 | 7 | 15 | 8 | 5/16 |
| H | PT035-T6000-S4Q | 205 147 790 4 | 6000 | 1/4 Hex | 20-36 | 15-26 | 175 | 6.9 | 26 | 1.02 | 192 | 7.6 | 1.4 | 3.0 | 8 | 17 | 8 | 5/16 |
| H | PT040-T6000-S10S | 205 146 229 4 | 6000 | 3/8 Sq | 22-40 | 16-29 | 177 | 7.0 | 26 | 1.02 | 192 | 7.6 | 1.4 | 3.0 | 8 | 17 | 8 | 5/16 |
| H | PT070-T4000-S13S | 205 146 230 4 | 4000 | 1/2 Sq | 32-70 | 24-51 | 192 | 7.6 | 29 | 1.14 | 200 | 7.9 | 1.8 | 4.0 | 10 | 21 | 10 | 3/8 |
| H | PT125-T3500-S13S | 205 146 231 4 | 3500 | 1/2 Sq | 62-125 | 46-92 | 201 | 7.9 | 34 | 1.34 | 211 | 8.3 | 2.4 | 5.3 | 12 | 25 | 10 | 3/8 |
| J | PT250-T4000-S19S | 205 147 464 4 | 4000 | 3/4 Sq | 125-250 | 92-185 | 216 | 8.5 | 37 | 1.46 | 215 | 8.5 | 3.3 | 7.2 | 20 | 42 | 13 | 1/2 |
| K | PT450-T3000-S19S | 205 147 465 4 | 3000 | 3/4 Sq | 225-450 | 166-332 | 202 | 8.0 | 42 | 1.65 | 229 | 9.0 | 4.3 | 9.5 | 22 | 46 | 13 | 1/2 |

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

Pulse Tools - Tool Selection

NON SHUT OFF RANGE

| | Bolt Grade at 8.8 | M5 | M10 | M12 | M14 | M16 |
|-------------------|--------------------|---|---------------------|---------------------|----------------------|-------------------------|
| PT031-L10000-I10S | | 20-31 (15-23 ft.lb) | | | | |
| PT028-T9000-I4Q | | 17-28 (13-21 ft.lb) | | | | |
| PT031-T9000-I10S | | 20-31 (15-23 ft.lb) | | | | |
| PT052-T7000-I10S | | | 30-52 (22-38 ft.lb) | | | |
| PT070-T6000-I13S | | | | 50-70 (37-52 ft.lb) | | |
| PT110-T4500-I13S | | | | | 65-110 (48-81 ft.lb) | |
| PT160-T3500-I13S | | | | | | 110-160 (81-118 ft.lb) |
| PT240-T2800-I19S | | | | | | 160-240 (118-177 ft.lb) |
| | Torque: Nm (ft.lb) | 10 20 30 40 50 60 70 80 100 150 200 250 | | | | |



SHUT OFF RANGE

| | Bolt Grade at 8.8 | M5 | M6 | M8 | M10 | M12 | M14 | M16 | M18 | M20 |
|------------------|--------------------|--|----|------------------|---------------------|---------------------|----------------------|-------------------------|-----|-----|
| PT010-T5500-S4Q | | | | 5-10 (4-7 ft.lb) | | | | | | |
| PT010-L5000-S4Q | | | | 5-10 (4-7 ft.lb) | | | | | | |
| PT014-T6000-S4Q | | | | 8-14 (4-7 ft.lb) | | | | | | |
| PT014-L6000-S4Q | | | | 8-14 (4-7 ft.lb) | | | | | | |
| PT025-T4500-S10S | | | | | 13-25 (10-18 ft.lb) | | | | | |
| PT025-L4500-S10S | | | | | 13-25 (10-18 ft.lb) | | | | | |
| PT035-T6000-S4Q | | | | | 20-36 (15-26 ft.lb) | | | | | |
| PT040-T6000-S10S | | | | | 22-40 (16-29 ft.lb) | | | | | |
| PT070-T4000-S13S | | | | | | 32-70 (24-51 ft.lb) | | | | |
| PT125-T3500-S13S | | | | | | | 62-125 (46-92 ft.lb) | | | |
| PT250-T4000-S19S | | | | | | | | 125-250 (92-185 ft.lb) | | |
| PT450-T3000-S19S | | | | | | | | 225-450 (166-332 ft.lb) | 450 | |
| | Torque: Nm (lb.ft) | 5 10 20 30 40 50 60 70 100 150 200 250 300 350 400 450 | | | | | | | | |

Accessories

ACCESSORIES INCLUDED

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

Pulse Non shut off

| | |
|---|---------------|
| • Cover protection for PT028-T9000-I4Q | 205 051 325 3 |
| • Cover protection for PT031-T9000-I10S | 205 051 325 3 |
| • Cover protection for PT052-T7000-I10S | 205 051 324 3 |
| • Cover protection for PT070-T6000-I13S | 205 051 463 3 |
| • Cover protection for PT110-T4500-I13S | 205 051 329 3 |
| • Cover protection for PT160-T3500-I13S | 205 051 326 3 |
| • Cover protection for PT240-T2800-I19S | 205 051 327 3 |

Pulse Shut off

| | |
|---|---------------|
| • Cover protection for PT010-T5500-S4Q | 205 051 331 3 |
| • Cover protection for PT014-T6000-S4Q | 205 051 331 3 |
| • Cover protection for PT025-T4500-S10S | 205 051 328 3 |
| • Cover protection for PT035-T6000-S4Q | 205 051 328 3 |
| • Cover protection for PT040-T6000-S10S | 205 051 328 3 |
| • Cover protection for PT070-T4000-S13S | 205 051 323 3 |
| • Cover protection for PT125-T3500-S13S | 205 051 464 3 |
| • Cover protection for PT250-T4000-S19S | 205 051 468 3 |
| • Cover protection for PT450-T3000-S19S | 205 050 929 3 |

OPTIONAL ACCESSORIES

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



Data Analyzer

Delta 1D / Delta 6D / Delta 7D

This generation of Delta analyzer is the compact portable solution to monitor all types of production tools at just 500g. Combined with standard Desoutter DRT or DST transducers it's capable of calibrating pulse tools, electric nutrunners or torque wrenches. Divided into three models for Torque measurement only (Delta 1D), Torque & Angle (Delta 6D) and capable of residual torque check and production strategy with DWTA wrench (Delta 7D)

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 CVI II, CVIC II and CVI3 calibration 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 an adapter
- Barcode (Delta 7D): Embedded Barcode for automatic Pset selection or VIN traceability



Measurement Unit

Delta 1D / Delta 6D / Delta 7D



| MAIN FEATURES | DELTA 1D | DELTA 6D | DELTA 7D |
|---|---|--|--|
| Transducer | | | |
| Connection to DRT4, DRT5, DST | ✓ | ✓ | ✓ |
| Connection to DWT, DWTA | | | ✓ |
| Connection to CMD, GSE or general 19 pins analog transducer | ✓ | ✓ | ✓ |
| | Through optional analog/digital adapter | | |
| On board functionality | | | |
| Wrench test | ✓ | ✓ | ✓ |
| Nutrunner test | ✓ | ✓ | ✓ |
| Pulse Tool test | ✓ | ✓ | ✓ |
| Tools | 1 | 1000 | 1000 |
| Pset | | 1000 | 1000 |
| Integrated Statistic | Min, Max Avg | Cm, Cmk (ISO, NF and CNOMO standards) | Cm, Cmk (ISO, NF and CNOMO standards) + SPC |
| Residual Check Strategy | | | ✓ |
| Production Strategy | | | ✓ |
| Results | 1000 | 5000 | 5000 |
| Curve | 10 | 10 | 10 |
| CVI autocalibration | | ✓ | ✓ |
| External Barcode connectivity | | ✓ | ✓ |
| Embedded Barcode | | | ✓ |

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

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

ACCESSORIES INCLUDED

| | PART NO. |
|----------------------------|---------------|
| • Delta Battery | 615 936 142 0 |
| • Universal Power Supplier | 615 936 143 0 |

OPTIONAL ACCESSORIES

| ITEM | PART NO. |
|------------------------------|---------------|
| 1 Rubber Protection | 615 936 141 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 |
| 2 Delta Demo Case (Empty) | 615 936 140 0 |
| • 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 |

see not included Transducer cables p.137



— 1

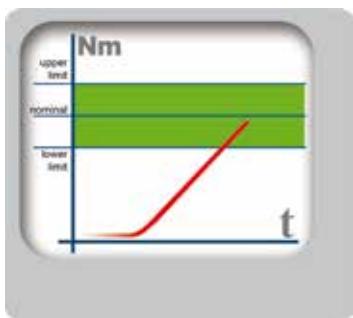


— 2

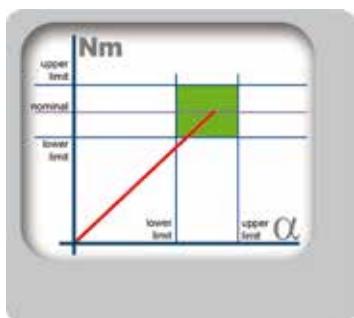
DWTA

Digital Wrench for Torque and Angle Measurement

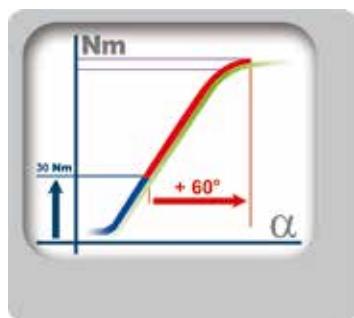
PRODUCTION AND QUALITY strategies : In combination with Delta 7D, the torque and angle wrench for residual automatic torque check and Joint analysis with Yield point detection.



Tightening within torque limits



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



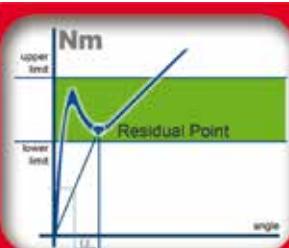
Tightening with torque and additional angle rotation (torque + angle)



■ Non Length Dependent Transducer thanks to double bridge strain gauge. To guarantee a tightening result independent from operator hand position 1 % of torque reading (from 10 % to 100 % of torque range)



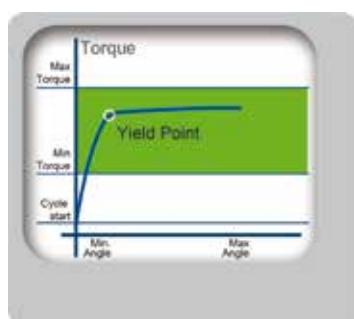
■ Military connector for standard transducer cable



Automatic Residual torque check



■ Gyroscope for angle measurement.



Joint analysis

| MODEL | PART NUMBER | RANGE | | ANGLE | DRIVE | | INCLUDED RATCHET | LENGTH | | WEIGHT | |
|----------|---------------|--------|-------------|-------|-------|-----------|------------------|--------|------|--------|-----|
| | | Nm | ft lb | | mm | in. | in | mm | in. | kg | lb |
| DWTA 30 | 615 165 760 0 | 3-30 | 2.21 | ✓ | 9x12 | 0.35x0.47 | 3/8 | 402 | 15.8 | 0.9 | 2.0 |
| DWTA 150 | 615 165 761 0 | 15-150 | 11.06-110.6 | ✓ | 14x18 | 0.55x0.71 | 1/2 | 625 | 24.6 | 1.8 | 4.0 |
| DWTA 400 | 615 165 762 0 | 40-400 | 29.5-295 | ✓ | 14x18 | 0.55x0.71 | 3/4 | 1026 | 40.4 | 2.8 | 6.2 |

no TAG feature available for DWTA

Delta Wrench

Digital Wrench for Torque & Angle Measurement

The digital wrench integrates a unique device and flexible solution for both production and quality strategy in tightening. Delta Wrench provides high accuracy solution for torque controlled joints tightening. Delta Wrench ensures perfect tightening operator independent thanks to automatic PSet selection and double bridge transducer, also introduces a quality strategy with angle measurement and traceability for a perfect quality audit.

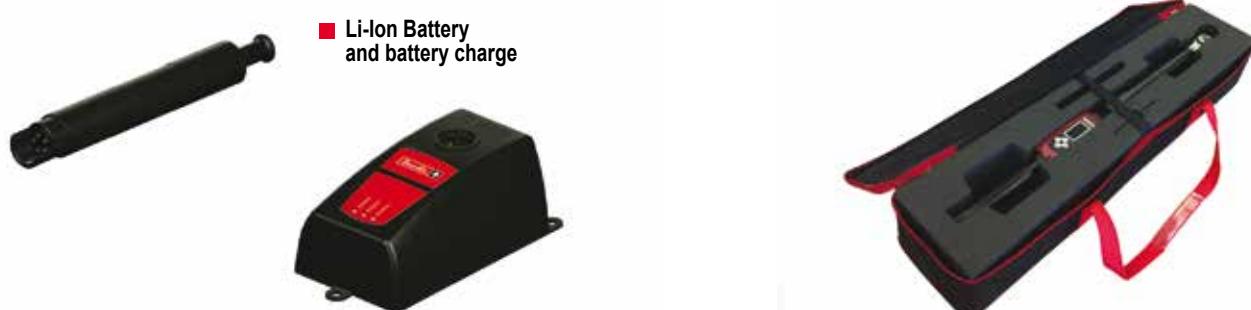


Delta Wrench



| MODEL | PART NUMBER | RANGE | | ANGLE | DRIVE | | INCLUDED RATCHET | LENGTH | | WEIGHT | |
|--------------------------|---------------|--------|-------------|-------|-------|-----------|------------------|--------|------|--------|------|
| | | Nm | ft lb | | mm | in. | | mm | in. | kg | lb |
| Delta Wrench 30 | 615 165 771 0 | 3-30 | 2.21 | X | 9x12 | 0.35x0.47 | 3/8 | 402 | 15.8 | 0.9 | 2.0 |
| Delta Wrench 150 | 615 165 772 0 | 15-150 | 11.06-110.6 | X | 14x18 | 0.55x0.71 | 1/2 | 625 | 24.6 | 1.8 | 4.0 |
| Delta Wrench 400 | 615 165 773 0 | 40-400 | 29.5-295 | X | 14x18 | 0.55x0.71 | 3/4 | 1026 | 40.4 | 2.8 | 6.2 |
| Delta Wrench 800 | 615 165 774 0 | 80-800 | 59-590 | X | Ø28 | Ø1.1 | 1 | 1309 | 51.5 | 4.7 | 10.4 |
| Delta Wrench 30-A | 615 165 775 0 | 3-30 | 2.21 | ✓ | 9x12 | 0.35x0.47 | 3/8 | 402 | 15.8 | 0.9 | 2.0 |
| Delta Wrench 150-A | 615 165 776 0 | 15-150 | 11.06-110.6 | ✓ | 14x18 | 0.55x0.71 | 1/2 | 625 | 24.6 | 1.8 | 4.0 |
| Delta Wrench 150-A Short | 615 165 767 0 | 15-150 | 11.06-110.6 | ✓ | 14x18 | 0.55x0.71 | 1/2 | 418 | 16.5 | 1.0 | 2.2 |
| Delta Wrench 200-A | 615 165 797 0 | 20-200 | 14.75-147.5 | ✓ | 14x18 | 0.55x0.71 | 1/2 | 625 | 24.6 | 2 | 4.4 |
| Delta Wrench 400-A | 615 165 777 0 | 40-400 | 29.5-295 | ✓ | 14x18 | 0.55x0.71 | 3/4 | 1026 | 40.4 | 2.8 | 6.2 |
| Delta Wrench 800-A | 615 165 778 0 | 80-800 | 59.0-590 | ✓ | Ø 28 | Ø 1.1 | 1 | 1309 | 51.5 | 4.7 | 10.4 |

All models are supplied with box including reverseable ratchet with TAG and Delta QC Free Version

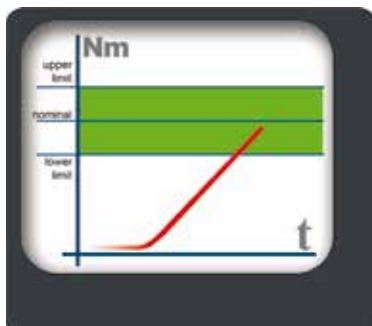


| MODEL | PART NUMBER | HEIGHT | | LENGTH | | WIDTH | | WEIGHT | |
|------------------------------|---------------|--------|------|--------|------|-------|--------|--------|------|
| | | mm | in | mm | in | mm | in | gr | lb |
| Delta Wrench Battery | 615 936 150 0 | - | - | 110 | 4.33 | Ø 22 | Ø 8.86 | 80 | 0.18 |
| Delta Wrench Battery Charger | 615 936 151 0 | 60 | 2.36 | 140 | 5.51 | 80 | 3.15 | 240 | 0.53 |

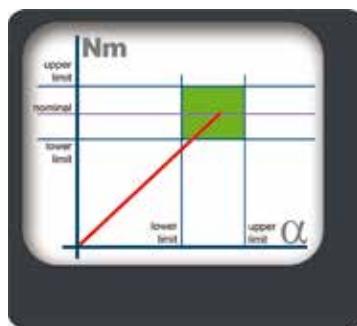
| DELTAQC SOFTWARE | FREE | LICENSED | ADVANCED |
|---------------------|------|----------|----------|
| PSet programming | ✓ | ✓ | ✓ |
| Result viewer | ✓ | ✓ | ✓ |
| Result excel export | ✓ | ✓ | ✓ |
| Curve viewer | | ✓ | ✓ |
| Result Database | | | ✓ |

| 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 |

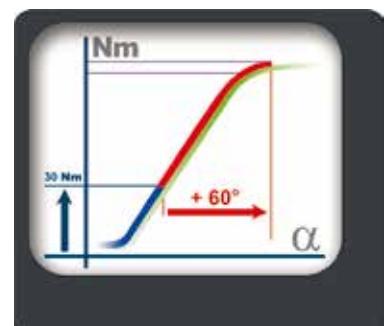
Production Strategies



Tightening within torque limits



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



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

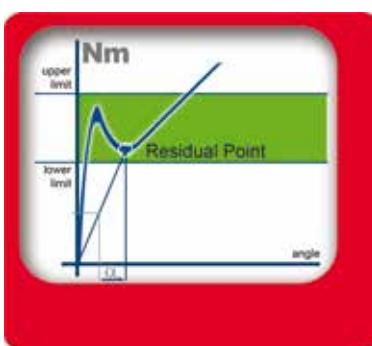
BENEFITS

- 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



Extension Application

| TECHNICAL SPECIFICATION | |
|-------------------------|--|
| 200 predefined Pset | Pset with T/A limits defined by Delta QC Software |
| Batch Count | Up to 99 |
| Production Strategies | Torque/Time, Torque & Angle, Torque + Angle CW/CCW Tightenings |
| Quality Audit Strategy | Peak Torque, Torque plus Angle Automatic residual detection CW/CCW Tightenings |
| Torque Accuracy | 1 % of torque reading +/- 1 digit |
| Angle Accuracy | +/- 1 % |
| Battery | Li-Ion Battery |
| Power Autonomy | up to 8h for stand alone, 5h for wireless communication |
| USB Communication | Bi-directional communication to Delta QC Software |
| Results | 1000 + 25 curves with Delta Licensed QC |
| RGB Display | Red Green or Blue backlight |
| Buzzer | Extension Torque and Angle bending correction |
| Multi-units | N·m, N·cm, Kgf·cm, Kgf·m, Ozf·in, Lbf·in, Lbf·ft |
| Languages | French, English, Spanish, Italian, Deutsch, Portuguese |
| Software | Free Delta QC software to define Pset and downloads results |



Automatic residual point detection

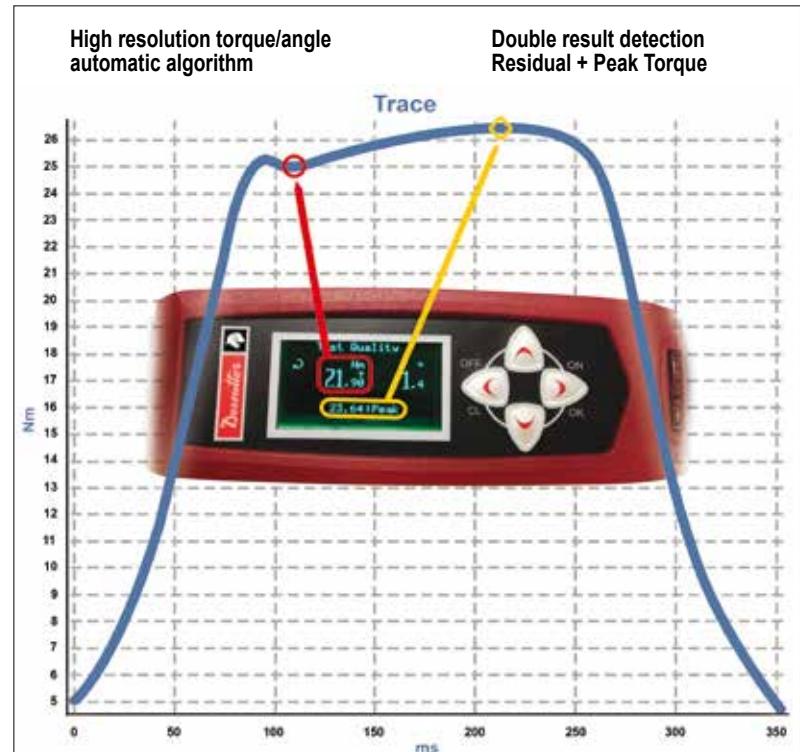
BENEFITS

- 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

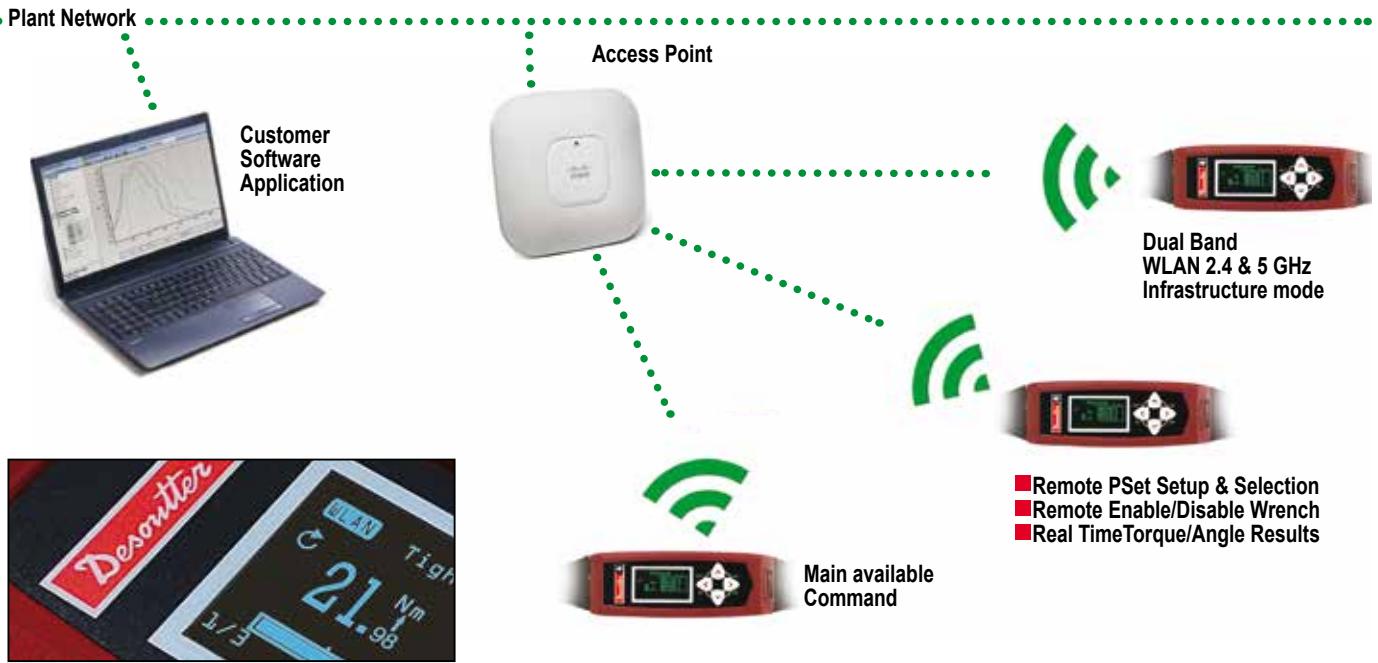


Quality Strategies

Perfect for joint inspection and auditing Delta Wrench detects automatically the real residual torque of the fastener.



Delta Wrench WLAN



Thanks to simple bidirectional communication protocol, DeltaWrench Wlan (TCP Client), can be easily interfaced to custom applications (TCP Server), by developing a communication bridge software.



CVI3 communication

BENEFITS

- Real Time communication
- OPEN Protocol or DESOUTTER Protocol (ASCII format) fully available for easy custom integration
- Dual Band Wlan Module fully configurable by DeltaQC Software
- CVI3 communication (PSET Selection, result management)
- CVINET WEB communication through Open Protocol Adapter

| MODEL | PART NUMBER | RANGE | | ANGLE | DRIVE | | INCLUDED RATCHET | LENGTH | | WEIGHT | |
|-------------------------------|---------------|--------|---------------|-------|-------|-----------|------------------|--------|-------|--------|------|
| | | Nm | ft lb | | mm | in. | | mm | in. | kg | lb |
| Delta Wrench 30 Wlan | 615 165 781 0 | 3-30 | 2.21 | X | 9x12 | 0.35x0.47 | 3/8 | 402 | 15.83 | 0.9 | 2.0 |
| Delta Wrench 150 Wlan | 615 165 782 0 | 15-150 | 11.06-110.6 | X | 14x18 | 0.55x0.71 | 1/2 | 625 | 24.60 | 1.8 | 4.0 |
| Delta Wrench 400 Wlan | 615 165 783 0 | 40-400 | 29.50-295.0 | X | 14x18 | 0.55x0.71 | 3/4 | 1026 | 40.40 | 2.8 | 6.2 |
| Delta Wrench 800 Wlan | 615 165 784 0 | 80-800 | 59.00-590.0 | X | Ø28 | Ø1.1 | 1 | 1309 | 51.54 | 4.7 | 10.4 |
| Delta Wrench 30-A Wlan | 615 165 785 0 | 3-30 | 2.21 | ✓ | 9x12 | 0.35x0.47 | 3/8 | 402 | 15.83 | 0.9 | 2.0 |
| Delta Wrench 150-A Wlan | 615 165 786 0 | 15-150 | 11.06-110.6 | ✓ | 14x18 | 0.55x0.71 | 1/2 | 625 | 24.60 | 1.8 | 4.0 |
| Delta Wrench 150-A Wlan Short | 615 165 789 0 | 15-150 | 11.06-110.6 | ✓ | 14x18 | 0.55x0.71 | 1/2 | 418 | 16.46 | 1.0 | 2.2 |
| Delta Wrench 200-A Wlan | 615 165 769 0 | 20-200 | 14.75 - 147.5 | ✓ | 14x18 | 0.55x0.71 | 1/2 | 625 | 24.6 | 2 | 4.4 |
| Delta Wrench 400-A Wlan | 615 165 787 0 | 40-400 | 29.50-295.0 | ✓ | 14x18 | 0.55x0.71 | 3/4 | 1026 | 40.40 | 2.8 | 6.2 |
| Delta Wrench 800-A Wlan | 615 165 788 0 | 80-800 | 59.00-590.0 | ✓ | Ø28 | Ø1.1 | 1 | 1309 | 51.54 | 4.7 | 10.4 |

All models are supplied with box including reverseable ratchet with TAG and Delta QC Free Version

| MODEL | PART NUMBER |
|------------------------------------|---------------|
| Access point Wifi 802.11N - US | 615 811 417 5 |
| Access point Wifi 802.11N - Europe | 615 811 419 5 |



| MODEL | PART NUMBER |
|--------------------------------|---------------|
| Access Point Wifi7 802.11N - C | 615 811 420 5 |
| Access Point Wifi7 802.11N - N | 615 811 650 5 |
| Access Point Power Cord UK | 615 917 202 0 |

E-LIT BOX



FOCUS

- 1. Wireless communication
- 2. Fast to connect
- 3. Safe report
- 4. Visual feedback



CHARACTERISTICS

- 1 Wireless communication**
 - Low consumption
 - Fast connection
 - Long range communication
 - Industrial wireless communication system (with 802-15-4 Technology)

- 2 Fast to connect**
 - Automatic free channel search
 - Easy pairing process

- 3 Safe report**
 - Memorize up to 25 OK/NOK reports if lost communication
 - Possibly to lock if memory full

- 4 Visual feedback**
 - Feedback directly on Wrench display
 - Wireless communication
 - Tightening OK / NOK



Gyroscope
for angle
measurement.

**WIRELESS
SYSTEM**
802-15-4 Standard



8 available outputs including:

- OK
- NOK
- Tool ready
- Tool disable
- Batch complete

4 available inputs including:

- Lock tool
- Unlock tool
- Unlock tool and reset

Delta Wrench ZigBee



EASY PAIRING PROCESS



■ No PC needed to pair E-LIT Box and Delta Wrench, just fast selection from wrench display



| MODEL | PART NUMBER | RANGE | | ANGLE | DRIVE | | INCLUDED RATCHET | LENGTH | | WEIGHT | |
|---------------------------------|---------------|--------|-------------|-------|-------|-----------|------------------|--------|-------|--------|------|
| | | Nm | ft lb | | mm | in. | | mm | in. | kg | lb |
| Delta Wrench 30 ZigBee | 615 165 800 0 | 3-30 | 2.21 | X | 9x12 | 0.35x0.47 | 3/8 | 402 | 15.83 | 0.9 | 2.0 |
| Delta Wrench 150 Zigbee | 615 165 801 0 | 15-150 | 11.06-110.6 | X | 14x18 | 0.55x0.71 | 1/2 | 625 | 24.60 | 1.8 | 4.0 |
| Delta Wrench 400 ZigBee | 615 165 802 0 | 40-400 | 29.50-295.0 | X | 14x18 | 0.55x0.71 | 3/4 | 1026 | 40.40 | 2.8 | 6.2 |
| Delta Wrench 800 ZigBee | 615 165 803 0 | 80-800 | 59.00-590.0 | X | Ø28 | Ø1.1 | 1 | 1309 | 51.54 | 4.7 | 10.4 |
| Delta Wrench 30-A Zigbee | 615 165 805 0 | 3-30 | 2.21 | ✓ | 9x12 | 0.35x0.47 | 3/8 | 402 | 15.83 | 0.9 | 2.0 |
| Delta Wrench 150-A Zigbee | 615 165 806 0 | 15-150 | 11.06-110.6 | ✓ | 14x18 | 0.55x0.71 | 1/2 | 625 | 24.60 | 1.8 | 4.0 |
| Delta Wrench 150-A Zigbee Short | 615 165 810 0 | 15-150 | 11.06-110.6 | ✓ | 14x18 | 0.55x0.71 | 1/2 | 418 | 16.46 | 1.0 | 2.2 |
| Delta Wrench 400-A ZigBee | 615 165 807 0 | 40-400 | 29.50-295.0 | ✓ | 14x18 | 0.55x0.71 | 3/4 | 1026 | 40.40 | 2.8 | 6.2 |
| Delta Wrench 800-A ZigBee | 615 165 808 0 | 80-800 | 59.00-590.0 | ✓ | Ø28 | Ø1.1 | 1 | 1309 | 51.54 | 4.7 | 10.4 |

All models are supplied with box including reverseable ratchet with TAG and Delta QC Free Version

ACCESSORIES FOR ELC TOOLS

| | PART NO. |
|--------------------------|---------------|
| • E-LIT BOX-V2 | 615 936 310 0 |
| • Power supply E-LIT BOX | 615 927 053 0 |

Delta Wrench Accessories

*End Fittings with embedded RFID TAG**



| OPEN END TAG - metric | PART NO. |
|-------------------------------|----------------------|
| Drive 9x12 Open End 7 mm TAG | 615 936 152 0 |
| Drive 9x12 Open End 8 mm TAG | 615 936 153 0 |
| Drive 9x12 Open End 9 mm TAG | 615 936 154 0 |
| Drive 9x12 Open End 10 mm TAG | 615 936 155 0 |
| Drive 9x12 Open End 11 mm TAG | 615 936 156 0 |
| Drive 9x12 Open End 12 mm TAG | 615 936 157 0 |
| Drive 9x12 Open End 13 mm TAG | 615 936 158 0 |
| Drive 9x12 Open End 14 mm TAG | 615 936 159 0 |
| Drive 9x12 Open End 15 mm TAG | 615 936 160 0 |
| Drive 9x12 Open End 16 mm TAG | 615 936 161 0 |
| Drive 9x12 Open End 17 mm TAG | 615 936 162 0 |
| Drive 9x12 Open End 18 mm TAG | 615 936 163 0 |
| Drive 9x12 Open End 19 mm TAG | 615 936 164 0 |

| RING BOX END TAG - metric | PART NO. |
|-----------------------------------|----------------------|
| Drive 9x12 Ring Box End 7 mm TAG | 615 936 165 0 |
| Drive 9x12 Ring Box End 8 mm TAG | 615 936 166 0 |
| Drive 9x12 Ring Box End 10 mm TAG | 615 936 167 0 |
| Drive 9x12 Ring Box End 11 mm TAG | 615 936 168 0 |
| Drive 9x12 Ring Box End 12 mm TAG | 615 936 169 0 |
| Drive 9x12 Ring Box End 13 mm TAG | 615 936 170 0 |
| Drive 9x12 Ring Box End 14 mm TAG | 615 936 171 0 |
| Drive 9x12 Ring Box End 15 mm TAG | 615 936 172 0 |
| Drive 9x12 Ring Box End 16 mm TAG | 615 936 173 0 |
| Drive 9x12 Ring Box End 17 mm TAG | 615 936 174 0 |
| Drive 9x12 Ring Box End 18 mm TAG | 615 936 175 0 |
| Drive 9x12 Ring Box End 19 mm TAG | 615 936 176 0 |
| Drive 9x12 Ring Box End 21 mm TAG | 615 936 177 0 |
| Drive 9x12 Ring Box End 22 mm TAG | 615 936 178 0 |

| FLARED END TAG - metric | PART NO. |
|---------------------------------|----------------------|
| Drive 9x12 Flared End 10 mm TAG | 615 936 179 0 |
| Drive 9x12 Flared End 11 mm TAG | 615 936 180 0 |
| Drive 9x12 Flared End 12 mm TAG | 615 936 181 0 |
| Drive 9x12 Flared End 13 mm TAG | 615 936 182 0 |
| Drive 9x12 Flared End 14 mm TAG | 615 936 183 0 |
| Drive 9x12 Flared End 16 mm TAG | 615 936 184 0 |
| Drive 9x12 Flared End 17 mm TAG | 615 936 185 0 |
| Drive 9x12 Flared End 18 mm TAG | 615 936 186 0 |
| Drive 9x12 Flared End 19 mm TAG | 615 936 187 0 |
| Drive 9x12 Flared End 21 mm TAG | 615 936 188 0 |
| Drive 9x12 Flared End 22 mm TAG | 615 936 189 0 |
| Drive 9x12 Flared End 24 mm TAG | 615 936 190 0 |

| OPEN END TAG - inches | PART NO. |
|--------------------------------|----------------------|
| Drive 9x12 Open End 1/4" TAG | 615 936 229 0 |
| Drive 9x12 Open End 5/16" TAG | 615 936 230 0 |
| Drive 9x12 Open End 3/8" TAG | 615 936 231 0 |
| Drive 9x12 Open End 7/16" TAG | 615 936 232 0 |
| Drive 9x12 Open End 1/2" TAG | 615 936 233 0 |
| Drive 9x12 Open End 9/16" TAG | 615 936 234 0 |
| Drive 9x12 Open End 5/8" TAG | 615 936 235 0 |
| Drive 9x12 Open End 11/16" TAG | 615 936 236 0 |
| Drive 9x12 Open End 3/4" TAG | 615 936 237 0 |

| RING BOX END TAG - inches | PART NO. |
|--------------------------------|----------------------|
| Drive 9x12 Ring Box End 1/4" | 615 936 238 0 |
| Drive 9x12 Ring Box End 5/16" | 615 936 239 0 |
| Drive 9x12 Ring Box End 3/8" | 615 936 240 0 |
| Drive 9x12 Ring Box End 7/16" | 615 936 241 0 |
| Drive 9x12 Ring Box End 1/2" | 615 936 242 0 |
| Drive 9x12 Ring Box End 9/16" | 615 936 243 0 |
| Drive 9x12 Ring Box End 5/8" | 615 936 244 0 |
| Drive 9x12 Ring Box End 11/16" | 615 936 245 0 |
| Drive 9x12 Ring Box End 3/4" | 615 936 246 0 |
| Drive 9x12 Ring Box End 13/16" | 615 936 247 0 |
| Drive 9x12 Ring Box End 7/8" | 615 936 248 0 |

| FLARED END TAG - inches | PART NO. |
|----------------------------------|----------------------|
| Drive 9x12 Flared End 3/8" TAG | 615 221 001 0 |
| Drive 9x12 Flared End 7/16" TAG | 615 221 002 0 |
| Drive 9x12 Flared End 1/2" TAG | 615 221 003 0 |
| Drive 9x12 Flared End 9/16" TAG | 615 221 004 0 |
| Drive 9x12 Flared End 5/8" TAG | 615 221 005 0 |
| Drive 9x12 Flared End 11/16" TAG | 615 221 006 0 |
| Drive 9x12 Flared End 3/4" TAG | 615 221 007 0 |



| REVERSIBLE RATCHET TAG | PART NO. |
|--|----------------------|
| Drive 9x12 Reversible ratchet 1/4" TAG | 615 936 191 0 |
| Drive 9x12 Reversible ratchet 3/8" TAG | 615 936 192 0 |
| Drive 9x12 Reversible ratchet 1/2" TAG | 615 936 193 0 |

| BITS HOLDER TAG | PART NO. |
|----------------------------------|----------------------|
| Drive 9x12 Bits Holder 1/4" TAG | 615 221 028 0 |
| Drive 9x12 Bits Holder 5/16" TAG | 615 221 029 0 |

| BLANK END TAG | PART NO. |
|--------------------------|----------------------|
| Drive 9x12 Blank End TAG | 615 936 228 0 |

Delta Wrench Accessories

*End Fittings with embedded RFID TAG**



| OPEN END TAG - metric | PART NO. |
|--------------------------------|---------------|
| Drive 14x18 Open End 13 mm TAG | 615 936 194 0 |
| Drive 14x18 Open End 14 mm TAG | 615 936 195 0 |
| Drive 14x18 Open End 15 mm TAG | 615 936 196 0 |
| Drive 14x18 Open End 16 mm TAG | 615 936 197 0 |
| Drive 14x18 Open End 17 mm TAG | 615 936 198 0 |
| Drive 14x18 Open End 18 mm TAG | 615 936 199 0 |
| Drive 14x18 Open End 19 mm TAG | 615 936 200 0 |
| Drive 14x18 Open End 21 mm TAG | 615 936 201 0 |
| Drive 14x18 Open End 22 mm TAG | 615 936 202 0 |
| Drive 14x18 Open End 24 mm TAG | 615 936 203 0 |
| Drive 14x18 Open End 27 mm TAG | 615 936 204 0 |
| Drive 14x18 Open End 30 mm TAG | 615 936 205 0 |
| Drive 14x18 Open End 32 mm TAG | 615 936 206 0 |
| Drive 14x18 Open End 34 mm TAG | 615 936 207 0 |
| Drive 14x18 Open End 36 mm TAG | 615 936 371 0 |
| 14x18 Open End 41 mm TAG | 615 936 389 0 |

| RING BOX END TAG - metric | PART NO. |
|------------------------------------|---------------|
| Drive 14x18 Ring Box End 13 mm TAG | 615 936 208 0 |
| Drive 14x18 Ring Box End 14 mm TAG | 615 936 209 0 |
| Drive 14x18 Ring Box End 15 mm TAG | 615 936 210 0 |
| Drive 14x18 Ring Box End 16 mm TAG | 615 936 211 0 |
| Drive 14x18 Ring Box End 17 mm TAG | 615 936 212 0 |
| Drive 14x18 Ring Box End 18 mm TAG | 615 936 213 0 |
| Drive 14x18 Ring Box End 19 mm TAG | 615 936 214 0 |
| Drive 14x18 Ring Box End 21 mm TAG | 615 936 2150 |
| Drive 14x18 Ring Box End 22 mm TAG | 615 936 216 0 |
| Drive 14x18 Ring Box End 24 mm TAG | 615 936 217 0 |
| Drive 14x18 Ring Box End 27 mm TAG | 615 936 218 0 |
| Drive 14x18 Ring Box End 30 mm TAG | 615 936 219 0 |
| Drive 14x18 Ring Box End 32 mm TAG | 615 936 220 0 |
| Drive 14x18 Ring Box End 34 mm TAG | 615 936 2210 |
| Drive 14x18 Ring Box End 36 mm TAG | 615 936 222 0 |
| Drive 14x18 Ring Box End 41 mm TAG | 615 936 223 0 |

| OPEN END TAG - inches | PART NO. |
|---------------------------------|---------------|
| Drive 14x18 Open End 7/16" TAG | 615 221 008 0 |
| Drive 14x18 Open End 1/2" TAG | 615 221 009 0 |
| Drive 14x18 Open End 9/16" TAG | 615 221 010 0 |
| Drive 14x18 Open End 5/8" TAG | 615 221 011 0 |
| Drive 14x18 Open End 11/16" TAG | 615 221 012 0 |
| Drive 14x18 Open End 3/4" TAG | 615 221 013 0 |
| Drive 14x18 Open End 13/16" TAG | 615 221 014 0 |
| Drive 14x18 Open End 7/8" TAG | 615 221 015 0 |
| Drive 14x18 Open End 15/16" TAG | 615 221 016 0 |
| Drive 14x18 Open End 1" TAG | 615 221 017 0 |
| Drive 14x18 Open End 1-1/8" TAG | 615 221 018 0 |

| RING BOX END TAG - inches | PART NO. |
|--------------------------------|---------------|
| Drive 14x18 Box End 1/2" TAG | 615 221 019 0 |
| Drive 14x18 Box End 9/16" TAG | 615 221 020 0 |
| Drive 14x18 Box End 5/8" TAG | 615 221 021 0 |
| Drive 14x18 Box End 11/16" TAG | 615 221 022 0 |
| Drive 14x18 Box End 3/4" TAG | 615 221 023 0 |
| Drive 14x18 Box End 13/16" TAG | 615 221 024 0 |
| Drive 14x18 Box End 7/8" TAG | 615 221 025 0 |
| Drive 14x18 Box End 15/16" TAG | 615 221 026 0 |
| Drive 14x18 Box End 1" TAG | 615 221 027 0 |



| BITS HOLDER TAG | PART NO. |
|-----------------------------------|---------------|
| Drive 14x18 Bits Holder 5/16" TAG | 615 221 030 0 |

| BITS END TAG | PART NO. |
|---------------------------|---------------|
| Drive 14x18 Blank End TAG | 615 936 226 0 |

| REVERSIBLE RATCHET TAG | PART NO. |
|---|---------------|
| Drive 14x18 Reversible ratchet 1/2" TAG | 615 936 224 0 |
| Drive 14x18 Reversible ratchet 3/4" TAG | 615 936 225 0 |
| Drive Ø 28 Reversible ratchet 1" TAG | 615 936 227 0 |



Low Torque Analyzer



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 Licensed |
| Multi-units | N.m, Kg.m, Kg.cm, Oz.in, Lb.in, Lb.ft, N.cm |
| Display | Red, Green, Blue blacklight |
| Power Supply | Embedded Battery External power supply |
| Battery Autonomy | Up to 12 hours |
| Languages | French, English, Spanish, Italian, Deutsch, Portuguese |
| Software | Free Delta QC Software to export by USB result |

■ Embedded Transducer & Battery

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.



| 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 |
| 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

Digital Rotary Transducers

Torque

TORQUE ROTARY TRANSDUCER:

The Rotary Torque Transducer DRT4 is designed to measure the torque output of any non-impact assembly tool. The transducer is suitable for use with impulse type assembly tools brushes with minimal maintenance requirements.



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.



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 torque reading.
- 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 1/4" |
| DRT 4 H 5 | 615 165 210 0 | 0.5 - 5 | 0.37 - 3.7 | Hex 1/4" |
| DRT 4 H 20 | 615 165 211 0 | 2 - 20 | 1.47 - 14.7 | Hex 1/4" |
| DRT 4 Sq 20 | 615 165 212 0 | 2 - 20 | 1.47 - 14.7 | Sq 1/4" |
| DRT 4 Sq 25 | 615 165 213 0 | 2.5 - 25 | 1.84 - 18.4 | Sq 3/8" |
| DRT 4 Sq 75 | 615 165 214 0 | 7.5 - 75 | 5.53 - 55.3 | Sq 3/8" |
| DRT 4 Sq 180 | 615 165 215 0 | 18 - 180 | 13.2 - 132 | Sq 1/2" |
| DRT 4 Sq 500 | 615 165 216 0 | 50 - 500 | 36.8 - 368 | Sq 3/4" |
| 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 1/2" |
| DRT 4 Sq 5000 | 615 165 540 0 | 500 - 5000 | 368.5 - 3685 | Sq 1 1/2" |
| DRT4 Sq 10000 | 615 935 164 0 | 1000 - 10000 | 736.6 - 7375 | Sq 1 1/2" |

*Note: for pulse tool test - due to pulse peak overtorque - DRT max torque range is 30 % lower than nominal.

Digital Rotary Transducers & Accessories

Torque & Angle

A version DRT5 is available with an angle measurement encoder which allows with a DELTA 6D or DELTA 7D, the measurement of the angle of rotation in addition to torque.



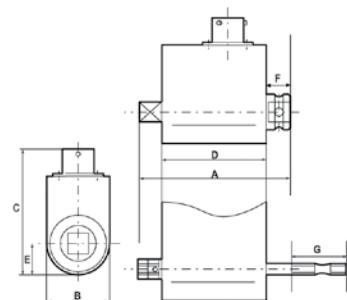
| MODEL | PART NUMBER | TORQUE RANGE | | OUTPUT |
|---------------|---------------|--------------|--------------|-----------|
| | | Nm | ft lb | |
| DRT5 | | | | |
| DRT 5 H 2 | 615 165 218 0 | 0.2 - 2 | 0.15 - 1.5 | Hex 1/4" |
| DRT 5 H 5 | 615 165 219 0 | 0.5 - 5 | 0.37 - 3.7 | Hex 1/4" |
| DRT 5 H 20 | 615 165 220 0 | 2 - 20 | 1.47 - 14.7 | Hex 1/4" |
| DRT 5 Sq 20 | 615 165 221 0 | 2 - 20 | 1.47 - 14.7 | Sq 1/4" |
| DRT 5 Sq 25 | 615 165 222 0 | 2.5 - 25 | 1.84 - 18.4 | Sq 3/8" |
| DRT 5 Sq 75 | 615 165 223 0 | 7.5 - 75 | 5.53 - 55.3 | Sq 3/8" |
| DRT 5 Sq 180 | 615 165 224 0 | 18 - 180 | 13.2 - 132 | Sq 1/2" |
| DRT 5 Sq 500 | 615 165 225 0 | 50 - 500 | 36.8 - 368 | Sq 3/4" |
| 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 1-1/2" |

*Note : for pulse tool test - due to pulse peak overtorque - DRT max torque range is 30 % lower than nominal.

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 torque reading.
- Built-in smart chip memory with calibration features: - type of transducer - sensitivity nominal load - serial number.

| OUTPUT | SAME SIZE FOR TORQUE OR TORQUE & ANGLE TRANSDUCER | | | | | | | | | | | | | |
|-----------|---|------|-----|------|-------|------|----|------|------|------|------|------|------|-----|
| | A | | B | | C | | E | | H | | F | | G | |
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. |
| Hex 1/4" | 116 | 4.56 | 31 | 1.22 | 71.9 | 2.83 | 56 | 2.2 | 15.5 | 0.61 | 39 | 1.53 | 25.5 | 1 |
| Sq 1/4" | 71.5 | 2.81 | 31 | 1.22 | 71.9 | 2.83 | 56 | 2.2 | 15.5 | 0.61 | 6 | 0.24 | | |
| Sq 3/8" | 77 | 3.03 | 31 | 1.22 | 71.9 | 2.83 | 56 | 2.2 | 15.5 | 0.61 | 8 | 0.31 | | |
| Sq 1/2" | 87 | 3.42 | 42 | 1.65 | 82.9 | 3.26 | 58 | 2.28 | 21 | 0.83 | 12 | 0.47 | | |
| Sq 3/4" | 106 | 4.17 | 52 | 2.05 | 92.9 | 3.66 | 66 | 2.60 | 26 | 1.02 | 21 | 0.83 | | |
| Sq 1 | 125 | 4.92 | 65 | 2.56 | 104.9 | 4.13 | 73 | 2.87 | 32.5 | 1.28 | 29 | 1.14 | | |
| Sq 1-1/2" | 165 | 6.5 | 106 | 4.17 | 148.5 | 5.85 | 88 | 3.46 | 53 | 2.09 | 35.2 | 1.39 | | |

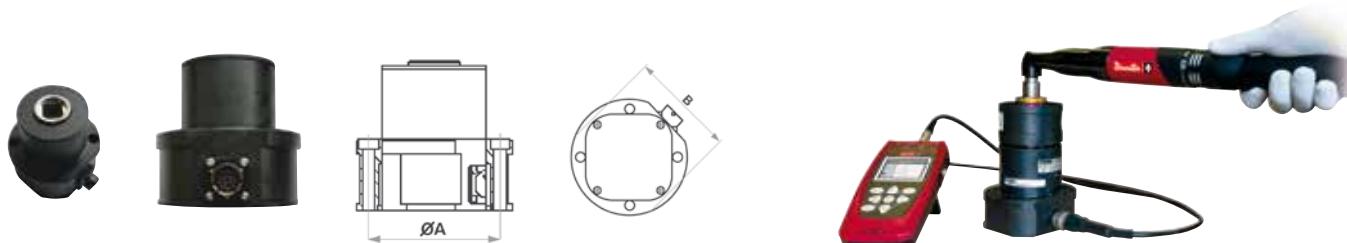


TRANSDUCER CABLES

| MODEL | PART NUMBER | DESCRIPTION |
|-----------------------------|---------------|--------------------------------|
| 2m (78.7") - 10 pins | 615 917 430 0 | for DST/DRT - All Delta models |
| 2m (78.7") spiral - 10 pins | 615 917 432 0 | for DST/DRT - All Delta models |
| 5m (196.8") - 10 pins | 615 917 433 0 | for DST/DRT - All Delta models |

DST - Digital Static Transducers

Designed for testing wrenches, click wrenches or for tightening tools where rotary action is not desired during measurement. In the case of a Shut-Off tool test a joint simulator as an accessory is required. Torque Accuracy : 0.35 % of Torque Reading.



| MODEL | PART NUMBER | TORQUE RANGE | | SQUARE DRIVE | DIMENSIONS | | | | WEIGHT | |
|------------------|---------------|--------------|------------|--------------|------------|------|-----|------|--------|------|
| | | Nm | lb | | in | mm | in | mm | in | kg |
| DST 0.5 Nm - 13 | 615 165 537 0 | 0.05-0.5 | 0.04-0.4 | 1/2 | 81 | 3.19 | 91 | 3.58 | 2.2 | 5.1 |
| DST 2 Nm - 13 | 615 165 532 0 | 0.2-2 | 0.15-1.5 | 1/2 | 81 | 3.19 | 91 | 3.58 | 2.2 | 5.1 |
| DST 5 Nm - 13 | 615 165 533 0 | 0.5-5 | 0.37-3.7 | 1/2 | 81 | 3.19 | 91 | 3.58 | 2.3 | 5.1 |
| DST 10 Nm - 20 | 615 165 534 0 | 1-10 | 0.74-7.4 | 3/4 | 86 | 3.38 | 93 | 3.66 | 3.1 | 6.8 |
| DST 30 Nm - 20 | 615 165 535 0 | 3-30 | 2.21-22 | 3/4 | 89 | 3.50 | 96 | 3.78 | 3.4 | 7.5 |
| DST 80 Nm - 25 | 615 165 538 0 | 8-80 | 5.89-59 | 1 | 108 | 4.25 | 116 | 4.57 | 5.8 | 12.8 |
| DST 200 Nm - 25 | 615 165 539 0 | 20-200 | 14.7-147 | 1 | 108 | 4.25 | 116 | 4.57 | 5.8 | 12.8 |
| DST 500 Nm - 32 | 615 165 541 0 | 50-500 | 36.8-368 | 1-1/4 | 133 | 5.24 | 144 | 5.67 | 11.8 | 26.0 |
| DST 1000 Nm - 32 | 615 165 542 0 | 100-1000 | 73.7-737 | 1-1/4 | 133 | 5.24 | 144 | 5.67 | 11.9 | 26.2 |
| DST 2000 Nm - 32 | 615 165 543 0 | 200-2000 | 147.4-1474 | 1-1/2 | 133 | 5.24 | 144 | 5.57 | 12.0 | 26.4 |

DSA - DELTA STATIC TRANSDUCERS ACCESSORIES

| 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 | 615 936 131 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 | | | | |



DJS - Digital 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 real 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 | TORQUE RANGE | | SQUARE DRIVE | | INSIDE | OUTSIDE | WEIGHT | |
|----------------------|---------------|--------------|------|--------------|---------|--------|---------|--------|------|
| | | Nm | lb | in | in | | | kg | lb |
| DJS for DST 2 Soft | 615 165 529 0 | 2 | 1.5 | 1/2 | Hex1/4 | Yellow | Yellow | 0.12 | 0.26 |
| DJS for DST 2 Hard | 615 165 530 0 | 2 | 1.5 | 1/2 | Hex 1/4 | Yellow | Black | 0.12 | 0.26 |
| DJS for DST 5 Soft | 615 165 531 0 | 5 | 3.7 | 1/2 | Hex 1/4 | Green | Yellow | 0.12 | 0.26 |
| DJS for DST 5 Hard | 615 165 571 0 | 5 | 3.7 | 1/2 | Hex 1/4 | Green | Black | 0.12 | 0.26 |
| DJS for DST 10 Soft | 615 165 574 0 | 10 | 7.4 | 3/4 | 3/8 | Red | Yellow | 0.64 | 1.41 |
| DJS for DST 10 Hard | 615 165 575 0 | 10 | 7.4 | 3/4 | 3/8 | Red | Black | 0.64 | 1.41 |
| DJS for DST 30 Soft | 615 165 577 0 | 30 | 22 | 3/4 | 3/8 | Blue | Yellow | 0.65 | 1.43 |
| DJS for DST 30 Hard | 615 165 579 0 | 30 | 22 | 3/4 | 3/8 | Blue | Black | 0.65 | 1.43 |
| DJS for DST 80 Soft | 615 165 584 0 | 80 | 59 | 1 | 1/2 | Purple | Yellow | 2.50 | 5.51 |
| DJS for DST 80 Hard | 615 165 587 0 | 80 | 59 | 1 | 1/2 | Purple | Black | 2.50 | 5.51 |
| DJS for DST 200 Soft | 615 165 588 0 | 200 | 147 | 1 | 1/2 | Grey | Yellow | 2.60 | 5.73 |
| DJS for DST 200 Hard | 615 165 589 0 | 200 | 147 | 1 | 1/2 | Grey | Black | 2.60 | 5.73 |
| DJS for DST 500 Soft | 615 165 590 0 | 500 | 369 | 1-1/4 | 3/4 | Black | Yellow | 5.00 | 11.0 |
| DJS for DST 500 Hard | 615 165 591 0 | 500 | 369 | 1-1/4 | 3/4 | Black | Black | 5.00 | 11.0 |
| DJS for DST 1000 | 615 165 572 0 | 1000 | 737 | 1-1/4 | 1 | | | 10.3 | 22.7 |
| DJS for DST 2000 | 615 936 137 0 | 2000 | 1475 | 1-1/2 | 1 | | | 14.1 | 28.8 |

Calibration Bench

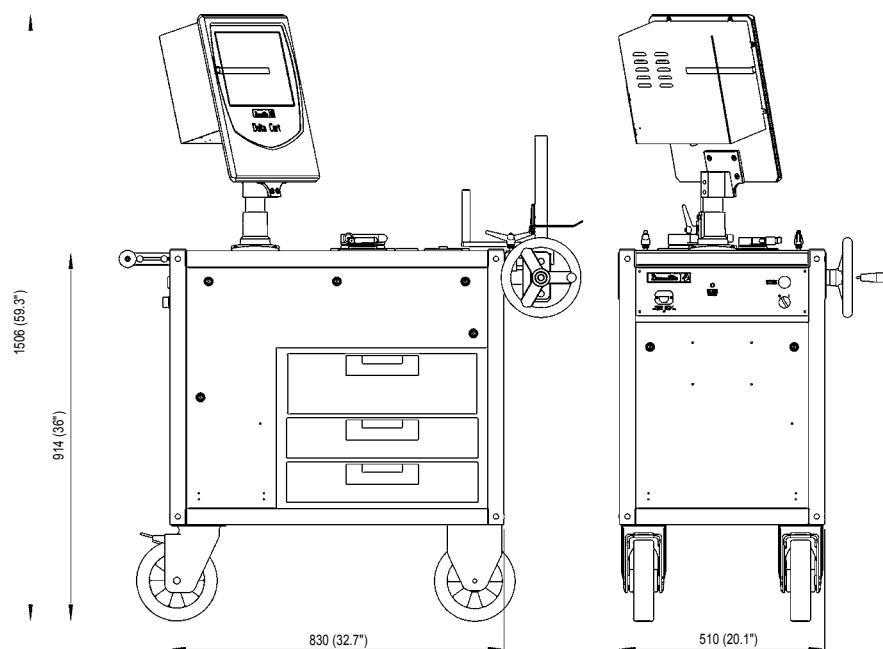
EMBEDDED TRANSDUCERS:

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

■ Delta Cart offers a wide torque range since it can be configured up to 4 static transducers to cover from 0.2 Nm to 1 000 Nm (0.15 to 738 ft.lb) in a very compact dimensions (510mm width), making the Delta Cart the ideal solution for tool testing in assembly production lines.



■ 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.

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

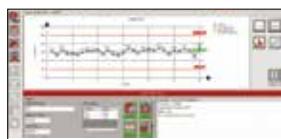
- Configurable torque range from 1 Nm to 2000Nm
- Torque reaction bar and joint simulator included
- External DRT communication for in-line calibration
- Angle Strategy with external DRT5
- CVI2 and CVI3 autocalibration
- Double reading calibration with automatic deviation check

Embedded Software with local tool DB (SQL Server) containing all Tool of the line including :

■ Calibration STATUS



■ Cm/Cmk Reports



- PST High accuracy static transducers with locking system specially designed for pulse tool calibration

- ISO RIG System for torque wrench calibration

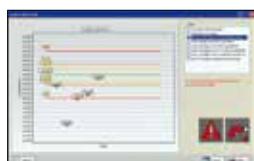
CLIENT - SERVER Architecture

- Ideal for > 1 cart management

- All Calibration data always synchronized with unique Server database

- Fast Ethernet communication

■ Next Calibration



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

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

ISO 6789 - ISO 5393

Automatic test report

Statistic Control - ISO 8258
Print

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

Export
Curve

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

Barcode
Configurable for each test

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

Languages

English, French, Italian, German, Russian

Delta QC Software

DELTA QC LICENSED

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



| | 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 | | | ✓ |

| 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 |

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



| | MAIN FUNCTIONS | | |
|---------------------|----------------|----------|----------|
| | FREE | LICENSED | ADVANCED |
| Delta Wrench | | | |
| 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 | | | ✓ |

Delta QC Free Version

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

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

Desoutter



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

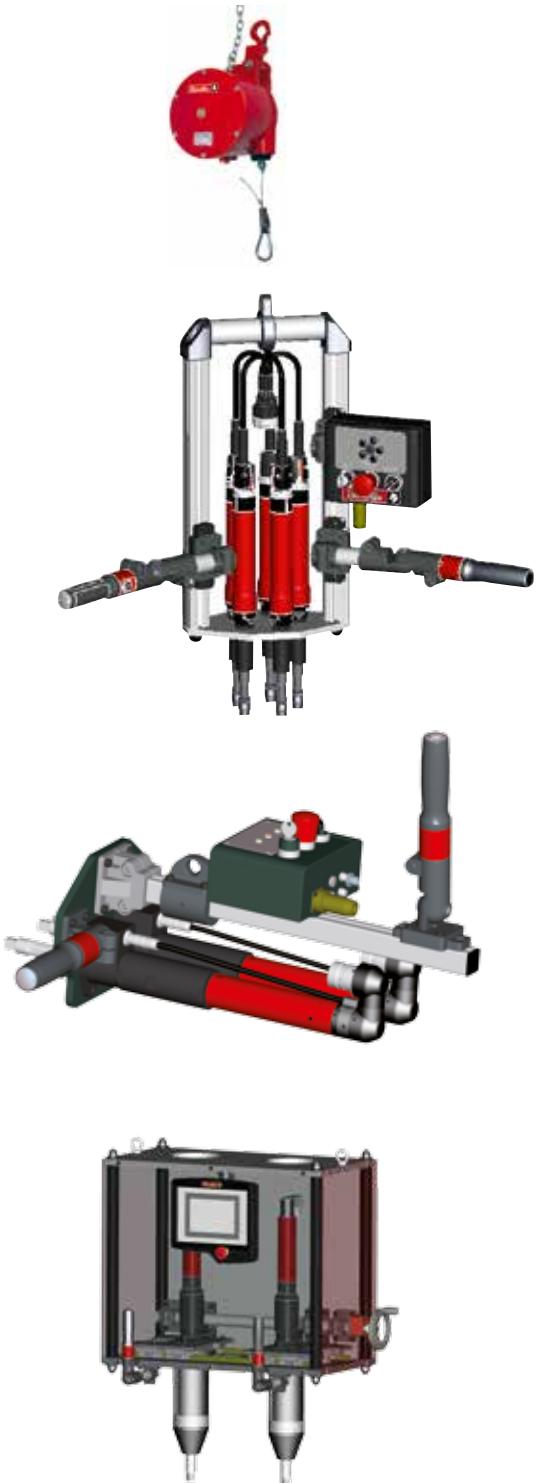
- U-Shape
- Specific output shaft
- Second torque transducer

Specific reaction bars

AND MUCH MORE ON REQUEST !

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

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 cpt | |
| 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

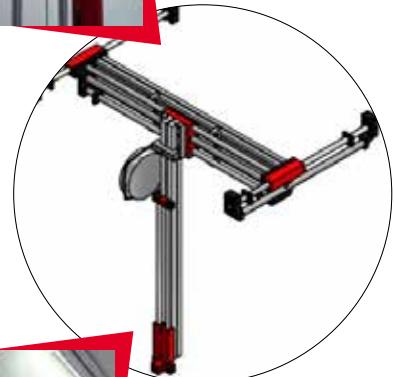
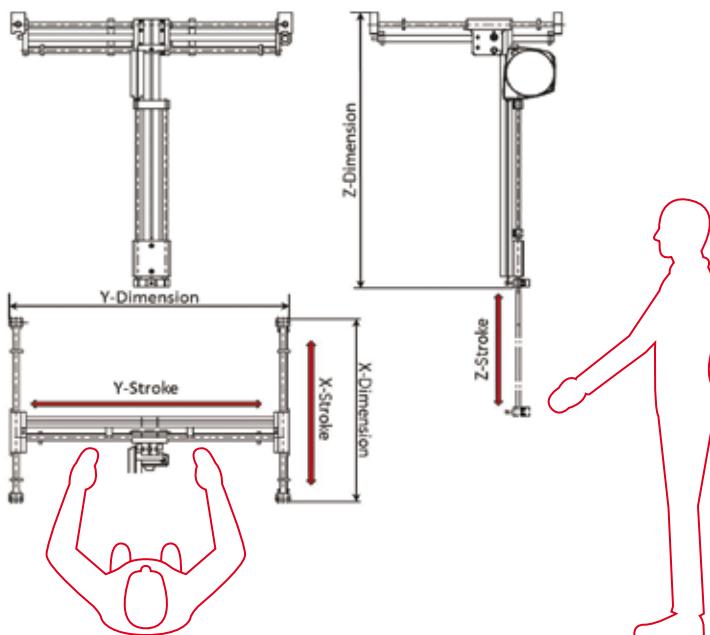
Single spindle, Multi spindles, Manual or automatic center distance adjustment



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



ROLLEX



| DESCRIPTION | UNIT | TORQUE | | |
|--------------------------------|------------|---|---|---|
| Maximum Torque | Nm (ft.lb) | 30 (22.1) | 60 (44.2) | 90 (66.4) |
| X-Stroke (min-max) | mm (in.) | 250-450 (every 50) 9.8-17.7 (every 1.97) | 250-450 (every 50) 9.8-17.7 (every 1.97) | 250-450 (every 50) 9.8-17.7 (every 1.97) |
| Y-Stroke (min-max) | mm (in.) | 250-750 (every 50) 9.8-29.5 (every 1.97) | 250-750 (every 50) 9.8-29.5 (every 1.97) | 250-750 (every 50) 9.8-29.5 (every 1.97) |
| Z-Stroke (min-max) | mm (in.) | 250-500 (every 50) 9.8-19.7 (every 1.97) | 250-500 (every 50) 9.8-19.7 (every 1.97) | 250-500 (every 50) 9.8-19.7 (every 1.97) |
| X-Dimensions | mm (in.) | X-Stroke= 260 (10.2) | X-Stroke= 260 (10.2) | X-Stroke= 260 (10.2) |
| Y-Dimensions | mm (in.) | Y-Stroke= 290 (11.4) | Y-Stroke= 290 (11.4) | Y-Stroke= 290 (11.4) |
| Z-Dimensions | mm (in.) | Z-Stroke= 1070 (42.1) | Z-Stroke= 1070 (42.1) | Z-Stroke= 1070 (42.1) |
| Maximum Tightening head weight | kg (lb) | 20 (44.1) | 25 (55.1) | 25 (55.1) |

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

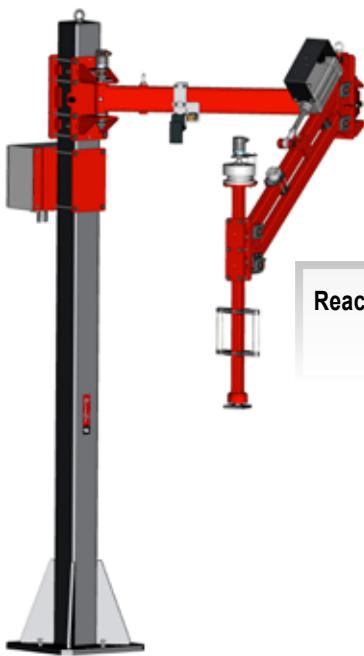
Arms and Torque Tubes



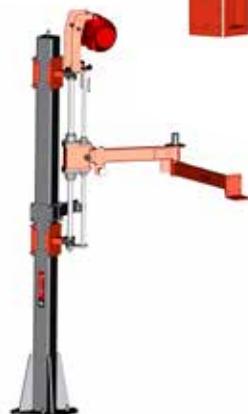
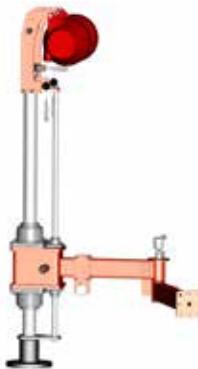
desoutter.info/arms-video

Torque Tubes

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



Reaction Arms



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)

175 Nm (129.5 ft.lb)
Balancer suspension
Radius 1000 mm (3.28 ft)

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

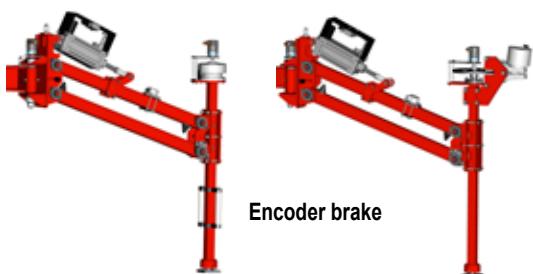
OPTIONS

Torque Tubes options

- Controller and accessories stand
- Parking position sensor
- Encoder
- Pneumatic suspension
- Balancers suspension
- Trolley for rails mounting



Controller support



Encoder brake

Arms options

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

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



Accessories and Options

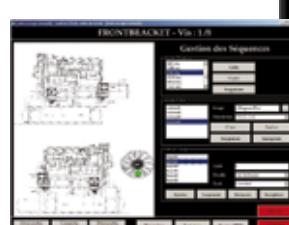
Tool holders



CVI3 HMI & Positioning System

CVI3 HMI

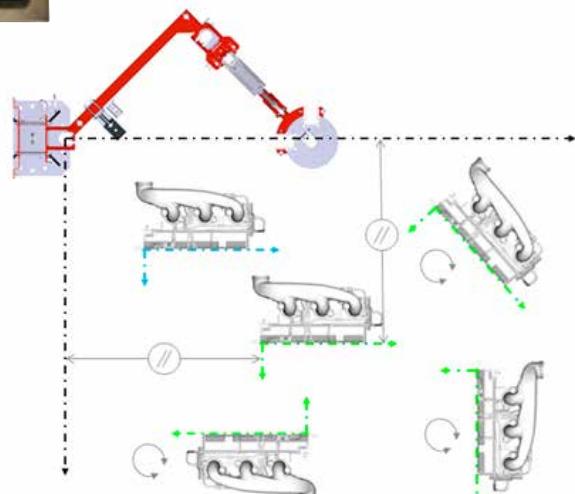
- Standard or specific 4", 7" and 8"
- PC or non PC based
- Plastic or stainless steel enclosure
- From basic input keypad to CVI Advanced HMI



CVI3 Positionning 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 CVI2 - Multi CVI3 - Retractable controller stand
- Different options and cable management included



SOCKET TRAY AND HMI SUPPORT



SPECIAL FUNCTIONS:

- Trombones (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



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

Screwfeeder Solutions - Handheld & Fixtured units

HST - TELESCOPIC HANDHELD UNIT

- High Productivity
- Light and Compact
- Easy to use/ Easy to maintain
- Push Start System



HSF - ADVANCED HANDHELD UNIT

- High performance rate
- Protuding system (retention in jaws)
- Easy to use/ Easy to maintain
- Optional Advanced Nozzle with swivelling arm



SEL/SRL - STATIONARY UNITS

- Simple & flexible
- Dedicated solution robot with SRL / MTB
- Easy to integrate / Easy to maintain
- SEL with 2 strokes / SRL with 1 stroke



| | HST | HSF | SEL | SRL |
|----------------------------|-----------------|--------------|----------------------|----------------------------|
| Type | Hand held | Hand held | Fixture | Fixture |
| Start | Push | lever | Remote | Remote |
| Stroke | Up to 78 mm | Up to 110 mm | Up to 80/180 mm | Up to 180 mm |
| Torque | Up to 10 Nm | Up to 15 Nm | Up to 100 Nm | Up to 100 Nm |
| Pneumatic & Electric Tools | ✓ | ✓ | ✓ | ✓ |
| Screw retention in jaws | ✗ | ✓ | ✗ | ✗ |
| Recommended installation | Balancer or Arm | Arm | Fixture Installation | Fixture Installation Robot |

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



ZSE – Modular Bowls feeders



Our bowl units have been strongly designed for a quick and easy access to the critical elements, improving effective efficiency and reducing maintenance time

CVI3 controller can control the complete screwfeeding system using CVI logix standard program"

Accessories

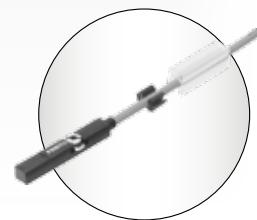
SENSORS



Screw present sensor
Screw feeding detection on hose



Home sensor
Home position detection of cylinders on SEL/SRL



Depth sensor
Depth tightening detection when required by application



Escapement sensors
Control/Secure escapement mechanism

BOWL OPTIONS



Control level
Detect and inform when the bowl is empty



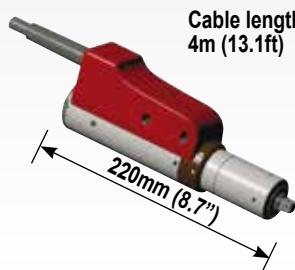
Hopper
increase your bowl capacity

LINEAR ARMS



Fixtured electric spindles ERF

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



Cable length:
4m (13.1ft)

220mm (8.7")

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 the technical data see pages 65

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

Desoutter



ASD

Desoutter

Desoutter

Designed in Europe

desoutter.com

CE

2009/2010

Optimized Workstation

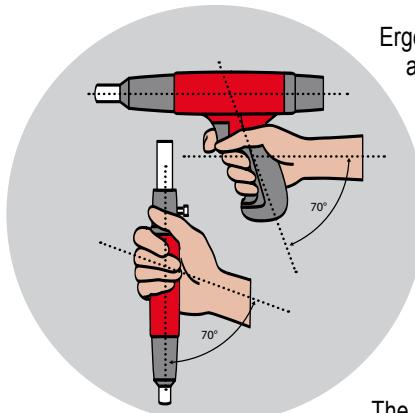


Fig. 1
Holding tools in
an ergonomically
neutral position

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

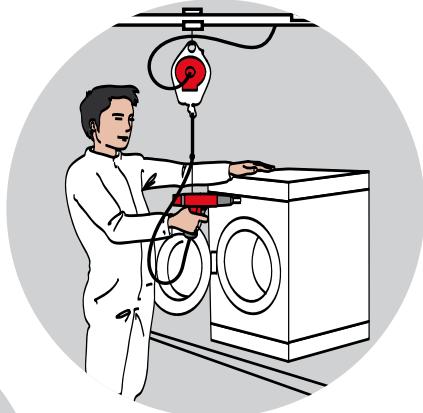


Fig. 2
Desoutter balancer

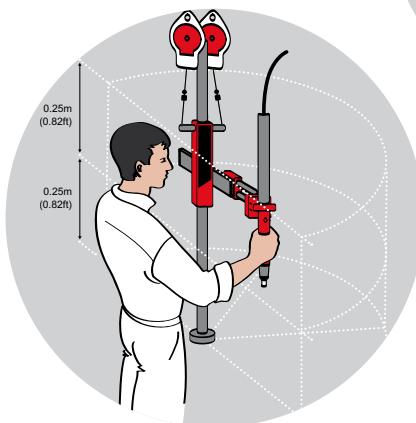
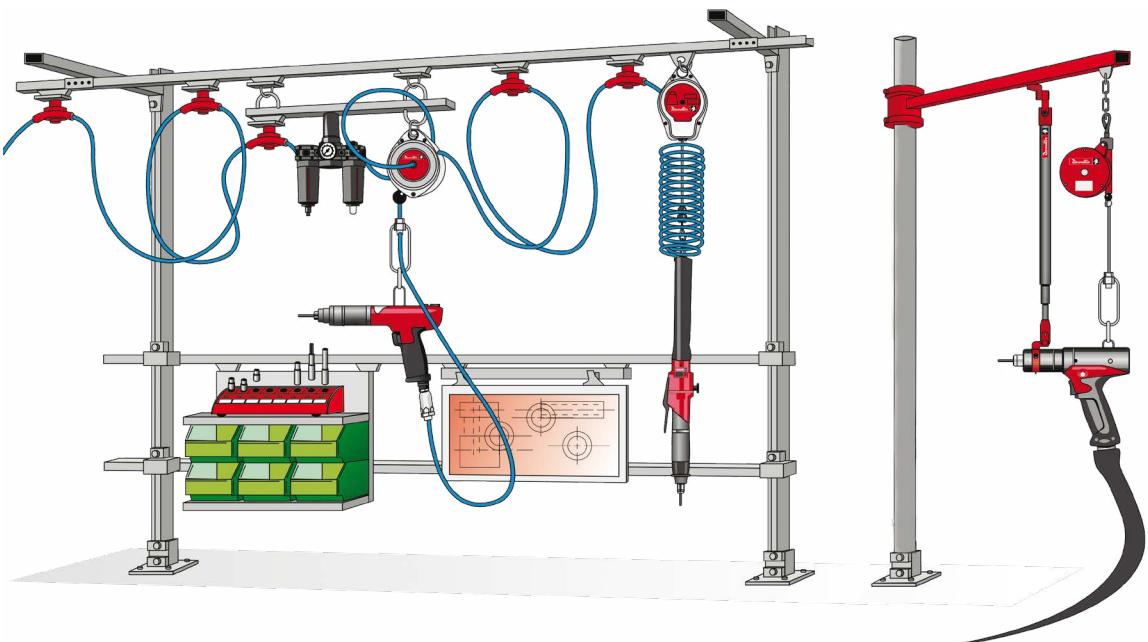
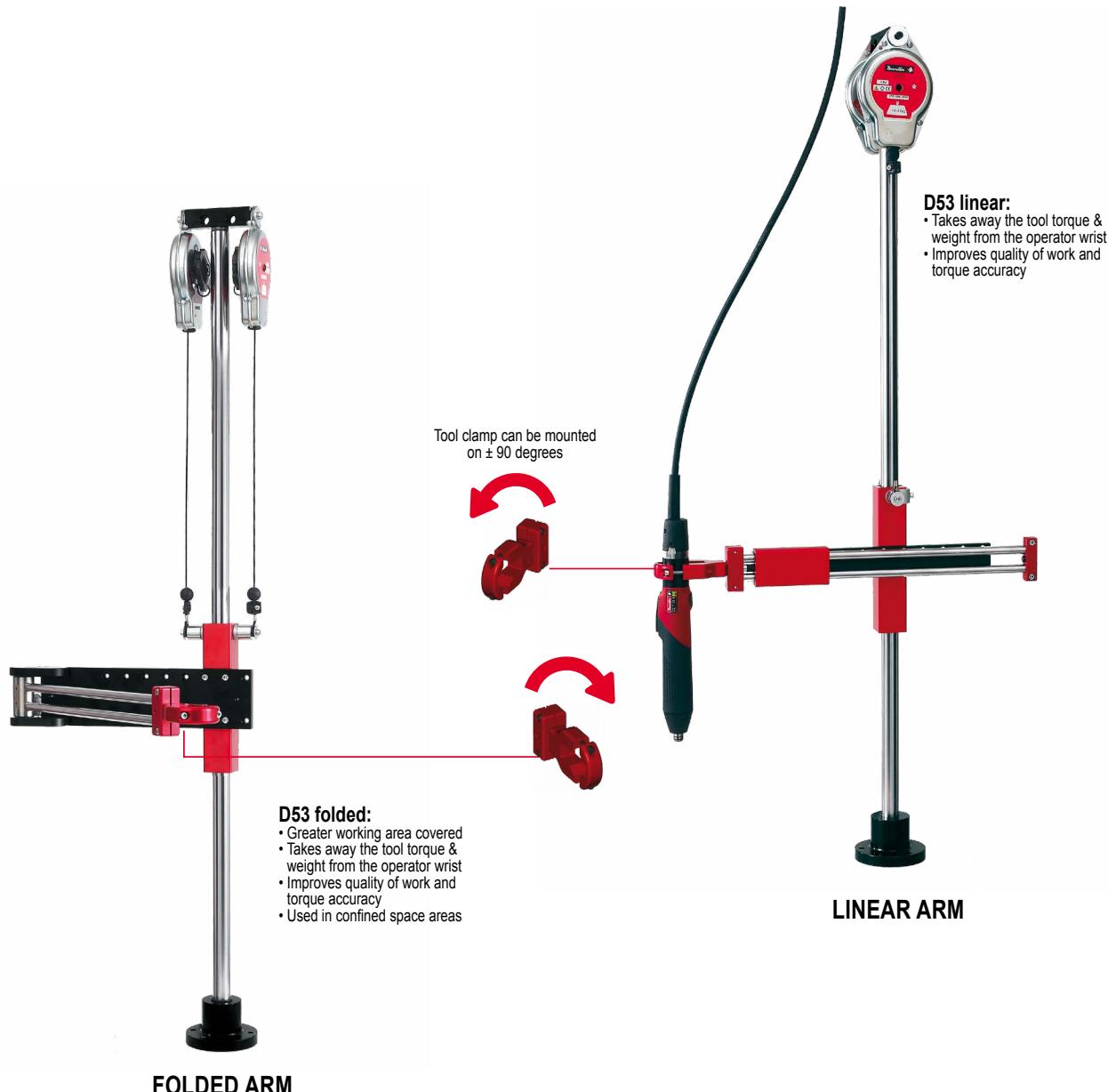


Fig. 3
Desoutter torque
reaction arm



Linear and Folded torque reaction arms

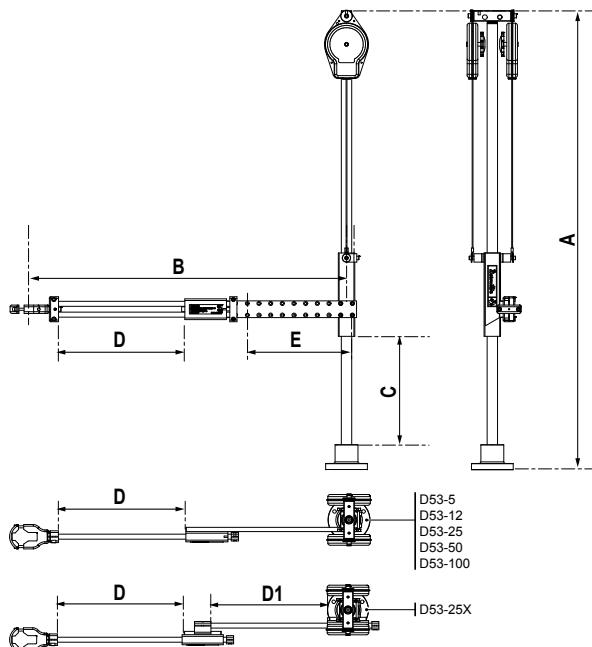
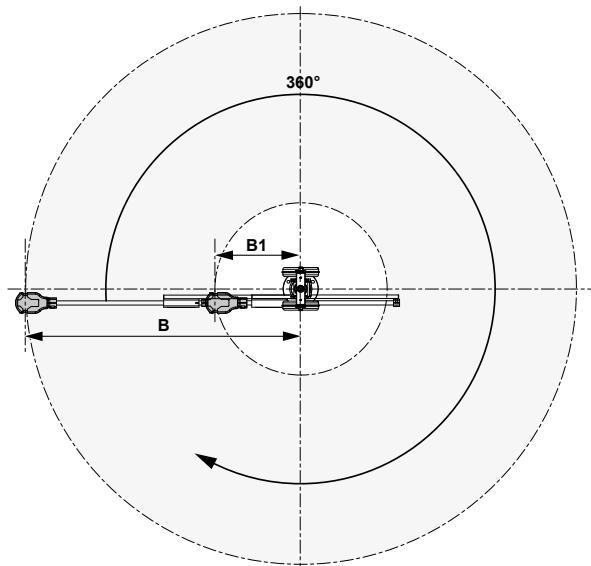


For full tool clamp program, please see details on page 162

| 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 | To order separately | |
| 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 | To order separately | |

(*) Universal D53 tool clamp included

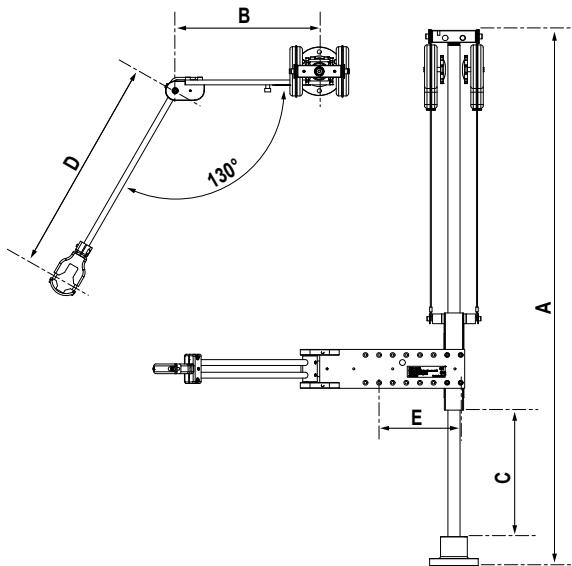
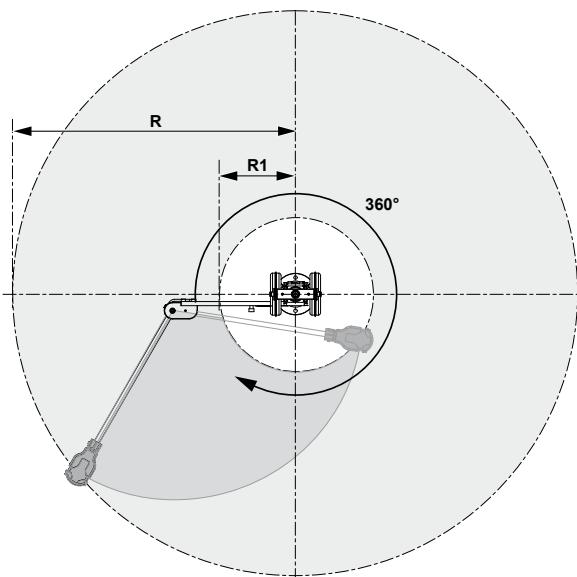
D53 - Dimensions



D53 linear working area product specification

| MODEL | PART NUMBER | MAXIMUM TORQUE | | HEIGHT A | | WIDTH | | | | VERTICAL STROKE C | | HORIZONTAL STROKE | | | | FIXED STROKE E | | TOOL WEIGHT MAX | |
|---------|---------------|----------------|--------|----------|------|-------|-------|-------|--------|-------------------|------|-------------------|------|-----|------|----------------|------|-----------------|------|
| | | Nm | ft. lb | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | 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 | - | - | 168 | 6.6 | 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 | - | - | 196 | 7.7 | 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 | - | - | 252 | 9.9 | 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 | - | - | 266 | 10.5 | 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 | - | - | 266 | 10.5 | 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 MAX | |
|----------|---------------|----------------|--------|----------|------|---------|-------|-------------------|------|----------|--------|----------------|-----|----------|------|-----------|-----|-----------------|------|
| | | 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



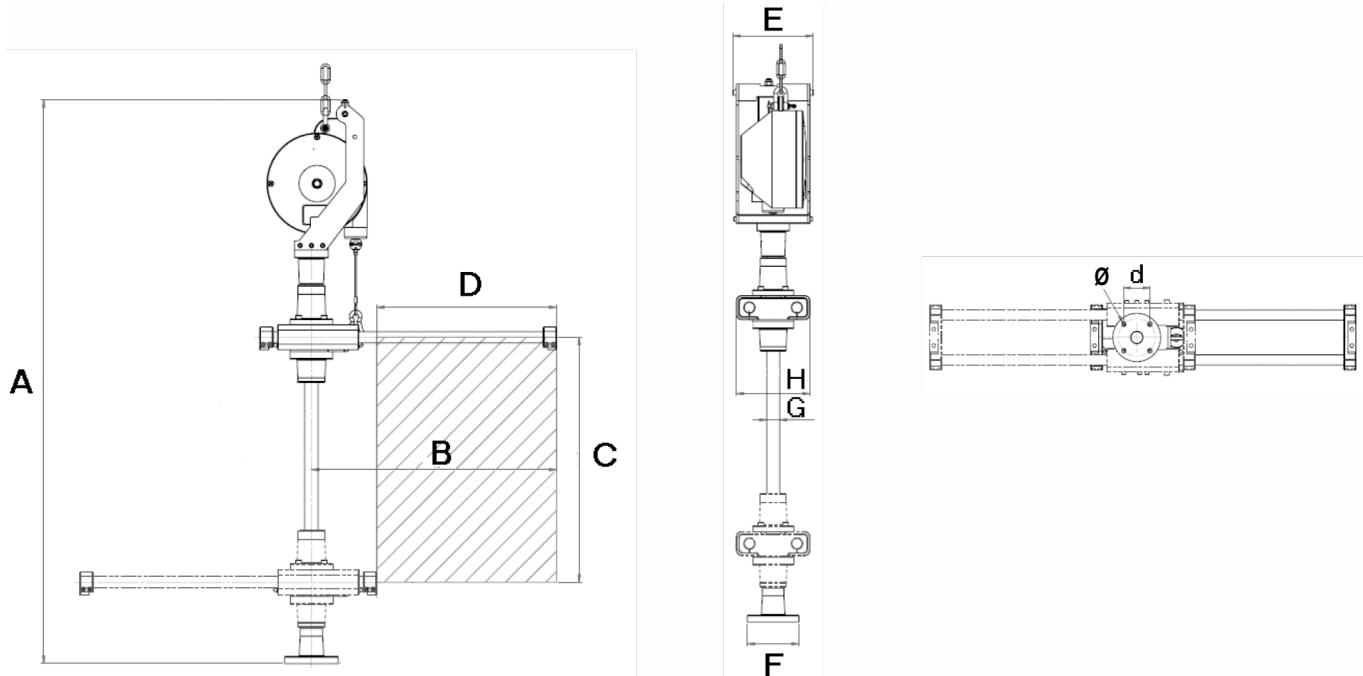
D53-150/1000 linear:

- 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 | |
| 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 45DF | |
| 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 45DF | |
| D53-1000XL | 615 811 665 0 | 1000 | 740 | 17.8 | 39.3 | 1 x 45DF | |

To order separately
contact your Desoutter
representatives

D53HT - Dimensions



| MODEL | PART NUMBER | HEIGHT | | WIDTH (WO/CLAMP) | | | | VERTICAL STROKE | | | | TOOL WEIGHT | |
|------------|---------------|--------|------|------------------|------|------|------|-----------------|------|------|------|-------------|------|
| | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb |
| 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 |

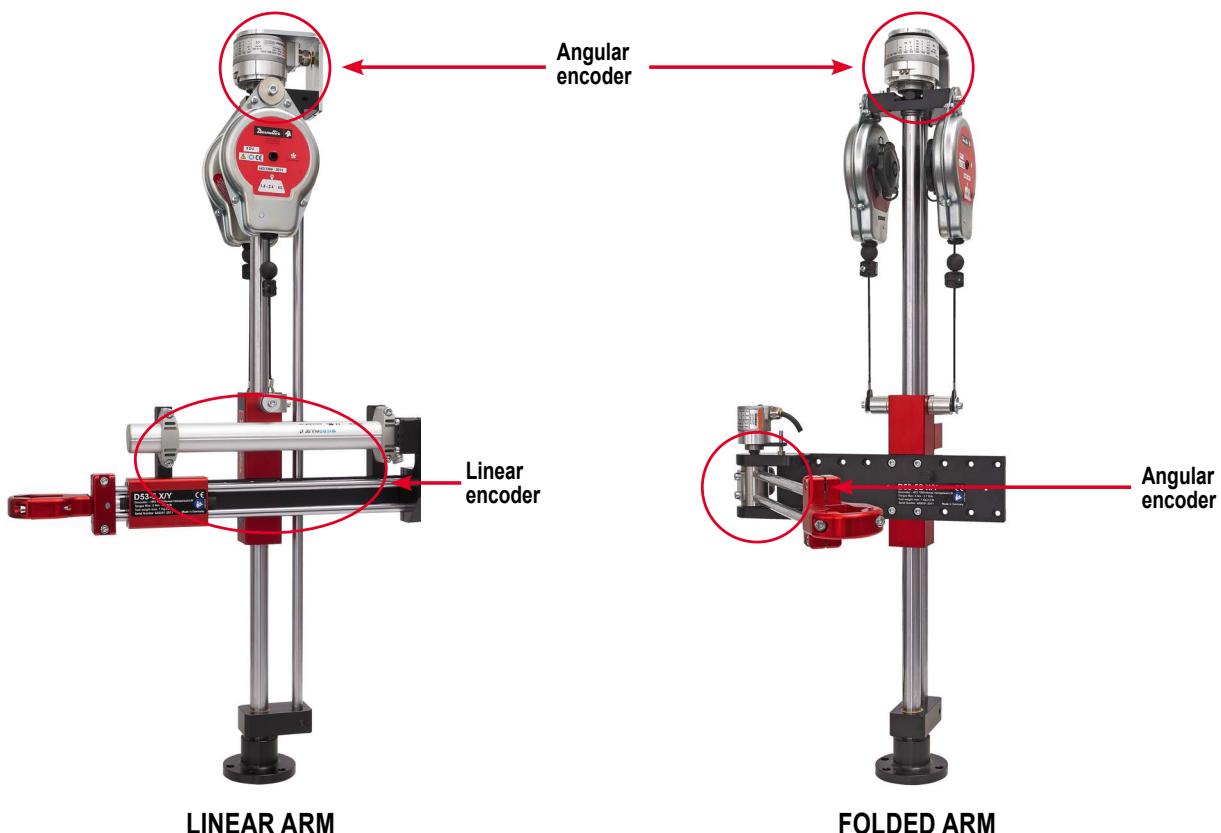
| MODEL | HORIZONTAL STROKE | | | | | | | |
|------------|-------------------|---------|---------|---------|---------|---------|---------|---------|
| | D mm | D in | E mm | E in | F mm | F in | G mm | G in |
| D53-150 | 360 | 14.4 | 170 | 6.7 | 90 | 3.5 | 25 | 1.0 |
| D53-150XL | 600 | 24 | 170 | 6.7 | 90 | 3.5 | 25 | 1.0 |
| D53-300 | 400 | 16 | 186 | 7.3 | 119 | 4.7 | 30 | 1.2 |
| D53-300XL | 600 | 24 | 186 | 7.3 | 119 | 4.7 | 30 | 1.2 |
| D53-500 | 440 | 17.6 | 180 | 7.1 | 119 | 4.7 | 40 | 1.6 |
| D53-500XL | 800 | 32 | 180 | 7.1 | 119 | 4.7 | 40 | 1.6 |
| D53-1000 | 480 | 19.2 | 182 | 7.2 | 129 | 5.1 | 50 | 2.0 |
| D53-1000XL | 800 | 32 | 182 | 7.2 | 129 | 5.1 | 50 | 2.0 |

| 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 - Positionning arms for Posco 500

- D53 X/Y 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 POSCO 500 to program a complete fastening sequence
- Linear arm: Linear/Angular/Encoders
- Swivel arm: Angular/Angular/Encoders

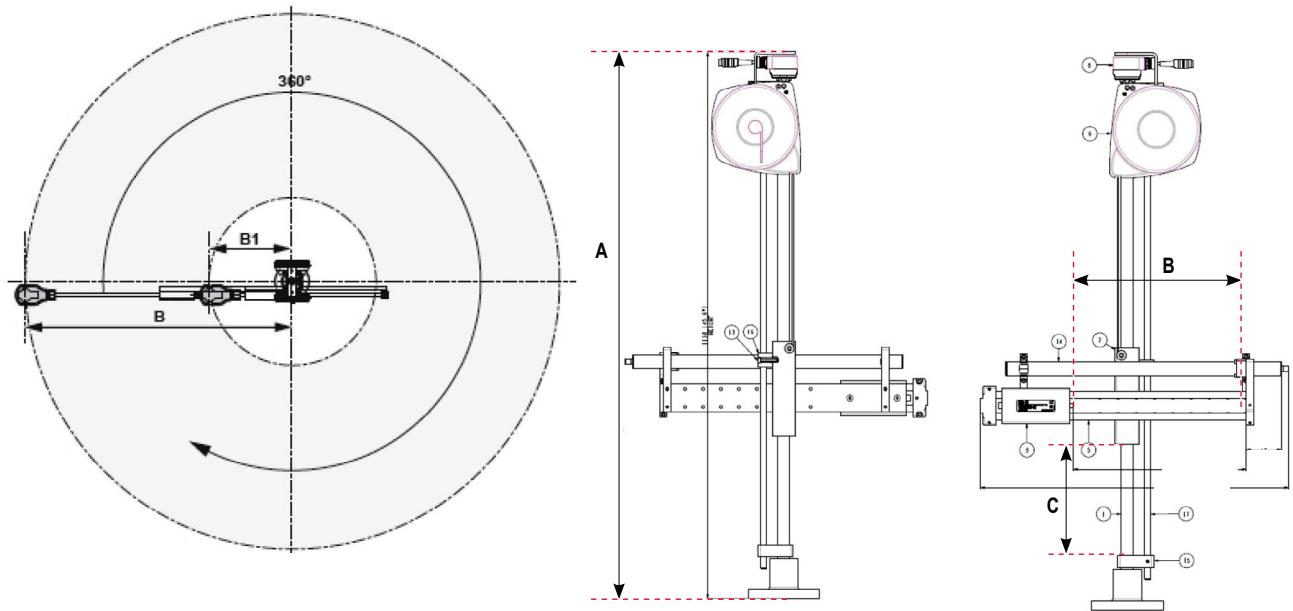


For full tool clamp program, please see details on page 154

| 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* | 615 397 874 0 | 5 | 3.7 | 0.8 | 1.8 | 1 x 5DU | 28.5 - 41 | 1.12 - 1.62 |
| D53-12 X/Y AXLE* | 615 397 875 0 | 12 | 8.8 | 1.5 | 3.3 | 2 x 5DU | 28.5 - 41 | 1.12 - 1.62 |
| D53-25 X/Y AXLE* | 615 397 876 0 | 25 | 18.4 | 2.5 | 5.5 | 2 x 5DU | 28.5 - 41 | 1.12 - 1.62 |
| D53-50 X/Y AXLE* | 615 397 877 0 | 50 | 36.8 | 5.0 | 11.0 | 2 x 15D | To order separately | |
| D53-100 X/Y AXLE* | 615 397 878 0 | 100 | 73.7 | 6.0 | 13.2 | 2 x 22D | To order separately | |
| FOLDED ARM | | | | | | | | |
| D53-5S X/Y AXLE* | 615 397 879 0 | 5 | 3.7 | 0.8 | 1.8 | 1 x 5DU | 28.5 - 41 | 1.12 - 1.62 |
| D53-12S X/Y AXLE* | 615 397 880 0 | 12 | 8.8 | 1.5 | 3.3 | 2 x 5DU | 28.5 - 41 | 1.12 - 1.62 |
| D53-25S X/Y AXLE* | 615 397 881 0 | 25 | 18.4 | 2.5 | 5.5 | 2 x 5DU | 28.5 - 41 | 1.12 - 1.62 |
| D53-50S X/Y AXLE | 615 397 882 0 | 50 | 36.8 | 5.0 | 11.0 | 2 x 15D | To order separately | |
| D53-100S X/Y AXLE | 615 397 883 0 | 100 | 73.7 | 6.0 | 13.2 | 2 x 22D | To order separately | |

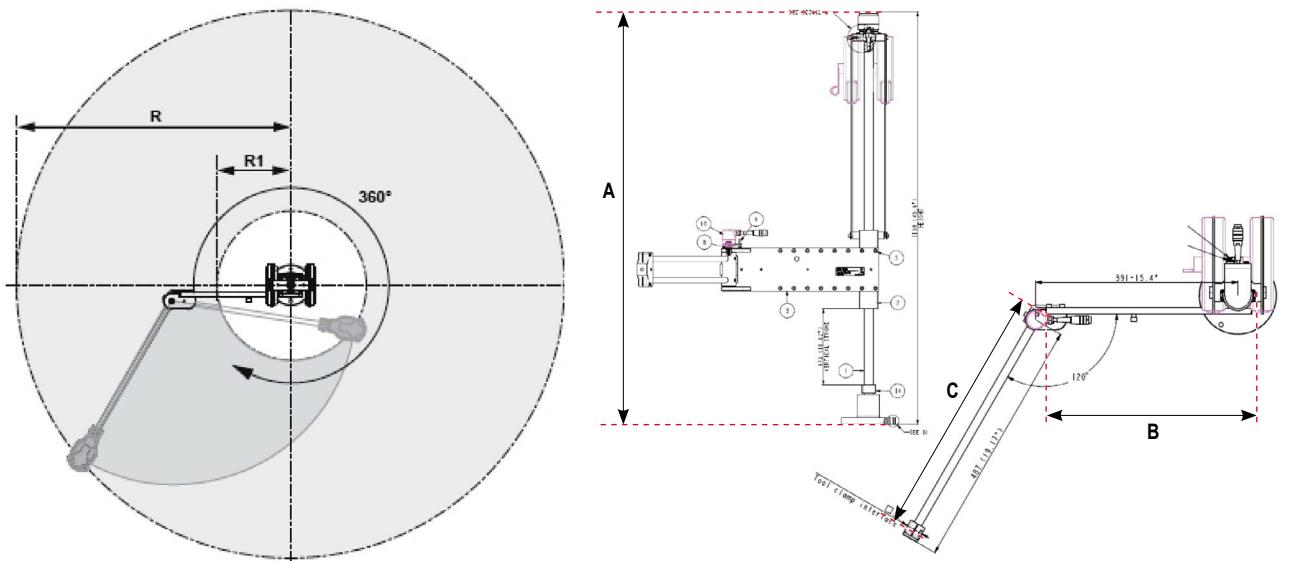
(*) Universal D53 tool clamp included

D53 X/Y - Dimensions



Linear arm

| MODEL | PART NUMBER | A | | B | | C | |
|------------------|---------------|------|------|-------|------|-----|------|
| | | mm | in. | mm | in. | mm | in. |
| D53-5 X/Y-AXLE | 615 397 874 0 | 789 | 31.1 | 206.5 | 8.1 | 281 | 11.1 |
| D53-12 X/Y-AXLE | 615 397 875 0 | 945 | 37.2 | 238.5 | 9.4 | 436 | 17.2 |
| D53-25 X/Y-AXLE | 615 397 876 0 | 1189 | 46.8 | 291.5 | 11.5 | 586 | 23.1 |
| D53-50 X/Y-AXLE | 615 397 877 0 | 1189 | 46.8 | 259.5 | 10.2 | 486 | 19.1 |
| D53-100 X/Y-AXLE | 615 397 878 0 | 1189 | 46.8 | 398.5 | 15.7 | 486 | 19.1 |



Folded arm

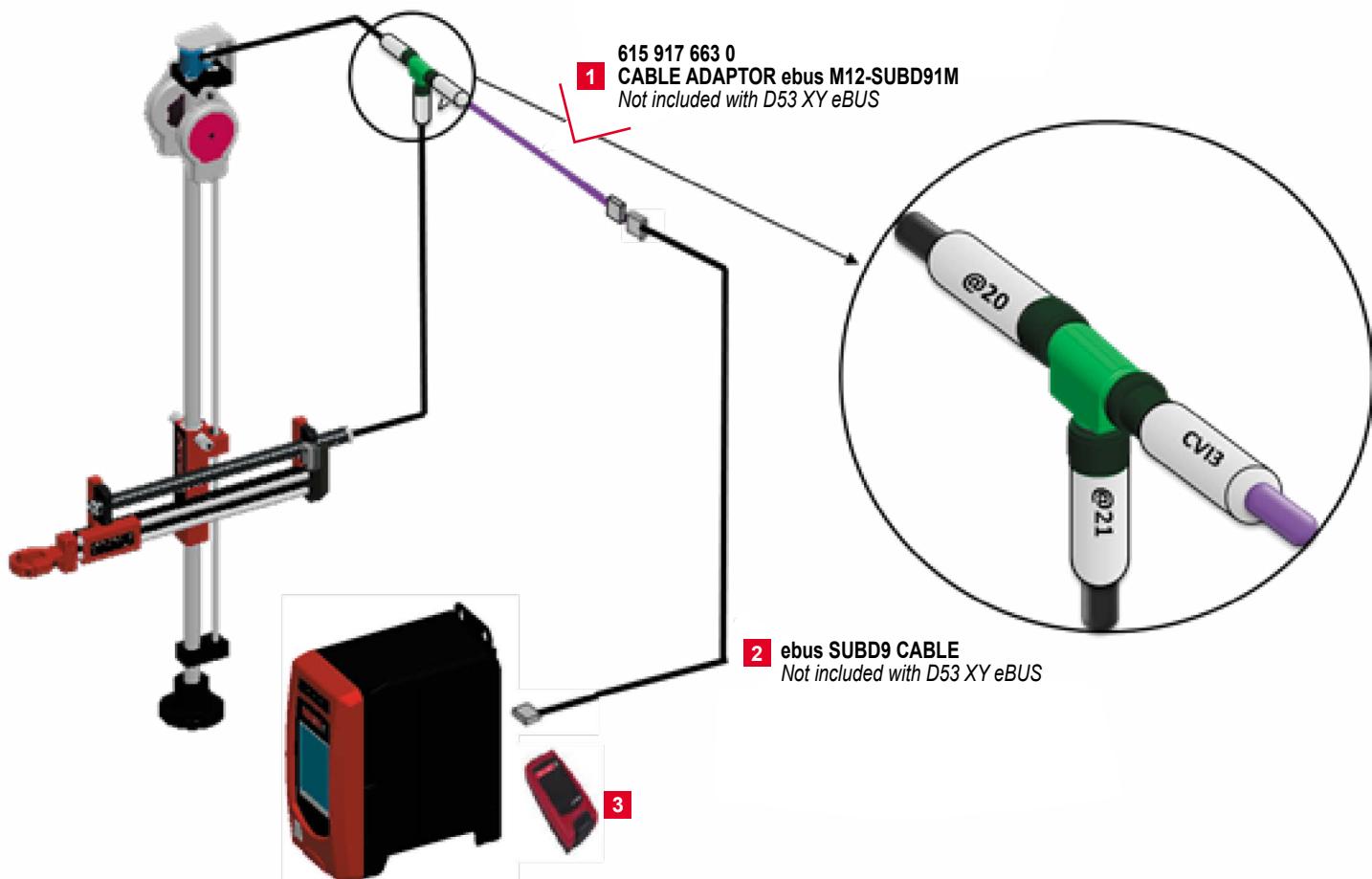
| MODEL | PART NUMBER | A | | B | | C | | R | | R1 | |
|-------------------|---------------|------|------|-----|------|-----|------|-----|------|-----|-----|
| | | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. |
| D53-5S X/Y AXLE | 615 397 879 0 | 789 | 31.1 | 248 | 9.8 | 370 | 14.6 | 546 | 21.5 | 140 | 5.5 |
| D53-12S X/Y AXLE | 615 397 880 0 | 945 | 37.2 | 298 | 11.7 | 420 | 16.5 | 639 | 25.2 | 146 | 5.8 |
| D53-25S X/Y AXLE | 615 397 881 0 | 1158 | 45.6 | 296 | 11.6 | 470 | 18.5 | 685 | 27 | 183 | 7.2 |
| D53-50S X/Y AXLE | 615 397 882 0 | 1158 | 45.6 | 336 | 13.2 | 440 | 17.3 | 698 | 27.5 | 154 | 6.1 |
| D53-100S X/Y AXLE | 615 397 883 0 | 1158 | 45.6 | 391 | 15.4 | 490 | 19.3 | 788 | 31 | 158 | 6.2 |

D53 X/Y – Positionning 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

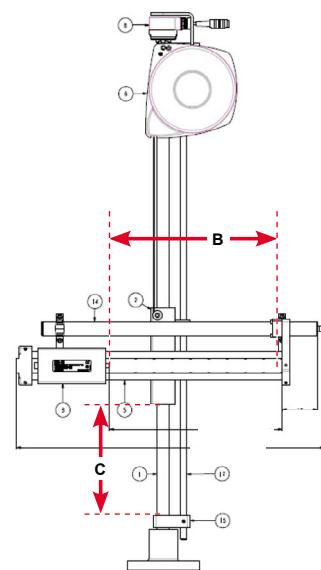
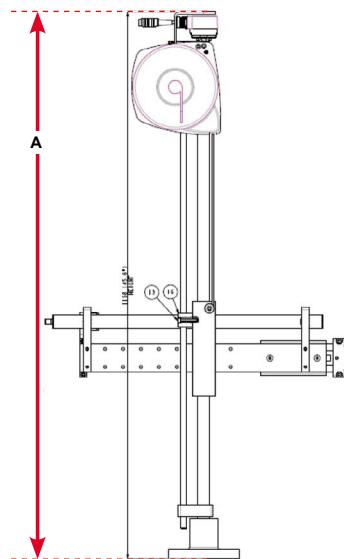
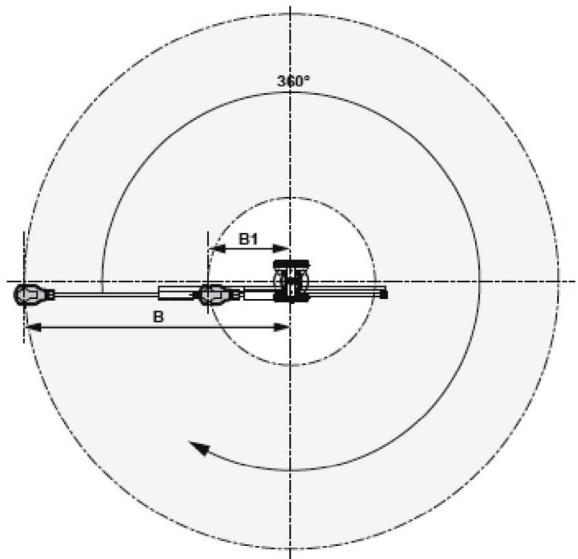
ACCESSORIES NEEDED :

| | | |
|----------|--------------------------------|------------|
| 1 | Cable adaptor EBUS M12 / SUBD9 | 6159176630 |
| 2 | Select one of them : | |
| | eBUS SUBD9 cable 3m | 6159176220 |
| | eBUS SUBD9 cable 5m | 6159176230 |
| | eBUS SUBD9 cable 15m | 6159176240 |
| 3 | Select one ePOD : | |
| | ePOD2 | 6159360760 |
| | ePOD3 | 6159360770 |



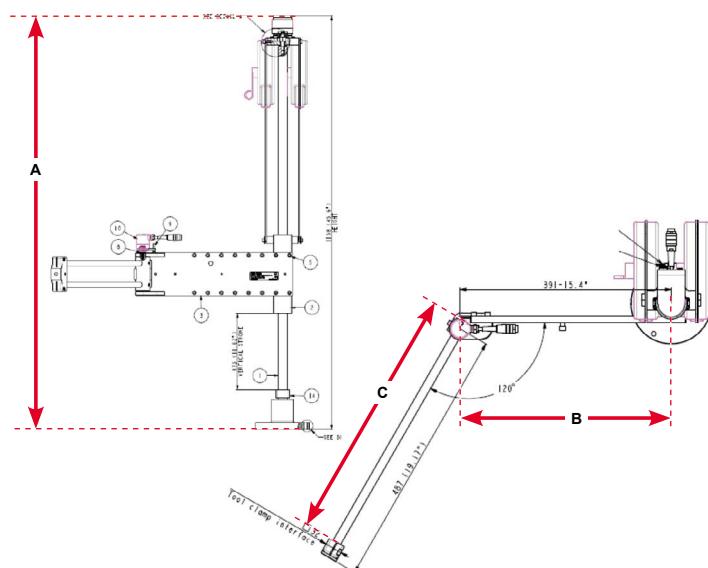
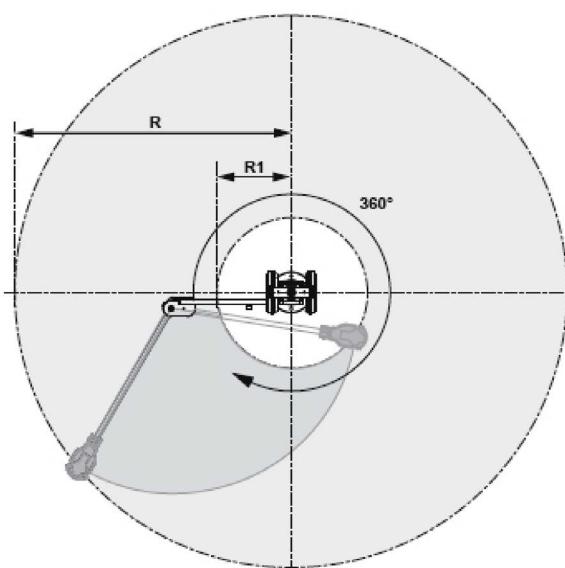
| MODEL | PART NUMBER | MAXIMUM TORQUE | | MAXIMUM TOOL WEIGHT | | ARM EQUIPPED WITH | TOOL CLAMP DIAMETER (INCLUDED WITH THE ARM) | |
|------------------------|---------------|----------------|--------|---------------------|------|-------------------|---|-------------|
| | | Nm | ft. lb | kg | lb. | | 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 | To order separately | |
| 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 | To order separately | |

D53 X/Y – Positionning arms for CVI3



Linear arm

| MODEL | PART NUMBER | A | | B | | C | |
|------------------|---------------|------|------|-------|------|-----|------|
| | | mm | in. | mm | in. | mm | in. |
| D53-5 X/Y-AXLE | 615 397 874 0 | 789 | 31.1 | 206.5 | 8.1 | 281 | 11.1 |
| D53-12 X/Y-AXLE | 615 397 875 0 | 945 | 37.2 | 238.5 | 9.4 | 436 | 17.2 |
| D53-25 X/Y-AXLE | 615 397 876 0 | 1189 | 46.8 | 291.5 | 11.5 | 586 | 23.1 |
| D53-50 X/Y-AXLE | 615 397 877 0 | 1189 | 46.8 | 259.5 | 10.2 | 486 | 19.1 |
| D53-100 X/Y-AXLE | 615 397 878 0 | 1189 | 46.8 | 398.5 | 15.7 | 486 | 19.1 |



Folded arm

| MODEL | PART NUMBER | A | | B | | C | | R | | R1 | |
|-------------------|---------------|------|------|-----|------|-----|------|-----|------|-----|-----|
| | | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. |
| D53-5S X/Y AXLE | 615 397 879 0 | 789 | 31.1 | 248 | 9.8 | 370 | 14.6 | 546 | 21.5 | 140 | 5.5 |
| D53-12S X/Y AXLE | 615 397 880 0 | 945 | 37.2 | 298 | 11.7 | 420 | 16.5 | 639 | 25.2 | 146 | 5.8 |
| D53-25S X/Y AXLE | 615 397 881 0 | 1158 | 45.6 | 296 | 11.6 | 470 | 18.5 | 685 | 27 | 183 | 7.2 |
| D53-50S X/Y AXLE | 615 397 882 0 | 1158 | 45.6 | 336 | 13.2 | 440 | 17.3 | 698 | 27.5 | 154 | 6.1 |
| D53-100S X/Y AXLE | 615 397 883 0 | 1158 | 45.6 | 391 | 15.4 | 490 | 19.3 | 788 | 31 | 158 | 6.2 |

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) | |
| | | | | A set of red tool clamps and adaptors, including a vertical rotation clamp, a horizontal rotation clamp, and a top mount adaptor. | | | | | |
| 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 | 615 396 615 0 + 409173 NOT Included To be ordered | | |
| SD/SDP/SDT ERP 3/5/10/20 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 | 615 396 615 0 + 409183 NOT Included To be ordered | SD Top mount adaptor ref. 409273 To be ordered with rotation clamps SD Nose mount: 465463 for 320-1470rpm / 465443 for 2200- 3500rpm - To be ordered with rotation clamps | |
| 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 | 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 ERP 30/40 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



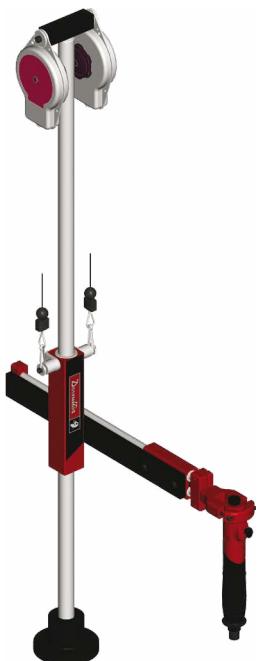
E

Specific Clamps

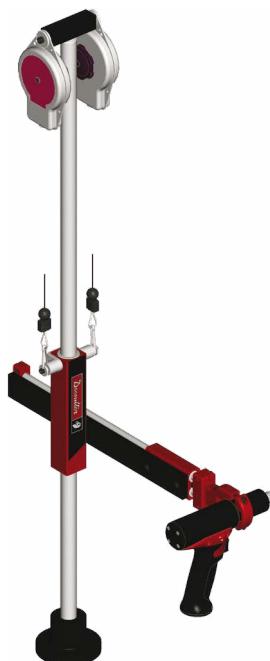
| MODEL | PART NUMBER |
|--|---------------|
| SB | 615 810 123 0 |
| SC2 / SBP / SCP(T) / SLB / ECS / SLC(P) SDP(T) | 615 810 125 0 |
| SD SH70/150/200/280 /420/500 | 615 810 129 0 |
| SH700/850 | 615 810 131 0 |

D53 Tool positionning

Straight tool



Pistol grip tool



Angle nutrunner



TRA - Telescopic reaction arms

Telescopic carbon arm: Ideal for busy workspace!

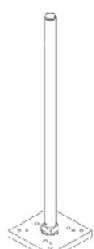
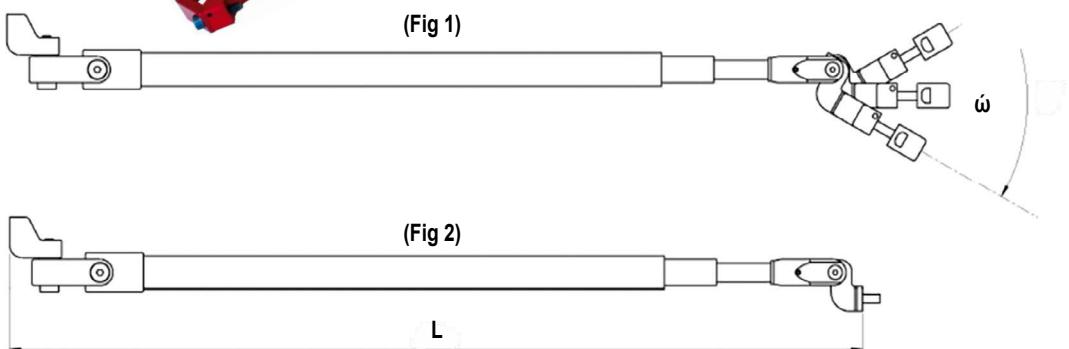
- From 12 up to 200 Nm (8.9 up to 148 ft.lb) torque capacity
- Several lengths available
- 90 degrees tool clamp interface for straight or pistol grip tools
- Limited tool clamp angle rotation to avoid side forces in the operator arm (ω) (Fig 1)

Benefits:

- Extremely lightweight carbon made torque arm for improved comfort of use
- Flexible solution



(Fig 1)



** 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 | | |
| 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

To order separately
(see page 168)

TRA - Positionning telescopic arms for Posco 500

TRA with positioning system allows to track the tool position during the assembly process

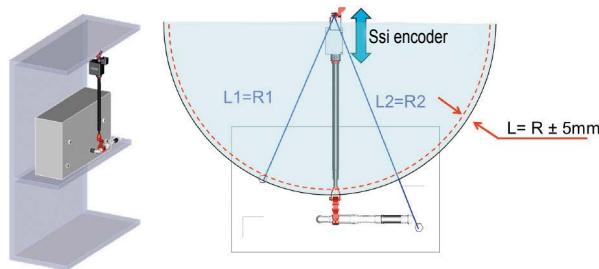
Same telescopic arm as the standard one: from 12 to 200 Nm
(8.9 to 148 ft.lb) torque capacity

2 different versions:

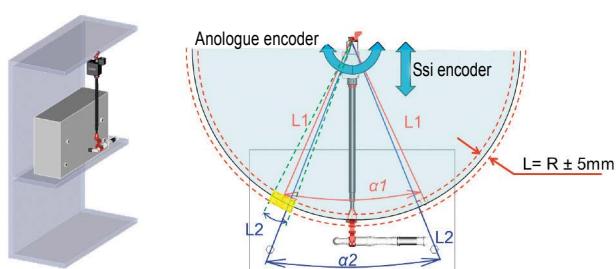
- 1 encoder: length measurement
- 2 encoders: length measurement + angle control
- This arm is intended to be used together with our POSCO 500 to program a complete fastening sequence
- Accuracy: +/- 5mm



1 encoder system



2 encoders system



| MODEL | PART NUMBER | NUMBER OF ENCODER | MAXIMUM TORQUE | | MAX. MIN. LENGTH | | TOOL CLAMP DIAMETER | |
|----------------------|---------------|-------------------|----------------|-------|------------------|-----|---------------------------------------|-------------|
| | | | Nm | ft.lb | mm | in. | mm | in. |
| TRA 12 1600 UNI P * | 615 811 694 0 | 1 | 12 | 8.8 | 1762 | 69 | 28 - 49 | 1.10 - 1.92 |
| TRA 25 2100 UNI P * | 615 811 670 0 | 1 | 25 | 18.4 | 2259 | 89 | 28 - 49 | 1.10 - 1.92 |
| TRA 50 2100 UNI P * | 615 811 676 0 | 1 | 50 | 36.8 | 2311 | 91 | 28 - 49 | 1.10 - 1.92 |
| TRA 100 2100 P | 615 811 682 0 | 1 | 100 | 73.7 | 2315 | 91 | To be ordered separately (page166) | |
| TRA 200 2100 P | 615 811 688 0 | 1 | 200 | 147.4 | 2317 | 91 | To be ordered separately (page166) | |
| TRA 12 1600 UNI P2 * | 615 811 695 0 | 2 | 12 | 8.8 | 1762 | 69 | 28 - 49 | 1.10 - 1.92 |
| TRA 25 2100 UNI P2 * | 615 811 671 0 | 2 | 25 | 18.4 | 2259 | 89 | 28 - 49 | 1.10 - 1.92 |
| TRA 50 2100 UNI P2 * | 615 811 677 0 | 2 | 50 | 36.8 | 2311 | 91 | 28 - 49 | 1.10 - 1.92 |
| TRA 100 2100 P2 | 615 811 683 0 | 2 | 100 | 73.7 | 2315 | 91 | To be ordered separately (page166) | |
| TRA 200 2100 P2 | 615 811 689 0 | 2 | 200 | 147.4 | 2317 | 91 | To be ordered separately (page166) | |

(*) Universal TRA tool clamp included

(**) Universal balancer adapters: 1 kit = 7 parts for all Desoutter balancer types. Part Nr. 615 397 922 5

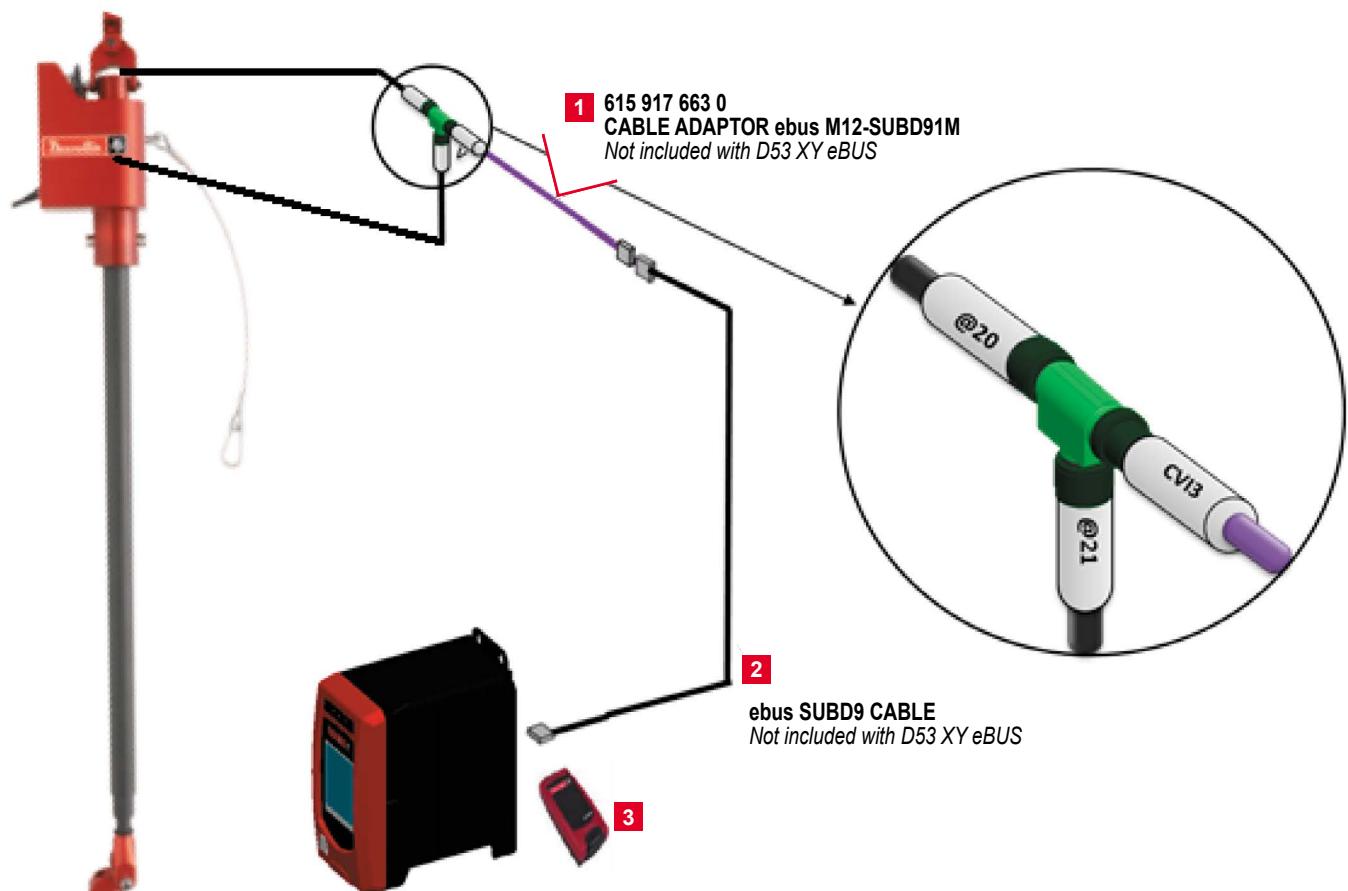
TRA X/Y – Positionning arms for CVI3

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 6159176220
eBUS SUBD9 cable 5m 6159176230
eBUS SUBD9 cable 15m 6159176240
3 Select one ePOD :
ePOD2 6159360760
ePOD3 6159360770
• Needs ePOD 2 or higher
• Easy positioning learning mode

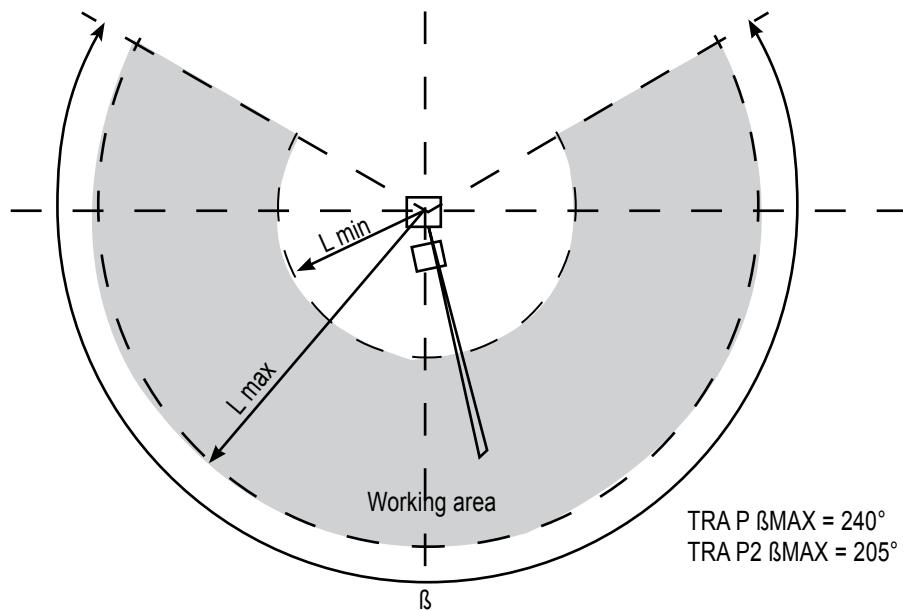


TRA X/Y – Positionning arms for CVI3

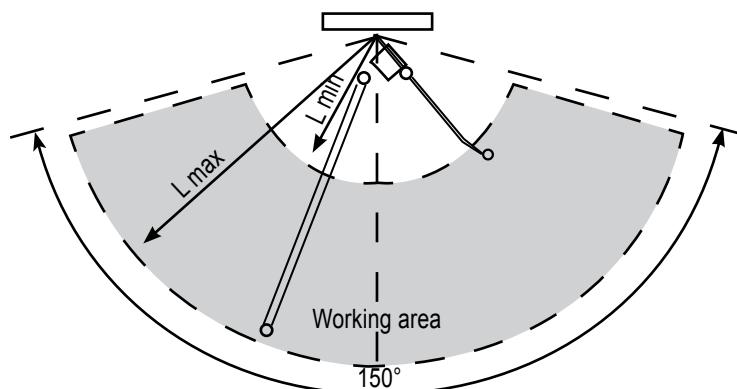
| MODEL | PART NUMBER | TORQUE MAX | | L MIN | | L MAX | | STROKE | | WEIGHT | |
|--------------------|---------------|------------|-------|--------|-------|-------|-------|--------|------|--------|------|
| | | Nm | Ft.lb | mm | in | mm | in | mm | in | kg | lb |
| TRA 12 1600 P UNI | 615 812 102 0 | 12 | 8.9 | 883.5 | 34.78 | 1762 | 69.4 | 887.5 | 34.6 | 4 | 8.8 |
| TRA 25 2100 P UNI | 615 812 103 0 | 25 | 18.4 | 1053.5 | 41.47 | 2259 | 88.9 | 1205.5 | 47.5 | 4.2 | 9.3 |
| TRA 50 2100 P UNI | 615 812 104 0 | 50 | 36.9 | 1105 | 43.5 | 2311 | 91 | 1206 | 47.5 | 4.6 | 10.1 |
| TRA 100 2100 UNI | 615 812 105 0 | 100 | 73.8 | 1080 | 42.5 | 2315 | 91.15 | 1235 | 48.6 | 4.8 | 10.6 |
| TRA 200 2100 P UNI | 615 812 106 0 | 200 | 148 | 1085 | 42.7 | 2317 | 91.2 | 1232 | 48.5 | 6.4 | 14.1 |
| TRA 12 1600 P2 | 615 812 107 0 | 12 | 8.9 | 883.5 | 34.78 | 1762 | 69.4 | 887.5 | 34.6 | 4.2 | 9.3 |
| TRA 25 2100 P2 | 615 812 108 0 | 25 | 18.4 | 1053.5 | 41.47 | 2259 | 88.9 | 1205.5 | 47.5 | 4.4 | 9.7 |
| TRA 50 2100 P2 | 615 812 109 0 | 50 | 36.9 | 1105 | 43.5 | 2311 | 91 | 1206 | 47.5 | 4.8 | 10.6 |
| TRA 100 2100 P2 | 615 812 110 0 | 100 | 73.8 | 1080 | 42.5 | 2315 | 91.15 | 1235 | 48.6 | 5 | 11 |
| TRA 200 2100 P2 | 615 812 111 0 | 200 | 148 | 1085 | 42.7 | 2317 | 91.2 | 1232 | 48.5 | 6.8 | 15 |

TRA X/Y CANopen - Dimensions

Horizontal, top view



Vertical, back view



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 ERP 3/5/10/20 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") |
| ERP 30/40 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") |
| SH 420/500 | TRA50 TRA100 | 6158129030 + 6158128940 6158129040 + 6158128940 |
| SH 700 | TRA50 TRA100 | 6158129030 + 6158129000 6158129040 + 6158129000 |
| SH 850 | TRA 100 | 6158128940 + 6158128970 |
| ERAL 1,5/2 ERAL 4 ERAL 6 | TRA50 TRA100 | 6158129030 + 6158128960 6158129040 + 6158128960 |
| ECA 15/20/30 | TRA 50 | 6158129030 + 6158128930 |
| ECA 40/60 | TRA 100 | 6158129040 + 6158128930 |
| EAD 20/32 EAB(C) 26/32/45 | TRA50 | 6158129030 + 6158128880 |
| EAD 50-900 | TRA50 TRA100 | 6158129030 + 6158128910 6158129040 + 6158128910 |
| EAD 70/80/105 EAB(C) 60 | TRA50 TRA100 | 6158129030 + 6158128950 6158129040 + 6158128950 |
| ERDL 4 - 60/80/135 ECD 50/70/120 EID 44/65/75 | TRA100 TRA200 | 6158102030 for TRA100 6158102020 for TRA200 NOT Included with the arm To be ordered Spline G1 D40,5 |
| ERDL 6 - 170/220/250 | TRA200 | 6158102040 NOT Included with the arm To be ordered Spline G1 D50 |
| EDP EID 25/32 | TRA 50 | 6158106280 + 6153965515 NOT Included with the arm To be ordered Clamp to be welded |
| ECD 20/30 | TRA 50 | 6158106280 + 6153961910 NOT Included with the arm To be ordered Clamp to be welded |
| ECA 70/90/115/125/150 | TRA 100 | 6158129040 + 6158128980 |
| ERAL 4 - 225 ECA 200 | TRA200 | 6158106310 + 6153962300 NOT Included with the arm To be ordered Clamp to be welded |

For the tools not mentioned in this list, please ask your local Desoutter contact to define the tool clamp



Torque Tubes



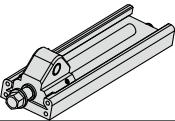
Telescopic arm for vertical and horizontal fastening applications

- From 0 to 100 Nm (0 to 73.7ft.lb) torque capacity
- Different strokes available
- Designed to be used with all Desoutter tools
- Gravity center adjustment and rigid fixation as options

| MODEL | PART NUMBER | MAX TORQUE | | STROKE | | WEIGHT | |
|----------------|---------------|------------|-------|--------|------|--------|------|
| | | Nm | ft lb | mm | in | kg | lb |
| TT10-850/300 | 615 812 260 0 | 12 | 8.9 | 300 | 11.8 | 1.4 | 3.1 |
| TT25-1150/300 | 615 812 082 0 | 25 | 18.4 | 300 | 11.8 | 3.5 | 7.8 |
| TT25-1600/600 | 615 812 261 0 | 25 | 18.4 | 600 | 23.6 | 3.9 | 8.7 |
| TT50-1700/600 | 615 812 262 0 | 50 | 36.9 | 600 | 23.6 | 5.3 | 11.7 |
| TT50-2100/900 | 615 812 263 0 | 50 | 36.9 | 900 | 35.4 | 6.3 | 13.8 |
| TT100-1700/600 | 615 812 264 0 | 100 | 73.7 | 600 | 23.6 | 8.6 | 18.9 |
| TT100-2100/900 | 615 812 265 0 | 100 | 73.7 | 900 | 35.4 | 10 | 22 |

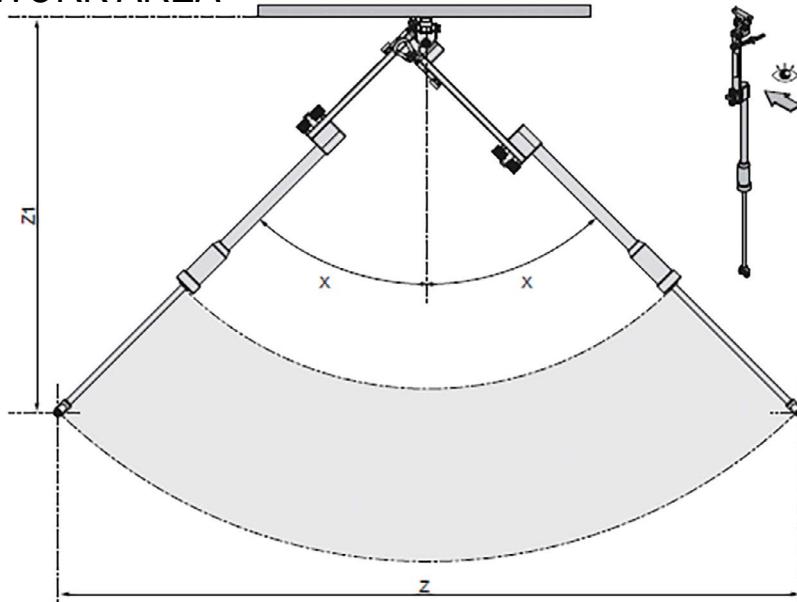


OPTIONAL ACCESSORIES

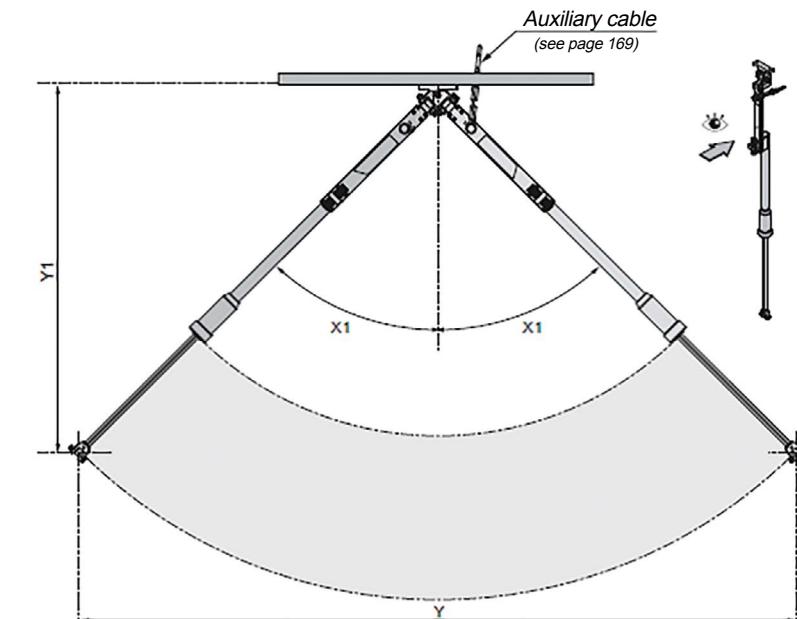
| PART NUMBER | DESCRIPTION | FOR TORQUE TUBE | |
|---------------|---------------------------|-----------------|---|
| 615 812 203 0 | Gravity center adjustment | TT10 |  |
| 615 812 149 0 | Gravity center adjustment | TT25 | |
| 615 812 532 0 | Gravity center adjustment | TT50 | |
| 615 812 539 0 | Gravity center adjustment | TT100 | |
| 615 812 211 0 | Rigid fixation | TT10 |  |
| 615 812 157 0 | Rigid fixation | TT25 | |
| 615 812 535 0 | Rigid fixation | TT50 / 100 | |
| 615 812 141 0 | Balancer DU fixation | TT10 / 25 |  |
| 615 812 145 0 | Balancer D fixation | TT25/50 | |
| 615 812 522 0 | Balancer DF fixation | TT50 / 100 | |

Torque Tubes

WORK AREA



| MODEL | PART NUMBER | X | Z MAX ± 5 | | Z1 MAX ± 5 | |
|----------------|---------------|----|---------------|-------|----------------|------|
| | | | Deg | mm | in | kg |
| TT10-850/300 | 615 812 260 0 | 45 | 1378 | 54.25 | 723.8 | 28.5 |
| TT25-1150/300 | 615 812 082 0 | 45 | 1508.4 | 59.39 | 819 | 32.2 |
| TT25-1600/600 | 615 812 261 0 | 45 | 2356.9 | 92.8 | 1243.3 | 48.9 |
| TT50-1700/600 | 615 812 262 0 | 45 | 2552 | 100.5 | 1362 | 53.6 |
| TT50-2100/900 | 615 812 263 0 | 45 | 340.3 | 13.4 | 1786.45 | 70.3 |
| TT100-1700/600 | 615 812 264 0 | 45 | 2583.1 | 101.7 | 1377.67 | 54.2 |
| TT100-2100/900 | 615 812 265 0 | 45 | 3431.6 | 135.1 | 1801.94 | 70.9 |



| MODEL | PART NUMBER | X | Y MAX ± 5 | | Y1 MAX ± 5 | |
|----------------|---------------|----|---------------|-------|----------------|-------|
| | | | Deg | mm | in | kg |
| TT10-850/300 | 615 812 260 0 | 45 | 1403.5 | 55.3 | 721.9 | 28.42 |
| TT25-1150/300 | 615 812 082 0 | 45 | 1562.1 | 61.5 | 807.8 | 31.8 |
| TT25-1600/600 | 615 812 261 0 | 45 | 2410.6 | 94.9 | 1232 | 48.5 |
| TT50-1700/600 | 615 812 262 0 | 45 | 2626.8 | 103.4 | 1342.6 | 52.9 |
| TT50-2100/900 | 615 812 263 0 | 45 | 3475.4 | 136.8 | 1766.9 | 69.6 |
| TT100-1700/600 | 615 812 264 0 | 45 | 2657.1 | 104.6 | 1357.6 | 53.4 |
| TT100-2100/900 | 615 812 265 0 | 45 | 3505.6 | 138.0 | 1781.8 | 70.2 |

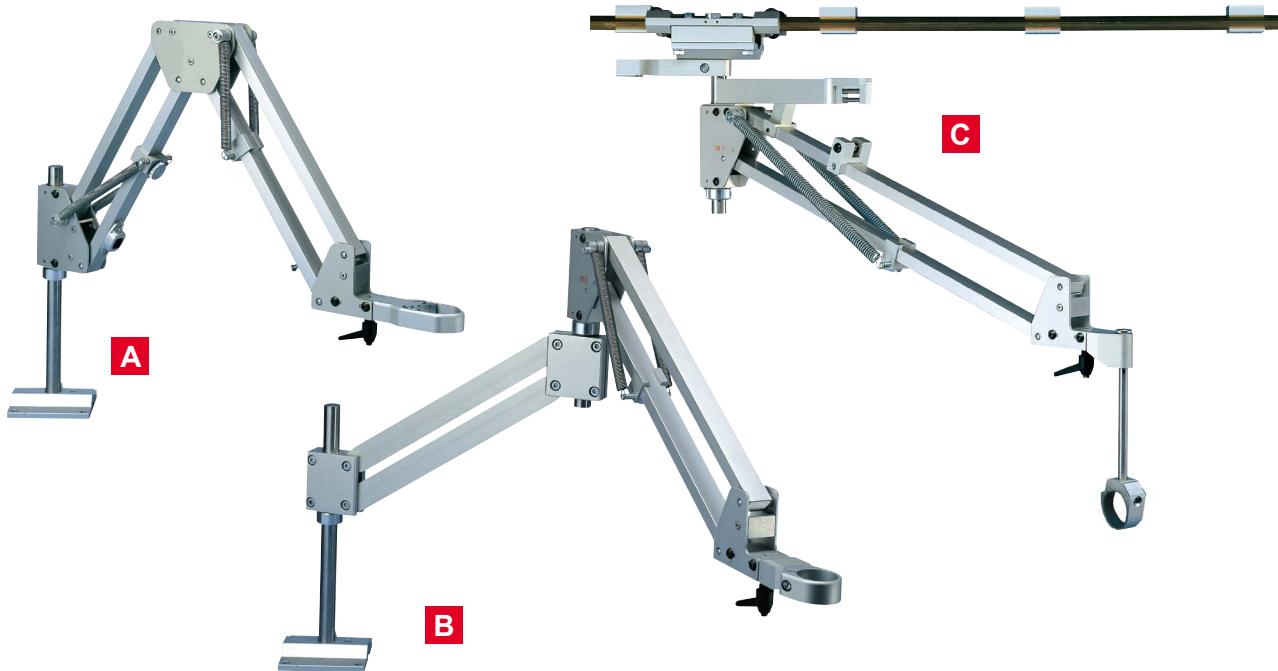
Tool clamp guide for TT arms

Ordering Process:

| SELECT YOUR TOOL | SELECT THE ARM ACCORDING TO: - THE TORQUE APPLICATION - THE REACH NEEDED | ADD THE TOOL CLAMP.. | ADD THE BALANCER KIT + BALANCER | ADD OPTIONS IF NEEDED |
|---|--|--------------------------------|---|--|
| STEP 1 TOOL MODEL | STEP 2 TT MODEL | STEP 3 TOOL CLAMP REFERENCE | STEP 4 BALANCER KIT AND BALANCER REFERENCES | STEP 5 OPTIONS |
| SB, SC2, SD, SLC, ECD5 ECS(A-F), ERS(A-F) ERDL 1.5-12, SLBN | TT10 : 6158122600 | 6158122150 | A 6158121410 Balancer DU fixation 5DU: 50532 / 4DU: 50532 5DU: 50542 / 4DU: 50542 5DU: 50542 / 5DU: 50542 5DU: 50542 | Gravity center adjustment: 6158122030 Rigid fixation: 6158122110 |
| SD 070/072, SLCP | TT10 : 6158122600 | 6158122180 | 6158121410 Balancer DU fixation 5DU: 50542 | Gravity center adjustment: 6158122030 Rigid fixation: 6158122110 |
| SH 70/150 | TT25 1160/300 : 6158120820 TT25 1600/600 : 6158122610 | 6158122200 | 6158121450 Balancer D fixation 10D: 50052 | Gravity center adjustment: 6158121490 Rigid fixation: 6158121570 |
| ECS (A-F), ERS (A-F) ECD30, SLBN 120 SD 130/140/160/220 | TT25 1160/300 : 6158120820 TT25 1600/600 : 6158122610 | 6158121610 | 6158121450 Balancer D fixation 10D: 50052 | Gravity center adjustment: 6158121490 Rigid fixation: 6158121570 |
| EID 25 | TT25 1160/300 : 6158120820 TT25 1600/600 : 6158122610 | 6158121950 | 6158121450 Balancer D fixation 10D: 50052 | Gravity center adjustment: 6158121490 Rigid fixation: 6158121570 |
| ECD20, ERDL | TT25 1160/300 : 6158120820 TT25 1600/600 : 6158122610 | 6158121960 | 6158121450 Balancer D fixation 10D: 50052 | Gravity center adjustment: 6158121490 Rigid fixation: 6158121570* |
| EFDE43-8/15 | TT25 1160/300 : 6158120820 TT25 1600/600 : 6158122610 | 6158121980 | 6158121450 Balancer D fixation 15D: 50062 | Gravity center adjustment: 6158121490 Rigid fixation: 6158121570 |
| MC35-20, MC38-10 EME35-20J, EME38-10J | TT25 1160/300 : 6158120820 TT25 1600/600 : 6158122610 | 6158121970 | 6158121450 Balancer D fixation 15D: 50062 | Gravity center adjustment: 6158121490 Rigid fixation: 6158121570 |
| SH 200/280 | TT25 1160/300 : 6158120820 TT25 1600/600 : 6158122610 | 6158121990 | 6158121450 Balancer D fixation 10D: 50052 | Gravity center adjustment: 6158121490 Rigid fixation: 6158121570 |
| EAD20, EAB(C) 15/26 ERAL 2-30/40, SDP 209/300 SH 150/280 | TT25 1160/300 : 6158120820 TT25 1600/600 : 6158122610 | 6158122000 | 6158121450 Balancer D fixation 10D: 50052 | Gravity center adjustment: 6158121490 Rigid fixation: 6158121570 |
| ECA 15/20/30 ERAL 1,5-15/25/35 | TT25 1160/300 : 6158120820 TT25 1600/600 : 6158122610 | 6158122010 | 6158121450 Balancer D fixation 10D: 50052 | Gravity center adjustment: 6158121490 Rigid fixation: 6158121570 |
| ERSA 12 | TT25 1160/300 : 6158120820 TT25 1600/600 : 6158122610 | 6158122020 | 6158121450 Balancer D fixation 10D: 50052 | Gravity center adjustment: 6158121490 Rigid fixation: 6158121570 |
| ERDL 1,5/2, ECD 30 | TT50 1700/600 : 6158122620 TT50 2100/900 : 6158122630 | 6158125750 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125320 Rigid fixation: 6158125350 |
| EAB(C) 26/32/45, EAD 20/32 | TT50 1700/600 : 6158122620 TT50 2100/900 : 6158122630 | 6158129030 + 6158128880 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125320 Rigid fixation: 6158125350 |
| ECA 20/30/40/60 | TT50 1700/600 : 6158122620 TT50 2100/900 : 6158122630 | 6158129030 + 6158128930 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125320 Rigid fixation: 6158125350 |
| SH 420/500 | TT50 1700/600 : 6158122620 TT50 2100/900 : 6158122630" | 6158129030 + 6158128940 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125320 Rigid fixation: 6158125350 |
| EFDE(S) 43-30/45 EME 51-70, MC 51-10/20 | TT50 1700/600 : 6158122620 TT50 2100/900 : 6158122630 | 6158125420 | 6158125220 Balancer DF fixation 14DF: 6158050140 for TT100 2100 | Gravity center adjustment: 6158125320 Rigid fixation: 6158125350 |
| EID 25/32/44 | TT50 1700/600 : 6158122620 TT50 2100/900 : 6158122630 | 6158125740 + 6158129010 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| ERDL 1,5-30 ERDL 2-40/50 | TT50 1700/600 : 6158122620 TT50 2100/900 : 6158122630 | 6158125740 + 6158129020 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| ERAL 2-60/80 | TT50 1700/600 : 6158122620 TT50 2100/900 : 6158122630 | 6158129030 + 6158128890 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125320 Rigid fixation: 6158125350 |
| | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158129040 + 6158128890 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| SH 700 | TT50 1700/600 : 6158122620 TT50 2100/900 : 6158122630 | 6158129030 + 6158128900 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125320 Rigid fixation: 6158125350 |
| | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158129040 + 6158128900 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| EAB(C,A) 50 EAD 50 | TT50 1700/600 : 6158122620 TT50 2100/900 : 6158122630 | 6158129030 + 6158128910 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125320 Rigid fixation: 6158125350 |
| | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158129040 + 6158128910 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| EAB(C) 60 | TT50 1700/600 : 6158122620 TT50 2100/900 : 6158122630 | 6158129030 + 6158128920 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125320 Rigid fixation: 6158125350 |
| | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158129040 + 6158128920 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| ERAL 4-90/110/120 | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158129040 + 6158128960 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158129040 + 6158128970 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| SH 850 | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158129040 + 6158128980 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158129040 + 6158128980 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| ECA 70/90/115/150 | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158129040 + 6158128980 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158129040 + 6158128980 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| ECA 125/150 | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158129040 + 6158128980 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158129040 + 6158128950 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| EAD 70/80/105 | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158125770 + 6158129000 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158125760 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| EID 65/75 | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158125760 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| EFDE(S) 51-70 | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158125760 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |
| EFDE 43-30/45 , MC 51-10/20 EME 51-10/20J, EME 60-10 | TT100 1700/600 : 6158122640 TT100 2100/900 : 6158122650 | 6158125760 | 6158121450 Balancer D fixation 22D: 50072 | Gravity center adjustment: 6158125390 Rigid fixation: 6158125350 |



Balancing arms D57, D58, D59

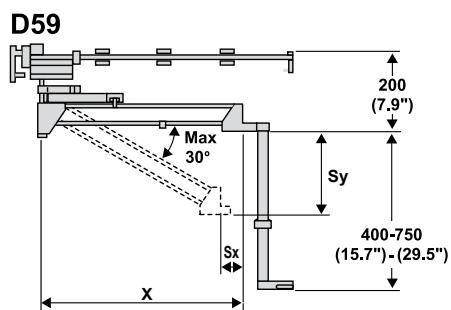
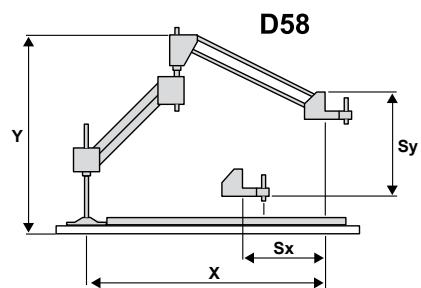
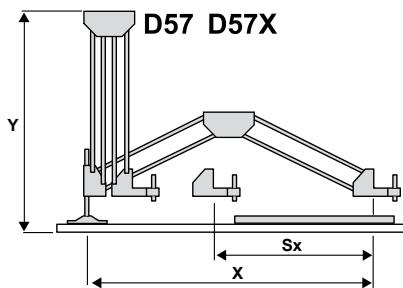
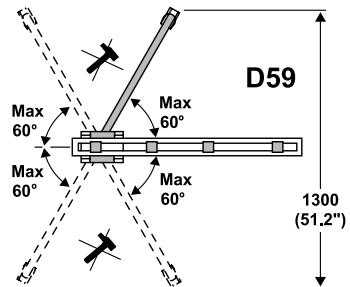


D57/D57X/D58 How To Order

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

D59 How To Order

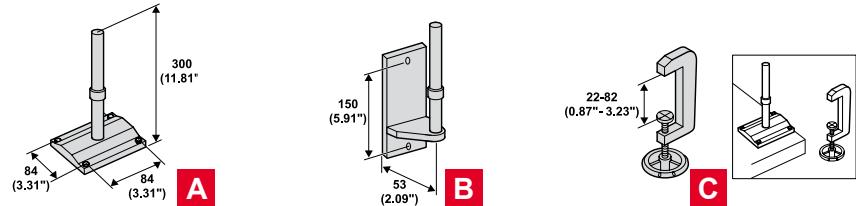
1. Basic Stand
2. Tool Holder
3. Rail (supplied per meter, e.g. for 3m order (3) of PN. 409213)
4. Rail End Stops (2 required per complete rail)
5. Optional Accessories



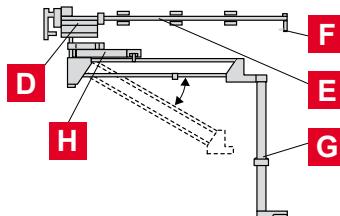
D57 / 58 / 59 BALANCING ARMS

| 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



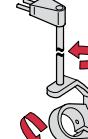
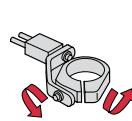
ACCESSORIES



| 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 Arrester / Vertical Lock | | ✓ | |
| H | 409243 | Side Arrester / Horizontal Lock | | ✓ | |

must also order top arrester when using side arrester

| D57/58/59 TOOL CLAMPS | Ø28.5-41MM | Ø40-50MM | VERTICAL 2 AXIS ROTATION | HORIZONTAL SINGLE AXIS ROTATION | HORIZONTAL 2 AXIS ROTATION | ADAPTOR SLEEVE BLANK (supplied as standard with tool holders) to be machined to suit the tool |
|--------------------------|--------------|--------------|---|---|---|--|
| PART NO. | 615 396 6140 | 615 396 6290 | 409083 Ø36mm (1.42) 409093 Ø46mm (1.8) 409103 Ø56mm (2.2) | 409113 Ø36mm (1.42) 409123 Ø46mm (1.8) 409133 Ø56mm (2.2) | 409173 Ø36mm (1.42) 409183 Ø46mm (1.8) | 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 | Ring adaptor PN 409273 for SD |
| SH70 / SH150 | ✓ | | 409093 | 409123 | 409183 | |

Electric Screwdrivers

| | | | | | | |
|------------------|---|---|--------|--------|--------|------------------------|
| | | | | | | |
| SLBN | ✓ | | 409093 | 409123 | 409183 | Ring adaptor PN 409273 |
| 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

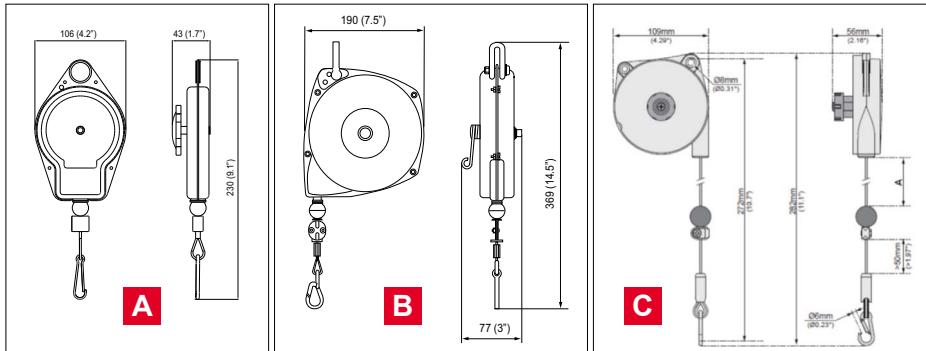
| | | | | | | |
|--------|---|--|--------|--------|--------|------------------------|
| | | | | | | |
| DR 300 | ✓ | | 409083 | 409113 | 409173 | |
| DR 350 | | | | 409113 | 409173 | |
| DR 750 | | | | 409123 | 409183 | Ring adaptor PN 409273 |



Balancers D, HU & R Series



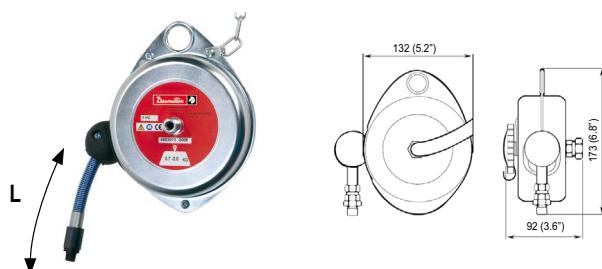
- Steel housing
- Nylon (pic A) Steel (pic B,C) cable
- Additional support chain included
- 10S / 15S / 22S with drum lock feature: operates only on spring failure



BALANCERS - 1DU - 22S

| PIC REF | MODEL | PART NUMBER | LOAD RANGE | | | | CABLE TRAVEL | | WEIGHT | |
|---------|-------|---------------|---------------|------|---------------|------|--------------|--------|--------|------|
| | | | MIN. CAPACITY | | MAX. CAPACITY | | m | ft | kg | lb |
| 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 |
| C | 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 |
| | 2DSB | 615 812 791 0 | 0.4 | 0.88 | 1 | 2.2 | 1600 | 63 | 0.57 | 1.25 |
| | 2DSBX | 615 812 794 0 | 0.4 | 0.88 | 1 | 2.2 | 3000 | 118.11 | 0.57 | 1.25 |
| | 4DSB | 615 812 792 0 | 1 | 2.2 | 2 | 4.4 | 1600 | 63 | 0.6 | 1.32 |

* Balancers with drum lock features



- Steel housing
- Additional support chain included
- Polyurethane hose
- 1/4" thread

HOSE BALANCERS - 1HU - 4HU

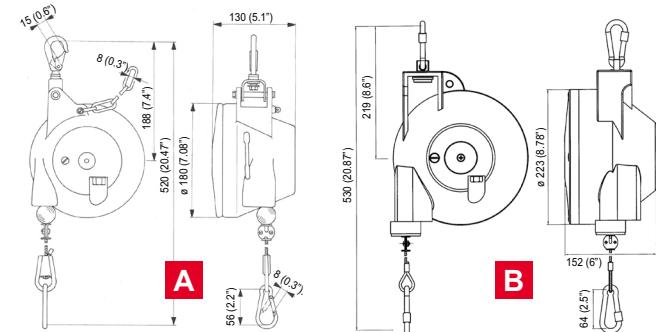
| MODEL | PART NUMBER | LOAD RANGE | | | | HOSE TRAVEL | | HOSE ID | | WEIGHT | |
|--------|---------------|---------------|-----|---------------|-----|-------------|-----|---------|-----|--------|-----|
| | | MIN. CAPACITY | | MAX. CAPACITY | | m | ft | mm | in. | kg | lb |
| 1HU | 52552 | 0 | 0 | 0.5 | 1.1 | 1.5 | 4.9 | 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 | 1.0 | 3.3 | 6.5 | 1/4 | 3.3 | 7.3 |

Flow rate: 7.1 l/s (15cfm) - *L= 0.5

Balancers - 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

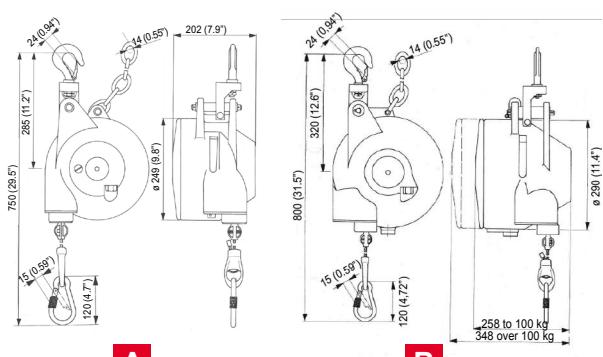
| PIC REF | MODEL | PART NUMBER | LOAD RANGE | | | | CABLE TRAVEL | | WEIGHT | |
|------------|-------|----------------|---------------|------|---------------|-------|-----------------|-----|--------|------|
| | | | MIN. CAPACITY | | MAX. CAPACITY | | m | | kg | |
| | | | kg | lb | kg | lb | | | | |
| A | 5DF | 615 805 011 0 | 3.0 | 6.6 | 5.0 | 11.0 | 2.0 | 6.6 | 2.9 | 6.4 |
| | 7DF | 615 805 012 0 | 4.5 | 9.9 | 7.0 | 15.4 | 2.0 | 6.6 | 3.1 | 6.8 |
| | 10DF | 615 805 013 0 | 6.0 | 13.2 | 10.0 | 22.0 | 2.0 | 6.6 | 3.2 | 7.1 |
| | 14DF | 615 805 014 0 | 9.0 | 19.8 | 14.0 | 30.9 | 2.0 | 6.6 | 3.4 | 7.5 |
| | 17DF | 615 805 015 0 | 13.0 | 28.7 | 17.0 | 37.5 | 2.0 | 6.6 | 3.6 | 7.9 |
| B | 21DF | 615 805 016 0 | 16.0 | 35.3 | 21.0 | 46.3 | 2.0 | 6.6 | 3.8 | 8.4 |
| | 25DF | 615 805 017 0 | 15.0 | 33.1 | 25.0 | 55.1 | 2.0 | 6.6 | 7.8 | 17.2 |
| | 35DF | 615 805 018 0 | 25.0 | 55.1 | 35.0 | 77.2 | 2.0 | 6.6 | 8.9 | 16.6 |
| | 45DF | 615 805 019 0 | 35.0 | 77.2 | 45.0 | 99.2 | 2.0 | 6.6 | 9.5 | 20.9 |
| | 55DF | 615 805 020 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 | | m | | kg | |
| | | | kg | lb | kg | lb | | | | |
| A | 20DFL | 615 805 021 0 | 12 | 26.5 | 20 | 44.1 | 2.0 | 6.6 | 14.8 | 32.6 |
| | 30DFL | 615 805 022 0 | 20 | 44.1 | 30 | 66.1 | 2.0 | 6.6 | 15.2 | 33.5 |
| | 45DFL | 615 805 023 0 | 30 | 66.1 | 45 | 99.2 | 2.0 | 6.6 | 16.9 | 37.2 |
| | 60DFL | 615 805 024 0 | 45 | 99.2 | 60 | 132.3 | 2.0 | 6.6 | 17.3 | 38.1 |
| | 75DFL | 615 805 025 0 | 60 | 132.3 | 75 | 165.3 | 2.0 | 6.6 | 18.7 | 41.2 |
| B | 90DFL | 615 805 026 0 | 75 | 165.3 | 90 | 198.4 | 2.0 | 6.6 | 19.7 | 43.4 |
| | 100DFL | 615 805 027 0 | 90 | 198.4 | 100 | 220.4 | 2.0 | 6.6 | 20.9 | 46.1 |
| | 115DFL | 615 805 028 0 | 100 | 220.4 | 115 | 253.5 | 3.0 | 9.8 | 41.8 | 92.1 |
| | 130DFL | 615 805 029 0 | 115 | 253.5 | 130 | 286.6 | 3.0 | 9.8 | 43.2 | 95.2 |
| | 140DFL | 615 805 030 0 | 130 | 286.6 | 140 | 308.6 | 3.0 | 9.8 | 44.6 | 98.3 |
| B | 150DFL | 615 805 031 0 | 140 | 308.6 | 150 | 330.7 | 3.0 | 9.8 | 46.0 | 101.4 |
| | 170DFL | 615 805 032 0 | 150 | 330.7 | 170 | 374.8 | 3.0 | 9.8 | 46.4 | 102.3 |
| | 180DFL | 615 805 033 0 | 170 | 374.8 | 180 | 396.8 | 3.0 | 9.8 | 46.7 | 102.9 |
| | 190DFL | 615 805 034 0 | 180 | 396.8 | 190 | 418.9 | 3.0 | 9.8 | 47.0 | 103.6 |
| | 200DFL | 615 805 035 0 | 190 | 418.9 | 200 | 440.9 | 3.0 | 9.8 | 47.3 | 104.2 |

Tool holsters

Desoutter Tool Holster - DTH42 - DTH-90

DTH-42

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

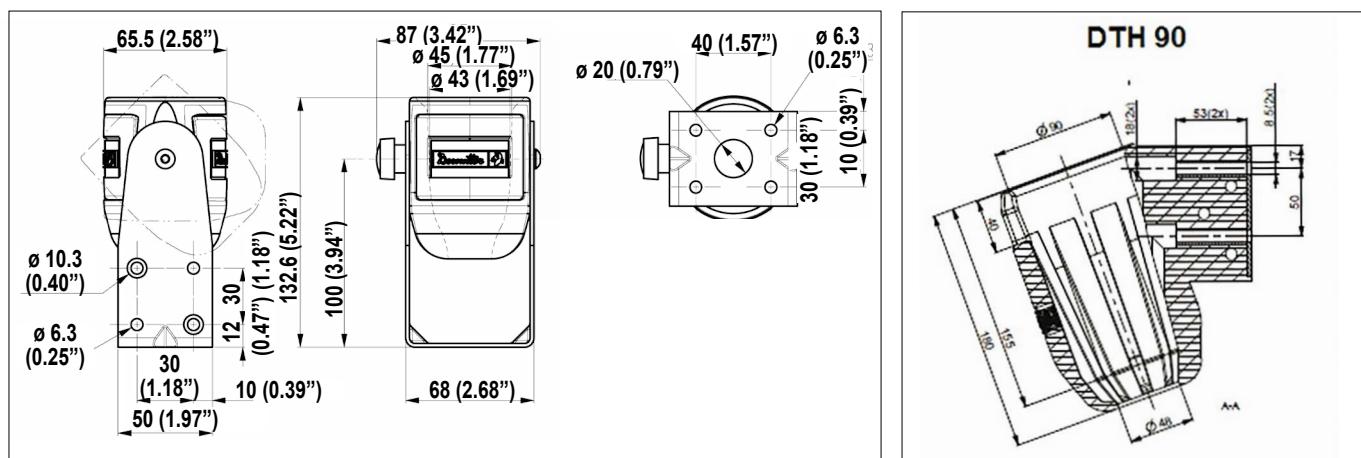
The mounting plate can be fastened in **several positions** and the plastic ring angle can be set at **different angles**



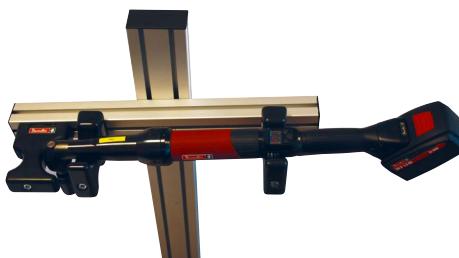
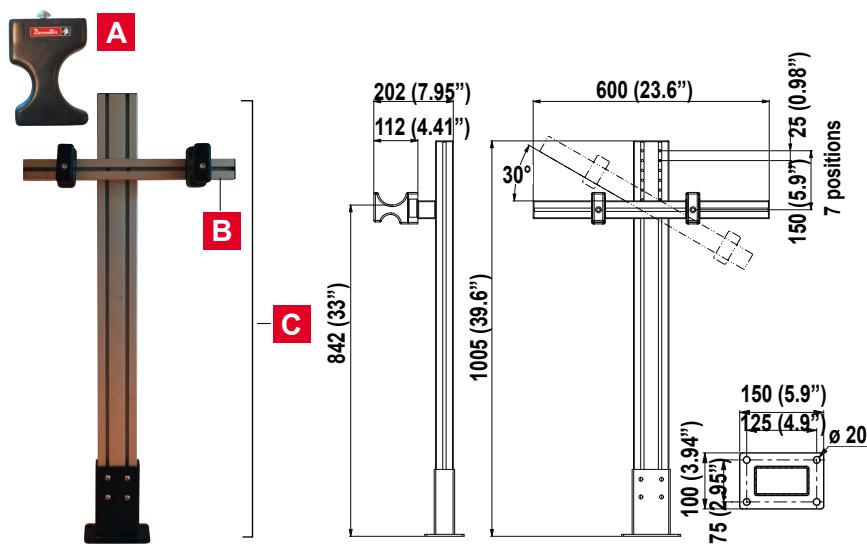
DTH-90

- Used for all **pistol grip tools** with an outside diameter of maximum 90 mm
 - Designed with 2 holes for tool sensors presence
 - Rubber material
 - Mounting screws included

| PIC REF | PART NUMBER | DESCRIPTION | MAX. DIAMETER | |
|---------|---------------|-------------|---------------|------|
| | | | mm | in. |
| A | 107 892 | DTH-42 | 42 | 1.65 |
| B | 615 812 119 0 | DTH-90 | 90 | 3.54 |



Desoutter Tool Holster - DTH TWIN



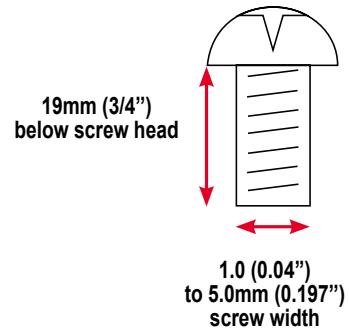
| PIC REF | PART NUMBER | DESCRIPTION |
|---------|---------------|---|
| A* | 615 811 411 0 | DTH TWIN (single) without rail |
| B | 615 811 412 5 | DTH TWIN rail KIT with 2 TWIN holders |
| C | 615 811 413 5 | DTH TWIN stand kit with base & 2 TWIN holders |

* Includes screw and fixation for rail type Bosch 10mm slot

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. |

Automatic Screw Dispenser - ASD

| | | | | | | | | | | | | |
|---------------|-----|-----------------|--------------|--------------|----------|-----|---|-----|-----|-----|-----|-----------|
| 615 810 472 0 | UK | M1.0 to M5.0 | Up | Up | included | 126 | 5 | 147 | 5.8 | 182 | 7.2 | AC 100 |
| 615 810 473 0 | EUR | M1.0 to M5.0 | to 19 | to 3/4" | | | | | | | | ~ 240V |
| 615 810 474 0 | US | 0.04" to 0.197" | (under head) | (under head) | | | | | | | | |