

TOOL ACCESSORIES

Atlas Copco

AIR-MECH LTD

AIR TOOLS & ACCESSORIES
Sales, Service, Hire & Compressed Air Safety Specialist

Protect your most valuable resource

Operator health is important. If your operators work with hand-held electric or pneumatic tools, the last thing you want is for their health to suffer. However light the tool, when an operator performs repetitive tasks daily, often with incorrect posture, the tool seems to grow heavier by the hour. Add torque reaction from the tightening process, and the result can be hand-arm-shoulder disorders that may lead to injury and even premature retirement.

Give your operators an extra arm! Atlas Copco torque arms are labour-saving extensions of Atlas Copco hand-held tools that ensure accurate tightening, and raise individual productivity in your plant. Available for torques of up to 1000 Nm, these ingenious constructions are the perfect way to lighten the load when performing repetitive tasks on lines or benches.

EASE THE STRAIN

Atlas Copco torque arms take the strain off your operators, and allow maximum freedom of movement and flexibility. Wide fields of reach mean that the operator has a large working area without stretching.

FAST PAYBACK

Investing in torque arms is not such a major decision. With their benefits in terms of increased productivity and improved employee health, payback time is short.

LINEAR TORQUE ARMS RAISE PRODUCTIVITY IN GERMANY

At its plant in Alpen, in the lower Rhine area of Germany, Lemken GmbH & Co. KG manufactures agricultural machinery. Previously, a safety critical bearing block joint was tightened using an impact wrench, followed by a torque wrench to reach final torque. The torque values required were between 300 and 500 Nm.

SML TORQUE ARMS ABSORB REACTION FORCES

To improve productivity, Lemken installed an Atlas Copco Tensor DS electric angle nutrunner, mounted on SML 500 linear torque arms, to handle the task. The bolt is tightened to 300 Nm, then loosened 15 degrees and finally tightened to 300 Nm again. The SML 500 absorbs all reaction forces, and enables fast, accurate tightening, with good ergonomics for the operator.

PAYBACK WITHIN ONE YEAR

Although the plant only operates on a single-shift basis, Lemken recouped its investment within one year. The company is satisfied with the equipment and enthusiastic about the flexibility of Atlas Copco tools.

BASIC GUIDELINES FOR TORQUE ARMS

Tools used full days with a torque capacity shown in the table should always be used together with a torque arm in order to prevent work related injuries.

| | Straight | Pistol | Angle |
|------------------------|-----------------|---------------|--------------|
| Ergonomical optimized* | > 4 Nm | > 7 Nm | > 30 Nm |
| Conventional tools | > 3 Nm | > 5 Nm | > 20 Nm |

* Ergonomically optimized tools is electric tools with two step softstop, turbotight or fast clutch pneumatic tool on a hard joint.

TO CONSIDER

- However light or low torque, daily use of tools for repetitive tasks can result in hand/arm/shoulder disorders.
- On average a female operator can take 2/3 of the same force as her male colleague.
- Is there enough space for a torque arm at the workplace?
- Finished product quality improvement.
- With the use of a torque arm the arm will absorb all the reaction force from the tool and prevent the tool from spinning around its axis. To ensure highest possible accuracy of the clamp force a torque arm should be used to prevent movement of the tool.



TPS – Tool Positioning System

CONTROL THE SEQUENCE AND THE POSITION

With a TPS controller you are always sure that the operators tighten the joints in the correct sequence and the correct position. The TPS controller works together with the SML/SMS T-series positioning torque arms or the SMC POSI L/LA torque arms and tool controller. The torque arms are equipped with encoders, SMS T-series have 2 angle encoders and SML T-series have 1 linear encoder and 1 angle encoder. The SMC POSI L is equipped with 1 linear encoder to measure the distance the arm travels. SMC POSI LA is equipped with 2 encoders, to measure the distance the arm travel and the angle. The TPS works with digital I/Os for OK or NOK signals to the tool controller to determine the sequence and position of the tool, if the tool is out of position the tool will not start and when the tool is in position it will be able to start. After a correct tightening with OK signal from tool/controller the operator will receive an OK signal from the TPS and is able to start in the next position.

EASY PROGRAMMING

The TPS can use self learning programming, position the tool in the arm over the selected joint and confirm position, go to next joint with the tool/arm and do the same procedure. When all joints are selected validate the job sequence and the TPS is ready for its new job.

50 JOBS – 500 POSITIONS

The TPS can have up to 50 jobs and up to 500 positions (sequences). The TPS can send information to the tool controller to change Pset in the same job which means that it can be different torque settings in the same job and that the same joint can be tightened several times in the same job. When programming the TPS it can also be with different Psets for different jobs so that the operator always has the correct Pset from tool controller when the TPS job is selected.

FAST AND SMOOTH TO START TO INCREASE PRODUCTIVITY

A job can be started by the operator by pressing the start button on the TPS



control and if the TPS is set to Level in job start the operator only needs to push the start button once, when the job is finished with Level setting the same job starts automatically again. Jobs can also be started by a switch button, from tool controller or on timer from previous job.

STAND ALONE SYSTEM

The TPS is a stand alone system that works together with Power Focus, Tensor DL/DS Drive D312/D31, Micro Torque controllers and EBL RE driver. A pneumatic license and air tool package is available to make the TPS work with RE controlled air tools.

OPTIONS

All options are activated by a license code. The license code is ordered separately.

BARCODE READER LICENSE OPTION

Use a barcode reader to start a job and/or identify a job for the TPS to select the correct Pset.

RESULT REPORT FUNCTION OPTION

Save the results to a PC. The results can be saved in two ways, report on job or report on sequence and job.

PNEUMATIC TOOL LICENSE OPTION

The pneumatic tool license also includes the necessary valves and hoses for a correct set up of RE controlled air tools.

TPS Controller

TPS CONTROLLER – CONTROL THE SEQUENCE AND THE POSITION

With a TPS controller you are always sure that the operator tightens the joints in the correct sequence and in the correct position.

- Up to 50 jobs and up to 500 positions.
- OK/NOK signal on position.
- The tool will not start when it is out of position.
- Batch count together with OK/NOK on position.
- Works together with Atlas Copco electric tools and RE controlled pneumatic tools.
- Possibility to save and upload set up through a PC.
- Easy and fast set up and programming.
- Error proofing solution.
- ESD approved.



HOW TO ORDER

1. TPS Controller
2. Select positioning torque arm by style (T-series linear or swivel, or SMC telescopic) and torque arm capacity
3. Cable TPS to tool controller
4. Power supply - optional.
(Order power cord separately)
5. Select other options if applicable

TPS CONTROLLER

| Model | Ordering No. |
|----------------|--------------|
| TPS Controller | 8202 9004 10 |

CONTROLLER ACCESSORY

| Model | Ordering No. |
|-------------------|--------------|
| I/O Extension TPS | 4390 2049 00 |

POWER SUPPLY/CORD

| Model | Ordering No. |
|----------------------------------|--------------|
| Power supply 24VDC 30W | 4222 1728 50 |
| Power cord | |
| EU | 4222 1801 13 |
| US | 4222 1802 13 |
| UK | 4222 1803 13 |
| India | 4222 1804 13 |
| Switzerland | 4222 1805 13 |
| Italy | 4222 1806 13 |
| Australia | 4222 1807 13 |
| China | 4222 1809 13 |

OPTIONS

| Model | Ordering No. |
|-------------------|--------------|
| Barcode license | 4390 2045 00 |
| Pneumatic license | 4390 2046 00 |
| Reporting license | 4390 2047 00 |

CABLES

| Model | Ordering No. |
|---|--------------|
| Cable TPS to controller Power Focus/Tensor | |
| 3 m | 4222 1715 03 |
| 10 m | 4222 1715 10 |
| Cable TPS to controller Power Focus 600 | |
| 3 m | 4222 1852 03 |
| 10 m | 4222 1852 10 |
| Cable TPS to EBL RE driver | |
| 1.5 m | 4222 1733 01 |
| 3 m | 4222 1733 03 |
| Cable TPS to controller G4 | |
| 1.5 m | 4222 1734 01 |
| 3 m | 4222 1734 03 |
| Cable TPS to controller MTF400 | |
| 1.5 m | 4222 1735 01 |
| 3 m | 4222 1735 03 |
| TPS Open End cable | |
| 3 m | 4222 1743 03 |
| 10 m | 4222 1743 10 |

TPS Positioning Torque Arms

SMC POSI L

SMC carbon arms with 1 encoder to measure the distance the arm travels. With this arm and encoder it is possible to verify the position due to the distance the arm travels. The encoder is mounted inside the arm to safe guard that nothing can interfere with the distance measurements. The SMC POSI L arm can work in both horizontal and vertical position and thus be roof or wall mounted. The accuracy of the encoder is 0.32 mm and the arm together with a TPS controller control the sequence and position.

- Carbon arm with position control up to 200 Nm.
- Encoder measures the distance the arm travels.
- Verify position due to distance.
- Can be mounted both in horizontal and vertical position for maximum flexibility.
- Accuracy of encoder 0.32 mm.
- Control the sequence and position together with TPS controller.

SMC POSI LA

SMC carbon arms with 2 encoders to measure the length the arm travels and the angle of the arm to determine the position of the arm/tool. With this SMC carbon arm it is possible to verify the position due to the length the arm travels together with an encoder that measures the angle of the arm. The length encoder is mounted inside the arm to safe guard that nothing can interfere with the length measurement and the angle encoder is mounted at the top of the arm. The SMC POSI LA can work in both horizontal and vertical position and thus be roof or wall mounted. The accuracy of the encoders is 0.32 mm and the arm together with a TPS controller will control the sequence and position.

- Carbon arm with 2 encoders to control position.
- Encoders measure the arm travel length and the angle of the arm to determine the position.
- Can be mounted both in horizontal and vertical position for maximum flexibility.
- Accuracy of encoder is 0.32 mm.
- Control the sequence and position together with the TPS controller.
- Arms available up to 200 Nm.

SML/SMS T-SERIES POSITIONING ARMS

The Atlas Copco T-series of arms are built to handle the most demanding industrial situation when you need to control the sequence and the position. The T-series arms are equipped with two encoders, SMS T-series have 2 angle encoders to determine the position and



SML T-series have 1 linear encoder and 1 angle encoder to determine the position. The arms are delivered with balancer, encoders and encoder cables ready to be plugged into the TPS controller.

- Control the sequence and position together with TPS controller.
- Excellent working area for work bench assembly stations.
- Available up to 100 Nm.

SMC CARBON ARMS WITH 1 ENCODER

| Model | Ordering No. |
|---------------------|--------------|
| SMC 12 1150 POSI L | 4390 1510 77 |
| SMC 12 1600 POSI L | 4390 1511 87 |
| SMC 12 2100 POSI L | 4390 1512 87 |
| SMC 25 1150 POSI L | 4390 1514 77 |
| SMC 25 1600 POSI L | 4390 1515 87 |
| SMC 25 2100 POSI L | 4390 1516 87 |
| SMC 25 2600 POSI L | 4390 1517 87 |
| SMC 50 1600 POSI L | 4390 1518 77 |
| SMC 50 2100 POSI L | 4390 1519 87 |
| SMC 50 2600 POSI L | 4390 1520 87 |
| SMC 100 1600 POSI L | 4390 1522 87 |
| SMC 100 2100 POSI L | 4390 1523 77 |
| SMC 100 2600 POSI L | 4390 1524 87 |
| SMC 200 1600 POSI L | 4390 1526 87 |
| SMC 200 2100 POSI L | 4390 1527 87 |
| SMC 200 2600 POSI L | 4390 1528 87 |

SML / SMS T ARMS WITH 2 ENCODERS

| Model | Ordering No. |
|--------------------|--------------|
| SML T-5 Position | 4390 2030 00 |
| SML T-12 Position | 4390 2031 00 |
| SML T-25 Position | 4390 2032 00 |
| SML T-50 Position | 4390 2034 00 |
| SML T-100 Position | 4390 2035 00 |
| SMS T-5 Position | 4390 2036 00 |
| SMS T-12 Position | 4390 2037 00 |
| SMS T-25 Position | 4390 2038 00 |
| SMS T-50 Position | 4390 2039 00 |
| SMS T-100 Position | 4390 2040 00 |

SMC CARBON ARMS WITH 2 ENCODERS

| Model | Ordering No. |
|----------------------|--------------|
| SMC 12 1150 POSI LA | 4390 1510 79 |
| SMC 12 1600 POSI LA | 4390 1511 79 |
| SMC 12 2100 POSI LA | 4390 1512 79 |
| SMC 25 1150 POSI LA | 4390 1514 79 |
| SMC 25 1600 POSI LA | 4390 1515 79 |
| SMC 25 2100 POSI LA | 4390 1516 79 |
| SMC 25 2600 POSI LA | 4390 1517 79 |
| SMC 50 1600 POSI LA | 4390 1518 79 |
| SMC 50 2100 POSI LA | 4390 1519 79 |
| SMC 50 2600 POSI LA | 4390 1520 79 |
| SMC 100 1600 POSI LA | 4390 1522 79 |
| SMC 100 2100 POSI LA | 4390 1523 79 |
| SMC 100 2600 POSI LA | 4390 1524 79 |
| SMC 200 1600 POSI LA | 4390 1526 79 |
| SMC 200 2100 POSI LA | 4390 1527 79 |
| SMC 200 2600 POSI LA | 4390 1528 79 |

NOTE: Tool holder needs to be ordered separately. SML/SMS T-series are equipped with balancer.

Choose the appropriate balancer for SMC arms depending on tool weight and order the balancer kit for easy and fast assembly if the arm is roof mounted.

SML T – SERIES TORQUE ARMS

The Atlas Copco linear arms are built to handle the most demanding industrial situations. The robust design offers unmatched user friendliness. The linear arms are equipped with ball bearings for smooth operation, and an adjustable plate for maximum adjustment of minimum and maximum working area. The linear arms have balancer included that will absorb the weight of the arm and tool combination to reduce the weight for the operator. The arms minimize the reaction force of the tool to prevent hand-arm-shoulder disorders. With minimized reaction force of the tool, finished product quality is also higher since there is no movement of the tool and all torque is absorbed in the joint.

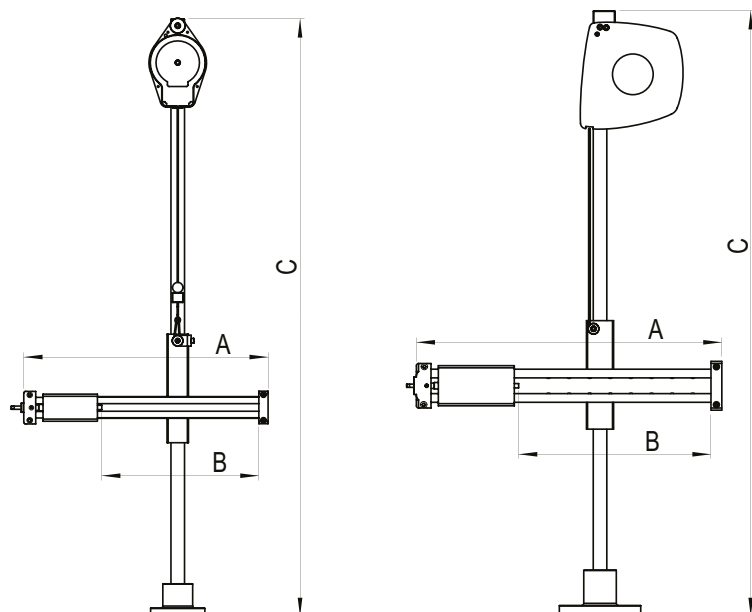
- Robust construction for long life and no force transferred to operator.
- Balancer included to remove the tool and arm weight from the operator.
- Available from 5 Nm up to 100 Nm.
- Minimizes reaction force to prevent hand-arm-shoulder disorders.
- Improves finished product quality with all torque absorbed in the joint and no movement of tool.



| Model | Max tool weight | | Max torque | | Min width without tool holder mm | A Max reach without tool holder mm | B Horizontal stroke | | C Height mm | Tool holder interface type | Ordering No. |
|-----------|-----------------|------|------------|-------|-------------------------------------|--|------------------------|-----|-------------------|----------------------------|--------------|
| | kg | lb | Nm | ft lb | | | mm | mm | | | |
| SML T-5 | 0.8 | 1.7 | 5 | 3.7 | 158 | 530 | 205 | 310 | 732 | A | 4390 2000 00 |
| SML T-12 | 1.5 | 3.3 | 12 | 8.8 | 198 | 648 | 255 | 465 | 888 | A | 4390 2001 00 |
| SML T-25 | 2.2 | 4.8 | 25 | 18.4 | 167 | 732 | 290 | 615 | 1100 | A | 4390 2002 00 |
| SML T-50 | 5 | 11 | 50 | 36.9 | 267 | 887 | 355 | 515 | 1116 | B | 4390 2004 00 |
| SML T-100 | 6 | 13.2 | 100 | 73.8 | 255 | 914 | 395 | 515 | 1116 | B | 4390 2005 00 |

Tool holder is ordered separately.

Dimensions



SMST – SERIES TORQUE ARMS

The Atlas Copco linear arms are built to handle the most demanding industrial situations. The robust design offers unmatched user friendliness and, due to the swivel function, a wide working area is covered with the SMS T-series. The swivel arms are equipped with ball bearings for smooth operation, and an adjustable plate for maximum adjustment of minimum and maximum working area. The swivel arms have a balancer included that will absorb the weight of the arm and tool combination to reduce the weight for the operator. The arms minimize reaction force of the tool to prevent hand-arm-shoulder disorders. With minimized reaction force of the tool, finished product quality is also higher since there is no movement of the tool and all torque is absorbed in the joint.

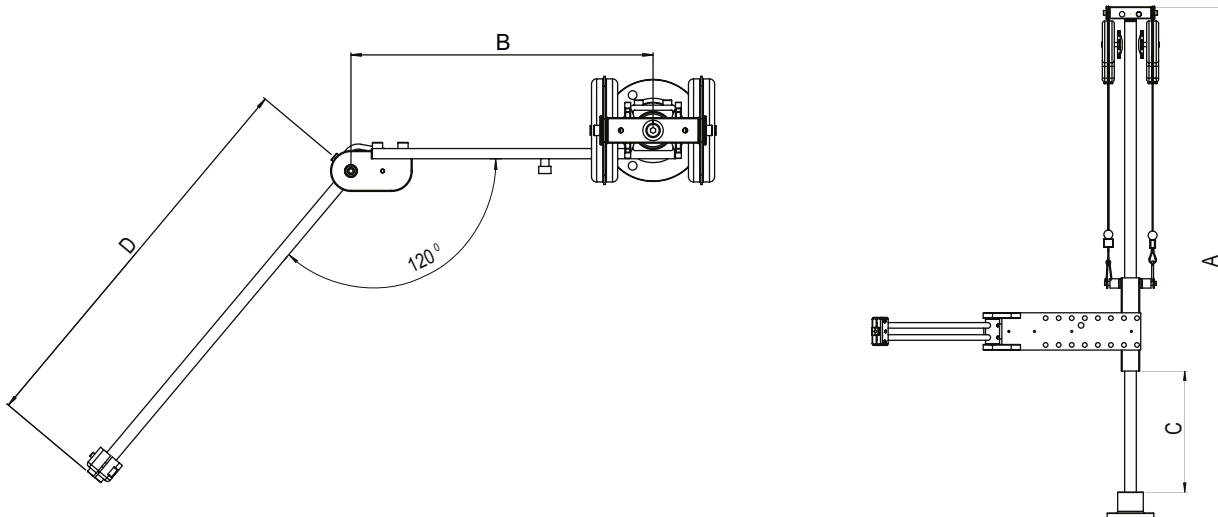
- Robust construction for long life and no force transferred to operator.
- Balancer included to remove the tool and arm weight from the operator.
- Available from 5 Nm up to 100 Nm.
- Minimizes reaction force to prevent hand-arm-shoulder disorders.
- Improves finished product quality with all torque absorbed in the joint and no movement of the tool.



| Model | Max tool weight | | Max torque | | D | B+D | C | A | B | Tool holder interface type | Ordering No. |
|-----------|-----------------|------|------------|-------|--|----------------------------------|--------------------|-----------|----------|----------------------------|--------------|
| | kg | lb | Nm | ft lb | Swivel rods width without tool holder mm | Max reach without tool holder mm | Vertical stroke mm | Height mm | Width mm | | |
| SMS T-5 | 0.8 | 1.7 | 5 | 3.7 | 292 | 582 | 270 | 732 | 248 | A | 4390 2006 00 |
| SMS T-12 | 1.5 | 3.3 | 12 | 8.8 | 342 | 682 | 425 | 888 | 298 | A | 4390 2007 00 |
| SMS T-25 | 2.5 | 5.5 | 25 | 18.4 | 392 | 732 | 580 | 1132 | 296 | A | 4390 2008 00 |
| SMS T-50 | 5 | 11 | 50 | 36.9 | 437 | 825 | 520 | 1147 | 336 | B | 4390 2009 00 |
| SMS T-100 | 6 | 13.2 | 100 | 73.8 | 487 | 930 | 500 | 1147 | 391 | B | 4390 2010 00 |

Tool holder is ordered separately.

Dimensions



SMC – CARBON ARMS

The Atlas Copco carbon arms have a telescopic design for maximum flexibility in the workplace. The carbon arms are light weight with smooth movements to reduce the operator force to use the arms. Together with a balancer the carbon arms can either retract up or be used in a weightless position to improve operator comfort. The carbon arms minimize reaction force to prevent hand-arm-shoulder disorders. With minimized reaction force of the tool you will also improve finished product quality because there is no movement of the tool and all torque is absorbed in the joint.

- Telescopic design for maximum flexibility in the workplace.
- Light weight and smooth movements for operator comfort.
- Easy to use together with balancer to create weightless solution to improve ergonomics.



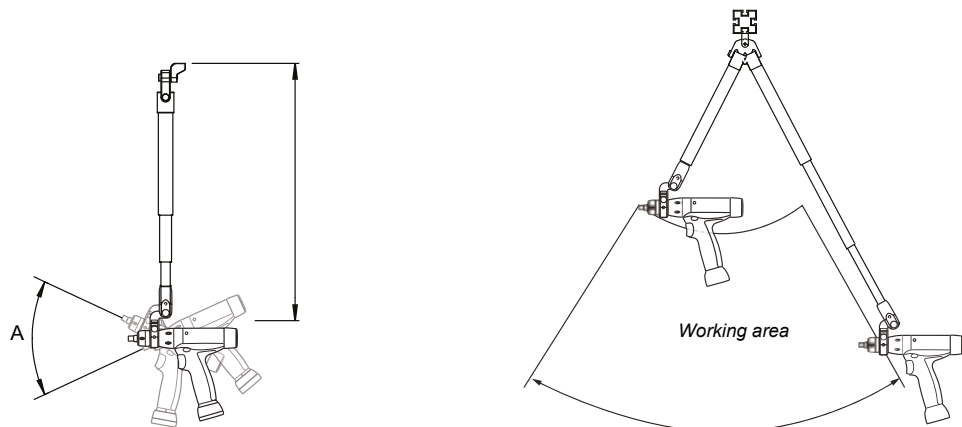
- Minimizes reaction force to prevent hand-arm-shoulder disorders.
- Minimizes pinching and can replace reaction bars.
- Improve finished product quality with all torque absorbed in the joint and no movement of the tool.

| Model | Max torque | | Min length mm | Max length mm | A Max tool holder swivel angle [deg] | Weight | | Tool holder interface type | Ordering No. |
|--------------|------------|-------|------------------|------------------|---|--------|-------|----------------------------------|--------------|
| | Nm | ft lb | | | | kg | lb | | |
| SMC 12 1150 | 12 | 8.9 | 516 | 1128 | 60 | 0.37 | 0.816 | A | 4390 1510 85 |
| SMC 12 1600 | 12 | 8.9 | 666 | 1578 | 60 | 0.42 | 0.926 | A | 4390 1511 85 |
| SMC 12 2100 | 12 | 8.9 | 835 | 2083 | 60 | 0.48 | 1.06 | A | 4390 1512 85 |
| SMC 25 1150 | 25 | 18.4 | 524 | 1124 | 50 | 0.51 | 1.12 | A | 4390 1514 85 |
| SMC 25 1600 | 25 | 18.4 | 674 | 1574 | 50 | 0.61 | 1.34 | A | 4390 1515 85 |
| SMC 25 2100 | 25 | 18.4 | 841 | 2075 | 50 | 0.68 | 1.5 | A | 4390 1516 85 |
| SMC 25 2600 | 25 | 18.4 | 1007 | 2573 | 50 | 0.77 | 1.7 | A | 4390 1517 85 |
| SMC 50 1600 | 50 | 36.9 | 712 | 1624 | 40 | 0.95 | 2.09 | B | 4390 1518 85 |
| SMC 50 2100 | 50 | 36.9 | 878 | 2125 | 40 | 1.05 | 2.31 | B | 4390 1519 85 |
| SMC 50 2600 | 50 | 36.9 | 1045 | 2626 | 40 | 1.15 | 2.54 | B | 4390 1520 85 |
| SMC 100 1600 | 100 | 73.8 | 722 | 1628 | 30 | 1.28 | 2.82 | B | 4390 1522 85 |
| SMC 100 2100 | 100 | 73.8 | 889 | 2129 | 30 | 1.41 | 3.11 | B | 4390 1523 85 |
| SMC 100 2600 | 100 | 73.8 | 1056 | 2630 | 30 | 1.53 | 3.37 | B | 4390 1524 85 |
| SMC 200 1600 | 200 | 148 | 726 | 1628 | 20 | 1.98 | 4.37 | - | 4390 1526 85 |
| SMC 200 2100 | 200 | 148 | 893 | 2129 | 20 | 2.18 | 4.81 | - | 4390 1527 85 |
| SMC 200 2600 | 200 | 148 | 1060 | 2630 | 20 | 2.39 | 5.27 | - | 4390 1528 85 |
| SMC 300 1600 | 300 | 221 | 744 | 1631 | 20 | 2.40 | 5.29 | - | 4390 1530 85 |
| SMC 300 2100 | 300 | 221 | 911 | 2132 | 20 | 2.60 | 5.73 | - | 4390 1531 85 |
| SMC 300 2600 | 300 | 221 | 1078 | 2633 | 20 | 2.81 | 6.20 | - | 4390 1532 85 |

Tool holder is ordered separately. Choose the appropriate balancer depending on tool weight. Order the balancer kit for easy and fast assembly.

NOTE: A: 17 mm square interface, B: 32 mm square interface. For SMC 200 the tool holders connect directly to the clevis of the arm.

Dimensions



SML MK II

Linear Arm

TORQUE ARM SML MK II

By mounting your assembly tool on a SML MK II torque arm you will immediately increase the productivity and reduce muscular stress from your operators. All arms are delivered with integrated balancer, 3-axis movement and the Atlas Copco interface for tool holders. The 3-axis movement allows the operator to ease the arm effortlessly around the workstation.

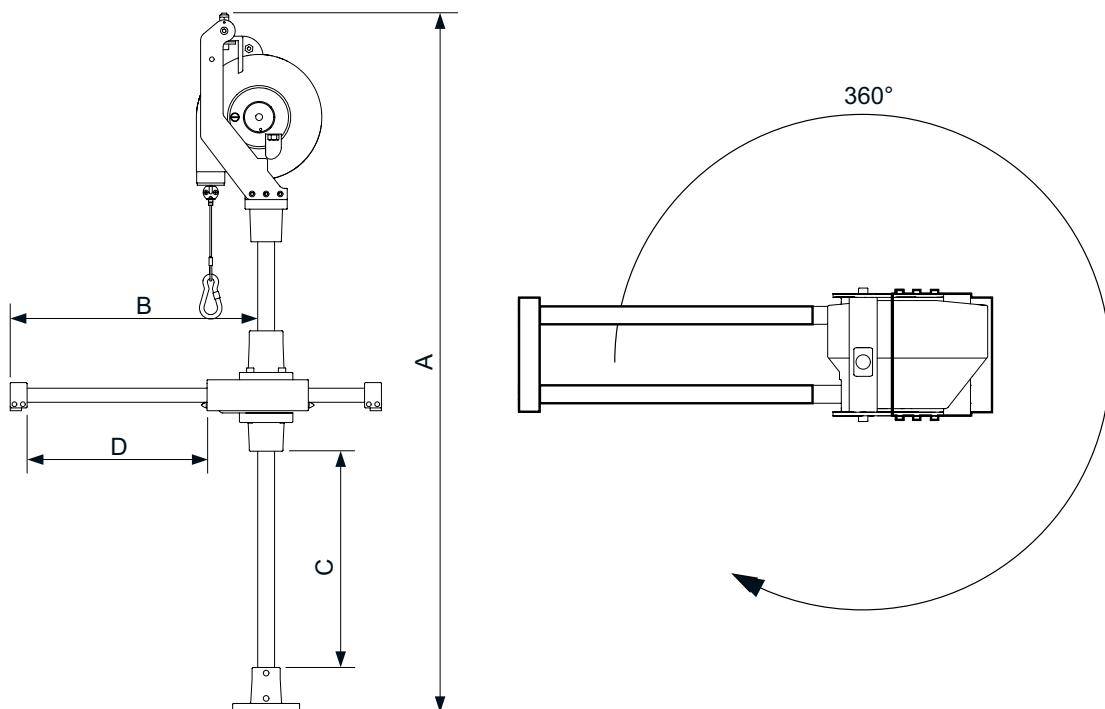
- 3-axis movement for maximum flexibility.
- Strong and durable desing.
- Integrated balancer to support tool and arm weight.
- High torque capacity, up to 1000 Nm.
- Same tool holder interface as SML T / SMS T / SMC for arms up to 150 Nm.



| Model | Max tool weight | | Max torque | | D | C | A | Tool holder interface type | Ordering No. |
|----------------|-----------------|------|------------|-------|----------------------|--------------------|-----------|----------------------------|--------------|
| | kg | lb | Nm | ft lb | Horizontal stroke mm | Vertical stroke mm | Height mm | | |
| SML 10 MK II | 1 | 2.2 | 10 | 7.4 | 240 | 220 | 680 | A | 8202 9003 20 |
| SML 40 MK II | 2.3 | 5.1 | 40 | 29.5 | 280 | 290 | 834 | B | 8202 9003 21 |
| SML 80 MK II | 5.2 | 11.5 | 80 | 59 | 320 | 360 | 964 | B | 8202 9003 22 |
| SML 150 MK II | 7 | 15.4 | 150 | 110.7 | 360 | 430 | 1049 | C | 8202 9003 23 |
| SML 300 MK II | 14 | 30.9 | 300 | 221.4 | 400 | 500 | 1231 | C | 8202 9003 24 |
| SML 500 MK II | 10 | 22 | 500 | 369 | 440 | 570 | 1361 | C | 8202 9003 25 |
| SML 1000 MK II | 11.3 | 24.9 | 1000 | 738 | 480 | 640 | 1571 | C | 8202 9003 26 |

Tool holder is ordered separately.

Dimensions



GHP

Torque Arms MicroTorque

GHP – TORQUE ARM FOR MICROTORQUE RANGE

Atlas Copco GHP torque arm is an excellent means of assistance when using hand-held or fixtured straight microtorque screwdrivers.

Torque arm GHP Mini is recommended with screwdrivers below 100 Ncm, and GHP Small below 200 Ncm.

The GHP torque arms are exceptionally easy to position and handle. The design is intended for low torque applications and work tasks over a long period of time. Comes with appropriate balancing system to support the weight of the tool.

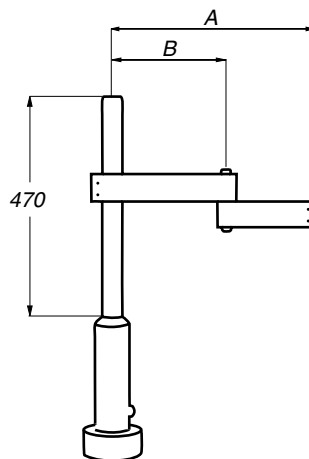


| Model | Stroke mm | alfa | Ordering No. |
|-----------|-----------|------|--------------|
| GHP Mini | 200 | 270° | 8432 0830 02 |
| GHP Small | 400 | 270° | 8432 0830 03 |
| GHP Large | 730 | 270° | 8432 0830 04 |

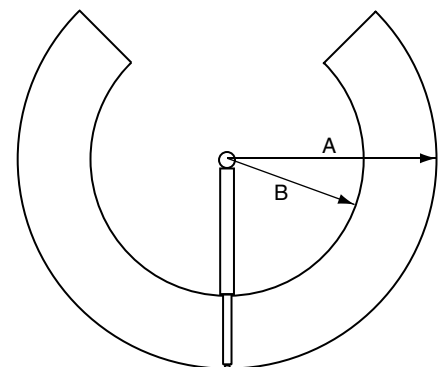
Tool holder is ordered separately.

Dimensions

| Model | Working range, mm | |
|-----------|-------------------|-----|
| | A | B |
| GHP Mini | 280 | 150 |
| GHP Small | 460 | 250 |
| GHP Large | 500 | 250 |



GHP Mini



GHP Small/GHP Large

Torque Arm Accessories

Optional Accessories

TOOL HOLDER GUIDE

Atlas Copco tool holders are designed to optimize your workplace solution. Depending on tool, torque arm and application you can choose from a wide range of tool holders; universal holder, specific diameter holders, spline holders, mounting plates with spine or hole, pistol tool holders or angle tool holders. A tool specific tool holder is always better than a universal holder.

HOW TO BUILD YOUR WORKPLACE SOLUTION

- 1) Tool
- 2) Torque arm
 - Torque range
 - Work area
 - Tool weight
- 3) Tool holder
 - Arm - Tool holder interface type (or mounting on arm clevis, as for SMC angle tool holders)
 - Tool interface: eg. Spline, Diameter or Angle
- 4) Accessories
- 5) For SMC - Balancer

TOOL HOLDERS FOR TORQUE ARMS WITH TOOL HOLDER INTERFACE TYPE A SMC 12/25 AND SMS/L T 5/12/25 AND SML MK II 10

| Model | Tool dia. mm | Spline type | Arm interface | | Description | Ordering No. |
|--|-----------------|----------------|---------------|------|-------------------------|--------------|
| | | | type | type | | |
| Universal holder | 26 - 49 | - | A | | Max tool torque 25 Nm | 4390 1510 86 |
| Holder, Spline 1 | - | 1 | A | | | 4390 1513 07 |
| Holder, diameter 30.5 | 30 - 30.5 | - | A | | | 4390 1513 80 |
| Holder, diameter 34 | 33.5 - 34 | - | A | | | 4390 1513 81 |
| Holder diameter 36.5 | 36 - 36.5 | - | A | | | 4390 1513 82 |
| Holder diameter 38 | 37.5 - 38 | - | A | | | 4390 1513 83 |
| Holder diameter 44 | 43.5 - 44 | - | A | | | 4390 1513 84 |
| Holder diameter 46 | 45.5 - 46 | - | A | | To be used with adapter | 4390 1513 85 |
| Special adapters to be used with dia 46 mm tool holder | | | | | | |
| | | | | | LUM10 PR | 4390 1734 09 |
| | | | | | ELI | 4390 1734 08 |
| | | | | | LUM21 PR-P | 4390 1735 44 |
| | | | | | LUM12 SR | 4390 1735 52 |
| | | | | | LUM12 PR | 4390 1735 53 |
| | | | | | LUM22 PR | 4390 1735 54 |
| Holder diameter 56 | 55.5-56 | - | A | | To be used with adapter | 4390 1513 86 |
| Special adapters to be used with dia 56 mm tool holder | | | | | | |
| | | | | | LUM21 SR | 4390 1735 45 |
| | | | | | LUM22 SR | 4390 1735 51 |
| Mounting plate, Spline 1 | - | 1 | A | | | 4390 2020 00 |
| Mounting plate, Spline 2 | - | 2 | A | | | 4390 2020 01 |
| Mounting plate, hole 24 | 24 | - | A | | | 4390 2020 02 |
| Mounting plate, hole 26 | 26 | - | A | | | 4390 2020 03 |
| Mounting plate, hole 28 | 28 | - | A | | | 4390 2020 04 |
| Mounting plate, blank | - | - | A | | | 4390 2020 05 |



Universal tool holder



Tool holder, diameter



Mounting plate



Tool holder, Spline

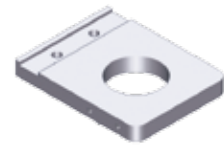
TOOL HOLDERS FOR TORQUE ARMS WITH TOOL HOLDER INTERFACE TYPE B, SMC 50/100 AND SMS/L T 50/100 AND SML MK II 40/80

| Model | Tool dia. mm | Spline type | Arm interface | | Description | Ordering No. |
|--------------------------|-----------------|----------------|---------------|------|-----------------------|--------------|
| | | | type | type | | |
| Universal holder | 30 - 50 | - | B | | Max tool torque 50 Nm | 4390 2064 80 |
| Holder, Spline 1 | - | 1 | B | | | 4390 1513 08 |
| Holder, Spline 2 | - | 2 | B | | | 4390 1513 09 |
| Holder, Spline 3 | - | 3 | B | | | 4390 1513 10 |
| Holder, hole 24 | 24 | - | B | | | 4390 1518 22 |
| Mounting plate, Spline 1 | - | 1 | B | | | 4390 2021 00 |
| Mounting plate, Spline 2 | - | 2 | B | | | 4390 2021 01 |
| Mounting plate, Spline 3 | - | 3 | B | | | 4390 2021 02 |
| Mounting plate, hole 24 | 24 | - | B | | | 4390 2021 03 |
| Mounting plate, hole 26 | 26 | - | B | | | 4390 2021 04 |
| Mounting plate, hole 28 | 28 | - | B | | | 4390 2021 05 |
| Mounting plate, blank | - | - | B | | | 4390 2021 06 |

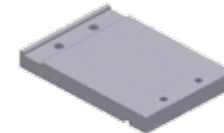
Optional Accessories

MOUNTING PLATES FOR SML MK II 150/300/500/1000 TORQUE ARMS, TOOL HOLDER INTERFACE TYPE C

| Model | Tool dia. mm | Spline type | Arm interface type | Description | Ordering No. |
|-----------------------------|-----------------|----------------|--------------------------|-------------|--------------|
| Mounting plate, Spline 1 | - | 1 | C | | 4390 1760 00 |
| Mounting plate, Spline 2 | - | 2 | C | | 4390 1761 00 |
| Mounting plate, Spline 3 | - | 3 | C | | 4390 1762 00 |
| Mounting plate, Spline 4 | - | 4 | C | | 4390 1763 00 |
| Mounting plate, Spline 5 | - | 5 | C | | 4390 1764 00 |
| Mounting plate, Spline 6 | - | 6 | C | | 4390 1765 00 |
| Mounting plate, Spline 7 | - | 7 | C | | 4390 1766 00 |
| Mounting plate, QMX/ETX50 | - | - | C | | 4390 1782 00 |
| Mounting plate, QMX/ETX62 | - | - | C | | 4390 1783 00 |
| Mounting plate, QMX90/ETX90 | - | - | C | | 4390 1785 00 |
| Extension mounting plate | - | - | C | | 4390 1768 00 |



Mounting plate



Extension mounting plate

PISTOL TOOL HOLDERS FOR SMC CARBON ARMS

| Model | Tool dia. mm | Spline type | Arm interface type | Description | Ordering No. |
|-------------------------|-----------------|----------------|--------------------------|-------------|--------------|
| Pistol holder, hole 24 | 24 | - | - | For SMC 50 | 4390 1518 18 |
| Pistol holder, Spline 2 | - | 2 | - | For SMC 100 | 4390 1522 18 |
| Pistol holder, Spline 2 | - | 2 | - | For SMC 200 | 4390 1526 18 |
| Pistol holder, Spline 3 | - | 3 | - | For SMC 200 | 4390 1513 11 |

Tool holder connects directly to the clevis of the arm.



Pistol holder

ANGLE TOOL HOLDERS FOR SMC CARBON ARMS, SMC 50

| Model | Description | Ordering No. |
|-----------------------|--|--------------|
| Angle tool holder for | | |
| | LTV38-R50-13, LTV38-R42-13 | 4390 2062 80 |
| | LTV38-R50-HAD, LTV38-R42-HAD | 4390 2062 81 |
| | LTV38-R50-10, LTV38-R42-10 | 4390 2062 82 |
| | LTV39-2 R30-10, LTV39-2 R37-10, LTV39-2 R48-10 | 4390 2062 83 |
| | ETV ST61-40-10, ETV ST61-40-HAD, | 4390 2062 84 |
| | ETV STB62-40-10, ETV STB62-50-10 | |
| | ETV STB32-30-10, ETV ST61-30-10, ETV STB62-30-10 | 4390 2062 85 |
| | LTV39-2 R48-13 | 4390 2062 86 |
| | LTV29-2 R30-10 | 4390 2062 87 |
| | ETV S72-30-10, ETV S42-30-10 | 4390 2062 88 |
| | ETV S72-40-10 | 4390 2062 89 |
| | ETV DS72-40-10 | 4390 2062 90 |

Tool holder connects directly to the clevis of the arm.

NOTE: 4390 2062 88 is attached to the arm by the arm tool holder interface B.



Angle tool holder

ANGLE TOOL HOLDERS FOR SMC CARBON ARMS, SMC 100

| Model | Description | Ordering No. |
|-------------------|---------------------------------------|--------------|
| Angle tool holder | | |
| | ETV ST81-100-13, ETV ST61-100-13, | 4390 2061 80 |
| | ETV STB62-100-13 | |
| | ETV DS72-70-HAD | 4390 2061 81 |
| | ETV STB62-70-13, ETV ST81-70-13-L150, | 4390 2061 82 |
| | ETV ST81-70-13, ETV ST61-70-13, | |
| | ETV ST81-90-HAD, ETV ST61-90-HAD | |
| | ETV S72-50-10/B10, LTV39-2 R70-13, | 4390 2061 83 |
| | LTV39-2 R56-13, ETV S7-50-10 | |
| | LTV39-2 R85-13 | 4390 2061 84 |
| | LTV38-R85-13 | 4390 2061 85 |
| | LTV38 R85-HAD | 4390 2061 86 |
| | ETV ST81-50-10, ETV ST61-50-HAD, | 4390 2061 87 |
| | ETV ST61-50-10, LTV39-2 R56-10 | |
| | ETV ST101-100-HAD, ETV ST101-100-13, | 4390 2061 88 |
| | ETV ST101-100-INTEL, ETV S72-100-13 | |
| | LTV38 R70-13 | 4390 2061 89 |
| | LTV38 R57-13 | 4390 2061 90 |
| | ETV DS72-70-13 | 4390 2061 91 |
| | ETV DS92-100-13 | 4390 2061 92 |
| | ETV S72-70-13 | 4390 2061 93 |
| | ETV DS72-50-HAD, ETV DS72-50-10 | 4390 2061 94 |

Tool holder connects directly to the clevis of the arm.



Angle tool holder

Torque Arm Accessories

Optional Accessories

Bench stand



ANGLE TOOL HOLDERS FOR SMC CARBON ARMS, SMC 200

| Model | Description | Ordering No. |
|-------------------|--|--------------|
| Angle tool holder | ETV ST61-200, ETV ST81-200 | 4390 1513 87 |
| | ETV ST101-180-13 / 13-F / 13-M / 13-M-F, ETV ST101-180-B13 / B13-F, ETV S72-150-13 / B13, ETV S72-180-13 / B13, ETV S92-180-13 | 4390 2060 80 |
| | ETV ST61-150-13 / B13 / 13-ATEX, ETV ST61-180-13 / B13 / 13-ATEX, ETV ST81-150-13 / B13, ETV ST81-180-13 / B13 | 4390 2060 81 |
| | ETV DS92-180-13 | 4390 2060 82 |
| | ETV DS72-160-13 / B13, ETV DS72-180-13 / B13 | 4390 2060 83 |
| | LTV48 R120-L13 / R150-L13 / R200-L13 | 4390 2060 84 |
| | LTV69 R180-13, LTV69 N180-13 | 4390 2060 85 |
| | LTV48 R120-HAD / R150-HAD / R200-HAD LTV48 R120-FS / R150-FS / R200-FS | 4390 2060 86 |
| | ETV ST61-150-FS / 180-FS ETV ST61-120-HAD / 150-HAD / 180-HAD ETV ST81-120-HAD / 150-HAD / 180-HAD ETV ST81-150-FS / 180-FS | 4390 2060 87 |
| | ETV ST101-180-FS / FS-F, ETV ST101-180-Intel / Intel-F ETV ST101-180-HAD / HAD-F | 4390 2060 88 |
| | ETV DS72-160-FS, ETV DS72-100-HAD / 160-HAD | 4390 2060 89 |
| | ETV DS72-100-13 / B13 | 4390 2060 90 |

Tool holder connects directly to the clevis of the arm.

Holder for bench stand



TOOL HOLDERS FOR SMC CARBON ARMS, SMC 300

| Model | Description | Ordering No. |
|--------------------|----------------------------------|--------------|
| Angle tool holder | ETV ST101-270 | 4390 2081 50 |
| Pistol tool holder | ETP ST101-300-20-F (Tensor Revo) | 4391 2081 51 |

Horizontal adapter



OPTIONAL ACCESSORIES FOR SMC CARBON ARMS

| Model | Description | Ordering No. |
|------------------------|--|------------------------------|
| Bench stand | Bench stand with height 753 mm. Holder must be ordered separately | 4390 1728 00 |
| Holder for bench stand | Stand attachment 12-25 Nm Stand attachment 50-100 Nm SMC 200 should not be used with table stand | 4390 1510 88 4390 1518 88 |
| Balancer kit | SMC Balancer adaptor kit for RIL 1C-5C and WP10 SMC Balancer adaptor kit for WP05 | 4390 2050 00 4390 2078 80 |

Vertical adapter



OPTIONAL ACCESSORIES FOR SML/SMS T-SERIES AND SML MK II

| Description | Ordering No. |
|---|--|
| Horizontal adapter (handle mount) | 4390 1770 00 |
| Vertical adapter (handle mount) | 4390 1769 00 |
| Start handle | (electric, 1 signal) 4390 1772 00 (electric, 2 signal) 4390 1773 00 (pneumatic) 4390 1771 00 |
| Heavy duty start handles | (electric, 1 signal) 4390 1772 01 (electric, 2 signal) 4390 1773 01 (pneumatic) 4390 1771 01 |
| Heavy duty handgrip (dead) | 4390 1786 01 |
| Handgrip (dead handle) | 4390 1786 00 |
| Remote start cable | 3 m 4390 1774 00 5 m 4390 1775 00 10 m 4390 1776 00 |
| Extension remote start cable | 10 m 4390 1778 00 |
| Y- piece connector (for 2 x electric handles) | 4390 1777 00 |

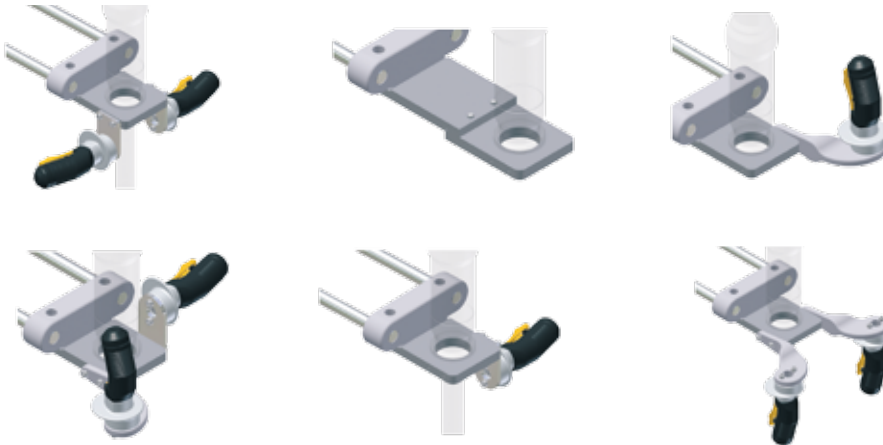
Start handle



NOTE: – For forward and reverse tool operation, a 2 signal handle is required (electric tools only).

Torque Arm Accessories

Installation Proposals for SML



Optional Accessories for GHP MicroTorque

| Description | Ordering No. |
|--|--------------|
| Adapter | |
| Adapter between GHP Mini and ETF 5, 10, 20 | 8432 0830 70 |
| Adapter between GHP Mini and ETD M 03/05/10A | 8432 0831 81 |
| Adapter between GHP Small and ETF 50-200 | 8432 0830 72 |
| Adapter between GHP Small and ETD M-40-250 L | 8432 0830 73 |
| Adapter between GHP Large and ETF 400, 500, 800 | 8432 0830 74 |
| Universal adapter for GHP Small (LUM, EBL, DL, SL) | 8432 0831 80 |
| Handle | |
| Handle between GHP Mini and ETF 05, 10, 20 | 8432 0830 90 |
| Handle between GHP Small and ETF 50, 100, 200 | 8432 0830 53 |
| Handle between GHP Large and ETF 400, 500, 800 | 8432 0830 54 |
| Swivling tool holder | |
| GHP Small and ETD M08-27 ABL V2 | 8432 0830 61 |
| GHP Small and ETD M50-250 ABL V2 | 8432 0830 62 |



Swivling tool holder



Tool holster small



Tool holster large

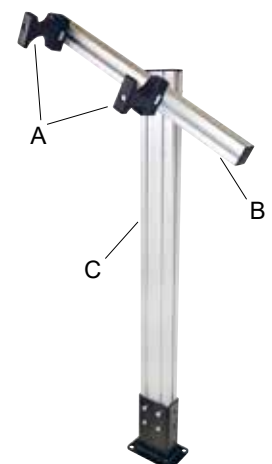
Optional Accessories

TOOL HOLSTER FOR PISTOL GRIP AND STRAIGHT TOOLS

| Model | Ordering No. |
|---|--------------|
| Tool holster small, max tool width 45 mm | 4220 3584 82 |
| Tool holster large , max tool width 98 mm | 4220 3584 84 |
| Holster assembly | 4220 3584 80 |
| Tool holster BCP | 4220 3535 80 |

MODULAR TOOL HOLDER FOR PISTOL TOOLS, ANGLE TOOLS AND GRINDERS

| Model | Included parts | Ordering No. |
|--------------------------------|----------------|--------------|
| Modular tool holder | A | 4220 3584 83 |
| Modular tool holder, rail kit | 2 X A, B | 4220 3584 84 |
| Modular tool holder, stand kit | 2 X A, B, C | 4220 3584 85 |



Modular tool holder

Bits and Sockets

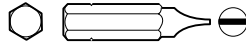
Screwdriver Bits – Hexagon Drive

DRIVE SYSTEM: 1/4" HEXAGON, STYLE C 6.3

SCREW PROFILE:



SLOTTED BITS



Application: For slotted screws
Drive: 1/4" Hexagon, Style C 6.3

| Blade thickness mm | Blade width mm | Length mm | Ordering No. |
|--------------------|----------------|-----------|--------------|
| 0.55 | 3.5 | 25 | 4023 1400 21 |
| 0.6 | 4 | 25 | 4023 1400 22 |
| 0.8 | 5.5 | 25 | 4023 1400 26 |

PHILLIPS BITS

Application: For Phillips screws
Drive: 1/4" Hexagon, Style C 6.3



| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| PH0 | 25 | 4023 1326 00 |
| PH1 | 25 | 4023 0696 01 |
| PH2 | 25 | 4023 0697 01 |
| PH3 | 25 | 4023 0698 01 |

HEX BITS

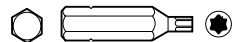
Application: For Hex-socket screws
Drive: 1/4" Hexagon, Style C 6.3



| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| 2 | 25 | 4023 1318 00 |
| 2.5 | 25 | 4023 1319 00 |
| 3 | 25 | 4023 0819 00 |
| 4 | 25 | 4023 1320 00 |
| 5 | 25 | 4023 0820 00 |
| 6 | 25 | 4023 0821 00 |
| 7 | 25 | 4023 1430 00 |
| 8 | 25 | 4023 0905 00 |

TORXPLUS BITS

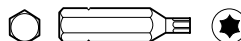
Application: For TorxPlus screws
Drive: 1/4" Hexagon, Style C 6.3



| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| IP6 | 25 | 4023 0001 70 |
| IP8 | 25 | 4023 0001 74 |
| IP10 | 25 | 4023 0001 78 |

TORX BITS

Application: For Torx screws
Drive: 1/4" Hexagon, Style C 6.3



| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| TX6 | 25 | 4023 0001 60 |
| TX8 | 25 | 4023 1329 00 |
| TX9 | 25 | 4023 1330 00 |
| TX10 | 25 | 4023 1321 00 |
| TX15 | 25 | 4023 1331 00 |
| TX20 | 25 | 4023 1322 00 |
| TX25 | 25 | 4023 1332 00 |
| TX27 | 25 | 4023 1333 00 |
| TX30 | 25 | 4023 1323 00 |
| TX40 | 25 | 4023 1334 00 |

POZIDRIV BITS



Application: For Pozidriv screws
Drive: 1/4" Hexagon, Style C 6.3

| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| PZ1 | 25 | 4023 1101 11 |
| PZ2 | 25 | 4023 1101 12 |
| PZ3 | 25 | 4023 1101 13 |

DRIVE SYSTEM: 5/16" HEXAGON, STYLE C 8

SCREW PROFILE:



HEX BITS

Application: For Hex-socket screws
Drive: 5/16" Hexagon, Style C 8



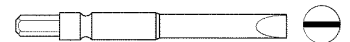
| Point mm | Length mm | Ordering No. |
|----------|-----------|--------------|
| 5 | 34 | 4023 1215 00 |
| 6 | 25 | 4023 1216 00 |
| 7 | 25 | 4023 1219 00 |
| 8 | 25 | 4023 1217 00 |
| 10 | 25 | 4023 1218 00 |

DRIVE SYSTEM: 3 MM HEXAGON

SCREW PROFILE:



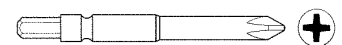
SLOTTED BITS



Application: For slotted screws
Drive: 3 mm Hexagon

| Blade thickness mm | Blade width mm | Length mm | Ordering No. |
|--------------------|----------------|-----------|--------------|
| 0.3 | 1.8 | 50 | 4023 0004 03 |
| 0.4 | 2 | 50 | 4023 0004 04 |
| 0.4 | 2.5 | 50 | 4023 0004 05 |
| 0.5 | 3 | 50 | 4023 0004 06 |
| 0.5 | 4 | 50 | 4023 0004 07 |
| 0.5 | 3.5 | 50 | 4023 0004 08 |
| 0.5 | 4.5 | 50 | 4023 0004 09 |
| 0.8 | 4 | 50 | 4023 0004 10 |
| 0.8 | 5.5 | 50 | 4023 0004 11 |

PHILLIPS BITS



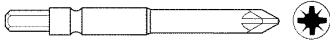
Application: For Phillips screws
Drive: 3 mm Hexagon

| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| 00 | 50 | 4023 0004 00 |
| 0 | 50 | 4023 0004 01 |
| 1 | 50 | 4023 0004 02 |

Bits and Sockets

TORX BITS

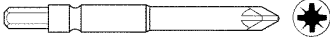
Application: For Torx screws
Drive: 3 mm Hexagon



| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| T6 | 50 | 4023 0004 14 |
| T7 | 50 | 4023 0004 15 |
| T8 | 50 | 4023 0004 16 |
| T10 | 50 | 4023 0004 17 |

POZIDRIV BITS

Application: For Pozidriv screws
Drive: 3 mm Hexagon



| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| PZ0 | 50 | 4023 0004 12 |
| PZ1 | 50 | 4023 0004 13 |

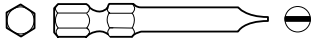
DRIVE SYSTEM: 1/4" HEXAGON, STYLE E 6.3

SCREW PROFILE:

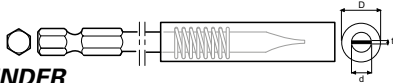


SLOTTED BITS

Application: For slotted screws
Drive: 1/4" Hexagon, Style E 6.3



| Blade thickness mm | Blade width mm | Length mm | Ordering No. |
|--------------------|----------------|-----------|--------------|
| 3.2 | 0.7 | 49 | 4023 2020 21 |
| 3.9 | 0.8 | 49 | 4023 2020 23 |
| 4.7 | 0.9 | 49 | 4023 2020 24 |
| 6.3 | 1 | 49 | 4023 2020 26 |
| 7 | 1.1 | 49 | 4023 2020 27 |
| 7.9 | 1.2 | 49 | 4023 2020 28 |
| 9.1 | 1.3 | 49 | 4023 2020 29 |
| 3.2 | 0.7 | 76 | 4023 2030 21 |
| 3.9 | 0.8 | 76 | 4023 2030 23 |
| 4.7 | 0.9 | 76 | 4023 2030 24 |



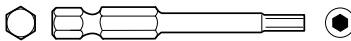
SLOTTED BITS WITH FINDER

Application: For slotted screws
Drive: 1/4" Hexagon, Style E 6.3

| Outside dia (D) mm | Blade thickness (t) mm | Blade width (d) mm | Length mm | Ordering No. |
|--------------------|------------------------|--------------------|-----------|--------------|
| 9.5 | 0.9 | 4.9 | 95 | 4023 0683 00 |
| 11.1 | 1 | 6.1 | 93 | 4023 1313 00 |
| 12.7 | 1.1 | 7.4 | 93 | 4023 0684 00 |
| 14.3 | 1.2 | 8.9 | 96 | 4023 0949 00 |
| 15.9 | 1.3 | 10.0 | 95 | 4023 0685 00 |

HEX BITS

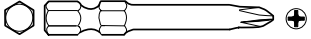
Application: For Hex-socket screws
Drive: 1/4" Hexagon, Style E 6.3



| Point mm | Length mm | Ordering No. |
|----------|-----------|--------------|
| 2 | 49 | 4023 1311 00 |
| 2.5 | 49 | 4023 1312 00 |
| 3 | 49 | 4023 0710 00 |
| 4 | 49 | 4023 0711 00 |
| 5 | 49 | 4023 0712 00 |
| 6.35 | 49 | 4023 0906 00 |
| 8 | 49 | 4023 1369 00 |
| 10 | 49 | 4023 1370 00 |

PHILLIPS BITS

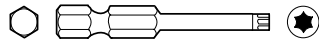
Application: For Phillips screws
Drive: 1/4" Hexagon, Style E 6.3



| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| PH00 | 50 | 4023 0001 51 |
| PH00 | 70 | 4023 0001 52 |
| PH00 | 90 | 4023 0001 53 |
| PH0 | 50 | 4023 1325 00 |
| PH1 | 50 | 4023 2320 21 |
| PH1 | 70 | 4023 2327 21 |
| PH1 | 89 | 4023 2335 21 |
| PH1 | 152 | 4023 2360 21 |
| PH2 | 50 | 4023 2320 22 |
| PH2 | 70 | 4023 2327 22 |
| PH2 | 89 | 4023 2335 22 |
| PH2 | 152 | 4023 2360 22 |
| PH3 | 50 | 4023 2320 23 |
| PH3 | 70 | 4023 2327 23 |
| PH3 | 89 | 4023 2335 23 |
| PH3 | 152 | 4023 2360 23 |

TORX BITS

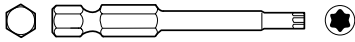
Application: For Torx screws
Drive: 1/4" Hexagon, Style E 6.3



| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| TX5 | 49 | 4023 0002 16 |
| TX5 | 70 | 4023 0002 17 |
| TX6 | 49 | 4023 0001 61 |
| TX6 | 70 | 4023 0001 62 |
| TX6 | 90 | 4023 0001 63 |
| TX7 | 49 | 4023 0002 18 |
| TX7 | 70 | 4023 0002 19 |
| TX8 | 49 | 4023 2220 21 |
| TX8 | 90 | 4023 2235 21 |
| TX9 | 49 | 4023 2220 22 |
| TX9 | 90 | 4023 2235 22 |
| TX10 | 49 | 4023 2220 23 |
| TX10 | 90 | 4023 2235 23 |
| TX15 | 49 | 4023 2220 24 |
| TX15 | 90 | 4023 2235 24 |
| TX20 | 49 | 4023 2220 25 |
| TX20 | 90 | 4023 2235 25 |
| TX25 | 49 | 4023 2220 26 |
| TX25 | 90 | 4023 2235 26 |
| TX27 | 49 | 4023 2220 27 |
| TX27 | 90 | 4023 2235 27 |
| TX30 | 49 | 4023 2220 28 |
| TX30 | 90 | 4023 2235 28 |
| TX40 | 90 | 4023 2235 29 |

TORXPLUS BITS

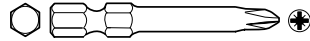
Application: For TorxPlus screws
Drive: 1/4" Hexagon, Style E 6.3



| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| IP5 | 50 | 4023 0002 20 |
| IP5 | 70 | 4023 0002 21 |
| IP6 | 50 | 4023 0001 71 |
| IP6 | 70 | 4023 0001 72 |
| IP6 | 90 | 4023 0001 73 |
| IP7 | 50 | 4023 0002 23 |
| IP7 | 70 | 4023 0002 24 |
| IP7 | 90 | 4023 0002 25 |
| IP8 | 50 | 4023 0001 75 |
| IP8 | 70 | 4023 0001 76 |
| IP8 | 90 | 4023 0001 77 |
| IP10 | 50 | 4023 0001 79 |
| IP10 | 70 | 4023 0001 80 |
| IP10 | 90 | 4023 0001 81 |

Bits and Sockets

POZIDRIV BITS



Application: For Pozidriv screws
Drive: 1/4" Hexagon, Style E 6.3

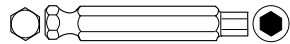
| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| PZ0 | 50 | 4023 0001 41 |
| PZ0 | 70 | 4023 0001 42 |
| PZ1 | 50 | 4023 2420 21 |
| PZ1 | 70 | 4023 2427 21 |
| PZ1 | 89 | 4023 2435 21 |
| PZ2 | 50 | 4023 2420 22 |
| PZ2 | 70 | 4023 2427 22 |
| PZ2 | 70 | 4023 2435 22 |
| PZ3 | 50 | 4023 2420 23 |
| PZ3 | 89 | 4023 2435 23 |

DRIVE SYSTEM: 7/16" HEXAGON

SCREW PROFILE:



HEX BITS



Application: For Hex-socket screws
Drive: 7/16" Hexagon

| Point mm | Length mm | Ordering No. |
|----------|-----------|--------------|
| 5 | 70 | 4023 0800 00 |
| 6 | 70 | 4023 0801 00 |
| 8 | 70 | 4023 0802 00 |
| 10 | 70 | 4023 0760 00 |

Bit Holders

DRIVE SYSTEM: 1/4" HEXAGON, STYLE E 6.3

APPLICATION: SUITABLE FOR BITS WITH 1/4" HEXAGON DRIVE



STANDARD TYPE

| Hex-drive | Hex-female | Dia-meter (D) mm | Length L mm | Length L1 mm | Magnetic | Ordering No. |
|-----------|------------|------------------|-------------|--------------|----------|--------------|
| 1/4" | 1/4" | 11.1 | 46.5 | 28.5 | Yes | 4023 1208 01 |
| 1/4" | 1/4" | 11.1 | 46.5 | 55.5 | Yes | 4023 1208 02 |
| 1/4" | 1/4" | 11.1 | 46.5 | 103.7 | Yes | 4023 1209 00 |

Adapters

DRIVE SYSTEM: 1/4" HEXAGON, STYLE E 6.3

APPLICATION: FOR BITS WITH WING-SHANK 4 MM DRIVE

ADAPTERS

| | Ordering No. |
|---------|--------------|
| Adapter | 4220 0105 00 |

Screwdriver Bits – Wing-shank Drive

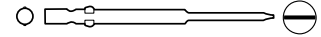
DRIVE SYSTEM: 4 MM WING-SHANK

SCREW PROFILE:



SLOTTED BITS

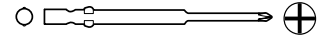
Application: For Slotted screws
Drive: Wing-shank 4 mm



| Blade thickness mm | Blade width mm | Length mm | Ordering No. |
|--------------------|----------------|-----------|--------------|
| 0.28 | 1.3 | 60 | 4023 1327 01 |
| 0.30 | 1.7 | 60 | 4023 1327 02 |
| 0.3 | 2.0 | 60 | 4023 1327 03 |
| 0.3 | 2.5 | 60 | 4023 1327 04 |

PHILLIPS BITS

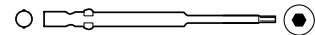
Application: For Phillips screws
Drive: Wing-shank 4 mm



| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| PH00 | 40 | 4023 0002 56 |
| PH0 | 40 | 4023 0002 57 |
| PH1 | 40 | 4023 0002 58 |
| PH2 | 40 | 4023 0002 59 |

HEX BITS

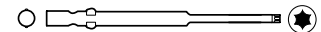
Application: For Hex screws
Drive: Wing-shank 4 mm



| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| 1.5 | 60 | 4023 0002 60 |
| 2 | 60 | 4023 0002 61 |
| 2.5 | 60 | 4023 0002 62 |
| 3 | 60 | 4023 0002 63 |

TORX BITS

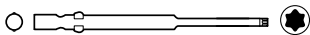
Application: For Torx screws
Drive: Wing-shank 4 mm



| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| TX1 | 40 | 4023 0002 52 |
| TX2 | 60 | 4023 0002 53 |
| TX3 | 60 | 4023 0002 54 |
| TX4 | 60 | 4023 0001 90 |
| TX5 | 60 | 4023 0001 91 |
| TX6 | 60 | 4023 0001 92 |
| TX8 | 60 | 4023 0001 93 |
| TX10 | 60 | 4023 0001 94 |

Bits and Sockets

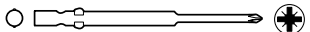
TORXPLUS BITS



Application: For TorxPlus screws
Drive: Wing-shank 4 mm

| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| IP4 | 60 | 4023 0002 10 |
| IP5 | 60 | 4023 0002 11 |
| IP6 | 60 | 4023 0002 12 |
| IP8 | 60 | 4023 0002 13 |
| IP10 | 60 | 4023 0002 14 |

POZIDRIV BITS



Application: For Pozidriv screws
Drive: Wing-shank 4 mm

| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| PZ0 | 60 | 4023 0002 03 |
| PZ1 | 60 | 4023 0002 04 |
| PZ2 | 60 | 4023 0002 55 |

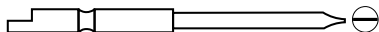
Screwdriver Bits – Halfmoon Drive

DRIVE SYSTEM: 4 MM HALFMOON

SCREW PROFILE:



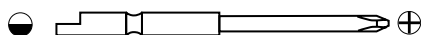
SLOTTED BITS



Application: For slotted screws
Drive: Halfmoon 4 mm

| Blade width mm | Blade thickness mm | Length mm | Ordering No. |
|----------------|--------------------|-----------|--------------|
| 2 | 0.3 | 44 | 4023 0002 37 |
| 2.5 | 0.3 | 44 | 4023 0002 38 |
| 3 | 0.4 | 44 | 4023 0002 39 |
| 4 | 0.5 | 44 | 4023 0002 40 |

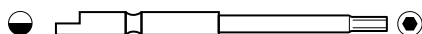
PHILLIPS BITS



Application: For Phillips screws
Drive: Halfmoon 4 mm

| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| PH00 | 44 | 4023 0001 12 |
| PH00 | 64 | 4023 0001 13 |
| PH0 | 44 | 4023 0001 14 |
| PH0 | 64 | 4023 0001 15 |
| PH1 | 44 | 4023 0001 16 |
| PH1 | 64 | 4023 0001 17 |
| PH1 | 90 | 4023 0001 18 |
| PH2 | 44 | 4023 0002 30 |
| PH2 | 64 | 4023 0002 31 |

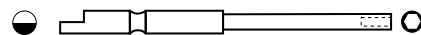
HEX BITS



Application: For Hex-socket screws
Drive: Halfmoon 4 mm

| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| 1.5 | 44 | 4023 0002 41 |
| 2 | 44 | 4023 0002 42 |
| 2.5 | 44 | 4023 0002 43 |
| 3 | 44 | 4023 0002 44 |

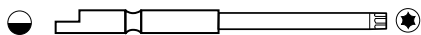
HEX-SOCKET BITS



Nutsetter. Application: For nuts and thread-headed screws
Drive: Halfmoon 4 mm

| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| 2.3 | 44 | 4023 0002 45 |
| 2.5 | 44 | 4023 0002 46 |
| 3 | 44 | 4023 0002 47 |
| 4 | 44 | 4023 0002 48 |
| 4.5 | 44 | 4023 0002 49 |
| 5 | 44 | 4023 0002 50 |
| 5.5 | 44 | 4023 0002 51 |

TORX BITS



Application: For Torx screws
Drive: Halfmoon 4 mm

| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| TX1 | 44 | 4023 0002 32 |
| TX2 | 44 | 4023 0001 06 |
| TX3 | 44 | 4023 0001 08 |
| TX3 | 64 | 4023 0001 09 |
| TX4 | 44 | 4023 0001 20 |
| TX4 | 64 | 4023 0001 21 |
| TX5 | 44 | 4023 0001 22 |
| TX5 | 64 | 4023 0001 23 |
| TX6 | 44 | 4023 0001 24 |
| TX6 | 64 | 4023 0001 25 |
| TX8 | 44 | 4023 0001 26 |
| TX8 | 64 | 4023 0001 27 |
| TX10 | 44 | 4023 0001 28 |
| TX10 | 64 | 4023 0001 29 |

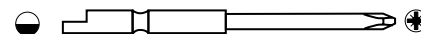
TORXPLUS BITS



Application: For TorxPlus screws
Drive: Halfmoon 4 mm

| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| IP2 | 44 | 4023 0002 35 |
| IP3 | 44 | 4023 0002 36 |
| IP4 | 44 | 4023 0001 30 |
| IP4 | 64 | 4023 0001 31 |
| IP5 | 44 | 4023 0001 32 |
| IP5 | 64 | 4023 0001 33 |
| IP6 | 44 | 4023 0001 34 |
| IP6 | 64 | 4023 0001 35 |
| IP8 | 44 | 4023 0001 36 |
| IP8 | 64 | 4023 0001 37 |
| IP10 | 44 | 4023 0001 38 |
| IP10 | 64 | 4023 0001 39 |

POZIDRIV BITS



Application: For Pozidriv screws
Drive: Halfmoon 4 mm

| Point | Length mm | Ordering No. |
|-------|-----------|--------------|
| PZ0 | 44 | 4023 0002 26 |
| PZ0 | 64 | 4023 0002 27 |
| PZ1 | 44 | 4023 0002 28 |
| PZ1 | 64 | 4023 0002 29 |

Bits and Sockets

Adapters

DRIVE SYSTEM: 4 MM HALFMOON

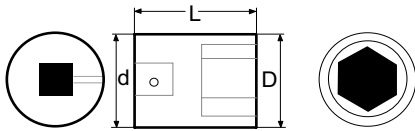
**APPLICATION: SUITABLE FOR BITS WITH
1/4" HEXAGON DRIVE**

ADAPTERS

| | Ordering No. |
|----------|--------------|
| Magnetic | 4023 0002 15 |

Sockets

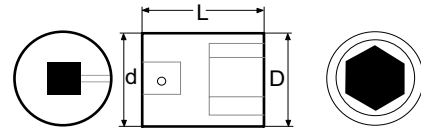
SOCKETS 1/4" SQUARE DRIVE



| | Width across flats | D mm | d mm | Overall length L mm | Ordering No. | Pin and O-ring ref. letter | |
|-------|--------------------|------|------|---------------------|--------------|----------------------------|---|
| mm | 4 | 7.5 | 13 | 23 | 4027 1100 04 | Z | |
| | 5 | 8.8 | 13 | 23 | 4027 1100 05 | Z | |
| | 5.5 | 9.4 | 13 | 23 | 4027 1100 55 | Z | |
| | 6 | 10.0 | 13 | 23 | 4027 1100 06 | Z | |
| | 7 | 11.3 | 13 | 23 | 4027 1100 07 | Z | |
| | 8 | 12.5 | 13 | 23 | 4027 1100 08 | Z | |
| | 9 | 13.8 | 13 | 23 | 4027 1100 09 | Z | |
| | 10 | 15.0 | 13 | 23 | 4027 1100 10 | Z | |
| | 11 | 16.3 | 13 | 23 | 4027 1100 11 | Z | |
| | 12 | 17.5 | 13 | 23 | 4027 1100 12 | Z | |
| | 13 | 18.8 | 13 | 23 | 4027 1100 13 | Z | |
| | 14 | 20 | 13 | 23 | 4027 1100 14 | Z | |
| | in | 7/32 | 9.4 | 13 | 23 | 4027 1100 97 | Z |
| | | 1/4 | 10.0 | 13 | 23 | 4027 1100 96 | Z |
| 9/32 | | 11.3 | 13 | 23 | 4027 1100 94 | Z | |
| 5/16 | | 12.5 | 13 | 23 | 4027 1100 93 | Z | |
| 3/8 | | 15.0 | 13 | 23 | 4027 1100 91 | Z | |
| 13/32 | | 15.0 | 13 | 23 | 4027 1100 89 | Z | |
| 7/16 | | 16.3 | 13 | 23 | 4027 1100 88 | Z | |
| 15/32 | | 17.5 | 13 | 23 | 4027 1100 12 | Z | |
| 1/2 | 18.8 | 13 | 23 | 4027 1100 86 | Z | | |
| 9/16 | 20 | 13 | 23 | 4027 1100 84 | Z | | |

See table for pin and o-ring.

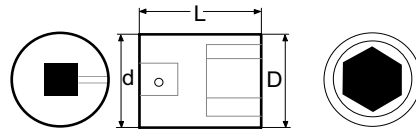
SOCKETS 3/8" SQUARE DRIVE



| | Width across flats | D mm | d mm | Overall length L mm | Ordering No. | Pin and O-ring ref. letter | |
|-----|--------------------|-------|------|---------------------|--------------|----------------------------|---|
| mm | 7 | 12 | 19 | 32 | 4027 1200 07 | Y | |
| | 8 | 13.3 | 19 | 32 | 4027 1200 08 | Y | |
| | 9 | 14.5 | 19 | 32 | 4027 1200 09 | Y | |
| | 10 | 15.8 | 19 | 32 | 4027 1200 10 | Y | |
| | 11 | 17 | 19 | 32 | 4027 1200 11 | Y | |
| | 12 | 18.3 | 19 | 32 | 4027 1200 12 | Y | |
| | 13 | 19.5 | 22 | 32 | 4027 1200 13 | X | |
| | 14 | 20.8 | 22 | 32 | 4027 1200 14 | X | |
| | 16 | 23.3 | 22 | 32 | 4027 1200 16 | X | |
| | 17 | 24.5 | 22 | 32 | 4027 1200 17 | X | |
| | 18 | 25.8 | 22 | 32 | 4027 1200 18 | X | |
| | 19 | 27 | 22 | 32 | 4027 1200 19 | X | |
| | in | 5/16 | 13.3 | 19 | 32 | 4027 1200 93 | Y |
| | | 3/8 | 15.8 | 19 | 32 | 4027 1200 91 | Y |
| | | 13/32 | 15.8 | 19 | 32 | 4027 1200 89 | Y |
| | | 7/16 | 17 | 19 | 32 | 4027 1200 88 | Y |
| | | 15/32 | 18.3 | 19 | 32 | 4027 1200 87 | Y |
| | | 1/2 | 19.5 | 22 | 32 | 4027 1200 86 | X |
| | | 9/16 | 20.8 | 22 | 32 | 4027 1200 84 | X |
| 3/4 | | 27 | 22 | 32 | 4027 1200 81 | X | |

See table for pin and o-ring.

SOCKETS 1/2" SQUARE DRIVE

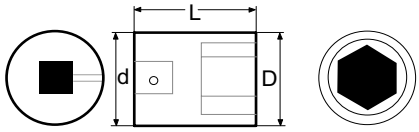


| | Width across flats | D mm | d mm | Overall length L mm | Ordering No. | Pin and O-ring ref. letter | |
|-------|--------------------|-------|------|---------------------|--------------|----------------------------|---|
| mm | 10 | 17 | 25 | 38 | 4027 1300 10 | W | |
| | 11 | 18.2 | 25 | 38 | 4027 1300 11 | W | |
| | 12 | 19.5 | 25 | 38 | 4027 1300 12 | W | |
| | 13 | 20.7 | 25 | 38 | 4027 1300 13 | W | |
| | 14 | 22 | 25 | 38 | 4027 1300 14 | W | |
| | 16 | 24.5 | 30 | 38 | 4027 1300 16 | V | |
| | 17 | 25.7 | 30 | 38 | 4027 1300 17 | V | |
| | 18 | 27 | 30 | 38 | 4027 1300 18 | V | |
| | 19 | 28.2 | 30 | 38 | 4027 1300 19 | V | |
| | 21 | 30.7 | 30 | 38 | 4027 1300 21 | V | |
| | 22 | 32 | 30 | 38 | 4027 1300 22 | V | |
| | 23 | 33.2 | 30 | 38 | 4027 1300 23 | V | |
| | 24 | 34.5 | 30 | 38 | 4027 1300 24 | V | |
| | 27 | 38.2 | 30 | 40 | 4027 1300 27 | V | |
| | in | 3/8 | 17 | 25 | 38 | 4027 1300 91 | W |
| | | 7/16 | 18.2 | 25 | 38 | 4027 1300 88 | W |
| | | 1/2 | 20.7 | 25 | 38 | 4027 1300 86 | W |
| | | 9/16 | 22 | 25 | 38 | 4027 1300 84 | W |
| | | 3/4 | 28.2 | 30 | 38 | 4027 1300 81 | V |
| | | 15/16 | 34.5 | 30 | 38 | 4027 1300 77 | V |
| 1 1/8 | | 40.7 | 30 | 42 | 4027 1300 98 | V | |

See table for pin and o-ring.

Bits and Sockets

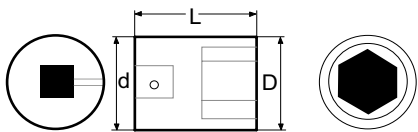
SOCKETS 3/4" SQUARE DRIVE



| | Width across flats | D mm | d mm | Overall length L mm | Ordering No. | Pin and O-ring ref. letter | |
|-------|--------------------|--------|------|---------------------|--------------|----------------------------|---|
| mm | 18 | 31.3 | 44 | 50 | 4027 1500 18 | U | |
| | 19 | 32.5 | 44 | 50 | 4027 1500 19 | U | |
| | 21 | 35 | 44 | 50 | 4027 1500 21 | U | |
| | 22 | 36.3 | 44 | 50 | 4027 1500 22 | U | |
| | 24 | 38.8 | 44 | 50 | 4027 1500 24 | U | |
| | 27 | 42.5 | 44 | 50 | 4027 1500 27 | U | |
| | 30 | 46.3 | 44 | 53 | 4027 1500 30 | U | |
| | 32 | 48.8 | 44 | 53 | 4027 1500 32 | U | |
| | 34 | 51.3 | 44 | 55 | 4027 1500 34 | U | |
| | 36 | 53.8 | 44 | 55 | 4027 1500 36 | U | |
| | in | 3/4 | 32.5 | 44 | 50 | 4027 1500 81 | U |
| | | 15/16 | 38.8 | 44 | 50 | 4027 1500 77 | U |
| | | 1 1/8 | 45 | 44 | 53 | 4027 1500 98 | U |
| | | 1 5/16 | 51.3 | 44 | 55 | 4027 1500 94 | U |
| 1 1/2 | | 56.3 | 44 | 57 | 4027 1500 91 | U | |

See table for pin and o-ring.

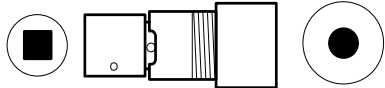
SOCKETS 1 1/2" SQUARE DRIVE



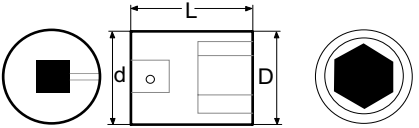
| | Width across flats | D mm | d mm | Overall length L mm | Ordering No. | Pin and O-ring ref. letter |
|----|--------------------|------|------|---------------------|--------------|----------------------------|
| mm | 50 | 79 | 86 | 84 | 4027 1700 50 | S |
| | 55 | 85 | 86 | 90 | 4027 1700 55 | S |
| | 60 | 91 | 86 | 90 | 4027 1700 60 | S |
| | 65 | 97 | 86 | 95 | 4027 1700 65 | S |
| | 70 | 103 | 86 | 100 | 4027 1700 70 | S |
| | 75 | 108 | 86 | 105 | 4027 1700 75 | S |
| | 80 | 115 | 86 | 110 | 4027 1700 80 | S |

See table for pin and o-ring.

Stud setter



SOCKETS 1" SQUARE DRIVE

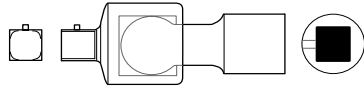


| 1" | Width across flats | D mm | d mm | Overall length L mm | Ordering No. | Pin ^a and O-ring ref. letter | |
|---------|--------------------|-------|------|---------------------|--------------|---|---|
| mm | 24 | 41.5 | 54 | 57 | 4027 1600 24 | T | |
| | 27 | 45.3 | 54 | 57 | 4027 1600 27 | T | |
| | 30 | 49 | 54 | 62 | 4027 1600 30 | T | |
| | 32 | 51.5 | 54 | 62 | 4027 1600 32 | T | |
| | 34 | 54 | 54 | 62 | 4027 1600 34 | T | |
| | 36 | 56.5 | 54 | 62 | 4027 1600 36 | T | |
| | 41 | 62.8 | 54 | 66 | 4027 1600 41 | T | |
| | 46 | 69 | 54 | 70 | 4027 1600 46 | T | |
| | 50 | 74 | 54 | 70 | 4027 1600 50 | T | |
| | 55 | 80.3 | 54 | 75 | 4027 1600 55 | T | |
| | 60 | 86.5 | 54 | 75 | 4027 1600 60 | T | |
| | 65 | 92.8 | 54 | 75 | 4027 1600 65 | T | |
| | in | 15/16 | 41.5 | 54 | 57 | 4027 1600 77 | T |
| | | 1 1/8 | 47.8 | 54 | 57 | 4027 1600 98 | T |
| 1 5/16 | | 54 | 54 | 62 | 4027 1600 94 | T | |
| 1 11/16 | | 65.3 | 54 | 68 | 4027 1600 87 | T | |
| 1 7/8 | 71.5 | 54 | 70 | 4027 1600 83 | T | | |

See table for pin and o-ring.

| Square drive in | Ordering No. | Holder drive nut | Ordering No. |
|-----------------|--------------|------------------|--------------|
| 1/2 | 4023 0752 80 | M6 | 4023 0761 00 |
| | | M8 | 4023 0762 00 |
| | | M10 | 4023 0756 00 |
| | | M12 | 4023 0757 00 |

Universal joints

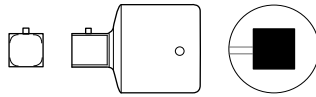


| Male square in | Square drive in | Diameter mm | Length mm | Ordering No. | Pin and O-ring ref. letter |
|----------------|-----------------|-------------|-----------|--------------|----------------------------|
| 3/8 | 3/8 | 22 | 56 | 4027 1235 40 | X |
| 1/2 | 1/2 | 30 | 74 | 4027 1335 40 | V |
| 5/8 | 5/8 | 38 | 69 | 4023 0875 00 | |
| 3/4 | 3/4 | 44 | 106 | 4027 1535 40 | U |
| 1 | 1 | 54 | 127 | 4027 1635 40 | T |
| 1 1/2 | 1 1/2 | 84 | 162 | 4023 1316 00 | F |

See table for pin and o-ring.

Bits and Sockets

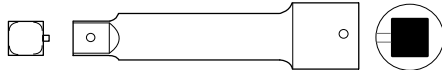
Socket adapters



| Male square in | Square drive in | Diameter mm | Length mm | Ordering No. | Pin ^a and O-ring ref. letter |
|----------------|-----------------|-------------|-----------|--------------|---|
| 1/2 | 3/8 | 22 | 32.5 | 4027 1235 31 | X |
| 3/8 | 1/2 | 25 | 36 | 4027 1335 30 | W |
| 5/8 | 1/2 | 30 | 42 | 4027 1335 21 | V |
| 1/2 | 5/8 | 35 | 46 | 4027 1435 20 | V |
| 3/4 | 5/8 | 38 | 54 | 4023 1156 00 | |
| 1/2 | 3/4 | 44 | 52 | 4027 1535 30 | U |
| 1 | 3/4 | 44 | 62 | 4027 1535 22 | U |
| 3/4 | 1 | 54 | 66.5 | 4027 1635 20 | T |
| 1 | 1 1/2 | 86 | 98 | 4027 1735 20 | S |

See table for pin and o-ring.

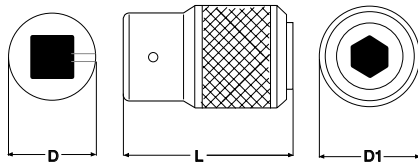
Extensions



| Male square in | Square drive in | Diameter mm | Length mm | Ordering No. | Pin and O-ring ref. letter |
|----------------|-----------------|-------------|-----------|--------------|----------------------------|
| 3/8 | 3/8 | 22 | 150 | 4027 1234 04 | X |
| 1/2 | 1/2 | 30 | 125 | 4027 1334 03 | V |
| 1/2 | 1/2 | 30 | 250 | 4027 1334 07 | V |
| 5/8 | 5/8 | 33 | 152 | 4023 0749 00 | |
| 3/4 | 3/4 | 44 | 175 | 4027 1534 15 | U |
| 3/4 | 3/4 | 44 | 330 | 4027 1534 18 | U |
| 1 | 1 | 54 | 175 | 4027 1634 15 | T |
| 1 | 1 | 54 | 330 | 4027 1634 18 | T |
| 1 1/2 | 1 1/2 | 86 | 330 | 4027 1734 18 | S |

See table for pin and o-ring.

Quick change chuck for power bits



| Square drive in | Female hex in | Diameter D mm | Diameter D1 mm | Length L mm | Ordering No. | Pin and O-ring ref. letter |
|-----------------|---------------|---------------|----------------|-------------|--------------|----------------------------|
| 3/8 | 1/4 | 22 | 22 | 46 | 4027 1236 01 | X |
| 3/8 | 5/16 | 22 | 33 | 55 | 4023 1382 00 | |
| 3/8 | 7/16 | 22 | 33 | 45 | 4027 1236 03 | X |
| 1/2 | 7/16 | 30 | 33 | 55 | 4027 1336 03 | V |

See table for pin and o-ring.

Locking pins and O-rings



| Ref. letter | Locking pin | | O-ring | | Pin and O-ring Ordering No. |
|----------------|-------------|-----------|-------------|-------------------|-----------------------------|
| | Diameter mm | Length mm | Diameter mm | Inner diameter mm | |
| A ^b | 4 | 35 | 5 | 33 | 4026 5000 90 |
| B | 4 | 45 | 5 | 33 | 4026 5000 91 |
| C | 5 | 45 | 6 | 44 | 4026 5000 92 |
| D | 5 | 60 | 6 | 59 | 4026 5000 93 |
| E | 5 | 70 | 6 | 65 | 4026 5000 94 |
| F | 6 | 75 | 6 | 65 | 4026 5000 95 |
| G | 6 | 75 | 6 | 79 | 4026 5000 96 |
| H | 6 | 95 | 6 | 94 | 4026 5000 97 |
| Z | 1.5 | 10 | 2.5 | 9 | 4027 1198 90 |
| Y | 2.5 | 14 | 3.5 | 13 | 4027 1298 90 |
| X | 2.5 | 16 | 3.5 | 16 | 4027 1298 91 |
| W | 3 | 20 | 4 | 19 | 4027 1398 90 |
| V | 3 | 25 | 4 | 24 | 4027 1398 91 |
| U | 4 | 35 | 5 | 36 | 4027 1598 90 |
| T | 5 | 45 | 7 | 45 | 4027 1698 90 |
| S | 6 | 75 | 10 | 75 | 4027 1798 90 |

^b B type pin also included.

Socket holders



| Hex in | Square in | Length mm | Ordering No. |
|--------|-----------|-----------|--------------|
| 1/4 | 1/4 | 50 | 4027 1017 00 |
| 1/4 | 1/4 | 75 | 4027 1017 01 |
| 1/4 | 1/4 | 100 | 4027 1017 02 |
| 1/4 | 1/4 | 150 | 4027 1017 04 |
| 1/4 | 3/8 | 50 | 4027 1017 10 |
| 1/4 | 3/8 | 75 | 4027 1017 11 |
| 1/4 | 3/8 | 100 | 4027 1017 12 |
| 7/16 | 3/8 | 70 | 4027 1018 01 |
| 7/16 | 1/2 | 70 | 4027 1018 11 |