TOOL ACCESSORIES

Atlas Copco

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

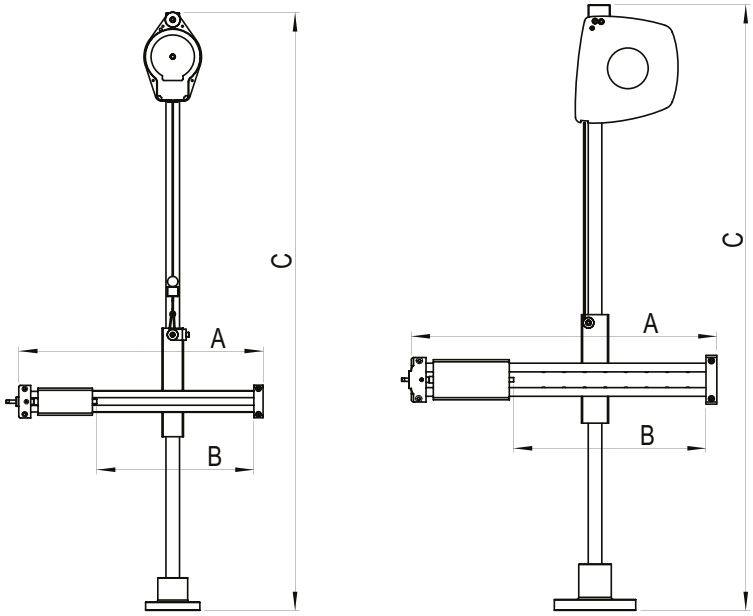
The Atlas Copco linear arms are built to handle the most demanding industrial situations. The robust design offers unmatched user friendliness. The linear arms are equipped with ball bearings for smooth operation, and an adjustable plate for maximum adjustment of minimum and maximum working area. The 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 kg	Max tool weight lb	Max torque Nm	Max torque ft lb	Min width without tool holder mm	A Max reach without tool holder mm	B Horizontal stroke mm	Vertical stroke mm	C Height mm	Tool holder interface type	Ordering No.
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



SMS T – SERIES TORQUE ARMS

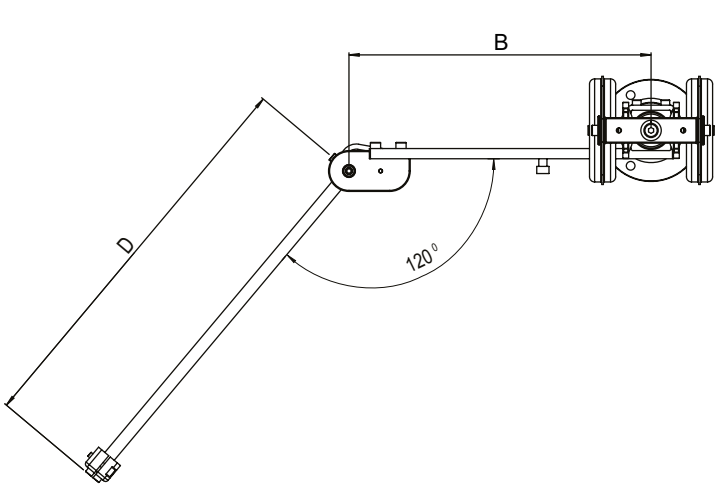
The Atlas Copco linear arms are built to handle the most demanding industrial situations. The robust design offers unmatched user friendliness and, due to the swivel function, a wide working area is covered with the SMS T-series. The swivel arms are equipped with ball bearings for smooth operation, and 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.

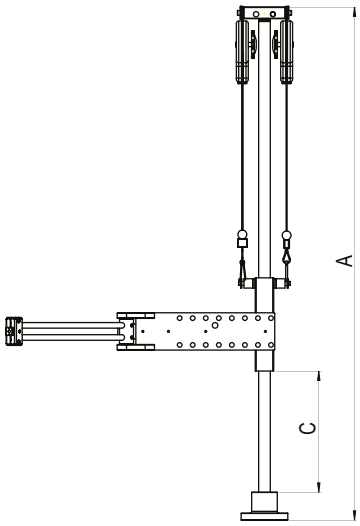
- Robust construction for long life and no force transferred to operator.
- Balancer included to remove the tool and arm weight from the operator.
- Available from 5 Nm up to 100 Nm.
- Minimizes reaction force to prevent hand-arm-shoulder disorders.
- Improves finished product quality with all torque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

Model	Max tool weight kg	Max tool weight lb	Max torque Nm	Max torque ft lb	D Swivel rods width without tool holder mm	B+D Max reach without tool holder mm	C Vertical stroke mm	A Height mm	B Width mm	Tool holder interface type	Ordering No.
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

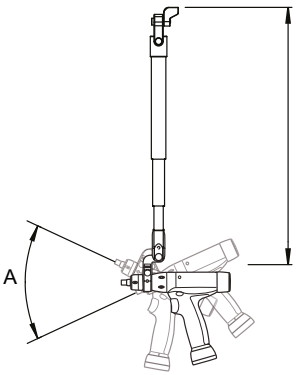
The Atlas Copco carbon arms have a telescopic design for maximum flexibility in the workplace. The carbon arms are light weight with smooth movements to reduce the operator force to use the arms. Together with a balancer the carbon arms can either retract up or be used in a weightless position to improve 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.

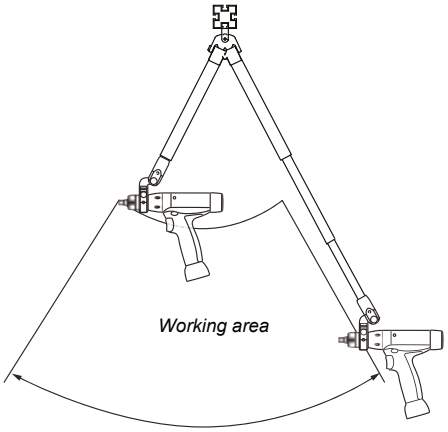
- Telescopic design for maximum flexibility in the workplace.
- Light weight and smooth movements for operator comfort.
- Easy to use together with balancer to create weightless solution to improve ergonomics.
- Minimizes reaction force to prevent hand-arm-shoulder disorders.
- Minimizes pinching and can replace reaction bars.
- Improve finished product quality with all torque absorbed in the joint and no movement of the tool.

Model	Max torque Nm	Max torque ft lb	Min length mm	Max length mm	A Max tool holder swivel angle [deg]	Weight kg	Weight lb	Tool holder interface type	Ordering No.
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

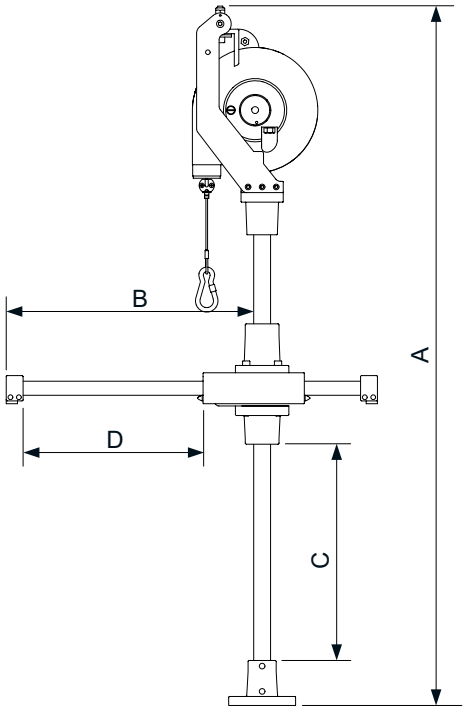
By mounting your assembly tool on a SML MK II torque arm you will immediately increase the productivity and reduce muscular stress from your operators. All arms are delivered with integrated balancer, 3-axis movement and the Atlas Copco interface for tool holders. The 3-axis movement allows the operator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

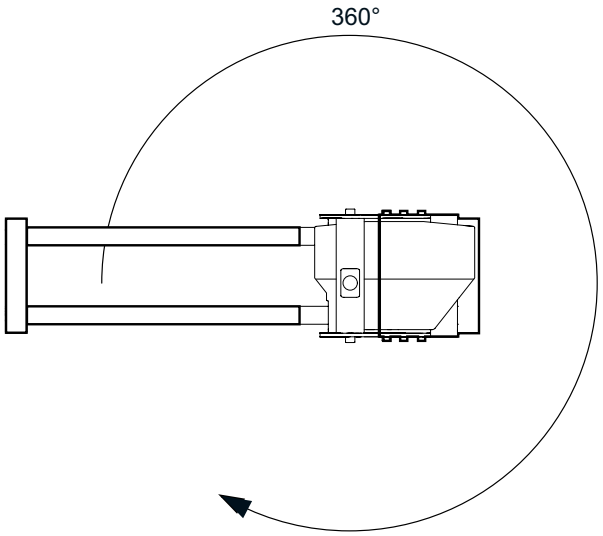
- 3-axis movement for maximum flexibility.
- Strong and durable desing.
- Integrated balancer to support tool and arm weight.
- High torque capacity, up to 1000 Nm.
- Same tool holder interface as SML T / SMS T / SMC for arms up to 150 Nm.

Model	Max tool weight kg	lb	Max torque Nm	ft lb	D Horizontal stroke mm	C Vertical stroke mm	A Height mm	Tool holder interface type	Ordering No.
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 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.

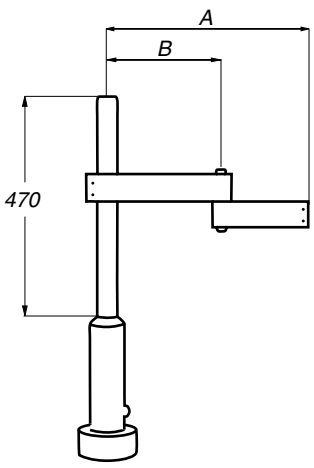
The GHP torque arms are exceptionally easy to position and handle. The design is intended for low torque applications and work tasks over a long period of time. Comes with appropriate balancing system to support the weight of the tool.

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

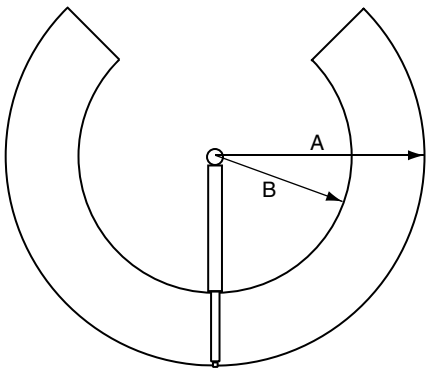
Tool holder is ordered separately.

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

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 then 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

Universal tool holder

Tool holder, diameter

Mounting plate

Tool holder, Spline

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 type	Description	Ordering No.
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

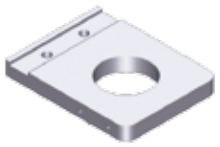
TOOL HOLDERS FOR TORQUE ARMS WITH TOOL HOLDER INTERFACE TYPE B, SMC 50/100 AND SMS/L T 50/100 AND SML MK II 40/80

Model	Tool dia. mm	Spline type	Arm interface type	Description	Ordering No.
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

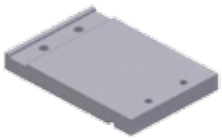
Optional Accessories

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, ETV STB62-40-10, ETV STB62-50-10	4390 2062 84
	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, ETV STB62-100-13	4390 2061 80
	ETV DS72-70-HAD	4390 2061 81
	ETV STB62-70-13, ETV ST81-70-13-L150, ETV ST81-70-13, ETV ST61-70-13, ETV ST81-90-HAD, ETV ST61-90-HAD	4390 2061 82
	ETV S72-50-10/B10, LTV39-2 R70-13, LTV39-2 R56-13, ETV S7-50-10	4390 2061 83
	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, ETV ST61-50-10, LTV39-2 R56-10	4390 2061 87
	ETV ST101-100-HAD, ETV ST101-100-13, ETV ST101-100-INTEL, ETV S72-100-13	4390 2061 88
	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

Optional Accessories

Bench stand

Holder for bench stand

Horizontal adapter

Vertical adapter

Start handle

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.

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

OPTIONAL ACCESSORIES FOR SMC CARBON ARMS

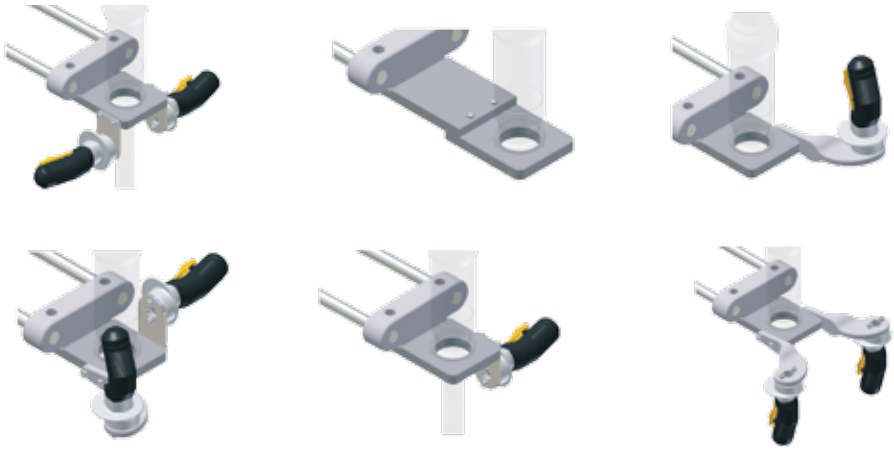
Model	Description	Ordering No.
Bench stand	Bench stand with height 753 mm. Holder must be ordered separately	4390 1728 00
Holder for bench stand	Stand attachment 12-25 Nm Stand attachment 50-100 Nm SMC 200 should not be used with table stand	4390 1510 88 4390 1518 88
Balancer kit	SMC Balancer adaptor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

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

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

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

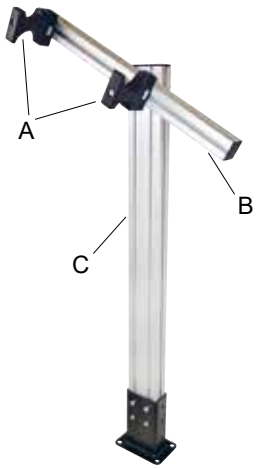
Optional Accessories

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



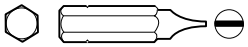
Modular tool holder

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

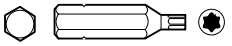
Point	Length mm	Ordering No.
PH0	25	4023 1326 00
PH1	25	4023 0696 01
PH2	25	4023 0697 01
PH3	25	4023 0698 01

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

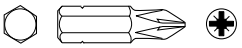
Point	Length mm	Ordering No.
IP6	25	4023 0001 70
IP8	25	4023 0001 74
IP10	25	4023 0001 78

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



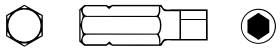
Application: For Pozidriv screws
Drive: 1/4" Hexagon, Style C 6.3

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



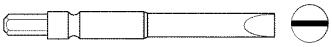
Application: For Hex-socket screws
Drive: 5/16" Hexagon, Style C 8

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:

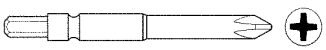
SLOTTED BITS



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

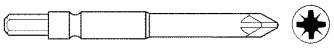
PHILLIPS BITS



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

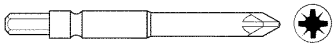
TORX BITS



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



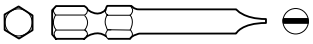
Application: For Pozidriv screws
Drive: 3 mm Hexagon

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

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

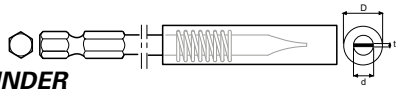
SCREW PROFILE:

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

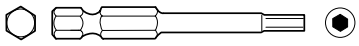


SLOTTED BITS WITH FINDER

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

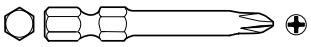
HEX BITS



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

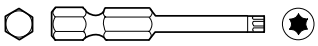
PHILLIPS BITS



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

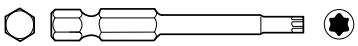
TORX BITS



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

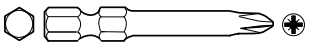
Point	Length mm	Ordering No.
TX5	49	4023 0002 16
TX5	70	4023 0002 17
TX6	49	4023 0001 61
TX6	70	4023 0001 62
TX6	90	4023 0001 63
TX7	49	4023 0002 18
TX7	70	4023 0002 19
TX8	49	4023 2220 21
TX8	90	4023 2235 21
TX9	49	4023 2220 22
TX9	90	4023 2235 22
TX10	49	4023 2220 23
TX10	90	4023 2235 23
TX15	49	4023 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



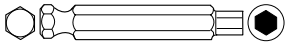
POZIDRIV BITS

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

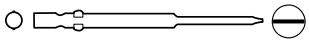
ADAPTERS

	Ordering No.
Adapter	4220 0105 00

Screwdriver Bits – Wing-shank Drive

DRIVE SYSTEM: 4 MM WING-SHANK

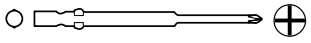
SCREW PROFILE:



SLOTTED BITS

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

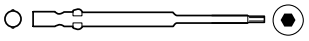
Blade thickness mm	Blade width mm	Length mm	Ordering No.
0.28	1.3	60	4023 1327 01
0.30	1.7	60	4023 1327 02
0.3	2.0	60	4023 1327 03
0.3	2.5	60	4023 1327 04



PHILLIPS BITS

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

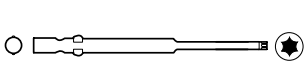
Point	Length mm	Ordering No.
PH00	40	4023 0002 56
PH0	40	4023 0002 57
PH1	40	4023 0002 58
PH2	40	4023 0002 59



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

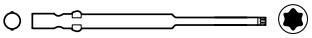


TORX BITS

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

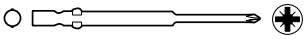
TORXPLUS BITS



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

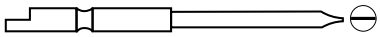
Point	Length mm	Ordering No.
PZ0	60	4023 0002 03
PZ1	60	4023 0002 04
PZ2	60	4023 0002 55

Screwdriver Bits – Halfmoon Drive

DRIVE SYSTEM: 4 MM HALFMOON

SCREW PROFILE:

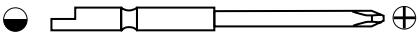
SLOTTED BITS



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

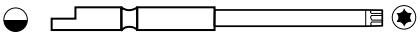
Point	Length mm	Ordering No.
1.5	44	4023 0002 41
2	44	4023 0002 42
2.5	44	4023 0002 43
3	44	4023 0002 44

HEX-SOCKET BITS

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

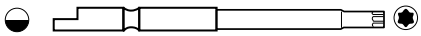
Point	Length mm	Ordering No.
2.3	44	4023 0002 45
2.5	44	4023 0002 46
3	44	4023 0002 47
4	44	4023 0002 48
4.5	44	4023 0002 49
5	44	4023 0002 50
5.5	44	4023 0002 51

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

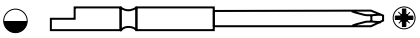


TORXPLUS BITS

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

Adapters

DRIVE SYSTEM: 4 MM HALFMOON

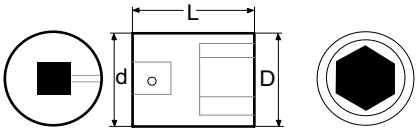
APPLICATION: SUITABLE FOR BITS WITH 1/4" HEXAGON DRIVE

ADAPTERS

	Ordering No.
Magnetic	4023 0002 15

Sockets

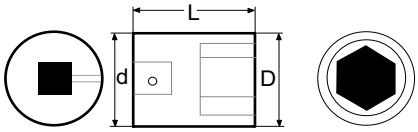
SOCKETS 1/4" SQUARE DRIVE



	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.

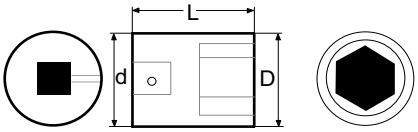
SOCKETS 3/8" SQUARE DRIVE



	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.

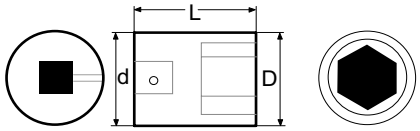
SOCKETS 1/2" SQUARE DRIVE



	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.

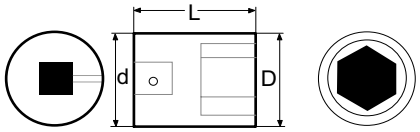
SOCKETS 3/4" SQUARE DRIVE



	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.

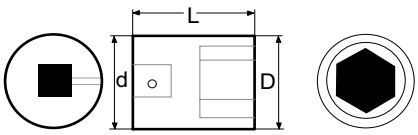
SOCKETS 1" SQUARE DRIVE



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.

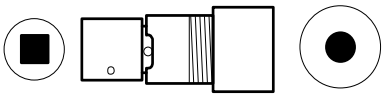
SOCKETS 1 1/2" SQUARE DRIVE



	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

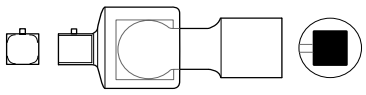
See table for pin and o-ring.

Stud setter



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

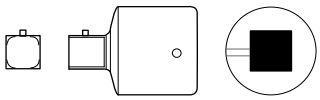
Universal joints



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.

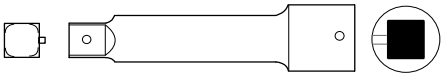
Socket adapters



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.

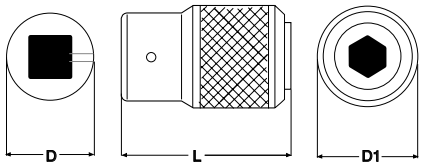
Extensions



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

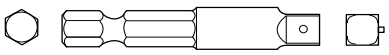
See table for pin and o-ring.

Locking pins and O-rings

Ref. letter	Locking pin Diameter mm	Locking pin Length mm	O-ring Dia-meter mm	O-ring Inner diameter mm	Pin and O-ring Ordering No.
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