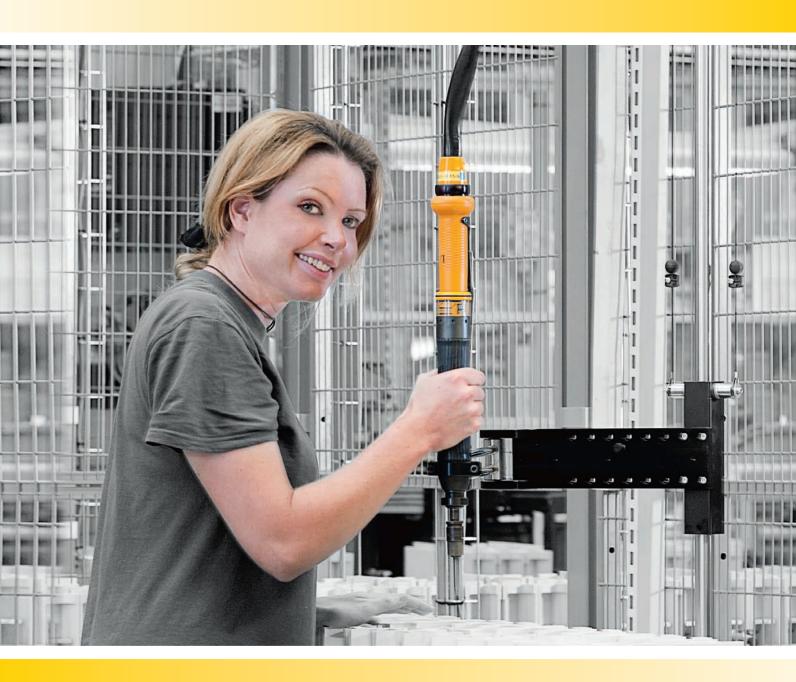
# **Atlas Copco Torque Arms**





# **Torque arms**

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### 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 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
Pneumatic	≥ 3 Nm	≥ 6 Nm	≥ 50 Nm
Electric	≥ 4 Nm	≥ 8 Nm	≥ 50 Nm

#### 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 forece 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.





SMC Carbon Arm

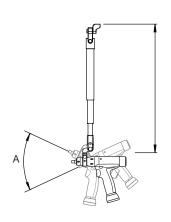
### SMC - Carbon arms

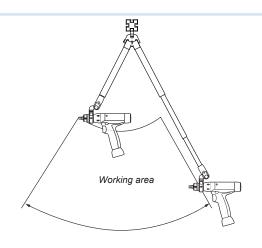
The Atlas Copco carbon arms have a telescopic design for maximum flexibility in the workplace. The carbon arms are light weight with smooth movements to reduce the operator force to use the arms. Together with a balancer the carbon arms can either retract up or be used in a weightless position to improve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



							A Max tool holder			
	Max	torque	Min le	ength	Max I	ength	swivel angle	Wei	ght	
Model	Nm	ft lb	mm	in	mm	in	[deg]	kg	lb	Ordering No.
SMC 12 1150	12	8.9	516	20.3	1128	44.4	60	0.37	0.816	4390 1510 85
SMC 12 1600	12	8.9	666	26.2	1578	62.1	60	0.42	0.926	4390 1511 85
SMC 12 2100	12	8.9	835	32.9	2083	82	60	0.48	1.06	4390 1512 85
SMC 25 1150	25	18.4	524	20.6	1124	44.3	50	0.51	1.12	4390 1514 85
SMC 25 1600	25	18.4	674	26.5	1574	62	50	0.61	1.34	4390 1515 85
SMC 25 2100	25	18.4	841	33.1	2075	81.7	50	0.68	1.5	4390 1516 85
SMC 25 2600	25	18.4	1007	39.6	2573	101.3	50	0.77	1.7	4390 1517 85
SMC 50 1600	50	36.9	712	28	1624	63.9	40	0.95	2.09	4390 1518 85
SMC 50 2100	50	36.9	878	34.6	2125	83.7	40	1.05	2.31	4390 1519 85
SMC 50 2600	50	36.9	1045	41.1	2626	103.4	40	1.15	2.54	4390 1520 85
SMC 100 1600	100	73.8	722	28.4	1628	64.1	30	1.28	2.82	4390 1522 85
SMC 100 2100	100	73.8	889	35	2129	83.8	30	1.41	3.11	4390 1523 85
SMC 100 2600	100	73.8	1056	41.6	2630	103.5	30	1.53	3.37	4390 1524 85
SMC 200 1600	200	148	726	28.6	1628	64.1	20	1.98	4.37	4390 1526 85
SMC 200 2100	200	148	893	35.2	2129	83.8	20	2.18	4.81	4390 1527 85
SMC 200 2600	200	148	1060	41.7	2630	103.5	20	2.39	5.27	4390 1528 85





Linear Arm SML

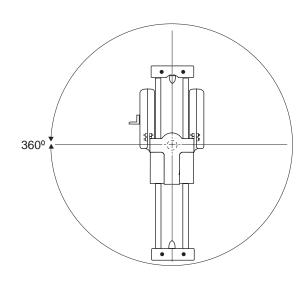
### SML - Linear torque arms

By mounting your assembly tool on a SM-Linear torque arm the payback begins immediately and continues throughout the duration of your assembly process. All components are available as standard, allowing fast delivery and quick installation. Each model comes complete with appropriate balancing system to support the weight of the tool, and the flexibility offered by movement in 3-axis allows the user to ease the arm effortlessly around the workstation.



	Max too	ol weight	We	eight	Max	torque	Horizontal stroke	Vertical stroke	Height	
Model	kg	lb	kg	lb	Nm	ft lb	mm	mm	mm	Ordering No.
SML 10	1.1	2.4	4.0	6.8	10	7	300	480	822.5	8202 9003 00
SML 40	3.1	6.8	5.5	11.2	40	29.5	300	470	807	8202 9003 01
SML 80	7.4	16.3	8.9	19.6	80	59	360	390	910	8202 9003 08
SML 150	6.9	15.2	19.0	38.6	150	111	330	500	1010	8202 9003 02
SML 300	11.9	26.2	21.0	42.3	300	221	330	500	1010	8202 9003 03
SML 500	9.5	48.7	37.5	59.5	500	369	455	500	1470	8202 9003 04
SML 1000	17.3	88.2	40.0	75.0	1000	738	455	500	1470	8202 9003 05

Model	Working area alfa
SML 10-1000	360°



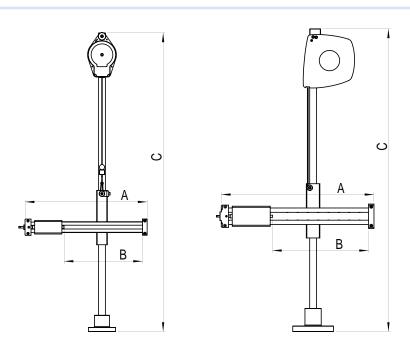
#### SML T - Series torque arms

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 handarm-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.



		tool ight	Max	torque	Min width without tool holder	A Max reach without tool holder	B Horizontal stroke	Vertical stroke	C Height	
Model	kg	lb	Nm	ft lb	mm	mm	mm	mm	mm	Ordering No.
SML T-5	0.8	1.8	5	3.7	158	530	205	310	732	4390 2000 00
SML T-12	1.5	3.3	12	8.9	198	648	255	465	888	4390 2001 00
SML T-25	2.2	4.9	25	18.4	167	732	290	615	1100	4390 2002 00
SML T-50	5	11	50	37	267	887	355	515	1116	4390 2004 00
SML T-100	6	13.2	100	74	255	914	395	515	1116	4390 2005 00



Torque Arm SMS T

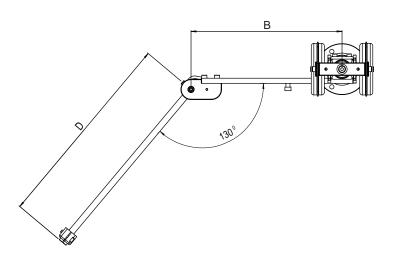
#### SMS T - Series torque arms

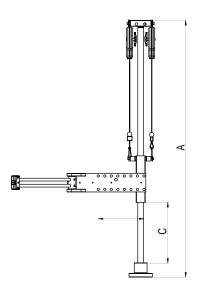
The Atlas Copco linear arms are built to handle the most demanding industrial situations. The robust design offers unmatched user friendliness and, due to the swivel function, a wide working area is covered with the SMS T-series. The swivel arms are equipped with ball bearings for smooth operation, and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



		k tool ight	Max	orque	D Swivel rods width without tool holder	B+D Max reach without tool holder	C Vertical stroke	A Height	B Width	
Model	kg	lb	Nm	ft lb	mm	mm	mm	mm	mm	Ordering No.
SMS T-5	0.8	1.8	5	3.7	292	582	270	732	290	4390 2006 00
SMS T-12	1.5	3.3	12	8.9	342	682	425	888	340	4390 2007 00
SMS T-25	2.5	4.9	25	18.4	392	732	580	1100	340	4390 2008 00
SMS T-50	5	11	50	37	440	825	520	1116	385	4390 2009 00
SMS T-100	6	13.2	100	74	490	930	500	1116	440	4390 2010 00





### 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.

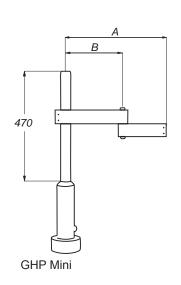
Torque arm GHP Mini is recommended with screwdrivers below 100 Ncm, and GHP Small below 200 Ncm.

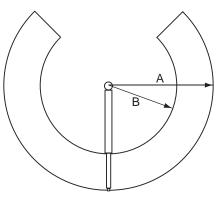
The GHP torque arms is exceptionally easy to position and handle. The design is intended for low torque applications and work tasks over a long period of time. Comes with appropriate balancing system to support the weight of the tool.



	Stroke		
Model	mm	alfa	Ordering No.
GHP Mini	200	270°	8432 0830 02
GHP Mini Clean room	200	270°	8432 0830 92
GHP Small	400	270°	8432 0830 03
GHP Large	730	270°	8432 0830 04

	Working ra	ange, mm
Model	Α	В
GHP Mini	280	150
GHP Mini Clean room	280	150
GHP Small	460	250
GHP Large	500	250





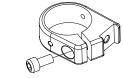
GHP Small/GHP Large

### Optional Accessories for SMC carbon arms and SML, SMS T-series

Tool holders	Description	Ordering No.
SMC carbon arms SML ar	nd SMS T-series, torque range 12-25 Nm	
Universal holder, dia 28-49	mm	4390 1510 86
Tool holder, dia 30.5 mm fo		
	LUM12 HRX/HRF, ETD STR21-16, LUM22 HR/HRX 3/4/6, ETP SL21-1/4/7/10, ETP ST32-5/10	4390 1513 80
Tool holder, dia 34 mm for	LUF34 HR 4/8/16, ETP ST32 20	4390 1513 81
Tool holder, dia 36.5 mm fo	r LUM22 HR/HRX 10/12, TWIST22 HRX 7/10/12, ETD SL/DL21	4390 1513 82
Tool holder, dia 38 mm for Tool holder, dia 46 mm, to b Tool holder, dia 56 mm, to b	be used with adapter	4390 1513 83 4390 1513 85 4390 1513 86
Special adapters to be used	d with dia 46 mm tool holder	
	LUM10 PR ELI LUM21 PR-P LUM12 SR LUM12 PR	4390 1734 09 4390 1734 08 4390 1735 44 4390 1735 52 4390 1735 53
	LUM22 PR	4390 1735 54
Special adapters to be used	d with dia 56 mm tool holder LUM21 SR LUM22 SR Spline 1, LMP24, LTD28	4390 1735 45 4390 1735 51 4390 1513 07
SMC carbon arms SML ar	nd SMS T-series, torque range 50-100 Nm	
Spline 1 Spline 2 Spline 3		4390 1513 08 4390 1513 09 4390 1513 10
Tool holder, pistol Spline 2, pistol	ETP STR61-20/30, ETP DS7 ETP STR61, ETP DS7, S7, DS9, S9	4390 1518 18 4390 1522 18
SMC carbon arms, torque	range 100 Nm	
Tool holder	ETV ST61-40/50 ETV ST61/81-70 ETV S72-50 ETV S72-70	4390 1513 88 4390 1513 89 4390 1529 80 4390 1529 81
SMC carbon arms torque	range 200 Nm	
Spline 3, pistol Spline 2, pistol	ETP STR61-120-13, ETP DS7-120, DS9, S7, S9	4390 1513 11 4390 1526 18
Tool holder	ETV ST61-200, ETV ST81-200	4390 1513 87
Holder for bench stand	Attachment that can be used to attach torque arm to any circular pole with diameter 25-46 mm.	4390 1729 00
	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
Bench stand	Bench stand with height 753 mm. Holder must be ordered separately, Ordering No. 4390 1729 00.	4390 1728 00
Table clamp	Clamp for heavy duty applications, 22-82 mm	4390 1734 02
Balancer kit	SMC Balancer adaptor kit	4390 2050 00



Universal tool holder



Tool holder



Spline



Tool holder



Holder for bench stand



Table clamp



Bench stand

### Optional Accessories for SML, SML T-series and SMS T-series



Horizontal adapter



Vertical adapter



Start handle



Extended mounting plate

Description		Ordering No.			
Horizontal adapter (	4390 1770 00				
Vertical adapter (har	ndle 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 har	ndles				
	(electric, 1 signal)	4390 1772 01			
	(electric, 2 signal)	4390 1773 01			
	(pneumatic)	4390 1771 01			
Heavy duty handgrip	o (dead)	4390 1786 01			
Handgrip (dead hand	dle)	4390 1786 00			
Extension mounting	plate (for extended reach, fits only with SML)	4390 1768 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			
	15 m	4390 1779 00			
Y- piece connector	4390 1777 00				

#### NOTE:

- Extension mounting plates are not compatible with SML 10/40 arms.
- For forward and reverse tool operation, a 2 signal handle is required (electric tools only).

### Optional Accessories for SML



Mounting plate

Description	Ordering No.
Mounting plate	
Spline type 1	4390 1760 00
Spline type 1 (for SML 10/40)	4390 1788 00
Spline type 2	4390 1761 00
Spline type 2 (for SML 10/40)	4390 1787 00
Spline type 3	4390 1762 00
Spline type 4	4390 1763 00
Spline type 5	4390 1764 00
Spline type 6	4390 1765 00
Spline type 7	4390 1766 00
QMX/ETX42	4390 1781 00
QMX/ETX50	4390 1782 00
QMX/ETX62	4390 1783 00
QMX80/ETX72	4390 1784 00
QMX90/ETX90	4390 1785 00

NOTE:

- All mounting plates compatible with models SML 150, 300, 500 and 1000.

### Optional Accessories for SML T and SMS T



Mou	nting	nla	ate
IVIOUI	nung	μιο	ale

Description	Ordering No.						
Mounting plate for arm SML T-5/12/25 (square 17 mm interface)							
Spline type 1	4390 2020 00						
Spline type 2	4390 2020 01						
Hole dia 24	4390 2020 02						
Hole dia 26	4390 2020 03						
Hole dia 28	4390 2020 04						
Blank	4390 2020 05						
Mounting plate for arm SML T-50/100 (square 32 mm interface)							
Spline type 1	4390 2021 00						
Spline type 2	4390 2021 01						
Spline type 3	4390 2021 02						
Hole dia 24	4390 2021 03						
Hole dia 26	4390 2021 04						
Hole dia 28	4390 2021 05						
Blank	4390 2021 06						

### Installation Proposals for SML, SMS T and SML T



## 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 Mini and ETD M25AVB	8432 0830 83
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

#### Hose reel balancer - HRIL

Models in the HRIL range of hose reel balancers are specifically designed for use with small pneumatic hand tools.

The integrated air hose and support cable ensure the work area is kept tidy and the tool is easy to control.

- Ergonomics The retraction force over hose travel remains almost constant which minimizes load on the operator and ensures smooth operation.
- An easily adjusted rubber stop is fitted on the hose which allows the tool to be set at the optimum position.
- The retraction force is easily adjustable by means of a hand wheel on the rear casing (this can be removed if desired, once the retraction force is set).
- Long service life The design features a rugged casing, self lubricating spindle bearing bushes and a 360 degrees rotary inlet connector.
- A durable hose is fitted with additional protection to prevent excessive bending around air connectors.
- Low pressure drop The HRIL balancers have very good flow characteristics.



	Capacit	y range	Max rec. air flow <sup>a</sup>	Hose travel	Wei	ght	Max working pressure		nensio	ons C	
Model	kg	lb	l/s	m	kg	lb	bar	mm	mm	mm	Ordering No.
HRIL 1	0.2-0.5	0.4-1.1	3.5	1.2	1.2	2.6	10	92	132	173	8202 0600 03
HRIL 3	0.5-1.4	1.1-3.1	5.5	1.0	1.2	2.6	10	92	132	173	8202 0600 11
HRIL 4	0.7-2.0	1.5-4.4	6.5	1.0	1.4	3.1	10	92	132	173	8202 0600 29

<sup>&</sup>lt;sup>a</sup> At inlet pressure of 6 bar pressure drop is 0.4 bar.

### **Dimensions**

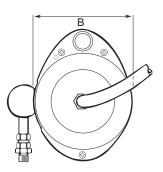
### Air line fittings

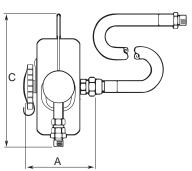
All models have a BSP 1/4" inlet fitting.

HRIL 1 supplied with M5 and BSP 1/8" outlet fittings.

HRIL 3 supplied with BSP 1/8" and BSP 1/4" outlet fittings.

HRIL 4 supplied with BSP 1/4" outlet fitting.





### **Optional Accessories**

Designation	Ordering No.
Safety chain	4391 4045 90

RIL Balancers

#### **RIL** balancer

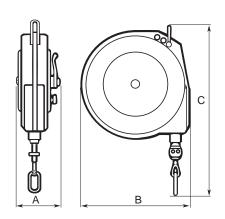
RIL balancers always keep the tool in place, handy and easily accessible.

### **RIL Retractors**

- Adjustable wire stop.
- High quality spring and construction.
- Load range 0 to 10 kg.



### **Dimensions**



			Cable			Dir	nensi	ons	
	Capac	Capacity range		Weight		Α	В	С	
Model	kg	lb	m	kg	lb	mm	mm	mm	Ordering No.
Retractors	3								
RIL 1C	0.0 - 0.5	0.0 - 1.7	1.5	0.6	1.3	51	106	238	8202 0700 02
RIL 2C	0.4 - 1.0	0.9 - 2.2	1.5	0.6	1.3	51	106	238	8202 0701 19
RIL 4C	1.0 - 2.0	2.2 - 4.4	1.5	0.6	1.3	51	106	238	8202 0702 18
RIL 5C	1.4 - 2.3	3.1 - 5.1	1.5	0.6	1.3	51	106	238	8202 0703 25
RIL 5	0.4 - 2.3	0.9 - 5.1	2.4	2.0	4.4	70	157	308	8202 0703 09
RIL 5LR <sup>b</sup>	0.4 - 2.3	0.9 - 5.1	2.4	2.0	4.4	70	157	308	8202 0703 15
RIL 10C	2.0 - 5.0	4.4 - 11.0	2.4	2.7	6.0	84	190	369	8202 0704 16
RIL 10CS <sup>a</sup>	2.0 - 5.0	4.4 - 11.0	2.4	2.7	6.0	84	190	369	8202 0704 20
RIL 15C	5.0 - 7.0	11.0 - 15.4	2.4	3.2	7.1	84	190	369	8202 0705 15
RIL 15CS <sup>a</sup>	5.0 - 7.0	11.0 - 15.4	2.4	3.2	7.1	84	190	369	8202 0705 20
RIL 22C	6.0 - 10.0	13.2 - 22.0	2.4	3.2	7.1	84	190	369	8202 0706 14
RIL 22CS <sup>a</sup>	6.0 - 10.0	13.2 - 22.0	2.4	3.2	7.1	84	190	369	8202 0706 20

<sup>&</sup>lt;sup>a</sup> Balancer equipped with automatic safety drum lock in case of spring failure.

### **Optional Accessories**

### Safety chain

	Ordering No.
1C, 2C, 4C and 5C	4391 4045 90
10C <sup>a</sup> , 15C <sup>a</sup> and 22C <sup>a</sup>	4391 4156 00
5, 20	4391 4046 90

<sup>&</sup>lt;sup>a</sup> Safety chain included.

<sup>&</sup>lt;sup>b</sup> Contains a lock ratchet to lock the cable in increments along its entire length.

**Balancers** COLIBRI

#### COLIBRI - COL

Balancers in the unique COL range hold the load and keep it weightless throughout the entire cable length.

#### **Productivity**

COL balancers always hold the tool in the correct position

#### **Ergonomic**

COL balancers reduce the stress level in the operator's muscles.

#### Safety

The load is not pulled back when released and the surroundings are protected from accidental hoisting of the load.

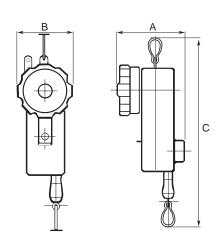
The cable locks in the event of spring failure (downward braking power).

In all models the braking function can be activated upwards by using the "bow and arrow" principle if you need to slacken the cable to change the tool.

#### **COLIBRI S**

The COL S models feature an extra safety brake mechanism (double braking system) for applications with extremely high safety requirements.







			Cable	Cable Dime					mensions			
	Capac	ty range	length	Weight		A B C						
Model	kg	lb	m	kg	lb	mm	mm	mm	Ordering No.			
COL 1 01	0.7 - 1.3	1.5 - 2.9	1.7	0.5	1.1	108	72	245	8202 0750 01			
COL 1 02	1.0 - 2.0	2.2 - 4.4	1.7	0.5	1.1	108	72	245	8202 0750 19			
COL 2 03	1.7 - 3.5	3.7 - 7.7	2.4	2.3	5.1	155	116	427	8202 0750 27			
COL 2 04	3.0 - 6.0	6.6 - 13.2	2.4	2.3	5.1	155	116	427	8202 0750 35			
COL 2 05	4.7 - 7.0	10.4 - 15.4	2.4	2.5	5.5	155	116	427	8202 0750 43			
COL 3 07	5.5 - 9.0	12.1 - 19.8	2.4	3.3	7.3	196	116	427	8202 0750 50			
COL 3 10	8.0 - 13.0	17.6 - 28.7	2.4	3.4	7.5	196	116	427	8202 0750 68			
COL 3 15	12.5 - 17.0	27.6 - 37.5	2.4	3.8	8.4	196	116	427	8202 0750 76			
COL 4 18	14.0 - 22.0	30.9 - 48.5	2.4	13.2	29.1	244	193	620	8202 0774 11			
COL 4 22	17.0 - 28.0	37.4 - 61.7	2.4	13.9	30.6	244	193	620	8202 0750 84			
COL 4 30	24.0 - 38.0	52.9 - 83.8	2.4	14.5	32.0	244	193	620	8202 0750 92			
COL 4 42	36.0 - 49.0	79.4 - 107.8	2.4	14.9	32.8	244	193	620	8202 0751 00			
COL 4 50	43.0 - 55.0	98.4 - 121.3	2.4	15.3	33.7	244	193	620	8202 0751 18			
Safety bra	ke											
COL 2 03S	1.7 - 3.5	3.7 - 7.7	2.4	2.3	5.1	155	116	427	8202 0775 93			
COL 2 04S	3.0 - 6.0	6.6 - 13.2	2.4	2.3	5.1	155	116	427	8202 0776 01			
COL 2 05S	4.7 - 7.0	10.4 - 15.4	2.4	2.5	5.3	155	116	427	8202 0776 19			
COL 3 07S	5.5 - 9.0	12.1 - 19.8	2.4	3.3	7.3	196	116	427	8202 0776 27			
COL 3 10S	8.0 - 13.0	17.6 - 28.7	2.4	3.4	7.5	196	116	427	8202 0776 35			
COL 3 15S	12.5 - 17.0	27.6 - 37.5	2.4	3.8	8.4	196	116	427	8202 0776 43			

### **Optional Accessories**

#### Safety chain

	Ordering No.
COL 1	4391 4045 90
COL 2 and 3	4391 4046 90
COL 4	4391 4047 90

#### WP balancer

Weightless positioning balancers with a cone-shaped drum hold the load and keep it weightless throughout the entire cable length.

### **Productivity**

WP balancers always hold the tool in the correct position and minimize worker fatigue.

### **Ergonomic**

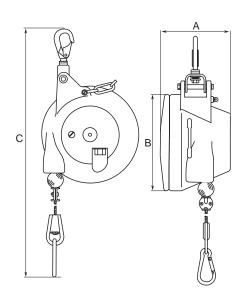
WP balancers reduce stress level in the operator's muscles.

### Safety

The load is not pulled back when released and the environment is protected from accidental hoisting of the load.

- Steel cable with cable stop buffer.
- · Safety chain.
- Quick and easy cable replacement.





			Cable			Dimension			
	Capac	ity range	length Weight		eight	Α	В	С	
Model	kg	lb	m	kg	lb	mm	mm	mm	Ordering No.
WP 10-3	3 - 5	6.6 - 11	2	2.9	6.4	129.5	188	520.7	8202 0779 00
WP 10-4.5	4.5 - 7	10 - 15.4	2	3.1	6.8	129.5	188	520.7	8202 0779 01
WP 10-6	6 - 10	13 - 22	2	3.2	7.0	129.5	188	520.7	8202 0779 02
WP 10-9	9 - 14	20 - 31	2	3.4	7.5	129.5	188	520.7	8202 0779 03
WP 10-13	13 - 17	29 - 37	2	3.6	8.0	129.5	188	520.7	8202 0779 04
WP 10-16	16 - 21	35 - 46	2	3.8	8.4	129.5	188	520.7	8202 0779 05
WP 20-15	15 - 25	33 - 55	2	7.8	17.2	152.4	218.4	520.7	8202 0780 00
WP 20-25	25 - 35	55 - 77	2	8.9	19.6	152.4	218.4	520.7	8202 0780 01
WP 20-35	35 - 45	77 - 99	2	9.5	21.0	152.4	218.4	520.7	8202 0780 02
WP 20-45	45 - 55	99 - 121	2	9.8	21.5	152.4	218.4	520.7	8202 0780 03
WP 30-12	12 - 20	26 - 44	2	14.8	32.6	203.2	284.5	749.3	8202 0781 00
WP 30-20	20 - 30	44 - 66	2	15.2	33.5	203.2	284.5	749.3	8202 0781 01
WP 30-30	30 - 45	66 - 99	2	16.9	37.3	203.2	284.5	749.3	8202 0781 02
WP 30-45	45 - 60	99 - 132	2	17.3	38.1	203.2	284.5	749.3	8202 0781 03
WP 30-60	60 - 75	132 - 165	2	18.7	41.2	203.2	284.5	749.3	8202 0781 04
WP 30-75	75 - 90	165 - 198	2	19.7	43.4	203.2	284.5	749.3	8202 0781 05
WP 30-90	90 - 100	198 - 220	2	19.9	43.4	203.2	284.5	749.3	8202 0781 06
WP 40-100	100 - 115	220 - 254	3	42.0	43.9	348	320	800	8202 0782 00
WP 40-115	115 - 130	254 - 287	3	44.0	97.0	348	320	800	8202 0782 01
WP 40-130	130 - 140	287 - 309	3	46.0	101	348	320	800	8202 0782 02
WP 40-140	140 - 150	309 - 331	3	48.0	106	348	320	800	8202 0782 03

### **Notes**

