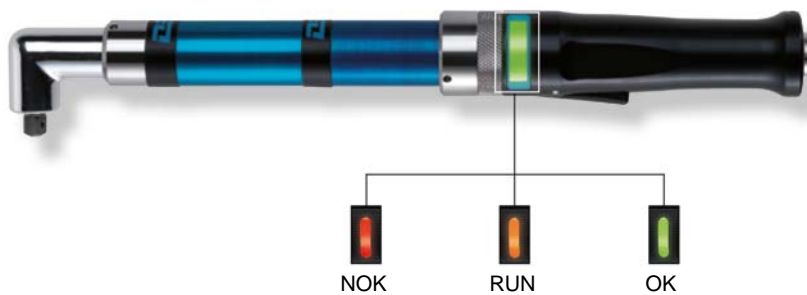




HAND-HELD NUTRUNNERS DS line

Overview of the different construction sizes

Type	Models Maximum torque in Nm
> DSH 26	0,5 1 2 4
> DS 34-P	2,5 5 10 15
> DSH 34	5 10 20
> DS 44-P	2,5 5 10 20 35
> DSH 44	20 30 40 60



The illuminated field at the tool shows the tightening status.

Highest precision, also by the manual assembly

Hand-held nutrunners from DSM are available in a lot of sizes from 0,5 up to 60 Nm torque. They are characterised by a robust technology, reliable precision and an intelligent control engineering.

Components of DS hand-held nutrunners

- Maintenance-free brushless servo motor
- Robust housing out of stainless steel and aluminium
- Ergonomic handle
- Wear-free operating elements
- Various output variants

Advantages of DS hand-held nutrunners

- Insensitive against electro-magnetic radiation due to digital data transfer
- Change-over between programs via function switch (different processes)
- Illuminated field for indication of the tightening status
- Simple programmable at the control unit or via external PC

MDW or SA – with or without torque transducer

DS-nutrunners of type MDW have a digital torque transducer. With this, the upcoming torque can be collected very precise. The accuracy-deviation is max. 0,5 % of the final value.

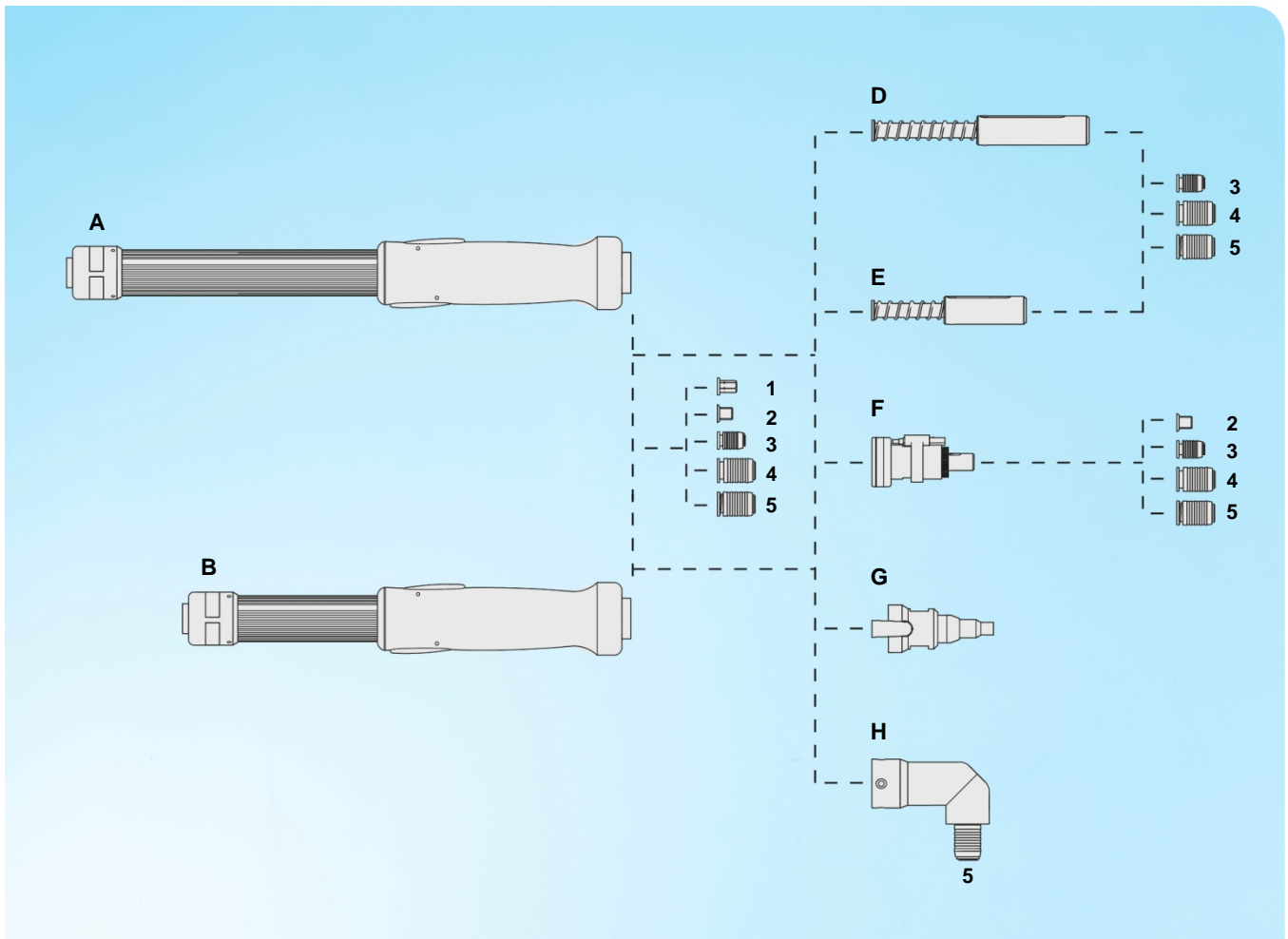
By DS-nutrunners of the type SA, the torque and the angle of rotation are collected via the motor. The accuracy-deviation here is max. 5 % of the final value.

Type	Torque measuring	Torque accuracy	Angle resolution
MDW	via digital torque transducer	0,5 %	> Data sheet
SA	via motor current	5 %	> Data sheet

Suitable control units for hand-held nutrunners of the DS series



Control unit	MultiBasic Blue TA	MultiBasic TA	MultiClassic TA	MultPro TA
suitable for type	SA	SA	MDW	MDW



DSH 26 series

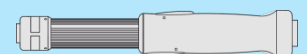
A) DSH 26 MDW with torque transducer



Type	Max. torque Nm	Application area Nm	Max. speed rpm	Angle resolution Degree [°]	Article number
DSH 26 / 005 MDW	0,5	0,05 – 0,5	1450	3,7	DSH-2260005
DSH 26 / 01 MDW	1	0,2 – 1	1450	3,7	DSH-2260010
DSH 26 / 02 MDW	2	0,4 – 2	1020	2,6	DSH-2260020
DSH 26 / 04 MDW	4	0,8 – 4	400	1,0	DSH-2260040

Torque accuracy 0,5 %, torque tolerance better 5 % according to ISO 5393

B) DSH 26 SA without torque transducer



Type	Max. torque Nm	Application area Nm	Max. speed rpm	Angle resolution Degree [°]	Article number
DSH 26 / 005 SA	0,5	0,05 – 0,5	1700	4,3	DSH-2261005
DSH 26 / 01 SA	1	0,2 – 1	1700	4,3	DSH-2261010
DSH 26 / 02 SA	2	0,4 – 2	820	2,1	DSH-2261020
DSH 26 / 04 SA	4	0,8 – 4	400	1,0	DSH-2261040

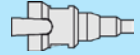
Torque accuracy 5 %

D/E) Spring output

Type	Article number
Spring output 20 mm	DS-2263010
Spring output 50 mm	DS-2263015

F) Self start output

Type	Article number
Self start with 5 mm spring deflexion	DS-2263020

G) Vacuum screw-retainer

Type	Article number
With electric supply unit	DS-2263895
With pneumatic supply unit	DS-2263896

H) Angle head

Type	Article number
Angle head (D6,3)	DS-2263025

Torque tolerance better 8 % according to ISO 5393

1) Hexagon drive 1/4"

Type	Article number
Hexagon drive 1/4"	DS-2263725

2) Square drive 1/4"

Type	Article number
Square drive 1/4"	DS-2263730

3) Hexagonal quick change chuck B3

Type	Article number
Hexagonal quick-change chuck B3	DS-2263720

4) Hexagonal quick change chuck B5,5

Type	Article number
Hexagonal quick-change chuck B5,5	DS-2263715

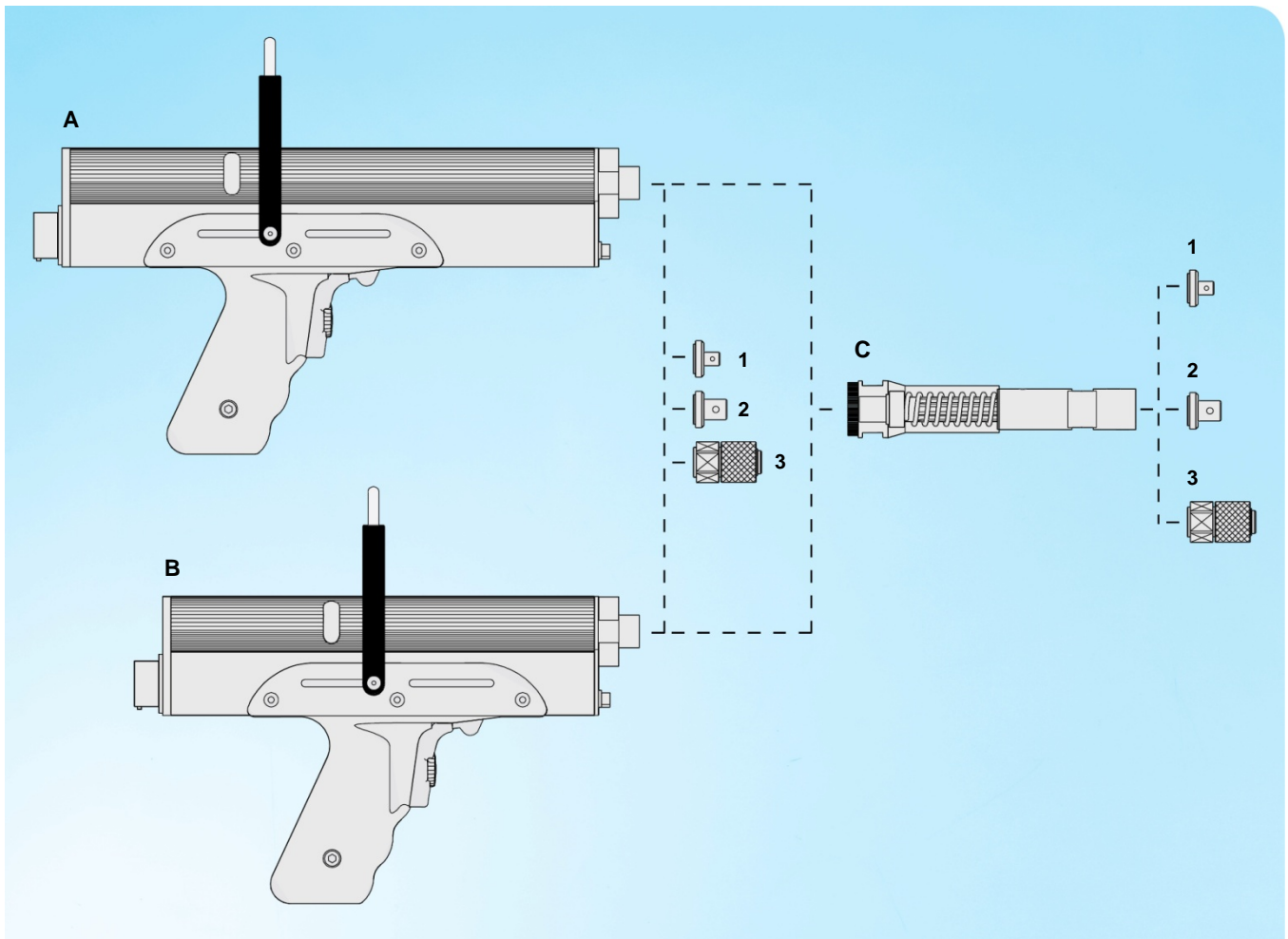
5) Hexagonal quick change chuck D6,3

Type	Article number
Bit shaft precision-guide 13 mm	DS-2263705
Bit shaft precision-guide 24 mm	DS-2263710

Cable

Cable for interconnection between nutrunner and control system

Type	Cable length	Article number
Interconnecting cable DS26 / DSH26 DSP05	5 m	MK-2269005



DS 34-P series

A) DS 34 MDW-P with torque transducer



Type	Max. torque Nm	Application area Nm	Max. speed rpm	Angle resolution Degree [°]	Article number
DS 34 / 025 MDW-P	2,5	0,5 – 2,5	880	0,1	DS-2342025
DS 34 / 05 MDW-P	5	1 – 5	880	0,1	DS-2342050
DS 34 / 10 MDW-P	10	2 – 10	1540	0,1	DS-2342100
DS 34 / 15 MDW-P	15	3 – 15	1540	0,1	DS-2342150

Torque accuracy 0,5 %, torque tolerance better 5 % according to ISO 5393

B) DS 34 SA-P without torque transducer



Type	Max. torque Nm	Application area Nm	Max. speed rpm	Angle resolution Degree [°]	Article number
DS 34 / 025 SA-P	2,5	0,5 – 2,5	880	3,3	DS-2343025
DS 34 / 05 SA-P	5	1 – 5	880	3,3	DS-2343050
DS 34 / 10 SA-P	10	2 – 10	1540	1,7	DS-2343100
DS 34 / 15 SA-P	15	3 – 15	1540	1,7	DS-2343150

Torque accuracy 5 %

C) Spring output



Type	Article number
Spring output 30 mm	DS-2403025
Spring output 30 mm with depth initiator	DS-2403045
Spring output 50 mm	DS-2403030
Spring output 50 mm with depth initiator	DS-2403050

1) Square drive 1/4"



Type	Article number
Square drive 1/4"	DS-2403715

2) Square drive 3/8"



Type	Article number
Square drive 3/8"	DS-2403720

3) Hexagonal quick change chuck D6,3

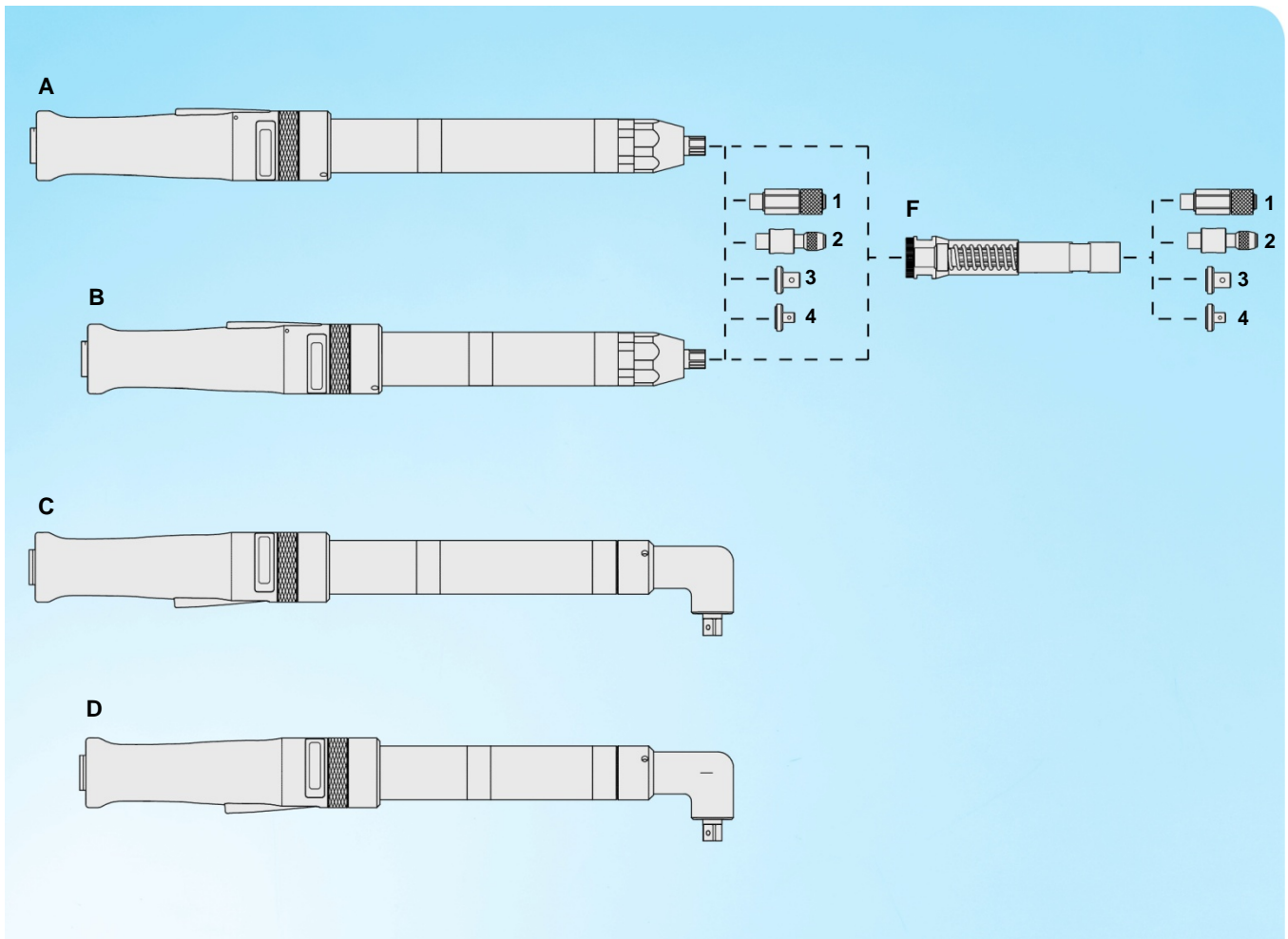


Type	Article number
Bit shaft precision-guide 13 mm	DS-2403705
Bit shaft precision-guide 24 mm	DS-2403710

Cable

Cable for interconnection between nutrunner and control system

Type	Cable length	Article number
Interconnecting cable DS34 / DS44 / SMP300 DSP05	5 m	MK-2409005
Interconnecting cable DS34 / DS44 / SMP300 DSP10	10 m	MK-2409010
Interconnecting cable DS34 / DS44 / SMP300 DSP15	15 m	MK-2409015
Interconnecting cable DS34 / DS44 / SMP300 DSP05 - angled 90° right	5 m	MK-2409105
Interconnecting cable DS34 / DS44 / SMP300 DSP10 - angled 90° right	10 m	MK-2409110
Interconnecting cable DS34 / DS44 / SMP300 DSP15 - angled 90° right	15 m	MK-2409115
Interconnecting cable DS34 / DS44 / SMP300 DSP05 - angled 90° left	5 m	MK-2409205
Interconnecting cable DS34 / DS44 / SMP300 DSP10 - angled 90° left	10 m	MK-2409210
Interconnecting cable DS34 / DS44 / SMP300 DSP15 - angled 90° left	15 m	MK-2409215



DSH 34 series

A) DSH 34 MDW with torque transducer Straight output



Type	Max. torque Nm	Application area Nm	Max. speed rpm	Angle resolution Degree [°]	Article number
DSH 34 / 05 MDW	5	1 – 5	1540	1,7	DSH-2340051
DSH 34 / 10 MDW	10	2 – 10	1540	1,7	DSH-2340101

Torque accuracy 0,5 %, torque tolerance better 5 % according to ISO 5393

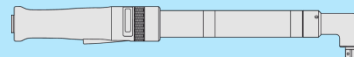
B) DSH 34 SA without torque transducer Straight output



Type	Max. torque Nm	Application area Nm	Max. speed rpm	Angle resolution Degree [°]	Article number
DSH 34 / 05 SA	5	1 – 5	1540	1,7	DSH-2341051
DSH 34 / 10 SA	10	2 – 10	1540	1,7	DSH-2341101

Torque accuracy 5 %

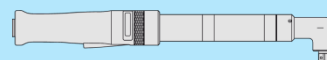
C) DSH 34 MDW-WA with torque transducer
Angle head (3/8" square drive)



Type	Max. torque Nm	Application area Nm	Max. speed rpm	Angle resolution Degree [°]	Article number
DSH 34 / 05 MDW-WA	5	1 – 5	1070	1,2	DSH-2340050
DSH 34 / 10 MDW-WA	10	2 – 10	1070	1,2	DSH-2340100
DSH 34 / 20 MDW-WA	20	4 – 20	1070	1,2	DSH-2340200

Torque accuracy 0,5 %, torque tolerance better 8 % according to ISO 5393

D) DSH 34 SA-WA without torque transducer
Angle head (3/8" square drive)



Type	Max. torque Nm	Application area Nm	Max. speed rpm	Angle resolution Degree [°]	Article number
DSH 34 / 05 SA-WA	5	1 – 5	1070	1,2	DSH-2341050
DSH 34 / 10 SA -WA	10	2 – 10	1070	1,2	DSH-2341100
DSH 34 / 20 SA-WA	20	4 – 20	1070	1,2	DSH-2341200

Torque accuracy 5 %

F) Spring output



Type	Article number
Spring output 30 mm	DS-2403025
Spring output 50 mm	DS-2403030

1) Hexagonal quick change chuck
D6,3



Type	Article number
Bit shaft precision-guide 24 mm	DS-2403710

2) Hexagonal quick change chuck
D6,3



Type	Article number
Bit shaft precision-guide 13 mm	DS-2403705

3) Square drive 3/8"



Type	Article number
Square drive 3/8"	DS-2403720

4) Square drive 1/4"

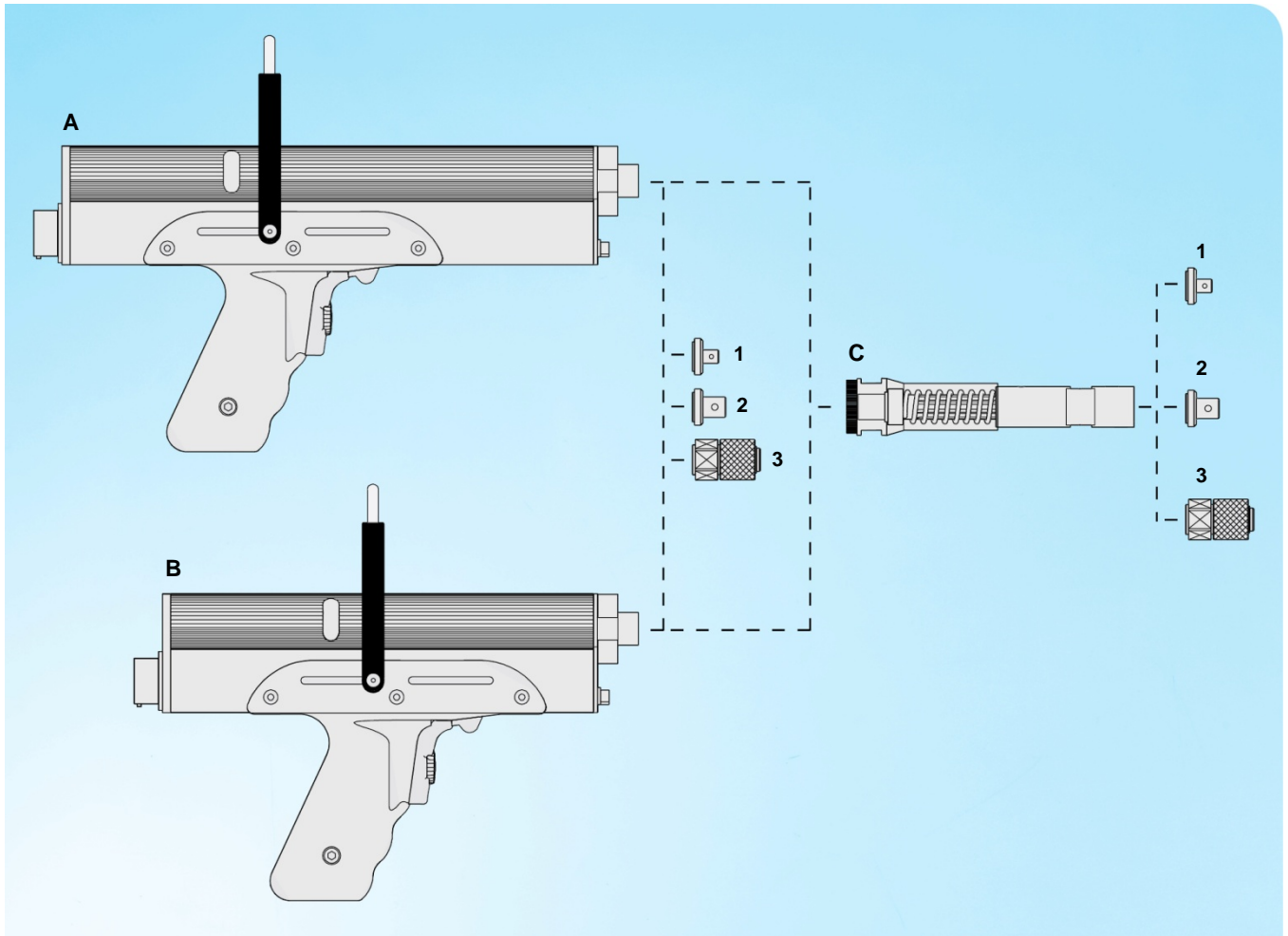


Type	Article number
Square drive 1/4"	DS-2403715

Cable

Cable for interconnection between nutrunner and control system

Typ	Cable length	Article number
Interconnecting cable DSH34 / DSH44 DSP05 - with plug protection	5 m	MK-2409305
Interconnecting cable DSH34 / DSH44 DSP10 - with plug protection	10 m	MK-2409310
Interconnecting cable DSH34 / DSH44 DSP15 - with plug protection	15 m	MK-2409315



DS 44-P series

A) DS 44 MDW-P with torque transducer



Type	Max. torque Nm	Application area Nm	Max. speed rpm	Angle resolution Degree [°]	Article number
DS 44 / 025 MDW-P	2,5	0,5 – 2,5	1300	0,1	DS-2442025
DS 44 / 05 MDW-P	5	1 – 5	1300	0,1	DS-2442050
DS 44 / 10 MDW-P	10	2 – 10	900	0,1	DS-2442100
DS 44 / 20 MDW-P	20	4 – 20	530	0,1	DS-2442200
DS 44 / 35 MDW-P	35	7 – 35	480	0,1	DS-2442350

Torque accuracy 0,5 %, torque tolerance better 5 % according to ISO 5393

B) DS 44 SA-P without torque transducer



Type	Max. torque Nm	Application area Nm	Max. speed rpm	Angle resolution Degree [°]	Article number
DS 44 / 05 SA-P	5	1 – 5	1300	3,3	DS-2443050
DS 44 / 10 SA-P	10	2 – 10	900	2,3	DS-2443100
DS 44 / 20 SA-P	20	4 – 20	530	1,4	DS-2443200
DS 44 / 35 SA-P	35	7 – 35	480	1,0	DS-2443350

Torque accuracy 5 %

C) Spring output



Type	Article number
Spring output 30 mm	DS-2403025
Spring output 30 mm with depth initiator	DS-2403045
Spring output 50 mm	DS-2403030
Spring output 50 mm with depth initiator	DS-2403050

1) Square drive 1/4"



Type	Article number
Square drive 1/4"	DS-2403715

2) Square drive 3/8"



Type	Article number
Square drive 3/8"	DS-2403720

3) Hexagonal quick change chuck D6,3

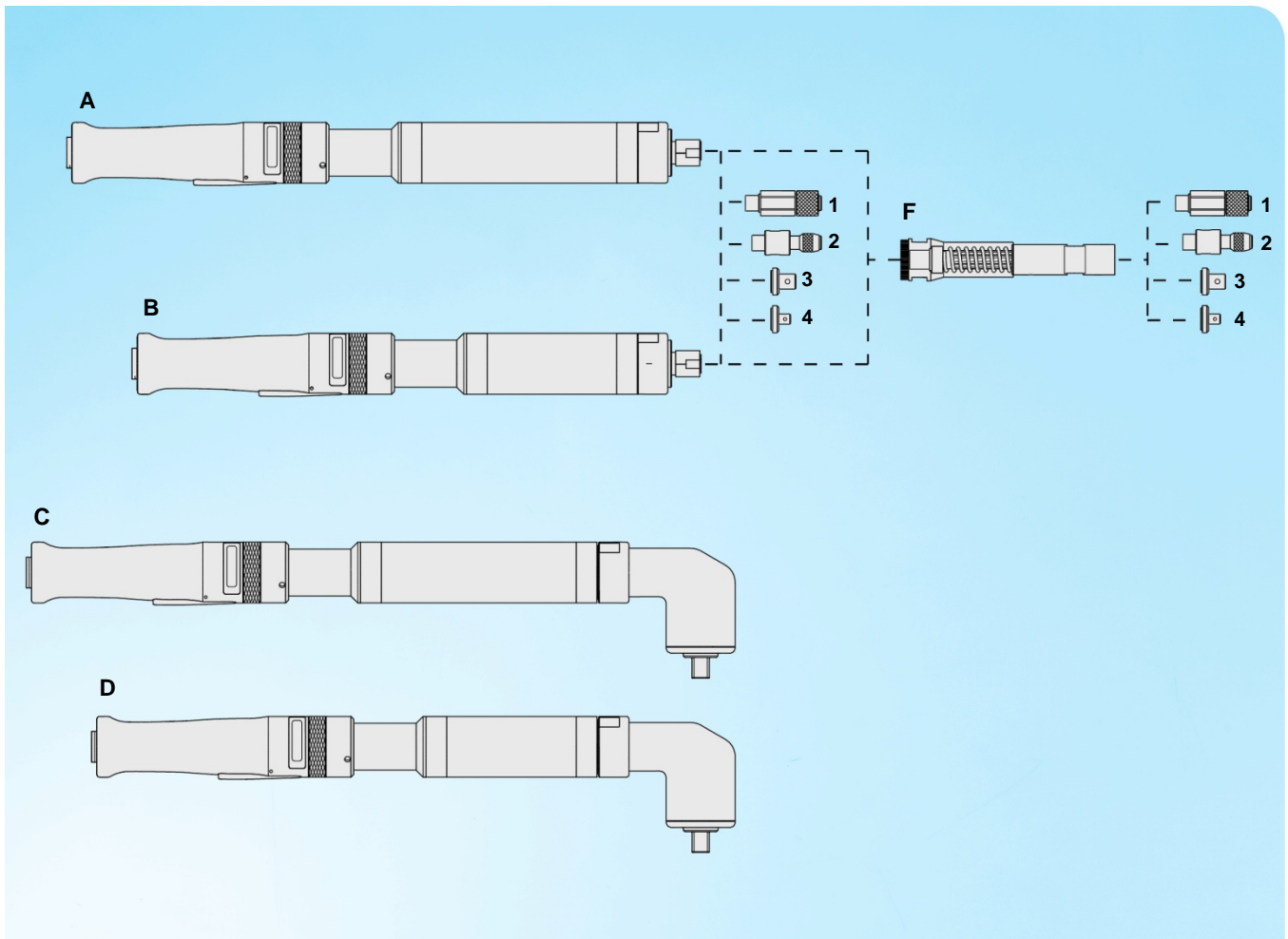


Type	Article number
Bit shaft precision-guide 13 mm	DS-2403705
Bit shaft precision-guide 24 mm	DS-2403710

Cable

Cable for interconnection between nutrunner and control system

Type	Cable length	Article number
Interconnecting cable DS34 / DS44 / SMP300 DSP05	5 m	MK-2409005
Interconnecting cable DS34 / DS44 / SMP300 DSP10	10 m	MK-2409010
Interconnecting cable DS34 / DS44 / SMP300 DSP15	15 m	MK-2409015
Interconnecting cable DS34 / DS44 / SMP300 DSP05 - angled 90° right	5 m	MK-2409105
Interconnecting cable DS34 / DS44 / SMP300 DSP10 - angled 90° right	10 m	MK-2409110
Interconnecting cable DS34 / DS44 / SMP300 DSP15 - angled 90° right	15 m	MK-2409115
Interconnecting cable DS34 / DS44 / SMP300 DSP05 - angled 90° left	5 m	MK-2409205
Interconnecting cable DS34 / DS44 / SMP300 DSP10 - angled 90° left	10 m	MK-2409210
Interconnecting cable DS34 / DS44 / SMP300 DSP15 - angled 90° left	15 m	MK-2409215



DSH 44 series

A) DSH 44 MDW with torque transducer Straight output



Type	Max. torque Nm	Application area Nm	Max. speed rpm	Angle resolution Degree [°]	Article number
DSH 44 / 20 MDW	20	4 – 20	680	1	DSH-2440201
DSH 44 / 30 MDW	30	6 – 30	680	1	DSH-2440301

Torque accuracy 0,5 %, torque tolerance better 5 % according to ISO 5393

B) DSH 44 SA without torque transducer Straight output



Type	Max. torque Nm	Application area Nm	Max. speed rpm	Angle resolution Degree [°]	Article number
DSH 44 / 20 SA	20	4 – 20	680	1	DSH-2441201
DSH 44 / 30 SA	30	6 – 30	680	1	DSH-2441301

Torque accuracy 5 %

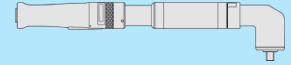
**C) DSH 44 MDW-WA with torque transducer
Angle head**



Type	Square drive	Max. torque Nm	Application area Nm	Max. speed rpm	Article number
DSH 44 / 40 MDW-WA	1/2"	40	8 – 40	490	DSH-2440400
DSH 44 / 60 MDW-WA	1/2"	50	12 – 60	350	DSH-2440600

Torque accuracy 0,5 %, torque tolerance better 8 % according to ISO 5393, angle resolution 1 degree [°]

**D) DSH 44 SA-WA without torque transducer
Angle head**



Type	Square drive	Max. torque Nm	Application area Nm	Max. speed rpm	Article number
DSH 44 / 40 SA-WA	1/2"	40	8 – 40	490	DSH-2441400
DSH 44 / 60 SA -WA	1/2"	50	12 – 60	350	DSH-2441600

Torque accuracy 5 %, angle resolution 1 degree [°]

F) Spring output



Type	Article number
Spring output 30 mm	DS-2403025
Spring output 50 mm	DS-2403030

**1) Hexagonal quick change chuck
D6,3**



Type	Article number
Bit shaft precision-guide 24 mm	DS-2403710

**2) Hexagonal quick change chuck
D6,3**



Type	Article number
Bit shaft precision-guide 13 mm	DS-2403705

3) Square drive 3/8"



Type	Article number
Square drive 3/8"	DS-2403720

4) Square drive 1/4"



Type	Article number
Square drive 1/4"	DS-2403715

Cable

Cable for interconnection between nutrunner and control system

Type	Cable length	Article number
Interconnecting cable DSH34 / DSH44 DSP05 - with plug protection	5 m	MK-2409305
Interconnecting cable DSH34 / DSH44 DSP10 - with plug protection	10 m	MK-2409310
Interconnecting cable DSH34 / DSH44 DSP15 - with plug protection	15 m	MK-2409315

Technical data

Hand-held nutrunners of the DS series for a manual assembly with straight or with angled output. Available in the execution MDW, the torque measurement is made directly at the output by a transducer, or in the execution SA, the torque measurement is made indirect by the motor.

The tightening tools consist out of a robust mechanic with servo drive technology, gearbox unit with precision gearwheel bearing, ergonomic handle and wear-free operating elements.



- Torque control, angle of rotation control and signal control are integrated
- Integrated digital parameter memory module enables error-free setup
- Monitoring with envelope technology and windowing (tightening control system)
- Thanks to the torque transducer with consistent accuracy, only one measuring range is necessary
- Powerful, maintenance-free EC motor with infinitely variable speed control; CW / CCW
- Status indication (RUN, OK, NOK) directly at the nutrunner
- Start-button with programmable functions-switch, can be configured for the switchover of programs (different operations)

DSH 26 series	MDW SA	Straight nutrunners Angle nutrunners			
Models, max. torque		0,5 Nm	1 Nm	2 Nm	4 Nm
max. speed (execution MDW)		1450 rpm	1450 rpm	1020 rpm	400 rpm
max. speed (execution SA)		1700 rpm	1700 rpm	820 rpm	400 rpm
Type of output		straight angled	straight angled	straight angled	straight angled

DS 34-P series	MDW SA	Pistol grip nutrunners			
Models, max. torque		2,5 Nm	5 Nm	10 Nm	15 Nm
max. speed		880 rpm	880 rpm	1540 rpm	1540 rpm
Type of output		straight	straight	straight	straight

DSH 34 series	MDW SA	Straight nutrunners Angle nutrunners		
Models, max. torque		5 Nm	10 Nm	20 Nm
max. speed (straight nutrunner)		1540 rpm	1540 rpm	---
max. speed (angle nutrunner)		1070 rpm	1070 rpm	1070 rpm
Type of output		straight angled	straight angled	angled

DS 44-P series	MDW SA	Pistol grip nutrunners				
Models, max. torque		2,5 Nm	5 Nm	10 Nm	20 Nm	35 Nm
max. speed		1300 rpm	1300 rpm	900 rpm	530 rpm	480 rpm
Type of output		straight	straight	straight	straight	straight

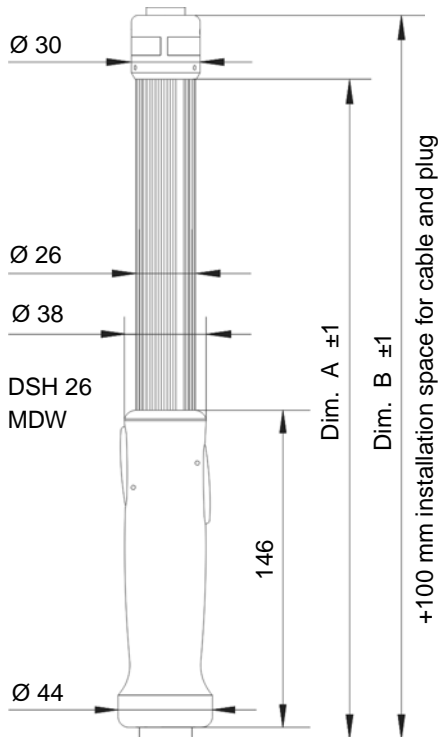
DSH 44 series	MDW SA	Straight nutrunners Angle nutrunners			
Models, max. torque		20 Nm	30 Nm	40 Nm	60 Nm
max. speed		680 rpm	680 rpm	490 rpm	350 rpm
Type of output		straight	straight	angled	angled

Accessories

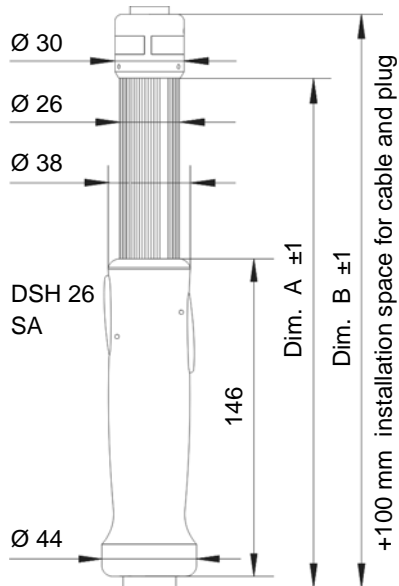
- Diverse motor and output variants, crow foos as well as individual technical solutions
- Suspension elements, balancer
- Socket boxes, handling equipment

Technical drawings DSH 26 series

DSH 26 MDW

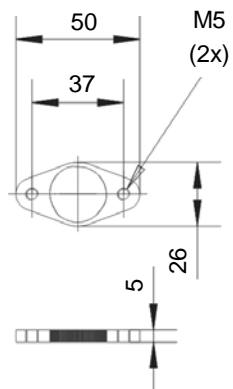


DSH 26 SA

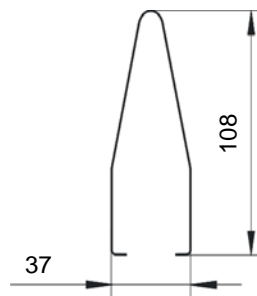


Type MDW	Dimension A mm	Dimension B mm	Type SA	Dimension A mm	Dimension B mm
DSH 26 / 02 MDW	235	263	DSH 26 / 02 SA	197	225
DSH 26 / 04 MDW	242	270	DSH 26 / 04 SA	200	228

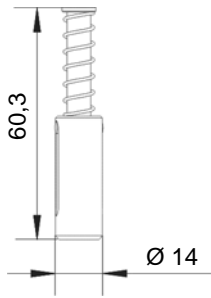
Mounting flange



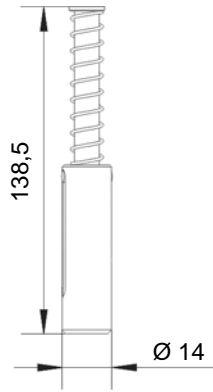
Suspension clip



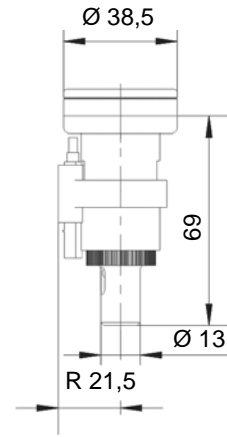
Spring output 20 mm



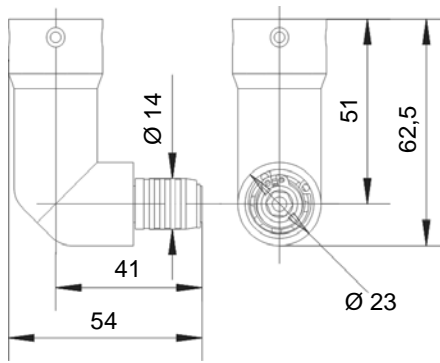
Spring output 50 mm



Self start

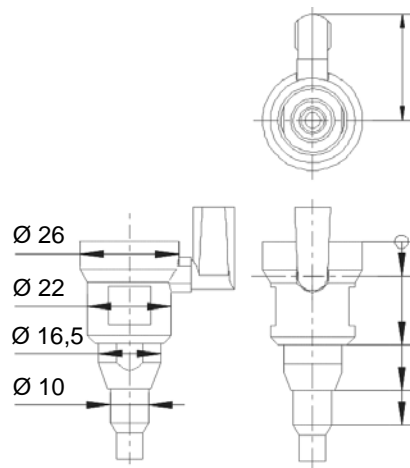


Angle output



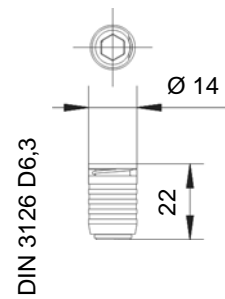
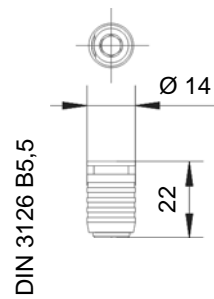
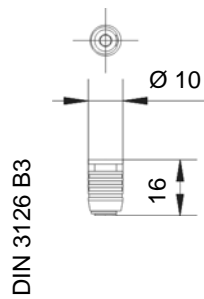
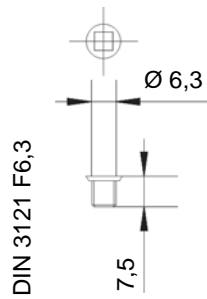
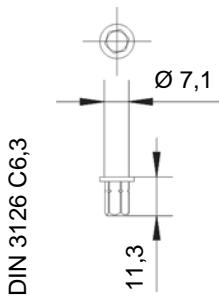
WA with quick change chuck
DIN 3126 D6,3

Vacuum screw-retainer



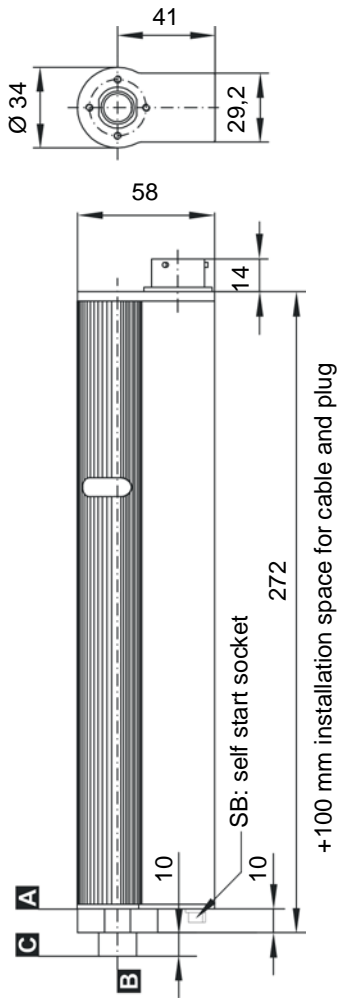
Nozzle to customer requirements

Output features

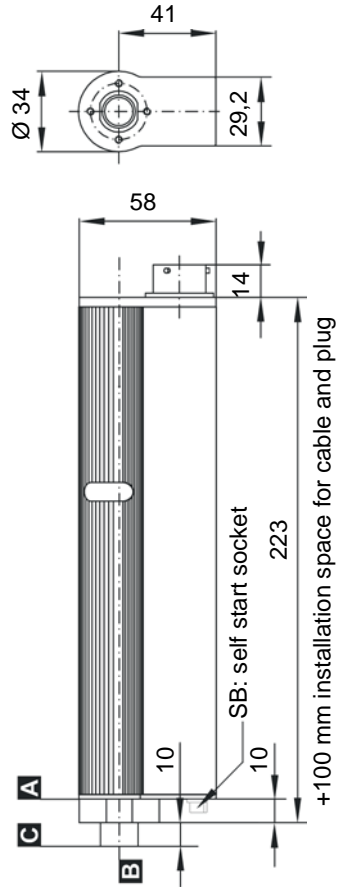


Technical drawings DS 34-P series

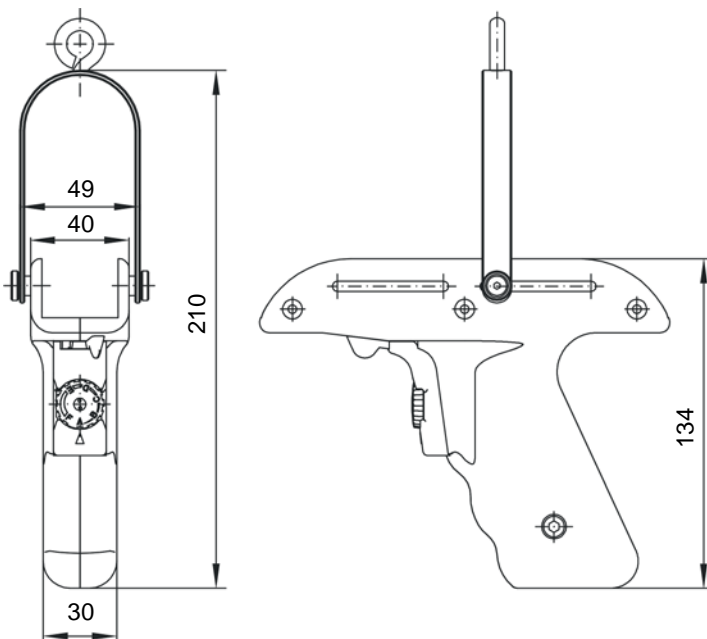
DS 34 MDW



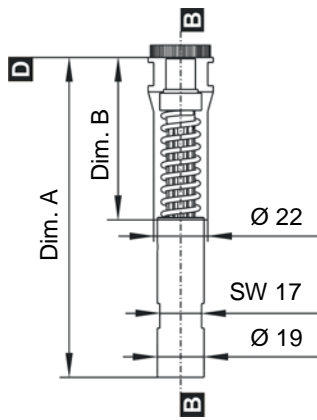
DS 34 SA



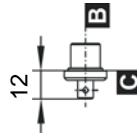
Pistol grip



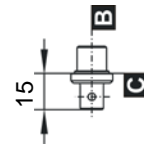
Spring output



Square drive DIN 3121 F6,3



Square drive DIN 3121 F10

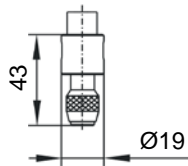
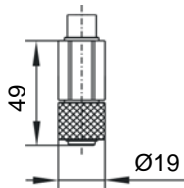


Spring deflexion	Dimension A mm	Dimension B mm
30 mm	130	66
50 mm	150	86

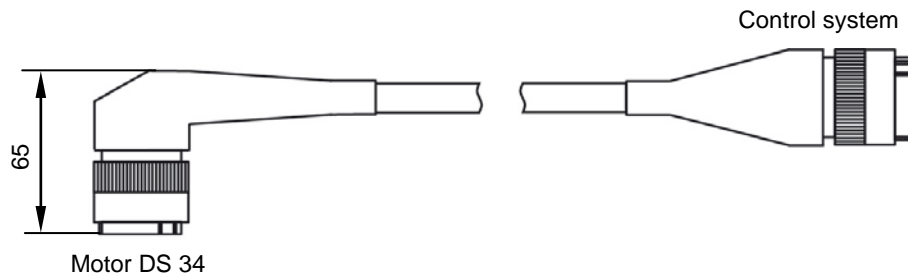
Hexagonal quick change chuck DIN 3126 D6,3

Bit shaft precision-guide 24 mm

Bit shaft precision-guide 13 mm

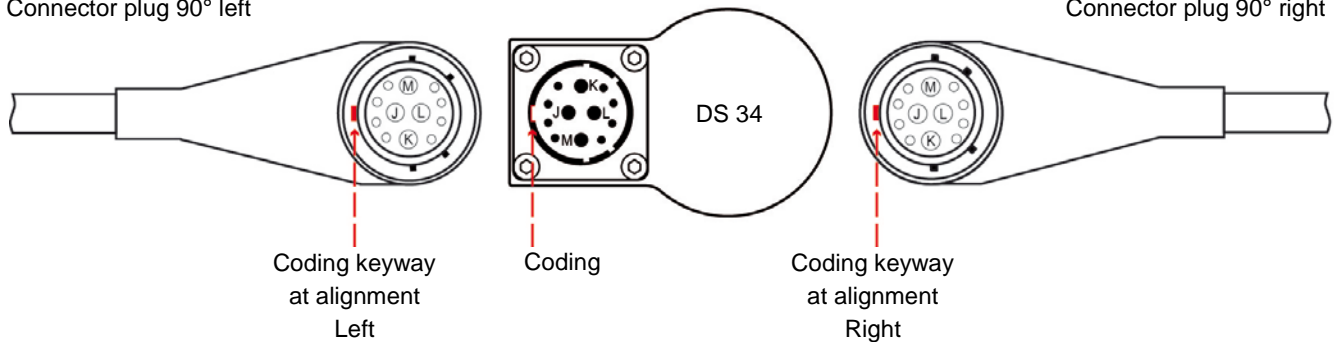


Interconnecting cable 90° angled



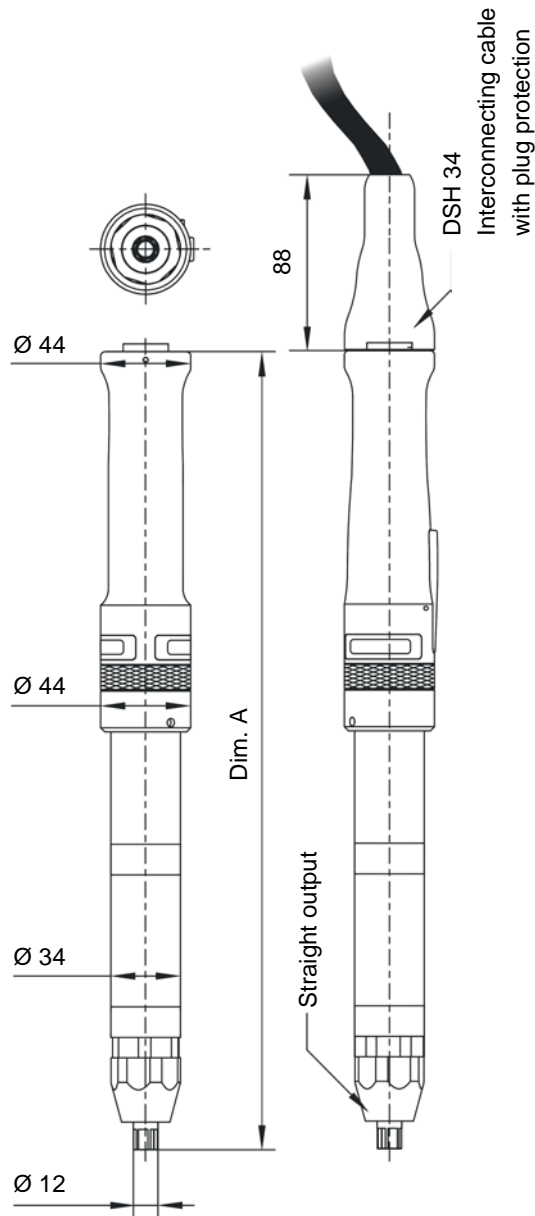
Connector plug 90° left

Connector plug 90° right

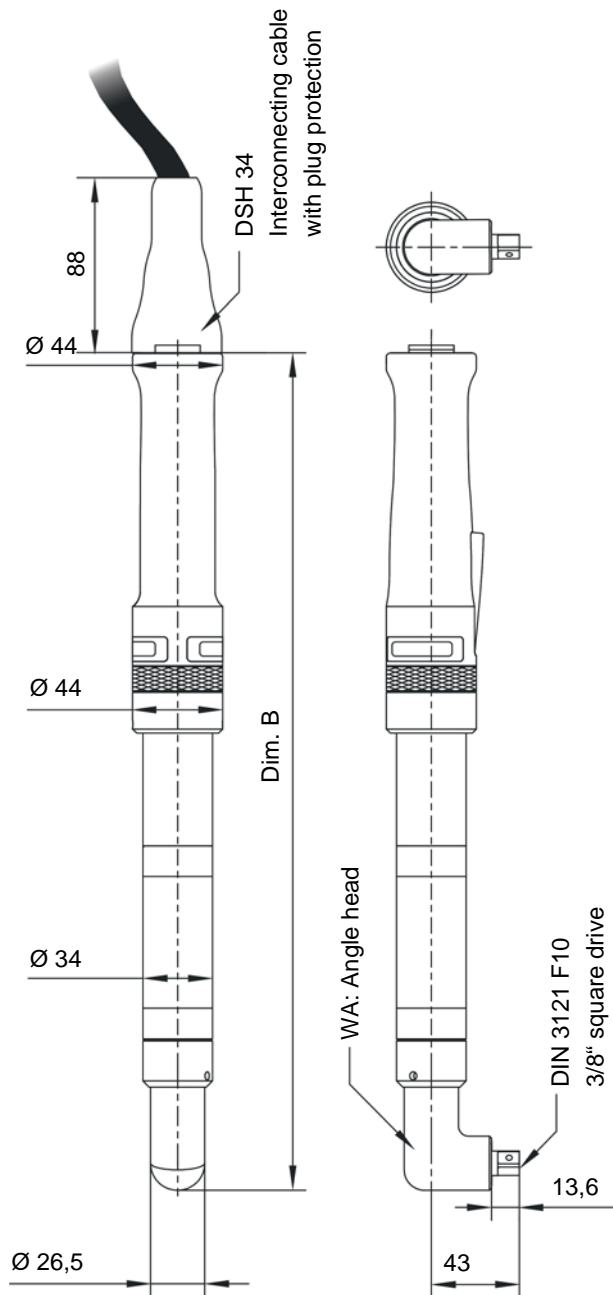


Technical drawings DSH 34 series

DSH 34 MDW/SA

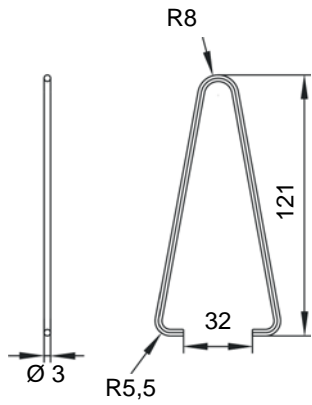


DSH 34 MDW-WA/SA-WA

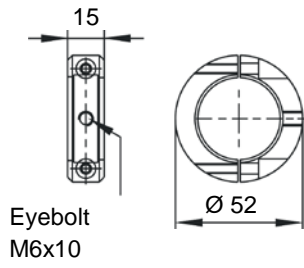


Type	Dimension A mm	Type	Dimension B mm
DSH 34 / 05 / 10 MDW	448 ±2	DSH 34 / 05 / 10 / 20 MDW-WA	459 ±2
DSH 34 / 05 / 10 SA	398 ±2	DSH 34 / 05 / 10 / 20 SA-WA	409 ±2

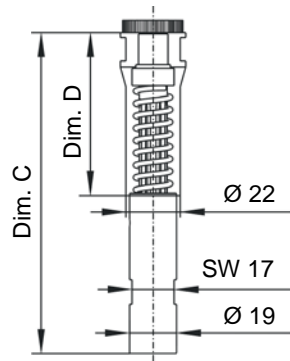
Suspension clip



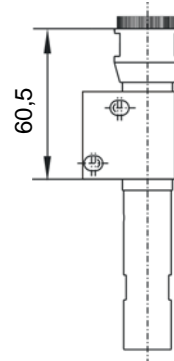
Suspension eye



Spring output



Self start

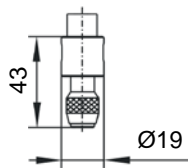
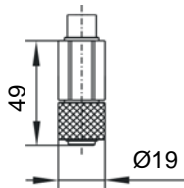


Spring deflexion	Dimension C mm	Dimension D mm
30 mm	130	66
50 mm	150	86

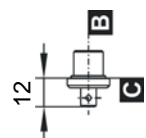
Hexagonal quick change chuck DIN 3126 D6,3

Bit shaft precision-guide 24 mm

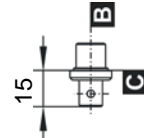
Bit shaft precision-guide 13 mm



Square drive DIN 3121 F6,3

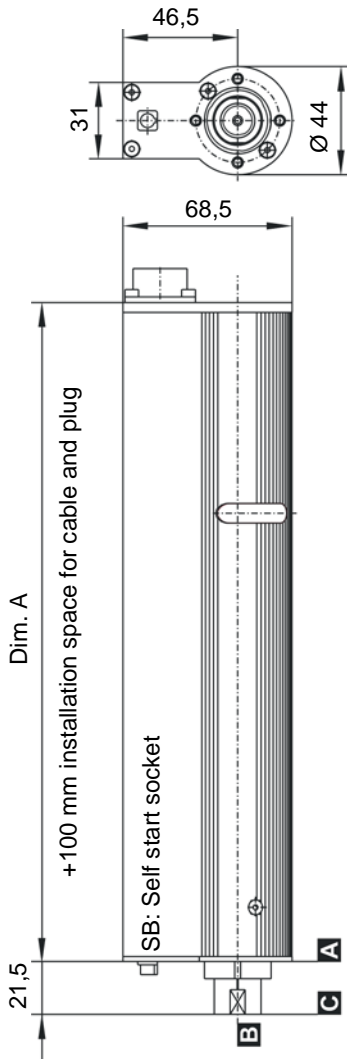


Square drive DIN 3121 F10

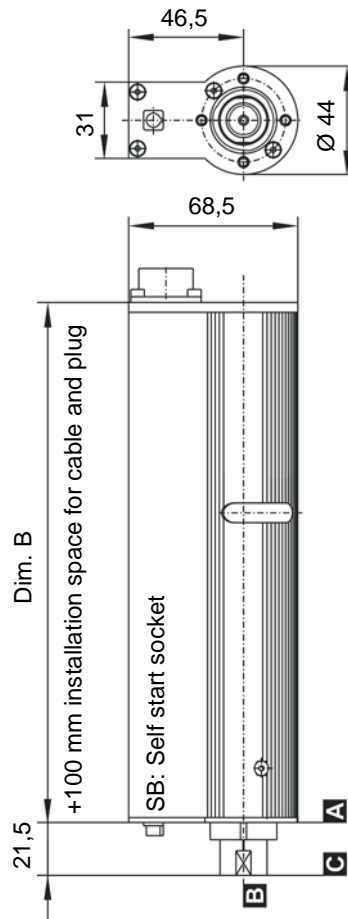


Technical drawings DS 44-P series

DS 44 MDW

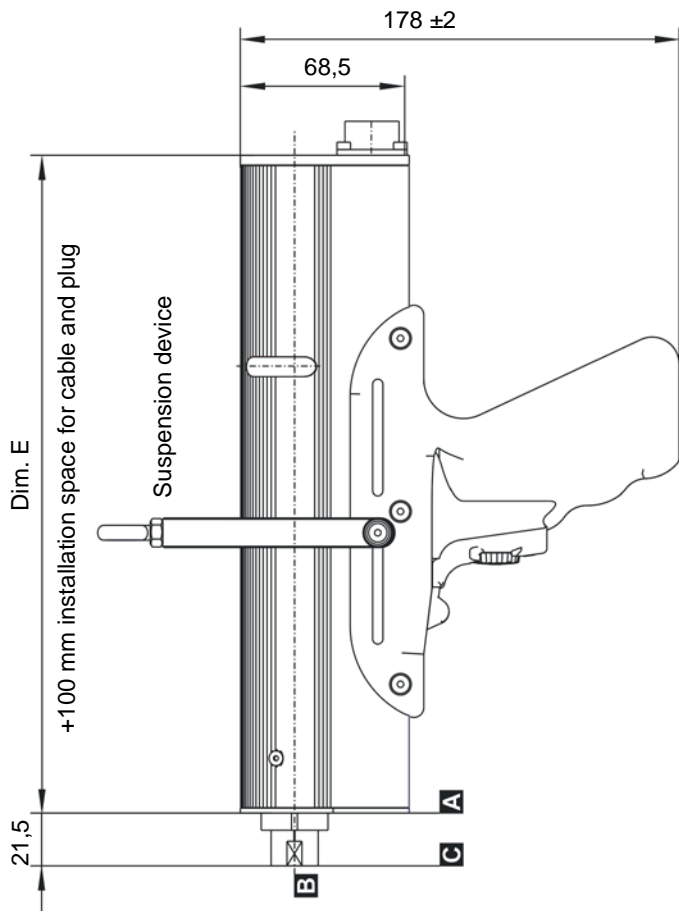
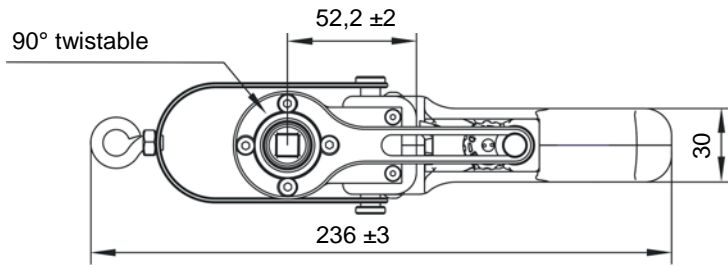


DS 44 SA



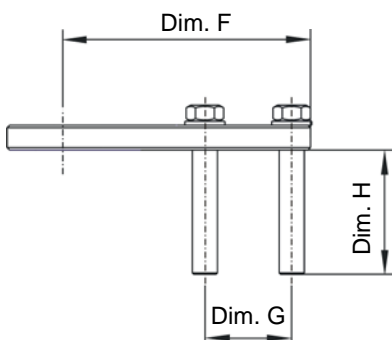
Type	Dimension A mm	Dimension B mm
DS 44 / 05 / 10 / 20	267,5	211,5
DS 44 / 35	348,5	292,5

Pistol grip

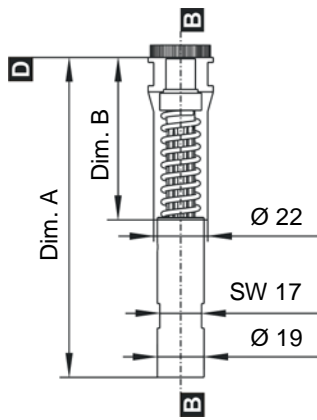


Counter bracket for pistol grip nutrunner

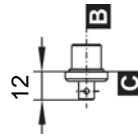
Dimensions according to customer requirement



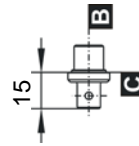
Spring output



Square drive DIN 3121 F6,3



Square drive DIN 3121 F10

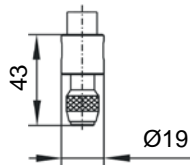
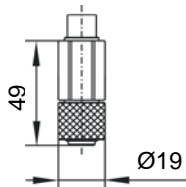


Spring deflexion	Dimension A mm	Dimension B mm
30 mm	130	66
50 mm	150	86

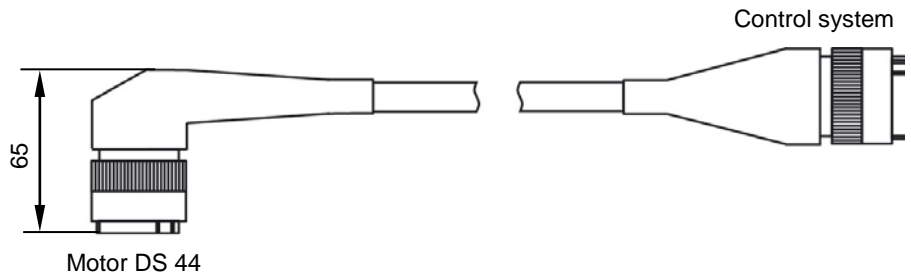
Hexagonal quick change chuck DIN 3126 D6,3

Bit shaft precision-guide 24 mm

Bit shaft precision-guide 13 mm

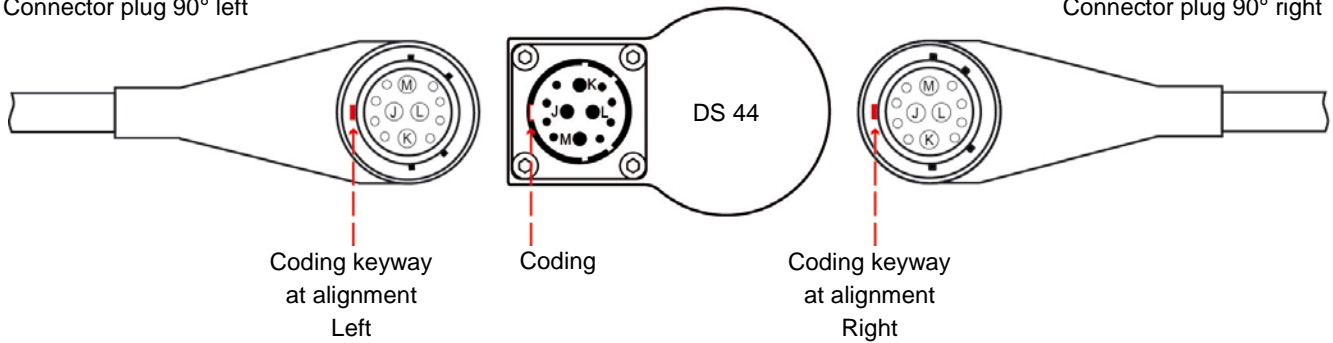


Interconnecting cable 90° angled



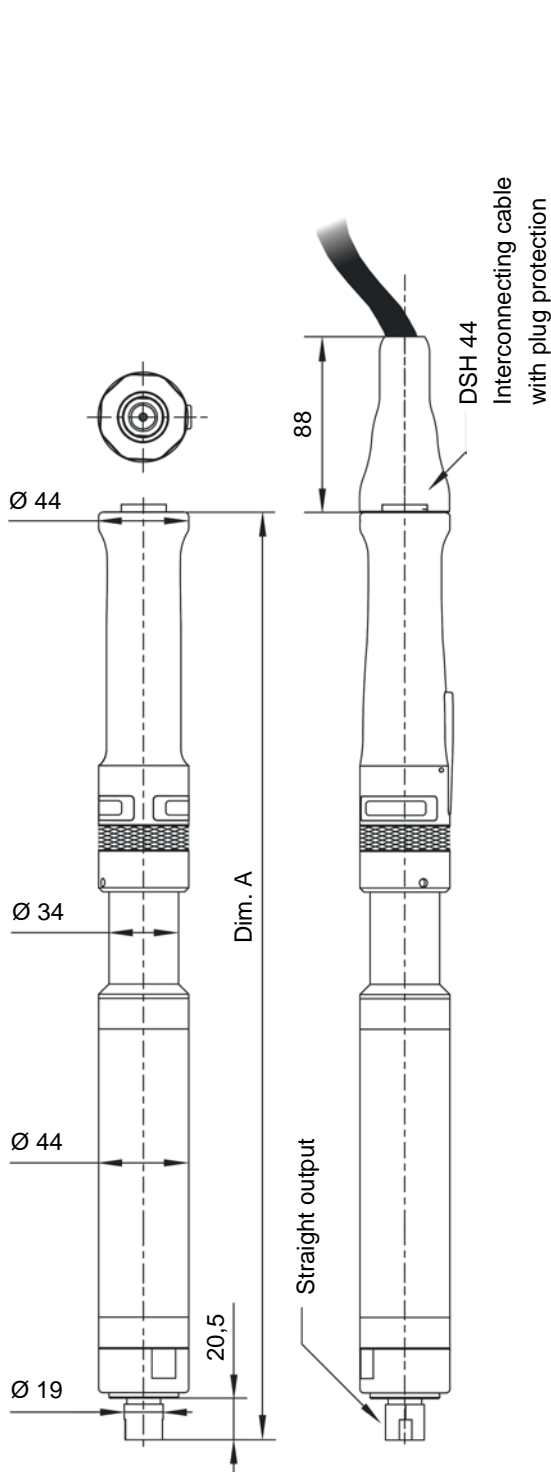
Connector plug 90° left

Connector plug 90° right

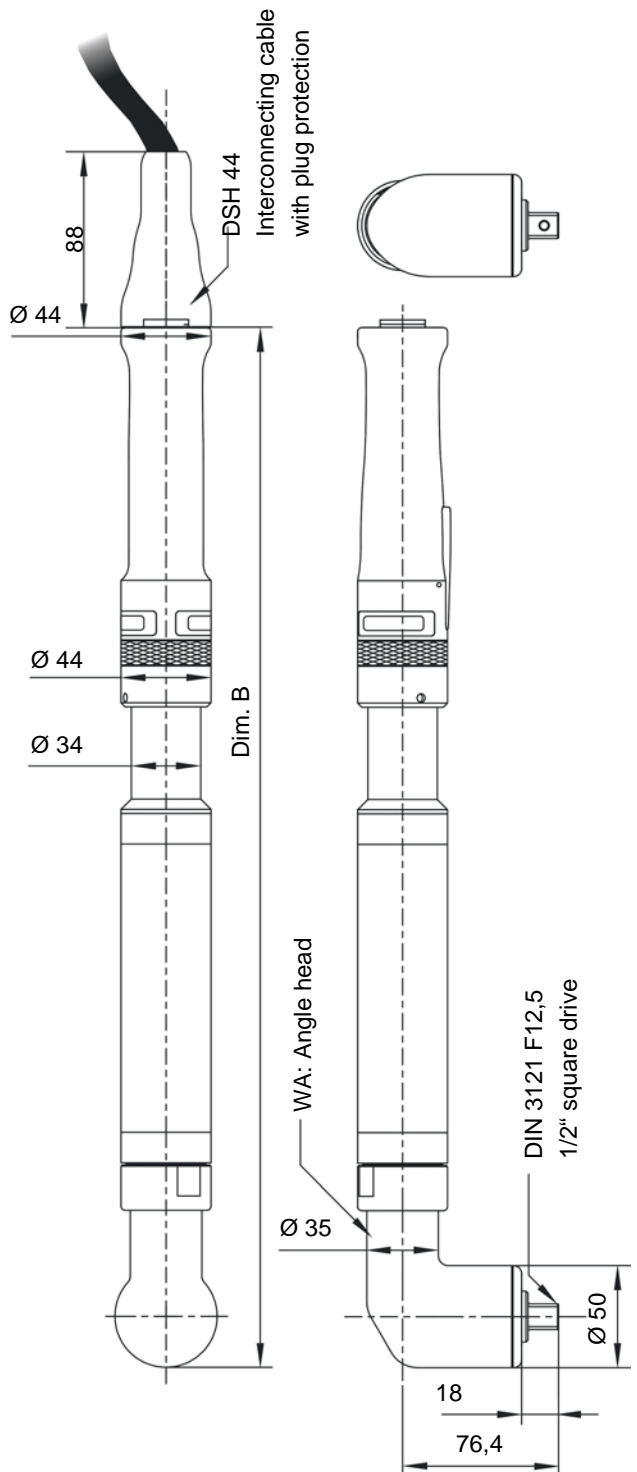


Technical drawings DSH 44 series

DSH 44 MDW/SA

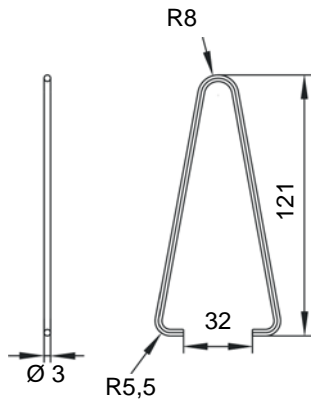


DSH 44 MDW-WA/SA-WA

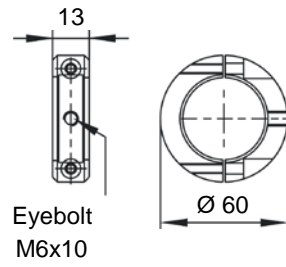


Type	Dimension A mm	Type	Dimension B mm
DSH 44 / 20 / 40 MDW	454 ±2	DSH 44 / 40 / 60 MDW-WA	509 ±2
DSH 44 / 20 / 40 SA	398 ±2	DSH 44 / 40 / 60 SA-WA	428 ±2

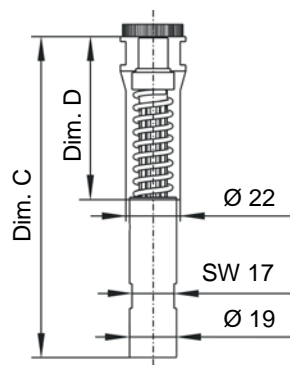
Suspension clip



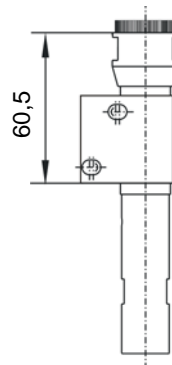
Suspension eye



Spring output



Self start

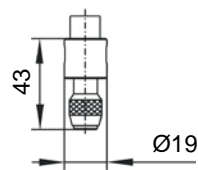
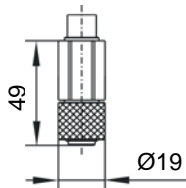


Spring deflexion	Dimension C mm	Dimension D mm
30 mm	130	66
50 mm	150	86

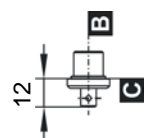
Hexagonal quick change chuck DIN 3126 D6,3

Bit shaft precision-guide 24 mm

Bit shaft precision-guide 13 mm



Square drive DIN 3121 F6,3



Square drive DIN 3121 F10

