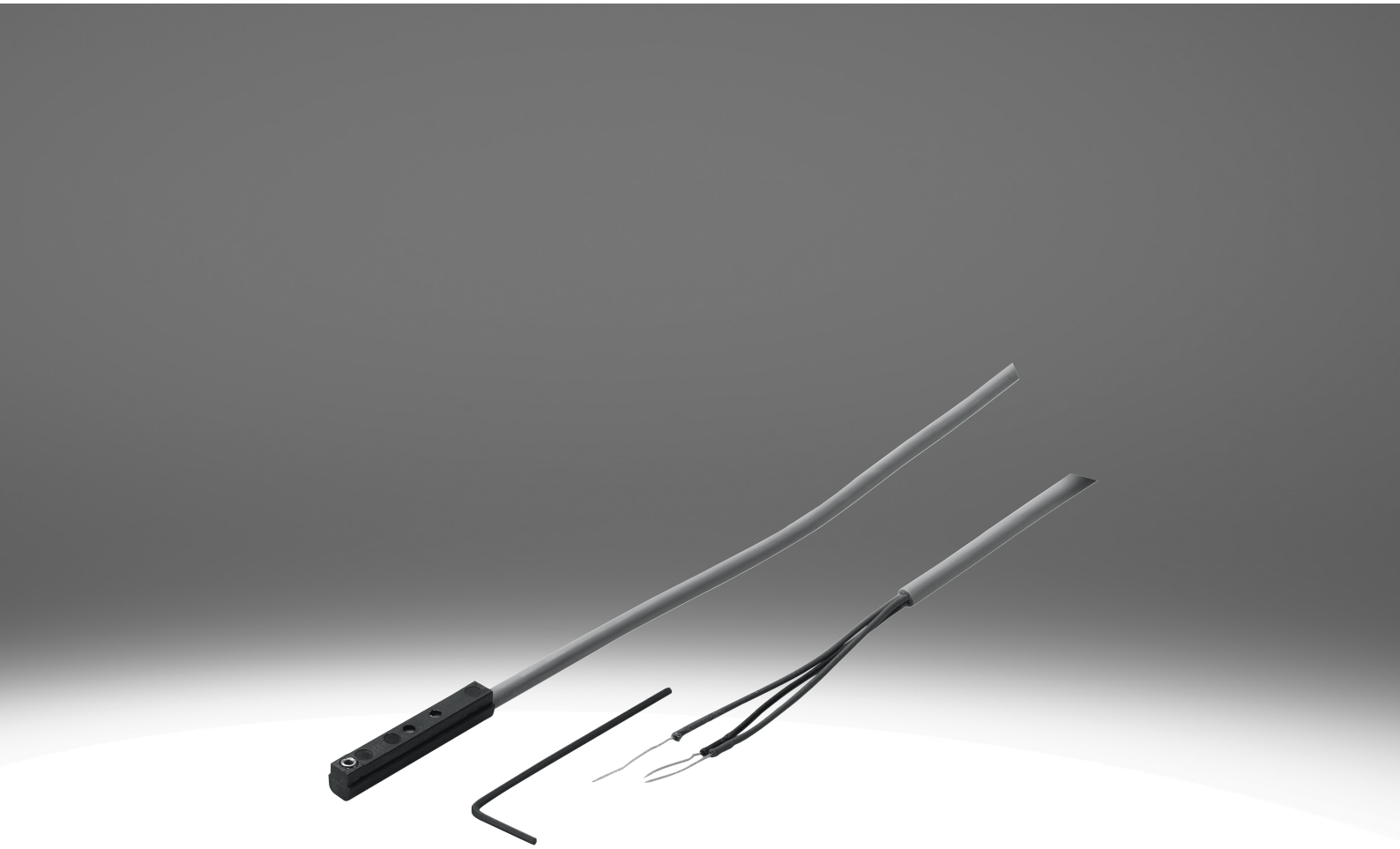
Proximity switch SME-10



Type code

001	Series	
SME	Proximity sensor	

002	Design type	
10	For round slot, insertable in the slot lengthwise	

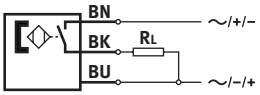
003	Electrical connection, cable length, outlet orientation of connection	
SL	Plug M8x1 with cable, 0.3 m, in-line	
KQ	Cable, 2.5 m, lateral	
SQ	Plug M8x1 with cable, 0.3 m, lateral	
KL	Cable, 2.5 m, in-line	

004	Switching status indication	
LED	Yellow LED	

005	Rated operating voltage	
24	24 V DC	

Datasheet

General technical data



Design	For C-slot
Mounting position	optional
Conforms to standard	EN 60947-5-2
Approval	RCM trademark
Instructions on use	Support / actuator-sensor overview“The right sensor for the actuator“
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC, To UK RoHS instructions
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B2-L

Input signal/measuring element

Measured variable	Position
Measuring principle	Magnetic reed
Ambient temperature	-20 ... 70°C

Switching output

Switching output	Contacting, bipolar
Switching element function	N/O contact
Repetition accuracy	0.2 mm
Switch-on time	≤0.6 ms
Switch-off time	≤0.05 ms
Max. output current	100 mA
Max. switching frequency	500 Hz
Max. switching capacity DC	1 W
Voltage drop	0 V

Output, further data

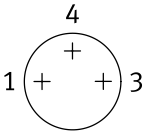
Short circuit current rating	no
Overload protection	Not available

Electronics

Operational voltage range DC	12 ... 27 V
Operational voltage range AC	12 ... 27 V
Reverse polarity protection	no
Short circuit current rating	no
Overload protection	Not available
Switching status indication	Yellow LED

Datasheet

Electromechanics



Electrical connection 1, connection type	Cable	Cable with plug
Electrical connection 1, function	Switching output, Power supply	
Electrical connection 1, connector system	Open end	M8x1, A-coded, to EN 61076-2-104
Electrical connection 1, number of connections/cores	3	
Electrical connection 1, used connections/cores	3	
Connection outlet orientation	In-line, Lateral	
Cable length	2.5 m	0.3 m
Material cable sheath	TPE-U(PUR)	
Cable sheath colour	Grey	

Mechanics

Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104	Open end
Type of mounting	Clamped in C-slot, Insertable in the slot lengthwise	
Tightening torque	0.1 Nm	
Material housing	Brass, nickel-plated PPS TPE-U(PU) High-alloy stainless steel	PPS High-alloy stainless steel
Housing colour	Black	
Corrosion resistance class CRC	2 - Moderate corrosion stress	4 - Very high corrosion stress
Pollution degree	3	

Display/operation

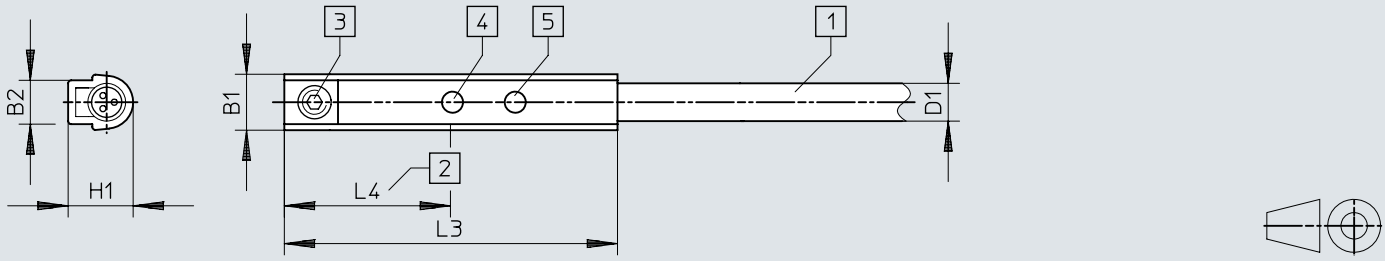
Switching status indication	Yellow LED
Function reserve indication	–

Immission/emission

Ambient temperature with moving cable	-5 ... 70°C
Degree of protection	IP65, IP67
Insulation voltage	50 V
Immunity to surge	0.8 kV

Dimensions

Dimensions – SME-10M-...-L, outlet direction of connection lengthways Download CAD data www.festo.com



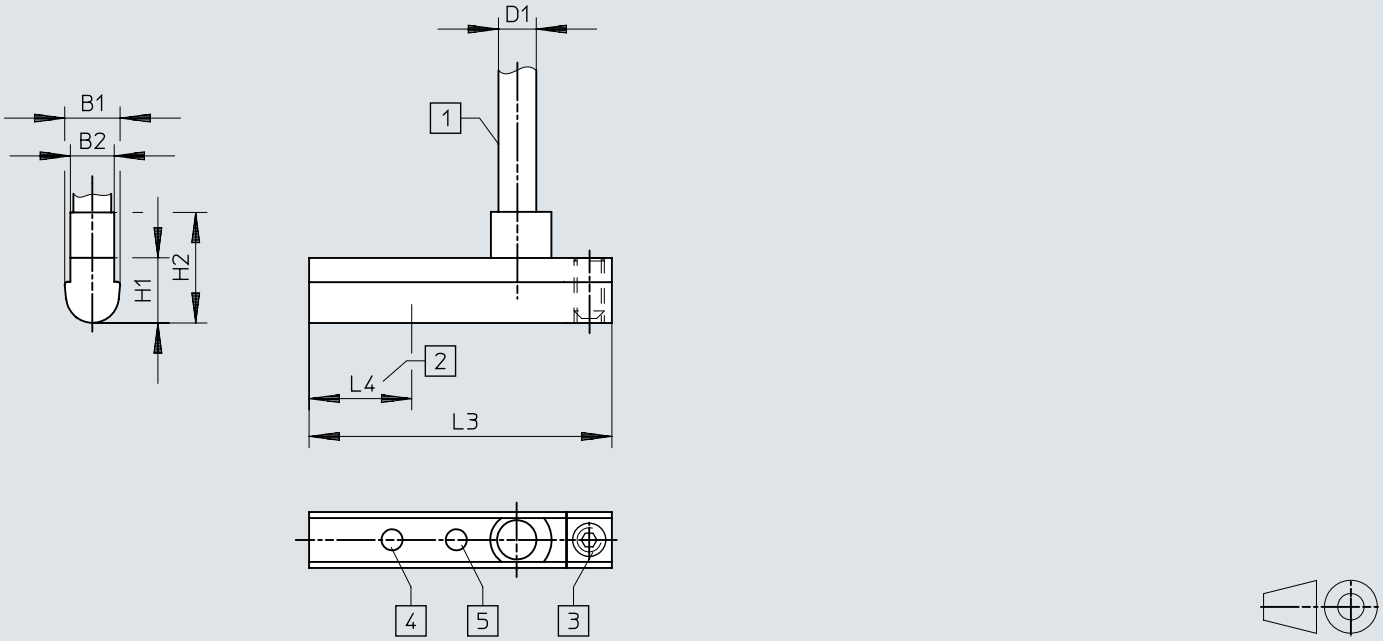
[1] Connecting cable
[2] Theoretical switching point
[3] Threaded pin M2x4
[4] Yellow LED (positive-switching)
[5] Yellow LED (negative-switching)

	B1	B2	D1 ⌀	H1	L3 + 0,4	L4
SME-10-KL-LED-24	3,7	2,9	2,4	4,3	22	11

Dimensions

Dimensions – SME-10M-...-Q, outlet direction of connection lateral

Download CAD data www.festo.com



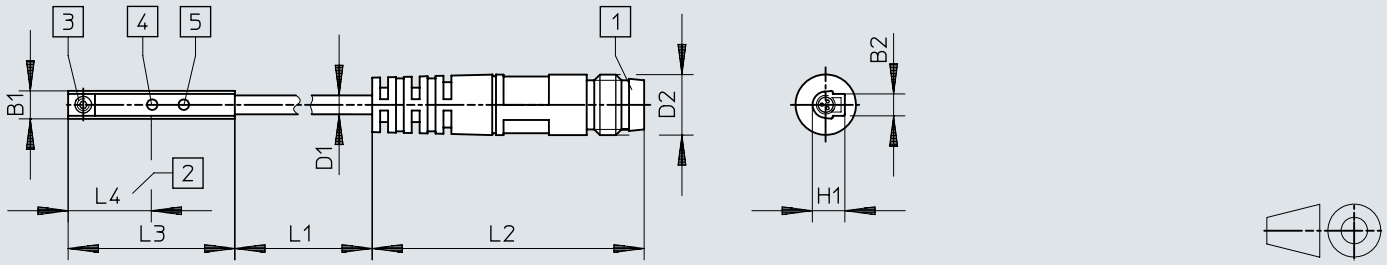
[1] Connecting cable
[2] Theoretical switching point
[3] Threaded pin M2x4
[4] Yellow LED (positive-switching)
[5] Yellow LED (negative-switching)

	B1	B2	D1 ø	H1	H2	L3 + 0,4	L4
SME-10-KQ-LED-24	3,7	2,9	2,4	4,3	7,3	20	6,8

Dimensions

Dimensions – SME-10 plug, connection outlet direction lengthways

Download CAD data www.festo.com



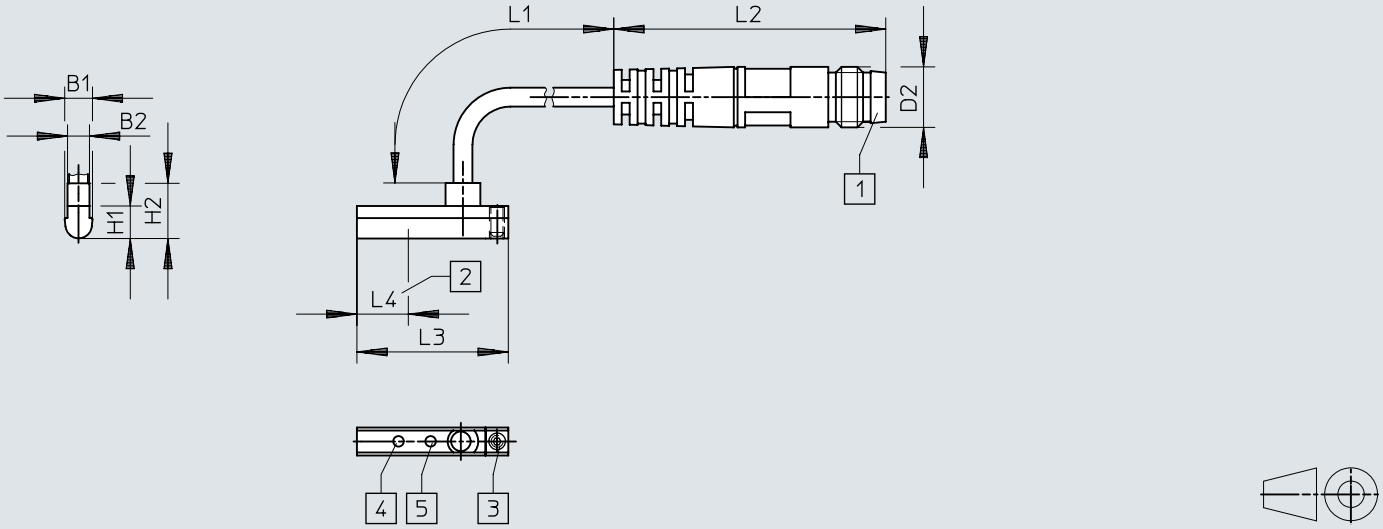
[1] Plug to fit connecting cable NEBU-M8
[2] Theoretical switching point
[3] Threaded pin M2x4
[4] Yellow LED (positive-switching)
[5] Yellow LED (negative-switching)

	B1	B2	D1 ø	D2	H1	L1	L2 ± 1	L3 + 0,4	L4
SME-10-SL-LED-24	3,7	2,9	2,4	M8	4,3	310	34	22	11

Dimensions

Dimensions – SME-10 plug, transverse outlet direction connection

Download CAD data www.festo.com

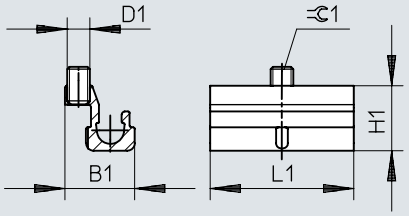


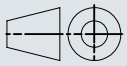
[1] Plug to fit connecting cable NEBU-M8
[2] Theoretical switching point
[3] Threaded pin M2x4
[4] Yellow LED (positive-switching)
[5] Yellow LED (negative-switching)

	B1	B2	D2	H1	H2	L1 –10 ... 30	L2 ± 1	L3 + 0,4	L4
SME-10-SQ-LED-24	3,7	2,9	M8	4,3	7,3	310	34	20	6,8

Dimensions

Dimensions – Mounting SMBN-10 Download CAD data www.festo.com



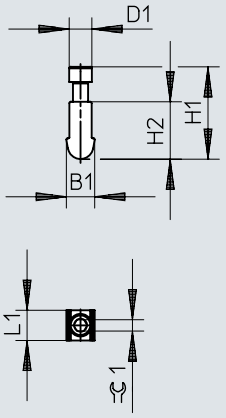


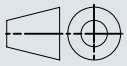
	D1	B1	H1	L1	⌀1
SMBN-10	M3	9,3	8,6	19	1,5

Dimensions

Dimensions – Positioning element SMM

Download CAD data www.festo.com





	B1	D1	H1	H2	L1	⌀1
SMM-10	3,75	3,0	12,23	7,6	4,0	1,5

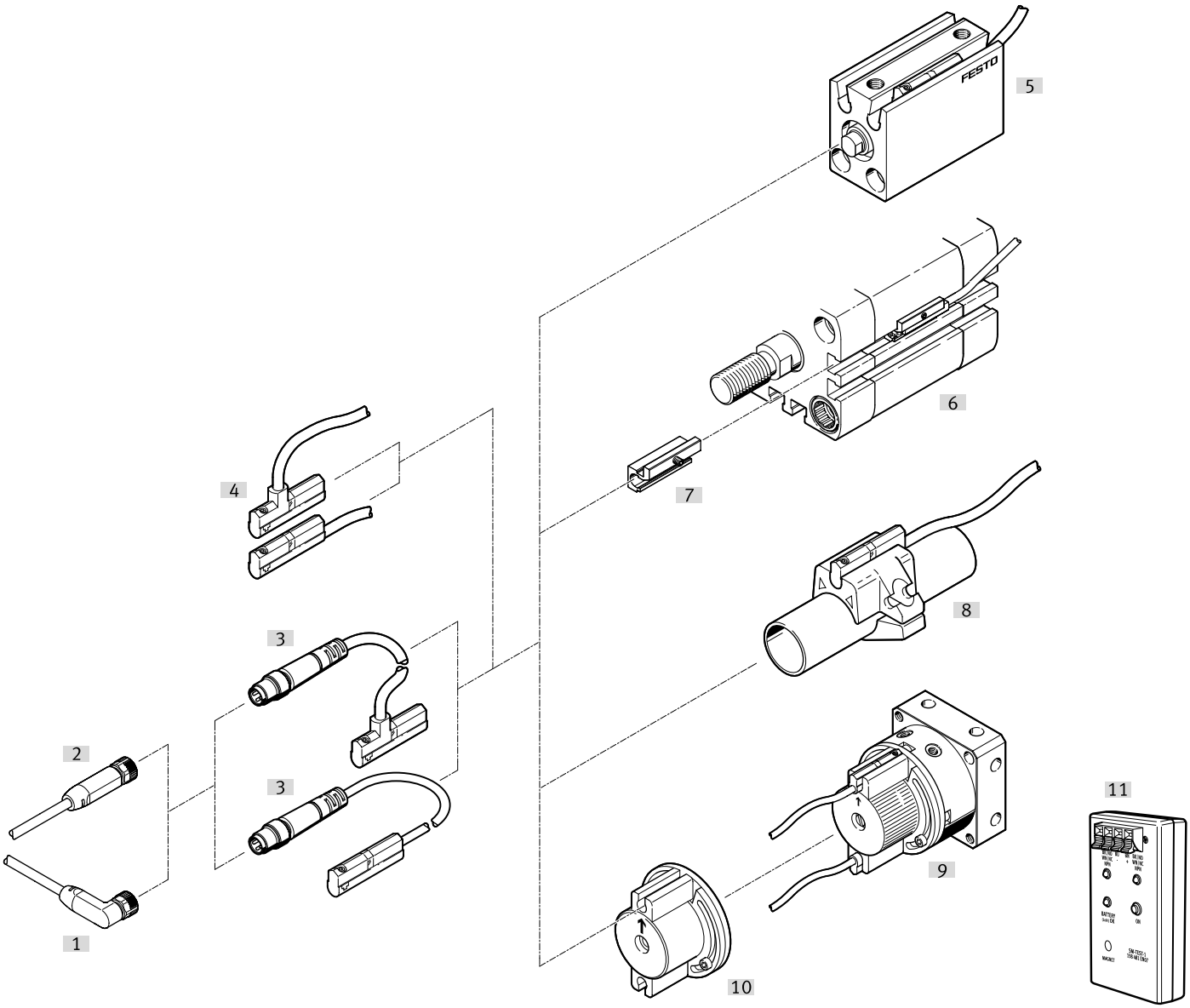
Ordering data

Ordering data connection lengthwise				
	Connection outlet orientation	Product weight	Part no.	Type
	In-line	5 g	**173212**	**SME-10-SL-LED-24**
		20 g	**173210**	**SME-10-KL-LED-24**

Ordering information, transverse connection				
	Connection outlet orientation	Product weight	Part no.	Type
	Lateral	5 g	**173213**	**SME-10-SQ-LED-24**
		20 g	**173211**	**SME-10-KQ-LED-24**

Peripherals

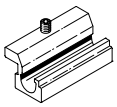
Peripherals overview



Accessories			→ Link
	Type/order code	Description	
[1]	Connecting cable NEBA-M8	Angled socket	13
[2]	Connecting cable NEBA-M8	Straight socket	13
[3]	Proximity switch SMT-10G-...-M...	Can be inserted into the slot from above, flush with the cylinder profile, with cable and plug	sme-10
[4]	Proximity switch SMT-10G-...-OE	Can be inserted into the slot from above, flush with the cylinder profile, with cable	sme-10
[5]	Drives with round slot	–	–
[6]	Drives with T-slot	–	–
[7]	Mounting kit SMBN-10	For mounting proximity switches on drives with T-slot	13
[8]	Round cylinder	–	–
[9]	Semi-rotary drive DSM	–	dsm
[10]	Mounting kit WSM-...-SME-10	Mounting kit for mounting proximity switches on semi-rotary drive DSM	13
[11]	Sensor tester SM-TEST-1	Testing the function of proximity switches using the built-in voltage source.Adjusting proximity switches on the cylinder.	sm-test-1

Accessories

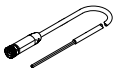
Mounting SMBN-10

	Size	Design	Material housing	Part no.	Type
	10	For T-slot	Wrought aluminium alloy, Anodised	**537809**	**SMBN-10**

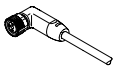
Positioning element SMM

	Size	Design	Material housing	Part no.	Type
	10	For C-slot	Wrought aluminium alloy, Anodised	**547942**	**SMM-10**

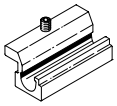
Connecting cable M8x1 socket straight

	Cable structure	Cable length	Product weight	Part no.	Type
	3 x 0.25 mm²	2.5 m	50 g	★ **8078223**	**NEBA-M8G3-U-2.5-N-LE3**
		5 m	96 g	★ **8078224**	**NEBA-M8G3-U-5-N-LE3**

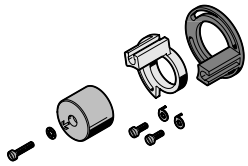
Connecting cable M8x1 socket angled

	Cable structure	Cable length	Product weight	Part no.	Type
	3 x 0.25 mm²	2.5 m	50 g	★ **8078230**	**NEBA-M8W3-U-2.5-N-LE3**
		5 m	96 g	★ **8078231**	**NEBA-M8W3-U-5-N-LE3**

Mounting kit SMBN-10

	Size	Part no.	Type
	10	**537809**	**SMBN-10**

Mounting kit for semi-rotary drive DSM

	Size	Part no.	Type
	6	**173205**	**WSM-6-SME-10**
	8	**173206**	**WSM-8-SME-10**
	10	**173207**	**WSM-10-SME-10**