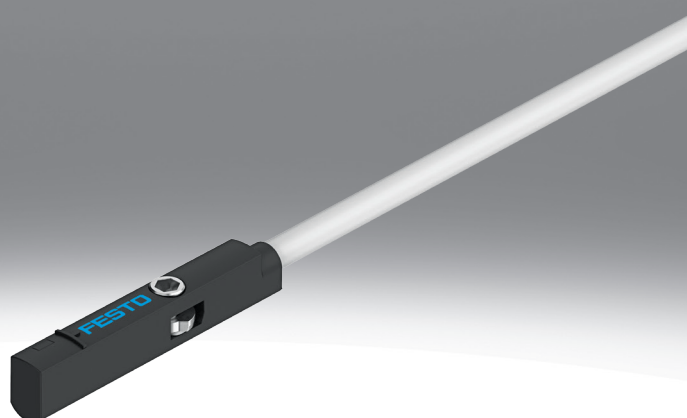


Proximity switch SMT-10M

FESTO



Characteristics

Product segmentation



Festo Core Range

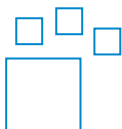
Solves the majority of your automation tasks

With the Festo Core Range, we have selected the most important products and functions from our broad product catalogue, and added the quickest delivery. the Core Range offers you the best value with the expected high Festo quality.

Quickest delivery, worldwide – wherever, whenever

- Expected high Festo quality
- Easy and fast to select

Ordering data - modular system



Configurable product

This product and all its product options can be ordered online via the configurator.

Type code

001	Series	
SMT	Proximity sensor	

002	Design type	
10M	For C-slot, inserted in slot from above	

003	Switching output	
NS	3-wire NPN N/O contact	
PS	3-wire PNP N/O contact	
ZS	2-wire PNP N/O contact	

004	Rated operating voltage	
24V	24 V	

005	Cable characteristic	
E	Suitable for energy chains/robots	

006	Cable length [m]	
	0.2 ... 30 m	
0,3	0.3 m	
2,5	2.5 m	

007	Display	
L	LED	

008	Cable outlet	
Q	Transverse	
L	Longitudinal	

009	Cable identification	
	With label holder	
N	Without label holder	

010	Connection technology	
OE	Open end	
M8	M8, snap-on flange	
M8D	M8, rotatable thread	
M12	M12, rotatable thread	

Datasheet

General technical data

Electrical connection 1, connector system	M12x1, A-coded to EN 61076-2-101	M8x1, A-coded, to EN 61076-2-104	Open end
Design	For C-slot		
Conforms to standard	EN 60947-5-2		
Approval	RCM trademark		
CE mark (see declaration of conformity) ¹⁾	To EU EMC Directive, In accordance with EU RoHS Directive		
UKCA marking (see declaration of conformity) ²⁾	To UK instructions for EMC, To UK RoHS instructions		
Special characteristics	Oil resistant		
Note on materials	RoHS-compliant, Free of halogen		
Instructions on use	https://www.festo.com/Drive-Sensor-Overview		
LABS (PWS) conformity	VDMA24364-B2-L		
Suitability for the production of Li-ion batteries	Product corresponds to the internal product definition from Festo for use in battery production: Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils		
Cleanroom class	Element installed statically, no meaningful evaluation possible according to ISO 14644-1		
Corrosion resistance class CRC	2 - Moderate corrosion stress		3 - high corrosion stress

1) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/smt → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/smt → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Input signal/measuring element

Measured variable	Position
Measuring principle	Magneto-resistive
Ambient temperature	-40 ... 70°C
Ambient temperature with moving cable	-20 ... 70°C

Switching output

Switching output	NPN	PNP	Non-contacting, 2-wire
Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104, Open end	M12x1, A-coded to EN 61076-2-101, M8x1, A-coded, to EN 61076-2-104, Open end	Open end
Switching element function	N/O contact		
Repetition accuracy	0.2 mm		
Switch-on time	≤1.3 ms		≤1 ms
Switch-off time	4.2 ... 7.3 ms		≤1 ms
Max. switching frequency	130 Hz		150 Hz
Max. output current	100 mA		
Max. output current using mounting kits	50 mA		
Max. switching capacity DC	2.8 W		2.4 W
Max. switching capacity DC using mounting kits	1.5 W		1.2 W
Voltage drop	≤1.5 V	≤1.7 V	≤6 V

Output, additional data

Short circuit current rating	yes
Overload protection	Available

Electronics

Switching output	NPN	PNP	NPN, PNP, Non-contacting, 2-wire	Non-contacting, 2-wire
Rated operational voltage DC	24 V			
Operational voltage range DC	5 ... 30 V			7 ... 30 V
Reverse polarity protection	For all electrical connections			

Datasheet

Electromechanics

Electrical connection 1, connection type	Cable	Cable with plug
Electrical connection 1, connector system	Open end	M12x1, A-coded to EN 61076-2-101, M8x1, A-coded, to EN 61076-2-104
Electrical connection 1, number of connections/cores	2, 3	3
Electrical connection 1, type of mounting	–	Screw-type lock, Rotatable
Connection outlet orientation	In-line, Lateral	
Test conditions cable	Bending strength: to Festo standard, Test conditions on request, Torsional strength: > 300,000 cycles, $\pm 270^\circ/0.1$ m, Energy chain: > 5 million cycles, bending radius 28 mm	
Cable length	2.5 m	0.3 m
Cable characteristic	Suitable for energy chains/robot applications	

Mechanics

Type of mounting	Screw-clamped, Insertable in the slot from above	
Max. tightening torque	0.4 Nm	
Mounting position	optional	
Material housing	PA-reinforced, High-alloy stainless steel	
Material cable sheath	TPE-U(PUR)	

Display/operation

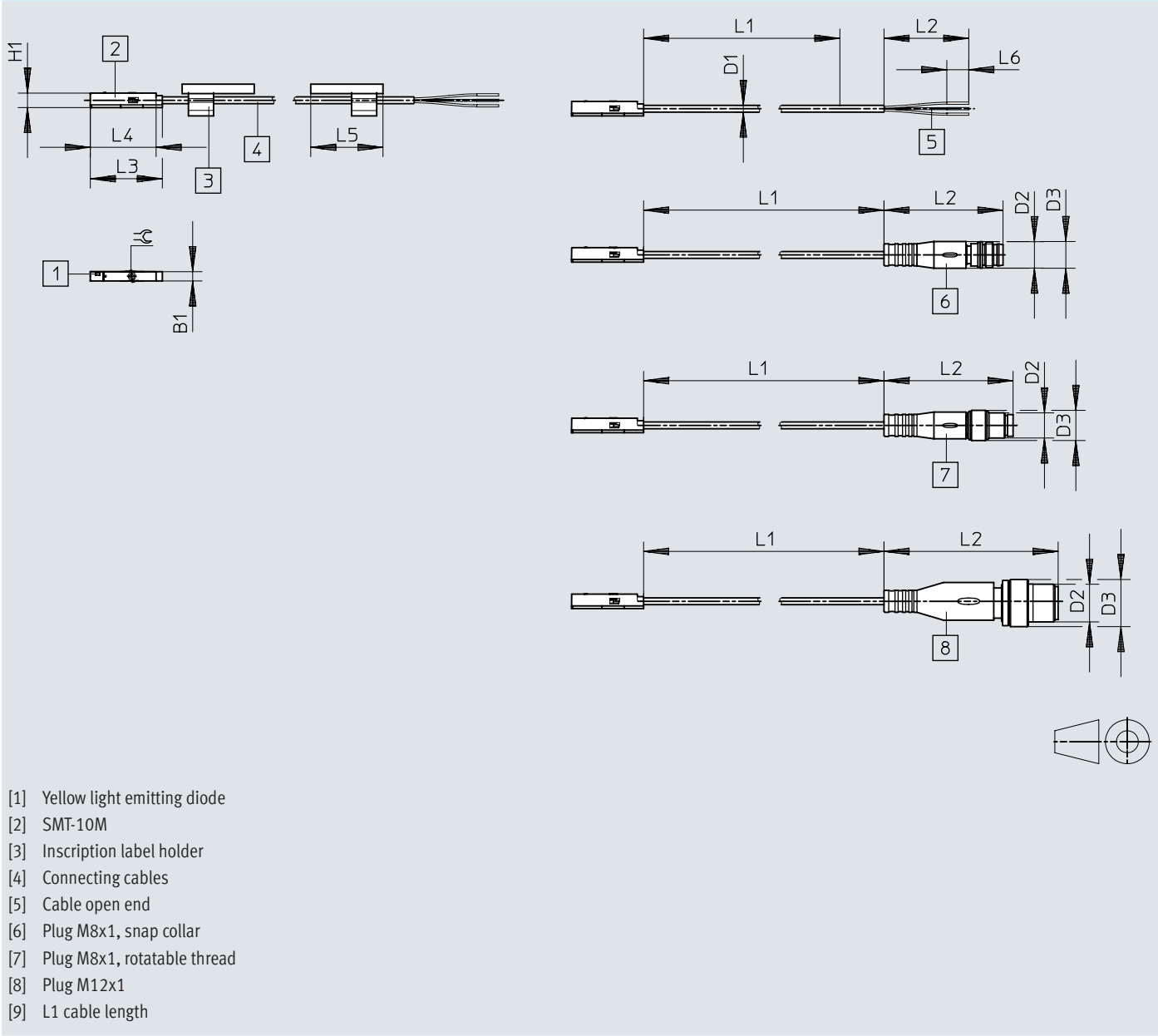
Switching status indication	Yellow LED
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Immission/emission

Ambient temperature with moving cable	-20 ... 70°C
Degree of protection	IP65, IP68

Dimensions

Dimensions – SMT-10M-...-L, outlet direction lengthwise connection Download CAD data www.festo.com

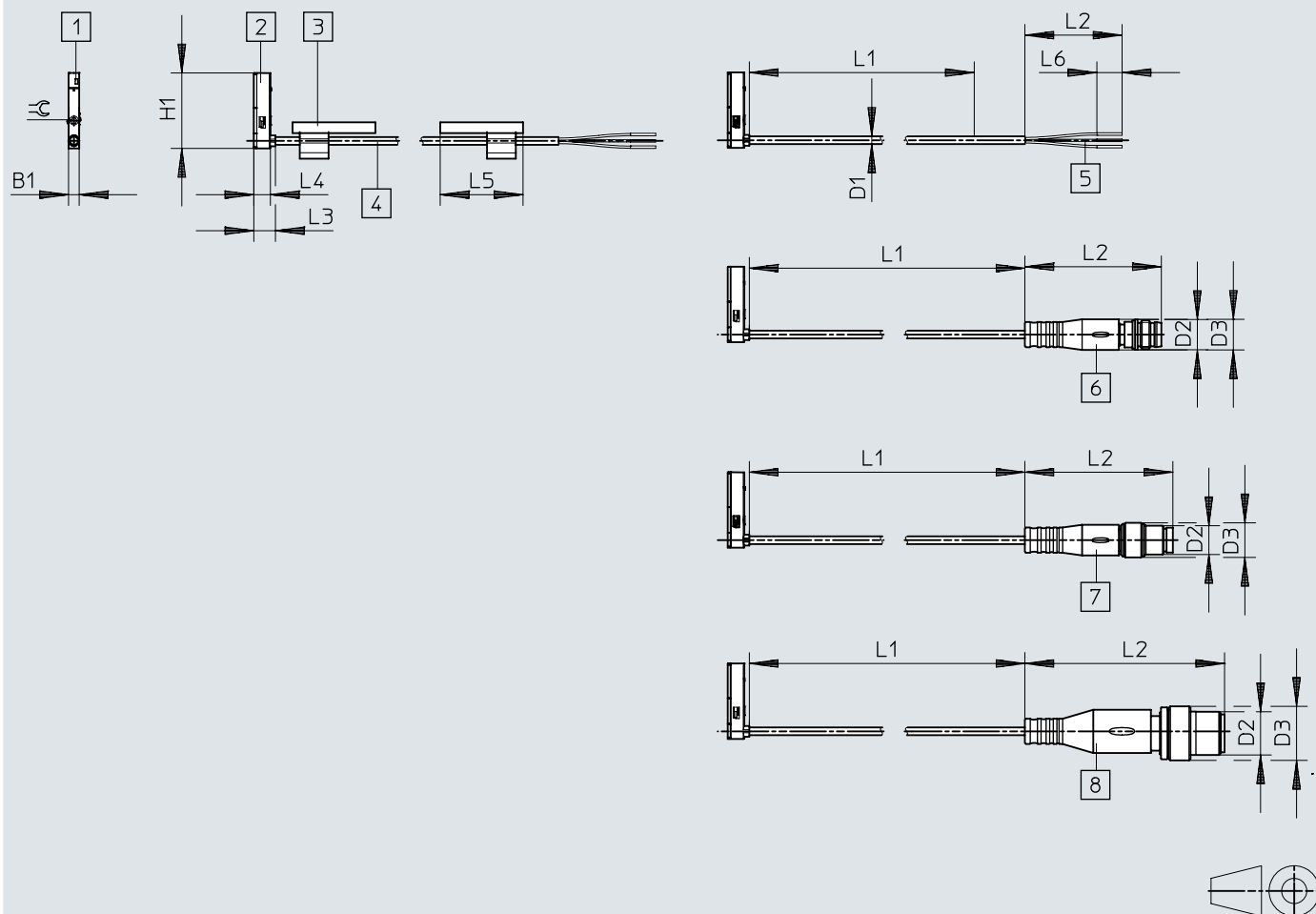


	B1	D1 Ø	D2	D3 Ø	H1	L2	L3	L4	L5	L6	L7	≅
SMT-10M-...-OE	2,9	2,15	–	–	4,6	50	22,9	20,9	23	50	7	1,5
SMT-10M-...-M8D			M8x1	8,5		32,7					–	
SMT-10M-...-M8			M8x1	9,6		41,1					–	
SMT-10M-...-M12			M12x1	15		55,5					–	

Dimensions

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

Download CAD data www.festo.com

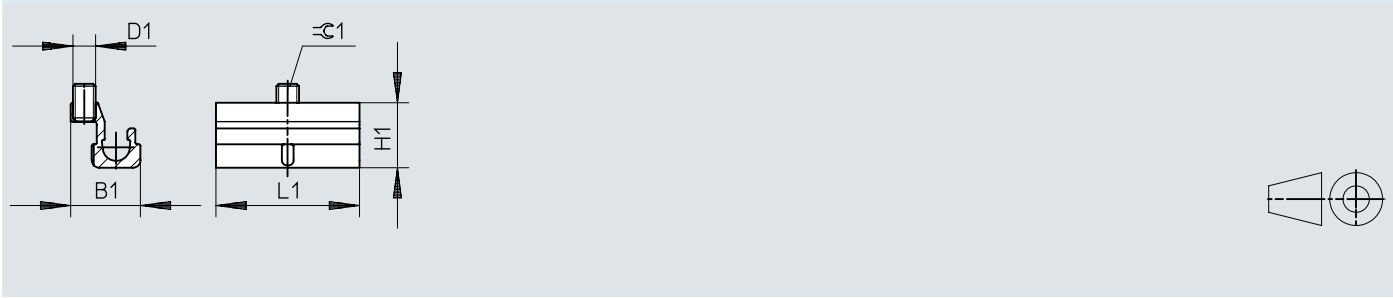


- [1] Yellow light emitting diode
- [2] SMT-10M
- [3] Inscription label holder
- [4] Connecting cables
- [5] Cable open end
- [6] Plug M8x1, snap collar
- [7] Plug M8x1, rotatable thread
- [8] Plug M12x1
- [9] L1 cable length

	B1	D1 ø	D2	D3 ø	H1	L2	L3	L4	L5	L6	L7	⌀
SMT-10M-...-OE	2,9	2,15	–	–	20,9	50	6	4,6	23	50	7	1,5
SMT-10M-...-M8D			M8x1	8,5		32,7					–	
SMT-10M-...-M8			M8x1	9,6		41,1					–	
SMT-10M-...-M12			M12x1	15		55,5					–	

Dimensions

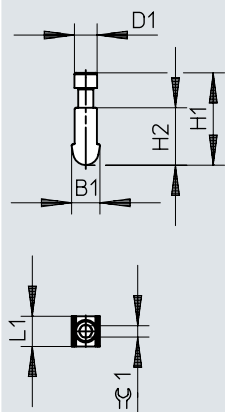
Dimensions – Mounting SMBN-10 [Download CAD data](#) www.festo.com



	D1	B1	H1	L1	1.5
SMBN-10	M3	9,3	8,6	19	1,5

Dimensions

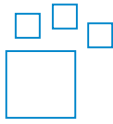
Dimensions – Positioning element SMM

[Download CAD data](#) www.festo.com


	B1	D1	H1	H2	L1	≈G1
SMM-10	3,75	3,0	12,23	7,6	4,0	1,5

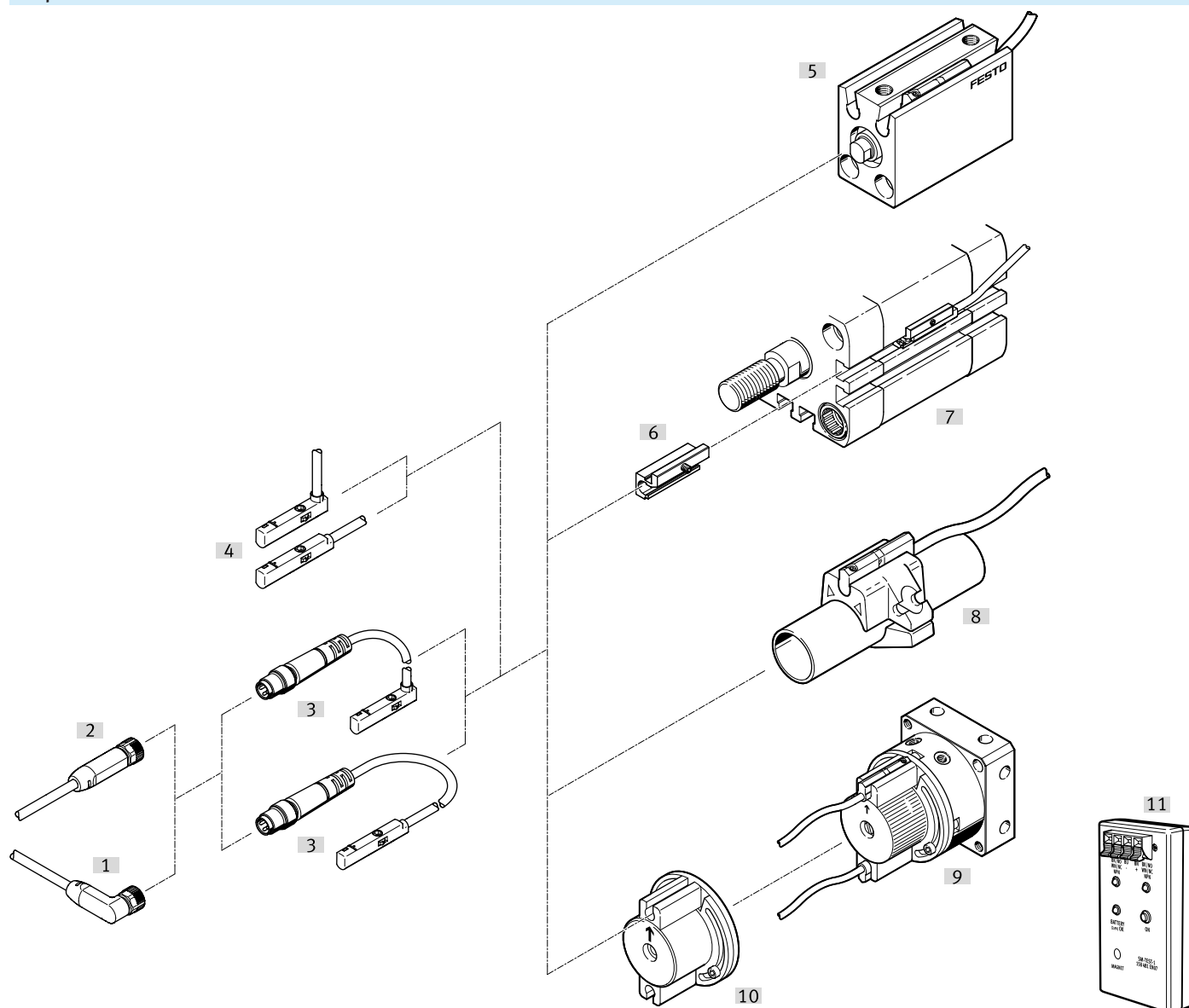
Ordering data

Ordering data					
	Switching output	Cable length	Product weight	Part no.	Type
	NPN	0.3 m	6.7 g	551380	SMT-10M-NS-24V-E-0,3-Q-M8D
				551379	SMT-10M-NS-24V-E-0,3-L-M8D
		2.5 m	16.8 g	★ 551377	SMT-10M-NS-24V-E-2,5-L-OE
				★ 551378	SMT-10M-NS-24V-E-2,5-Q-OE
	PNP	0.3 m	6.7 g	★ 551375	SMT-10M-PS-24V-E-0,3-L-M8D
				551376	SMT-10M-PS-24V-E-0,3-Q-M8D
			14 g	8152201	SMT-10M-PS-24V-E-0,3-L-M12
		2.5 m	16.8 g	551374	SMT-10M-PS-24V-E-2,5-Q-OE
				★ 551373	SMT-10M-PS-24V-E-2,5-L-OE
	Non-contacting, 2-wire		14.6 g	551383	SMT-10M-ZS-24V-E-2,5-Q-OE
				551382	SMT-10M-ZS-24V-E-2,5-L-OE

Ordering data – Modular product system				
	Design	Switching output	Part no.	Type
	For C-slot	NPN, PNP, Non-contacting, 2-wire	551372	SMT-10M

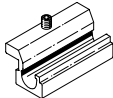
Peripherals

Peripherals overview



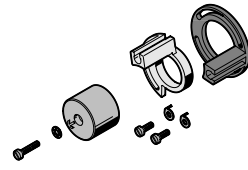
Accessories			→ Link
Type/order code	Description		
[1] Connecting cable NEBA-M8	Angled socket		12
[2] Connecting cable NEBA-M8	Straight socket		12
[3] Proximity switch SMT-10M-...-M...	Can be inserted into the slot from above, flush with the cylinder profile, with cable and plug		smt-10m
[4] Proximity switch SMT-10M-...-OE	Can be inserted into the slot from above, flush with the cylinder profile, with cable		smt-10m
[5] Drives with round slot	-		-
[6] Mounting kit SMBN-10	For mounting proximity switches on drives with T-slot		12
[7] Drives with T-slot	-		-
[8] Round cylinder	-		-
[9] Mounting kit WSM-...-SME-10	Mounting kit for mounting proximity switches on semi-rotary drive DSM		12
[10] Semi-rotary drive DSM-B	-		dsm
[11] Sensor tester SM-TEST-1	Checking the function of proximity switches using the built-in voltage source. Adjusting proximity switches on the cylinder.		sm-test-1

Accessories

Mounting kit SMBN-10			
	Size	Part no.	Type
	10	537809	SMBN-10

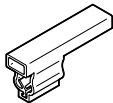
Positioning element SMM			
	Note on materials	Part no.	Type
	RoHS-compliant	547942	SMM-10

Connecting cable NEBA-M8					
	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
				★ 8078223	NEBA-M8G3-U-2.5-N-LE3
		5 m	96 g	★ 8078231	NEBA-M8W3-U-5-N-LE3
				★ 8078224	NEBA-M8G3-U-5-N-LE3

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

Mounting component SMBK-10				
	Design	Type of mounting	Part no.	Type
	For C-slot	Clamped in C-slot	534255	SMBK-10

Inscription labels			
	Size	Part no.	Type
	4x23 mm	541598	ASLR-L-423

Inscription label holder						
	Length	Width	Height	Size of pack	Part no.	Type
	23 mm	5.4 mm	10.1 mm	100	8078305	NEAU-LH-1