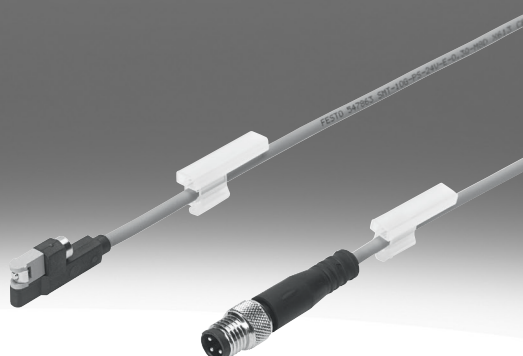


Proximity switch SMT-10G

FESTO



Type code

001	Series	
SMT	Proximity sensor	

002	Design type	
10G	For round slot, inserted in the slot lengthwise	

003	Switching output	
NS	3-wire NPN N/O contact	
PS	3-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]	
0,3	0.3 m	
2,5	2.5 m	

007	Cable outlet	
Q	Transverse	

008	Electrical connection	
M8D	Cable with M8x1 plug, 3-pin, rotatable thread	
OE	Open end	

Datasheet

General technical data

Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104	Open end
Design	For C-slot	
Based on standard	EN 60947-5-2	
Approval	RCM trademark, c UL us listed (OL)	
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	
Instructions on use	https://www.festo.com/Drive-Sensor-Overview	
Certificate issuing authority	UL E232949	
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	
Note on materials	RoHS-compliant	
Cleanroom class	Class 4 according to ISO 14644-1	
LABS (PWIS) conformity	VDMA24364-B2-L	
Corrosion resistance class CRC ³⁾	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 reducing 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.

3) More information visit www.festo.com/x/topic/kbk

Input signal/measuring element

Measured variable	Position
Measuring principle	Magneto-resistive
Ambient temperature	-20 ... 70°C
Ambient temperature with moving cable	-5 ... 70°C

Switching output

Switching output	NPN	PNP
Switching element function	N/O contact	
Voltage drop	≤2 V	
Inductive protective circuit	Adapted to MZ, MY, ME coils	
Max. output current	100 mA	
Off-state current	≤0.15 mA	≤0.01 mA
Switch-on time	≤1 ms	
Switch-off time	≤1 ms	
Max. switching frequency	150 Hz	
Repetition accuracy	0.2 mm	
Max. switching capacity DC	2.8 W	

Output, additional data

Short circuit current rating	yes
Overload protection	Available

Electronics

Operational voltage range DC	10 ... 30 V
Rated operational voltage DC	24 V
Residual ripple	10%
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	M8x1, A-coded, to EN 61076-2-104
Electrical connection 1, number of connections/cores	3	
Electrical connection 1, type of mounting	–	Screw-type lock with hexagon A/F 9 mm and longitudinal knurl, Rotatable
Connection outlet orientation	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	
Material cable sheath	TPE-U(PU)	
Cable sheath colour	Grey	
Material electrical contact	–	Gold-plated brass
Wire ends	Wire ferrule	–

Mechanical system

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	
Max. tightening torque	0.6 Nm	
Mounting position	optional	
Material housing	Aluminium, PA-reinforced, High-alloy stainless steel	
Housing colour	Black	
Material union nut	Nickel-plated brass	–
Product weight	10 g	30 g

Display/operation

Switching status indication	Yellow LED
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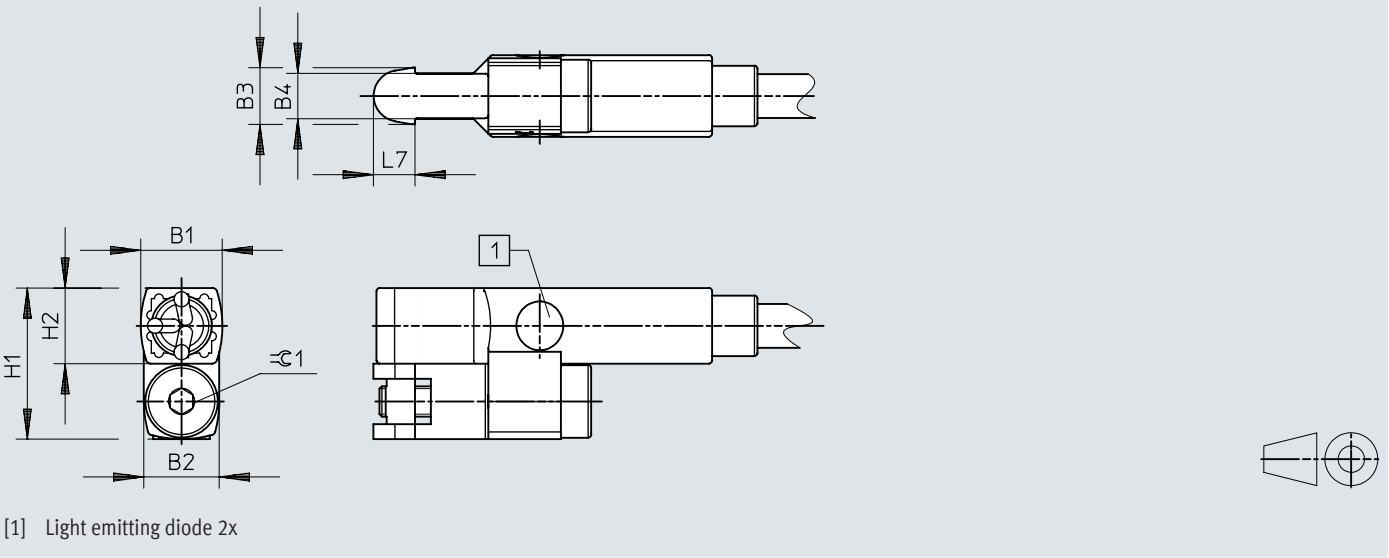
Immission/emission

Ambient temperature with moving cable	-5 ... 70°C
Degree of protection	IP65, IP68

Dimensions

Dimensions – SMT-10G

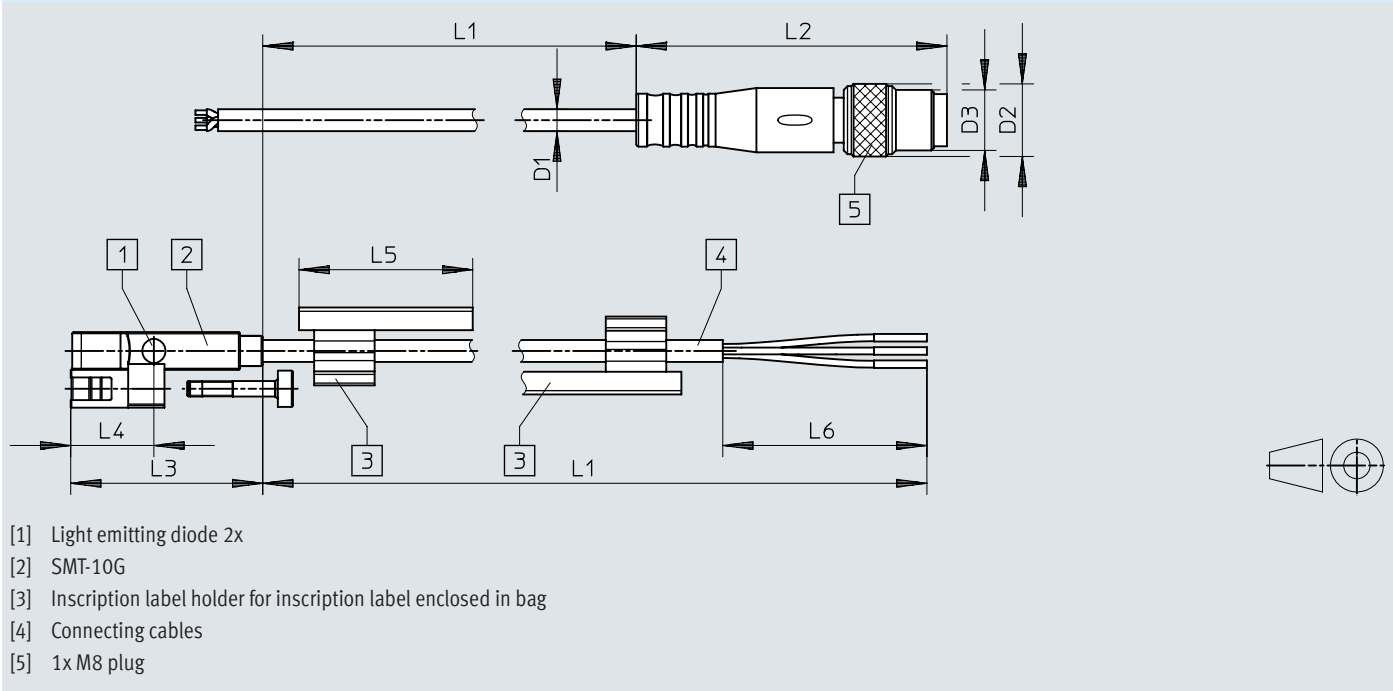
Download CAD data www.festo.com



	B1	B2	B3	B4	H1	H2	L7	⌀
SMT-10G-PS-...-OE	5,4	5	3,8	3	10	5	2,8	1,5
SMT-10G-PS-...-M8D								
SMT-10G-NS-...-OE								
SMT-10G-NS-...-M8D								

Dimensions

Dimensions – Proximity switch SMT-10G Download CAD data www.festo.com

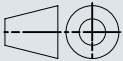
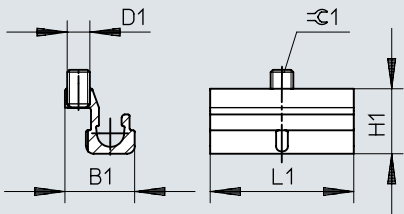


	D1 ø	D2 ø	D3	L1	L2 ±0,4	L3 ±0,15	L4	L5	L6 ±5
SMT-10G-PS-...-OE	2,9	–	–	2500 + 70	–	25,2	10,8	23	50
SMT-10G-PS-...-M8D		9,6	M8x1	300 + 30	41,1				–
SMT-10G-NS-...-OE		–	–	2500 + 70	–				50
SMT-10G-NS-...-M8D		9,6	M8x1	300 + 30	41,1				–

Dimensions

Dimensions – Mounting SMBN-10

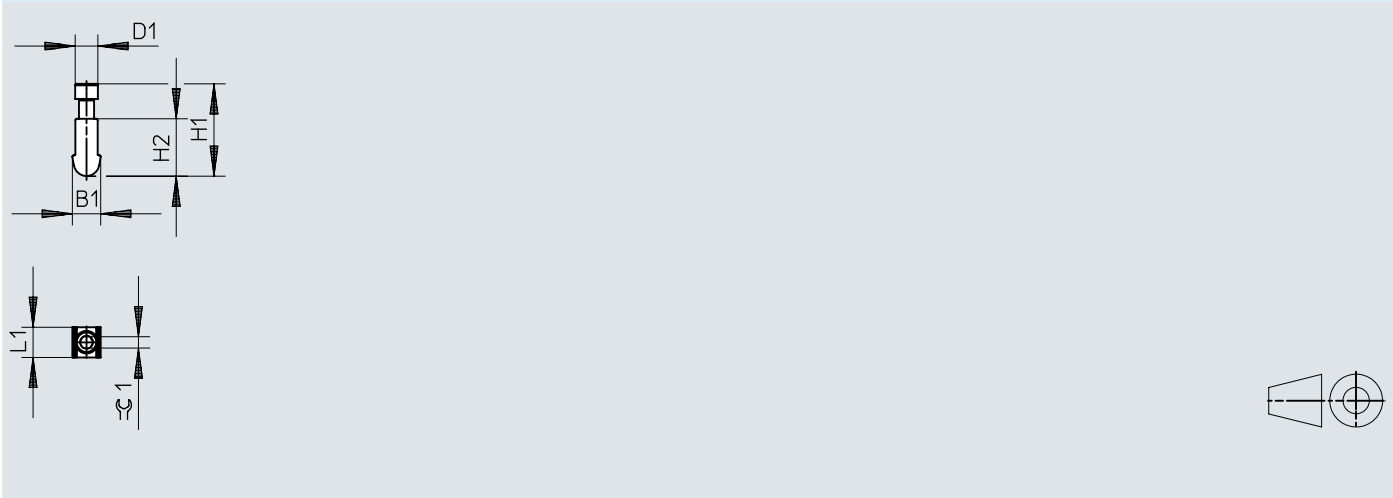
Download CAD data www.festo.com



	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



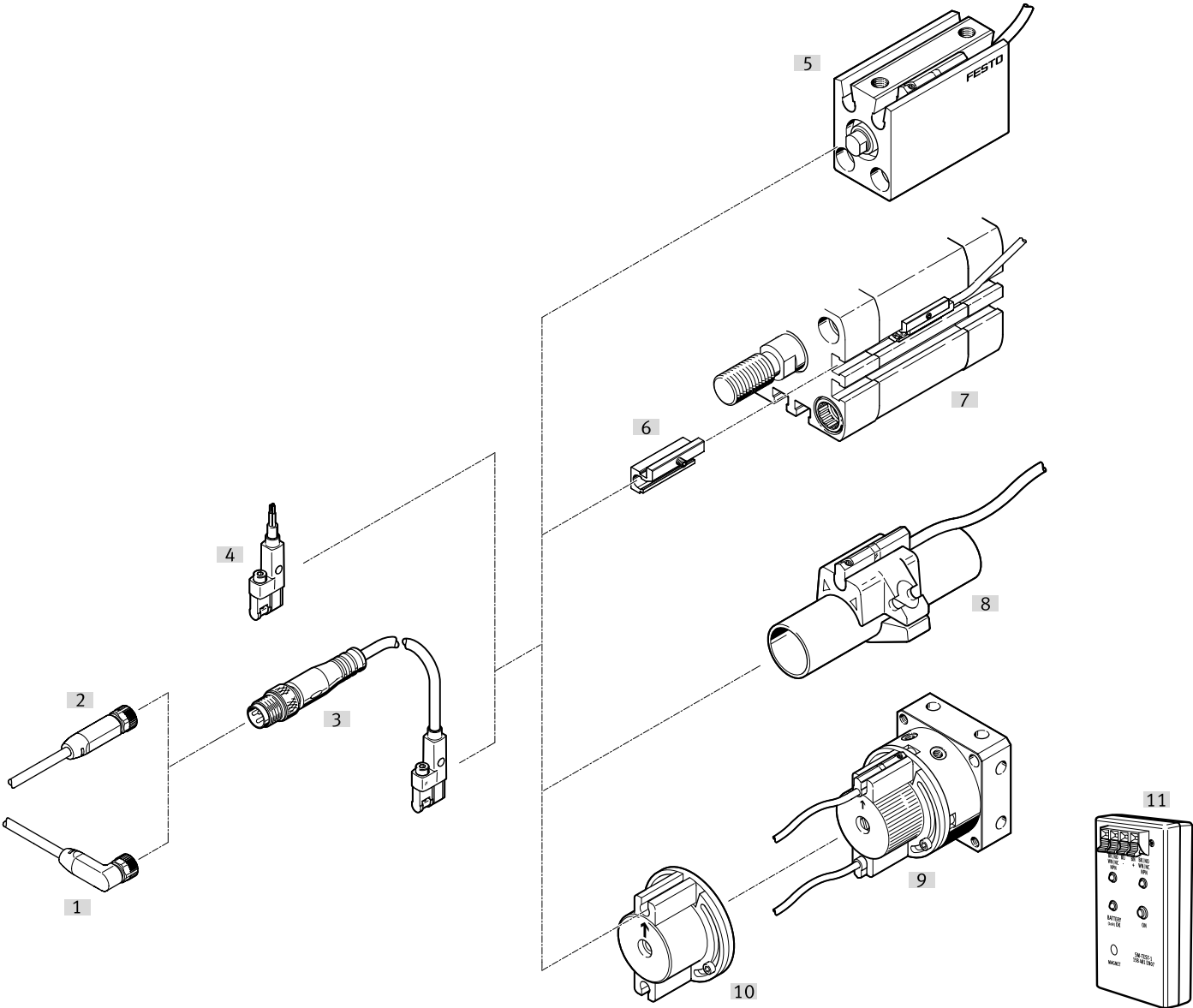
	B1	D1	H1	H2	L1	≙1
SMM-10	3,75	3,0	12,23	7,6	4,0	1,5

Ordering data

Ordering data						
	Switching output	Electrical connection 1, connector system	Electrical connection 1, number of connections/cores	Cable length	Part no.	Type
	NPN	M8x1, A-coded, to EN 61076-2-104	3	0.3 m	8065029	SMT-10G-NS-24V-E-0,3Q-M8D
		Open end		2.5 m	8065030	SMT-10G-NS-24V-E-2,5Q-OE
	PNP	M8x1, A-coded, to EN 61076-2-104		0.3 m	547863	SMT-10G-PS-24V-E-0,3Q-M8D
		Open end		2.5 m	547862	SMT-10G-PS-24V-E-2,5Q-OE

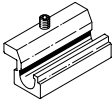
Peripherals

Peripherals overview



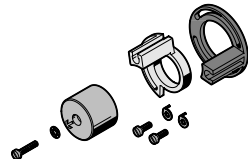
Accessories		→ Link
Type/order code	Description	
[1] Connecting cable NEBA-M8	Angled socket	11
[2] Connecting cable NEBA-M8	Straight socket	11
[3] Proximity switch SMT-10G-...-M...	Can be inserted into the slot from above, flush with the cylinder profile, with cable and plug	smt-10g
[4] Proximity switch SMT-10G-...-OE	Can be inserted into the slot from above, flush with the cylinder profile, with cable	smt-10g
[5] Mounting kit SMBN-10	For mounting proximity switches on drives with T-slot	11
[6] Mounting kit WSM-...SME-10	Mounting kit for mounting proximity switches on semi-rotary drive DSM	11
[7] Drives with round slot	-	-
[8] Drives with T-slot	-	-
[9] Round cylinder	-	-
[10] Semi-rotary drive DSM	-	dsm
[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 kit SMBN-10			
	Size	Part no.	Type
	10	537809	SMBN-10

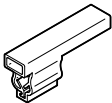
Positioning element SMM			
	Note on materials	Part no.	Type
	RoHS-compliant	547942	SMM-10

Connecting cable NEBA-M8					
	Cable structure	Cable length	Product weight	Part no.	Type
	3 x 0.25 mm ²	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

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