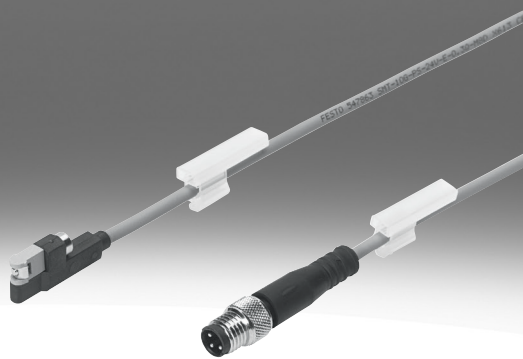


## Proximity switch SMT-10G

**FESTO**



## Type code

001	Series	
<b>SMT</b>	Proximity sensor	

002	Design type	
<b>10G</b>	For round slot, inserted in the slot lengthwise	

003	Switching output	
<b>NS</b>	3-wire NPN N/O contact	
<b>PS</b>	3-wire PNP N/O contact	

004	Rated operating voltage	
<b>24V</b>	24 V	

005	Cable characteristic	
<b>E</b>	Suitable for energy chains/robot applications	

006	Cable length [m]	
<b>0,3</b>	0.3 m	
<b>2,5</b>	2.5 m	

007	Cable outlet	
<b>Q</b>	Transverse	

008	Electrical connection	
<b>M8D</b>	Cable with M8x1 plug, 3-pin, rotatable thread	
<b>OE</b>	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) <sup>1)</sup>	To EU EMC Directive, In accordance with EU RoHS Directive	
CE marking (see declaration of conformity) <sup>2)</sup>	To UK instructions for EMC, To UK RoHS instructions	
Instructions on use	<a href="https://www.festo.com/Drive-Sensor-Overview">https://www.festo.com/Drive-Sensor-Overview</a>	
Certificate issuing authority	UL E232949	
Suitability for the production of Li-ion batteries	Metals with more than 1% by mass of copper, zinc or nickel by mass are excluded from use. 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 <sup>3)</sup>	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](http://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](http://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](http://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
Connection outlet orientation	Lateral	
Test conditions cable	Bending strength: to Festo standard, Test conditions on request, Torsional resistance: > 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 end sleeve	–

**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**

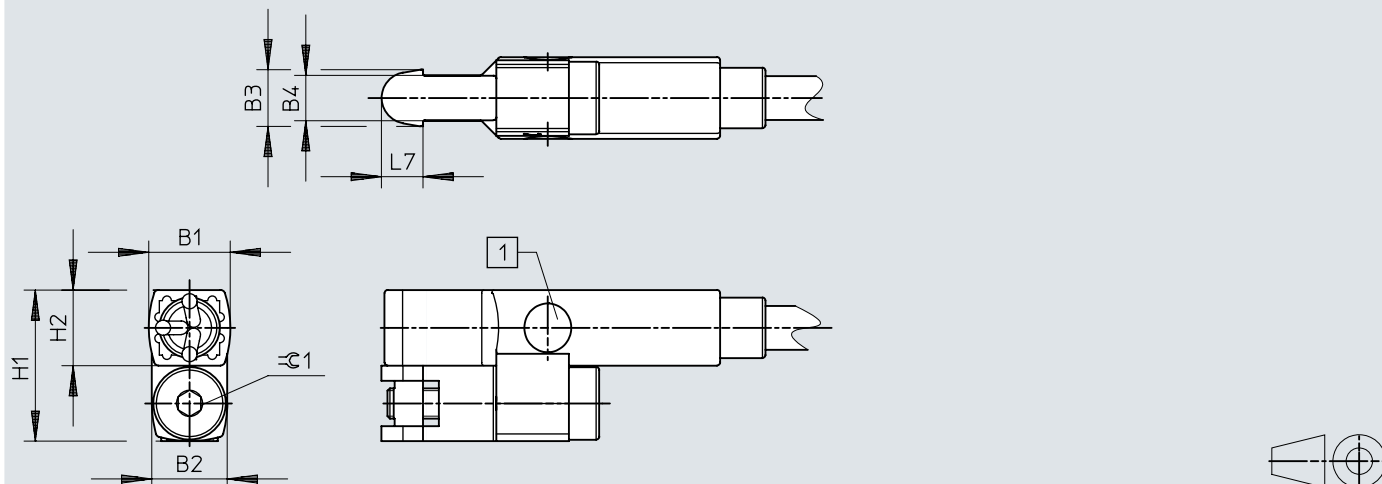
Switching status indication	Yellow LED
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**Immission/emission**

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

## Dimensions

## Dimensions – SMT-10G

Download CAD data [www.festo.com](http://www.festo.com)

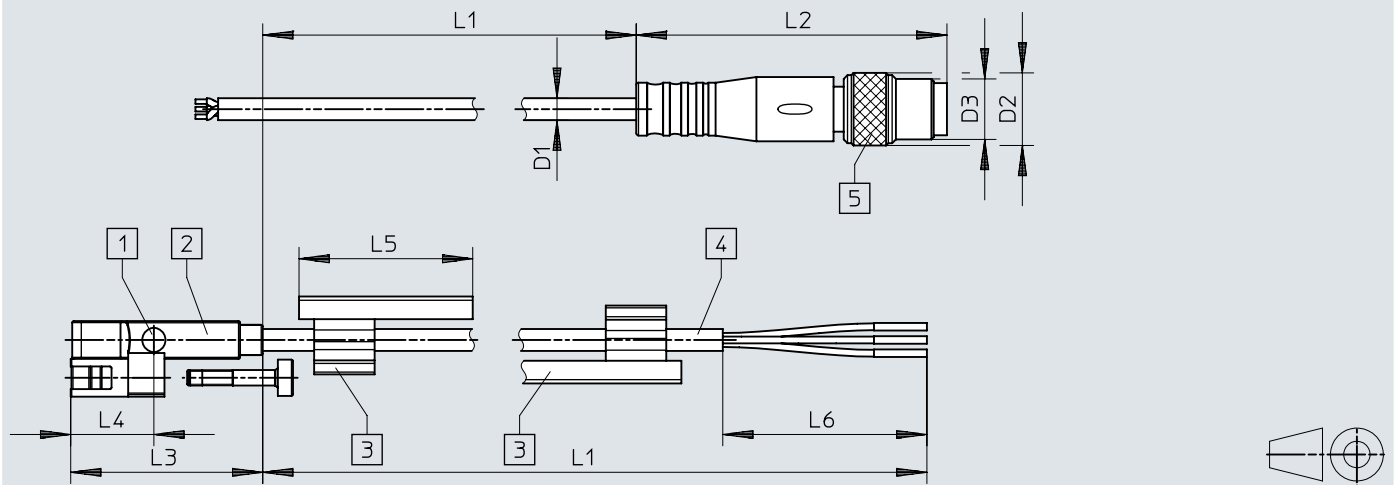
[1] Light emitting diode 2x

	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](http://www.festo.com)

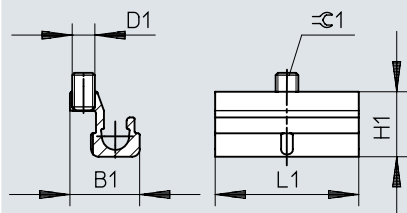


- [1] Light emitting diode 2x
- [2] SMT-10G
- [3] Inscription label holder for inscription label enclosed in bag
- [4] Connecting cables
- [5] 1x M8 plug

	D1 ∅	D2 ∅	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

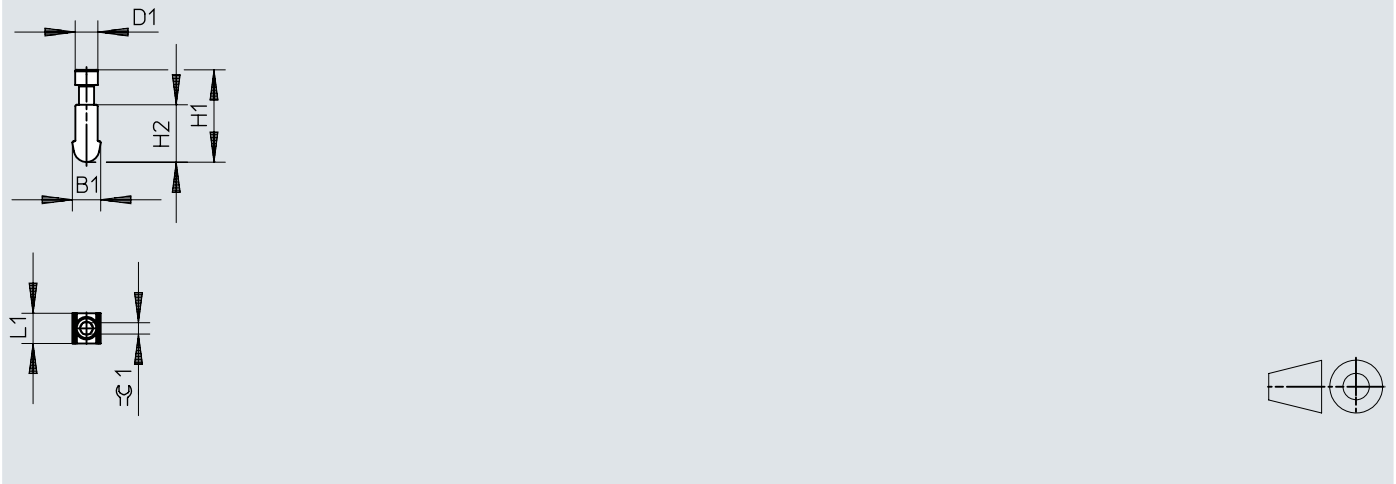
Download CAD data [www.festo.com](http://www.festo.com)

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

## Dimensions

### Dimensions – Positioning element SMM


Download CAD data [www.festo.com](http://www.festo.com)



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

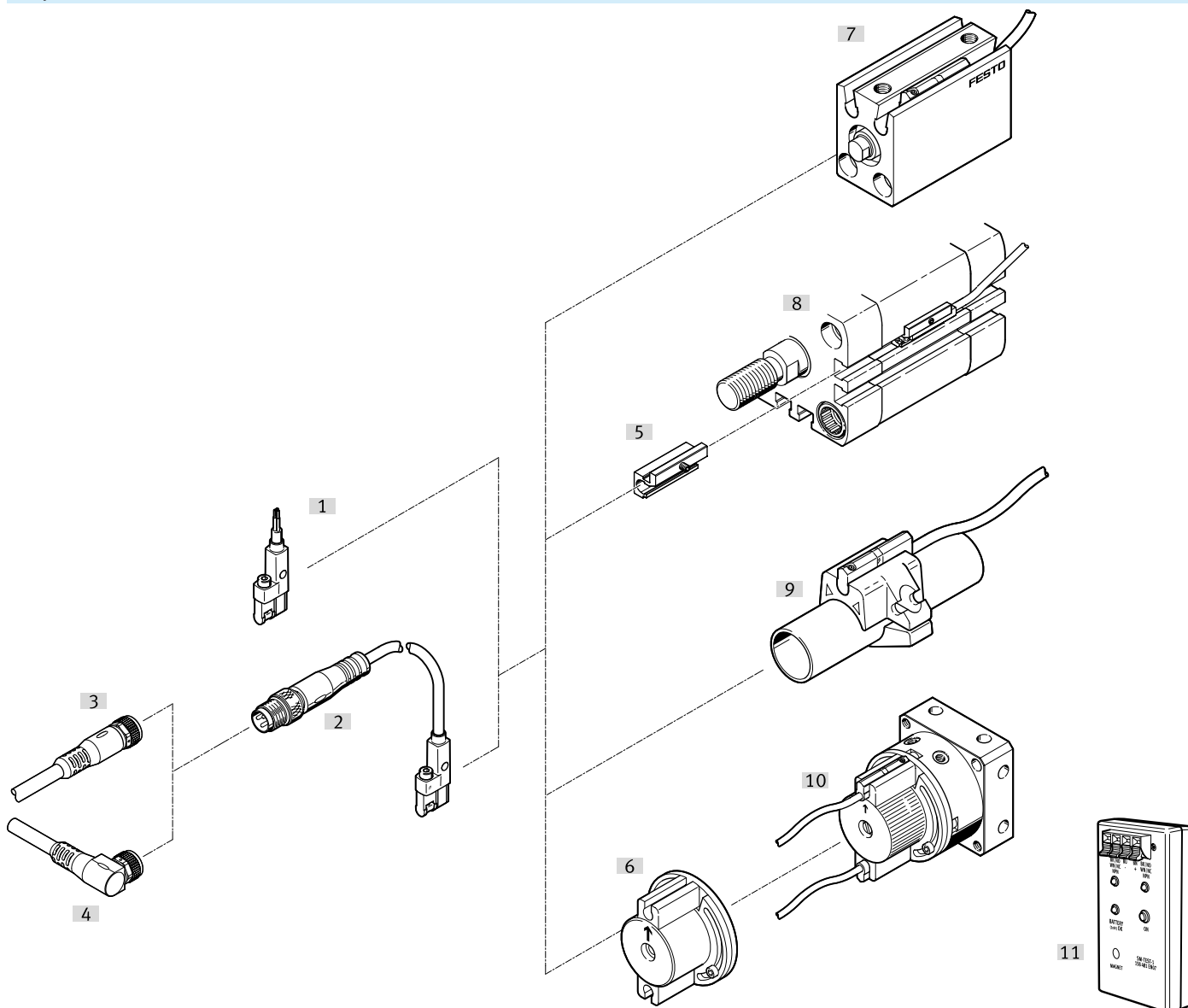


## Ordering data

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	<b>8065029</b>	<b>SMT-10G-NS-24V-E-0,3Q-M8D</b>
		Open end		2.5 m	<b>8065030</b>	<b>SMT-10G-NS-24V-E-2,5Q-OE</b>
	PNP	M8x1, A-coded, to EN 61076-2-104		0.3 m	<b>547863</b>	<b>SMT-10G-PS-24V-E-0,3Q-M8D</b>
		Open end		2.5 m	<b>547862</b>	<b>SMT-10G-PS-24V-E-2,5Q-OE</b>

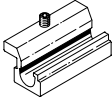
## Peripherals

### Peripherals overview




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


## Accessories

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

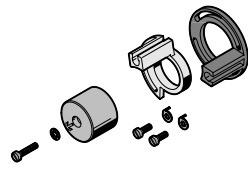
  

Positioning element SMM				
	Note on materials	Part no.	Type	
	RoHS-compliant	547942	SMM-10	


  

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

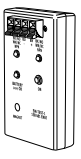
  

Mounting kit for semi-rotary drive DSM				
	Size	Part no.	Type	
	10	173205	WSM-6-SME-10	
		173206	WSM-8-SME-10	
		173207	WSM-10-SME-10	


  

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

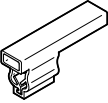
  

Sensor tester			
	Description	Part no.	Type
	Adjusting proximity switches on the cylinder, Checking the function of proximity switches with the help of the built-in voltage source	158481	SM-TEST-1

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

## Accessories

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