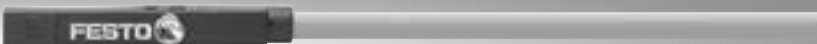



# Proximity sensors SME-10M, for C-slot





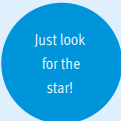
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Simply good:  
Fast:

Festo Core Range  
Solves the majority of your automation tasks

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Easy and fast to select

With the Festo Core Range, we have selected the most important products and functions from our broad product catalogue, and added the quickest delivery.

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Just look for the star!

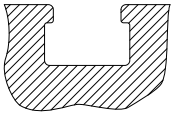
## Product range overview

Design	Type of mounting	Measuring principle	Type	Operating voltage range	Switching output	Switching element function	→ Page/ Internet
For C-slot	Standard						
	Inserted in the slot from above, flush with the cylinder profile	Magneto-resistive	SMT-10M	5 ... 30 V DC	PNP	N/O contact	–
					NPN		
					Non-contacting, 2-wire		
		Magnetic reed	SME-10M	5 ... 30 V AC/DC	Contacting, bipolar	N/O contact	6
	Inserted in the slot lengthwise	Magneto-resistive	SMT-10G	10 ... 30 V DC	PNP, NPN	N/O contact	–
Magnetic reed		SME-10	12 ... 27 V AC/DC	Contacting	N/O contact	–	
For T-slot	Standard						
	Inserted in the slot from above, flush with the cylinder profile	Magneto-resistive	SMT-8M	10 ... 30 V DC	PNP	N/O contact	T-slot
					N/C contact		
		NPN	N/O contact				
		Magnetic reed	SME-8M	5 ... 30 V AC/DC	Contacting, bipolar	N/O contact	
	N/C contact						
	Inserted in the slot lengthwise, flush with the cylinder profile	Magneto-resistive	SMT-8	10 ... 30 V DC	PNP	N/O contact	
					NPN		
	Inserted in the slot lengthwise, flush with the cylinder profile	Magnetic reed	SME-8	12 ... 30 V AC/DC	Contacting, bipolar	N/O contact	
				3 ... 230 V AC/DC		N/C contact	
				5 ... 250 V AC/DC		N/O contact	
	Inserted in the slot lengthwise	Magneto-resistive	SMT-8G	10 ... 30 V DC	PNP	N/O contact	
		Magneto-resistive	SMT-8-SL	10 ... 30 V DC	PNP	N/O contact	
		Magnetic reed	SME-8-SL	10 ... 30 V AC/DC	Contacting, bipolar	N/O contact	
	Via accessories	Magneto-resistive	SMT0-8E	10 ... 30 V DC	PNP	N/O contact	
					NPN		
		Magnetic reed	SME0-8E	12 ... 30 V DC	Contacting, bipolar	N/O contact	
				3 ... 250 V DC			
	3 ... 230 V AC						
	Corrosion-resistant						
	Inserted in the slot lengthwise, flush with the cylinder profile	Magneto-resistive	CRSMT-8	10 ... 30 V DC	PNP	N/O contact	T-slot
	Welding field immune						
	Via accessories	Magneto-inductive	SMTSO-8E	10 ... 30 V DC	PNP	N/O contact	T-slot
					NPN		
	Heat resistant up to 120°C						
	Inserted in the slot lengthwise, flush with the cylinder profile	Magnetic reed	SME-8-...S6	0 ... 30 V AC/DC	Contacting, bipolar	N/O contact	T-slot
	Via accessories	Magnetic reed	SME0-8E-...S6	0 ... 30 V DC	Contacting	N/O contact	T-slot
				0 ... 30 V AC			

## Product range overview

### T-slot sensors can be used for drives with T-slot

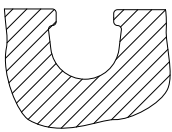
#### Exceptions



- DFM-B: SMT0-8E, SMTSO-8E, SME0-8E, SMP0-8E cannot be used
- DHDS: SME-8M can only be used on  $\varnothing 50$
- DHPS: SME-8M can only be used on  $\varnothing 20 \dots 35$
- HGDD-63-A: SMT-8M-A cannot be used
- HGPT-B: only SMT-8G can be used for size 40 and upwards
- SDBT-BSW- ... -PU/NU can only be used on a limited number of drive series

### C-slot sensors can be used for drives with C-slot

#### Exceptions

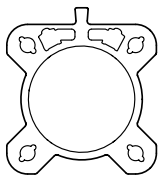


- ADVC  $\varnothing 100$ : SMT-10M and SME-10M cannot be used (ADVC has a T-slot and a C-slot)
- DSM/DSM-B-6/8/10: SME-10M cannot be used
- DSM/DSM-B-10/16: SMT-10M cannot be used
- HGPT-B: only SMT-10G can be used for sizes up to and including size 35

### For drives with sensor rail: these are available with 2 cylinder barrel contours

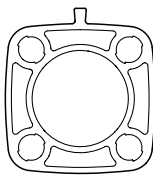
Only T-slot sensors CRSMT-8M and SMT-8M-A can be used, and only with the suitable profile identified below.

Example: DSBF



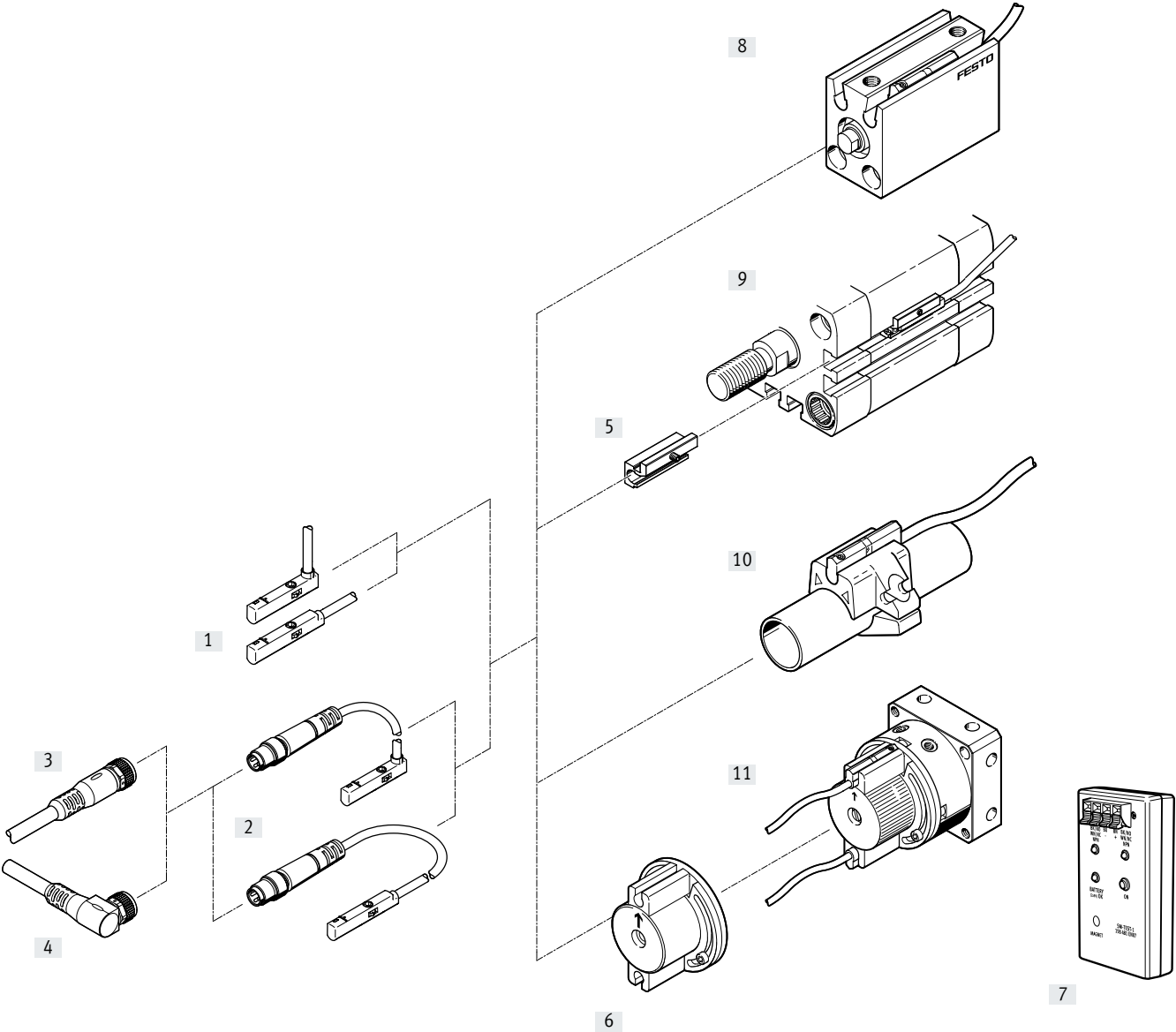
Suitable

Example: CDC



Not suitable

Peripherals overview



Mounting attachments and accessories		→ Page/ Internet
<b>Proximity sensor</b>		
[1]	SME-10M-...-OE, with cable	6
[2]	SME-10M-...-M..., with cable and plug	6
<b>Connecting cables</b>		
[3]	Connecting cable NEBU-M...G...	13
[4]	Connecting cable NEBU-M...W...	13
<b>Mounting kits</b>		
[5]	Mounting kit SMBN-10	12
[6]	Mounting kit WSM-...SME-10	13

Mounting attachments and accessories		→ Page/ Internet
<b>Accessories</b>		
[7]	Sensor tester SM-TEST-1	13
-	Positioning element SMM-10	12
-	Clip SMBK-10	13
-	Inscription label ASLR	13
-	Safety clip NEAU	13
<b>Drives</b>		
[8]	Drives with C-slot	-
[9]	Drives with T-slot	-
[10]	Round cylinders	-
[11]	Semi-rotary drive DSM	-

## Type codes

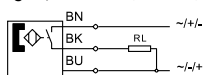
001	Series	
SME	Proximity sensor	
002	Design type	
10	For C-slot	
003	Sensor version	
M	Inserted in slot from above	
004	Switching output	
ZS	2-wire PNP N/O contact	
DS	3-wire N/O contact	
005	Rated operating voltage	
24	24 V DC	
006	Cable characteristic	
	None	
E	Suitable for energy chains/robot applications	

007	Cable length [m]	
	0.2 ... 10 m	
2,5	2.5 m	
0,3	0.3 m	
008	Display	
L	LED	
009	Cable outlet	
Q	Transverse	
L	Longitudinal	
010	Cable identification	
	With label holder	
N	Without label holder	
011	Connection technology	
OE	Open end	
M8	M8, snap-on flange	
M8D	M8, rotatable thread	
M12	M12, rotatable thread	

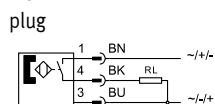
## Data sheet – Magnetic reed

## Function

e.g. N/O contact, 3-wire, with cable



e.g. N/O contact, 3-wire, with plug



- Magnetic reed measuring principle
- Inserted in the slot from above, does not protrude beyond the cylinder profile
- Cable clip and retaining bracket for inscription labels holders included in the scope of delivery



## General technical data

Design	For C-slot
Conforms to standard	EN 60947-5-2
Certification	RCM trademark
Special characteristics	Oil resistant
CE mark (see declaration of conformity)	To EU EMC Directive <sup>1)</sup>
Note on materials	Halogen-free
	Free of copper and PTFE
	RoHS-compliant

1) For information about the area of use, see the EC declaration of conformity at: [www.festo.com/sp](http://www.festo.com/sp) → Certificates.

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	Magnetic reed
Ambient temperature [°C]	–40 ... +70

## Switching output

Type SME-10M	DS	ZS
Switching output	Contacting, bipolar	
Switching element function	N/O contact	
Switching output repetition accuracy in ± mm	0.2	
Switch-on time [ms]	0 ... 1.2	
Switch-off time [ms]	0 ... 1	
Max. switching frequency [Hz]	50	
Max. output current [mA]	300	100
Max. output current in mounting kits [mA]	50	50
Max. switching capacity AC [VA]	9	3
Max. switching capacity AC in mounting kits [VA]	1.5	1.5
Max. switching capacity DC [W]	9	3
Max. switching capacity DC in mounting kits [W]	1.5	1.5
Voltage drop [V]	0 ... 0.5	0 ... 4.5

## Additional output data

Short circuit current rating	No
Overload protection	Not present

## Data sheet – Magnetic reed

Electronics		DS	ZS
Rated operating voltage	[V DC]	24	
Operating voltage range AC	[V]	5 ... 30	
Operating voltage range DC	[V]	5 ... 30	
Reverse polarity protection		No	Bipolar

Electromechanical components								
Type SME-10M	DS				ZS			
Electrical connection	OE	M8D	M8	M12	OE	M8D	M8	M12
Connection type	Cable	Cable with plug			Cable	Cable with plug		
Connection technology	Open end	M8x1, A-coded to EN 61076-2-104	M12x1, A-coded to EN 61076-2-101		Open end	M8x1, A-coded to EN 61076-2-104	M12x1, A-coded to EN 61076-2-101	
Number of pins/wires	3				2			
Type of mounting	–	Screw-type lock			–	Screw-type lock		
Outlet direction of connection	In-line							
	Lateral							
Cable test conditions	Energy chain: 5 million cycles, bending radius 28 mm							
	Torsional resistance: 300,000 cycles, ±270°/0.1 m							
	Resistance to bending: to Festo standard; test conditions on request							
Cable length	[m]	0.2 ... 10						
Cable characteristic	Energy chain + robot							
Information on materials: Cable sheath	TPE-U(PUR)							

Mechanical system	
Type of mounting	Screw-clamped, inserted in the slot from above
Max. tightening torque	0.4
Mounting position	Any
Housing	PA-reinforced
	High-alloy stainless steel

Display/operation	
Switching status indication	Yellow LED

Immission/emission	
Ambient temperature with flexible cable installation	[°C] –20 ... +70
Degree of protection	IP65
	IP68

Pin allocation to EN 60947-5-2				M8x1, 3-pin N/O contact			
M8x1, 2-pin N/O contact				M8x1, 3-pin N/O contact			
	Pin	Wire colour	Allocation		Pin	Wire colour	Allocation
	1	Brown	+		1	Brown	+
	4	Black	Output		3	Blue	–
					4	Black	Output

Pin allocation to EN 60947-5-2				M12x1, 3-pin N/O contact			
M12x1, 2-pin N/O contact				M12x1, 3-pin N/O contact			
	Pin	Wire colour	Allocation		Pin	Wire colour	Allocation
	1	Brown	+		1	Brown	+
	4	Black	Output		3	Blue	–
					4	Black	Output

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

SME-10M-...-L, in-line connection direction



Type	B1	D1	D2	D3	H1	L2	L3	L4	L5	L6	L7	↺
SME-10M-...-OE	3	2.15	–	–	4.6	50	26.6	24.6	23	50	7	1.5
SME-10M-...-M8D			M8x1	8.5		32.7					–	
SME-10M-...-M8			M8x1	9.6		41.1					–	
SME-10M-...-M12			M12x1	15		55.5					–	

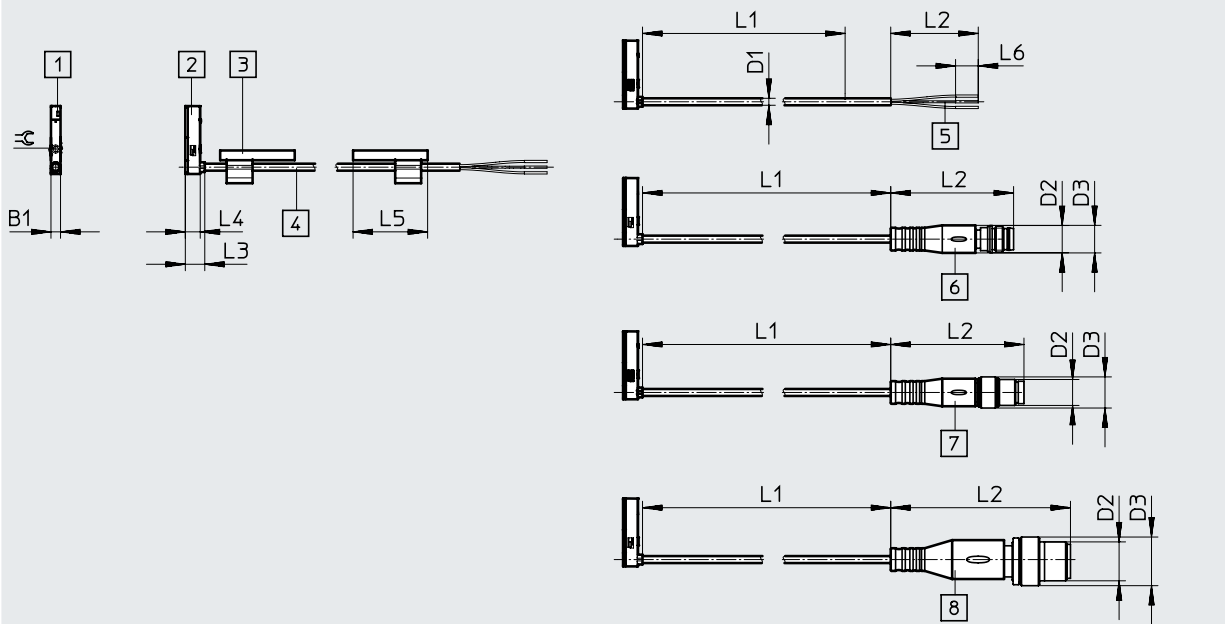


## Data sheet – Magnetic reed

## Dimensions

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

SME-10M-...-Q, lateral connection direction

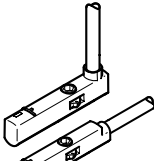


- [1] Yellow LED  
 [2] SME-10M  
 [3] Inscription label holder  
 [4] Connecting cable  
 [5] Cable with open end  
 [6] Plug M8x1, snap-on flange  
 [7] Plug M8x1, rotatable thread  
 [8] Plug M12x1  
 L1 Cable length

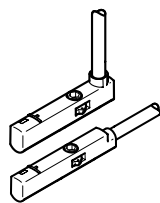
Type	B1	D1	D2	D3	H1	L2	L3	L4	L5	L6	L7	⌀
SME-10M-...-OE	3	2.15	–	–	24.6	50	6	4.6	23	50	7	1.5
SME-10M-...-M8D			M8x1	8.5		32.7					–	
SME-10M-...-M8			M8x1	9.6		41.1					–	
SME-10M-...-M12			M12x1	15		55.5					–	

## ★ Core product range

## Ordering data

Ordering data							
	Switching output	Electrical connection		Cable length [m]	Weight [g]	Part no.	Type
		Cable	Cable with plug, rotatable thread				
	N/O contact						
	Contacting, bipolar	3-wire	–	2.5	16.8	★ 551365	SME-10M-DS-24V-E-2.5-L-OE
		–	M8x1, 3-pin	0.3	6.7	★ 551367	SME-10M-DS-24V-E-0.3-L-M8D
		2-wire	–	2.5	14.6	★ 551369	SME-10M-ZS-24V-E-2.5-L-OE

## Data sheet – Magnetic reed

Ordering data	Switching output	Electrical connection		Cable length [m]	Weight [g]	Part no.	Type
		Cable	Cable with plug, rotatable thread				
	N/O contact Contacting, bipolar	3-wire	–	2.5	16.8	551366	SME-10M-DS-24V-E-2.5-Q-OE
		–	M8x1, 3-pin	0.3	6.7	551368	SME-10M-DS-24V-E-0.3-Q-M8D
		2-wire	–	2.5	14.6	551370	SME-10M-ZS-24V-E-2.5-Q-OE

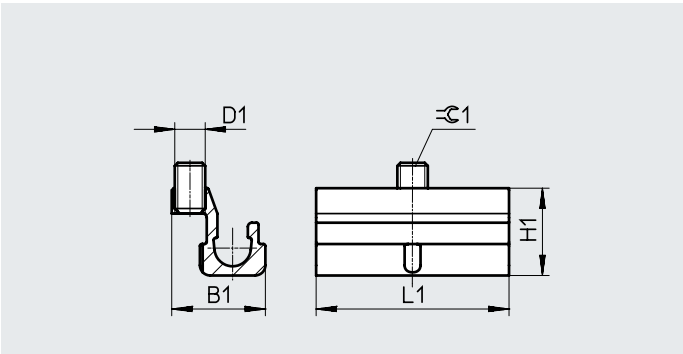
## Ordering data – Modular product system, magnetic reed

Ordering table				
Size	10	Conditions	Code	Enter code
Module no.	<b>551364</b>			
Function	Proximity sensor for C-slot, contacting		<b>SME-10M</b>	SME-10M
			–	–
Switching output	3-wire N/O contact		<b>DS</b>	
Switching output	2-wire N/O contact		<b>ZS</b>	
			–	–
Rated operating voltage [V DC]	24		<b>24V</b>	24V
			–	–
Cable characteristic	Energy chain + robot		<b>E</b>	E
			–	–
Cable length [m]	0.2 ... 10 (0.2 ... 5.0 m in 0.1 m increments, 5.0 ... 10 m in 0.5 m increments)		<b>...</b>	
			–	–
Cable outlet	In-line		<b>L</b>	
	Lateral		<b>Q</b>	
			–	–
Cable designation	With inscription label holder		–	
	Without inscription label holder		<b>N</b>	
			–	–
Connection technology	Open end		<b>OE</b>	
	M8, rotatable thread		<b>M8D</b>	
	M8, snap-on flange		<b>M8</b>	
	M12, rotatable thread		<b>M12</b>	

Accessories

**Mounting SMBN-10**  
for mounting proximity sensors  
SME/SMT-10 on drives with T-slot

Material:  
Rail: Anodised wrought aluminium alloy  
Screws: High-alloy stainless steel  
Note on materials:  
Free of copper and PTFE  
RoHS-compliant

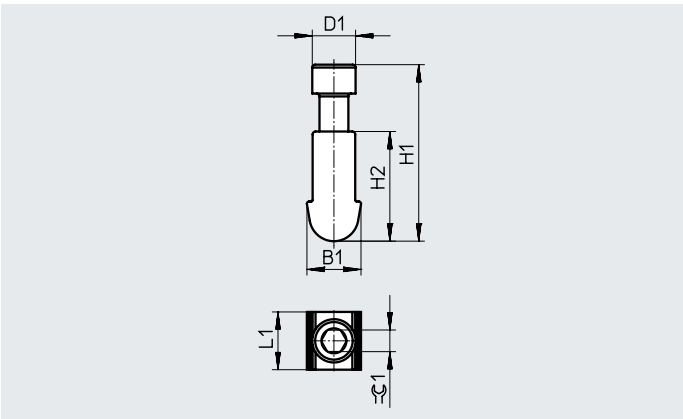


Dimensions and ordering data							
For piston $\varnothing$	D1	B1	H1	L1	$\varnothing 1$	Part no.	Type
125 ... 320	M3	9.3	8.6	19	1.5	537809	SMBN-10

**Positioning element SMM**  
Inserted in the slot lengthwise

Ambient temperature: -40 ... +120°C

Materials:  
Housing: Anodised wrought aluminium alloy  
Screws: High-alloy stainless steel  
Note on materials:  
RoHS-compliant



Dimensions and ordering data									
B1	D1	H1	H2	L1	∅1	CRC <sup>1)</sup>	Part no.	Type	PU <sup>2)</sup>
3.75	3.0	12.23	7.6	4.0	1.5	3	547942	SMM-10	10



1) Corrosion resistance class CRC 3 to Festo standard FN 940070  
High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts in direct contact with the ambient atmosphere typical for industrial applications, with primarily functional requirements for the surface.

2) Packaging unit

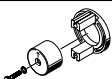

## Accessories

## Ordering data – Connecting cables


Data sheets → Internet: nebu

	Type	Number of wires	Cable length [m]	Part no.	Type
<b>Socket M8x1, 3-pin</b>					
	For SMT/SME-10...	3	2.5	★ 541333	NEBU-M8G3-K-2.5-LE3
			5	★ 541334	NEBU-M8G3-K-5-LE3
	For SMT/SME-10...	3	2.5	★ 541338	NEBU-M8W3-K-2.5-LE3
			5	★ 541341	NEBU-M8W3-K-5-LE3

## Ordering data – Mounting components

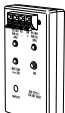
	For Ø	Description	Part no.	Type
	6	Mounting kit for mounting proximity sensors on semi-rotary drives DSM	173205	WSM-6-SME-10
	8		173206	WSM-8-SME-10
	10		173207	WSM-10-SME-10
	–	For fixing connecting cables in place	534255	SMBK-10

## Ordering data – Safety clips for ATEX zone


	Size	Description	Part no.	Type	PU <sup>1)</sup>
	M8	<ul style="list-style-type: none"> <li>Protects "equipment that is not intrinsically safe" in zones 2 and 22 against simple disconnection</li> <li>ATEX category: gas: II 3G / dust: II 3D</li> </ul>	548067	NEAU-M8-GD	1
	M12		548068	NEAU-M12-GD	1

1) Packaging unit

## Ordering data – Sensor testers

	Description	Part no.	Type
	<ul style="list-style-type: none"> <li>Testing the functionality of proximity sensors using the integrated voltage supply</li> <li>Adjusting the proximity switches on the cylinder</li> </ul>	158481	SM-TEST-1

## Ordering data – Inscription labels

	Size	Part no.	Type	PU <sup>1)</sup>
	23x4 mm	541598	ASLR-L-423	34

1) Packaging unit