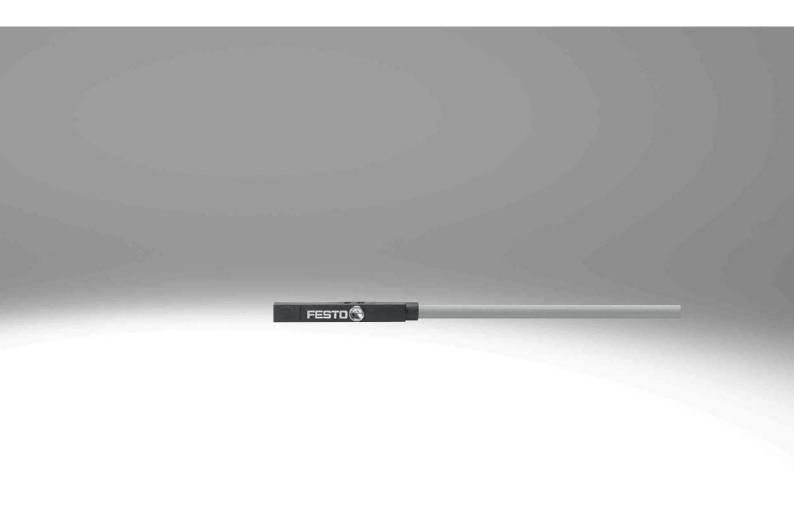
# Proximity sensors SME-10M, for C-slot





★/☆

Festo core product range

Covers 80% of your automation tasks

Worldwide:

Always in stock Superb: Festo quality at an attractive price Easy: Simplified procurement and warehousing ★ Generally ready for dispatch from the factory within 24 hours In stock at 13 Service Centres worldwide More than 2200 products

☆ Generally ready for dispatch from the factory within 5 days Assembled for you at 4 Service Centres worldwide Up to  $6 \times 10^{12}$  variants per product family

# Product range overview

Design	Type of mounting	Measuring principle	Туре	Operating voltage range	Switching output	Switching element function	→ Page/ Internet				
For C-slot	Standard										
	Inserted in the slot from	Magneto-resistive	SMT-10M	5 30 V DC	PNP	N/O contact	-				
	above, flush with the				NPN						
	cylinder profile				Non-contacting, 2-wire						
		Magnetic reed	SME-10M	5 30 V AC/DC	Contacting, bipolar	N/O contact	6				
	Inserted in the slot	Magneto-resistive	SMT-10G	10 30 V DC	PNP, NPN	N/O contact	-				
	lengthwise	Magnetic reed	SME-10	12 27 V AC/DC	Contacting	N/O contact	-				
or T-slot	Standard										
	Inserted in the slot from	Magneto-resistive	SMT-8M	10 30 V DC	PNP	N/O contact	T-slot				
	above, flush with the					N/C contact	1				
	cylinder profile				NPN	N/O contact	1				
		Magnetic reed	SME-8M	5 30 V AC/DC	Contacting, bipolar	N/O contact	1				
						N/C contact	1				
	Inserted in the slot lengthwise, flush with the	Magneto-resistive	SMT-8	10 30 V DC	PNP	N/O contact	-				
	cylinder profile				NPN						
	Inserted in the slot	Magnetic reed	SME-8	12 30 V AC/DC	Contacting, bipolar	N/O contact	1				
	lengthwise, flush with the					N/C contact	1				
	cylinder profile			3 230 V AC/DC		N/O contact	1				
				5 250 V AC/DC							
	Inserted in the slot	Magneto-resistive	SMT-8G	10 30 V DC	PNP	N/O contact	1				
	lengthwise	Magneto-resistive	SMT-8-SL	10 30 V DC	PNP	N/O contact	1				
		Magnetic reed	SME-8-SL	10 30 V AC/DC	Contacting, bipolar	N/O contact	1				
	Insertable in the slot from above	Magnetic reed	SME-8-FM	10 30 V AC/DC	Contacting, bipolar	N/O contact					
	Via accessories	Magneto-resistive	SMTO-8E	10 30 V DC	PNP	N/O contact	1				
					NPN						
		Magnetic reed	SMEO-8E	12 30 V DC	Contacting, bipolar	N/O contact	1				
				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 NPN	N/O contact	T-slot				
	Heat resistant up to 120°C	1			1	1	1				
	Inserted in the slot	Magnetic reed	SME-8S6	0 30 V AC/DC	Contacting, bipolar	N/O contact	T-slot				
	lengthwise, flush with the cylinder profile			,							
	Via accessories	Magnetic reed	SMEO-8ES6	0 30 V DC	Contacting	N/O contact	T-slot				
				0 30 V AC	$\dashv$						

## Product range overview

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

#### Exceptions



- DFM-B: SMTO-8E, SMTSO-8E, SMEO-8E, SMPO-8E cannot be used
- DHDS: SME-8M can only be used on  $\emptyset$  50
- DHPS: SME-8M can only be used on Ø 20 ... 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 Ø 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-1 0/16: 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



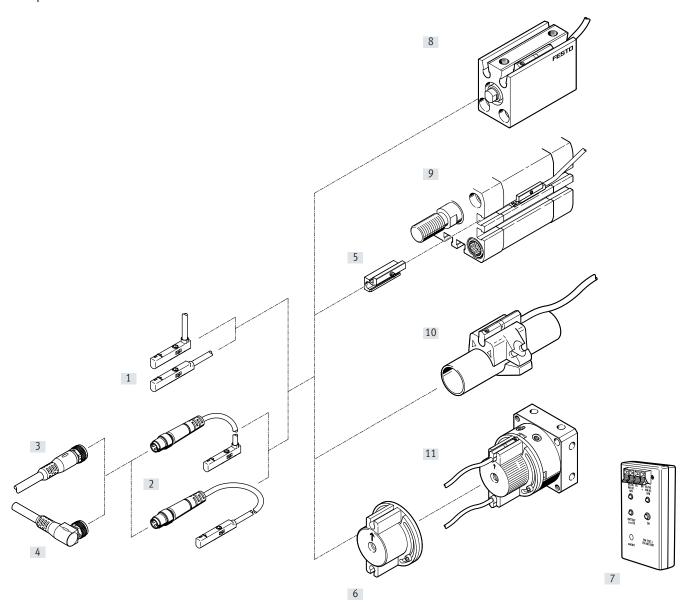
Suitable

Example: CDC



Not suitable

# Peripherals overview



Moun	ing attachments and accessories	→ Page/ Internet
Proxin	nity sensor	
[1]	SME-10MOE, with cable	6
[2]	SME-10MM, with cable and plug	6
	cting cables	12
[3]	Connecting cable NEBU-MG	13
<b>Conne</b> [3] [4]		13   13
[3] [4]	Connecting cable NEBU-MG	
[3] [4]	Connecting cable NEBU-MG Connecting cable NEBU-MW	

Mounti	Mounting attachments and accessories						
Access	Accessories						
[7]	Sensor tester SM-TEST-1	13					
-	Positioning element SMM-10	12					
-	Clip SMBK-10	13					
-	Inscription label ASLR	13					
_	Safety clip NEAU	13					
Drives							
[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	
003	Sensor version
М	
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

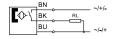
007		
2,5		
0,3		
008	Display	
L	LED	
009	Cable outlet	
Q	Transverse	
L	Longitudinal	
010	Cable identification	
	With label holder	
N	Without label holder	
011	Connection technology	
OE	Open end	
M8	M8, snap-on flange	
M8D	M8, rotatable thread	
M12	M12, rotatable thread	

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

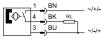
## Data sheet – Magnetic reed

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			
	c UL us - Listed (OL)			
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 → 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	
± mm			
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	[VA]	1.5	1.5
kits			
Max. switching capacity DC	[W]	9	3
Max. switching capacity DC in mounting	[W]	1.5	1.5
kits			
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
Electrical connection		Cable, 3-wire Cable with plug, 3-pin			Cable, 2-wire	Cable, 2-wire Cable with plug, 2-pin			
			M8x1	M8x1	M12x1	]	M8x1	M8x1	M12x1
			Rotatable	Snap-on flange	Rotatable	]	Rotatable	Snap-on flange	Rotatable
			thread		thread		thread		thread
Outlet direction of connection		In-line							
		Lateral							
Cable test conditions		Energy chain: 5	million cycles, b	ending radius 28	mm				
			Torsional resistance: 300,000 cycles, ±270°/0.1 m						
		Resistance to be	nding: to Festo	standard; test con	ditions on requ	est			
Cable length	[m]	0.2 10							
Cable characteristic	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	Immission/emission								
Ambient temperature with flexible cable installation	[°C]	-20 +70							
Degree of protection		IP65							
		IP68							

#### 

N/O contact			
	Pin	Wire colour	Allocation
4	1	Brown	+
1 + + 3	3	Blue	_
	4	Black	Output

Pin allocation to EN 6094 M12x1, 2-pin N/O contact	47-5-2		
	Pin	Wire colour	Allocation
	1	Brown	+
+ 1	4	Black	Output
+ 4			

M12x1, 3-pin N/O contact			
	Pin	Wire colour	Allocation
	1	Brown	+
3 (+ +)1	3	Blue	_
+ + 1	4	Black	Output
4			

## Data sheet - Magnetic reed

#### Dimensions Download CAD data → www.festo.com SME-10M-...-L, in-line connection direction 2 6 L1 L2 L1 8 [1] Yellow LED [5] Cable with open end [7] Plug M8x1, rotatable thread L1 Cable length [2] SME-10M [6] Plug M8x1, snap-on flange [8] Plug M12x1 Inscription label holder [3] Connecting cable [4] В1 D1 D2 D3 Н1 L2 L6 Туре L3 L4 L5 L7 **=**C SME-10M-...-OE 50 50 2.15 4.6 26.6 24.6 23 1.5 SME-10M-...-M8D M8x1 8.5 32.7 SME-10M-...-M8 M8x1 9.6 41.1

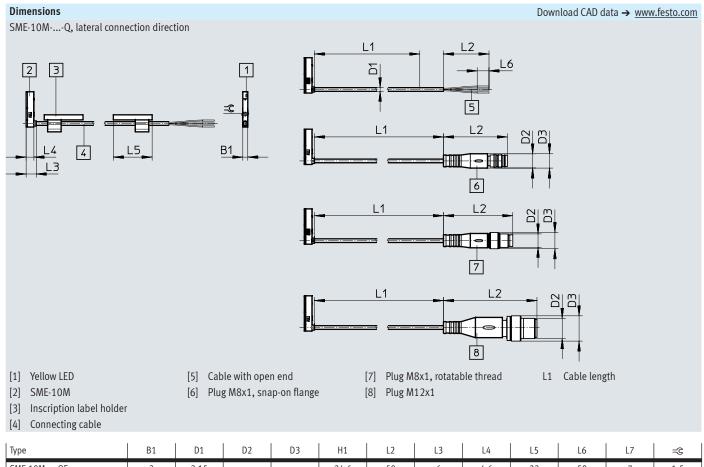
55.5

SME-10M-...-M12

M12x1

15

## Data sheet - Magnetic reed



SME-10MOE	3	2.15		-	24.6	50	6	4.6	23	50	7	1.5
SME-10MM8D			M8x1	8.5		32.7					-	
SME-10MM8			M8x1	9.6		41.1					-	
SME-10MM12			M12x1	15		55.5					-	

### ★ Core product range

Ordering data							
	Switching output	Electrical connection		Cable	Weight	Part no.	Type
		Cable	Cable with plug,	length			
			rotatable thread	[m]	[g]		
	N/O contact						
	Contacting, bipolar	3-wire	-	2.5	16.8	<b>★</b> 551365	SME-10M-DS-24V-E-2.5-L-OE
The state of the s		-	M8x1, 3-pin	0.3	6.7	<b>★</b> 551367	SME-10M-DS-24V-E-0.3-L-M8D
		2-wire	-	2.5	14.6	<b>★</b> 551369	SME-10M-ZS-24V-E-2.5-L-0E

Festo core product range

Generally ready for dispatch from the factory within 24 hours

Generally ready for dispatch from the factory within 5 days

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

# Data sheet – Magnetic reed

Ordering data												
	Switching output	Electrical connection		Cable	Weight	Part no.	Туре					
		Cable	Cable with plug,	length								
			rotatable thread	[m]	[g]							
n	N/O contact											
	Contacting, bipolar	3-wire	-	2.5	16.8	551366	SME-10M-DS-24V-E-2.5-Q-0E					
		_	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-0E					

# Ordering data – Modular product system, magnetic reed

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

## Accessories

#### **Mounting SMBN-10**

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

Material:

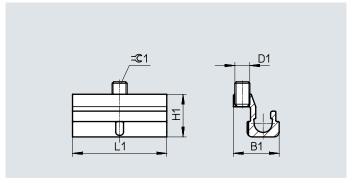
Rail: Anodised wrought aluminium

alloy

Screws: High-alloy stainless steel

Note on materials: Free of copper and PTFE RoHS-compliant





Dimensions and ordering data										
For piston Ø	D1	B1	H1	L1	<b>=</b> ©1	Part no.	Туре			
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

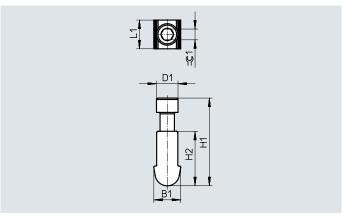
Materials:

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.	Туре	PU <sup>2)</sup>
3.75	3.0	12.23	7.6	4.0	1.5	3	547942	SMM-10	10

<sup>1)</sup> 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

Packaging unit

## Accessories

Ordering data – Cor	nnecting cables				Data sheets → Internet: nebu
	Туре	Number of wires	Cable length [m]	Part no.	Type
Socket M8x1, 3-pin					
	For SMT/SME-10	3	2.5	<b>★</b> 541333	NEBU-M8G3-K-2.5-LE3
OF THE STATE OF TH			5	<b>★</b> 541334	NEBU-M8G3-K-5-LE3
	For SMT/SME-10	3	2.5	<b>★</b> 541338	NEBU-M8W3-K-2.5-LE3
			5	<b>★</b> 541341	NEBU-M8W3-K-5-LE3

Ordering data – Mounting components				
	For Ø	Description	Part no.	Туре
	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.	Туре	PU <sup>1)</sup>
	M8	Protects "equipment that is not intrinsically safe" in zones 2 and 22 against simple disconnection	548067	NEAU-M8-GD	1
	M12	ATEX category: gas: II 3G / dust: II 3D	548068	NEAU-M12-GD	1

<sup>1)</sup> Packaging unit

Ordering data – Sensor testers				
	Description		Туре	
11 0 0 0 12 12 12 12 12 12 12 12 12 12 12 12 12	Testing the functionality of proximity sensors using the integrated voltage supply     Adjusting the proximity switches on the cylinder	158481	SM-TEST-1	

Ordering data – Inscription labels				
	Size	Part no.	Туре	PU <sup>1)</sup>
	23x4 mm	541598	ASLR-L-423	34

<sup>1)</sup> Packaging unit

## **Festo - Your Partner in Automation**





1 Festo Inc.

5300 Explorer Drive Mississauga, ON L4W 5G4 Canada

### **Festo Customer Interaction Center**

Tel: 1877 463 3786 Fax: 1877 393 3786



### 2 Festo Pneumatic

Av. Ceylán 3, Col. Tequesquináhuac 54020 Tlalnepantla, Estado de México

### **Multinational Contact Center**

01 800 337 8669



#### 3 Festo Corporation

1377 Motor Parkway Suite 310 Islandia, NY 11749



#### **Regional Service Center**

7777 Columbia Road Mason, OH 45040

### **Festo Customer Interaction Center**

1 800 993 3786 1 800 963 3786 customer.service.us@festo.com

Connect with us









