



- Switch output contactless or via reed contacts
- Wide range of mounting and connection options
- Heat, welding field and corrosion resistant designs
- Switching status display via LED

Specified types in accordance with ATEX directive for potentially explosive atmospheres

→ www.festo.com/en/ex

Proximity sensors

Key features



General information

<p>Festo's proximity sensors are position sensors specially adapted and optimised for use with Festo cylinders. They are mounted on cylinders either directly or by means of special mounting kits and offer users the advantage of being able to</p>	<p>obtain from a single source an optimally harmonised system which requires only simple mounting components for assembly. The proximity sensors operate in conjunction with a permanent</p>	<p>magnet, matched to the overall system and integrated into the piston of the drive unit concerned. All drives provided by Festo with the designation "A" are equipped with a permanent magnet of this kind.</p>	<p>The proximity sensors are adjusted mechanically on the cylinder in question and locked into the desired position. As soon as the cylinder piston returns to this position, the switching signal status changes.</p>
---	--	---	--

Variants

Inductive proximity sensors SMT

<p>Inductive proximity sensors SMT consist of an oscillator circuit. Current flowing through this circuit changes when a magnetic field approaches.</p>	<p>This change generates a switching signal. Proximity sensors SMT are used</p>	<p>mainly in applications where they are connected to a controller by</p>	<p>means of which their switching signals are processed.</p>
---	---	---	--

Contacting proximity sensors SME

<p>Contacting proximity sensors SME consist of a reed switch whose contacts close when a magnetic field approaches, thus generating a switching signal.</p>	<p>Proximity sensors SME are used mainly in applications where it is necessary to switch high load currents (e.g. for the direct control of</p>	<p>electrical consuming devices). In applications involving large capacitive loads or long cable</p>	<p>lengths (over approx. 7.5 m), a protective circuit (→ 1 / 10.2-3) must be provided.</p>
---	---	--	--

Welding field immune proximity sensors SMTSO

<p>Welding field immune proximity sensors SMTSO work in the same way as inductive sensors SMT, but with the additional feature that the</p>	<p>switching signal is "frozen" as soon as the proximity sensor detects an alternating magnetic field. This</p>	<p>prevents incorrect switching during welding operations. Proximity sensors SMTSO are used on welding</p>	<p>machines where welding operations generate strong alternating magnetic fields.</p>
---	---	--	---

Pneumatic proximity sensors SMPO

<p>Pneumatic proximity sensors SMPO consist of a 3/2-way valve which is actuated when a magnetic field</p>	<p>approaches. A pneumatic output signal can be activated when the pneumatic proximity sensor is</p>	<p>switched. Proximity sensors SMPO are used in systems which are</p>	<p>capable of directly processing pneumatic output signals.</p>
--	--	---	---

Proximity sensors SMH for grippers

<p>Proximity sensors SMH are position sensors which have been specially developed for use with Festo mini and precision grippers. A magnet integrated into the piston of the gripper generates a magnetic field whose strength varies as a function of distance. An analogue electrical</p>	<p>signal is generated by the proximity sensor in proportion to the strength of the magnetic field, and is converted into digital signals by the electronic evaluation unit. Proximity sensors SMH allow 3 gripper jaw positions to be detected with only one sensor and the associated</p>	<p>evaluation unit SMH-AE1. This evaluation unit is essential when a proximity sensor SMH is used. It allows 3 switching points to be set independently by means of potentiometers and tapped as electrical signals at the 5-pin M12 plug.</p>	<p>Example: Two of the switching points can be set in such a way that 2 objects of different sizes can be detected. The third switching point can be used to detect a fault (no object in gripper).</p>
---	---	--	---

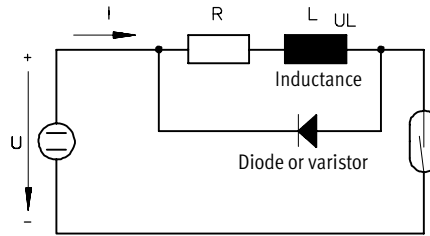
Proximity sensors

Key features

Protective circuit for contacting proximity sensors SME

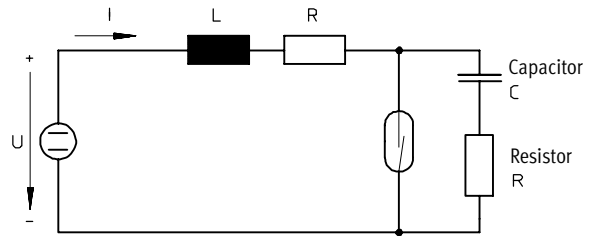
Inductive loads

When inductive loads are switched, a high voltage peak is produced at the moment of switch-off. For this reason, proximity sensors must be provided with a protective circuit. The protective circuit can consist either of an appropriate diode or varistor (→ circuit diagram). The electrical values of these components depend on the power component which is connected in series (e.g. relay, contactor, etc.). If a relay or auxiliary contactor is switched, allowance must be made for the technical data of the proximity sensor and of the relay or auxiliary contactor. With R-C circuits, there is no need for an additional resistor to protect against inductive loads.



Capacitive loads

When inductive loads are switched or cables longer than approx. 7.5 m are used, a high current peak occurs at the moment of switch-on. These current peaks can lead to severe damage to mechanical switching devices. For this reason, proximity sensors must be provided with a protective circuit. To protect against current peaks, a protective resistor R must be installed in the power supply line (brown cable) as close as possible to the proximity sensor. This protective resistor reduces the load current I. Ensure therefore during sizing that the minimum current necessary for reliable status detection is available (allow for the technical data of the connected load).



Note

The pick-up current rating of a relay or auxiliary contactor is much higher (8 to 10 times higher) than the holding power rating. For this reason, controller sizing should be based primarily on the pick-up power rating.

Cylinders with magnetically actuated proximity sensors should not be installed in places where strong magnetic fields (e.g. resistance welding machines) are present. Welding field immune proximity sensors SMTSO should be used instead.

The distance between a proximity sensor and the nearest outer wall of a cylinder with a permanent magnet integrated in the piston must be at least 100 mm if no special screening is used.

Proximity sensors

Selection aid



Drive	Remarks	SMT-8 CRSMT-8 SME-8 SMPO-8	SMT-10 SME-10	SMT0-4U SME0-4U CRSME0-4	SMT0-1 SMT0-6 SME0-1 SMPO-1	SMH-S1
Standards-based cylinders						
Standard cylinders DSNU, ESNU	∅ 8 ... 25 mm	■	■	■	■	-
Standard cylinders DSN, ESN	∅ 8 ... 25 mm	■	■	■	■	-
Standard cylinders DNCB		■	-	-	-	-
Standard cylinders DNC		■	-	-	-	-
Standard cylinders DNG		-	-	-	■	-
Standard cylinders DNU		-	-	-	■	-
Standard cylinders ADN		■	-	-	-	-
Piston cylinders						
Compact cylinders ADVU, AEVU		■	-	-	-	-
Short-stroke cylinders ADVC, AEVC	∅ 6 ... 25 mm	-	■	-	-	-
	∅ 32 ... 100 mm	■	-	-	-	-
Flat cylinders EZH-10/40-40-A-B		■	-	-	-	-
Flat cylinders DZF		■	-	-	-	-
Flat cylinders DZH	∅ 16 ... 25 mm	■	-	-	-	-
	∅ 32 ... 63 mm	-	-	-	■	-
Round cylinders DSNU, ESNU	∅ 32 ... 63 mm	■	■	■	■	-
Round cylinders DSW, ESW		■	■	■	■	-
Round cylinders DSEU, ESEU		■	■	■	■	-
Multimount cylinders DMM, EMM		■	-	-	-	-
Round cylinders CRDG		-	-	■	-	-
Round cylinders CRDSW		■	■	■	■	-
Standard cylinders CRHD		■	-	-	-	-
Standard cylinders CRDSNU		-	-	■	-	-
Standard cylinders CRDNG		-	-	■	-	-
Standard cylinders CRDNGS		-	-	■	-	-
Rodless cylinders						
Linear drives DGC		-	■	-	-	-
Linear drives DGP, DGPL		■	-	-	-	-
Linear drives SLG		-	■	-	-	-
Linear drives DGO		-	-	■	-	-
Linear drives SLM		■	-	-	-	-
Semi-rotary drives						
Swivel modules DSM	∅ 6 ... 10 mm	-	■	-	-	-
Semi-rotary drives DRQ	∅ 16 ... 32 mm	■	-	-	-	-
	∅ 40 ... 100	-	-	-	■	-
Semi-rotary drives DRQD	∅ 6 ... 12 mm	-	■	-	-	-
	∅ 16 ... 32 mm	■	-	-	-	-
Technical data → Page		1 / 10.2-6	1 / 10.2-42	1 / 10.2-58	1 / 10.2-72	1 / 10.2-90

Proximity sensors






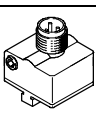
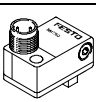
Selection aid

FESTO

Drive	Remarks	SMT-8 CRSMT-8 SME-8 SMPO-8	SMT-10 SME-10	SMT0-4U SME0-4U CRSME0-4	SMT0-1 SMT0-6 SME0-1 SMPO-1	SMH-S1
Function-oriented drives						
Stopper cylinders STA, STAF		■	-	-	-	-
Linear/swivel clamps CLR		■	-	-	-	-
Swivel/linear units DSL		■	-	-	-	-
Drives with linear guide						
Mini slides SLS, SLF, SLT		-	■	-	-	-
Twin cylinders SPZ		■	-	-	-	-
Slide units SLZ		■	-	-	-	-
Guided cylinders DFP	∅ 6 ... 16 mm	-	■	-	-	-
	∅ 25 ... 80 mm	■	-	-	-	-
Mini guided drive units DFC		-	■	-	-	-
Guided drive units DFM		■	-	-	-	-
Linear units SLE	∅ 32 ... 50 mm	■	-	-	-	-
Twin cylinders DPZC		-	■	-	-	-
Twin cylinders DPZ		■	-	-	-	-
Handling units						
Linear modules HMP		■	-	-	-	-
Linear modules HMPL		■	-	-	-	-
Handling modules HSP		■	-	-	-	-
Feed separators HPV		■	-	-	-	-
Three-point grippers HGD	∅ 32, 50 mm	■	-	-	-	-
Parallel grippers HGP	∅ 6 mm	-	-	-	-	■
	∅ 10 ... 35 mm	■	-	-	-	-
Precision parallel grippers HGPP	∅ 12 ... 32 mm	-	-	-	-	■
T-slot grippers HGPT	∅ 16 ... 63 mm	-	■	-	-	-
Three-point grippers HGD	∅ 16 mm	-	-	-	-	■
Angle grippers HGW	∅ 10 mm	-	-	-	-	■
	∅ 16 ... 40 mm	■	-	-	-	-
Radial grippers HGR	∅ 10 mm	-	-	-	-	■
	∅ 16 ... 40 mm	■	-	-	-	-
Cushioning components						
Stop elements YSRWJ		■	-	-	-	-
Electrical positioning systems						
Toothed belt axes DGE-ZR		■	-	-	-	-
Spindle axes DGE-SP		■	-	-	-	-
System components						
Heavy-duty guides HD		■	-	-	-	-
Actuators						
Copac linear actuators DLP-A		■	-	-	-	-
Technical data → Page		1 / 10.2-6	1 / 10.2-42	1 / 10.2-58	1 / 10.2-72	1 / 10.2-90



Proximity sensors for slot type 8

Product range overview

Measuring principle	Design	Type	Mounting	Switching element function		Switch output	Electrical connection	
				NO contact	NC contact		Cable	Plug
Magneto-resistive	Operating voltage range 10 ... 30 V DC							
		SMT-8F  New	Insertable from above	■	■	PNP	3-wire	-
				■	-		-	M8x1, 3-pin
				■	-		-	M12x1, 3-pin
				■	-	NPN	3-wire	M8x1, 3-pin
				■	-	-	2-wire	-
		SMT-8	Insertable from end, flush with the cylinder profile	■	-	PNP	3-wire	M8x1, 3-pin
				■	-	NPN	3-wire	M8x1, 3-pin
				■	-	PNP	3-wire	-
		CRSMT-8 Corrosion resistant		■	-			
		SMT-8-SL  New	Insertable from end	■	-	PNP	-	M8x1, 3-pin
		SMTO-8E	With accessories	■	-	PNP	-	M8x1, 3-pin
				■	-	PNP	-	M12x1, 3-pin
				■	-	NPN	-	M8x1, 3-pin
				■	-		-	M12x1, 3-pin
				■	-	PNP	-	M12x1, 3-pin
				■	-	NPN	-	M12x1, 3-pin
		SMTSO-8E Welding field immune		■	-	PNP	-	M12x1, 3-pin
■				-	NPN	-	M12x1, 3-pin	




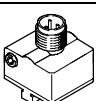

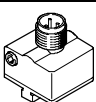
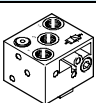
Proximity sensors for slot type 8

Product range overview

Type	Connection direction		Replacement without re-adjustment	Switching status display with LED	Free of copper, PTFE and silicone	→ Page
	In-line	Lateral				
Operating voltage range 10 ... 30 V DC						
SMT-8F  New	■	-	-	■	■	1 / 10.2-13
	■	-	-	■	■	
	■	-	-	■	■	
	■	-	-	■	■	
	■	-	-	■	■	
SMT-8	■	-	-	■	■	1 / 10.2-19
	■	-	-	■	■	
CRSMT-8 Corrosion resistant	■	-	-	■	■	1 / 10.2-21
SMT-8-SL  New	■	-	-	■	■	1 / 10.2-23
SMT0-8E	-	■	■	■	■	1 / 10.2-31
	-	■	■	■	■	
	-	■	■	■	-	
	-	■	■	■	-	
SMTSO-8E Welding field immune	-	■	■	■	-	1 / 10.2-33
	-	■	■	■	-	

Proximity sensors for slot type 8



Product range overview

Measuring principle	Design	Type	Mounting	Switching element function		Switch output	Electrical connection	
				NO contact	NC contact		Cable	Plug
Magnetic reed	Operating voltage range 0 ... 30 V AC/DC							
		SME-8F New	Insertable from above	■	■	Contacting	3-wire	–
				■	–		2-wire	M8x1, 3-pin
		SME-8	Insertable from end, flush with the cylinder profile	■	■	Contacting	3-wire	–
				■	–		2-wire	M8x1, 3-pin
		SME-8-...-S6 Heat resistant up to 120 °C		■	–		2-wire	–
		SME-8-SL New	Insertable from end	■	–	Contacting	–	M8x1, 3-pin
		SME0-8E	With accessories	■	–	Contacting	–	M8x1, 3-pin
				■	–		–	M12x1, 3-pin
		SME0-8E-...-S6 Heat resistant up to 120 °C		■	–		2-wire	–
Operating voltage range 3 ... 250 V AC/DC								
	SME-8-...-230	Insertable from end, flush with the cylinder profile	■	–	Contacting	2-wire	–	
	SME0-8E-...-230	With accessories	■	–	Contacting	–	M12x1, 2-pin	
Pneumatic	Operating pressure 2 ... 8 bar							
	SMPO-8E	With accessories	■ ¹⁾	–	–	–	–	

1) 3/2-way valve, normally closed

Proximity sensors for slot type 8

Product range overview

Type	Connection direction		Replacement without re-adjustment	Switching status display with LED	Free of copper, PTFE and silicone	→ Page
	In-line	Lateral				
Operating voltage range 0 ... 30 V AC/DC						
SME-8F  New	■	-	-	■	■	1 / 10.2-16
	■	-	-	■	■	
SME-8	■	-	-	■	■	1 / 10.2-25
	■	-	-	■	■	
SME-8-...-S6 Heat resistant up to 120 °C	■	-	-	-	-	
SME-8-SL  New	■	-	-	■	-	1 / 10.2-28
SME0-8E	-	■	■	■	-	1 / 10.2-35
	-	■	■	■	-	
SME0-8E-...-S6 Heat resistant up to 120 °C	-	■	■	-	-	
Operating voltage range 3 ... 250 V AC/DC						
SME-8-...-230	■	-	-	■	-	1 / 10.2-25
SME0-8E-...-230	-	■	■	■	-	1 / 10.2-35
Operating pressure 2 ... 8 bar						
SMPO-8E	-	■	■	_ 2)	-	1 / 10.2-38

2) Switching status is indicated by means of an LED.

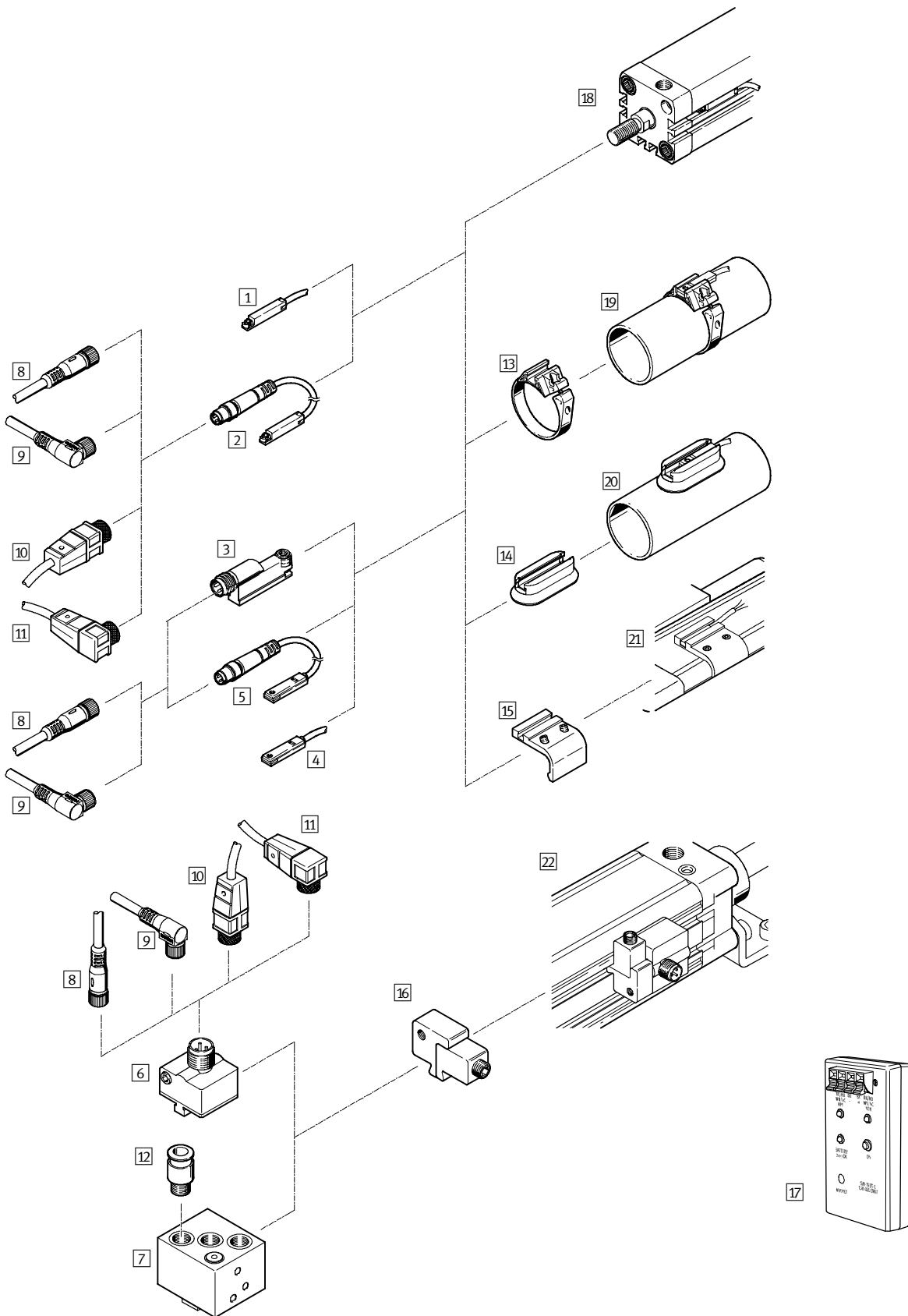
Proximity sensors for slot type 8

Peripherals overview



Drive accessories
Cylinder sensors

10.2



Proximity sensors for slot type 8

Peripherals overview

FESTO

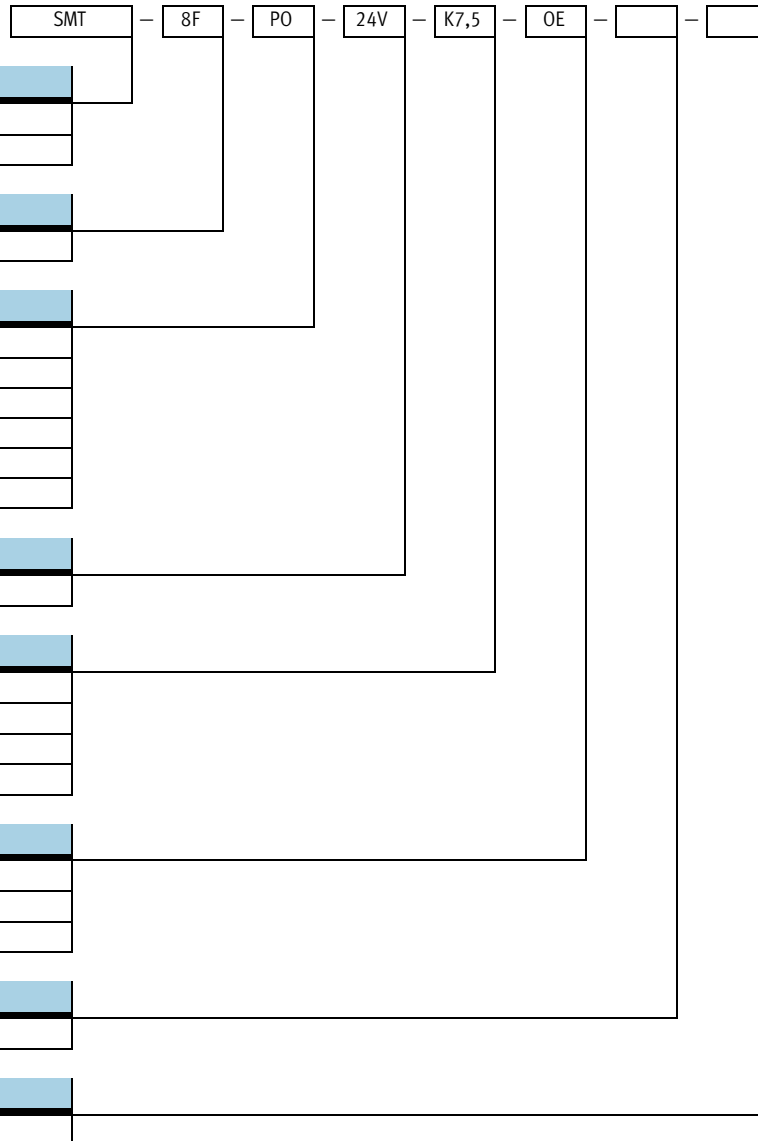
Mounting attachments and accessories			
	Brief description	→ Page	
Proximity sensors			
1	SMT-8F-...-OE SME-8F-...-OE	Magneto-resistive, with cable Magnetic reed, with cable	1 / 10.2-13 1 / 10.2-16
2	SMT-8F-...-M8D/M12 SME-8F-...-M8D/M12	Magneto-resistive, with cable and plug M8x1 or M12x1 Magnetic reed, with cable and plug M8x1 or M12x1	1 / 10.2-13 1 / 10.2-16
3	SMT-8-SL-... SME-8-SL-...	Magneto-resistive, with plug M8x1 Magnetic reed, with plug M8x1	1 / 10.2-23 1 / 10.2-28
4	SMT-8-K-... CRSMT-8-K-... SME-8-K-...	Magneto-resistive, with cable Magneto-resistive, corrosion resistant, with cable Magnetic reed, with cable	1 / 10.2-19 1 / 10.2-21 1 / 10.2-25
5	SMT-8-S-... SME-8-S-...	Magneto-resistive, with cable and plug M8x1 Magnetic reed, with cable and plug M8x1	1 / 10.2-19 1 / 10.2-25
6	SMT0-8E-... SMTSO-8E-... SME0-8E-...	Magneto-resistive, with plug M8x1 or M12x1 Magneto-resistive, welding field immune, with plug M8x1 or M12x1 Magnetic reed, with cable or with plug M8x1 or M12x1	1 / 10.2-31 1 / 10.2-33 1 / 10.2-35
7	SMPO-8E-...	Pneumatic	1 / 10.2-38
4	SMT-8-K-... CRSMT-8-K-... SME-8-K-...	Magneto-resistive, with cable Magneto-resistive, corrosion resistant, with cable Magnetic reed, with cable	
5	SMT-8-S-... SME-8-S-...	Magneto-resistive, with cable and plug M8x1 Magnetic reed, with cable and plug M8x1	
6	SMT0-8E-... SMTSO-8E-... SME0-8E-...	Magneto-resistive, with plug M8x1 or M12x1 Magneto-resistive, welding field immune, with plug M8x1 or M12x1 Magnetic reed, with cable or with plug M8x1 or M12x1	
7	SMPO-8E-...	Pneumatic	
Accessories			
8	Plug socket with cable SIM-M8-3GD-...	Straight socket, M8x1, 3-pin	1 / 10.2-100
9	Plug socket with cable SIM-M8-3WD-...	Angled socket, M8x1, 3-pin	1 / 10.2-100
10	Plug socket with cable SIM-M12-3GD-...	Straight socket, M12x1, 3-pin	1 / 10.2-100
11	Plug socket with cable SIM-M12-3WD-...	Angled socket, M12x1, 3-pin	1 / 10.2-100
12	Push-in fitting QSM-M5	For standard O.D. tubing to CETOP RP 54 P	1 / 10.2-41
13	Mounting kit SMBR	For round cylinders DSEU, ESEU, DSNU, ESNU, DSW, ESW	1 / 10.2-40
14	Mounting kit CRSMB	Corrosion resistant, for round cylinders	1 / 10.2-40
15	Mounting kit SMB-8-FENG	For standard cylinders DNC, DNCB in combination with guide unit FENG	1 / 10.2-41
16	Mounting kit SMB-8E	For drives with slot type 8	1 / 10.2-41
17	Sensor tester SM-TEST-1		1 / 10.2-99
Drives			
18	Drives with slot type 8 (T-slot)		-
19	Round cylinders	∅ 8 ... 63 mm	
20	Round cylinders	∅ 32 ... 100 mm	
21	Standard cylinders DNC, DNCB	In combination with guide unit FENG	
22	Drives with slot type 8 (T-slot)		

Drive accessories
Cylinder sensors

10.2

Proximity sensors SMT/SME-8F, for slot type 8

Type code

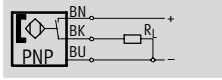


Proximity sensors SMT-8F, for slot type 8

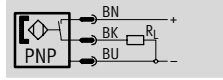
Technical data – Magneto-resistive measuring principle

Function

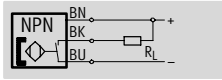
NO contact, PNP, with cable



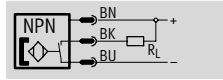
NO contact, PNP, with plug



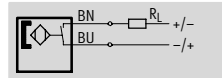
NO contact, NPN, with cable



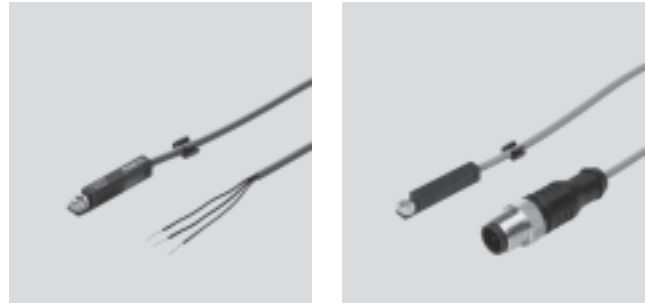
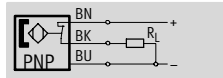
NO contact, NPN, with plug



NO contact, with 2-wire cable



NC contact, PNP, with cable



General technical data										
Switching element function		NO contact						NC contact		
Electrical data										
Switch output		PNP			NPN		-	PNP		
Electrical connection		Cable, 3-wire		Cable with plug M8x1, 3-pin	Cable with plug M12x1, 3-pin	Cable, 3-wire	Cable with plug M8x1, 3-pin	Cable, 2-wire	Cable, 3-wire	
Operating voltage range		[V DC]	10 ... 30							
Max. output current		[mA]	100							
Max. switching capacity		[W]	3							
Voltage drop		[V]	1.8			1.8	5.6	1.8		
Residual current		[mA]	≤0.1			0.1	0.8	0.1		
Protection against short circuit		Yes								
Protection against polarity reversal		For all electrical connections								
Protection class to EN 60 529		IP65/IP67								
CE symbol		89/336/EEC (EMC)	Yes							
Design										
Design		For T-slot								
Type of mounting		Clamped in T-slot, insertable from above								
Reproducibility of switching point ¹⁾		[mm]	±0.1							
Switch-on time		[ms]	≤0.2			≤0.2	≤1.6	0.5		
Switch-off time		[ms]	≤11			≤7	1.6	11		
Switching status display		Yellow LED								
Cable length		[m]	2.5	5.0	0.3	0.3	2.5	0.3	2.5	7.5
Mounting position		Any								
Materials		Housing	Polyamide							
		Cable sheath	Polyurethane							
Note on material		Free of copper, PTFE and silicone								
Product weight		[g]	30	90	10	20	30	10	24	90

1) Only applicable to drives secured against rotation

Proximity sensors SMT-8F, for slot type 8

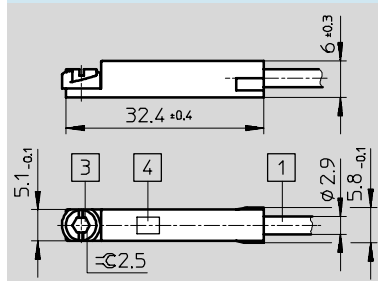
Technical data – Magneto-resistive measuring principle

Operating and environmental conditions						
Electrical connection	Cable, 3-wire		Cable, 2-wire		Plug	
Cable installation	Fixed	Flexible	Fixed	Flexible	Fixed	Flexible
Ambient temperature [°C]	-20 ... +60	-5 ... +60	-25 ... +70	-5 ... +70	-20 ... +60	-5 ... +60
Corrosion resistance class CRC ¹⁾	4		4		2	

- 1) Corrosion resistance class 2 according to Festo standard 940 070
 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.
 Corrosion resistance class 4 according to Festo standard 940 070
 Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

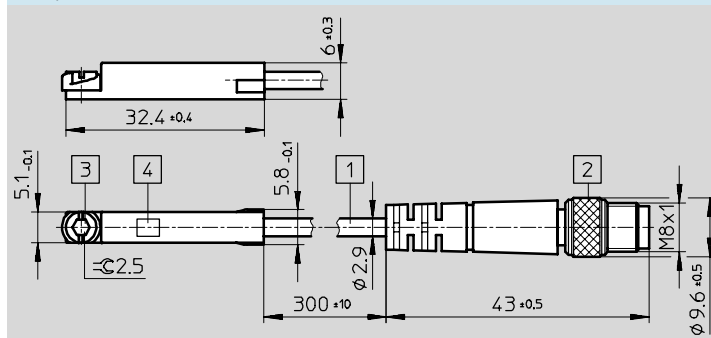
Dimensions Download CAD data → www.festo.com/en/engineering

With cable



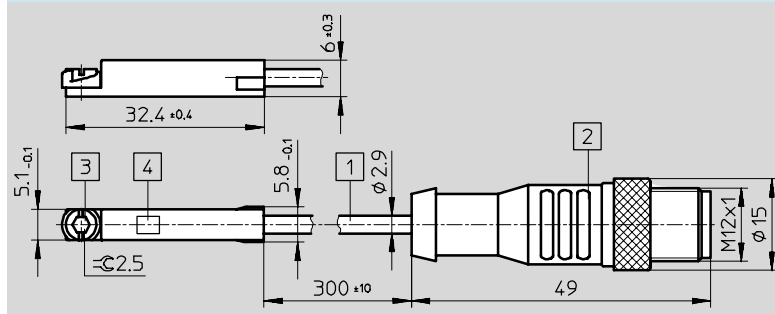
- 1 Connecting cable
- 3 Clamping component
- 4 Yellow LED

With plug M8



- 1 Connecting cable
- 2 Plug suitable for plug socket with cable SIM-M8-...
- 3 Clamping component
- 4 Yellow LED

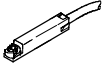
With plug M12



- 1 Connecting cable
- 2 Plug suitable for plug socket with cable SIM-M12-...
- 3 Clamping component
- 4 Yellow LED

Proximity sensors SMT-8F, for slot type 8

Technical data – Magneto-resistive measuring principle

Ordering data									
	Switch output	Electrical connection			Cable length [m]	Part No.	Type	PU ¹⁾	
		Cable	Plug M8	Plug M12					
	NO contact								
	PNP	3-wire	-	-	2.5	525 898	SMT-8F-PS-24V-K2,5-OE	1	
						535 199	SMT-8F-PS-24V-K2,5-OE-X	50	
					5.0	538 486	SMT-8F-PS-24V-K5,0-OE	1	
		-	3-pin	-	-	0.3	525 899	SMT-8F-PS-24V-K0,3-M8D	1
							535 200	SMT-8F-PS-24V-K0,3-M8D-X	50
						525 900	SMT-8F-PS-24V-K0,3-M12	1	
	NPN	3-wire	-	-	2.5	525 909	SMT-8F-NS-24V-K2,5-OE	1	
					0.3	525 910	SMT-8F-NS-24V-K0,3-M8D	1	
		-	3-pin	-	-	2.5	525 908	SMT-8F-ZS-24V-K2,5-OE-EX	1
	NC contact								
	PNP	3-wire	-	-	7.5	525 911	SMT-8F-PO-24V-K7,5-OE	1	

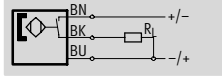
1) Packaging unit quantity

Proximity sensors SME-8F, for slot type 8

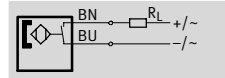
Technical data – Magnetic reed measuring principle

Function

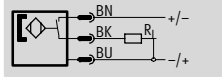
NO contact, with 3-wire cable



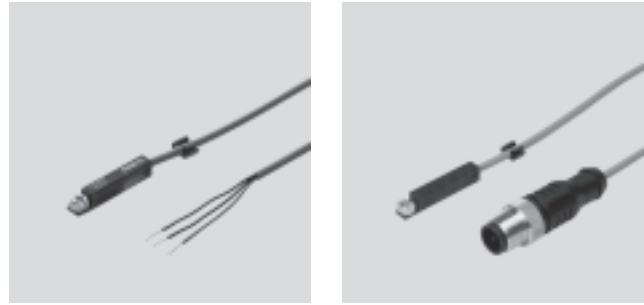
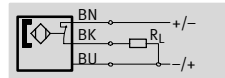
NO contact, with 2-wire cable



NO contact, 3-wire, with plug



NC contact, with 3-wire cable



General technical data			NO contact			NC contact	
Switching element function			NO contact			NC contact	
Electrical data							
Switch output			Contacting, bipolar				
Electrical connection			Cable, 3-wire	Cable, 3-wire	Cable with plug M8x1, 3-pin	Cable, 2-wire	Cable, 3-wire
Operating voltage range	D.C. voltage	[V DC]	10 ... 30			5 ... 30	10 ... 30
	A.C. voltage	[V AC]	10 ... 30			5 ... 30	10 ... 30
Max. output current		[mA]	500			100	80
Max. switching capacity	D.C. voltage	[W]	10			3	1.5
	A.C. voltage	[VA]	10			3	1.5
Voltage drop		[V]				3.5	4
Protection against short circuit			No				
Protection against polarity reversal			No			For all electrical connections	No
Protection class to EN 60 529			IP65/IP67				
CE symbol			89/336/EEC (EMC)				
			Yes				
Design							
Design			For T-slot				
Type of mounting			Clamped in T-slot, inserted from above				
Reproducibility of switching point ¹⁾		[mm]	±0.1				
Switch-on time		[ms]	≤0.5			0.6	2
Switch-off time		[ms]	0.03			0.05	0.2
Switching status display			Yellow LED				
Cable length		[m]	2.5	5.0	0.3	2.5	7.5
Mounting position			Any				
Materials		Housing	Polyamide				
		Cable sheath	Polyurethane				
Note on material			Free of copper, PTFE and silicone				
Product weight		[g]	30	60	10	27	

1) Only applicable to drives secured against rotation

Operating and environmental conditions					
Electrical connection		Cable		Plug	
Cable installation		Fixed	Flexible	Fixed	Flexible
Ambient temperature		[°C]		-20 ... +60	-5 ... +60
Corrosion resistance class CRC ¹⁾		4		2	

1) Corrosion resistance class 2 according to Festo standard 940 070
 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.
 Corrosion resistance class 4 according to Festo standard 940 070
 Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Proximity sensors SME-8F, for slot type 8

Technical data – Magnetic reed measuring principle

Dimensions Download CAD data → www.festo.com/en/engineering

With cable

- 1 Connecting cable
- 3 Clamping component
- 4 Yellow LED

With plug M8

- 1 Connecting cable
- 2 Plug suitable for plug socket with cable SIM-M8-...
- 3 Clamping component
- 4 Yellow LED

With plug M12

- 1 Connecting cable
- 2 Plug suitable for plug socket with cable SIM-M12-...
- 3 Clamping component
- 4 Yellow LED

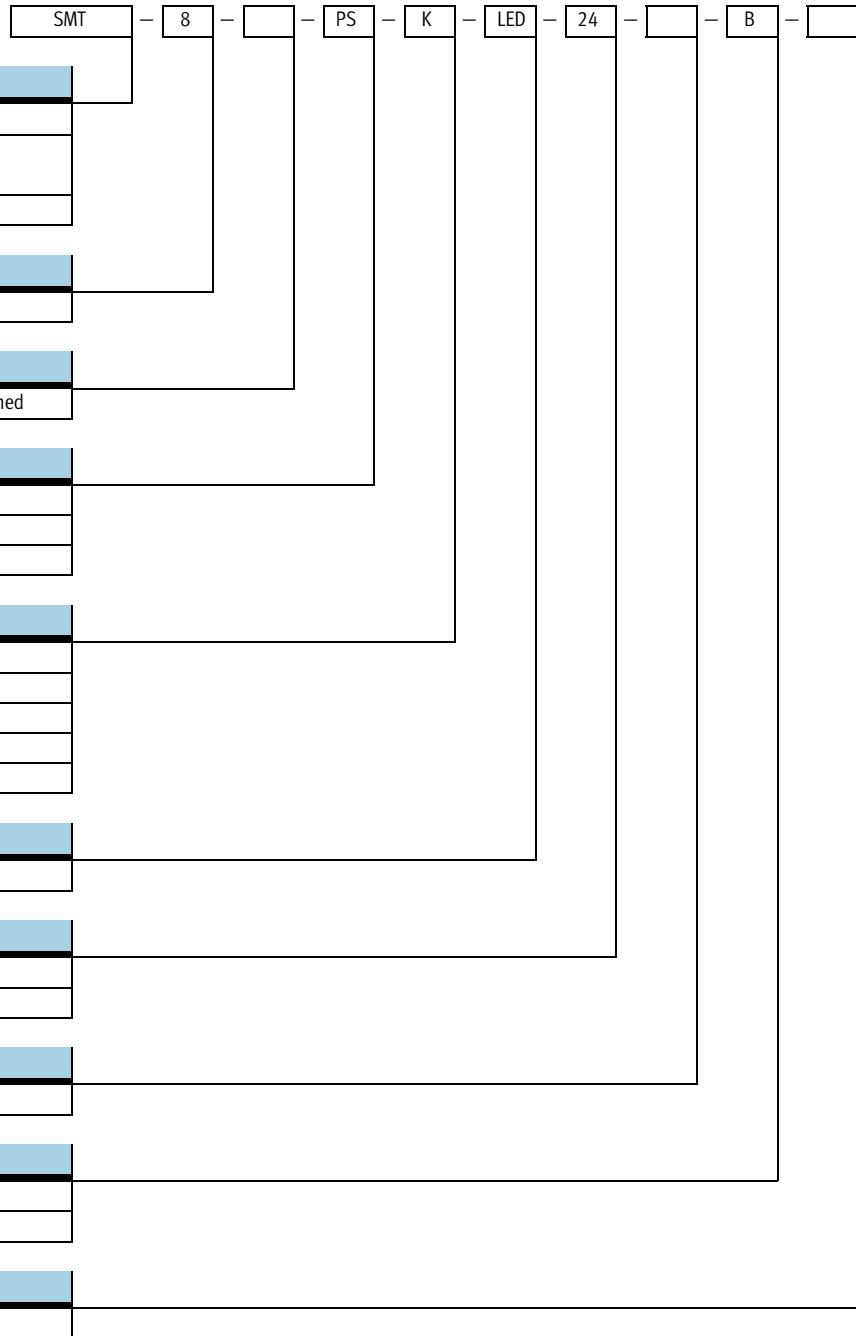
Ordering data		Cable length [m]	Part No.	Type	PU ¹⁾	
Electrical connection	Plug M8					
	NO contact		2.5	525 895	SME-8F-DS-24V-K2,5-OE	1
	3-wire	–		535 197	SME-8F-DS-24V-K2,5-OE-X	50
	–	3-pin	0.3	525 897	SME-8F-DS-24V-K5,0-OE	1
	–	–	–	525 896	SME-8F-DS-24V-K0,3-M8D	1
	–	–	–	535 198	SME-8F-DS-24V-K0,3-M8D-X	50
	2-wire	–	2.5	525 907	SME-8F-ZS-24V-K2,5-OE	1
NC contact						
3-wire	–	7.5	525 906	SME-8F-DO-24V-K7,5-OE	1	

1) Packaging unit quantity

Core Range

Proximity sensors SMT/SME-8, for slot type 8

Type code



Type	
SMT	Proximity sensor, magneto-resistive
CRSMT	Proximity sensor, magneto-resistive, corrosion resistant
SME	Proximity sensor, magnetic reed

Design	
8	For T-slot, insertable from end

Electrical connection	
SL	Plug-in housing longitudinally attached

Switching element function, switch output	
PS	NO contact, 3-wire, PNP
NS	NO contact, 3-wire, NPN
O	NC contact, 3-wire

Electrical connection, cable length	
K	Cable, 2.5 m or 7.5 m
K2,5	Cable, 2.5 m
K5	Cable, 5.0 m
KL	Cable, 2.5 m
S	Plug M8x1 with cable, 0.3 m

Switching status display	
LED	Yellow LED

Rated operating voltage	
24	24 V DC
230	230 V AC

Variant	
S6	Heat resistant

Generation	
	Series A
B	Series B

Packaging unit	
X	Quantity of 50

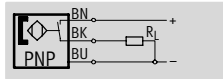
Proximity sensors SMT-8, for slot type 8

Technical data – Magneto-resistive measuring principle

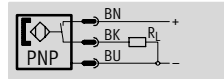


Function

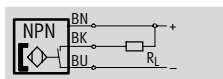
NO contact, PNP, with cable



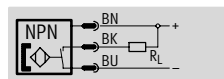
NO contact, PNP, with plug



NO contact, NPN, with cable



NO contact, NPN, with plug



General technical data						
Switching element function	NO contact					
Electrical data						
Switch output	PNP			NPN		
Electrical connection	Cable, 3-wire	Cable, 3-wire	Cable with plug M8x1, 3-pin	Cable, 3-wire	Cable with plug M8x1, 3-pin	
Operating voltage range	[V DC]	10 ... 30				
Max. output current	[mA]	100				
Max. switching capacity	[W]	3				
Voltage drop	[V]	1.8				
Residual current	[mA]	≤0.01				
Protection against short circuit	Yes					
Protection against polarity reversal	For all electrical connections					
Protection class to EN 60 529	IP65/IP67					
CE symbol	89/336/EEC (EMC)	Yes				
Design						
Design	For T-slot					
Type of mounting	Clamped in T-slot, insertable from end, flush with the cylinder profile					
Reproducibility of switching point ¹⁾	[mm]	±0.2				
Switch-on time	[ms]	≤0.2				
Switch-off time	[ms]	≤0.5				
Switching status display	Yellow LED					
Cable length	[m]	2.5	5.0	0.3	2.5	0.3
Mounting position	Any					
Materials	Housing	Polyurethane				
	Cable sheath	Polyurethane				
Note on material	Free of copper, PTFE and silicone					
Product weight	[g]	30	60	10	30	10

1) Only applicable to drives secured against rotation

Operating and environmental conditions					
Electrical connection	Cable, 3-wire		Cable with plug		
Cable installation	Fixed	Flexible	Fixed	Flexible	
Ambient temperature	[°C]	-20 ... +60	-5 ... +60	-20 ... +60	-5 ... +60
Corrosion resistance class CRC ¹⁾	4		2		

1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

Corrosion resistance class 4 according to Festo standard 940 070

Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Proximity sensors SMT-8, for slot type 8

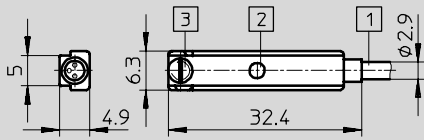
Technical data – Magneto-resistive measuring principle



Dimensions

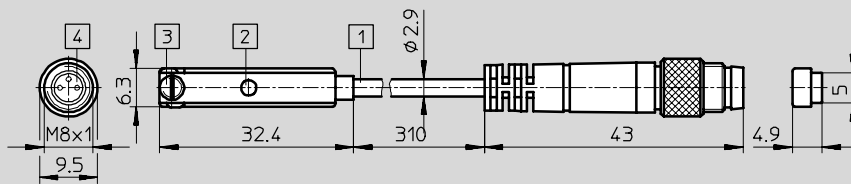
Download CAD data → www.festo.com/en/engineering

With cable



- 1 Connecting cable
- 2 Yellow LED
- 3 Clamping component

With plug M8



- 1 Connecting cable
- 2 Yellow LED
- 3 Clamping component
- 4 Plug suitable for plug socket with cable SIM-M8-...

Ordering data

	Switch output	Electrical connection		Cable length [m]	Part No.	Type	PU ¹⁾
		Cable	Plug M8				
	NO contact						
	PNP	3-wire	-	2.5	175 436	SMT-8-PS-K-LED-24-B	1
				5.0	175 434	SMT-8-PS-K5-LED-24-B	1
		-	3-pin	0.3	175 484	SMT-8-PS-S-LED-24-B	1
					535 196	SMT-8-PS-S-LED-24-B-X	50
	NPN	3-wire	-	2.5	171 180	SMT-8-NS-K-LED-24-B	1
-		3-pin	0.3	171 181	SMT-8-NS-S-LED-24-B	1	

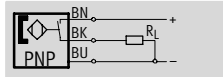
1) Packaging unit quantity

Proximity sensors CRSMT-8, for slot type 8

Technical data – Magneto-resistive measuring principle

Function

NO contact, PNP, with cable, corrosion resistant



General technical data		
Switching element function	NO contact	
Electrical data		
Electrical connection	Cable, 3-wire	Cable, 3-wire
Switch output	PNP	
Operating voltage range	[V DC]	10 ... 30
Max. output current	[mA]	100
Max. switching capacity	[W]	3
Voltage drop	[V]	1.8
Residual current	[mA]	≤0.01
Protection against short circuit	Yes	
Protection against polarity reversal	For all electrical connections	
Protection class to EN 60 529	IP65/IP67	
CE symbol	89/336/EEC (EMC)	Yes
Design		
Design	For T-slot	
Type of mounting	Clamped in T-slot, insertable from end, flush with the cylinder profile	
Reproducibility of switching point ¹⁾	[mm]	±0.2
Switch-on time	[ms]	≤0.2
Switch-off time	[ms]	≤0.5
Switching status display	Yellow LED	
Cable length	[m]	2.5 5.0
Mounting position	Any	
Materials	Housing	Polyurethane
	Cable sheath	Polyurethane
Note on material	Free of copper, PTFE and silicone	
Product weight	[g]	30 60

1) Only applicable to drives secured against rotation

Operating and environmental conditions		
Electrical connection	Cable, 3-wire	
Cable installation	Fixed	Flexible
Ambient temperature	[°C]	-20 ... +60 -5 ... +60
Corrosion resistance class CRC ¹⁾	4	

1) Corrosion resistance class 4 according to Festo standard 940 070
 Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Proximity sensors CRSMT-8, for slot type 8

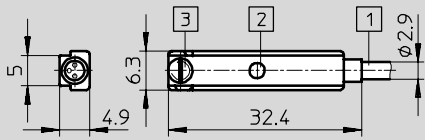
Technical data – Magneto-resistive measuring principle



Dimensions

Download CAD data → www.festo.com/en/engineering

With cable



- 1 Connecting cable
- 2 Yellow LED
- 3 Clamping component

Ordering data

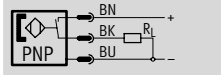
	Switch output	Electrical connection	Cable length [m]	Part No.	Type
		Cable			
	NO contact				
	PNP	3-wire	2.5	525 563	CRSMT-8-PS-K2,5-LED-24
			5.0	525 564	CRSMT-8-PS-K5-LED-24

Proximity sensors SMT-8-SL, for slot type 8

Technical data – Magneto-resistive measuring principle

Function

NO contact, PNP, with plug



General technical data	
Switching element function	NO contact
Electrical data	
Switch output	PNP
Electrical connection	Plug M8x1, 3-pin
Operating voltage range	[V DC] 10 ... 30
Max. output current	[mA] 200
Max. switching capacity	[W] 6
Voltage drop	[V] 1.8
Residual current	[mA] 0.1
Protection against short circuit	Yes
Protection against polarity reversal	For all electrical connections
Protection class to EN 60 529	IP65/IP67
CE symbol	89/336/EEC (EMC) Yes
Design	
Design	For T-slot
Type of mounting	Clamped in T-slot, insertable from end
Reproducibility of switching point ¹⁾	[mm] ±0.1
Switch-on time	[ms] ≤0.5
Switch-off time	[ms] 0.5
Switching status display	Yellow LED
Mounting position	Any
Materials	Housing Polyamide
Note on material	Free of copper, PTFE and silicone
Product weight	[g] 5

1) Only applicable to drives secured against rotation

Operating and environmental conditions	
Electrical connection	Plug M8
Ambient temperature	[°C] -25 ... +70
Corrosion resistance class CRC ¹⁾	2

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

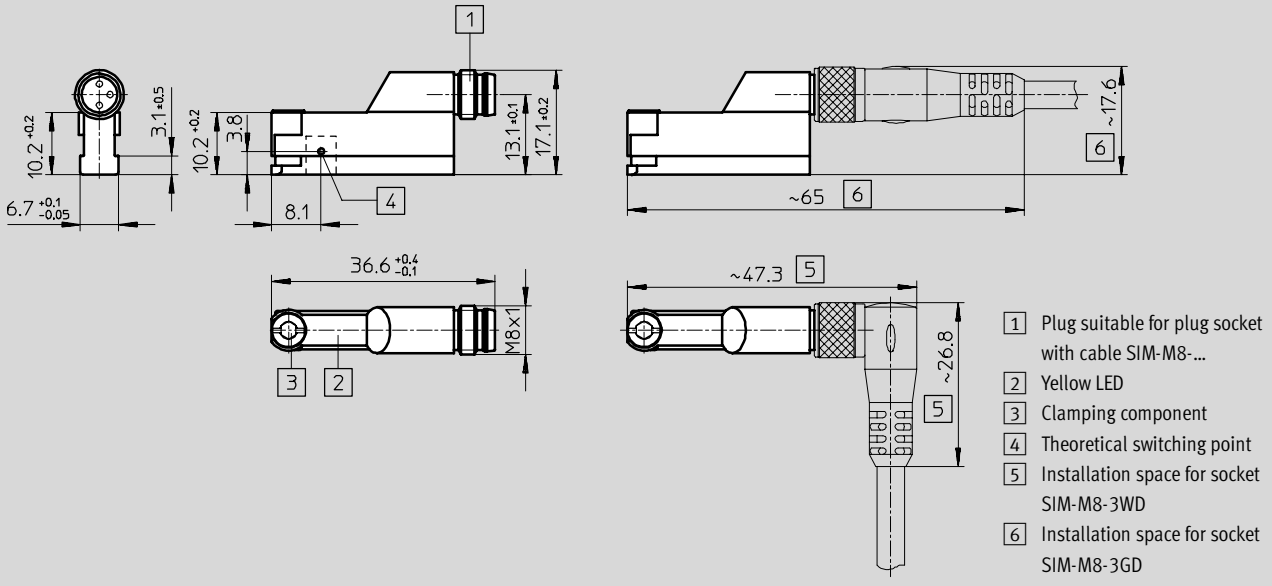
Proximity sensors SMT-8-SL, for slot type 8

Technical data – Magneto-resistive measuring principle

Dimensions

Download CAD data → www.festo.com/en/engineering


With plug M8



Drive accessories
Cylinder sensors

10.2

Ordering data

	Switch output	Electrical connection	Cable length [m]	Part No.	Type
		Plug M8			
	NO contact				
	PNP	3-pin	-	531 145	SMT-8-SL-PS-LED-24

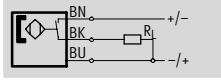
Proximity sensors SME-8, for slot type 8

Technical data – Magnetic reed measuring principle

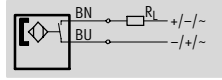


Function

NO contact, with 3-wire cable

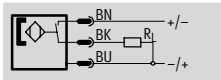


NO contact, with 2-wire cable¹⁾

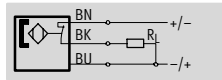


1) e. g. heat resistant

NO contact, 3-wire, with plug



NC contact, with 3-wire cable



General technical data			NO contact				NC contact		
Switching element function			NO contact				NC contact		
Electrical data									
Switch output			Contacting, bipolar						
Electrical connection			Cable, 3-wire	Cable, 3-wire	Cable with plug M8x1, 3-pin	Cable, 2-wire	Cable, 2-wire	Cable, 2-wire ¹⁾	Cable, 3-wire
Operating voltage range	D.C. voltage	[V DC]	12 ... 30			12 ... 27	3 ... 250	0 ... 30	12 ... 30
	A.C. voltage	[V AC]	–			–	3 ... 250	0 ... 30	12 ... 30
Max. output current	D.C. voltage	[mA]	500			80	120	500	50
	A.C. voltage	[mA]	–			–	200	–	50
Max. switching capacity	D.C. voltage	[W]	10			2	10	10	1.5
	A.C. voltage	[VA]	–			–	10	–	–
Voltage drop		[V]	–			–	–	–	1.8
Protection against short circuit			No						
Protection against polarity reversal			No			Yes ²⁾		Yes	No
Protection class to EN 60 529			IP65/IP67			IP67			
CE symbol	89/336/EEC (EMC)		Yes			Yes	Yes	Omitted	Yes
	73/23/EEC (low voltage)		Omitted			Omitted	Yes	Omitted	Omitted
Design									
Design			For T-slot						
Type of mounting			Clamped in T-slot, insertable from end, flush with the cylinder profile						
Reproducibility of switching point ³⁾		[mm]	±0.1						
Switch-on time		[ms]	≤0.5				≤0.5	≤2	
Switch-off time		[ms]	0.03				≤0.5	≤0.2	
Switching status display			Yellow LED				–		
Cable length		[m]	2.5	5.0	0.3	2.5	2.5	2.5	7.5
Mounting position			Any						
Materials	Housing		Polyester						
	Cable sheath		Polyurethane				Polyvinyl chloride	Polyurethane	
Note on material			Free of copper, PTFE and silicone				–		
Product weight		[g]	30	60	8	24	40	50	85

1) Heat-resistant design

2) Without LED function

3) Only applicable to drives secured against rotation

Proximity sensors SME-8, for slot type 8

Technical data – Magnetic reed measuring principle



Operating and environmental conditions						
Electrical connection	Cable		Cable, heat resistant		Cable with plug	
Cable installation	Fixed	Flexible	Fixed	Flexible	Fixed	Flexible
Ambient temperature [°C]	-20 ... +60	-5 ... +60	-40 ... +120	-5 ... +120	-20 ... +60	-5 ... +60
Corrosion resistance class CRC ¹⁾	4		4		2	

- 1) Corrosion resistance class 2 according to Festo standard 940 070
 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.
 Corrosion resistance class 4 according to Festo standard 940 070
 Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Dimensions Download CAD data → www.festo.com/en/engineering

NO contact with cable

- 1 Connecting cable
- 2 Yellow LED
- 3 Clamping component

NC contact with cable

- 1 Connecting cable
- 2 Yellow LED
- 3 Clamping component

Operating voltage range 3 ... 250 V DC/AC

- 1 Connecting cable
- 2 Yellow LED
- 3 Clamping component

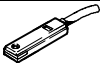
With plug M8

- 1 Connecting cable
- 2 Plug suitable for plug socket with cable SIM-M8-...
- 3 Clamping component
- 4 Yellow LED

Proximity sensors SME-8, for slot type 8

Technical data – Magnetic reed measuring principle



Ordering data						
	Electrical connection		Cable length [m]	Part No.	Type	PU ¹⁾
	Cable	Plug M8				
	NO contact					
	Operating voltage range 0 ... 30 V AC/DC					
	3-wire	-	2.5	150 855	SME-8-K-LED-24	1
				535 194	SME-8-K-LED-24-X	50
	-	3-pin	0.3	175 404	SME-8-K5-LED-24	1
				150 857	SME-8-S-LED-24	1
	2-wire	-	2.5	535 195	SME-8-S-LED-24-X	50
				171 169	SME-8-ZS-KL-LED-24	1
	Heat resistant up to 120 °C					
	2-wire	-	2.5	161 756	SME-8-K-24-S6	1
	Operating voltage range 3 ... 250 V AC/DC					
	2-wire	-	2.5	152 820	SME-8-K-LED-230	1
	NC contact					
	3-wire	-	7.5	160 251	SME-8-O-K-LED-24	1

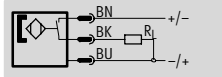
1) Packaging unit quantity

Proximity sensors SME-8-SL, for slot type 8

Technical data – Magnetic reed measuring principle

Function

NO contact, 3-wire, with plug



General technical data		
Switching element function		NO contact
Electrical data		
Switch output		Contacting, bipolar
Electrical connection		Plug M8x1, 3-pin
Operating voltage range	[V DC]	10 ... 30
Max. output current	[mA]	500
Max. switching capacity	[W]	10
Voltage drop	[V]	–
Protection against short circuit		No
Protection against polarity reversal		No
Protection class to EN 60 529		IP65/IP67
CE symbol	89/336/EEC (EMC)	Yes
Design		
Design		For T-slot
Type of mounting		Clamped in T-slot, insertable from end
Reproducibility of switching point ¹⁾	[mm]	±0.1
Switch-on time	[ms]	≤0.6
Switch-off time	[ms]	≤0.05
Switching status display		Yellow LED
Mounting position		Any
Materials	Housing	PA
Note on material		Free of copper, PTFE and silicone
Product weight	[g]	5

1) Only applicable to drives secured against rotation

Operating and environmental conditions		
Electrical connection		Plug M8
Ambient temperature	[°C]	–20 ... +60
Corrosion resistance class CRC ¹⁾		2

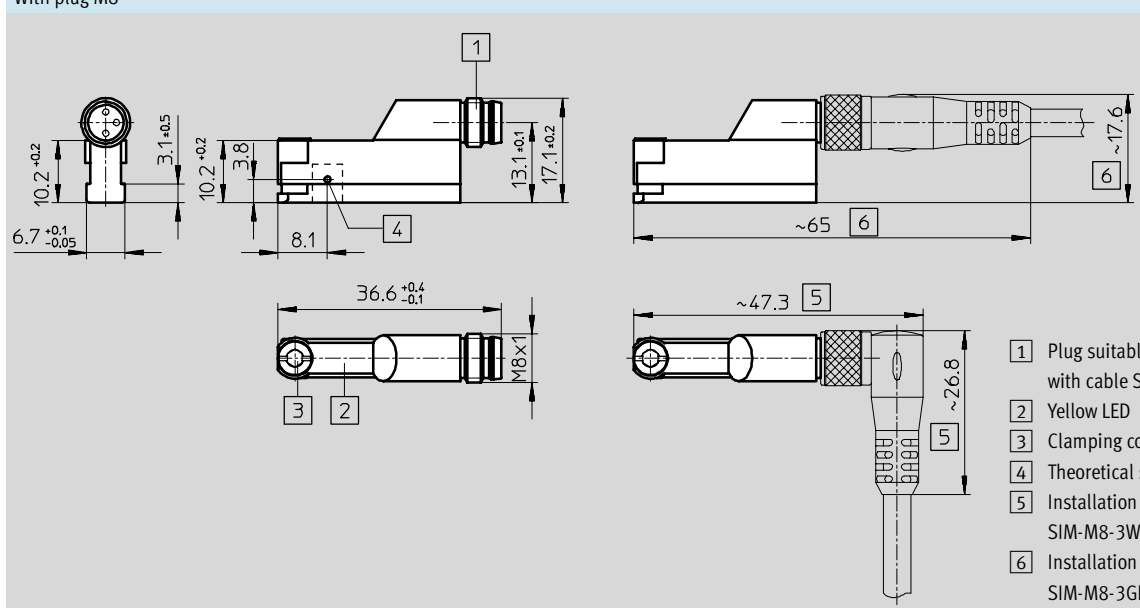
1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

Proximity sensors SME-8-SL, for slot type 8


Technical data – Magnetic reed measuring principle

Dimensions Download CAD data → www.festo.com/en/engineering

With plug M8

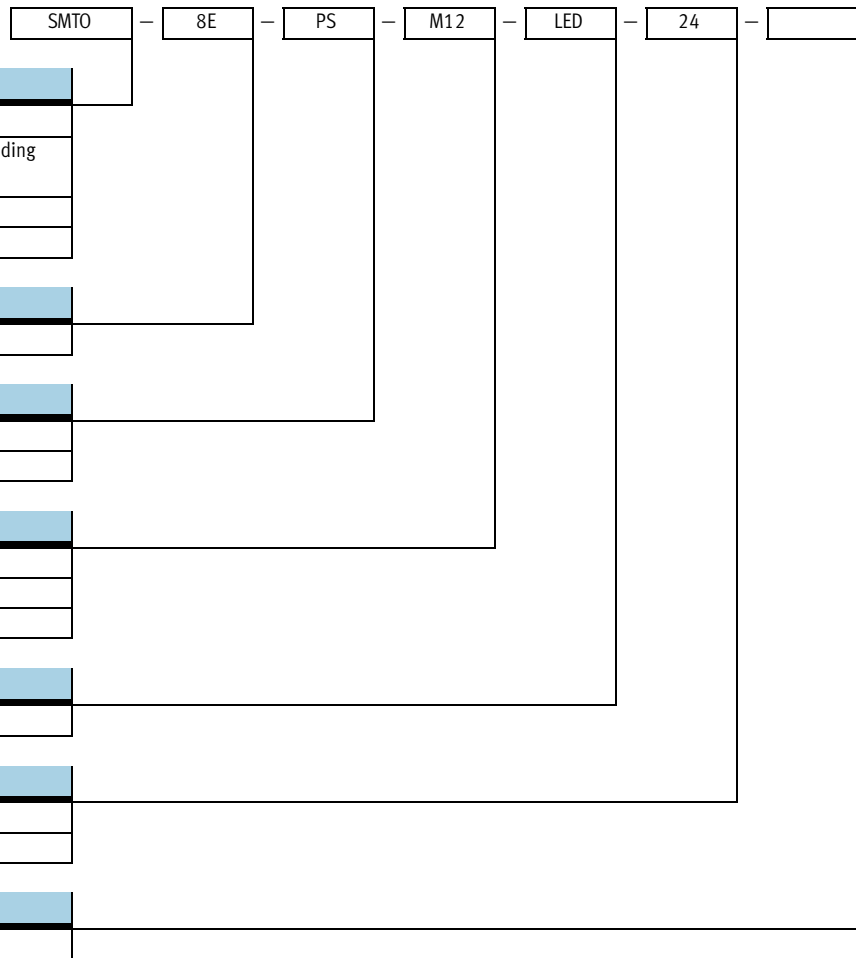


- 1 Plug suitable for plug socket with cable SIM-M8...
- 2 Yellow LED
- 3 Clamping component
- 4 Theoretical switching point
- 5 Installation space for socket SIM-M8-3WD
- 6 Installation space for socket SIM-M8-3GD

Ordering data				
	Electrical connection	Cable length [m]	Part No.	Type
	Plug M8			
	NO contact			
	3-pin	–	526 622	SME-8-SL-LED-24

Proximity sensors SMTO/SMEO-8E, for slot type 8

Type code



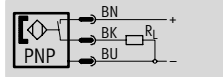
Proximity sensors SMTO-8E, for slot type 8

Technical data – Magneto-resistive measuring principle

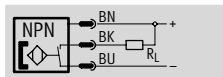


Function

NO contact, PNP, with plug



NO contact, NPN, with plug



General technical data				
Switching element function	NO contact			
Electrical data				
Switch output	PNP		NPN	
Electrical connection	Plug M8x1, 3-pin	Plug M12x1, 3-pin	Plug M8x1, 3-pin	Plug M12x1, 3-pin
Operating voltage range	[V DC]	10 ... 30		
Max. output current	[mA]	100		
Max. switching capacity	[W]	3		
Voltage drop	[V]	1.8		
Residual current	[mA]	≤0.01		
Protection against short circuit	Yes			
Protection against polarity reversal	For all electrical connections			
Protection class to EN 60 529	IP65/IP67			
CE symbol	89/336/EEC (EMC)	Yes		
Design				
Design	For T-slot			
Type of mounting	With accessories			
Reproducibility of switching point ¹⁾	[mm]	±0.1		
Switch-on time	[ms]	≤0.5		
Switch-off time	[ms]	≤25		
Switching status display	Yellow LED			
Mounting position	Any			
Materials	Housing	Polyurethane		
Note on material	Free of copper, PTFE and silicone		-	
Product weight	[g]	10	10	10

1) Only applicable to drives secured against rotation

Operating and environmental conditions	
Electrical connection	Plug
Ambient temperature	[°C] -20 ... +60
Corrosion resistance class CRC ¹⁾	4

1) Corrosion resistance class 4 according to Festo standard 940 070
Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Proximity sensors SMTO-8E, for slot type 8

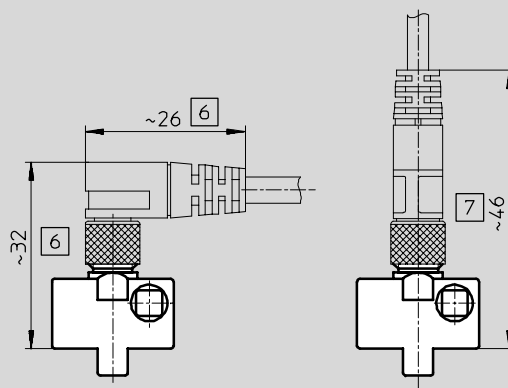
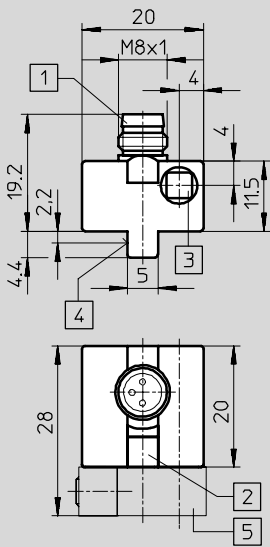
Technical data – Magneto-resistive measuring principle



Dimensions

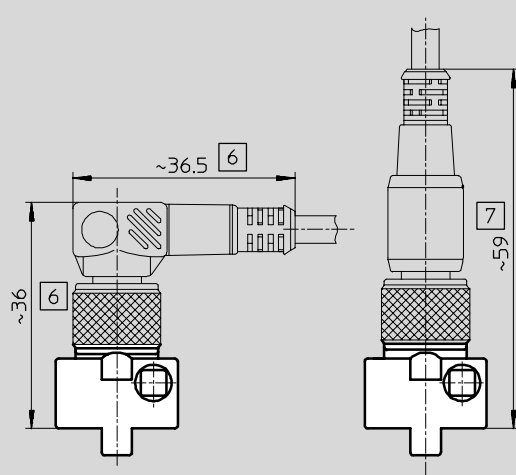
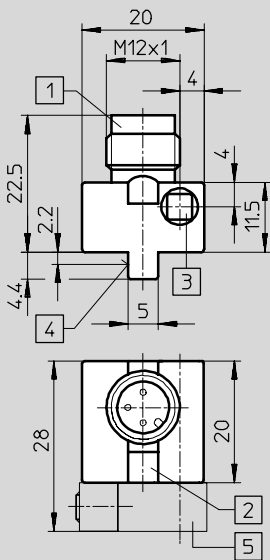
Download CAD data → www.festo.com/en/engineering

With plug M8



- 1 Plug suitable for plug socket with cable SIM-M8-...
- 2 Yellow LED
- 3 Mounting screw
- 4 Theoretical switching point
- 5 Mounting kit SMB-8E
- 6 Installation space for socket SIM-M8-3WD
- 7 Installation space for socket SIM-M8-3GD

With plug M12



- 1 Plug suitable for plug socket with cable SIM-M12-...
- 2 Yellow LED
- 3 Mounting screw
- 4 Theoretical switching point
- 5 Mounting kit SMB-8E
- 6 Installation space for socket SIM-M12-3WD
- 7 Installation space for socket SIM-M12-3GD

Ordering data

	Switch output	Electrical connection		Cable length [m]	Part No.	Type
		Plug M8	Plug M12			
	NO contact					
	PNP	3-pin	–	–	171 178	SMTO-8E-PS-S-LED-24
		–	3-pin	–	171 179	SMTO-8E-PS-M12-LED-24
	NPN	3-pin	–	–	171 166	SMTO-8E-NS-S-LED-24
–		3-pin	–	171 176	SMTO-8E-NS-M12-LED-24	

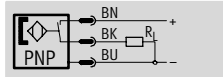
Proximity sensors SMTSO-8E, for slot type 8

Technical data – Magneto-resistive measuring principle

Function

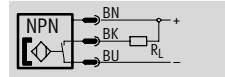
NO contact, PNP, with plug

Welding field immune



NO contact, NPN, with plug

Welding field immune



General technical data		
Switching element function	NO contact	
Electrical data		
Switch output	PNP	NPN
Electrical connection	Plug M12x1, 3-pin	
Operating voltage range	[V DC]	10 ... 30
Max. output current	[mA]	200
Max. switching capacity	[W]	6
Voltage drop	[V]	1.8
Residual current	[mA]	0.01
Protection against short circuit	Yes	
Protection against polarity reversal	For all electrical connections	
Resistance to interference from magnetic fields	Alternating magnetic field 45 ... 65 Hz	
Protection class to EN 60 529	IP65/IP67	
CE symbol	89/336/EEC (EMC)	Yes
Design		
Design	For T-slot	
Type of mounting	With accessories	
Reproducibility of switching point ¹⁾	[mm]	±0.1
Switch-on time	[ms]	≤38
Switch-off time	[ms]	≤20
Switching status display	Yellow LED	
Mounting position	Any	
Materials	Housing	Polyamide
Product weight	[g]	10

1) Only applicable to drives secured against rotation

Operating and environmental conditions		
Electrical connection	Plug	
Ambient temperature	[°C]	-25 ... +70
Corrosion resistance class CRC ¹⁾	2	

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

Proximity sensors SMTSO-8E, for slot type 8

Technical data – Magneto-resistive measuring principle



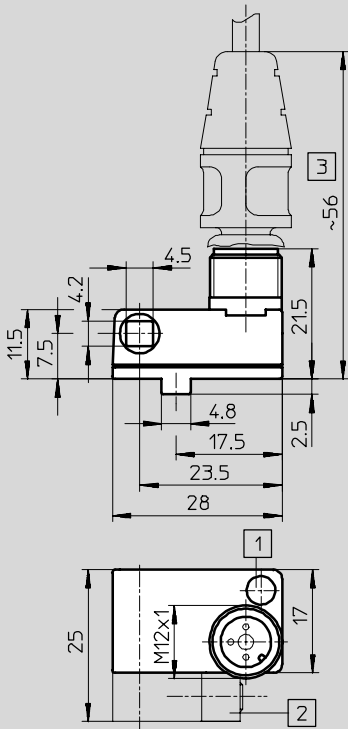
Drive accessories
Cylinder sensors

10.2

Dimensions

Download CAD data → www.festo.com/en/engineering

With plug M12



- 1 Yellow LED
- 2 Mounting kit SMB-8E
- 3 Installation space for socket SIM-M12-3GD

Ordering data

	Switch output	Electrical connection	Cable length [m]	Part No.	Type
		Plug M12			
	NO contact				
	Welding field immune				
	PNP	3-pin	-	191 986	SMTSO-8E-PS-M12-LED-24
	NPN			175 825	SMTSO-8E-NS-M12-LED-24

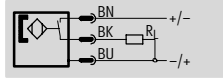
Proximity sensors SMEO-8E, for slot type 8

Technical data – Magnetic reed measuring principle

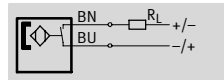


Function

NO contact, 3-wire, with plug

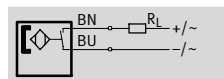


NO contact, with 2-wire cable¹⁾



1) Heat-resistant design

NO contact, 2-wire, with plug



General technical data						
Switching element function		NO contact				
Electrical data						
Switch output		Contacting, bipolar				
Electrical connection		Plug M8x1, 3-pin	Plug M12x1, 3-pin	Plug M12x1, 2-pin	Cable, 2-wire ¹⁾	
Operating voltage range	D.C. voltage	[V DC]	12 ... 30	12 ... 30	3 ... 250	0 ... 30
	A.C. voltage	[V AC]	–	–	3 ... 230	–
Max. output current	D.C. voltage	[mA]	500		120	500
	A.C. voltage	[mA]	–		120	–
Max. switching capacity	D.C. voltage	[W]	10			
	A.C. voltage	[VA]	–		10	–
Voltage drop		[V]	–		3.9	–
Protection against short circuit		No				
Protection against polarity reversal		No		Yes ²⁾		Yes
Protection class to EN 60 529		IP65/IP67				
CE symbol	89/336/EEC (EMC)		Yes		Yes	
	73/23/EEC (low voltage)		Omitted		Yes	
Design						
Design		For T-slot				
Type of mounting		With accessories				
Reproducibility of switching point ³⁾		[mm]	±0.1			
Switch-on time		[ms]	≤0.5		≤2	≤0.5
Switch-off time		[ms]	0.03			
Switching status display		Yellow LED				–
Cable length		[m]	–	–	–	2.5
Mounting position		Any				
Materials	Housing		Polyurethane			
	Cable sheath		–			Polyurethane
Product weight		[g]	10	10	10	40

1) Heat-resistant design

2) Without LED function

3) Only applicable to drives secured against rotation

Operating and environmental conditions				
Electrical connection		Cable, heat resistant		Plug
Cable installation		Fixed	Flexible	–
Ambient temperature		[°C]	–20 ... +120	–5 ... +120
Corrosion resistance class CRC ¹⁾		4		4

1) Corrosion resistance class 4 according to Festo standard 940 070

Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Proximity sensors SMEO-8E, for slot type 8

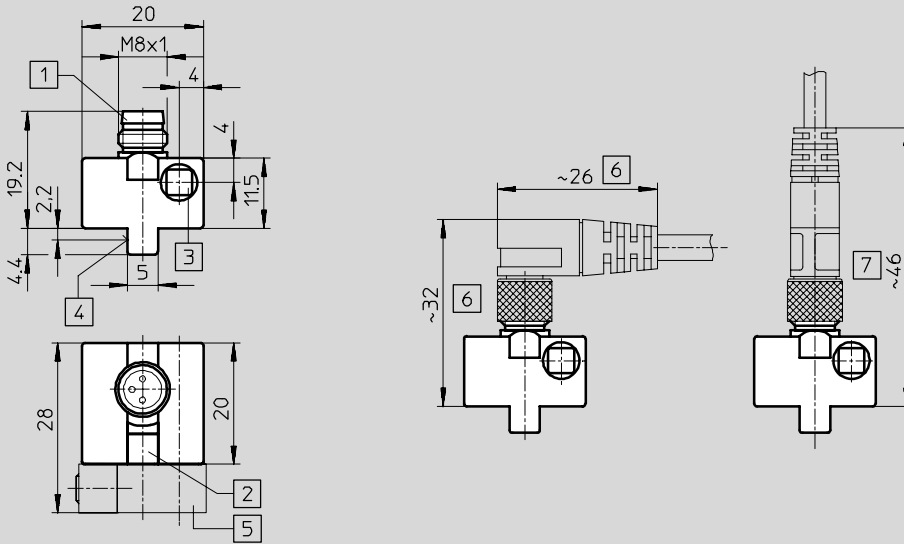
Technical data – Magnetic reed measuring principle



Dimensions

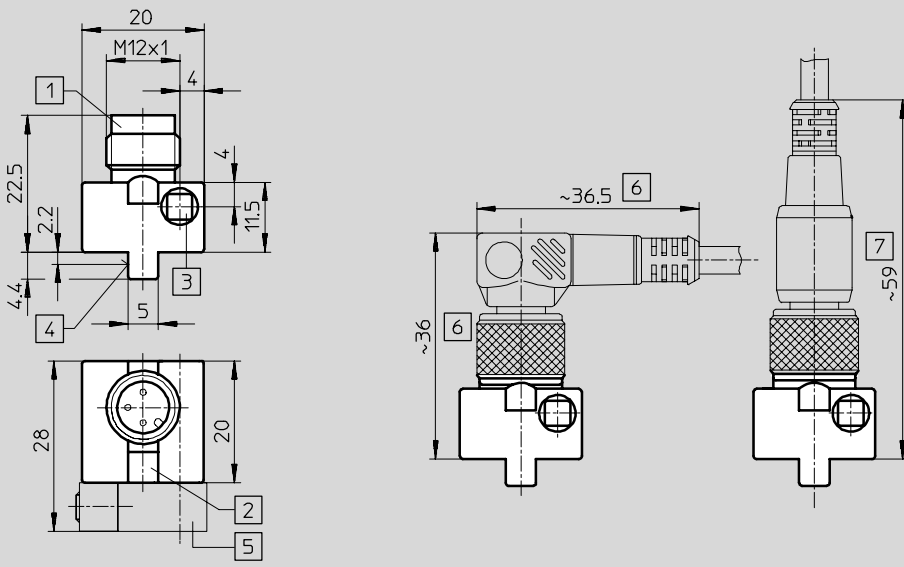
Download CAD data → www.festo.com/en/engineering

With plug M8



- 1 Plug suitable for plug socket with cable SIM-M8-...
- 2 Yellow LED
- 3 Mounting screw
- 4 Theoretical switching point
- 5 Mounting kit SMB-8E
- 6 Installation space for socket SIM-M8-3WD
- 7 Installation space for socket SIM-M8-3GD

With plug M12



- 1 Plug suitable for plug socket with cable SIM-M12-...
- 2 Yellow LED
- 3 Mounting screw
- 4 Theoretical switching point
- 5 Mounting kit SMB-8E
- 6 Installation space for socket SIM-M12-3WD
- 7 Installation space for socket SIM-M12-3GD

Proximity sensors SMEO-8E, for slot type 8

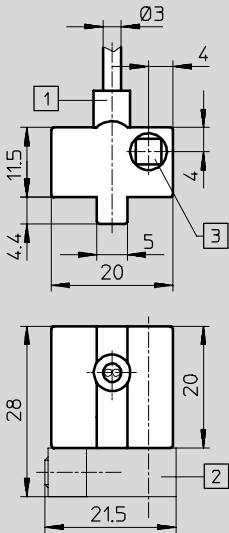
Technical data – Magnetic reed measuring principle



Dimensions


Download CAD data → www.festo.com/en/engineering

Heat resistant up to 120 °C



- 1 Connecting cable
- 2 Mounting kit SMB-8E
- 3 Mounting screw

Ordering data

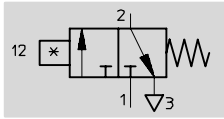
	Electrical connection			Cable length [m]	Part No.	Type
	Cable	Plug M8	Plug M12			
	NO contact					
	Operating voltage range 0 ... 30 V AC/DC					
	-	3-pin	-	-	171 163	SMEO-8E-S-LED-24
	-	-	3-pin	-	171 164	SMEO-8E-M12-LED-24
	Heat resistant up to 120 °C					
	2-wire	-	-	2.5	171 158	SMEO-8E-K-S6
Operating voltage range 3 ... 250 V AC/DC						
-	-	2-pin	-	171 160	SMEO-8E-M12-LED-230	

Proximity sensors SMPO-8E, for slot type 8

Technical data – Pneumatic measuring principle



Function
3/2-way valve,
normally closed



General technical data		
Switching element function	3/2-way valve, normally closed	
Design		
Design	For T-slot	
Type of mounting	With accessories	
Operating medium	Compressed air, filtered, unlubricated, grade of filtration 40 µm	
Operating pressure	[bar]	2 ... 8
Reproducibility of switching point ¹⁾	[mm]	±0.1
Switch-on time	[ms]	22
Switch-off time	[ms]	52
Switching status display	Visual	
Pneumatic connection	Female thread M5	
Mounting position	Any	
Materials	Housing	Polyamide, aluminium
Product weight	[g]	12
Electrical data		
Protection class to EN 60 529	IP65	
CE symbol	89/336/EEC (EMC)	Omitted

1) Only applicable to drives secured against rotation

Operating and environmental conditions		
Ambient temperature	[°C]	-15 ... +60
Corrosion resistance class CRC ¹⁾	2	

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

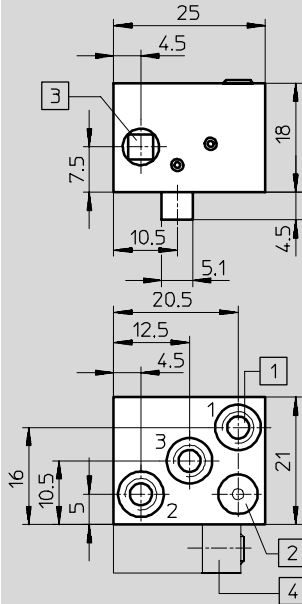
Proximity sensors SMPO-8E, for slot type 8

Technical data – Pneumatic measuring principle



Dimensions

Download CAD data → www.festo.com/en/engineering



- 1 Connecting thread M5
- 2 Pneumatic indicator
- 3 Mounting screw
- 4 Mounting kit SMB-8E

Drive accessories
Cylinder sensors

10.2

Ordering data

	Pneumatic connection	Part No.	Type
	3/2-way valve, normally closed	178 563	SMPO-8E
	Female thread M5		

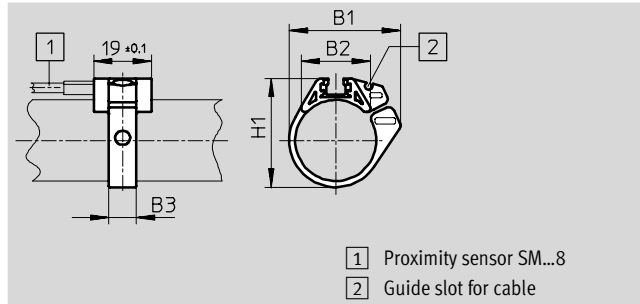
Proximity sensors for slot type 8

Accessories



Mounting kit SMBR

Material:
Polyacetate

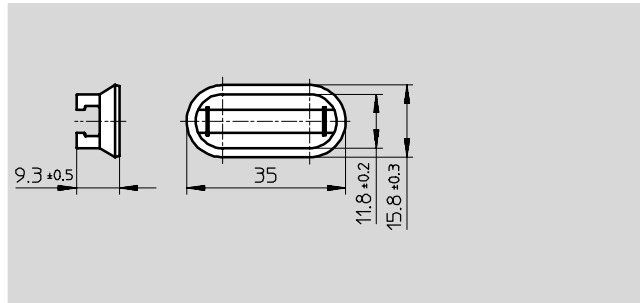


- 1 Proximity sensor SM...8
- 2 Guide slot for cable

Dimensions and ordering data						
For piston Ø	B1	B2	B3	H1	Part No.	Type
8	18.9	12.3	7	17.5	175 091	SMBR-8-8
10	20.4	13.7	7	19.9	175 092	SMBR-8-10
12	22.7	14.3	7	21.9	175 093	SMBR-8-12
16	26.1	17.1	7	25.7	175 094	SMBR-8-16
20	33.2	20.8	9	30.4	175 095	SMBR-8-20
25	36.5	22.6	9	35.6	175 096	SMBR-8-25
32	41.7	24.6	9	42.7	175 097	SMBR-8-32
40	47.1	26.5	9	50.7	175 098	SMBR-8-40
50	56.4	28.6	9	61.5	175 099	SMBR-8-50
63	69.4	32	9	74.5	175 100	SMBR-8-63

Mounting kit CRSMB

Material:
Housing: Polyurethane
Rail: Hard anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data		
For piston Ø	Part No.	Type
32 ... 100	525 565	CRSMB-8-32/100

- - Note
The mounting kit is secured to the cylinder using the double-sided adhesive tape provided.

Core Range

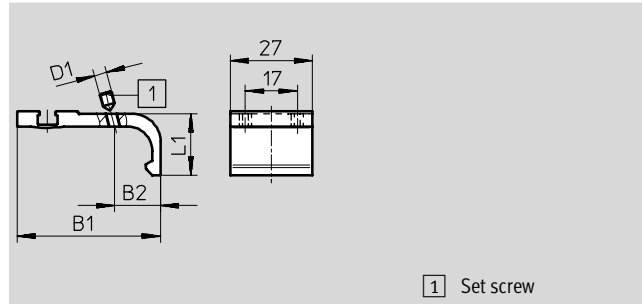
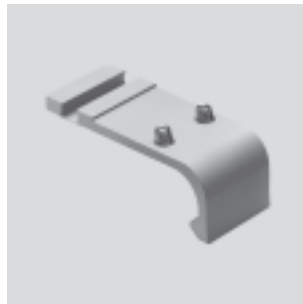
Proximity sensors for slot type 8

Accessories



Mounting kit SMB-8-FENG

Material:
Wrought aluminium alloy
Free of copper, PTFE and silicone

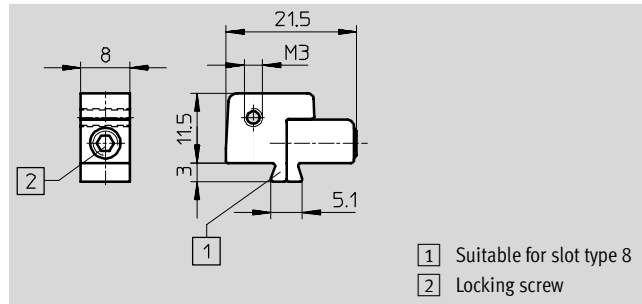


1 Set screw

Dimensions and ordering data							
For piston \varnothing	B1	B2	D1	L1	Tightening torque [Nm]	Part No.	Type
32/40	35.1	8.7	M3	15.5	0.2	175 705	SMB-8-FENG-32/40
50/63	47	12.3	M4	20	0.5	175 706	SMB-8-FENG-50/63
80/100	64.3	15.7	M5	24.3	0.7	175 707	SMB-8-FENG-80/100

Mounting kit SMB-8E



Material:
Polyacetate



1 Suitable for slot type 8
2 Locking screw

Ordering data		
For piston \varnothing	Part No.	Type
10 ... 125	178 230	SMB-8E

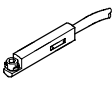

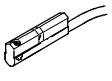

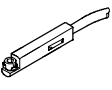

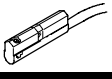

Ordering data – Cable clip SMBK-8		
	Part No.	Type
 For fixing the cable in the sensor slot	534 254	SMBK-8

Ordering data – Push-in fittings		Technical data → Volume 3	
		[mm]	Part No. Type
	Push-in connector with connecting thread M5 for tubing OD	3	153 302 QSM-M5-3
		4	153 304 QSM-M5-4
		6	153 306 QSM-M5-6
	Push-in L connector with connecting thread M5 for tubing OD	3	153 331 QSML-M5-3
		4	153 333 QSML-M5-4
		6	153 335 QSML-M5-6

 Core Range





Proximity sensors for slot type 10

Product range overview

Measuring principle	Design	Type	Mounting	Switching element function		Switch output
				NO contact	NC contact	
Magneto-resistive	Operating voltage range 5 ... 30 V DC					
		SMT-10F  New	Insertable from above	<input checked="" type="checkbox"/>	-	PNP
				<input checked="" type="checkbox"/>	-	NPN
		SMT-10  Type Discontinued	Insertable from end	<input checked="" type="checkbox"/>	-	PNP
				<input checked="" type="checkbox"/>	-	NPN
	Magnetic reed	Operating voltage range 5 ... 30 V AC/DC				
		SME-10F  New	Insertable from above	<input checked="" type="checkbox"/>	-	Contacting
				<input checked="" type="checkbox"/>	-	
		SME-10  Type Discontinued	Insertable from end	<input checked="" type="checkbox"/>	-	Contacting

Proximity sensors for slot type 10

Product range overview

Type	Electrical connection		Switching status display with LED	Free of copper, PTFE and silicone	→ Page
	Cable	Plug			
Operating voltage range 5 ... 30 V DC					
SMT-10F  New	3-wire	M8x1, 3-pin	■	■	1 / 10.2-47
	3-wire	M8x1, 3-pin	■	■	
SMT-10  Type Discontinued	3-wire	M8x1, 3-pin	■	■	1 / 10.2-53
	3-wire	M8x1, 3-pin	■	■	
Operating voltage range 5 ... 30 V AC/DC					
SME-10F  New	3-wire	M8x1, 3-pin	■	■	1 / 10.2-50
	2-wire	-	■	■	
SME-10  Type Discontinued	3-wire	M8x1, 3-pin	■	■	1 / 10.2-55

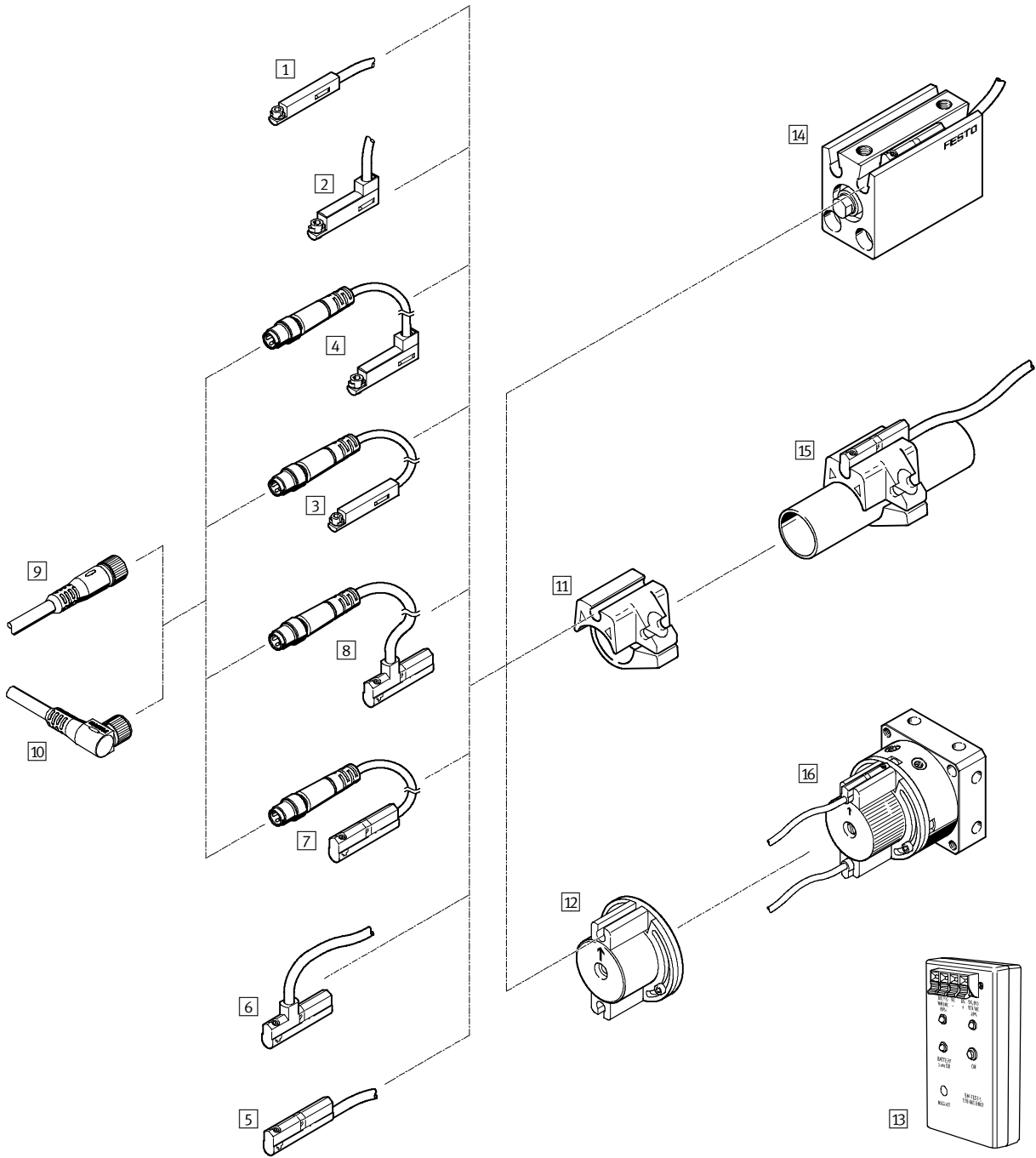
Proximity sensors for slot type 10

Peripherals overview



Drive accessories
Cylinder sensors

10.2



Proximity sensors for slot type 10

Peripherals overview

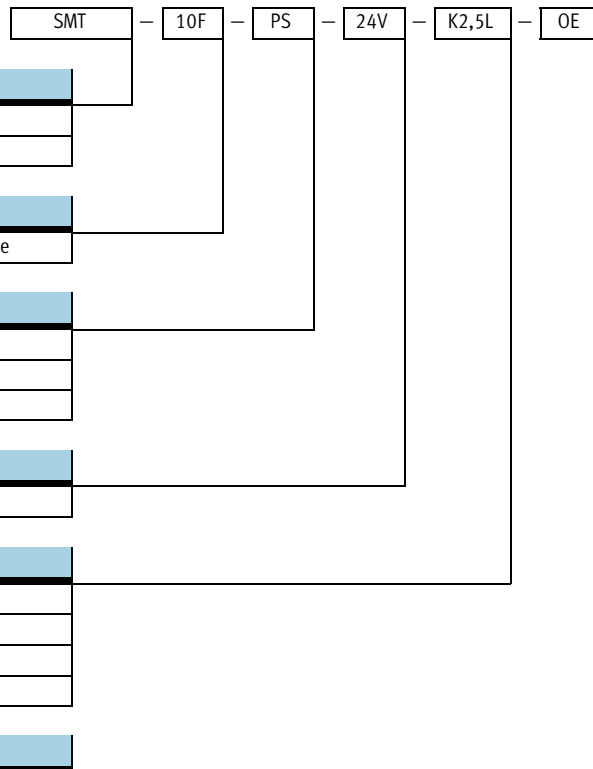
FESTO

Mounting attachments and accessories			
	Brief description	→ Page	
Proximity sensors			
1	SMT-10F...-K2,5L-OE SME-10F...-K2,5L-OE	Magneto-resistive, with cable, in-line connection Magnetic reed, with cable, in-line connection	1 / 10.2-47 1 / 10.2-50
2	SMT-10F...-K2,5Q-OE SME-10F...-K2,5Q-OE	Magneto-resistive, with cable, lateral connection Magnetic reed, with cable, lateral connection	1 / 10.2-47 1 / 10.2-50
3	SMT-10F...-K0,3L-M8D SME-10F...-K0,3L-M8D	Magneto-resistive, with cable and plug M8x1, in-line connection Magnetic reed, with cable and plug M8x1, in-line connection	1 / 10.2-47 1 / 10.2-50
4	SMT-10F...-K0,3Q-M8D SME-10F...-K0,3Q-M8D	Magneto-resistive, with cable and plug M8x1, lateral connection Magnetic reed, with cable and plug M8x1, lateral connection	1 / 10.2-47 1 / 10.2-50
5	SMT-10-KL-... SME-10-KL-...	Magneto-resistive, with cable, in-line connection Magnetic reed, with cable, in-line connection	1 / 10.2-53 1 / 10.2-55
6	SMT-10-KQ-... SME-10-KQ-...	Magneto-resistive, with cable, lateral connection Magnetic reed, with cable, lateral connection	1 / 10.2-53 1 / 10.2-55
7	SMT-10-SL-... SME-10-SL-...	Magneto-resistive, with cable and plug M8x1, in-line connection Magnetic reed, with cable and plug M8x1, in-line connection	1 / 10.2-53 1 / 10.2-55
8	SMT-10-SQ-... SME-10-SQ-...	Magneto-resistive, with cable and plug M8x1, lateral connection Magnetic reed, with cable and plug M8x1, lateral connection	1 / 10.2-53 1 / 10.2-55
Accessories			
9	Plug socket with cable SIM-M8-3GD-...	Straight socket, M8x1, 3-pin	1 / 10.2-100
10	Plug socket with cable SIM-M8-3WD-...	Angled socket, M8x1, 3-pin	1 / 10.2-100
11	Mounting kit SMBR-10-...	For round cylinders DSEU, ESEU, DSNU, ESNU, DSW, ESW	1 / 10.2-57
12	Mounting kit WSM-...-SME-10	For swivel module DSM	1 / 10.2-57
13	Sensor tester SM-TEST-1		1 / 10.2-99
Drives			
14	Drives with slot type 10 (rounded slot)		-
15	Round cylinder	∅ 6 ... 63 mm	
16	Swivel module DSM	∅ 6 ... 10 mm	

Drive accessories
Cylinder sensors

10.2

Proximity sensors SMT/SME-10F, for slot type 10



Type

SMT	Proximity sensor, magneto-resistive
SME	Proximity sensor, magnetic reed

Design

10F	For rounded slot, inserted from above
-----	---------------------------------------

Switching element function, switch output

PS	NO contact, 3-wire, PNP
NS	NO contact, 3-wire, NPN
DS	NO contact, 3-wire

Rated operating voltage

24V	24 V DC
-----	---------

Cable length, connection direction

K0,3L	0.3 m, in-line with switch axis
K0,3Q	0.3 m, at right angle to switch axis
K2,5L	2.5 m, in-line with switch axis
K2,5Q	2.5 m, at right angle to switch axis

Electrical connection

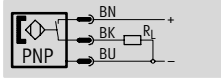
OE	Cable
M8D	Plug M8x1 with cable

Proximity sensors SMT-10F, for slot type 10

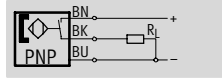
Technical data – Magneto-resistive measuring principle

Function

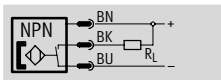
NO contact, PNP, with plug



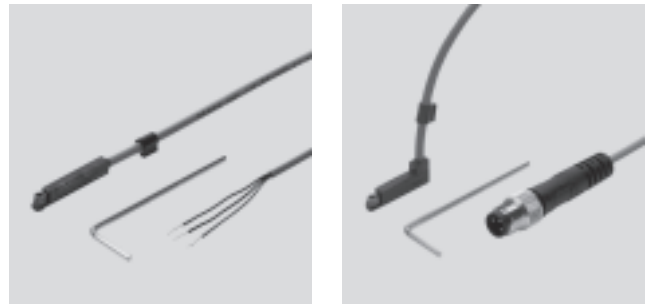
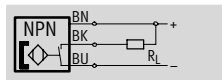
NO contact, PNP, with cable



NO contact, NPN, with plug



NO contact, NPN, with cable



General technical data				
Switching element function		NO contact		
Electrical data				
Switch output		PNP		NPN
Electrical connection		Cable, 3-wire	Cable with plug M8x1, 3-pin	Cable with plug M8x1, 3-pin
Operating voltage range	[V DC]	5 ... 30		
Max. output current	[mA]	200		
Max. switching capacity	[W]	6		
Voltage drop	[V]	2		
Residual current	[mA]	0.06	0.01	
Protection against short circuit		Yes		
Protection against polarity reversal		For all electrical connections		
Protection class to EN 60 529		IP65/IP67		
CE symbol	89/336/EEC (EMC)	Yes		
Design				
Design		For rounded slot		
Type of mounting		Clamped in rounded slot, insertable from above		
Reproducibility of switching point ¹⁾		±0.1		
Switch-on time	[ms]	≤0.33	0.5	
Switch-off time	[ms]	0.3	0.5	
Switching status display		Yellow LED		
Cable length	[m]	2.5	0.3	2.5
Connection direction		In-line or lateral		
Mounting position		Any		
Materials	Housing	Polyamide		
	Cable sheath	Polyurethane		
Note on material		Free of copper, PTFE and silicone		
Product weight	[g]	15.5	5	15.5

1) Only applicable to drives secured against rotation

Proximity sensors SMT-10F, for slot type 10

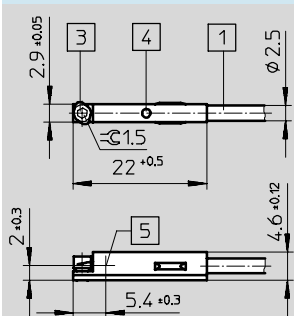
Technical data – Magneto-resistive measuring principle

Operating and environmental conditions				
Electrical connection	Cable		Plug	
Cable installation	Fixed	Flexible	Fixed	Flexible
Ambient temperature [°C]	-20 ... +60	-5 ... +60	-20 ... +60	-5 ... +60
Corrosion resistance class CRC ¹⁾	4		2	

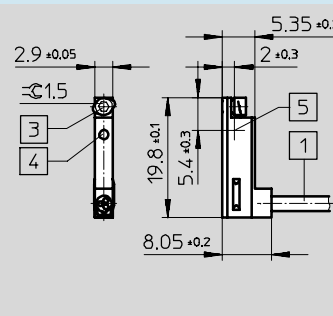
- 1) Corrosion resistance class 2 according to Festo standard 940 070
 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.
 Corrosion resistance class 4 according to Festo standard 940 070
 Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Dimensions Download CAD data → www.festo.com/en/engineering

With cable, in-line connection

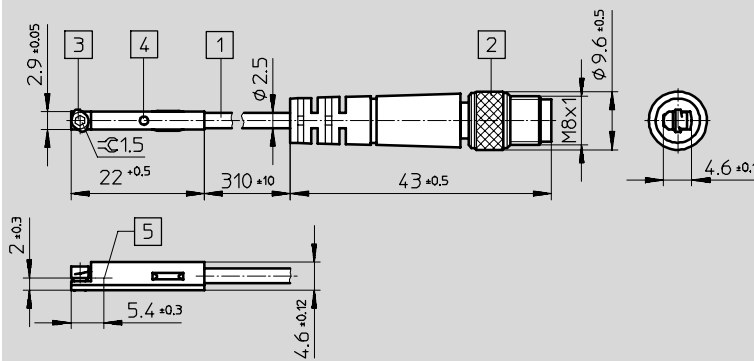


With cable, lateral connection



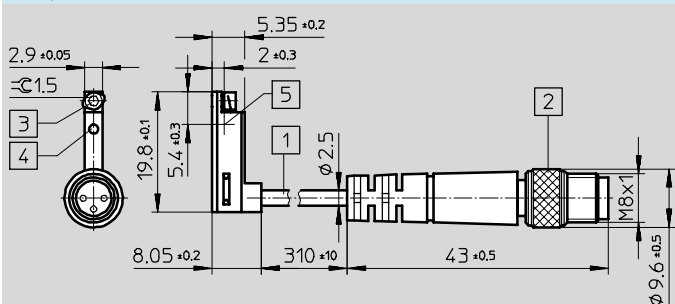
- 1 Connecting cable
- 3 Clamping component
- 4 Yellow LED
- 5 Switching point

With plug M8, in-line connection



- 1 Connecting cable
- 2 Plug suitable for plug socket with cable SIM-M8-...
- 3 Clamping component
- 4 Yellow LED
- 5 Switching point

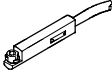
With plug M8, lateral connection



- 1 Connecting cable
- 2 Plug suitable for plug socket with cable SIM-M8-...
- 3 Clamping component
- 4 Yellow LED
- 5 Switching point

Proximity sensors SMT-10F, for slot type 10

Technical data – Magneto-resistive measuring principle

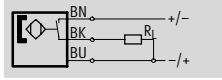
Ordering data							
	Switch output	Electrical connection		Cable length [m]	Connection direction	Part No.	Type
		Cable	Plug M8				
	NO contact						
	PNP	3-wire	–	2.5	In-line	525 915	SMT-10F-PS-24V-K2,5L-OE
					Lateral	526 674	SMT-10F-PS-24V-K2,5Q-OE
		–	3-pin	0.3	In-line	525 916	SMT-10F-PS-24V-K0,3L-M8D
					Lateral	526 675	SMT-10F-PS-24V-K0,3Q-M8D
	NPN	3-wire	–	2.5	In-line	526 678	SMT-10F-NS-24V-K2,5L-OE
					Lateral	526 680	SMT-10F-NS-24V-K2,5Q-OE
		–	3-pin	0.3	In-line	526 679	SMT-10F-NS-24V-K0,3L-M8D
					Lateral	526 681	SMT-10F-NS-24V-K0,3Q-M8D

Proximity sensors SME-10F, for slot type 10

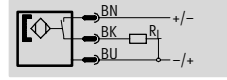
Technical data – Magnetic reed measuring principle

Function

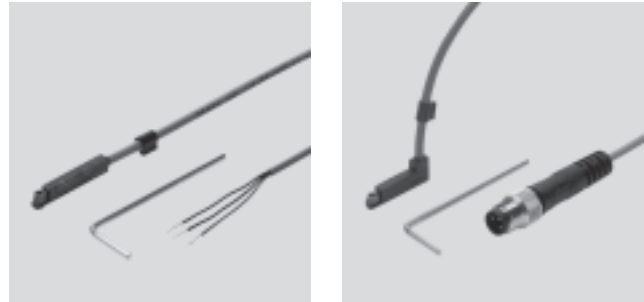
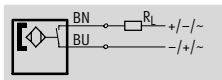
NO contact, with 3-wire cable



NO contact, 3-wire, with plug



NO contact, with 2-wire cable



General technical data			
Switching element function		NO contact	
Electrical data			
Switch output		Contacting, bipolar	
Electrical connection		Cable, 3-wire	Cable with plug M8x1, 3-pin
Operating voltage range	D.C. voltage	[V DC]	10 ... 30
	A.C. voltage	[V AC]	10 ... 30
Max. output current		[mA]	500
Max. switching capacity	D.C. voltage	[W]	10
	A.C. voltage	[VA]	10
Voltage drop		[V]	–
Residual current		[mA]	–
Protection against short circuit	No		
Protection against polarity reversal	No		For all electrical connections
Protection class to EN 60 529	IP65/IP67		
CE symbol	89/336/EEC (EMC)	Yes	
Design			
Design		For rounded slot	
Type of mounting		Clamped in rounded slot, insertable from above	
Reproducibility of switching point ¹⁾		[mm]	±0.1
Switch-on time		[ms]	≤0.5
Switch-off time		[ms]	0.03
Switching status display		Yellow LED	
Cable length		[m]	2.5
Connection direction		In-line or lateral	
Mounting position		Any	
Materials		Polyamide	
Cable sheath		Polyurethane	
Note on material		Free of copper, PTFE and silicone	
Product weight		[g]	20

1) Only applicable to drives secured against rotation

Operating and environmental conditions				
Electrical connection		Cable		Plug
Cable installation		Fixed	Flexible	Fixed
Ambient temperature		[°C]	–20 ... +60	–20 ... +60
Corrosion resistance class CRC ¹⁾		4		2

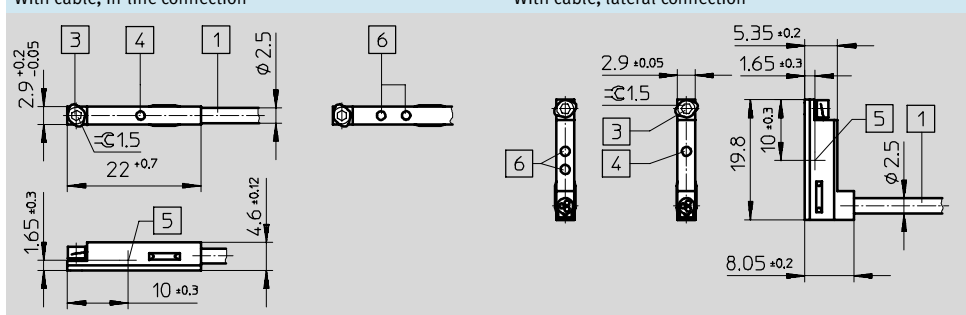
1) Corrosion resistance class 2 according to Festo standard 940 070
 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.
 Corrosion resistance class 4 according to Festo standard 940 070
 Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Proximity sensors SME-10F, for slot type 10

Technical data – Magnetic reed measuring principle

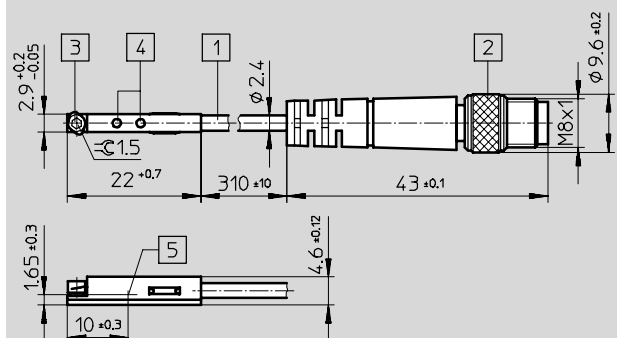
Dimensions Download CAD data → www.festo.com/en/engineering

With cable, in-line connection With cable, lateral connection



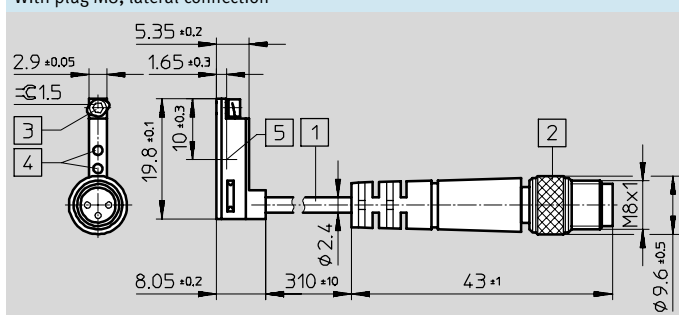
- 1 Connecting cable
- 3 Clamping component
- 4 Yellow LED (SME-10F-ZS-...)
- 5 Switching point
- 6 Yellow LED (SME-10F-DS-..., positive or negative switching)

With plug M8, in-line connection

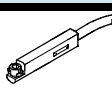


- 1 Connecting cable
- 2 Plug suitable for plug socket with cable SIM-M8-...
- 3 Clamping component
- 4 Yellow LED (positive or negative switching)
- 5 Switching point

With plug M8, lateral connection



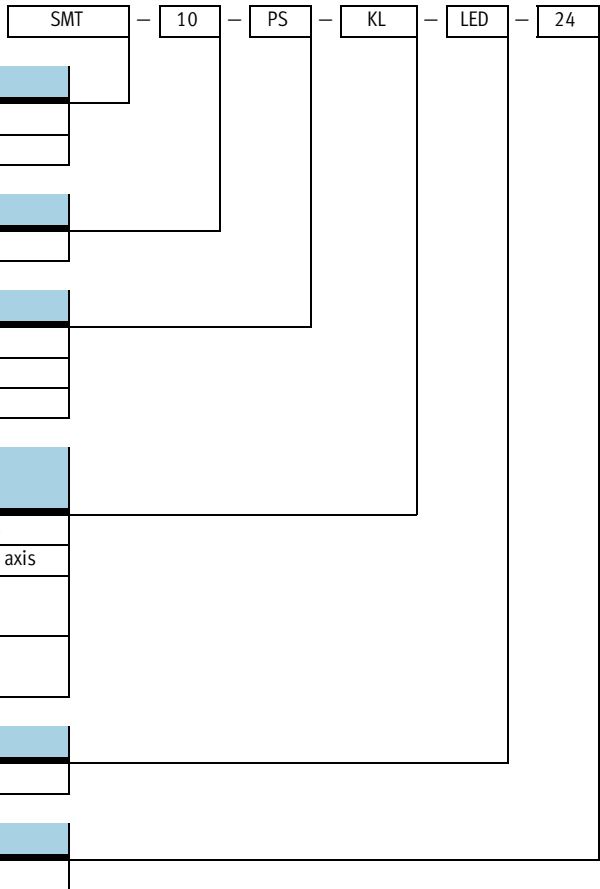
- 1 Connecting cable
- 2 Plug suitable for plug socket with cable SIM-M8-...
- 3 Clamping component
- 4 Yellow LED (positive or negative switching)
- 5 Switching point

Ordering data		Electrical connection	Cable length	Connection	Part No.	Type
		Cable	Plug M8	[m]	direction	
	NO contact					
	Operating voltage range 10 ... 30 V AC/DC					
	3-wire	–	2,5	In-line	525 913	SME-10F-DS-24V-K2,5L-OE
				Lateral	526 670	SME-10F-DS-24V-K2,5Q-OE
	–	3-pin	0,3	In-line	525 914	SME-10F-DS-24V-K0,3L-M8D
				Lateral	526 671	SME-10F-DS-24V-K0,3Q-M8D
Operating voltage range 5 ... 30 V AC/DC						
2-wire	–	2,5	In-line	526 672	SME-10F-ZS-24V-K2,5L-OE	
			Lateral	526 673	SME-10F-ZS-24V-K2,5Q-OE	

 Core Range

Proximity sensors SMT/SME-10, for slot type 10

Type code



- 1 - Type discontinued
Available up until 2005

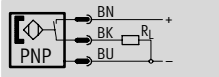
Proximity sensors SMT-10, for slot type 10

Technical data – Magneto-resistive measuring principle

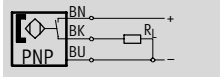
FESTO

Function

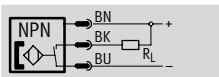
NO contact, PNP, with plug



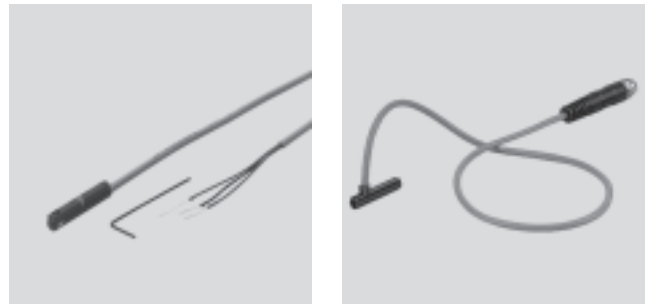
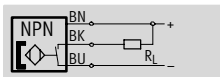
NO contact, PNP, with cable



NO contact, NPN, with plug



NO contact, NPN, with cable



General technical data					
Switching element function	NO contact				
Electrical data					
Switch output	PNP		NPN		
Electrical connection	Cable, 3-wire	Cable with plug M8x1, 3-pin	Cable, 3-wire	Cable with plug M8x1, 3-pin	
Operating voltage range	[V DC]	10 ... 30			
Max. output current	[mA]	200			
Max. switching capacity	[W]	6			
Voltage drop	[V]	1.8			
Residual current	[mA]	≤0.01			
Protection against short circuit	Yes				
Protection against polarity reversal	For all electrical connections				
Protection class to EN 60 529	IP65/IP67				
CE symbol	89/336/EEC (EMC)	Yes			
Design					
Design	For rounded slot				
Type of mounting	Clamped in rounded slot, insertable from end				
Reproducibility of switching point ¹⁾	[mm]	±0.1			
Switch-on time	[ms]	≤0.2			
Switch-off time	[ms]	≤0.2			
Switching status display	Yellow LED				
Cable length	[m]	2.5	0.3	2.5	0.3
Connection direction	In-line or lateral				
Mounting position	Any				
Materials	Housing	Polyamide			
	Cable sheath	Polyurethane			
Note on material	Free of copper, PTFE and silicone				
Product weight	[g]	20	6	20	6

1) Only applicable to drives secured against rotation

Operating and environmental conditions					
Electrical connection	Cable		Plug		
Cable installation	Fixed	Flexible	Fixed	Flexible	
Ambient temperature	[°C]	-20 ... +60	-5 ... +60	-20 ... +60	-5 ... +60
Corrosion resistance class CRC ¹⁾	4		4		

1) Corrosion resistance class 4 according to Festo standard 940 070
 Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

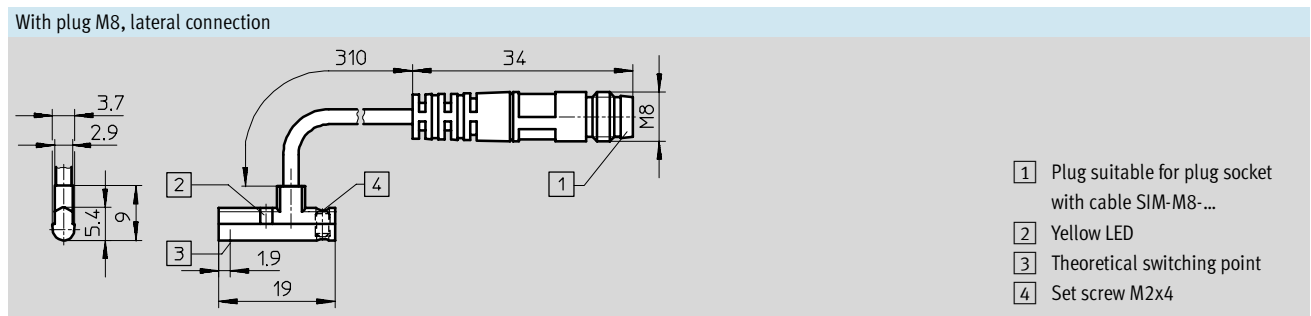
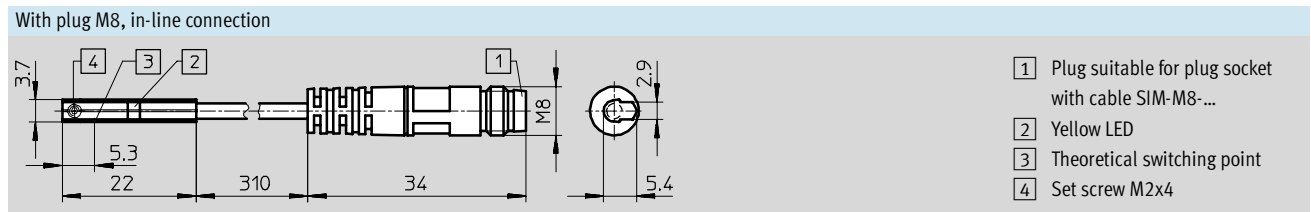
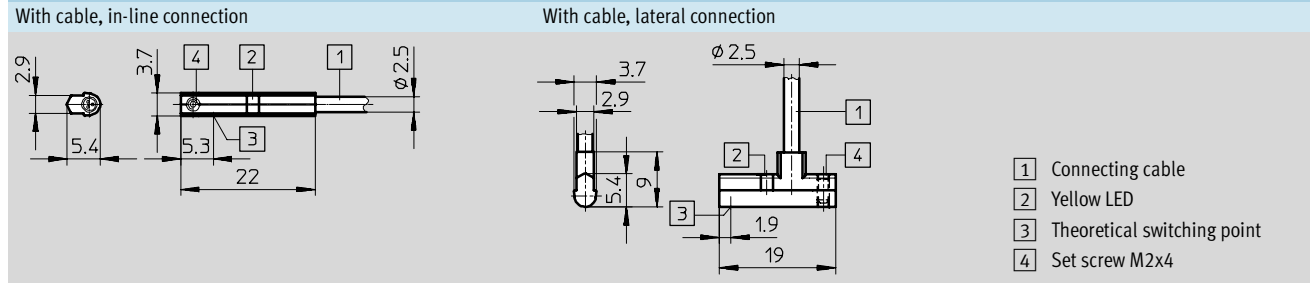
- Type discontinued
Available up until 2005

FESTO

Proximity sensors SMT-10, for slot type 10

Technical data – Magneto-resistive measuring principle

Dimensions Download CAD data → www.festo.com/en/engineering



Ordering data							
	Switch output	Electrical connection		Cable length [m]	Connection direction	Part No.	Type
		Cable	Plug M8				
	NO contact						
	NPN	3-wire	-	2.5	In-line	173 222	SMT-10-NS-KL-LED-24
					Lateral	173 223	SMT-10-NS-KQ-LED-24
		-	3-pin	0.3	In-line	173 224	SMT-10-NS-SL-LED-24
					Lateral	173 225	SMT-10-NS-SQ-LED-24
	PNP	3-wire	-	2.5	In-line	173 218	SMT-10-PS-KL-LED-24
					Lateral	173 219	SMT-10-PS-KQ-LED-24
		-	3-pin	0.3	In-line	173 220	SMT-10-PS-SL-LED-24
Lateral					173 221	SMT-10-PS-SQ-LED-24	

Drive accessories
Cylinder sensors

10.2

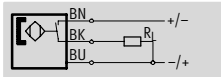
Proximity sensors SME-10, for slot type 10

Technical data – Magnetic reed measuring principle

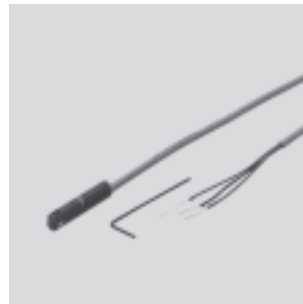
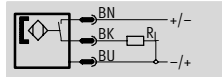
FESTO

Function

NO contact, with 3-wire cable



NO contact, 3-wire, with plug



General technical data			
Switching element function		NO contact	
Electrical data			
Switch output		Contacting, bipolar	
Electrical connection		Cable, 3-wire	Cable with plug M8x1, 3-pin
Operating voltage range	[V DC]	12 ... 27	
Max. output current	[mA]	100	
Max. switching capacity	[W]	1	
Voltage drop	[V]	-	
Residual current	[mA]	-	
Protection against short circuit		No	
Protection against polarity reversal		No	
Protection class to EN 60 529		IP65/IP67	
CE symbol	89/336/EEC (EMC)	Yes	
Design			
Design		For rounded slot	
Type of mounting		Clamped in rounded slot, insertable from end	
Reproducibility of switching point ¹⁾	[mm]	±0.1	
Switch-on time	[ms]	≤0.6	
Switch-off time	[ms]	≤0.05	
Switching status display		Yellow LED	
Cable length	[m]	2.5	0.3
Connection direction		In-line or lateral	
Mounting position		Any	
Materials	Housing	Polyphenylene sulphide	
	Cable sheath	Polyurethane	
Note on material		Free of copper, PTFE and silicone	
Product weight	[g]	20	5

1) Only applicable to drives secured against rotation

Operating and environmental conditions					
Electrical connection		Cable		Plug	
Cable installation		Fixed	Flexible	Fixed	Flexible
Ambient temperature	[°C]	-20 ... +70	-5 ... +70	-20 ... +70	-5 ... +70
Corrosion resistance class CRC ¹⁾		4		2	

1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

Corrosion resistance class 4 according to Festo standard 940 070

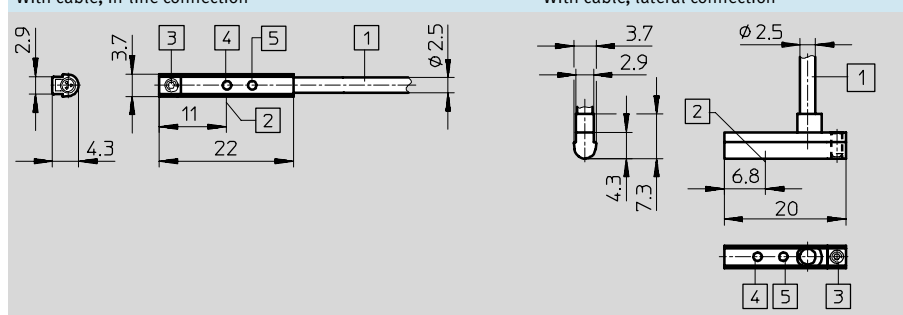
Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Proximity sensors SME-10, for slot type 10

Technical data – Magnetic reed measuring principle

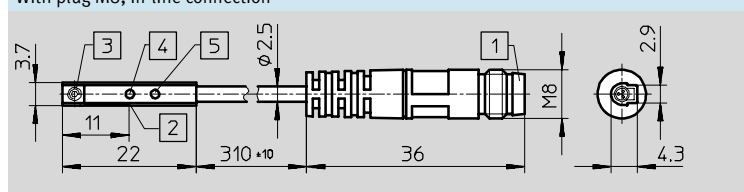
Dimensions Download CAD data → www.festo.com/en/engineering

With cable, in-line connection **With cable, lateral connection**



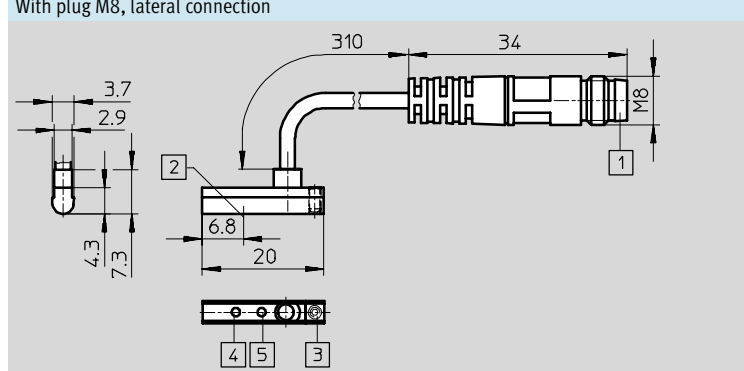
- 1 Connecting cable
- 2 Theoretical switching point
- 3 Set screw M2x4
- 4 Yellow LED (positive switching)
- 5 Yellow LED (negative switching)

With plug M8, in-line connection

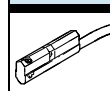


- 1 Plug suitable for plug socket with cable SIM-M8-...
- 2 Theoretical switching point
- 3 Set screw M2x4
- 4 Yellow LED (positive switching)
- 5 Yellow LED (negative switching)

With plug M8, lateral connection



- 1 Plug suitable for plug socket with cable SIM-M8-...
- 2 Theoretical switching point
- 3 Set screw M2x4
- 4 Yellow LED (positive switching)
- 5 Yellow LED (negative switching)

	Electrical connection		Cable length [m]	Connection direction	Part No.	Type
	Cable	Plug M8				
	NO contact		2.5	In-line	173 210	SME-10-KL-LED-24
	3-wire	-				
	-	3-pin	0.3	In-line	173 212	SME-10-SL-LED-24
				Lateral	173 213	SME-10-SQ-LED-24

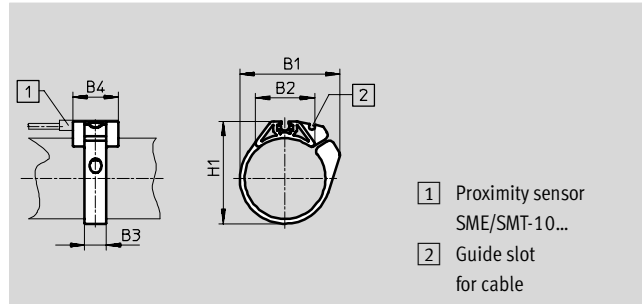
Proximity sensors for slot type 10

Accessories



Mounting kit SMBR

Material:
Polyacetate



Dimensions and ordering data							
For piston \varnothing	B1	B2	B3 ± 0.1	B4 ± 0.1	H1	Part No.	Type
6	15.6	9.4	7	13.5	13.5	173 226	SMBR-10-6
8	18.9	12.3	7	19	17.5	175 101	SMBR-10-8
10	20.4	13.7	7	19	19.9	173 227	SMBR-10-10
12	22.7	14.3	7	19	21.9	175 102	SMBR-10-12
16	26.1	17	7	19	25.7	173 228	SMBR-10-16
20	33.2	20.8	9	19	30.4	175 103	SMBR-10-20
25	36.5	22.6	9	19	35.6	175 104	SMBR-10-25
32	41.7	24.5	9	19	42.7	175 105	SMBR-10-32
40	47	26.5	9	19	50.7	175 106	SMBR-10-40
50	56.4	28.6	9	19	61.5	175 107	SMBR-10-50
63	69.4	32	9	19	74.5	175 108	SMBR-10-63

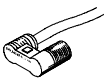
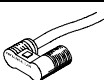

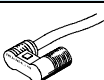
Ordering data – Mounting kit WSM-...-SME-10			
		Piston \varnothing	Part No. Type
	For swivel module DSM	6	173 205 WSM-6-SME-10
		8	173 206 WSM-8-SME-10
		10	173 207 WSM-10-SME-10

Ordering data – Cable clip SMBK-10		
		Part No. Type
	For fixing the cable in the sensor slot	534 255 SMBK-10

Core Range

Proximity sensors, round design

Product range overview

Measuring principle	Design	Type	Mounting	Switching element function		Switch output	Electrical connection	
				NO contact	NC contact		Cable	Plug
Magneto-inductive	Operating voltage range 10 ... 30 V DC							
		SMT0-4U	With accessories	■	-	PNP	3-wire	M8x1, 3-pin
				■	-	NPN	3-wire	M8x1, 3-pin
Magnetic reed	Operating voltage range 12 ... 30 V AC/DC							
		SMEO-4U	With accessories	■	-	Contacting	3-wire	M8x1, 3-pin
		CRSMEO-4 Corrosion resistant	With accessories	■	-	Contacting	3-wire	-
	Operating voltage range 12 ... 250 V AC/DC							
		SMEO-4U	With accessories	■	-	Contacting	2-wire	-

Drive accessories
Cylinder sensors

10.2

Proximity sensors, round design

Product range overview

Type	Connection direction		Switching status display with LED	Free of copper, PTFE and silicone	→ Page
	In-line	Lateral			
Operating voltage range 10 ... 30 V DC					
SMT0-4U	■	-	■	■	1 / 10.2-63
	■	-	■		
Operating voltage range 12 ... 30 V AC/DC					
SME0-4U	■	-	■	■	1 / 10.2-65
CRSME0-4 Corrosion resistant	■	-	■	-	1 / 10.2-68
Operating voltage range 12 ... 250 V AC/DC					
SME0-4U	■	-	■	-	1 / 10.2-65

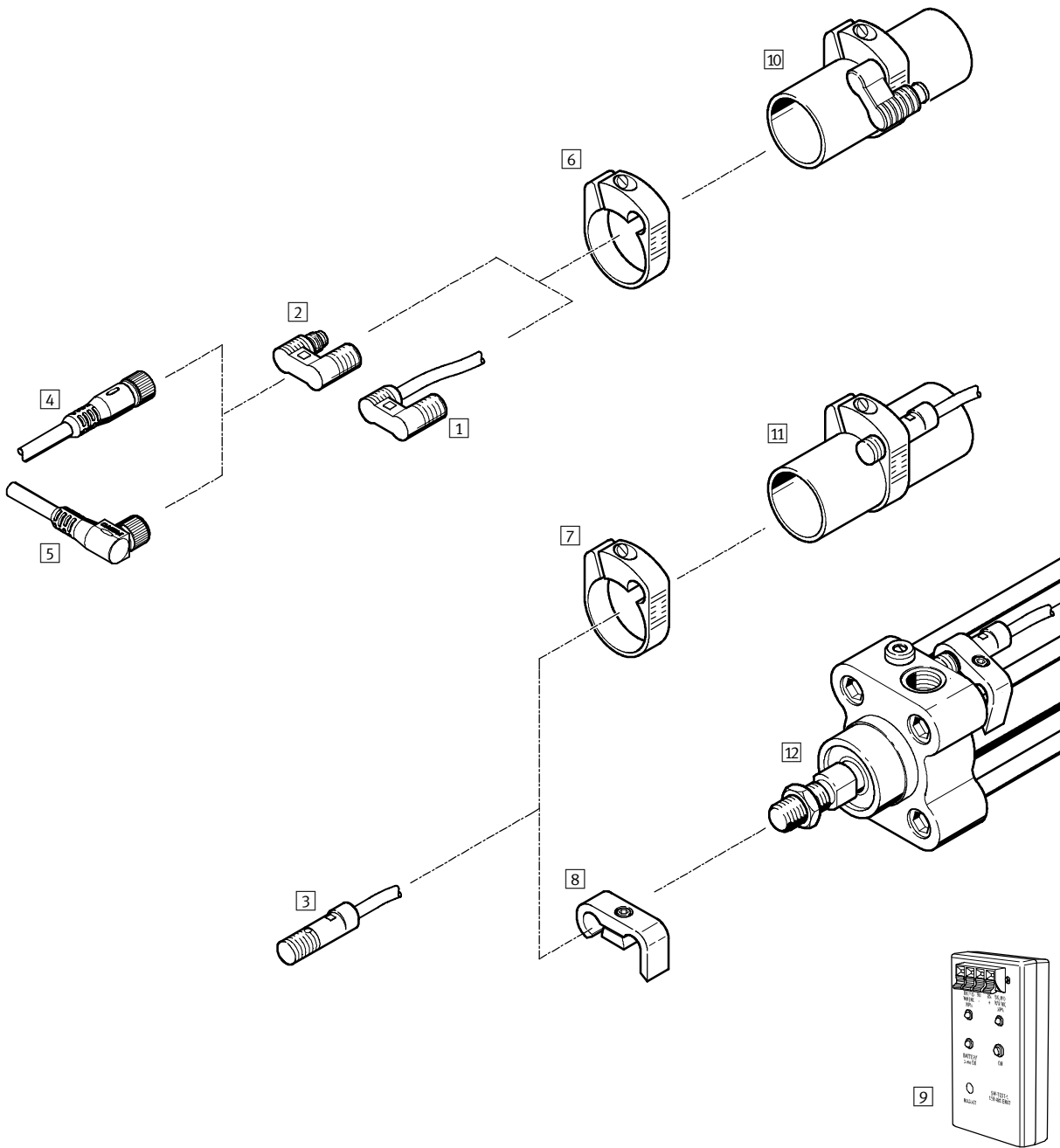
Proximity sensors, round design

Peripherals overview



Drive accessories
Cylinder sensors

10.2



Proximity sensors, round design

Peripherals overview

FESTO

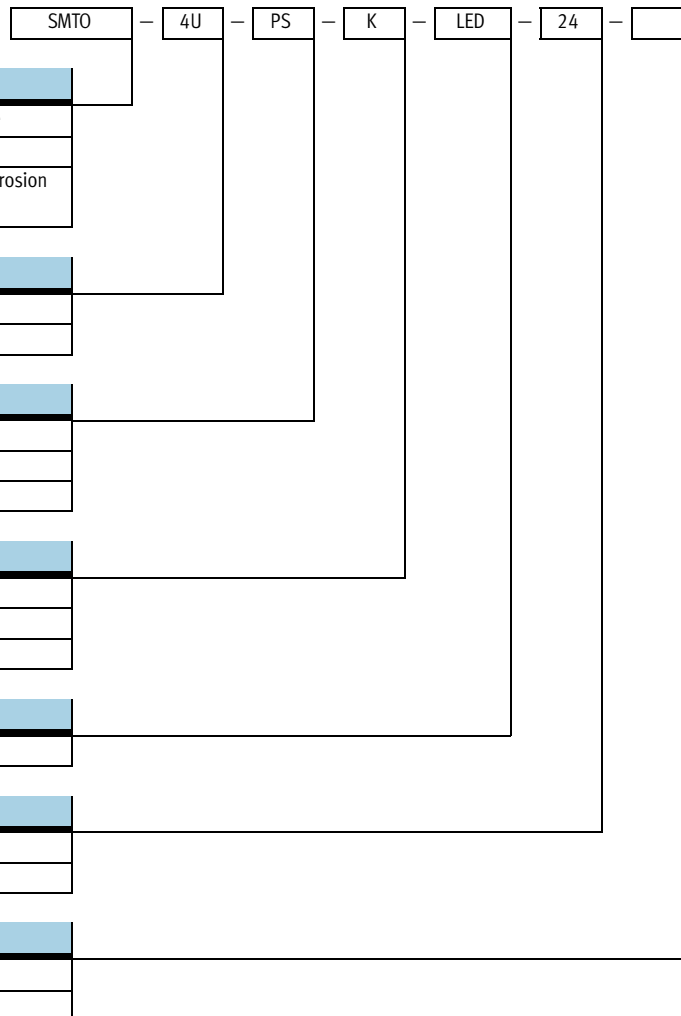
Mounting attachments and accessories		
	Brief description	→ Page
Proximity sensors		
1	SMT0-4U-K	Magneto-inductive, with cable
	SME0-4U-K	Magnetic reed, with cable
2	SMT0-4U-S	Magneto-inductive, with plug M8x1
	SME0-4U-S	Magnetic reed, with plug M8x1
3	CRSME0-4	Magnetic reed, corrosion resistant, with cable
Accessories		
4	Plug socket with cable SIM-M8-3GD-...	Straight socket, M8x1, 3-pin
5	Plug socket with cable SIM-M8-3WD-...	Angled socket, M8x1, 3-pin
6	Mounting kit SMBR-...	For round cylinders
7	Mounting kit CRSMBR-...	Corrosion resistant, for round cylinders
8	Mounting kit CRSMB-...	Corrosion resistant
9	Sensor tester SM-TEST-1	
Drives		
10	Round cylinder	∅ 8 ... 63 mm
11	Round cylinders CRDG, CRDSW, CRDSNU, stainless steel	∅ 12 ... 63 mm
12	Standard cylinders CRDNG, CRDNGS, stainless steel	∅ 32 ... 125 mm

Drive accessories
Cylinder sensors

10.2

Proximity sensors, round design

Type code

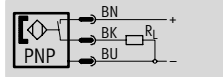


Proximity sensors SMTO-4U, round design

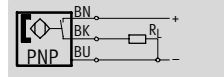
Technical data – Magneto-inductive measuring principle

Function

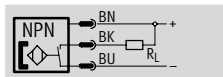
NO contact, PNP, with plug



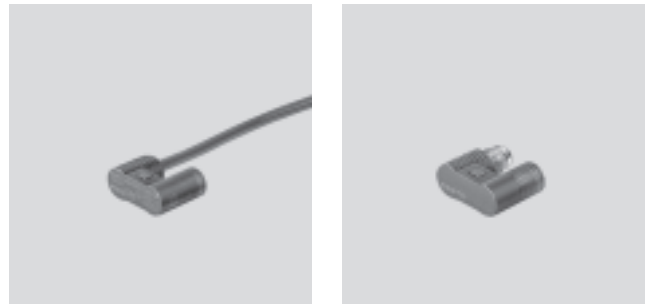
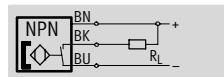
NO contact, PNP, with cable



NO contact, NPN, with plug



NO contact, NPN, with cable



General technical data				
Switching element function		NO contact		
Electrical data				
Switch output		PNP		NPN
Electrical connection		Cable, 3-wire	Plug M8x1, 3-pin	Cable, 3-wire Plug M8x1, 3-pin
Operating voltage range [V DC]		10 ... 30		
Max. output current [mA]		200		
Max. switching capacity [W]		6		
Voltage drop [V]		2		
Residual current [mA]		≤0.01		
Protection against short circuit		Yes		
Protection against polarity reversal		For all electrical connections		
Protection class to EN 60 529		IP67		
CE symbol 89/336/EEC (EMC)		Yes		
Design				
Design		Round		
Type of mounting		With accessories		
Reproducibility of switching point ¹⁾ [mm]		±0.1		
Switch-on time [ms]		≤0.5		
Switch-off time [ms]		≤0.5		
Switching status display		Yellow LED		
Cable length [m]		2.5	–	2.5
Connection direction		In-line		
Mounting position		Any		
Materials		Polyester		
Housing		Polyester		
Cable sheath		PVC	–	PVC
Note on material		Free of copper, PTFE and silicone		
Product weight [g]		70	6	70

1) Only applicable to drives secured against rotation

Operating and environmental conditions			
Electrical connection		Cable	
Cable installation		Fixed	Flexible
Ambient temperature [°C]		–25... +70	–5 ... +70
Corrosion resistance class CRC ¹⁾		4	2

1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

Corrosion resistance class 4 according to Festo standard 940 070

Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Proximity sensors SMT0-4U, round design

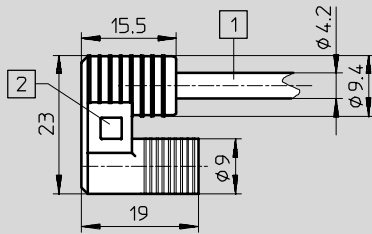
Technical data – Magneto-inductive measuring principle



Dimensions

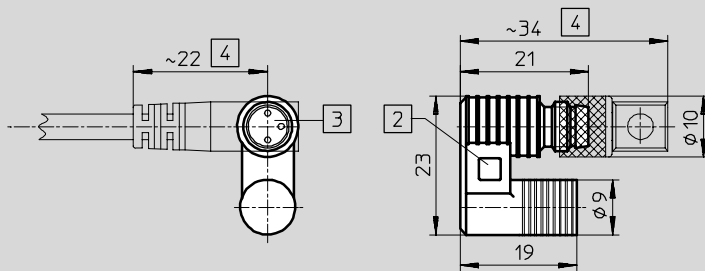
Download CAD data → www.festo.com/en/engineering

With cable



- 1 Connecting cable
- 2 Yellow LED

With plug M8



- 2 Yellow LED
- 3 Plug suitable for plug socket with cable SIM-M8-...
- 4 Installation space for angled socket

Ordering data

	Switch output	Electrical connection		Cable length [m]	Part No.	Type
		Cable	Plug M8			
	NO contact					
	PNP	3-wire	–	2.5	152 836	SMT0-4U-PS-K-LED-24
		–	3-pin	–	152 742	SMT0-4U-PS-S-LED-24
	NPN	3-wire	–	2.5	152 837	SMT0-4U-NS-K-LED-24
–		3-pin	–	152 743	SMT0-4U-NS-S-LED-24	

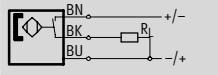
Proximity sensors SMEO-4U, round design

Technical data – Magnetic reed measuring principle

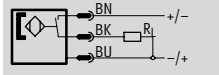
FESTO

Function

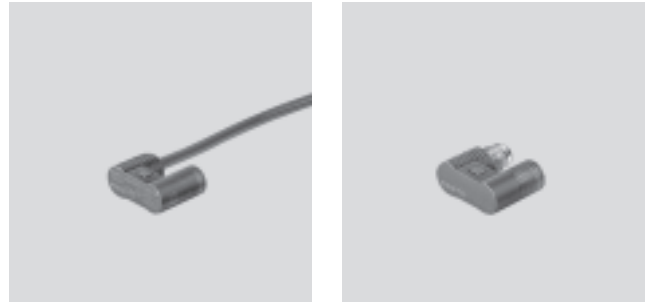
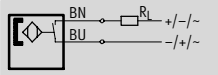
NO contact, with 3-wire cable



NO contact, 3-wire, with plug



NO contact, with 2-wire cable



General technical data						
Switching element function		NO contact				
Electrical data						
Switch output		Contacting, bipolar ¹⁾				
Electrical connection		Cable, 3-wire	Cable, 3-wire	Plug M8x1, 3-pin	Cable, 2-wire	
Operating voltage range	D.C. voltage	[V DC]	12 ... 27		12 ... 250	
	A.C. voltage	[V AC]	-		12 ... 250	
Max. output current		[mA]	500		500	
Max. switching capacity	D.C. voltage	[W]	10		10	
	A.C. voltage	[VA]	-		10	
Voltage drop		[V]	-		4.1	
Residual current		[mA]	-		-	
Protection against short circuit		No				
Protection against polarity reversal		No				
Protection class to EN 60 529		IP67				
CE symbol	89/336/EEC (EMC)		Yes		Yes	
	73/72/EEC (low voltage)		Omitted		Yes	
Design						
Design		Round				
Type of mounting		With accessories				
Reproducibility of switching point ²⁾		[mm]	±0.1			
Switch-on time		[ms]	0.03			
Switch-off time		[ms]	≤0.5			
Switching status display		Yellow LED				
Cable length		[m]	2.5	5	-	2.5
Connection direction		In-line				
Mounting position		Any				
Materials		Polyester				
Cable sheath		Polyurethane	Polyvinyl chloride	-	Polyvinyl chloride	
Note on material		-		Free of copper, PTFE and silicone	-	
Product weight		[g]	70	130	16	70

1) 2-wire design, bipolar, without LED function
 2) Only applicable to drives secured against rotation

Proximity sensors SMEO-4U, round design

Technical data – Magnetic reed measuring principle



Operating and environmental conditions			
Electrical connection	Cable		Plug
Cable installation	Fixed	Flexible	
Ambient temperature [°C]	-20 ... +60	-5 ... +60	-20 ... +60
Corrosion resistance class CRC ¹⁾	4		2

- 1) Corrosion resistance class 2 according to Festo standard 940 070
 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.
 Corrosion resistance class 4 according to Festo standard 940 070
 Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Dimensions Download CAD data → www.festo.com/en/engineering

With cable

- 1 Connecting cable
- 2 Yellow LED

With plug M8

- 2 Yellow LED
- 3 Plug suitable for plug socket with cable SIM-M8-...
- 4 Installation space for angled socket

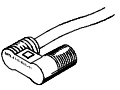
Drive accessories
Cylinder sensors

10.2

Proximity sensors SMEO-4U, round design

Technical data – Magnetic reed measuring principle



Ordering data					
	Electrical connection		Cable length [m]	Part No.	Type
	Cable	Plug M8			
	NO contact				
	Operating voltage range 12 ... 27 V DC				
	3-wire	–	2.5	36 198	SMEO-4U-K-LED-24
			5	175 401	SMEO-4U-K5-LED-24
	–	3-pin	–	151 526	SMEO-4U-S-LED-24-B
	Operating voltage range 12 ... 250 V AC/DC				
	2-wire	–	2.5	150 011	SMEO-4U-K-LED-230

Proximity sensors CRSMEO-4, round design

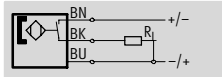
Technical data – Magnetic reed measuring principle



Function

NO contact, with 3-wire cable

corrosion resistant



General technical data			
Switching element function		NO contact	
Electrical data			
Switch output		Contacting	
Electrical connection		Cable, 3-wire	
Operating voltage range	D.C. voltage	[V DC]	12 ... 30
	A.C. voltage	[V AC]	12 ... 30
Max. output current		[mA]	500
Max. switching capacity	D.C. voltage	[W]	10
	A.C. voltage	[VA]	10
Voltage drop		[V]	–
Residual current		[mA]	–
Protection against short circuit		No	
Protection against polarity reversal		No	
Protection class to EN 60 529		IP65/IP67	
CE symbol		89/336/EEC (EMC)	Yes
Design			
Design		Round	
Type of mounting		With accessories	
Reproducibility of switching point ¹⁾		[mm]	±0.1
Switch-on time		[ms]	0.03
Switch-off time		[ms]	≤0.5
Switching status display		Yellow LED	
Cable length		[m]	2.5
Connection direction		In-line	
Mounting position		Any	
Materials	Housing	Polypropylene	
	Cable sheath	Termoplastic rubber	
Product weight		[g]	70

1) Only applicable to drives secured against rotation

Operating and environmental conditions			
Electrical connection		Cable	
Cable installation		Fixed	Flexible
Ambient temperature		[°C]	–20 ... +60
Corrosion resistance class CRC ¹⁾		4	

1) Corrosion resistance class 4 according to Festo standard 940 070
Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Proximity sensors CRSMEO-4, round design

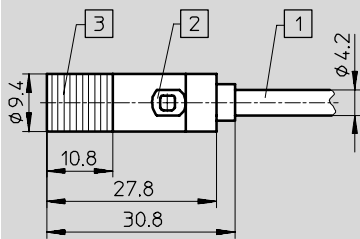
Technical data – Magnetic reed measuring principle



Dimensions

Download CAD data → www.festo.com/en/engineering

With cable



- 1 Connecting cable
- 2 Yellow LED
- 3 Clamping range

Ordering data

	Electrical connection	Cable length [m]	Part No.	Type
	Cable			
	NO contact			
	Corrosion resistant			
	3-wire	2.5	161 775	CRSMEO-4-K-LED-24

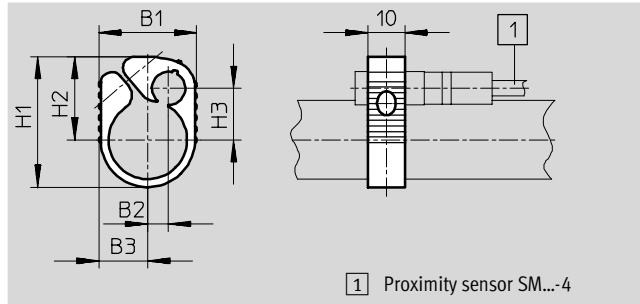
Proximity sensors, round design

Accessories



Mounting kit SMBR

Material:
Polyacetate



1) Proximity sensor SM...-4

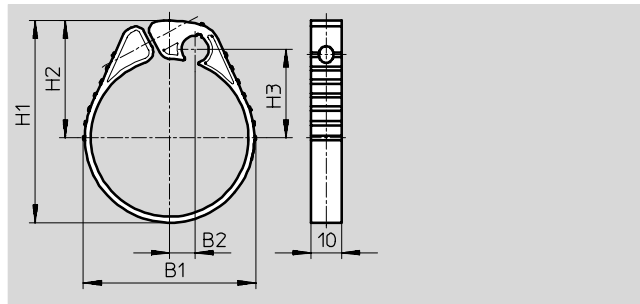
Dimensions and ordering data

For piston \varnothing	B1	B2	B3	H1	H2	H3	Part No.	Type
8	21	-	14	23.5	16.5	9	19 272	SMBR-8
							166 398	SMBR-8-CT ¹⁾
10	22	0.5	14	26	18.5	10	19 273	SMBR-10
							166 399	SMBR-10-CT ¹⁾
12	22	4	11	28.5	20	10.2	19 274	SMBR-12
							166 400	SMBR-12-CT ¹⁾
16	22.5	4	11.5	33.5	22.5	12.4	19 275	SMBR-16
							166 401	SMBR-16-CT ¹⁾
20	26.5	5.5	13.5	35.5	22.5	14	19 276	SMBR-20
							166 402	SMBR-20-CT ¹⁾
25	31.5	7.5	16	40.5	25	16	19 277	SMBR-25
							166 403	SMBR-25-CT ¹⁾

1) Free of Copper, PTFE and silicone

Mounting kit CRSMBR

Material:
Polypropylene



Dimensions and ordering data

For piston \varnothing	B1	B2	H1	H2	H3	Part No.	Type
12	22	4.1	28.6	20	10.2	164 581	CRSMBR-12
16	22.3	4	33.2	22.5	12.4	164 582	CRSMBR-16
20	26.5	5.6	35.25	22.5	14	164 583	CRSMBR-20
25	31.5	7.4	40.2	25	16	164 584	CRSMBR-25
32	38.6	7.9	47.8	29	19.7	163 888	CRSMBR-32
40	46.6	8.1	55.8	33	23.8	163 889	CRSMBR-40
50	57.4	8.2	67.2	39	29.5	163 890	CRSMBR-50
63	70.4	8.2	80.8	45.9	36.2	163 891	CRSMBR-63

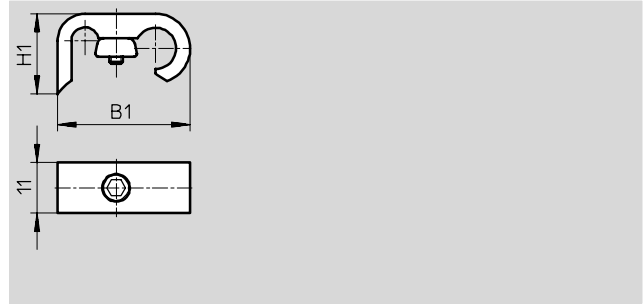
Proximity sensors, round design

Accessories



Mounting kit CRSMB

Material:
High-alloy stainless steel



Dimensions and ordering data				
For piston \varnothing	B1	H1	Part No.	Type
32	29	17.6	161 763	CRSMB-32
40	29	15.1	161 764	CRSMB-40
50	31.1	17.4	161 765	CRSMB-50
63	31.1	18.1	161 766	CRSMB-63
80	33	24.2	161 767	CRSMB-80
100	33	27.5	161 768	CRSMB-100
125	36.5	31.1	185 365	CRSMB-125


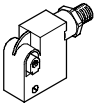
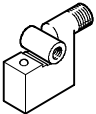



Proximity sensors, block design

Product range overview



Drive accessories
Cylinder sensors

10.2

Measuring principle	Design	Type	Mounting	Switching element function		Switch output	Electrical connection	
				NO contact	NC contact		Cable	Plug
Magneto-resistive	Operating voltage range 10 ... 30 V DC							
		SMTO-1	With accessories	■	-	PNP	3-wire	M8x1, 3-pin
				■	-	NPN	3-wire	M8x1, 3-pin
	SMTSO-1 Welding field immune		■	-	PNP	-	M12x1, 3-pin	
Magneto-inductive	Operating voltage range 10 ... 30 V DC							
		SMTO-6	With accessories	■	-	PNP	-	M12x1, 3-pin
Magnetic reed	Operating voltage range 0 ... 30 V DC							
		SMEO-1	With accessories	■	-	Contacting	-	M8x1, 3-pin ¹⁾
				■	-		3-wire	M8x1, 3-pin
	Operating voltage range 0 ... 250 V AC, 0 ... 200 V DC							
		SMEO-1-B	With accessories	■	-	Contacting	2-wire	-
		SMEO-1		■	-		2-wire	-
		■		-	2-wire		-	
	SMEO-1-S6-C Heat resistant up to 120 °C	■		-	2-wire		-	
Pneumatic	Operating pressure 2 ... 6 bar							
		SMPO-1	With accessories	■ ²⁾	-	-	-	-

1) The proximity sensor has 2 wires internally. One pin of the M8x1 plug is unused.

2) 3/2-way valve, normally closed

Proximity sensors, block design

Product range overview

FESTO

Type	Connection direction		Replacement without re-adjustment	Switching status display with LED	Free of copper, PTFE and silicone	→ Page
	In-line	Lateral				
Operating voltage range 10 ... 30 V DC						
SMT0-1	■	-	■ 1)	■	■	1 / 10.2-77
	■	-	■ 1)	■	-	
SMTSO-1 Welding field immune	■	-	-	■	-	1 / 10.2-79
Operating voltage range 10 ... 30 V DC						
SMT0-6	■	-	-	■	-	1 / 10.2-81
Operating voltage range 0 ... 30 V DC						
SME0-1	■	-	■ 1)	-	■	1 / 10.2-83
	■	-	■ 1)	■	■	
Operating voltage range 0 ... 250 V AC, 0 ... 200 V DC						
SME0-1-B	■	-	■ 1)	-	-	1 / 10.2-83
SME0-1	■	-	■ 1)	■	-	
	■	-	■ 1)	-	-	
SME0-1-S6-C Heat resistant up to 120 °C	■	-	■ 1)	■	-	
Operating pressure 2 ... 6 bar						
SMPO-1	■	-	■ 1)	- 2)	-	1 / 10.2-86

1) Not in combination with mounting kit SMB-1 or SMBS-...

2) Switching status is indicated by means of an LED.

Drive accessories
Cylinder sensors

10.2

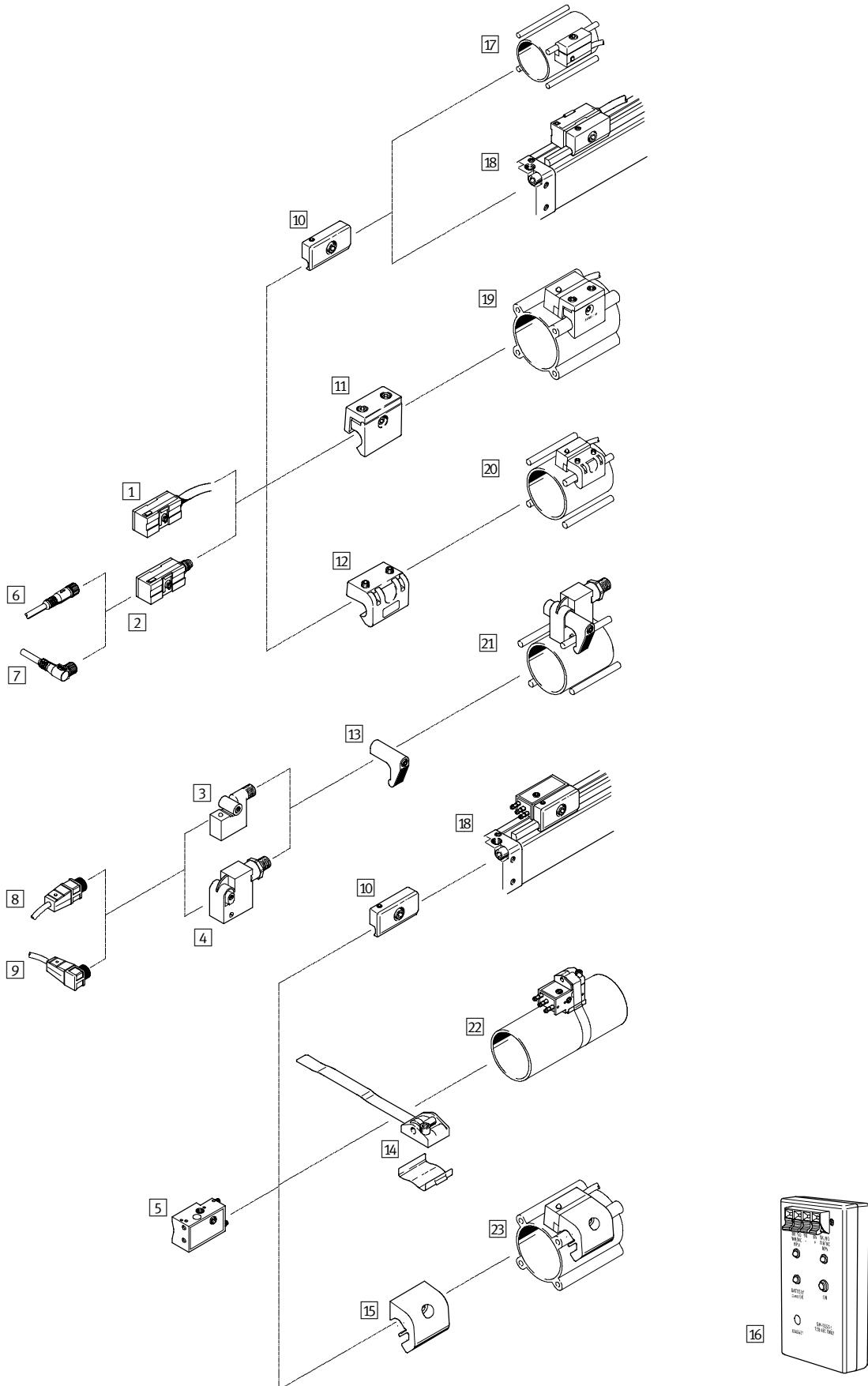
Proximity sensors, block design

Peripherals overview



Drive accessories
Cylinder sensors

10.2



Proximity sensors, block design

Peripherals overview

FESTO

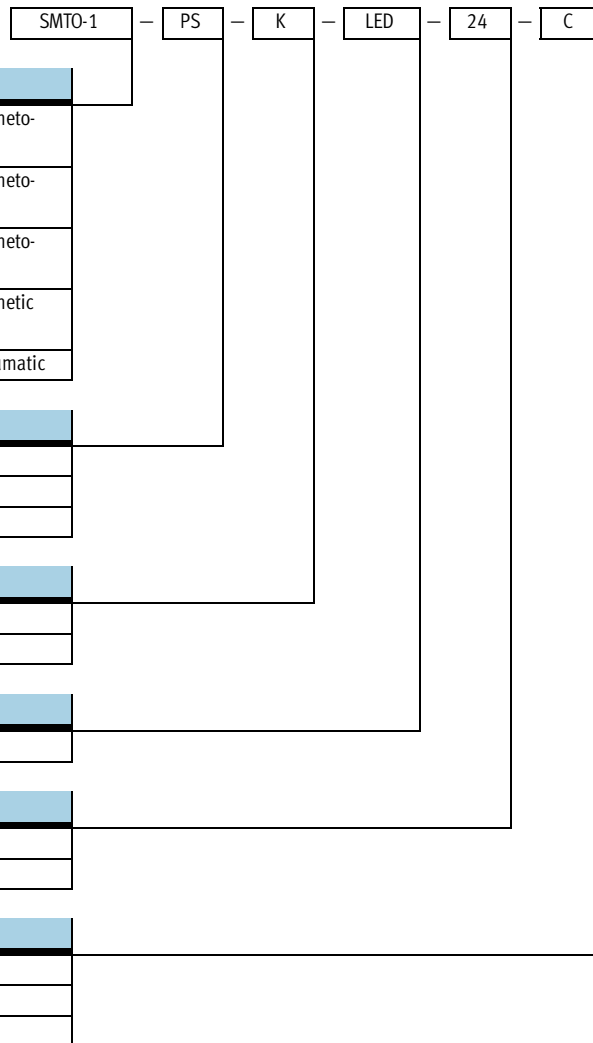
Mounting attachments and accessories		
	Brief description	→ Page
Proximity sensors		
1	SMT0-1-... SME0-1-...	Magneto-resistive, with cable Magnetic reed, with cable 1 / 10.2-77 1 / 10.2-83
2	SMT0-1-... SME0-1-...	Magneto-resistive, with plug M8x1 Magnetic reed, with plug M8x1 1 / 10.2-77 1 / 10.2-83
3	SMT0-6-...	Magneto-inductive, with plug M12x1 1 / 10.2-81
4	SMTSO-1-...	Magneto-resistive, welding field immune, with plug M12x1 1 / 10.2-79
5	SMPO-1-...	Pneumatic 1 / 10.2-86
Accessories		
6	Plug socket with cable SIM-M8-3GD-...	Straight socket, M8x1, 3-pin 1 / 10.2-100
7	Plug socket with cable SIM-M8-3WD-...	Angled socket, M8x1, 3-pin 1 / 10.2-100
8	Plug socket with cable SIM-M12-3GD-...	Straight socket, M12x1, 3-pin 1 / 10.2-100
9	Plug socket with cable SIM-M12-3WD-...	Angled socket, M12x1, 3-pin 1 / 10.2-100
10	Mounting kit SMB-1	For standard cylinders DNG 1 / 10.2-88
11	Mounting kit SMBU-1-B	For standard cylinders DNG 1 / 10.2-88
12	Mounting kits SMB-2-B, SMB-3-B	For standard cylinders DNG 1 / 10.2-88
13	Mounting kit SMBT-1	For standard cylinders DNG 1 / 10.2-89
14	Mounting kit SMBS-...	For round cylinders 1 / 10.2-89
15	Mounting kit SMBU-1-H-32	For standard cylinders DNU 1 / 10.2-89
16	Sensor tester SM-TEST-1	1 / 10.2-99
Drives		
17	Standard cylinder DNG	∅ 32 ... 320 mm -
18	Flat cylinder DZH	∅ 32 ... 63 mm
	Semi-rotary drive DRQ	∅ 40 ... 100 mm
19	Standard cylinder DNU	∅ 32 ... 125 mm
20	Standard cylinder DNG	∅ 32 ... 320 mm
21	Standard cylinder DNG	∅ 32 ... 320 mm
22	Round cylinder	∅ 8 ... 100 mm
23	Standard cylinder DNU	∅ 32 ... 125 mm

Drive accessories
Cylinder sensors

10.2

Proximity sensors, block design

Type code

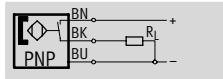


Proximity sensors SMTO-1, block design

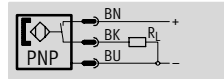
Technical data – Magneto-resistive measuring principle

Function

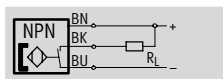
NO contact, PNP, with cable



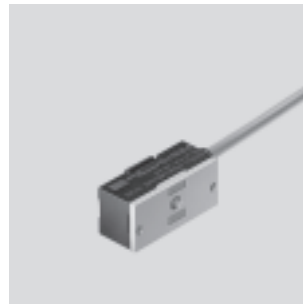
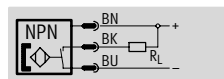
NO contact, PNP, with plug



NO contact, NPN, with cable



NO contact, NPN, with plug



General technical data				
Switching element function	NO contact			
Electrical data				
Switch output	PNP		NPN	
Electrical connection	Cable, 3-wire	Plug M8x1, 3-pin	Cable, 3-wire	Plug M8x1, 3-pin
Operating voltage range	[V DC]	10 ... 30		
Max. switching current	[mA]	200		
Max. switching capacity	[W]	6		
Voltage drop	[V]	3		
Residual current	[mA]	≤0.01		
Protection against short circuit	Yes			
Protection against polarity reversal	For all electrical connections			
Protection class to EN 60 529	IP67			
CE symbol	89/336/EEC (EMC)	Yes		
Design				
Design	Block design			
Type of mounting	With accessories			
Reproducibility of switching point ¹⁾	[mm]	±0.1		
Switch-on time	[ms]	≤1		
Switch-off time	[ms]	≤1		
Switching status display	Yellow LED			
Cable length	[m]	2.5	–	2.5
Mounting position	Any			
Materials	Housing	Die-cast zinc, polyester, spring steel		
	Cable sheath	Polyvinyl chloride		
Note on material	Free of copper, PTFE and silicone		–	
Product weight	[g]	85	20	85

1) Only applicable to drives secured against rotation

Operating and environmental conditions			
Electrical connection	Cable		Plug
Cable installation	Fixed	Flexible	
Ambient temperature	[°C]	–25 ... +70	–5 ... +70
Corrosion resistance class CRC ¹⁾	4		2

1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

Corrosion resistance class 4 according to Festo standard 940 070

Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Proximity sensors SMTO-1, block design

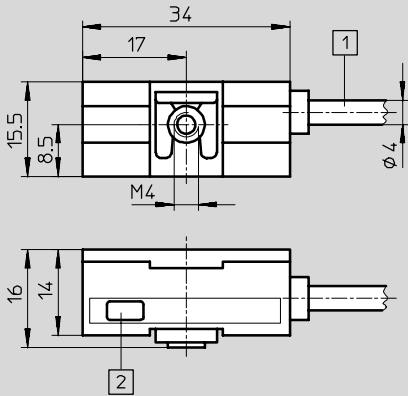
Technical data – Magneto-resistive measuring principle



Dimensions

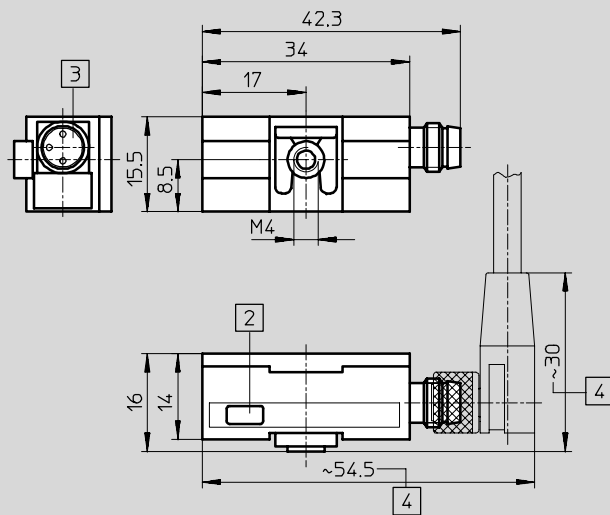
Download CAD data → www.festo.com/en/engineering

With cable



- 1 Connecting cable
- 2 Yellow LED

With plug M8



- 2 Yellow LED
- 3 Plug suitable for plug socket with cable SIM-M8-...
- 4 Installation space for angled socket

Ordering data

	Switch output	Electrical connection		Cable length [m]	Part No.	Type
		Cable	Plug M8			
	NO contact					
	PNP	3-wire	–	2.5	151 683	SMTO-1-PS-K-LED-24-C
		–	3-pin	–	151 685	SMTO-1-PS-S-LED-24-C
	NPN	3-wire	–	2.5	151 684	SMTO-1-NS-K-LED-24-C
–		3-pin	–	151 686	SMTO-1-NS-S-LED-24-C	

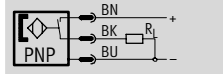
Proximity sensors SMTSO-1, block design

Technical data – Magneto-resistive measuring principle

Function

NO contact, PNP, with plug

Welding field immune



General technical data	
Switching element function	NO contact
Electrical data	
Switch output	PNP
Electrical connection	Plug M12x1, 3-pin
Operating voltage range	[V DC] 10 ... 30
Max. switching current	[mA] 200
Max. switching capacity	[W] 6
Voltage drop	[V] 3
Residual current	[mA] 0.01
Resistance to interference from magnetic fields	Alternating magnetic field 50 ... 60 Hz
Protection against short circuit	Yes
Protection against polarity reversal	For all electrical connections
Protection class to EN 60 529	IP65/IP67
CE symbol	89/336/EEC (EMC) Yes
Design	
Design	Block design
Type of mounting	With accessories
Reproducibility of switching point ¹⁾	[mm] ±0.1
Switch-on time	[ms] ≤35
Switch-off time	[ms] ≤20
Switching status display	Yellow LED
Ready status display	Green LED
Mounting position	Any
Materials	Housing Die-cast zinc
Product weight	[g] 70

1) Only applicable to drives secured against rotation

Operating and environmental conditions	
Electrical connection	Plug
Ambient temperature	[°C] -25 ... +70
Corrosion resistance class CRC ¹⁾	1

1) Corrosion resistance class 1 according to Festo standard 940 070
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Proximity sensors SMTSO-1, block design

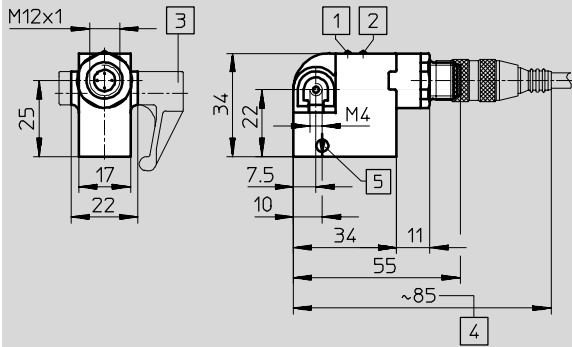
Technical data – Magneto-resistive measuring principle



Dimensions

Download CAD data → www.festo.com/en/engineering

With plug M12



- 1 Green LED
- 2 Yellow LED
- 3 Mounting kit
- 4 Installation space for socket

Ordering data

	Switch output	Electrical connection	Cable length [m]	Part No.	Type
		Plug M12			
	NO contact				
	Welding field immune				
	PNP	3-pin	–	30 441	SMTSO-1-PS-S-LED-24

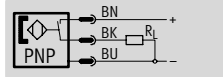
Proximity sensors SMTO-6, block design

Technical data – Magneto-inductive measuring principle



Function

NO contact, PNP, with plug



General technical data		
Switching element function		NO contact
Electrical data		
Switch output		PNP
Electrical connection		Plug M12x1, 3-pin
Operating voltage range	[V DC]	10 ... 30
Max. switching current	[mA]	200
Max. switching capacity	[W]	6
Voltage drop	[V]	3
Residual current	[mA]	≤0.01
Protection against short circuit		Yes
Protection against polarity reversal		For all electrical connections
Protection class to EN 60 529		IP67
CE symbol	89/336/EEC (EMC)	Yes
Design		
Design		Block design
Type of mounting		With accessories
Reproducibility of switching point ¹⁾	[mm]	±0.1
Switch-on time	[ms]	≤1
Switch-off time	[ms]	≤1
Switching status display		Yellow LED
Mounting position		Any
Materials	Housing	Die-cast zinc
Product weight	[g]	36

1) Only applicable to drives secured against rotation

Operating and environmental conditions		
Electrical connection		Plug
Ambient temperature	[°C]	-25 ... +70
Corrosion resistance class CRC ¹⁾		1

1) Corrosion resistance class 1 according to Festo standard 940 070
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Proximity sensors SMT0-6, block design

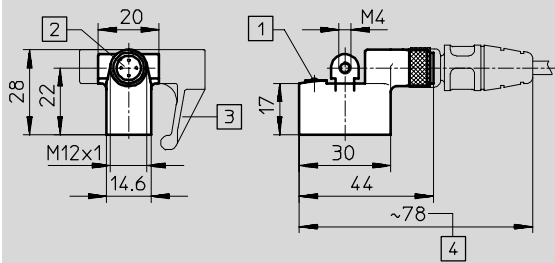
Technical data – Magneto-inductive measuring principle



Dimensions

Download CAD data → www.festo.com/en/engineering

With plug M12



- 1 Yellow LED
- 2 Plug suitable for plug socket with cable SIM-M12-...
- 3 Mounting kit
- 4 Installation space for socket

Ordering data

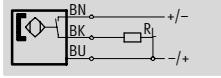
	Switch output	Electrical connection	Cable length [m]	Part No.	Type
		Plug M12			
	NO contact				
	PNP	3-pin	–	35 573	SMT0-6-PS-S-LED-24

Proximity sensors SMEO-1, block design

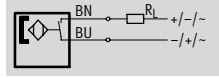
Technical data – Magnetic reed measuring principle

Function

NO contact, with 3-wire cable

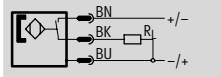


NO contact, with 2-wire cable¹⁾

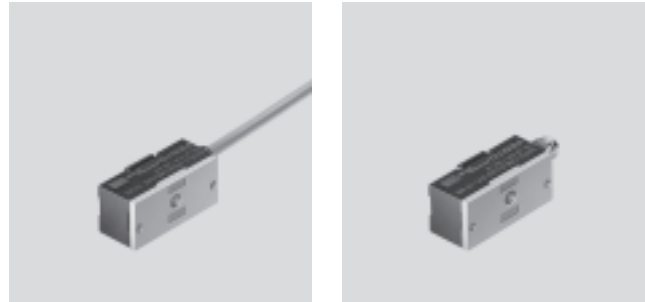
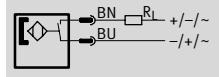


1) Heat-resistant design, 0 ... 30 V AC/DC

NO contact, 3-wire, with plug



NO contact, 2-wire, with plug



General technical data									
Switching element function		NO contact							
Electrical data									
Switch output		Contacting, bipolar							
Electrical connection		Cable, 3-wire	Cable, 3-wire	Plug M8x1, 3-pin	Cable, 2-wire	Cable, 2-wire	Cable, 2-wire	Cable, 2-wire ¹⁾	Plug M8x1, 2-pin
Operating voltage range	D.C. voltage [V DC]	12 ... 27			5 ... 200		0 ... 200		0 ... 30
	A.C. voltage [V AC]	-			5 ... 250		0 ... 250		-
Max. switching current	D.C. voltage [mA]	1000			500		1000		1000
	A.C. voltage [mA]	-			500		1000		-
Max. switching capacity	D.C. voltage [W]	27			40		40		40
	A.C. voltage [VA]	-			40		40		-
Voltage drop [V]		-			4.1		-		-
Protection against short circuit		No							
Protection against polarity reversal		No							
Protection class to EN 60 529		IP67							
CE symbol	89/336/EEC (EMC)	Yes			Yes		Omitted		Yes
	73/23/EEC (low voltage)	Omitted			Yes		Yes		Omitted
Design									
Design		Block design							
Type of mounting		With accessories							
Reproducibility of switching point ²⁾ [mm]		±0.1							
Switch-on time [ms]		≤0.5							
Switch-off time [ms]		≤0.03							
Switching status display		Yellow LED	Yellow LED	Yellow LED	Yellow LED	Yellow LED	-	-	-
Cable length [m]		2.5	5.0	-	2.5	5.0	2.5	2.5	-
Mounting position		Any							
Materials	Housing	Die-cast zinc, polyester, spring steel							
	Cable sheath	Polyurethane			-		Polyurethane		-
Note on material		Free of copper, PTFE and silicone			-				
Product weight [g]		85	130	20	100	130	85	130	20

1) Heat-resistant design
2) Only applicable to drives secured against rotation

Proximity sensors SMEO-1, block design

Technical data – Magnetic reed measuring principle



Operating and environmental conditions					
Electrical connection	Cable		Cable, heat resistant		Plug
Cable installation	Fixed	Flexible	Fixed	Flexible	
Ambient temperature [°C]	-20 ... +70	-5 ... +70	-10 ... +120	-5 ... +120	-20 ... +70
Corrosion resistance class CRC ¹⁾	4		4		2

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.
- Corrosion resistance class 4 according to Festo standard 940 070
Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Dimensions Download CAD data → www.festo.com/en/engineering

With cable

1 Connecting cable
2 Yellow LED


With plug M8

2 Yellow LED
3 Plug suitable for plug socket with cable SIM-M8-...
4 Installation space for angled socket

Proximity sensors SMEO-1, block design

Technical data – Magnetic reed measuring principle



Ordering data						
	Electrical connection		Cable length [m]	Switching status display with LED	Part No.	Type
	Cable	Plug M8				
	NO contact					
	Operating voltage range 12 ... 27 V DC					
	3-wire	–	2.5	■	30 459	SMEO-1-LED-24-B
	3-wire	–	5.0	■	151 672	SMEO-1-LED-24-K5-B
	–	3-pin	–	■	150 848	SMEO-1-S-LED-24-B
	Operating voltage range 0 ... 250 V AC, 0 ... 200 V DC					
	2-wire	–	2.5	–	30 457	SMEO-1-B
	2-wire	–	2.5	■	151 671	SMEO-1-LED-230-B
	2-wire	–	5.0	■	160 998	SMEO-1-LED-230-K5-B
	Heat resistant up to 120 °C					
	2-wire	–	2.5	–	151 673	SMEO-1-S6-C
	Operating voltage range 0 ... 30 V DC					
	–	3-pin ¹⁾	–	–	150 847	SMEO-1-S-24-B

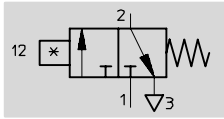
1) The proximity sensor has 2 wires internally. One pin of the M8x1 plug is unused.

Proximity sensors SMPO-1, block design

Technical data – Pneumatic measuring principle



Function
3/2-way valve,
normally closed



General technical data	
Switching element function	3/2-way valve, normally closed
Design	
Design	Block design
Type of mounting	With accessories
Operating medium	Filtered, unlubricated compressed air
Operating pressure [bar]	2 ... 6
Reproducibility of switching point ¹⁾ [mm]	±0.1
Switch-on time [ms]	12
Switch-off time [ms]	30
Switching status display	Visual
Pneumatic connection	Barbed connector PK-3
Mounting position	Any
Materials	Housing: PA Barbed connector: Brass
Product weight [g]	14
Electrical data	
Protection class to EN 60 529	IP65
CE symbol	Omitted

1) Only applicable to drives secured against rotation

Operating and environmental conditions	
Ambient temperature [°C]	-15 ... +60
Corrosion resistance class CRC ¹⁾	1

1) Corrosion resistance class 1 according to Festo standard 940 070
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

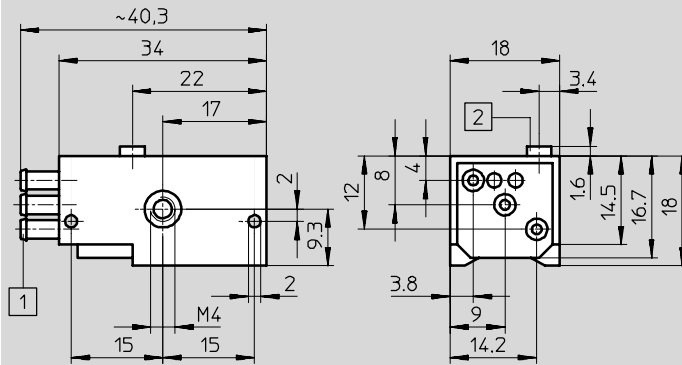
Proximity sensors SMPO-1, block design

Technical data – Pneumatic measuring principle



Dimensions

Download CAD data → www.festo.com/en/engineering



- 1 Barbed connector for tubing, 3mm I.D.
- 2 Visual indicator

Ordering data

	Pneumatic connection	Part No.	Type
	3/2-way valve, normally closed		
	Barbed connector for 3mm I.D. tubing	31 008	SMPO-1-H-B

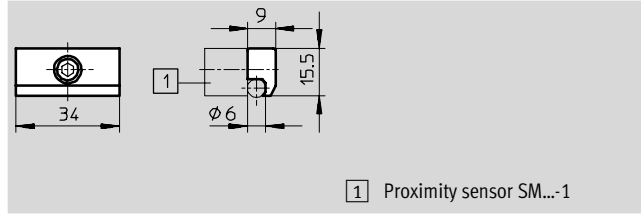
Proximity sensors, block design

Accessories



Mounting kit SMB-1

Material:
Die-cast zinc



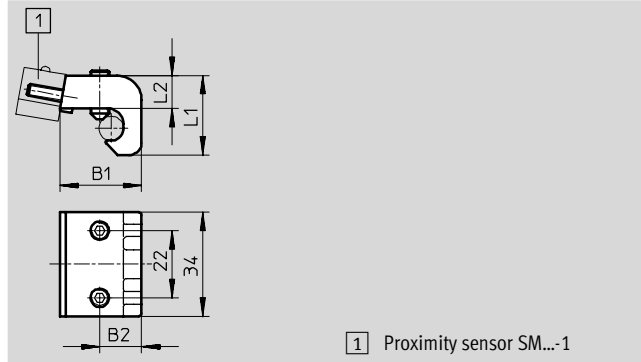
1 Proximity sensor SM...-1

Dimensions and ordering data

For piston Ø	Part No.	Type
32 ... 100	11 886	SMB-1

Mounting kit SMB-2-B/SMB-3-B

Material:
Die-cast aluminium



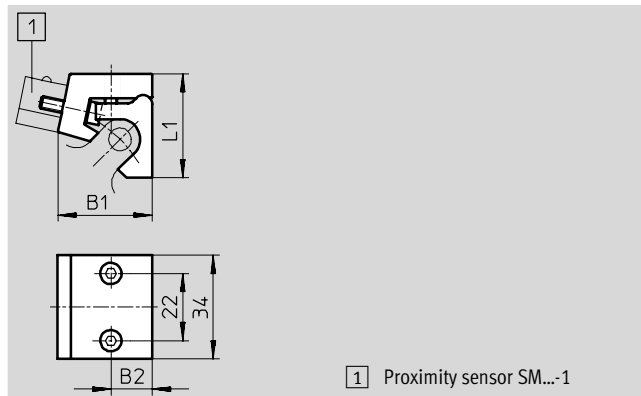
1 Proximity sensor SM...-1

Dimensions and ordering data

For piston Ø	B1	B2	L1	L2	Part No.	Type
32 ... 50	18	11	23	11.6	36 162	SMB-2-B
63 ... 100	26.8	13.7	26	10.8	36 163	SMB-3-B

Mounting kit SMBU

Material:
Die-cast aluminium



1 Proximity sensor SM...-1

Dimensions and ordering data

For piston Ø	B1	B2	L1	Part No.	Type
32 ... 50	19	8.5	30	36 173	SMBU-1-B¹⁾
63 ... 100	31	13.5	34	36 174	SMBU-2-B¹⁾
125	31	13.5	37	125 828	SMBU-3-B

1) Free of copper, PTFE and silicone

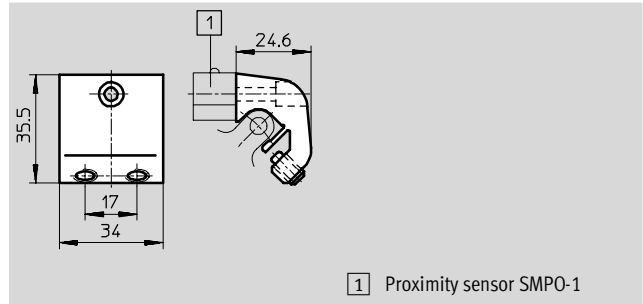
Proximity sensors, block design

Accessories



Mounting kit SMBU-1-H-32

Material:
Aluminium

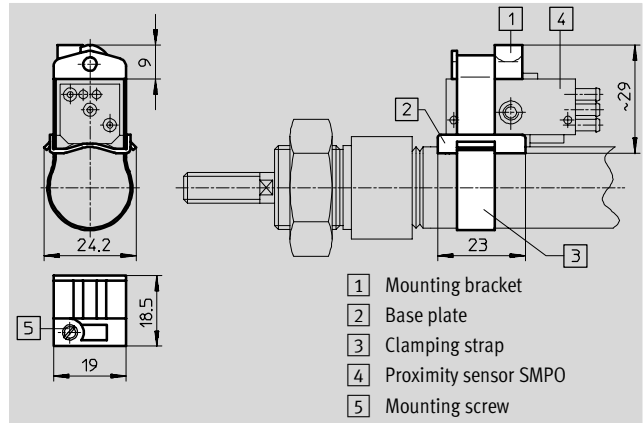


1 Proximity sensor SMPO-1

Dimensions and ordering data		
For piston \varnothing	Part No.	Type
32	150 216	SMBU-1-H-32

Mounting kit SMBS

Material:
Brass, plastic

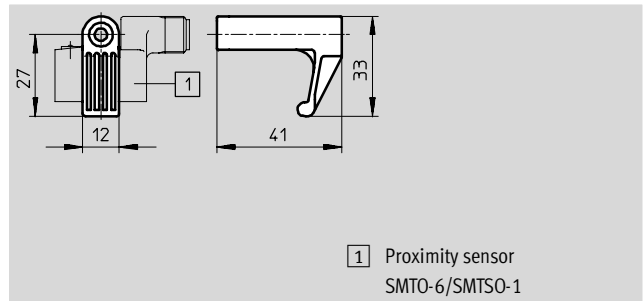


- 1 Mounting bracket
- 2 Base plate
- 3 Clamping strap
- 4 Proximity sensor SMPO
- 5 Mounting screw

Dimensions and ordering data		
For piston \varnothing	Part No.	Type
8 ... 25	151 225	SMBS-1
32 ... 100	151 226	SMBS-2

Mounting kit SMBT-1

Material:
Die-cast zinc

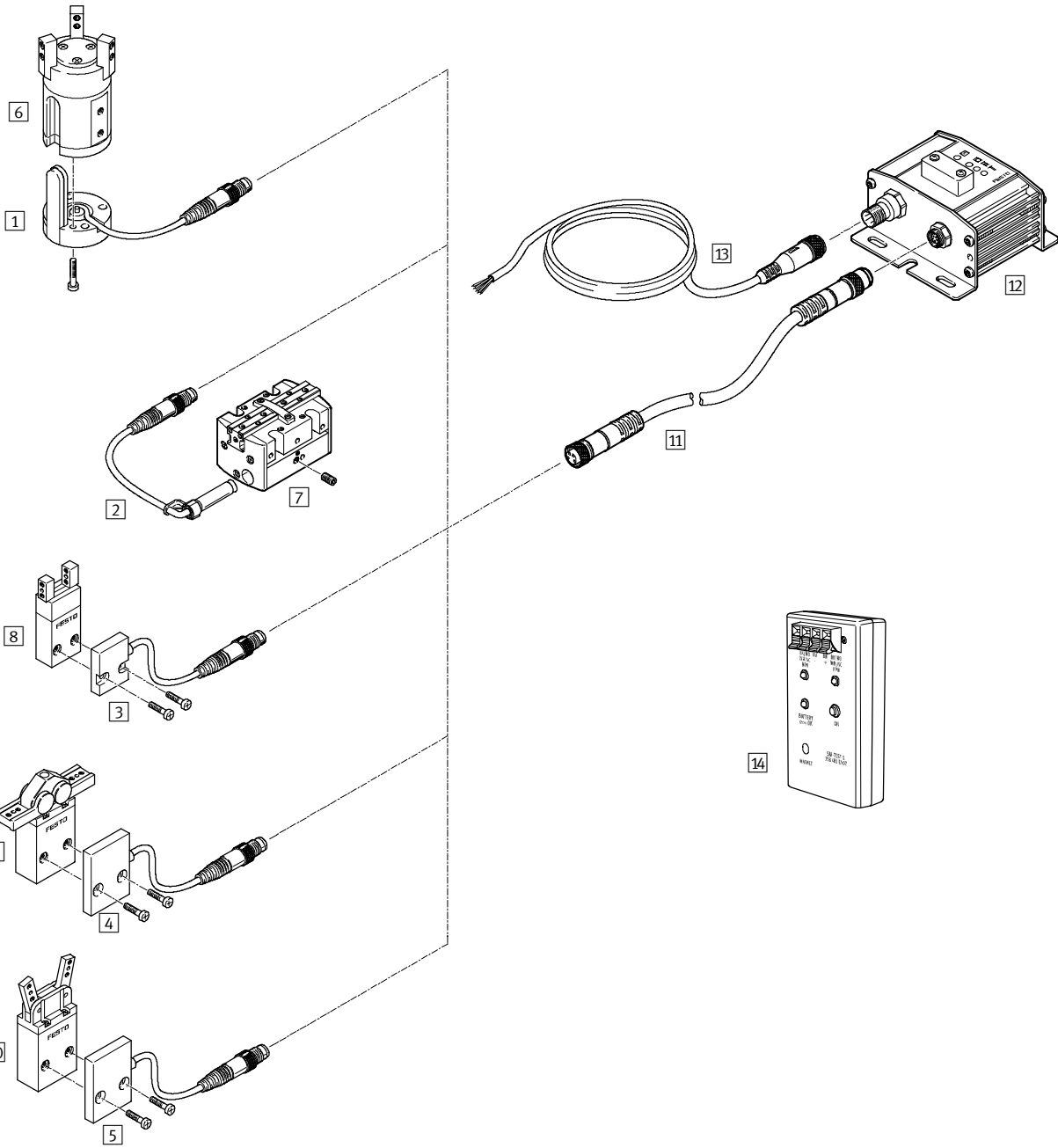


1 Proximity sensor SMT0-6/SMTSO-1

Dimensions and ordering data		
For piston \varnothing	Part No.	Type
32 ... 200	150 002	SMBT-1

Proximity sensors SMH, for grippers

Peripherals overview



Drive accessories
Cylinder sensors

10.2

Proximity sensors SMH, for grippers

Peripherals overview

FESTO

Mounting attachments and accessories		
	Brief description	→ Page
Hall proximity sensor		
1	SMH-S1-HGD16	For three-point gripper HGD-16-A
2	SMH-S1-HGPP-...	For precision parallel gripper HGPP-...
3	SMH-S1-HGP06	For parallel gripper HGP-06-A
4	SMH-S1-HGR10	For radial gripper HGR-10-A
5	SMH-S1-HGW10	For angle gripper HGW-10-A
Drives		
6	Three-point gripper HGD-16-A	
7	Precision parallel gripper HGPP-...	∅ 10 ... 32 mm
8	Parallel gripper HGP-06-A	
9	Radial gripper HGR-10-A	
10	Angle gripper HGW-10-A	
Accessories		
11	Connecting cable KSMH-1-M8-2-M8	Proximity sensor/evaluation unit connecting cable, plug/straight socket, M8x1, 4-pin
12	Evaluation unit SMH-AE1-...	
13	Plug socket with cable SIM-M12-5GD-...-PU	Evaluation unit/controller connecting cable, straight socket, M12x1, 5-pin
14	Sensor tester SM-TEST-1	

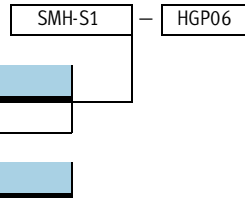
Drive accessories
Cylinder sensors

10.2

Proximity sensors SMH, for grippers

Type code

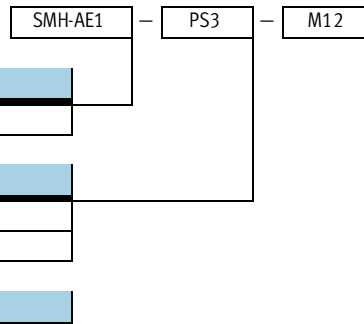
Proximity sensor



Type	
SMH-S1	Hall proximity sensor for grippers

Associated grippers	
HGD16	Three-point gripper HGD-16-...
HGP06	Parallel gripper HGP-06-...
HGR10	Radial gripper HGR-10-...
HGW10	Angle gripper HGW-10-...
HGPP-10/12	Precision parallel gripper HGPP-10-... and HGPP-12-...
HGPP-16	Precision parallel gripper HGPP-16-...
HGPP20/25	Precision parallel gripper HGPP-20-... and HGPP-25-...
HGPP-32	Precision parallel gripper HGPP-32-...

Evaluation unit



Type	
SMH-AE1	Evaluation unit

Switch output	
PS3	NO contact, PNP, 3 switch outputs
NS3	NO contact, NPN, 3 switch outputs

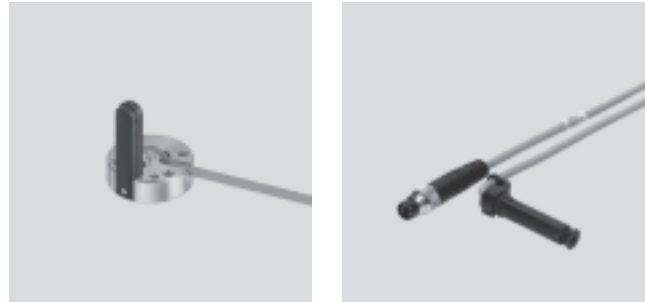
Electrical connection	
M12	Plug M12x1, 5-pin

Proximity sensors SMH, for grippers

Technical data – Magnetic Hall measuring principle



Proximity sensor SMH-S1-...



General technical data	
Electrical data	
Electrical connection	Cable with plug M8x1, 4-pin
Protection against short circuit	No
Protection against polarity reversal	No
Protection class to EN 60 529	IP65
CE symbol	89/336/EEC (EMC) Yes
Design	
Design	Hall sensor for grippers
Type of mounting	Screwed to gripper
Cable length	[m] 0.5
Materials	Housing Polyamide Cable sheath Polyurethane
Note on material	Free of copper, PTFE and silicone
Product weight	[g] 20 (30) ¹⁾

1) Weight in brackets applies to SMH-S1-HGD16

Operating and environmental conditions	
Electrical connection	Cable
Ambient temperature	[°C] 5 ... +60
Corrosion resistance class CRC ¹⁾	2

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

Proximity sensors SMH, for grippers

Technical data – Magnetic Hall measuring principle



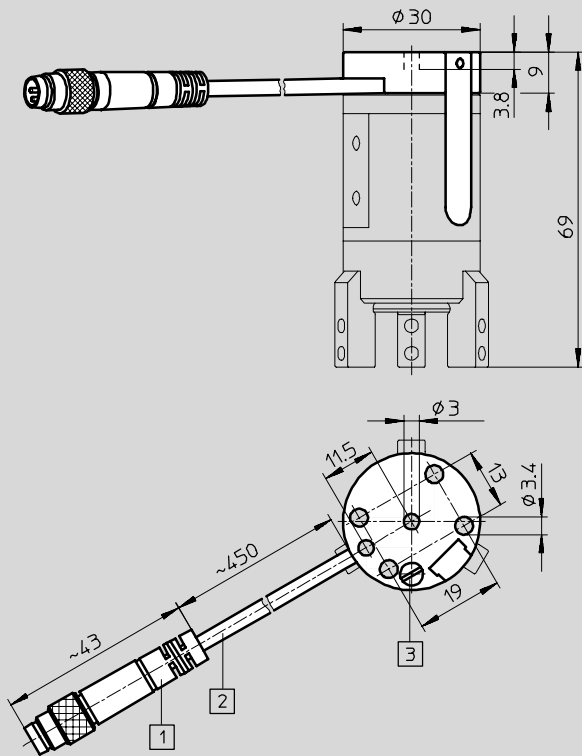
Drive accessories
Cylinder sensors

10.2

Dimensions

Download CAD data → www.festo.com/en/engineering

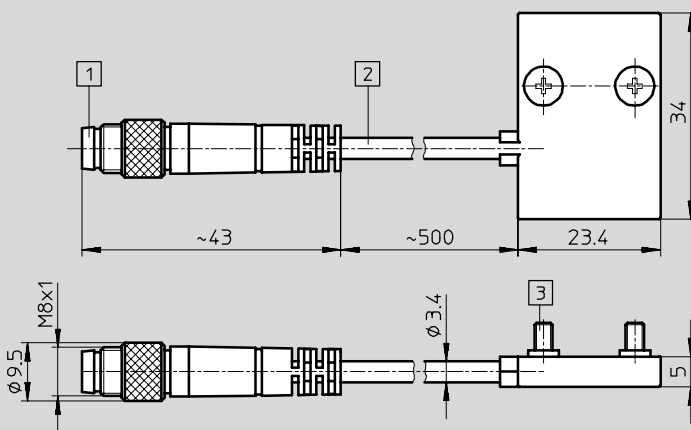
SMH-S1-HGD16



- 1 Plug suitable for plug socket with cable KSMH-1-M8-2-M8 or evaluation unit SMH-AE1-...
- 2 Connecting cable
- 3 Mounting screw

SMH-S1-HGR10

SMH-S1-HGW10



- 1 Plug suitable for plug socket with cable KSMH-1-M8-2-M8 or evaluation unit SMH-AE1-...
- 2 Connecting cable
- 3 Mounting screw

Proximity sensors SMH, for grippers

Technical data – Magnetic Hall measuring principle



Dimensions Download CAD data → www.festo.com/en/engineering

SMH-S1-HGP06

1 Plug suitable for plug socket with cable KSMH-1-M8-2-M8 or evaluation unit SMH-AE1-...
 2 Connecting cable
 3 Mounting screw

SMH-S1-HGPP-...

1 Plug suitable for plug socket with cable KSMH-1-M8-2-M8 or evaluation unit SMH-AE1-...
 2 Connecting cable
 3 Clip for lateral cable exit

Type	L1	L2	L3
SMH-S1-HGPP10/12	8.6	29.5	31.2
SMH-S1-HGPP16	9.1	36.4	38.6
SMH-S1-HGPP20/25	9.1	39.5	41.7
SMH-S1-HGPP32	9.1	46.9	49

Ordering data		
Associated grippers	Part No.	Type
HGD-16-A	175 713	SMH-S1-HGD16
HGP-06-A	175 710	SMH-S1-HGP06
HGR-10-A	175 712	SMH-S1-HGR10
HGW-10-A	175 711	SMH-S1-HGW10
HGPP-10-...	189 040	SMH-S1-HGPP10/12
HGPP-12-...		
HGPP-16-...	189 041	SMH-S1-HGPP16
HGPP-20-...	189 042	SMH-S1-HGPP20/25
HGPP-25-...		
HGPP-32-...	526 895	SMH-S1-HGPP32

Proximity sensors SMH, for grippers

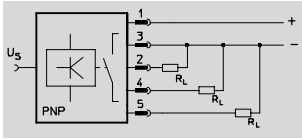
Technical data – Evaluation unit



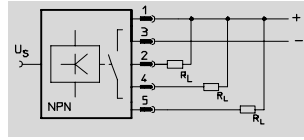
Evaluation unit SMH-AE1-...

Function

PNP



NPN



General technical data		
Electrical data		
Switch output	PNP	NPN
Electrical connection	Plug M12x1, 5-pin	
Sensor connection	4-pin	
Operating voltage range	[V DC]	12 ... 30
Protection class to EN 60 529	IP53	
CE symbol	89/336/EEC (EMC)	Yes
Design		
Type of mounting	Via through holes	
Switching status display	Yellow LED	
Ready status display	Green LED	
Mounting position	Any	
Materials	Housing	Wrought aluminium alloy
Note on material	Free of copper, PTFE and silicone	

Operating and environmental conditions		
Electrical connection	Cable	
Ambient temperature	[°C]	5 ... +60
Corrosion resistance class CRC ¹⁾	2	

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

Terminal allocation			
	Connection	Symbol	Meaning
	1	—	0 V DC
	2		Large object gripped
	3	—	24 V DC
	4		Small object gripped
	5		Gripper closed (no object gripped)

Proximity sensors SMH, for grippers

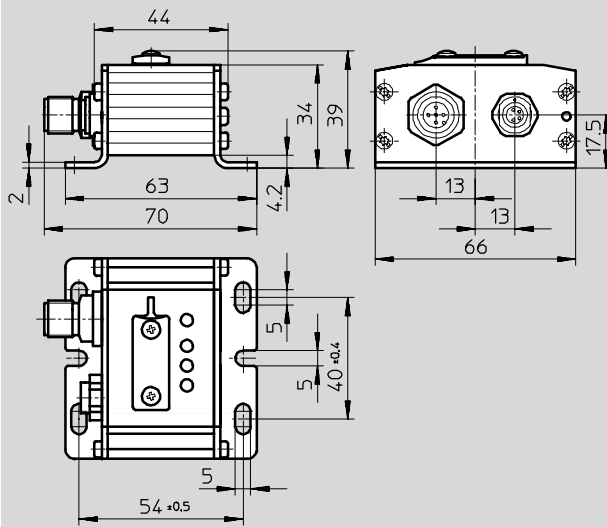
Technical data – Evaluation unit

FESTO

Dimensions

Download CAD data → www.festo.com/en/engineering

SMH-AE1-...



Ordering data

Switch output	Part No.	Type
PNP	175 708	SMH-AE1-PS3-M12
NPN	175 709	SMH-AE1-NS3-M12

Drive accessories
Cylinder sensors

10.2

Proximity sensors SMH, for grippers

Accessories



Connecting cable M8x1 KSMH-1-M8-2-M8

Material:
Housing: Polyurethane
Cable sheath: Polyurethane
Free of copper, PTFE and silicone



Ordering data		Technical data → 2	
Cable length [m]	CRC ¹⁾	Part No.	Type
Straight socket			
2	2	175 714	KSMH-1-M8-2-M8

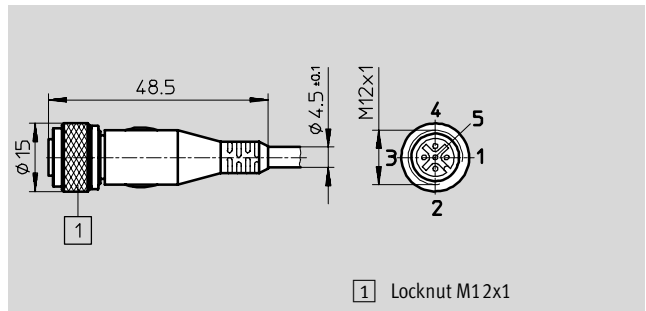
1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

Drive accessories
Cylinder sensors

10.2

Plug socket with cable M12x1 SIM-M12-5GD-...

Material:
Housing: Polyurethane
Cable sheath: Polyurethane



Ordering data		Technical data → 2	
Cable length [m]	CRC ¹⁾	Part No.	Type
Straight socket			
2.5	2	175 715	SIM-M12-5GD-2,5-PU
5	2	175 716	SIM-M12-5GD-5-PU

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

Sensor tester SM-TEST-1

Technical data

FESTO

Description

The sensor tester is used to test and adjust sensors and proximity switches. The sensor tester facilitates commissioning and servicing work.

Functions:

- Testing of operation of proximity sensors using the integrated voltage supply
- Adjustment of proximity switches whilst attached to cylinders
- Identification of switching outputs of proximity switches and sensors with PNP, NPN, NC and NO functions by means of the appropriate LED




- 1 Terminal strip for connecting cable
- 2 LED for battery check
- 3 Magnet for testing of proximity sensors
- 4 LED for indicating switching status
- 5 On-off button

Drive accessories
Cylinder sensors

10.2

Ordering data – Sensor tester

Part No.	Type
158 481	SM-TEST-1

-  - Note

The tester is powered by two 9 V block batteries, which are not included in the scope of delivery.

Proximity sensors

Accessories



Plug socket with cable M8

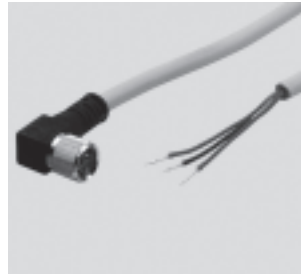
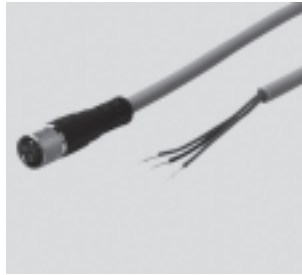
SIM-M8-3GD-...

SIM-M8-3WD-...

Material:

Housing: Polyurethane

Cable sheath: Polyurethane



Ordering data						
Switch output		Switching status display with LED	Cable length [m]	Weight [g]	Part No.	Type
PNP	NPN					
Straight socket						
■	■	-	2.5	79	159 420	SIM-M8-3GD-2,5-PU
■	■	-	5	150	159 421	SIM-M8-3GD-5-PU
■	■	-	10	284	192 964	SIM-M8-3GD-10-PU
Angled socket						
■	■	-	2.5	81	159 422	SIM-M8-3WD-2,5-PU
■	■	-	5	146	159 423	SIM-M8-3WD-5-PU
■	■	-	10	283	192 965	SIM-M8-3WD-10-PU
-	■	■	2.5	80	159 426	SIM-M8-3WD-2,5-NSL-PU
-	■	■	5	150	159 427	SIM-M8-3WD-5-NSL-PU
■	-	■	2.5	83	159 424	SIM-M8-3WD-2,5-PSL-PU
■	-	■	5	143	159 425	SIM-M8-3WD-5-PSL-PU

Plug socket with cable M12

SIM-M12-3GD-...

SIM-M12-3WD-...

Material:

Housing: Polyurethane

Cable sheath: Polyurethane



Ordering data							
Switch output		Switching status display with LED	Welding field immune	Cable length [m]	Weight [g]	Part No.	Type
PNP	NPN						
Straight socket							
■	■	-	-	2.5	85	159 428	SIM-M12-3GD-2,5-PU
■	■	-	-	5	151	159 429	SIM-M12-3GD-5-PU
■	■	-	■	3	131	30 450	SIM-M12-RS-3GD-3
Angled socket							
■	■	-	-	2.5	87	159 430	SIM-M12-3WD-2,5-PU
■	■	-	-	5	155	159 431	SIM-M12-3WD-5-PU
-	■	■	-	2.5	88	159 434	SIM-M12-3WD-2,5-NSL-PU
-	■	■	-	5	155	159 435	SIM-M12-3WD-5-NSL-PU
■	-	■	-	2.5	86	159 432	SIM-M12-3WD-2,5-PSL-PU
■	-	■	-	5	158	159 433	SIM-M12-3WD-5-PSL-PU
■	■	-	■	3	138	30 451	SIM-M12-RS-3WD-3

■ Core Range