


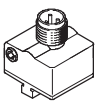




Proximity sensors for T-slot

Product range overview


Measuring principle	Version	Type	Assembly	Switching element function			Switch output	Electrical connection	
				N/O contact	N/C contact	Namur		Cable	Cable with plug
Magneto-resistive	Operating voltage range 10 ... 30 V DC								
		SMT-8F	Insertable from above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	PNP	3-wire	-
	<input checked="" type="checkbox"/>			-	-	-		M5x0.5, 3-pin M8x1, 3-pin M12x1, 3-pin	
	<input checked="" type="checkbox"/>			-	-	NPN	3-wire	M8x1, 3-pin	
		SMT-8-SL	Insertable from end	<input checked="" type="checkbox"/>	-	-	PNP	-	M8x1, 3-pin
		SMT-8	Insertable from end, flush with the cylinder profile	<input checked="" type="checkbox"/>	-	-	PNP	3-wire	M8x1, 3-pin
				<input checked="" type="checkbox"/>	-	-	NPN	3-wire	M8x1, 3-pin
				<input checked="" type="checkbox"/>	-	-	PNP	3-wire	-
		CRSMT-8	Corrosion and acid resistant	<input checked="" type="checkbox"/>	-	-	PNP	3-wire	-
		SMTO-8E	Via accessories	<input checked="" type="checkbox"/>	-	-	PNP	-	M8x1, 3-pin M12x1, 3-pin
				<input checked="" type="checkbox"/>	-	-	NPN	-	M8x1, 3-pin M12x1, 3-pin
		SMTSO-8E		<input checked="" type="checkbox"/>	-	-	PNP	-	M12x1, 3-pin
				Welding field immune	<input checked="" type="checkbox"/>	-	-	NPN	-

Measuring principle	Version	Type	Assembly	Analogue output	Electrical connection	
					Cable	Plug
Magnetic	Position transmitter, operating voltage range 15 ... 30 V DC					
		SMAT-8E  New	Insertable from end	0 ... 10 V 0 ... 20 mA	-	M8x1, 4-pin

Proximity sensors for T-slot

Product range overview

Type	Connection direction		Replacement without re-adjustment	Switching status display via LED	Free of copper and PTFE	→ Page
	In-line	Lateral				
Operating voltage range 10 ... 30 V DC						
SMT-8F	■	-	-	■	■	1 / 10.2-13
	■	-	-	■	■	
	■	-	-	■	■	
SMT-8-SL	■	-	-	■	■	1 / 10.2-20
SMT-8	■	-	-	■	■	1 / 10.2-25
	■	-	-	■	■	
CRSMT-8 Corrosion and acid resistant	■	-	-	■	■ ¹⁾	1 / 10.2-27
SMTO-8E	-	■	■	■	■	1 / 10.2-33
	-	■	■	■	■	
SMTSO-8E Welding field immune	-	■	■	■	-	1 / 10.2-35
	-	■	■	■	-	

Type	Connection direction		Replacement without re-adjustment	Status display via LED	Free of copper and PTFE	→ Page
	In-line	Lateral				
Position transmitter, operating voltage range 15 ... 30 V DC						
SMAT-8E  New	■	-	-	■	■	1 / 10.2-117

1) Paint wetting impairment substances only contained in removable covering film




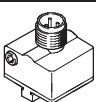

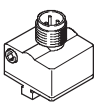
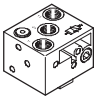
Proximity sensors for T-slot

Product range overview



Drive accessories
Cylinder sensors

10.2

Measuring principle	Version	Type	Assembly	Switching element function		Switch output	Electrical connection	
				N/O contact	N/C contact		Cable	Cable with plug
Magnetic reed	Operating voltage range 0 ... 30 V AC/DC							
		SME-8F	Insertable from above	■	-	Contacting	3-wire	M5x0.5, 3-pin M8x1, 3-pin
				■	-		2-wire	-
		SME-8-SL	Insertable from end	■	-	Contacting	-	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	-
		SME0-8E	Via 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	Via accessories	■	-	Contacting	-	M12x1, 2-pin
Magnetic	Pneumatic proximity sensor, operating pressure 2 ... 8 bar							
		SMPO-8E	Via accessories	■ ¹⁾	-	-	-	-

1) 3/2-way valve, normally closed

Proximity sensors for T-slot

Product range overview

Type	Connection direction		Replacement without re-adjustment	Switching status display via LED	Free of copper and PTFE	→ Page
	In-line	Lateral				
Operating voltage range 0 ... 30 V AC/DC						
SME-8F	■	-	-	■	■	1 / 10.2-16
	■	-	-	■	■	
SME-8-SL	■	-	-	■	■	1 / 10.2-22
SME-8	■	-	-	■	-	1 / 10.2-29
	■	-	-	■	-	
SME-8-...-S6 Heat resistant up to 120°C	■	-	-	-	-	
SME0-8E	-	■	■	■	-	1 / 10.2-37
SME0-8E-...-S6 Heat resistant up to 120°C	-	■	■	-	-	
Operating voltage range 3 ... 250 V AC/DC						
SME-8-...-230	■	-	-	■	-	1 / 10.2-29
SME0-8E-...-230	-	■	■	■	-	1 / 10.2-37
Pneumatic proximity sensor, operating pressure 2 ... 8 bar						
SMPO-8E	-	■	■	- 2)	-	1 / 10.2-40

2) Switching status is via pneumatic indicator

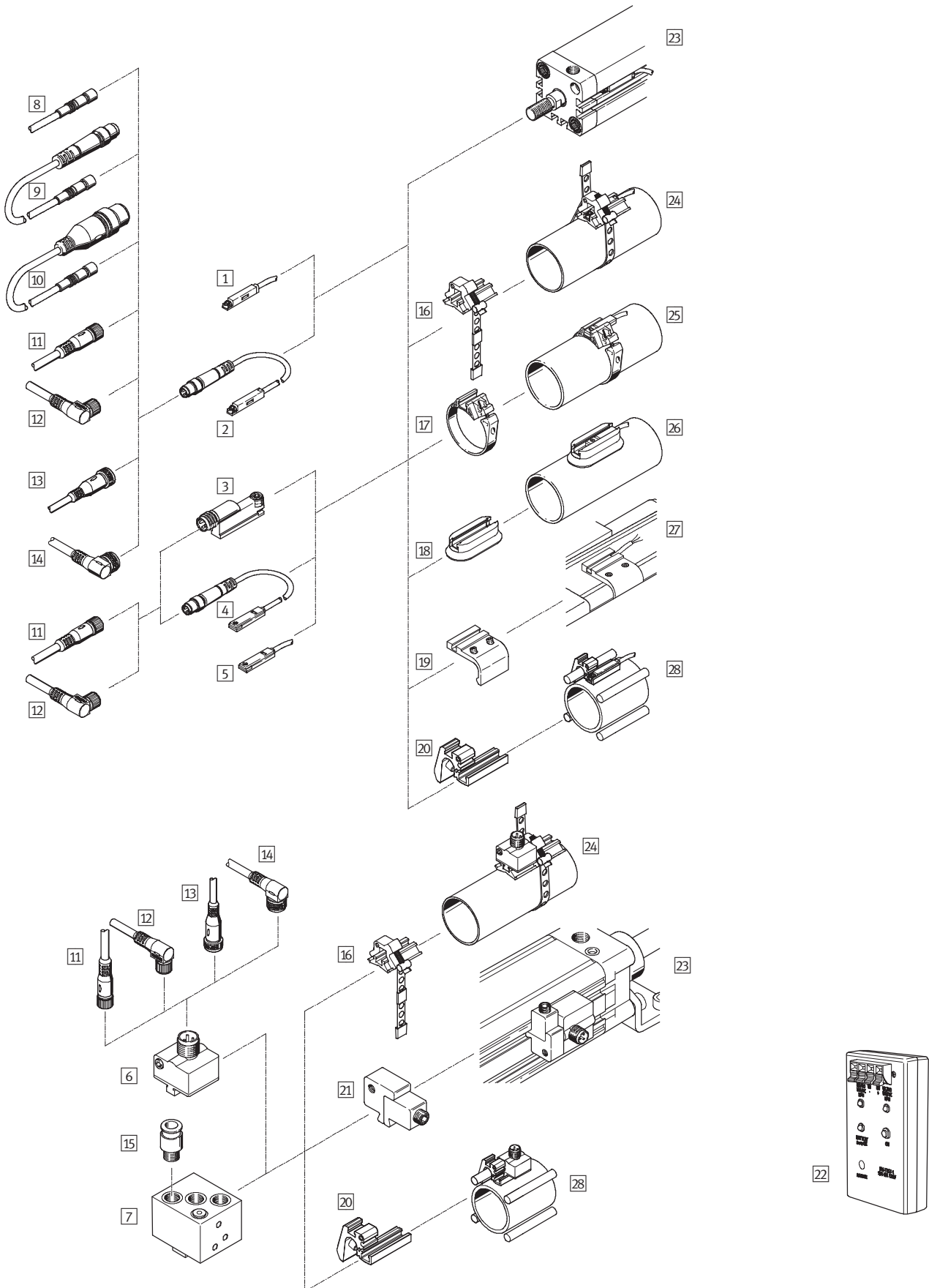
Proximity sensors for T-slot

Peripherals overview



Drive accessories
Cylinder sensors

10.2



Proximity sensors for T-slot

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-...-M5D/M8D/M12 SME-8F-...-M5D/M8D/M12	Magneto-resistive, with cable and plug M5x0.5, M8x1 or M12x1 Magnetic reed, with cable and plug M5x0.5, 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 / 10.2-20 1 / 10.2-22
4	SMT-8-S-... SME-8-S-...	Magneto-resistive, with cable and plug M8x1 Magnetic reed, with cable and plug M8x1	1 / 10.2-25 1 / 10.2-29
5	SMT-8-K-... CRSMT-8-K-... SME-8-K-...	Magneto-resistive, with cable Magneto-resistive, corrosion resistant, with cable Magnetic reed, with cable	1 / 10.2-25 1 / 10.2-27 1 / 10.2-29
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 / 10.2-33 1 / 10.2-35 1 / 10.2-37
7	SMPO-8E-...	Pneumatic proximity sensor, magnetically actuated	1 / 10.2-40
Accessories			
8	Connecting cable NEBU-...-5-Q3-LE3	Straight socket, M5x0.5, 4-pin; open at one end, 3-wire	1 / 10.2-108
9	Connecting cable NEBU-...-1-Q3-M8G3	Straight socket, M5x0.5, 4-pin; plug M8x1, 3-pin	1 / 10.2-108
10	Connecting cable NEBU-...-1-Q3-M12G4	Straight socket, M5x0.5, 4-pin; plug M12x1, 5-pin	1 / 10.2-108
11	Plug socket with cable SIM-M8-3GD-...	Straight socket, M8x1, 3-pin	1 / 10.2-108
12	Plug socket with cable SIM-M8-3WD-...	Angled socket, M8x1, 3-pin	1 / 10.2-108
13	Plug socket with cable SIM-M12-3GD-...	Straight socket, M12x1, 3-pin	1 / 10.2-109
14	Plug socket with cable SIM-M12-3WD-...	Angled socket, M12x1, 3-pin	1 / 10.2-109
15	Push-in fitting QSM-M5	For standard O.D. tubing	1 / 10.2-44
16	Mounting kit SMBR-8-8/100-S6	Heat resistant, for round cylinders	1 / 10.2-42
17	Mounting kit SMBR	For round cylinders DSEU, ESEU, DSNU, ESNU, DSW, ESW	1 / 10.2-42
18	Mounting kit CRSMB	Corrosion resistant, for round cylinders	1 / 10.2-43
19	Mounting kit SMB-8-FENG	For standard cylinders DNC, DNCB in combination with guide unit FENG	1 / 10.2-43
20	Mounting SMBZ-8-...	For drives with tie or mounting rod, DUO or clamping rail	1 / 10.2-44
21	Mounting kit SMB-8E	For drives with T-slot	1 / 10.2-43
22	Sensor tester SM-TEST-1	-	1 / 10.2-107
Drives			
23	Drives with T-slot	-	-
24	Round cylinders	∅ 8 ... 100 mm	
25	Round cylinders	∅ 8 ... 63 mm	
26	Round cylinders	∅ 32 ... 100 mm	
27	Standard cylinders DNC, DNCB	In combination with guide unit FENG	
28	Drives with tie or mounting rod, DUO or clamping rail	-	

Drive accessories
Cylinder sensors

10.2

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

Type codes



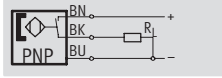
SMT		8F		PO		24V		K7,5		OE	
Type											
SMT		Proximity sensor, magneto-resistive									
SME		Proximity sensor, magnetic reed									
Design											
8F		For T-slot, insertable from above									
Switching element function, switch output											
PS		N/O contact, 3-wire, PNP									
PO		N/C contact, 3-wire, PNP									
NS		N/O contact, 3-wire, NPN									
ZS		N/O contact, 2-wire									
DS		N/O contact, 3-wire									
Rated operating voltage											
24V		24 V DC									
Cable length											
K0,3		0.3 m									
K2,5		2.5 m									
K5,0		5.0 m									
K7,5		7.5 m									
Electrical connection											
OE		Cable									
M5D		Cable with plug M5x0.5									
M8D		Cable with plug M8x1									
M12		Cable with plug M12x1									

Proximity sensors SMT-8F, for T-slot, magneto-resistive

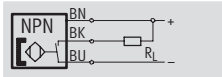
Technical data

Function

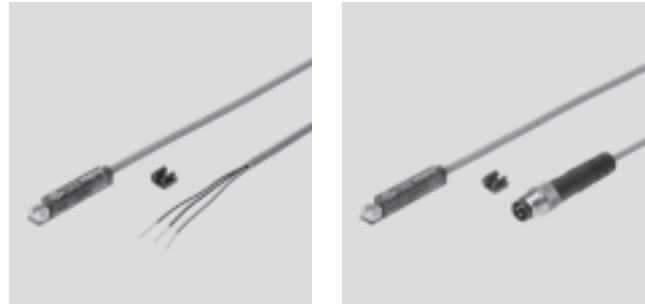
e.g. PNP, N/O contact, with cable



e.g. NPN, N/O contact, with cable



- Magneto-resistive measuring principle
- Insertable in the slot from above
- Cable clip included in the scope of delivery



Design	
Constructional design	For T-slot
Type of mounting	Clamped, insertable in the slot from above
Connection direction	In-line
Reproducibility of switching point ¹⁾ [mm]	±0.1
Switching status display	Yellow LED

1) Only applicable to drives secured against rotation

Technical data – PNP, N/O contact					
Electrical connection	Cable, 3-wire		Cable with plug		
			M5x0.5, 3-pin	M8x1, 3-pin	M12x1, 3-pin
Cable length [m]	2.5	5.0	0.3		
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]	≤0.1		0.1	≤0.1	
Switch-on time [ms]	≤0.2	≤0.5	0.5	≤0.2	
Switch-off time [ms]	≤11		> 7 ... 11	≤11	
Protection against short circuit	Yes				
Protection against polarity reversal	For all electrical connections				
Protection class	IP65/IP67				
CE symbol (declaration of conformity)	In accordance with EU EMC directive				
Certification	c UL us - Listed (OL)				
Product weight [g]	30	180	10	10	20

Technical data – PNP, N/C contact	
Electrical connection	Cable, 3-wire
Cable length [m]	7.5
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]	0.1
Switch-on time [ms]	0.5
Switch-off time [ms]	11
Protection against short circuit	Yes
Protection against polarity reversal	For all electrical connections
Protection class	IP65/IP67
CE symbol (declaration of conformity)	In accordance with EU EMC directive
Certification	-
Product weight [g]	90

Proximity sensors SMT-8F, for T-slot, magneto-resistive

Technical data



Technical data – NPN, N/O contact		
Electrical connection	Cable, 3-wire	Cable with plug M8x1, 3-pin
Cable length	[m]	2.5
Operating voltage range	[V DC]	10 ... 30
Max. output current	[mA]	–
Max. switching capacity	[W]	3
Voltage drop	[V]	1.8
Residual current	[mA]	0.1
Switch-on time	[ms]	≤0.2
Switch-off time	[ms]	7
Protection against short circuit	Yes	
Protection against polarity reversal	For all electrical connections	
Protection class	IP65/IP67	
CE symbol (declaration of conformity)	In accordance with EU EMC directive	
Product weight	[g]	30

Materials			
Switch output	PNP	NPN	Two-wire
Housing	Polyamide		Reinforced polyamide
Cable sheath	Polyurethane		
Note on materials	Free of copper and PTFE		

Operating and environmental conditions							
Electrical connection	Cable, 3-wire		Cable, 2-wire ¹⁾		Cable with plug		
	Fixed	Flexible	Fixed	Flexible	Fixed	Flexible	
Ambient temperature	[°C]		-20 ... +60	-5 ... +60	-25 ... +55	-5 ... +55	-20 ... +60
Corrosion resistance class CRC ²⁾	4		4		2		

1) ATEX ambient temperature for fixed cable installation: $-25^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$

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

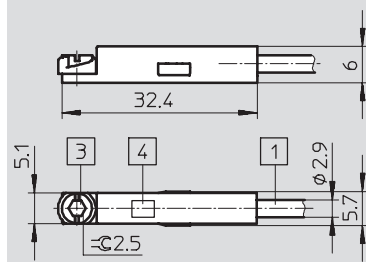
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

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

Cable type



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

Proximity sensors SMT-8F, for T-slot, magneto-resistive

Technical data



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

Plug type M5x0.5

- 1 Connecting cable
- 2 Plug suitable for plug socket with cable NEBU-M5G4-..., tightening torque 0.6 Nm
- 3 Clamping component
- 4 Yellow LED

Plug type M8x1

- 1 Connecting cable
- 2 Plug suitable for plug socket with cable SIM-M8-..., tightening torque 0.2 Nm
- 3 Clamping component
- 4 Yellow LED

Plug type M12x1

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

Ordering data									
	Switch output	Electrical connection			Cable length [m]	Part No.	Type		
		Cable	Cable with plug						
			M5x0.5	M8x1	M12x1				
	N/O contact								
	PNP	3-wire	-	-	-	2.5	525 898	SMT-8F-PS-24V-K2,5-OE	
			-	-	-	5.0	538 486	SMT-8F-PS-24V-K5,0-OE	
		-	3-pin	-	-	-	0.3	539 493	SMT-8F-PS-24V-K0,3-M5D
				-	3-pin	-		525 899	SMT-8F-PS-24V-K0,3-M8D
	NPN	3-wire	-	-	-	2.5	525 909	SMT-8F-NS-24V-K2,5-OE	
			-	3-pin	-	0.3	525 910	SMT-8F-NS-24V-K0,3-M8D	
N/C contact									
	PNP	3-wire	-	-	-	7.5	525 911	SMT-8F-PO-24V-K7,5-OE	

Core Range

Drive accessories
Cylinder sensors
10.2

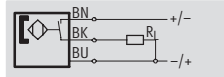
Proximity sensors SME-8F, for T-slot, magnetic reed

Technical data



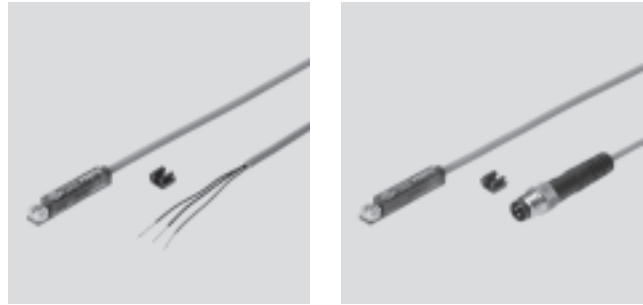
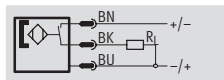
Function

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



- Magnetic reed measuring principle
- Insertable in the slot from above
- Cable clip included in the scope of delivery

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



Design	
Constructional design	For T-slot
Type of mounting	Clamped, insertable in the slot from above
Connection direction	In-line
Reproducibility of switching point ¹⁾	[mm] ±0.1
Switching status display	Yellow LED

1) Only applicable to drives secured against rotation

Technical data – N/O contact, 3-wire					
Switch output	Conventional contact, bipolar				
Electrical connection	Cable, 3-wire			Cable with plug	
				M5x0.5, 3-pin	M8x1, 3-pin
Cable length	[m]	2.5	5.0	0.3	
Operating voltage range	DC	[V DC]	10 ... 30		
	AC	[V AC]	10 ... 30		
Max. output current	[mA]	500			
Max. switching capacity	DC	[W]	10		
	AC	[W]	10		
Switch-on time	[ms]	≤0.5	0.5	≤0.5	
Switch-off time	[ms]	0.03			
Protection against short circuit	No				
Protection against polarity reversal	No				
Protection class	IP65/IP67				
CE symbol (declaration of conformity)	In accordance with EU EMC directive				
Certification	c UL us - Listed (OL)				
Product weight	[g]	30	60	5	10

Technical data – N/C contact, 3-wire					
Switch output	Conventional contact, bipolar				
Electrical connection	Cable, 3-wire				
Cable length	[m]	7.5			
Operating voltage range	DC	[V DC]	10 ... 30		
	AC	[V AC]	10 ... 30		
Max. output current	[mA]	80			
Max. switching capacity	DC	[W]	1.5		
	AC	[W]	1.5		
Voltage drop	[V]	4			
Switch-on time	[ms]	2			
Switch-off time	[ms]	0.2			
Protection against short circuit	No				
Protection against polarity reversal	No				
Protection class	IP65/IP67				
CE symbol (declaration of conformity)	In accordance with EU EMC directive				
Product weight	[g]	83			

Proximity sensors SME-8F, for T-slot, magnetic reed

Technical data

Technical data – N/O contact, 2-wire			
Switch output	Conventional contact, bipolar		
Electrical connection	Cable, 2-wire		
Cable length	[m]	2.5	
Operating voltage range	DC	[V DC]	5 ... 30
	AC	[V AC]	5 ... 30
Max. output current	[mA]	100	
Max. switching capacity	DC	[W]	3
	AC	[VA]	3
Voltage drop	[V]	3.5	
Switch-on time	[ms]	0.6	
Switch-off time	[ms]	0.05	
Protection against short circuit	No		
Protection against polarity reversal	For all electrical connections		
Protection class	IP65/IP67		
CE symbol (declaration of conformity)	In accordance with EU EMC directive		
Product weight	[g]	27	

Materials	
Housing	Polyamide
Cable sheath	Polyurethane
Note on materials	Free of copper and PTFE

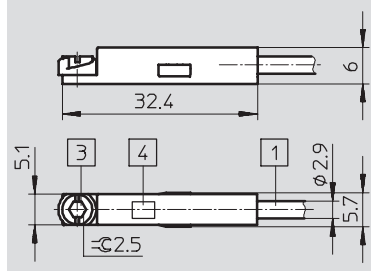
Operating and environmental conditions					
Electrical connection	Cable		Cable with plug		
Cable installation	Fixed	Flexible	Fixed	Flexible	
Ambient temperature	[°C]	-20 ... +60	-5 ... +60	-20 ... +60	-5 ... +60
Corrosion resistance class CRC ¹⁾	4		2		

- 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 normal industrial environment or media such as coolants 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

Cable type



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

Proximity sensors SME-8F, for T-slot, magnetic reed

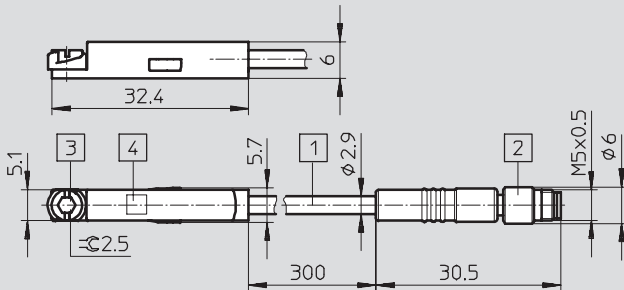
Technical data



Dimensions

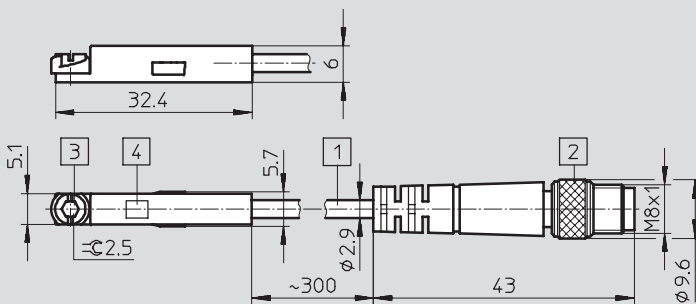
Download CAD data → www.festo.com/en/engineering

Plug type M5x0.5



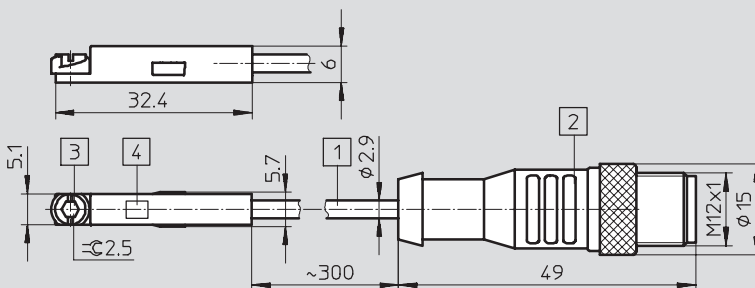
- 1 Connecting cable
- 2 Plug suitable for plug socket with cable NEBU-M5G4-..., tightening torque 0.6 Nm
- 3 Clamping component
- 4 Yellow LED

Plug type M8x1



- 1 Connecting cable
- 2 Plug suitable for plug socket with cable SIM-M8-..., tightening torque 0.2 Nm
- 3 Clamping component
- 4 Yellow LED

Plug type M12x1



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

Ordering data

	Electrical connection		Cable length [m]	Part No.	Type
	Cable	Cable with plug			
		M5x0.5	M8x1		
	N/O contact				
	3-wire	-	-	2.5	525 895 SME-8F-DS-24V-K2,5-OE
				5.0	525 897 SME-8F-DS-24V-K5,0-OE
	-	3-pin		0.3	539 492 SME-8F-DS-24V-K0,3-M5D
	-		3-pin	0.3	525 896 SME-8F-DS-24V-K0,3-M8D
	2-wire	-	-	2.5	525 907 SME-8F-ZS-24V-K2,5-OE
N/C contact					
3-wire	-	-	7.5	525 906 SME-8F-DO-24V-K7,5-OE	

Core Range