


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



## Proximity sensors SMT/SME

Product range overview

Design	Type of mounting	Measuring principle	Type	Operating voltage range	Switching output	Switching element function	→ Page/ Internet
<b>For T-slot</b>	<b>Standard</b>						
	Insertable in the slot from above, flush with the cylinder profile	Magneto-resistive	SMT-8M-A	5 ... 30 V DC	PNP	N/O contact	7 
					NPN	N/C contact	
					Non-contacting, 2-wire		
	Insertable in the slot from above, flush with the cylinder profile	Magneto-resistive	SMT-8M	10 ... 30 V DC	PNP	N/O contact	15
						N/C contact	
					NPN	N/O contact	
					8 ... 30 V DC	Non-contacting, 2-wire	
		Magnetic reed	SME-8M	5 ... 30 V AC/DC	Contacting, bipolar	N/O contact	21
						N/C contact	
	Insertable in the slot lengthwise, flush with the cylinder profile	Magneto-resistive	SMT-8	10 ... 30 V DC	PNP	N/O contact	28
					NPN		
	Insertable in the slot lengthwise, flush with the cylinder profile	Magnetic reed	SME-8	12 ... 30 V AC/DC	Contacting, bipolar	N/O contact	32
						N/C contact	
				3 ... 230 V AC/DC		N/O contact	35
	Insertable in the slot lengthwise	Magneto-resistive	SMT-8G	10 ... 30 V DC	PNP	N/O contact	37
		Magneto-resistive	SMT-8-SL	10 ... 30 V DC	PNP	N/O contact	28
		Magnetic reed	SME-8-SL	10 ... 30 V AC/DC	Contacting, bipolar	N/O contact	32
	Insertable in slot from above	Magnetic reed	SME-8-FM	10 ... 30 V AC/DC	Contacting, bipolar	N/O contact	41
	Via accessories	Magneto-resistive	SMT0-8E	10 ... 30 V DC	PNP	N/O contact	44
					NPN		
		Magnetic reed	SME0-8E	12 ... 30 V DC	Contacting, bipolar	N/O contact	48
		3 ... 250 V DC					
		3 ... 230 V AC					
<b>Corrosion-resistant</b>							
Insertable in the slot lengthwise, flush with the cylinder profile	Magneto-resistive	CRSMT-8	10 ... 30 V DC	PNP	N/O contact	28	
<b>Welding field immune</b>							
Via accessories	Magneto-inductive	SMTSO-8E	10 ... 30 V DC	PNP	N/O contact	44	
				NPN			
<b>Heat-resistant up to 120 °C</b>							
Insertable in the slot lengthwise, flush with the cylinder profile	Magnetic reed	SME-8-...-S6	0 ... 30 V AC/DC	Contacting, bipolar	N/O contact	35	
Via accessories	Magnetic reed	SME0-8E-...-S6	0 ... 30 V DC	Contacting	N/O contact	48	
			0 ... 30 V AC				

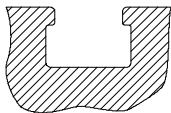
# Proximity sensors SMT/SME

Product range overview

Design	Type of mounting	Measuring principle	Type	Operating voltage range	Switching output	Switching element function	→ Page/ Internet
For C-slot	Standard	Magneto-resistive	SMT-10F	5 ... 30 V DC	PNP	N/O contact	C-slot
					NPN		
				10 ... 30 V DC	Non-contacting, 2-wire		
		Magnetic reed	SME-10F	10 ... 30 V AC/DC 5 ... 30 V AC/DC	Contacting, bipolar	N/O contact	
	Insertable in the slot lengthwise		Magneto-resistive	SMT-10G	10 ... 30 V DC	PNP	N/O contact
			Magneto-resistive	SMT-10	10 ... 30 V DC	PNP	N/O contact
						NPN	
			Magnetic reed	SME-10	12 ... 27 V AC/DC	Contacting	N/O contact

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

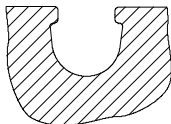
Exceptions



- DFM-B: SMxO-8E cannot be used
- DHDS: SME-8M can only be used on  $\varnothing$  50
- DHPS: SME-8M can only be used on  $\varnothing$  20 ... 35
- HGDD-63-A: SMT-8M-A cannot be used

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

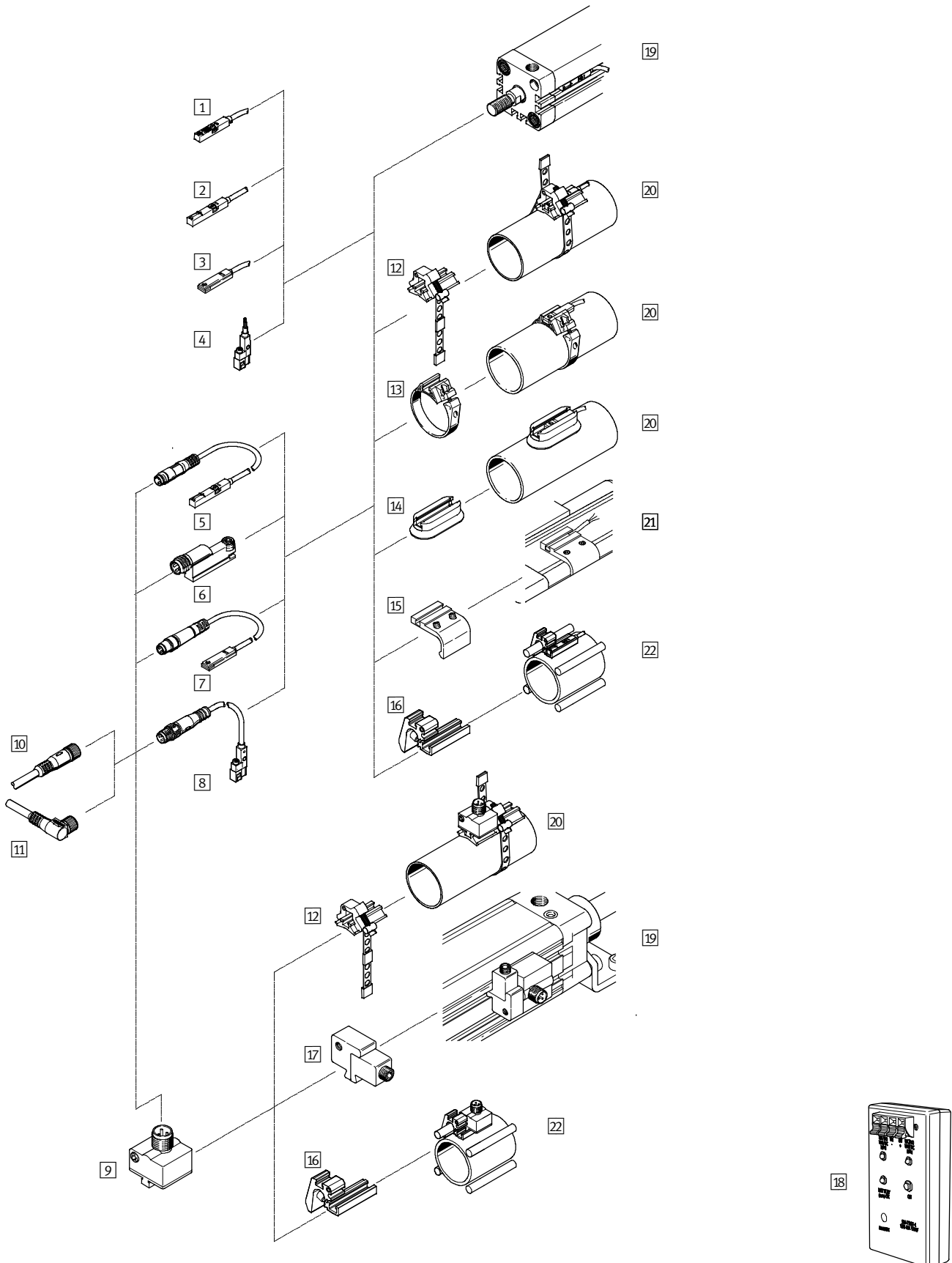
Exceptions



- ADVC  $\varnothing$  100: SMT-10M and SME-10M cannot be used (ADVC is equipped with T-slot and C-slot)
- DSM/DSM-B-6/8/10: SME-10M cannot be used
- DSM/DSM-B-10/16: SMT-10M cannot be used


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

Peripherals overview



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

Peripherals overview

Mounting attachments and accessories		→ Page/ Internet
Proximity sensors		
1	SMT-8M-A-..., with cable	7 
2	SMT/SME-8M-...-OE, with cable	15
3	SMT/SME-8-K-..., with cable	28
	SME-8-FM-...-K-..., with cable	41
	CRSMT-8-K-..., with cable, corrosion-resistant	28
4	SMT-8G-...-OE, with cable	38
5	SMT/SME-8M-...-M..., with cable and plug	15
6	SMT-8-SL-..., with plug	28
	SME-8-SL-..., with plug	32
7	SMT-8-S-..., with cable and plug	28
	SME-8-S-..., with cable and plug	32
8	SMT-8G-...-M..., with cable and plug	38
9	SMT/SMTSO, with plug	44
	SMEO-8E, with cable or plug	48
Connecting cables		
10	NEBU-M...G...	55
11	NEBU-M...W...	55

Mounting attachments and accessories		→ Page/ Internet
Mounting kits and accessories		
12	Mounting kit SMBR-8-8/100-S6, heat-resistant	52
13	Mounting kit SMBR	52
14	Mounting kit CRSMB, corrosion-resistant	53
15	Mounting kit SMB-8-FENG	53
16	Mounting component SMBZ-8-...	54
17	Mounting kit SMB-8E	53
18	Sensor tester SM-TEST-1	55
-	Position marker SMM-8	54
-	Clip SMBK-8	55
-	Inscription label ASLR	55
-	Safety clip NEAU	55
Drives		
19	Drives with T-slot	-
20	Round cylinders	-
21	Standard cylinders DNC, DNCB, DNCCE	-
22	Drives with tie or mounting rod	-

## Proximity sensors SMT-8M-A, for T-slot

Type codes

**FESTO**

### SMT-8M-A

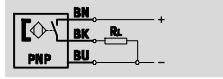
		SMT-8M	-	A	-	PO	-	24V	-	E	-	0,5	-	N	-	OE	-		
<b>Function</b>																			
SMT-8M	Proximity sensor, magneto-resistive, for T-slot, insertable in the slot from above																		
<b>Series</b>																			
A	Short design																		
<b>Switching output</b>																			
PS	PNP, N/O contact, 3-wire																		
PO	PNP, N/C contact, 3-wire																		
NS	NPN, N/O contact, 3-wire																		
ZS	N/O contact, 2-wire																		
PNS	PNP, NPN switchable																		
PSO	PNP N/C contact, N/O contact switchable																		
<b>Rated operating voltage</b>																			
24V	24 V DC																		
<b>Cable characteristics</b>																			
E	Energy chain + robot																		
<b>Cable length [m]</b>																			
<b>Cable designation</b>																			
-	With inscription label holder																		
N	Without inscription label holder																		
<b>Electrical connection</b>																			
OE	Open end																		
M8	Cable with plug M8x1, snap-on flange																		
M8D	Cable with plug M8x1, rotatable thread																		
M12	Cable with plug M12x1, rotatable thread																		
<b>EU certification</b>																			
Ex2	II 3GD in accordance with EU Directive 94/9/EC																		

## Proximity sensors SMT-8M-A, for T-slot

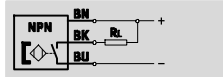
Technical data – Magneto-resistive

### 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, does not protrude over the cylinder profile
- Cable clip and inscription labels included in the scope of delivery
- Variant EX2 for use in potentially explosive areas in zones 2 and 22



General technical data	
Design	For T-slot
Mounting position	Any
Based on standard	EN 60947-5-2
Certification	C-Tick UL - Listed (OL)
CE marking (see declaration of conformity)	To EU EMC Directive
Note on materials	Cable halogen-free, oil-resistant RoHS-compliant, free of copper and PTFE

Input signal/measuring element	
Measured variable	Position
Measuring principle	Magneto-resistive
Ambient temperature	[°C] -40 ... +85

Switching output						
Type	PS	NS	PO	ZS	PNS	PSO
Switching output	PNP	NPN	PNP	Non-contacting, 2-wire	PNP, NPN switchable	PNP
Switching element function	N/O contact	N/O contact	N/C contact	N/O contact	N/O contact	N/C contact, N/O contact switchable
Repetition accuracy	[mm]	±0.1				
Switch-on time	[ms]	≤ 1				
Switch-off time	[ms]	≤ 1				
Max. output current	[mA]	100 <sup>1)</sup>	100 <sup>1)</sup>	100 <sup>1)</sup>	80 <sup>1)</sup>	100
Max. output current in mounting kits	[mA]	100			80 <sup>1)</sup>	100
Max. switching capacity DC	[W]	2.8	2.8	2.8	1.9	2.7
Max. switching capacity DC in mounting kits	[W]	2.8 <sup>2)</sup>	2.8 <sup>2)</sup>	2.8 <sup>2)</sup>	1.5 <sup>2)</sup>	2.7
Max. switching frequency	[Hz]	180				
Voltage drop <sup>1)</sup>	[V]	0 ... 1.5		0 ... 1.5	0 ... 6	0 ... 2.5

1) Variant ...-PS/NS/PO-...-Ex2: max. output current in mounting kits 80 mA, T<sub>a</sub> 70 °C

Variant ...-ZS-...-Ex2: max. output current in mounting kits 50 mA, T<sub>a</sub> 70 °C

2) Variant ...-PS/NS/PO-...-Ex2: max. switching capacity 2.2 W

Variant ...-ZS-...-Ex2: max. switching capacity 1.2 W

Output, additional data	
Protection against short circuit	Pulsed
Protection against overloading	Yes

## Proximity sensors SMT-8M-A, for T-slot

Technical data – Magneto-resistive

Electronic components				
Type		PS, NS, PO, ZS	PNS, PSO	Ex2
Operating voltage range	[V DC]	5 ... 30	7 ... 30	5 ... 30
Rated operating voltage	[V DC]	24		
Reverse polarity protection		For all electrical connections		

Electromechanical components					
Electrical connection		M8	M8D	M12	OE
Electrical connection		Cable with plug, 3-pin			Cable, 3-wire
		M8x1		M12x1	Cable, 2-wire
		–	Rotatable thread		
Connection direction		In-line			
Cable test conditions		Energy chain: 5 million cycles, bending radius 28 mm			
		Torsional strength: > 300,000 cycles, ±270°/0.1 m			
		Resistance to bending: according to Festo standard; test conditions on request			
Cable length	[m]	0.1 ... 30			
Cable characteristics		Energy chain + robot			
Cable sheath materials		TPE-U(PU)			
Cable sheath colour		Grey			

Mechanical components			
Electrical connection		M8, M8D, M12	OE
Type of mounting		Screw-clamped in slot, insertable from above	
Max. tightening torque	[Nm]	0.6	
Housing		Black	
		PA reinforced	
		High-alloy stainless steel	
		Nickel-plated brass	–




## Proximity sensors SMT-8M-A, for T-slot

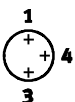
Technical data – Magneto-resistive

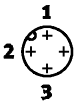
Display/operation			
	PS, NS, PO, ZS	PNS	PSO
Switching status display	Yellow LED	Yellow LED (for PNP)/white LED (for NPN)	Yellow LED (for N/O contact)/white LED (for N/C contact)
Operating reserve display	Orange LED	–	

Immissions/emissions	
Ambient temperature with flexible cable installation [°C]	–20 ... +85
Protection class	IP65, IP68, IP69K

ATEX	
SMT-8M-A-...-	Ex2
ATEX category for gas	II 3G
Explosion ignition protection type for gas	Ex nA IIC T4 X Gc
ATEX category for dust	II 3D
Explosion ignition protection type for dust	Ex tc IIIC T1 20°C X Dc IP65
Explosion-proof temperature rating	–40 °C ≤ Ta ≤ +70 °C
Explosion protection	Zone 2 (ATEX)
	Zone 22 (ATEX)
CE marking (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

Pin allocation to EN 60947-5-2			
M8x1, 2-pin		M1 2x1, 2-pin	
N/O contact		N/O contact	
	Pin	Wire colour	Allocation
	1	Brown	+
	4	Blue	–

Pin allocation to EN 60947-5-2			
M8x1, 3-pin		M1 2x1, 3-pin	
N/O contact and N/C contact		N/O contact	
	Pin	Wire colour	Allocation
	1	Brown	+
	3	Blue	–
	4	Black	Output

Pin allocation to EN 60947-5-2			
M1 2x1, 3-pin			
N/C contact			
	Pin	Wire colour	Allocation
	1	Brown	+
	3	Blue	–
	2	White	Output

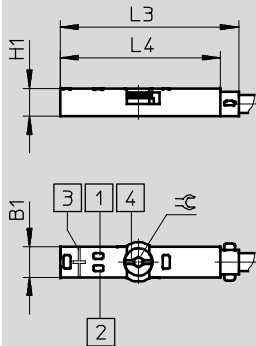
## Proximity sensors SMT-8M-A, for T-slot

Technical data – Magneto-resistive

### Dimensions

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

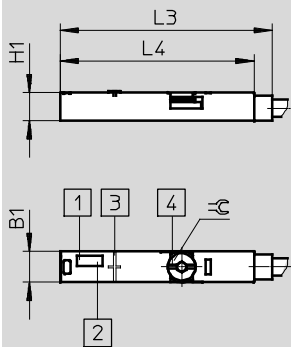
SMT-8M-A-24V-E-...-... (PS, NS, PO, ZS)



Yellow LED for safe switching status.  
Yellow and orange LED for unsafe switching status.

- 1 Yellow LED
- 2 Orange LED
- 3 Position of sensor element centre
- 4 Tightening torque of clamping component 0.6 Nm

SMT-8M-A-24V-E-...-... (PNS, PSO)



Switching status display for PNS:  
Yellow LED for PS switching output.  
White LED for NS switching output.

- 1 Yellow LED
- 2 White LED
- 3 Position of sensor element centre
- 4 Slot for screwdriver

Switching status display for PSO:  
Yellow LED for PS switching output.  
White LED for PO switching output.

Type	B1	H1	L3	L4	≡C
SMT-8M-A-...-24V-E- (PS, NS, PO, ZS)	5	4.6	29.3	26.3	1.5
SMT-8M-A-...-24V-E- (PNS, PSO)			34.8	31.8	

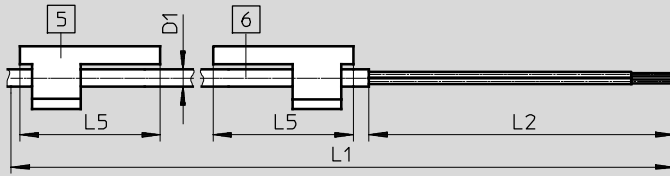
## Proximity sensors SMT-8M-A, for T-slot

Technical data – Magneto-resistive

### Dimensions

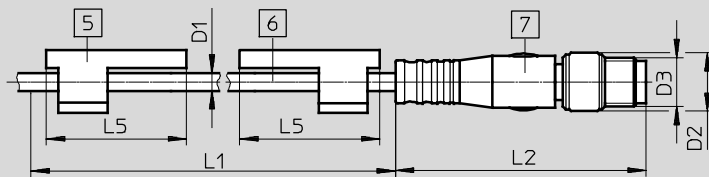
Download CAD data → [www.festo.com](http://www.festo.com)

#### SMT-8M-A-...-OE/OE-Ex – Cable



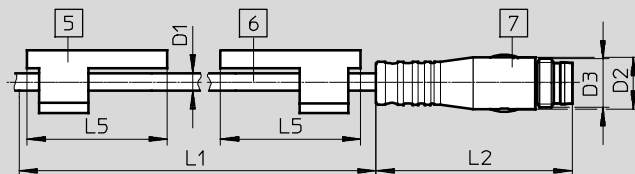
- 5 Inscription label holder drawn turned by 90°
- 6 Connecting cable

#### SMT-8M-A-...-M8D – Cable with plug M8x1, rotatable thread



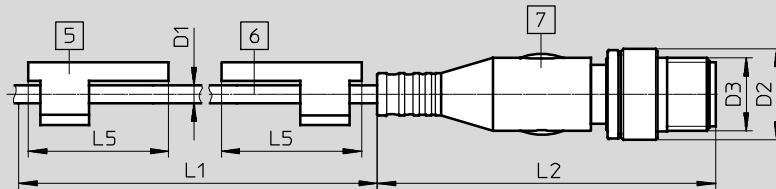
- 5 Inscription label holder drawn turned by 90°
- 6 Connecting cable
- 7 Plug suitable for connecting cable NEBU-M8

#### SMT-8M-A-...-M8 – Cable with plug M8x1, snap-on flange



- 5 Inscription label holder drawn turned by 90°
- 6 Connecting cable
- 7 Plug suitable for connecting cable NEBU-M8

#### SMT-8M-A-...-M12 – Cable with plug M12x1, rotatable thread



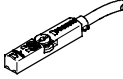
- 5 Inscription label holder drawn turned by 90°
- 6 Connecting cable
- 7 Plug suitable for connecting cable NEBU-M12

Type	D1	D2	D3	L1	L2	L5	⌀
SMT-8M-A-...-OE	2.9	-	-	2,500; 7,500	50	23	1.5
SMT-8M-A-...-OE-Ex		-	-	5,000	50		
SMT-8M-A-...-M8D		9.6	M8x1	300	41.1		
SMT-8M-A-...-M8		8.5	M8x1	300	32.7		
SMT-8M-A-...-M12		15	M12x1	300	55.5		

## Proximity sensors SMT-8M-A, for T-slot

Technical data – Magneto-resistive

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Ordering data								
	Switching output	Electrical connection			Cable length	Weight	Part No.	Type
		Cable	Cable with plug, rotatable thread					
			M8x1	M12x1	[m]	[g]		
	N/O contact							
	PNP	–	3-pin	–	0.3	8.9	574334	SMT-8M-A-PS-24V-E-0,3-M8D
	PNP	3-wire	–	–	2.5	29.1	574335	SMT-8M-A-PS-24V-E-2,5-OE
	PNP	3-wire	–	–	5	57.1	574336	SMT-8M-A-PS-24V-E-5,0-OE
	PNP	–	–	3-pin	0.3	15.9	574337	SMT-8M-A-PS-24V-E-0,3-M12
	NPN	3-wire	–	–	2.5	29.1	574338	SMT-8M-A-NS-24V-E-2,5-OE
		–	3-pin	–	0.3	8.9	574339	SMT-8M-A-NS-24V-E-0,3-M8D
	PNP	–	3-pin	–	0.3	8.9	574342	SMT-8M-A-PS-24V-E-0,3-M8D-Ex2
	Non-contacting	2-wire	–	–	5	57.1	574341	SMT-8M-A-ZS-24V-E-5,0-OE-Ex2
	Switchable							
PNP/NPN	–	3-pin	–	0.3	9	574343	SMT-8M-A-PNS-24V-E-0,3-M8D	
PNP PS/PO	–	3-pin	–	0.3	9	574344	SMT-8M-A-PSO-24V-E-0,3-M8D	
N/C contact								
PNP	3-wire	–	–	7.5	85.1	574340	SMT-8M-A-PO-24V-E-7,5-OE	

Specified types → [www.festo.com](http://www.festo.com)

## Proximity sensors SMT-8M-A, for T-slot

Modular products – Magneto-resistive

**FESTO**

Ordering table				
Size	8	Condi- tions	Code	Enter code
<b>M</b> Module No.	<b>574333</b>			
Function	Proximity sensor for T-slot, electronic		<b>SMT-8M</b>	SMT-8M
Series	Short design		<b>A</b>	A
Switching output	3-wire PNP N/O contact		<b>PS</b>	
	3-wire NPN N/O contact		<b>NS</b>	
	3-wire PNP N/C contact		<b>PO</b>	
	2-wire PNP N/O contact		<b>ZS</b>	
	PNP/NPN switchable		<b>PNS</b>	
	PNP N/C contact, N/O contact switchable		<b>PSO</b>	
Rated operating voltage [V DC]	24		<b>24V</b>	24V
Cable characteristics	Energy chain + robot		<b>E</b>	E
Cable length [m]	0.1 ... 30 (0.1 ... 5.0 in 0.1 increments, 5.0 ... 30 in 0.5 increments)		<b>...</b>	
Cable designation	With inscription label holder			
	Without inscription label holder		<b>N</b>	
Connection technology	Open end		<b>OE</b>	
	M8, rotatable thread		<b>M8D</b>	
	M8, snap-on flange		<b>M8</b>	
	M12, rotatable thread		<b>M12</b>	
<b>O</b> EU certification	II 3GD in accordance with EU Directive 94/9/EC	<b>1</b>	<b>-Ex2</b>	

**1 EX2** Not with switching output PNS, PSO, minimum cable length 0.2 m

### Transfer order code

574333 SMT-8M - A - [ ] - 24V - E - [ ] - N - [ ] - [ ]

## Proximity sensors SMT/SME-8M, for T-slot

Type codes

### SMT/SME-8M

SMT - 8M - PO - 24V - K - 7,5 - OE -

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

Design	
8M	For T-slot, insertable in slot from above

Switching output, switching element function	
PS	PNP, N/O contact, 3-wire
PO	PNP, N/C contact, 3-wire
NS	NPN, N/O contact, 3-wire
ZS	N/O contact, 2-wire
DS	N/O contact, 3-wire
DO	N/C contact, 3-wire

Rated operating voltage	
24V	24 V DC

Cable properties	
K	Standard + energy chain
E	Energy chain + robot applications

Cable length [m]	

Electrical connection	
OE	Open end
M8	Cable with plug M8x1, snap-on flange
M8D	Cable with plug M8x1, rotatable thread
M12	Cable with plug M12x1, rotatable thread

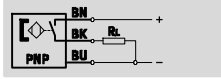
EU certification	
EX2	II 3GD to EU Directive 94/9/EG

## Proximity sensors SMT-8M, for T-slot

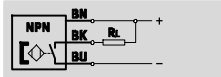
Technical data – Magneto-resistive

### Function

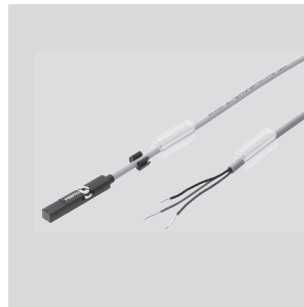
e.g. PNP, N/O contact, with cable



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



- Magneto-resistive measuring principle
- Insertable in slot from above, does not protrude over the cylinder profile
- Cable clip and inscription labels included in the scope of delivery
- Variant EX2 for use in potentially explosive areas in zones 2 and 22



General technical data	
Design	For T-slot
Based on standard	EN 60947-5-2
Certification	c UL us - Listed (OL) C-Tick
CE mark (see declaration of conformity)	To EU EMC Directive
Note on materials	Free of copper and PTFE RoHS-compliant

Input signal/measuring element	
Measuring principle	Magneto-resistive
Ambient temperature [°C]	-20 ... +70

Switching output				
Type	SMT-8M-PS	SMT-8M-NS	SMT-8M-PO	SMT-8M-ZS
Switching output	PNP	NPN	PNP	Contactless, 2-wire
Switching element function	N/O contact		N/C contact	N/O contact
Max. output current [mA]	100			80
Max. switching capacity DC [W]	3			2.4
Voltage drop <sup>1)</sup> [V]	≤2			≤6

1) Applies to cable length 2.5 m. Max. 0.03 V voltage drop per metre of additional cable length

Output, additional data	
Protection against short circuit	Pulsed
Protection against overloading	Yes

Electronic components				
Type	SMT-8M-PS	SMT-8M-NS	SMT-8M-PO	SMT-8M-ZS
Operating voltage range [V DC]	10 ... 30			8 ... 30
Reverse polarity protection	For all electrical connections			

## Proximity sensors SMT-8M, for T-slot

Technical data – Magneto-resistive

**FESTO**

Electromechanical components				
Electrical connection	OE	M8D	M8	M12
Electrical connection	Cable, 3-wire	Cable with plug, 3-pin		
		M8x1	M8x1	M12x1
		Rotatable thread	Snap-on flange	Rotatable thread
Connection direction	In-line			
Cable test conditions	K	Energy chain: 5 million cycles, bending radius 75 mm		
		Resistance to bending: to Festo standard; test conditions on request		
	E	Energy chain: 5 million cycles, bending radius 28 mm		
		Torsional strength: $\pm 270^\circ/0.1\text{ m}$ Resistance to bending: to Festo standard; test conditions on request		
Cable length	[m]	0.2 ... 30		
Cable properties	K	Standard + energy chain		
	E	Energy chain + robot applications		
Cable sheath material	K	TPE-U(PU), oil resistant		
	E	TPE-U(PU), oil resistant, halogen free		

Mechanical components		
Electrical connection	OE	M...
Type of mounting	Screw-clamped in slot, insertable from above	
Housing	PA	PA
	High-alloy stainless steel	High-alloy stainless steel
	–	Nickel-plated brass
	–	TPE-U(PU)

Display/operation	
Switching status display	Yellow LED


Immissions/emissions	
Ambient temperature with flexible cable installation [°C]	–5 ... +70
Protection class	IP65, IP68


ATEX	
SMT-8M-ZS-...-	EX2
ATEX category gas	II 3G
Ex-ignition protection type gas	Ex nA II T4 X
ATEX category dust	II 3D
EX-ignition protection type dust	Ex tD A22 IP65 T120°C X
ATEX ambient temperature	$-20\text{ °C} \leq T_a \leq +70\text{ °C}$
ATEX certification	For zones 2 and 22
CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

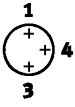


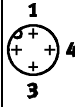
## Proximity sensors SMT-8M, for T-slot

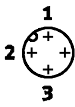
Technical data – Magneto-resistive

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

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

Pin allocation to EN 60947-5-2			
MM8x1, 3-pin			
N/O contact and N/C contact			
	Pin	Wire colour	Allocation
	1	Brown	+
	3	Blue	-
	4	Black	Output

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

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

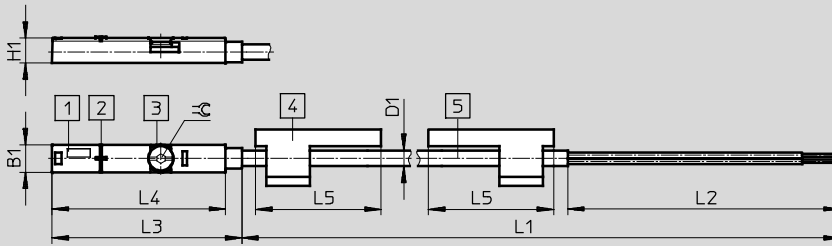
## Proximity sensors SMT-8M, for T-slot

Technical data – Magneto-resistive

### Dimensions

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

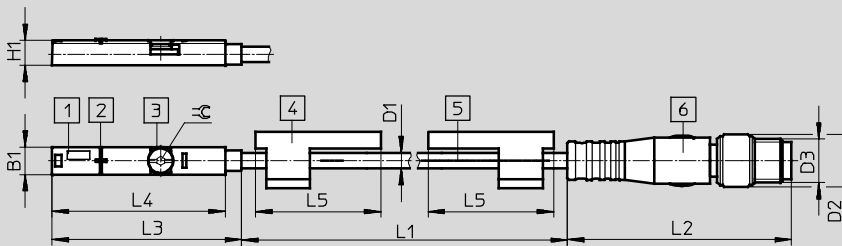
#### SMT-8M-...-OE – Cable



- 1 Yellow LED
- 2 Centre of the sensor element
- 3 Clamping component, tightening torque 0.6 Nm
- 4 Inscription label holder
- 5 Connecting cable

L1 Cable length

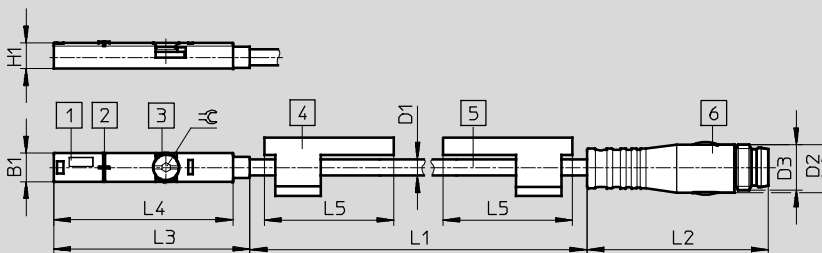
#### SMT-8M-...-M8D – Cable with plug M8x1, rotatable thread



- 1 Yellow LED
- 2 Centre of the sensor element
- 3 Clamping component, tightening torque 0.6 Nm
- 4 Inscription label holder
- 5 Connecting cable
- 6 Plug to fit connecting cable NEBU-M8

L1 Cable length

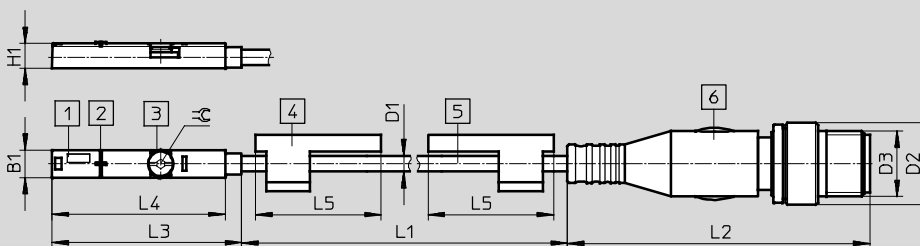
#### SMT-8M-...-M8 – Cable with plug M8x1, snap-on flange



- 1 Yellow LED
- 2 Centre of the sensor element
- 3 Clamping component, tightening torque 0.6 Nm
- 4 Inscription label holder
- 5 Connecting cable
- 6 Plug to fit connecting cable NEBU-M8

L1 Cable length

#### SMT-8M-...-M12 – Cable with plug M12x1, rotatable thread



- 1 Yellow LED
- 2 Centre of the sensor element
- 3 Clamping component, tightening torque 0.6 Nm
- 4 Inscription label holder
- 5 Connecting cable
- 6 Plug to fit connecting cable NEBU-M12

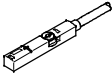

L1 Cable length

Type	B1	D1	D2	D3	H1	L2	L3	L4	L5	⌀
SMT-8M-...-OE			-	-		50				
SMT-8M-...-M8D	5	2.9	9.6	M8x1	4.6	41	34.8	31.8	23	1.5
SMT-8M-...-M8			8.8	M8x1		35				
SMT-8M-...-M12			15	M12x1		55.5				

## Proximity sensors SMT-8M, for T-slot

Technical data – Magneto-resistive

**FESTO**

Ordering data							
	Switching output	Electrical connection			Cable length [m]	Part No.	Type
		Cable	Cable with plug, rotatable thread				
			M8x1	M12x1			
	N/O contact						
	PNP	3-wire	–	–	2.5	543867	SMT-8M-PS-24V-K-2,5-OE
			–	–	5.0	543868	SMT-8M-PS-24V-K-5,0-OE
		–	3-pin	–	0.3	543866	SMT-8M-PS-24V-K-0,3-M8D
			–	3-pin		543869	SMT-8M-PS-24V-K-0,3-M12
	NPN	3-wire	–	–	2.5	543870	SMT-8M-NS-24V-K-2,5-OE
			–	3-pin	–	0.3	543871
	Contactless, 2-wire	2-wire	–	–	5.0	543874	SMT-8M-ZS-24V-K-5,0-OE-EX2 
	N/C contact						
	PNP	3-wire	–	–	7.5	543873	SMT-8M-PO-24V-K-7,5-OE

**New**  
**SMT-8M-ZS-...-EX2**

**Proximity sensors SMT-8M, for T-slot**

Modular products – Magneto-resistive

**FESTO**

M Mandatory data							O Options
Module No.	Function	Switching output	Rated operating voltage	Cable characteristics	Cable length	Connection technology	EU certification
543893	SMT-8M	PS NS PO ZS	24V	K E	0.2 ... 30	OE M8D M8 M12	EX2
<b>Ordering example</b>							
<b>543893</b>	<b>SMT-8M</b>	<b>- NS</b>	<b>- 24V</b>	<b>- E</b>	<b>- 3</b>	<b>- M8D</b>	<b>- EX2</b>

Ordering table				
Size	8	Condi-tions	Code	Enter code
M Module No.	<b>543893</b>			
Function	Proximity sensor for T-slot, non-contacting		<b>SMT-8M</b>	SMT-8M
			-	-
Switching output	3-wire PNP N/O contact		<b>PS</b>	
	3-wire NPN N/O contact		<b>NS</b>	
	3-wire PNP N/C contact		<b>PO</b>	
	2-wire N/O contact		<b>ZS</b>	
			-	-
Rated operating voltage [V DC]	24		<b>24V</b>	24V
			-	-
Cable characteristics	Standard + energy chain		<b>K</b>	
	Energy chain + robot		<b>E</b>	
			-	-
Cable length [m]	0.2 ... 30		<b>...</b>	
	(0.2 ... 5.0 m in 0.1 m increments, 5.0 ... 30 m in 0.5 m increments)			
			-	-
Connection technology	Open end		<b>OE</b>	
	M8, rotatable thread		<b>M8D</b>	
	M8, snap-on flange		<b>M8</b>	
	M12, rotatable thread		<b>M12</b>	
O EU certification	II 3GD in accordance with EU Directive 94/9/EC	<b>1</b>	<b>-EX2</b>	

**1 EX2** Only with switching output ZS

**Transfer order code**

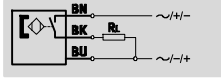
**543893** **SMT-8M** -  - **24V** -  -  -  -

# Proximity sensors SME-8M, for T-slot

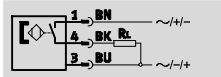
Technical data – Magnetic reed

**Function**

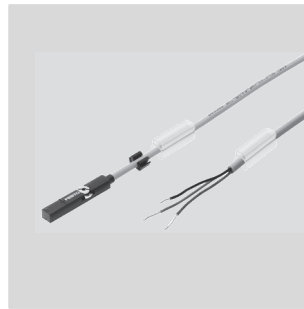
e.g. N/O contact, 3-wire, with cable



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



- Magnetic reed measuring principle
- Insertable in slot from above, does not protrude over the cylinder profile
- Cable clip and inscription labels included in the scope of delivery



General technical data	
Design	For T-slot
Based on standard	EN 60947-5-2
Certification	cULus listed (OL)
	C-Tick
CE mark (see declaration of conformity)	To EU EMC Directive
Note on materials	Free of copper and PTFE
	RoHS-compliant

Input signal/measuring element	
Measuring principle	Magnetic reed
Ambient temperature	[°C] -40 ... +70

Switching output			
Type	SME-8M-DS	SME-8M-ZS	SME-8M-DO
Switching output	Contacting, bipolar		
Switching element function	N/O contact	N/O contact	N/C contact
Max. output current	[mA] 500	80	
Max. output current in mounting kits	[mA] 80	80	
Max. switching capacity DC	[W] 10	2.4	
Max. switching capacity DC in mounting kits	[W] 2.4	2.4	
Max. switching capacity AC	[VA] 10	2.4	
Max. switching capacity AC in mounting kits	[VA] 2.4	2.4	
Voltage drop <sup>1)</sup>	[V] ≤1.5	≤4.8	≤3.5

1) Applies to cable length 2.5 m. Max. 0.15 V voltage drop per metre of additional cable length

Output, additional data	
Protection against short circuit	No
Protection against overloading	No

Electronic components	
Operating voltage range DC	[V] 5 ... 30
Operating voltage range AC	[V] 5 ... 30
Reverse polarity protection	No

# Proximity sensors SME-8M, for T-slot

Technical data – Magnetic reed

Electromechanical components								
Switching element function	DS/DO				ZS			
Electrical connection	OE	M8D	M8	M12	OE	M8D	M8	M12
Electrical connection	Cable, 3-wire	Cable with plug, 3-pin			Cable, 2-wire	Cable with plug, 2-pin		
		M8x1	M8x1	M12x1		M8x1	M8x1	M12x1
		Rotatable thread	Snap-on flange	Rotatable thread		Rotatable thread	Snap-on flange	Rotatable thread
Connection direction	In-line							
Cable test conditions	K	Energy chain: 5 million cycles, bending radius 75 mm						
		Resistance to bending: to Festo standard; test conditions on request						
	E	Energy chain: 5 million cycles, bending radius 28 mm						
		Torsional strength: $\pm 270^\circ/0.1$ m						
		Resistance to bending: to Festo standard; test conditions on request						
Cable length	[m]	0.2 ... 10						
Cable properties	K	Standard + energy chain						
	E	Energy chain + robot applications						
Cable sheath material	K	TPE-U(PU), oil resistant						
	E	TPE-U(PU), oil resistant, halogen free						

Mechanical components		
Electrical connection	OE	M...
Type of mounting	Screw-clamped in slot, insertable from above	
Housing	PA	PA
	High-alloy stainless steel	High-alloy stainless steel
	–	Nickel-plated brass
	–	TPE-U(PU)

Display/operation	
Switching status display	Yellow LED

Immissions/emissions	
Ambient temperature with flexible cable installation [°C]	–5 ... +70
Protection class	IP65, IP68

Pin allocation to EN 60947-5-2			
M8x1, 2-pin		M12x1, 2-pin	
N/O contact			
	Pin	Wire colour	Allocation
	1	Brown	+
	4	Black	Output

Pin allocation to EN 60947-5-2			
M8x1, 3-pin		M12x1, 3-pin	
N/O contact and N/C contact			
	Pin	Wire colour	Allocation
	1	Brown	+
	3	Blue	–
	4	Black	Output

# Proximity sensors SME-8M, for T-slot

Technical data – Magnetic reed

Pin allocation to EN 60947-5-2			
M12x1, 3-pin			
N/C contact			
	Pin	Wire colour	Allocation
	1	Brown	+
	3	Blue	-
	2	White	Output

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

SME-8M-...-OE – Cable

- 1 Yellow LED
- 2 Centre of the sensor element
- 3 Clamping component, tightening torque 0.6 Nm
- 4 Inscription label holder
- 5 Connecting cable

L1 Cable length

SME-8M-...-M8D – Cable with plug M8x1, rotatable thread

- 1 Yellow LED
- 2 Centre of the sensor element
- 3 Clamping component, tightening torque 0.6 Nm
- 4 Inscription label holder
- 5 Connecting cable
- 6 Plug to fit connecting cable NEBU-M8

L1 Cable length

SME-8M-...-M8 – Cable with plug M8x1, snap-on flange

- 1 Yellow LED
- 2 Centre of the sensor element
- 3 Clamping component, tightening torque 0.6 Nm
- 4 Inscription label holder
- 5 Connecting cable
- 6 Plug to fit connecting cable NEBU-M8

L1 Cable length

Type	B1	D1	D2	D3	H1	L2	L3	L4	L5	⌀
SME-8M-...-OE	5	2.9	-	-	4.6	50	34.8	31.8	23	1.5
SME-8M-...-M8D			9.6	M8x1		41				
SME-8M-...-M8			8.8	M8x1		35				

# Proximity sensors SME-8M, for T-slot

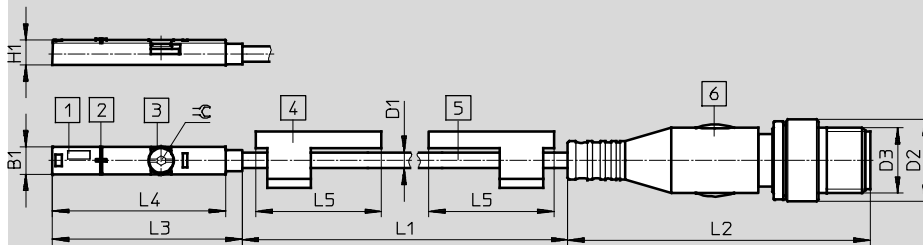
Technical data – Magnetic reed



## Dimensions

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

SME-8M-...-M12 – Cable with plug M12x1, rotatable thread



- 1 Yellow LED
- 2 Centre of the sensor element
- 3 Clamping component, tightening torque 0.6 Nm
- 4 Inscription label holder
- 5 Connecting cable
- 6 Plug to fit connecting cable NEBU-M12

L1 Cable length

Type	B1	D1	D2	D3	H1	L2	L3	L4	L5	↻
SME-8M-...-M12	5	2.9	15	M12x1	4.6	55.5	34.8	31.8	23	1.5

## Ordering data

	Switching output	Electrical connection		Cable length [m]	Part No.	Type
		Cable	Cable with plug, rotatable thread, M8x1			
	N/O contact					
	Contacting, bipolar	3-wire	-	2.5	543862	SME-8M-DS-24V-K-2,5-OE
				5.0	543863	SME-8M-DS-24V-K-5,0-OE
				7.5	543876	SME-8M-DS-24V-K-7,5-OE
		-	3-pin	0.3	543861	SME-8M-DS-24V-K-0,3-M8D
2-wire	-	2.5	543872	SME-8M-ZS-24V-K-2,5-OE		
N/C contact						
Contacting, bipolar	3-wire	-	7.5	546799	SME-8M-DO-24V-K-7,5-OE	



# Proximity sensors SME-8M, for T-slot

Modular products – Magnetic reed

M Mandatory data						
Module No.	Function	Switching output	Rated operating voltage	Cable properties	Cable length	Connection technology
543892	SME-8M	DS ZS DO	24V	K E	0.2 ... 10	OE M8D M8 M12
<b>Ordering example</b>						
543892	SME-8M	ZS	24V	K	0.8	OE

Ordering table				
Size	8	Condi- tions	Code	Enter code
M Module No.	543892			
Function	Proximity sensor for T-slot, contacting		SME-8M	SME-8M
			-	-
Switching output	3-wire N/O contact		DS	
	2-wire N/O contact		ZS	
	3-wire N/C contact		DO	
			-	-
Rated operating voltage [V DC]	24		24V	24V
			-	-
Cable properties	Standard + energy chain		K	
	Energy chain + robot applications		E	
			-	-
Cable length [m]	0.2 ... 10		...	
	(0.2 ... 5.0 m in 0.1 m steps, 5.0 ... 10 m in 0.5 m steps)			
			-	-
Connection technology	Open end		OE	
	M8, rotatable thread		M8D	
	M8, snap-on flange		M8	
	M12, rotatable thread		M12	

Transfer order code

543892	SME-8M	-		-	24V	-		-		-	
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# Proximity sensors SMT/CRSMT/SME-8, for T-slot

Type codes

SMT/SME-8	
SMT – 8 – PS – K – LED – 24 – B	
<b>Function</b>	
SMT	Proximity sensor, magneto-resistive
SME	Proximity sensor, magnetic reed
<b>Design</b>	
8	For T-slot, insertable in slot lengthwise
<b>Switching output, switching element function</b>	
PS	PNP, N/O contact, 3-wire
NS	NPN, N/O contact, 3-wire
ZS	N/O contact, 2-wire
0	N/C contact, 3-wire
<b>Electrical connection, cable length</b>	
K	Cable, 2.5 m or 7.5 m
K2,5	Cable, 2.5 m
K5	Cable, 5.0 m
K-7,5	Cable, 7.5 m
KL	Cable, 2.5 m
S	Plug M8x1 with cable, 0.3 m
<b>Switching status display</b>	
LED	Yellow LED
<b>Rated operating voltage</b>	
24	24 V DC
230	230 V AC
<b>Variant</b>	
S6	Heat resistant
<b>Generation</b>	
B	B series

SMT/SME-8-SL	
SMT – 8 – SL – PS – LED – 24	
<b>Function</b>	
SMT	Proximity sensor, magneto-resistive
SME	Proximity sensor, magnetic reed
<b>Design</b>	
8	For T-slot, insertable in slot lengthwise
<b>Electrical connection</b>	
SL	Plug
<b>Switching output, switching element function</b>	
PS	PNP, N/O contact, 3-wire
<b>Switching status display</b>	
LED	Yellow LED
<b>Rated operating voltage</b>	
24	24 V DC

# Proximity sensors SMT/CRSMT/SME-8, for T-slot

Type codes

CRSMT-8	
CRSMT – 8 – PS – K2,5 – LED – 24	
<b>Function</b>	
CRSMT	Proximity sensor, magneto-resistive, suitable for the food industry, resistant to acids and cooling lubricants
<b>Design</b>	
8	For T-slot, insertable in slot lengthwise
<b>Switching output, switching element function</b>	
PS	PNP, N/O contact, 3-wire
<b>Electrical connection, cable length</b>	
K2,5	Cable, 2.5 m
K5	Cable, 5.0 m
<b>Switching status display</b>	
LED	Yellow LED
<b>Rated operating voltage</b>	
24	24 V DC

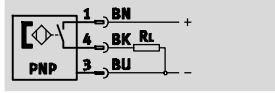
# Proximity sensors SMT-8/CRSMT-8, for T-slot

Technical data – Magneto-resistive

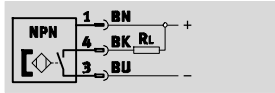


## Function

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



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



- Magneto-resistive measuring principle
- Insertable in slot lengthwise
- Corrosion-resistant designs

### SMT-8-SL

- Sturdy thanks to long guides
- Plug directly on sensor



SMT-8



SMT-8-SL

General technical data				
Type	SMT-8		CRSMT	SMT-8-SL
Switching output	PNP	NPN	PNP	PNP
Design	For T-slot		For T-slot	For T-slot
Conforms to	–		EN 60947-5-2	–
Based on standard	EN 60947-5-2		–	EN 60947-5-2
Certification	C-Tick		C-Tick	C-Tick
	–		–	c UL us - Listed (OL)
CE mark (see declaration of conformity)	To EU EMC Directive		To EU EMC Directive	To EU EMC Directive
Note on materials	Free of copper and PTFE		Free of copper and PTFE	Free of copper and PTFE
	–		–	RoHS-compliant

Input signal/measuring element				
	SMT-8		CRSMT	SMT-8-SL
Measuring principle	Magneto-resistive		Magneto-resistive	Magneto-resistive
Ambient temperature	[°C]	–20 ... +60	–20 ... +60	–20 ... +70

Switching output				
Type	SMT-8		CRSMT	SMT-8-SL
Switching output	PNP	NPN	PNP	PNP
Switching output	PNP	NPN	PNP	PNP
Switching element function	N/O contact		N/O contact	N/O contact
Reproducibility of switching value	[mm]	±0.1	±0.1	–
Switch-on time	[ms]	≤ 0.2	≤ 0.2	≤ 1
Switch-off time	[ms]	≤ 0.5	≤ 0.5	3 ... 5
Max. switching frequency	[Hz]	–	1 000	140
Max. output current	[mA]	100	100	100
Max. switching capacity DC	[W]	3	3	3
Voltage drop	[V]	≤ 1.8	≤ 1.8	≤ 2
Residual current	[µmA]	≤ 100	≤ 100	≤ 1.5

Output, additional data				
Type	SMT-8		CRSMT	SMT-8-SL
Switching output	PNP	NPN	PNP	PNP
Protection against short circuit	Pulsed		Yes	Yes
Protection against overloading	Yes		–	Yes

Electronic components				
Type	SMT-8		CRSMT	SMT-8-SL
Switching output	PNP		PNP	PNP
Rated operating voltage	[V DC]	–	–	24
Operating voltage range	[V DC]	10 ... 30	10 ... 30	10 ... 30
Reverse polarity protection	For all electrical connections			

# Proximity sensors SMT-8/CRSMT-8, for T-slot

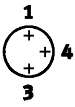
Technical data – Magneto-resistive

Electromechanical components						
Type	SMT-8				CRSMT	SMT-8-SL
Switching output	PNP		NPN		PNP	PNP
Electrical connection	Cable, 3-wire	Cable with plug, 3-pin	Cable, 3-wire	Cable with plug, 3-pin	Cable, 3-wire	Plug M8x1, 3-pin
Connection direction	In-line				–	In-line
Cable length [m]	2.5	0.3	2.5	0.3	2.5	–
	5	–	–	–	5	
Cable properties	Standard		–		–	–
Cable sheath material	Polyurethane				Thermoplastic polyolefin elastomer	–

Mechanical components						
Type	SMT-8				CRSMT	SMT-8-SL
Switching output	PNP		NPN		PNP	PNP
Electrical connection	Cable, 3-wire	Cable with plug M8x1, 3-pin	Cable, 3-wire	Cable with plug M8x1, 3-pin	Cable, 3-wire	Plug M8x1, 3-pin
Type of mounting	Clamped in T-slot				Clamped in T-slot	Screw-clamped
	Insertable in slot lengthwise				–	Insertable in slot lengthwise
Housing material	High-alloy stainless steel				High-alloy stainless steel	Polyamide
	Thermoplastic polyurethane elastomer				Polypropylene	–
	–	Brass	–	Brass	–	–
	–	Nickel-plated	–	Nickel-plated	–	–

Display/operation	
Switching status display	Yellow LED

Immissions/emissions			
Type	SMT-8	CRSMT	SMT-8-SL
Ambient temperature with flexible cable installation [°C]	–5 ... +60	–5 ... +60	–
Protection class	IP65	IP65	IP65
	IP67	IP68	IP68
	–	IP69K	–
Insulation voltage [V]	–	500	–
Degree of contamination	–	3	–
Corrosion resistance class CRC	2	4	3

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

# Proximity sensors SMT-8/CRSMT-8, for T-slot

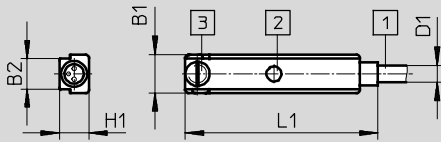
Technical data – Magneto-resistive



## Dimensions

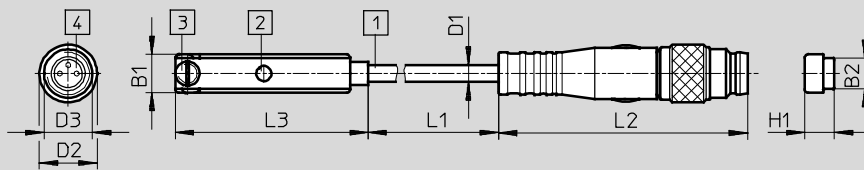
Download CAD data → [www.festo.com](http://www.festo.com)

### SMT-8-...S-K



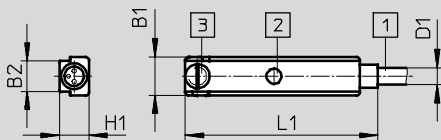
- 1 Connecting cable
- 2 Yellow LED
- 3 Clamping component

### SMT-8-...S-S



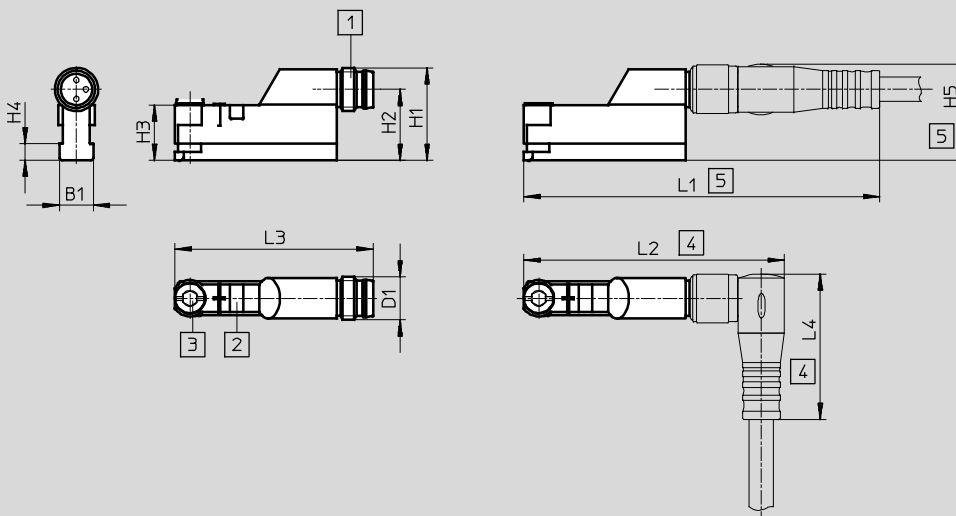
- 1 Connecting cable
- 2 Yellow LED
- 3 Clamping component
- 4 Plug to fit connecting cable NEBU-M8

### CRSMT



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

### SMT-8-SL

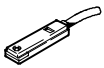

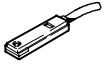


- 1 Plug to fit connecting cable NEBU-M8
- 2 Yellow LED
- 3 Clamping component
- 4 Fitting space for connecting cable NEBU-M8W3
- 5 Fitting space for connecting cable NEBU-M8G3

Type	B1	B2	D1	D2	D3	H1	H2	H3	H4	H5	L1	L2	L3	L4
SMT-8-...S-K	6.3	5	2.9	-	-	4.9	-	-	-	-	32.4	-	-	-
SMT-8-...S-S	6.3 -0.1	5 ±0.05	2.9	9.5	M8x1	4.9 ±0.1	-	-	-	-	310 +30/-10	41.1 ±0.1	32.4 +0.4/-0.2	-
CRSMT	6.3	5	2.9	-	-	4.9	-	-	-	-	32.4	-	-	-
SMT-8-SL	6.7	-	M8x1	-	-	17.1	13.1	10.2	3.1	17.6	66	48.4	36.6	26.9

# Proximity sensors SMT-8/CRSMT-8, for T-slot

Technical data – Magneto-resistive

Ordering data							
	Switching output	Electrical connection			Cable length [m]	Part No.	Type
		Cable	Cable with plug M8x1	Plug M8x1			
<b>N/O contact, basic version</b>							
	PNP	3-wire	-	-	2.5	175436	SMT-8-PS-K-LED-24-B
			-	3-pin	-	0.3	175484
	NPN	3-wire	-	-	2.5	171180	SMT-8-NS-K-LED-24-B
			-	3-pin	-	0.3	171181
	PNP	-	-	3-pin	-	562019	SMT-8-SL-PS-LED-24-B
<b>N/O contact, corrosion resistant</b>							
	PNP	3-wire	-	-	2.5	525563	CRSMT-8-PS-K-LED-24
					5.0	525564	CRSMT-8-PS-K5-LED-24

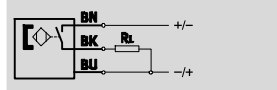
# Proximity sensors SME-8, for T-slot

Technical data – Magnetic reed

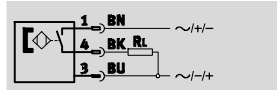


Function

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



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



- Magnetic reed measuring principle
- Insertable in slot lengthwise

### SME-8-SL

- Sturdy thanks to long guides
- Plug directly on sensor



General technical data					
Type	SME-8-K	SME-8-S	SME-8-ZS	SME-8-O	SME-8-SL
Design	For T-slot				
Conforms to	EN 60947-5-2				
Certification	C-Tick				
CE mark (see declaration of conformity)	To EU EMC Directive <sup>1)</sup>				
Note on materials	Free of copper and PTFE				
	RoHS-compliant	–		RoHS-compliant	

1) For information about the applicability of the component see the manufacturer's EC declaration of conformity at: [www.festo.com](http://www.festo.com) → Support → User documentation.  
If the component is subject to restrictions on usage in residential, office or commercial environments or small businesses, further measures to reduce the emitted interference may be necessary.

Input signal/measuring element							
Type	SME-8-K	SME-8-K5	SME-8-K-7,5	SME-8-S	SME-8-ZS	SME-8-O	SME-8-SL
Measuring principle	Magnetic reed						
Ambient temperature [°C]	–40 ... +60	–40 ... +70	–40 ... +70	–40 ... +70	–40 ... +60	–40 ... +60	–40 ... +60

Switching output					
Type	SME-8-K	SME-8-S	SME-8-ZS	SME-8-O	SME-8-SL
Switching output	Contacting, bipolar				
Switching element function	N/O contact	N/O contact	N/O contact	N/C contact	N/O contact
Reproducibility of switching value [mm]	±0.1	±0.1	±0.1	±0.1	±0.1
Switch-on time [ms]	≤ 0.5	≤ 0.5	≤ 0.5	≤ 2	≤ 0.6
Switch-off time [ms]	≤ 0.03	≤ 0.03	≤ 0.03	≤ 0.2	≤ 0.05
Max. switching frequency [Hz]	800	–	800	–	500
Max. output current [mA]	500	500	80	50	500
Max. switching capacity AC [VA]	10	10	–	1.5	10
Max. switching capacity DC [W]	10	10	2.16	1.5	10
Voltage drop [V]	0	–	≤ 3.5	≤ 2.5	0

Output, additional data	
Protection against short circuit	No
Protection against overloading	No

Electronic components					
Type	SME-8-K	SME-8-S	SME-8-ZS	SME-8-O	SME-8-SL
Operating voltage range [V AC]	12 ... 30	12 ... 30	–	12 ... 30	10 ... 30
Operating voltage range [V DC]	12 ... 30	12 ... 30	12 ... 27	12 ... 30	10 ... 30
Reverse polarity protection	No				



# Proximity sensors SME-8, for T-slot


Technical data – Magnetic reed

Electromechanical components							
Type	SME-8-K	SME-8-K5	SME-8-K-7,5	SME-8-S	SME-8-ZS	SME-8-O	SME-8-SL
Electrical connection	Cable, 3-wire			Cable with plug M8x1, 3-pin	Cable, 2-wire	Cable, 3-wire	Plug M8x1, 3-pin
Connection direction	In-line						
Cable length [m]	2.5	5	7.5	0.3	2.5	7.5	–
Cable sheath material	Polyurethane						

Mechanical components							
Type	SME-8-K	SME-8-K5	SME-8-K-7,5	SME-8-S	SME-8-ZS	SME-8-O	SME-8-SL
Type of mounting	Clamped in T-slot Insertable in slot lengthwise						
Housing material	Epoxy resin Polycarbonate Polybutylene terephthalate High-alloy stainless steel						

Display/operation	
Switching status display	Yellow LED

Immissions/emissions							
Type	SME-8-K	SME-8-K5	SME-8-K-7,5	SME-8-S	SME-8-ZS	SME-8-O	SME-8-SL
Ambient temperature with flexible cable installation [°C]	–5 ... +60	–5 ... +70	–5 ... +70	–5 ... +70	–5 ... +60	–5 ... +60	–
Protection class	IP65 IP67			– IP67	IP65 IP67	– IP67	IP65 IP67
Insulation voltage [V]	50						
Surge capacity [kV]	3	3	3	3	3	3	3
Degree of contamination	3						

Pin allocation to EN 60947-5-2			
S			
Plug, 3-pin			
M8x1	Pin	Wire colour	Allocation
	1	Brown	+
	3	Blue	–
	4	Black	Output

# Proximity sensors SME-8, for T-slot

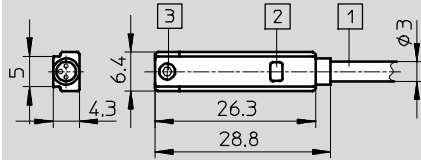
Technical data – Magnetic reed



## Dimensions

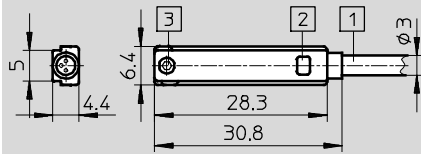
Download CAD data → [www.festo.com](http://www.festo.com)

### N/O contact, cable



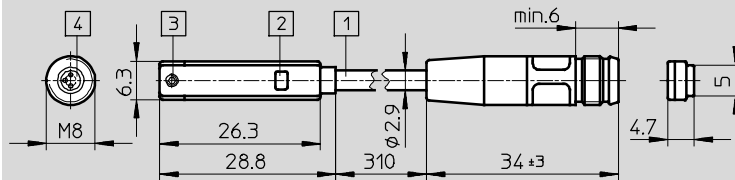
- 1 Connecting cable
- 2 Yellow LED
- 3 Clamping component

### N/C contact, cable



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

### Plug M8x1



- 1 Connecting cable
- 2 Plug to fit connecting cable NEBU-M8
- 3 Clamping component
- 4 Yellow LED

## Ordering data

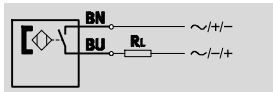
	Switching output	Electrical connection			Cable length [m]	Part No.	Type
		Cable	Cable with plug M8x1	Plug M8x1			
<b>N/O contact, basic version</b>							
	Contacting, bipolar	3-wire	–	–	2.5	150855	SME-8-K-LED-24
			–	–	5.0	175404	SME-8-K5-LED-24
			–	–	7.5	530491	SME-8-K-7,5-LED-24
	–	–	3-pin	–	0.3	150857	SME-8-S-LED-24
	–	2-wire	–	–	2.5	171169	SME-8-ZS-KL-LED-24
	Contacting, bipolar	–	–	3-pin	–	526622	SME-8-SL-LED-24
<b>N/C contact</b>							
	Contacting, bipolar	3-wire	–	–	7.5	160251	SME-8-O-K-LED-24

# Proximity sensors SME-8, for T-slot

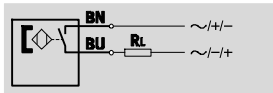
Technical data – Magnetic reed

**Function**

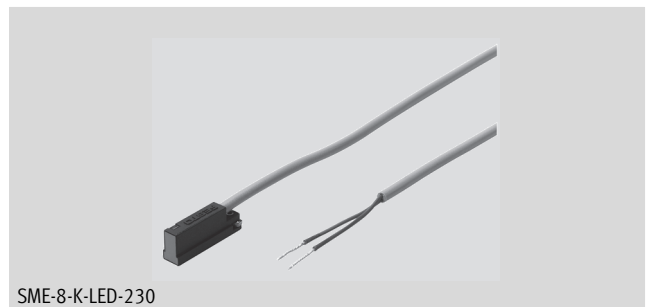
e.g. N/O contact, with cable, 2-wire,  
0 ... 30 V AC/DC



e.g. N/O contact, with cable, 2-wire,  
3 ... 230 V AC/DC



- Magnetic reed measuring principle
- Insertable in slot lengthwise
- Heat-resistant design
- Variants with operating voltage range up to 230 V DC/AC



SME-8-K-LED-230

General technical data		
	SME-8-...-S6	SME-8-...-230
Design	For T-slot	
Conforms to	EN 60947-5-2	
CE mark (see declaration of conformity)	-	To EU EMC Directive <sup>1)</sup>
	-	To EU Low Voltage Directive
Note on materials	Free of copper and PTFE	
	RoHS-compliant	

1) For information about the applicability of the component see the manufacturer's EC declaration of conformity at: [www.festo.com](http://www.festo.com) → Support → User documentation.  
If the component is subject to restrictions on usage in residential, office or commercial environments or small businesses, further measures to reduce the emitted interference may be necessary.

Input signal/measuring element		
	SME-8-...-S6	SME-8-...-230
Measuring principle	Magnetic reed	
Ambient temperature	[°C] -40 ... +120	-30 ... +60

Switching output		
	SME-8-...-S6	SME-8-...-230
Switching output	Contacting, bipolar	Contacting, bipolar, without LED function
Switching element function	N/O contact	
Reproducibility of switching value	[mm] ±0.1	±0.1
Switch-on time	[ms] ≤ 0.5	2
Switch-off time	[ms] ≤ 0.03	0.03
Max. switching frequency	[Hz] 800	500
Max. output current	[mA] 500	120
Max. switching capacity AC	[VA] 10	
Max. switching capacity DC	[W] 10	
Voltage drop	[V] ≤ 0	≤ 3.9
Residual current	[mA] -	0

Output, additional data		
	SME-8-...-S6	SME-8-...-230
Protection against short circuit	No	
Protection against overloading	No	

Electronic components		
	SME-8-...-S6	SME-8-...-230
Operating voltage range	[V AC] 0 ... 30	3 ... 230
Operating voltage range	[V DC] 0 ... 30	3 ... 230
Reverse polarity protection	No	

# Proximity sensors SME-8, for T-slot

FESTO

Technical data – Magnetic reed

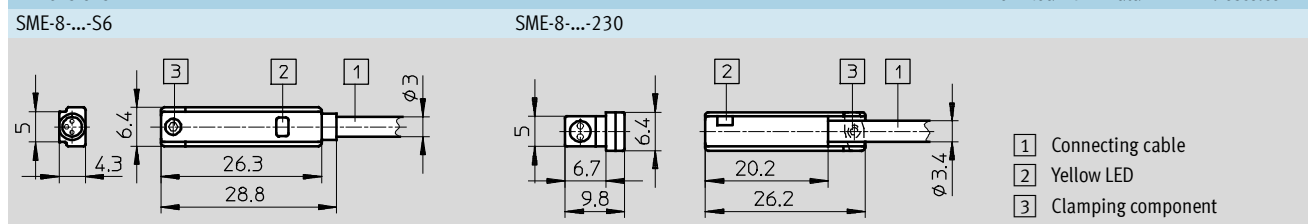
Electromechanical components		
	SME-8-...-S6	SME-8-...-230
Electrical connection	Cable, 2-wire	
Connection direction	In-line	
Cable length [m]	2.5	2.5
	–	–
Cable sheath material	Thermoplastic styrene elastomer	Polyurethane

Mechanical components		
	SME-8-...-S6	SME-8-...-230
Type of mounting	Clamped in T-slot Insertable in slot lengthwise	
Housing material	Epoxy resin	Epoxy resin
	Polycarbonate	Polystyrene
	Polyethylene terephthalate	Polyethylene terephthalate
	High-alloy stainless steel	High-alloy stainless steel

Display/operation		
	SME-8-...-S6	SME-8-...-230
Switching status display	–	Yellow LED

Immissions/emissions		
	SME-8-...-S6	SME-8-...-230
Ambient temperature with flexible cable installation [°C]	–5 ... +120	–5 ... +60
Protection class	– IP67	– IP67
Insulation voltage [V]	50	–
Surge capacity [kV]	0.8	4
Degree of contamination	3	3

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



Ordering data						
	Switching output	Electrical connection	Connection direction	Cable length [m]	Part No.	Type
		Cable				
N/O contact, heat resistant						
	Contacting, bipolar	2-wire	In-line	2.5	161756	SME-8-K-24-S6
N/O contact, operating voltage range up to 230 V AC/DC						
	Contacting, bipolar	2-wire	In-line	2.5	152820	SME-8-K-LED-230

# Proximity sensors SMT-8G, for T-slot

Type codes

**SMT-8G**

SMT - 8G - PS - 24V - E - 2,5Q - OE

Function	
SMT	Proximity sensor, magneto-resistive

Design	
8G	For T-slot, insertable in slot lengthwise

Switching output, switching element function	
PS	PNP, N/O contact, 3-wire

Rated operating voltage	
24V	24 V DC

Cable properties	
E	Energy chain + robot applications

Cable length [m], connection direction	
2,5Q	Cable, 2.5 m, lateral <sup>1)</sup>
0,3Q	Cable with plug, 0.3 m, lateral <sup>2)</sup>

Electrical connection	
OE	Open end
M8D	Cable with plug M8x1, rotatable thread

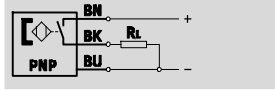
1) Only with electrical connection OE  
 2) Not with electrical connection OE

# Proximity sensors SMT-8G, for T-slot

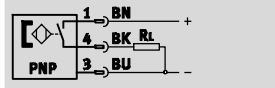
Technical data – Magneto-resistive

Function

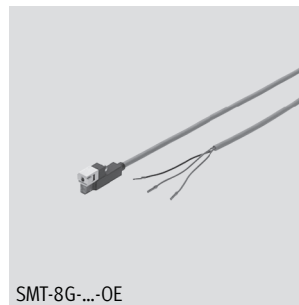
PNP, N/O contact, with cable, 3-wire



PNP, N/O contact, with plug



- Magneto-resistive measuring principle
- Insertable in slot lengthwise
- Design ideally matched to gripper sensing



General technical data	
Design	For T-slot
Based on standard	EN 60947-5-2
Certification	c UL us - Listed (OL)
CE mark (see declaration of conformity)	To EU EMC Directive
Note on materials	Free of copper and PTFE RoHS-compliant

Input signal/measuring element	
Measuring principle	Magneto-resistive
Ambient temperature	[°C] -20 ... +70

Switching output	
Switching output	PNP
Switching element function	N/O contact
Max. output current	[mA] 80
Max. switching capacity DC	[W] 2.4

Output, additional data	
Protection against short circuit	Pulsed
Protection against overloading	Yes

Electronic components	
Operating voltage range	[V DC] 10 ... 30
Reverse polarity protection	For all electrical connections

Electromechanical components		
Type	SMT-8G-...-OE	SMT-8G-...-M8D
Electrical connection	Cable, 3-wire	Cable with plug M8x1, 3-pin, rotatable thread
Connection direction	Lateral	
Cable test conditions	Energy chain: 5 million cycles, bending radius 28 mm Torsional strength: > 300,000 cycles, ±270°/0.1 m Resistance to bending: to Festo standard; test conditions on request	
Cable length	[m] 2.5	0.3
Cable properties	Energy chain + robot applications	
Cable sheath material	Thermoplastic polyurethane elastomer	

Mechanical components	
Type of mounting	Clamped in T-slot Insertable in slot lengthwise
Housing material	Reinforced polyamide



# Proximity sensors SME-8-FM, for T-slot

Type codes

**SME-8-FM**

SME - 8 - FM - DS - 24V - K - 1,0 - OE

Function	
SME	Proximity sensor, magnetic reed
Design	
8	For T-slot
Sensor design	
FM	Screw-clamped in slot, insertable from above
Switching output	
DS	3-wire N/O contact
ZS	2-wire N/O contact
Nominal operating voltage	
24V	24 V AC/DC
Cable properties	
K	Standard
Cable length [m]	
1,0	1
Electrical connection	
OE	Open end

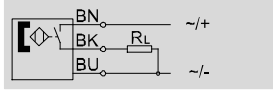


# Proximity sensors SME-8-FM, for T-slot

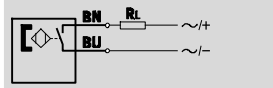
Technical data – Magnetic reed

Function

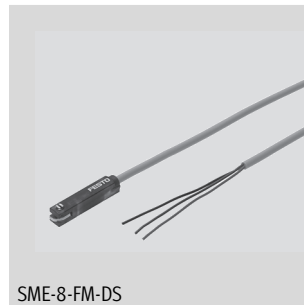
N/O contact, with cable, 3-wire



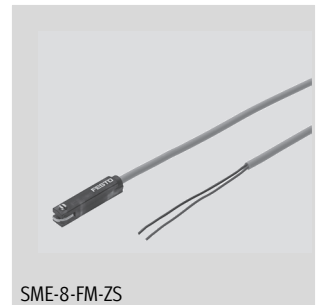
N/O contact, with cable, 2-wire



- Magnetic reed measuring principle
- Insertable in slot from above



SME-8-FM-DS



SME-8-FM-ZS

General technical data	
Design	For T-slot
Based on standard	EN-60947-5-2
Certification	C-Tick
CE mark (see declaration of conformity)	To EU EMC Directive
Note on materials	Free of copper and PTFE RoHS-compliant

Input signal/measuring element	
Measuring principle	Magnetic reed
Ambient temperature	[°C] -10 ... +60

Switching output		
Type	SME-8-FM-DS	SME-8-FM-ZS
Switching output	Contacting, bipolar	
Switching element function	N/O contact	
Max. output current	[mA] 100	
Max. switching capacity AC	[VA] 3	
Max. switching capacity DC	[W] 3	

Output, additional data	
Protection against short circuit	No
Protection against overloading	No

Electronic components		
Operating voltage range	[V AC] 10 ... 30	
Operating voltage range	[V DC] 10 ... 30	

Electromechanical components		
Type	SME-8-FM-DS	SME-8-FM-ZS
Electrical connection	Cable, 3-wire	Cable, 2-wire
Connection direction	In-line	
Cable test conditions	Test conditions on request	
Cable length	[m] 1	
Cable properties	Standard	
Cable sheath material	Polyvinyl chloride	

Mechanical components		
Type	SME-8-FM-DS	SME-8-FM-ZS
Type of mounting	Screw-clamped Insertable in slot from above	
Housing material	Polyamide	

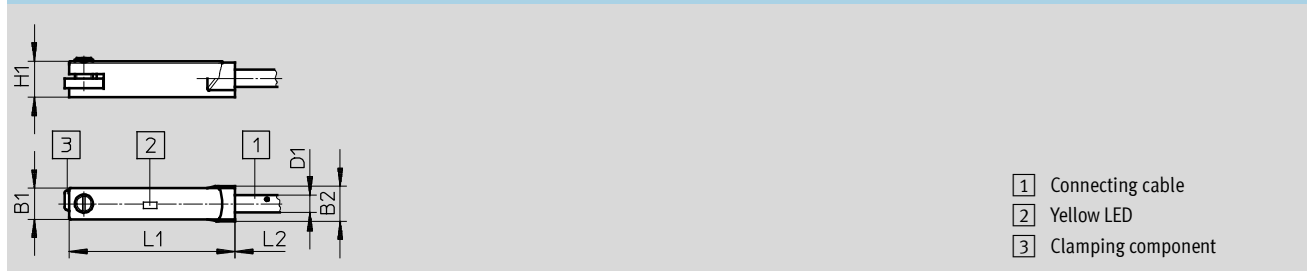
## Proximity sensors SME-8-FM, for T-slot

Technical data – Magnetic reed

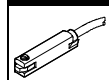
Display/operation	
Switching status display	Yellow LED

Immissions/emissions	
Ambient temperature with flexible cable installation	[°C] -5 ... +60
Protection class	IP67

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



	B1	B2	D1	H1	L1	L2
SME-8-FM	5.1	5.8	2.9	6	27.4	1 000

Ordering data					
	Switching output	Electrical connection	Cable length [m]	Part No.	Type
		Cable			
	Contacting, bipolar	3-wire	1	562515	SME-8-FM-DS-24V-K-1,0-OE
		2-wire	1	562516	SME-8-FM-ZS-24V-K-1,0-OE

# Proximity sensors SMTO/SMTSO/SMEO-8E, for T-slot

Type codes

SMTO/SMTSO/SMEO-8E	
SMTO – 8E – PS – M12 – LED – 24 –	
<b>Function</b>	
SMTO	Proximity sensor, magneto-resistive
SMTSO	Proximity sensor, magneto-inductive, welding field immune
SMEO	Proximity sensor, magnetic reed
<b>Design</b>	
8E	For T-slot, mounting via accessories
<b>Switching output, switching element function</b>	
PS	PNP, N/O contact, 3-wire
NS	NPN, N/O contact, 3-wire
<b>Electrical connection, cable length</b>	
K	Cable, 2.5 m or 7.5 m
S	Plug M8x1
M12	Plug M12x1
<b>Switching status display</b>	
LED	Yellow LED
<b>Rated operating voltage</b>	
24	24 V DC
230	230 V AC
<b>Variant</b>	
S6	Heat resistant

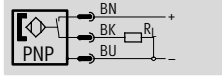
# Proximity sensors SMTO-8E/SMTSO-8E, for T-slot

Technical data – Magneto-resistive

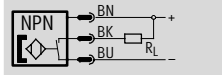


Function

PNP, N/O contact, with plug



NPN, N/O contact, with plug



- Magneto-resistive measuring principle
- Welding field immune designs



General technical data		SMTO-8E	SMTSO-8E, welding field immune
Type			
Design		For T-slot	
Certification		C-Tick	
CE mark (see declaration of conformity)		To EU EMC Directive <sup>1)</sup>	
Note on materials		Free of copper and PTFE	
		RoHS-compliant	-

- 1) For information about the applicability of the component see the manufacturer's EC declaration of conformity at: [www.festo.com](http://www.festo.com) → Support → User documentation.  
If the component is subject to restrictions on usage in residential, office or commercial environments or small businesses, further measures to reduce the emitted interference may be necessary.

Input signal/measuring element		SMTO-8E	SMTSO-8E, welding field immune
Type			
Measuring principle		Magneto-resistive	Magneto-inductive
Ambient temperature	[°C]	-20 ... +60	-25 ... +70

Switching output		SMTO-8E		SMTSO-8E, welding field immune	
Type					
Switching output		PNP	NPN	PNP	NPN
Switching element function		N/O contact			
Reproducibility of switching value	[mm]	±0.1			
Switch-on time	[ms]	0 ... 0.5		0 ... 38	
Switch-off time	[ms]	10 ... 25		0 ... 20	
Max. output current	[mA]	100		200	
Max. switching capacity DC	[W]	3		6	
Voltage drop	[V]	0 ... 1.8		0 ... 1.8	0 ... 3
Residual current	[µmA]	0.01			

Output, additional data		SMTO-8E		SMTSO-8E, welding field immune	
Type					
Switching output		PNP	NPN	PNP	NPN
Protection against short circuit		Pulsed		Yes	Pulsed
Protection against overloading		Yes			

Electronic components		SMTO-8E		SMTSO-8E, welding field immune	
Operating voltage range DC	[V]	10 ... 30			
Reverse polarity protection		For all electrical connections			

# Proximity sensors SMT0-8E/SMTSO-8E, for T-slot

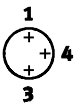
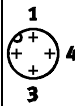
Technical data – Magneto-resistive

Electromechanical components			
Type	SMT0-8E-...-S	SMT0-8E-...-M12	SMTSO-8E-...-M12, welding field immune
Electrical connection	Plug M8x1, 3-pin	Plug M12x1, 3-pin	Plug M12x1, 3-pin
Connection direction	Lateral		
Max. tightening torque for plug [Nm]	0.3	0.5	0.5

Mechanical components			
Type	SMT0-8E-...-S	SMT0-8E-...-M12	SMTSO-8E-...-M12, welding field immune
Type of mounting	Clamped in T-slot Insertable in slot from above Via accessories		
Tightening torque [Nm]	1	0.5	0.5
Housing materials	TPE-U(PU)	TPE-U(PU)	TPE-U(PU)
	Nickel-plated brass	High-alloy stainless steel	High-alloy stainless steel
	–	Wrought aluminium alloy	Wrought aluminium alloy
		–	PA

Display/operation	
Switching status display	Yellow LED

Immissions/emissions			
Type	SMT0-8E-...-S	SMT0-8E-...-M12	SMTSO-8E-...-M12, welding field immune
Protection class	IP65 IP67		
Resistance to interference from magnetic fields	–	–	Alternating magnetic field 45 ... 65 Hz

Pin allocation to EN 60947-5-2							
M8x1, 3-pin				M12x1, 3-pin			
N/O contact				N/O contact			
	Pin	Wire colour	Allocation		Pin	Wire colour	Allocation
	1	Brown	+		1	Brown	+
	3	Blue	–		3	Blue	–
	4	Black	Output		4	Black	Output

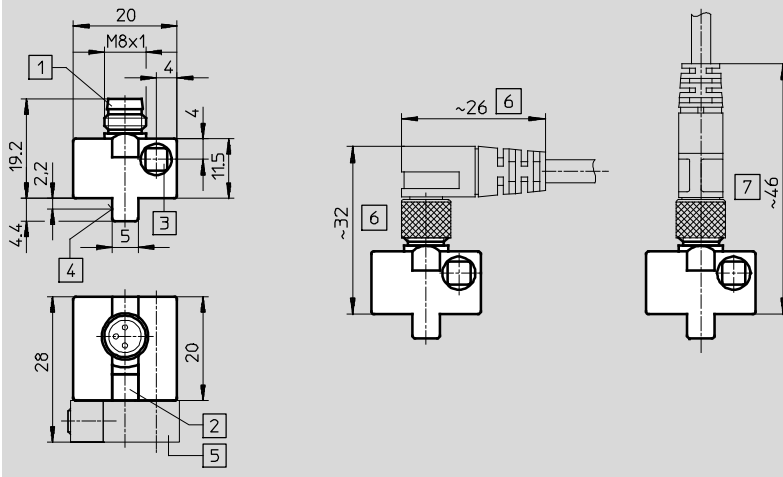
# Proximity sensors SMT0-8E/SMTSO-8E, for T-slot

Technical data – Magneto-resistive

## Dimensions

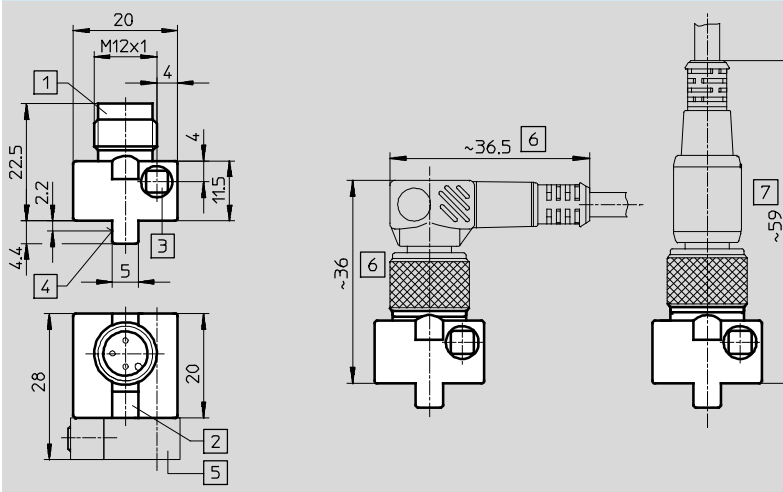
Download CAD data → [www.festo.com](http://www.festo.com)

### SMT0-8E-...-S-LED-24 – Plug M8x1



- 1 Plug to fit connecting cable NEBU-M8
- 2 Yellow LED
- 3 Mounting screw
- 4 Theoretical switching point
- 5 Mounting kit SMB-8E (not included in the scope of delivery)
- 6 Fitting space for connecting cable NEBU-M8W3
- 7 Fitting space for connecting cable NEBU-M8G3

### SMT0-8E-...-M12-LED-24 – Plug M12x1

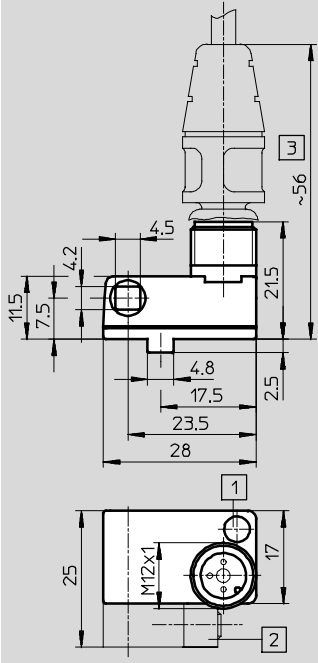


- 1 Plug to fit connecting cable NEBU-M12
- 2 Yellow LED
- 3 Mounting screw
- 4 Theoretical switching point
- 5 Mounting kit SMB-8E (not included in the scope of delivery)
- 6 Fitting space for connecting cable NEBU-M12W5
- 7 Fitting space for connecting cable NEBU-M12G5

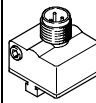
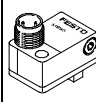
# Proximity sensors SMT0-8E/SMTSO-8E, for T-slot

Technical data – Magneto-resistive

**Dimensions** Download CAD data → [www.festo.com](http://www.festo.com)  
 SMTSO-8E-...-M12-LED-24 – Plug M12x1



- 1 Yellow LED
- 2 Mounting kit SMB-8E (not included in the scope of delivery)
- 3 Fitting space for connecting cable NEBU-M12G5

Ordering data					
	Switching output	Electrical connection		Part No.	Type
		Plug M8x1	Plug M12x1		
N/O contact, basic version					
	PNP	3-pin	–	171178	SMT0-8E-PS-S-LED-24
		–	3-pin	171179	SMT0-8E-PS-M12-LED-24
	NPN	3-pin	–	171166	SMT0-8E-NS-S-LED-24
		–	3-pin	171176	SMT0-8E-NS-M12-LED-24
N/O contact, welding field immune					
	PNP	–	3-pin	191986	SMTSO-8E-PS-M12-LED-24
	NPN	–	3-pin	175825	SMTSO-8E-NS-M12-LED-24

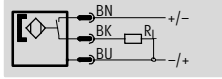
# Proximity sensors SMEO-8E, for T-slot

Technical data – Magnetic reed

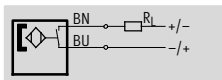


Function

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



E.g. N/O contact, 2-wire, with cable



- Magnetic reed measuring principle
- Heat-resistant variant



General technical data			
	SMEO-8E...-24	SMEO-8E...-24-S6, heat-resistant	SMEO-8E...-230
Design	For T-slot	For T-slot	For T-slot
Conforms to	EN 60947-5-2	–	EN 60947-5-2
Certification	C-Tick	–	C-Tick
CE mark (see declaration of conformity)	To EU EMC Directive <sup>1)</sup> –	–	To EU EMC Directive <sup>1)</sup> To EU Low Voltage Directive
Note on materials	Free of copper and PTFE RoHS-compliant	Free of copper and PTFE –	Free of copper and PTFE –

1) For information about the applicability of the component see the manufacturer's EC declaration of conformity at: [www.festo.com](http://www.festo.com) → Support → User documentation.  
If the component is subject to restrictions on usage in residential, office or commercial environments or small businesses, further measures to reduce the emitted interference may be necessary.

Input signal/measuring element			
	SMEO-8E...-24	SMEO-8E...-24-S6, heat-resistant	SMEO-8E...-230
Measuring principle	Magnetic reed	Magnetic reed	Magnetic reed
Ambient temperature [°C]	–40 ... +60	–40 ... +120	–20 ... +60

Switching output			
	SMEO-8E...-24	SMEO-8E...-24-S6, heat-resistant	SMEO-8E...-230
Switching output	Contacting, bipolar –	Contacting –	Contacting, bipolar Without LED function
Switching element function	N/O contact	N/O contact	N/O contact
Reproducibility of switching value [mm]	±0.1	±0.1	±0.1
Switch-on time [ms]	0 ... 0.5	0 ... 0.5	0 ... 2
Switch-off time [ms]	0.03	0.03	0.03
Max. switching frequency [Hz]	800	500	500
Max. output current [mA]	500	500	120
Max. switching capacity DC [W]	10	10	10
Max. switching capacity AC [VA]	10	10	10
Voltage drop [V]	–	0.5	3.9

Output, additional data	
Protection against short circuit	No
Protection against overloading	No

Electronic components			
	SMEO-8E...-24	SMEO-8E...-24-S6, heat-resistant	SMEO-8E...-230
Operating voltage range DC [V]	12 ... 30	0 ... 30	3 ... 250
Operating voltage range AC [V]	12 ... 30	0 ... 30	3 ... 230
Reverse polarity protection	No	For all electrical connections	No



# Proximity sensors SMEO-8E, for T-slot

Technical data – Magnetic reed

Electromechanical components				
Type	SMEO-8E-S-LED-24	SMEO-8E-M12-LED-24	SMEO-8E-K-24-S6, heat-resistant	SMEO-8E-M12-LED-230
Electrical connection	Plug M8x1, 3-pin	Plug M12x1, 3-pin	Cable, 2-wire	Plug M12x1, 3-pin
Connection direction	Lateral	Lateral	Lateral	In-line
Pin contact materials	Nickel-plated brass	Brass	–	–
Cable length [m]	–	–	2.5	–
Cable sheath materials	–	–	TPE-S	–

Mechanical components				
Type	SMEO-8E-S-LED-24	SMEO-8E-M12-LED-24	SMEO-8E-K-24-S6, heat-resistant	SMEO-8E-M12-LED-230
Type of mounting	Via accessories		Via accessories	Via accessories
Tightening torque [Nm]	0.5	0.5	0.5	0.5
Housing materials	TPE-U(PU)	TPE-U(PU)	TPE-U(PU)	TPE-U(PU)
	High-alloy stainless steel	High-alloy stainless steel	–	High-alloy stainless steel
	Wrought aluminium alloy	Wrought aluminium alloy	–	Wrought aluminium alloy
	Nickel-plated brass	–	–	–

Display/operation			
	SMEO-8E-...-24	SMEO-8E-...-24-S6, heat-resistant	SMEO-8E-...-230
Switching status display	Yellow LED	–	Yellow LED

Immissions/emissions			
	SMEO-8E-...-24	SMEO-8E-...-24-S6, heat-resistant	SMEO-8E-...-230
Ambient temperature with flexible cable installation [°C]	–	–40 ... +120	–
Protection class	IP65	IP65	IP65
	IP67	IP67	IP67
Insulation voltage [V]	–	50	–
Surge capacity [kV]	0.8	–	4
Degree of contamination	3	3	3

Pin allocation to EN 60947-5-2				
M8x1, 3-pin			M12x1, 3-pin, 24 V	
N/O contact			N/O contact	
	Pin	Wire colour	Allocation	
	1	Brown	+	
	3	Blue	–	
	4	Black	Output	

Pin allocation to EN 60947-5-2			
M12x1, 3-pin, 230 V			
N/O contact			
	Pin	Wire colour	Allocation
	4	Black	~ / +
	3	Blue	~ / –

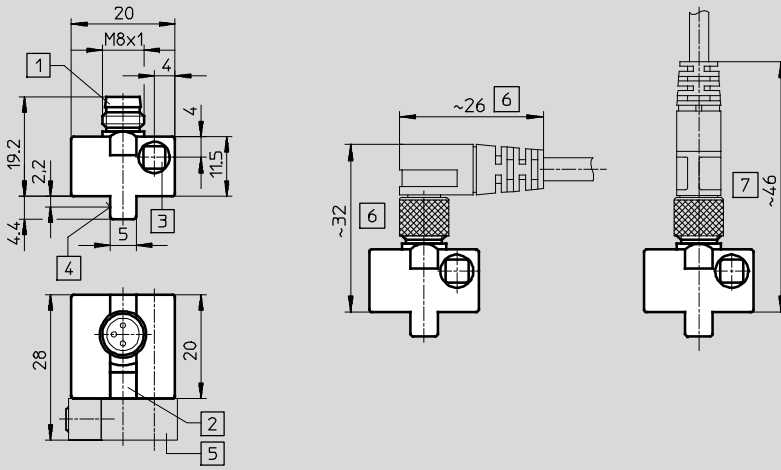
# Proximity sensors SMEO-8E, for T-slot

Technical data – Magnetic reed

## Dimensions

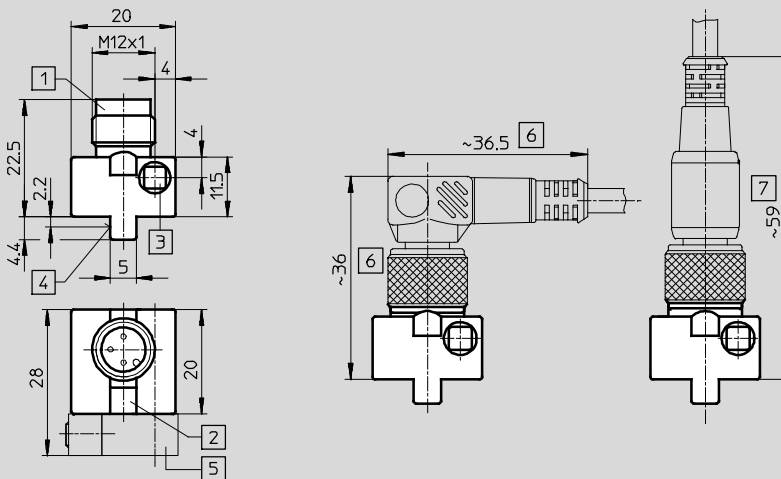
Download CAD data → [www.festo.com](http://www.festo.com)

### SMEO-8E-S-LED-24 – Plug M8x1



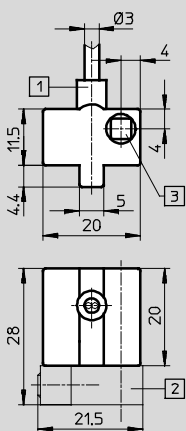
- 1 Plug to fit connecting cable NEBU-M8
- 2 Yellow LED
- 3 Mounting screw
- 4 Theoretical switching point
- 5 Mounting kit SMB-8E (not included in the scope of delivery)
- 6 Fitting space for connecting cable NEBU-M8W3
- 7 Fitting space for connecting cable NEBU-M8G3

### SMEO-8E-M12-LED-24 – Plug M12x1



- 1 Plug to fit connecting cable NEBU-M12
- 2 Yellow LED
- 3 Mounting screw
- 4 Theoretical switching point
- 5 Mounting kit SMB-8E (not included in the scope of delivery)
- 6 Fitting space for connecting cable NEBU-M12W5
- 7 Fitting space for connecting cable NEBU-M12G5


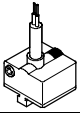
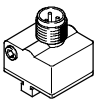
### SMEO-8E-K24-S6 – Cable, heat-resistant up to 120 °C



- 1 Connecting cable
- 2 Mounting kit SMB-8E (not included in the scope of delivery)
- 3 Mounting screw

# Proximity sensors SMEO-8E, for T-slot

Technical data – Magnetic reed

Ordering data								
	Switching output	Electrical connection			Cable length [m]	Product weight [g]	Part No.	Type
		Cable	Plug M8x1	Plug M12x1				
<b>N/O contact, basic version</b>								
	Contacting, bipolar	-	3-pin	-		10	171163	SMEO-8E-S-LED-24
			-	3-pin			9	171164
<b>N/O contact, heat-resistant</b>								
	Contacting, bipolar		2-wire	-	2.5	40	171158	SMEO-8E-K-24-S6
<b>N/O contact, operating voltage range 3 ... 250 V AC/DC</b>								
	Contacting, bipolar		-	3-pin	-	9	171160	SMEO-8E-M12-LED-230

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

Accessories



## Mounting kit SMBR-8-8/100-S6

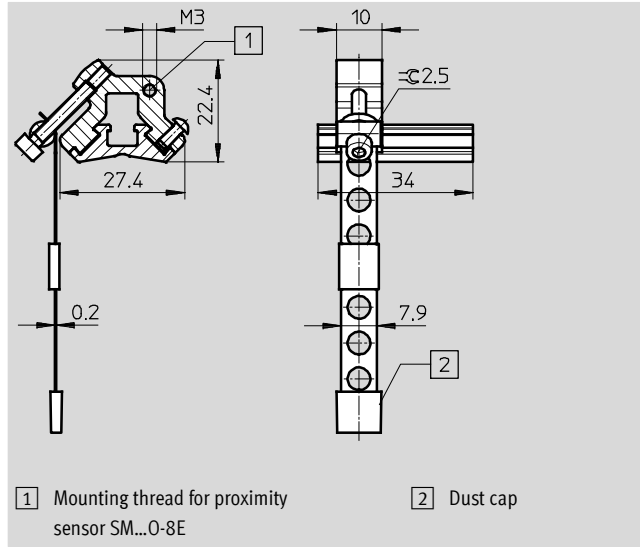
### Materials:

Rail: Anodised wrought aluminium alloy

Clamping strap, screws: High-alloy stainless steel

Free of copper and PTFE

RoHS-compliant



Dimensions and ordering data			
For piston Ø	Corrosion resistance class CRC <sup>1)</sup>	Part No.	Type
8 ... 100	4	538937	SMBR-8-8/100-S6

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

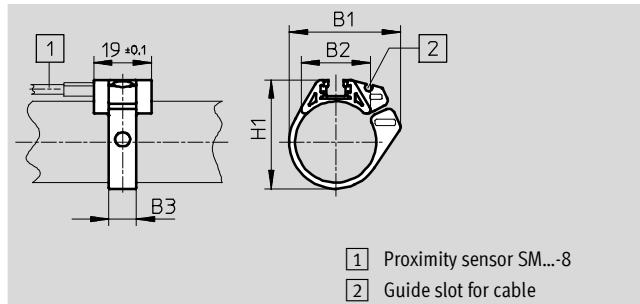
Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

## Mounting kit SMBR

### Material:

Polyacetal

RoHS-compliant



Dimensions and ordering data						
For piston Ø	B1	B2	B3	H1	Part No.	Type
8	18.9	12.3	7	17.5	175091	SMBR-8-8
10	20.4	13.7	7	19.9	175092	SMBR-8-10
12	22.7	14.3	7	21.9	175093	SMBR-8-12
16	28.2	16.9	8	25.7	175094	SMBR-8-16
20	34.5	20.8	9	30.4	175095	SMBR-8-20
25	36.7	22.7	9	35.6	175096	SMBR-8-25
32	41.7	24.6	9	42.7	175097	SMBR-8-32
40	47.1	26.5	9	50.7	175098	SMBR-8-40
50	56.4	28.6	9	61.5	175099	SMBR-8-50
63	69.4	32	9	74.5	175100	SMBR-8-63

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

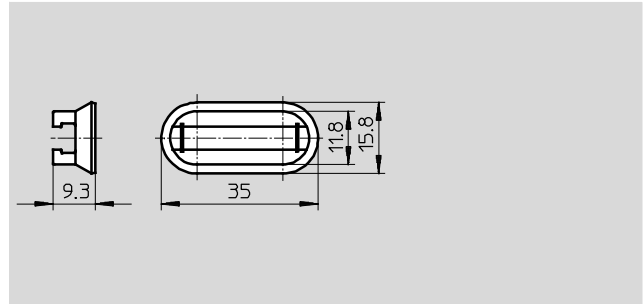
Accessories

## Mounting kit CRSMB

Design: For round cylinders  
 Mounting method:  
 Affixed with adhesive tape (supplied)

Protection class: IP65, IP68, IP69K  
 Ambient temperature:  
 -40 ... +90 °C

Materials:  
 Housing: Polyurethane  
 Rail: Hard anodised aluminium  
 Free of copper and PTFE

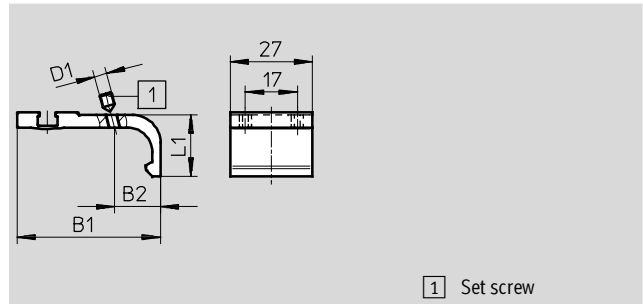
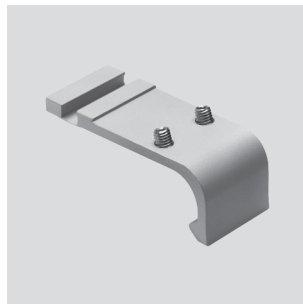


Ordering data			
For piston Ø	CRC <sup>1)</sup>	Part No.	Type
32 ... 100	4	525565	CRSMB-8-32/100

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

## Mounting kit SMB-8-FENG

Material:  
 Wrought aluminium alloy  
 Free of copper and PTFE

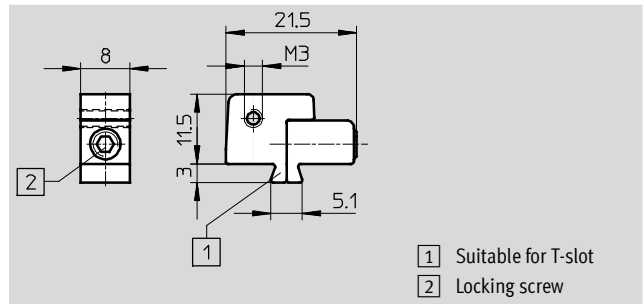
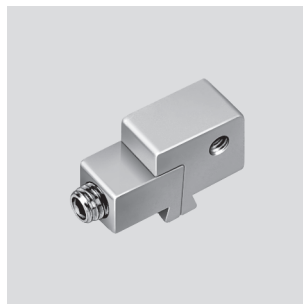


1 Set screw

Dimensions and ordering data						
For piston Ø	B1	B2	D1	L1	Tightening torque [Nm]	Part No. Type
32/40	35.1	8.7	M3	15.5	0.2	175705 SMB-8-FENG-32/40
50/63	47	12.3	M4	20	0.5	175706 SMB-8-FENG-50/63
80/100	64.3	15.7	M5	24.3	0.7	175707 SMB-8-FENG-80/100

## Mounting kit SMB-8E

Material:  
 Polyacetal



1 Suitable for T-slot  
 2 Locking screw

Ordering data		
For piston Ø	Part No.	Type
10 ... 125	178230	SMB-8E

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

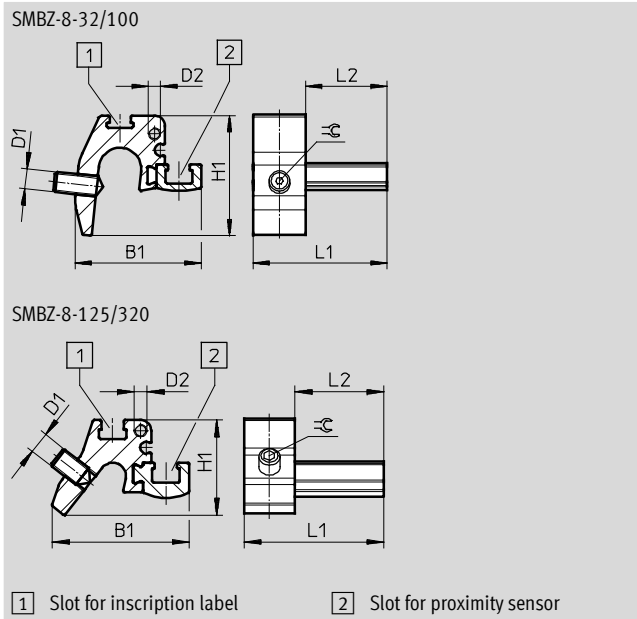
Accessories



## Mounting SMBZ-8-...

### Materials:

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



Dimensions and ordering data									
For piston $\varnothing$	B1	D1	D2	H1	L1	L2	$\approx \varnothing$	Part No.	Type
32 ... 100	31	M5	M3	30	33	20	1.5	537806	SMBZ-8-32/100
125 ... 320	32.3			22			2.5	537808	SMBZ-8-125/320

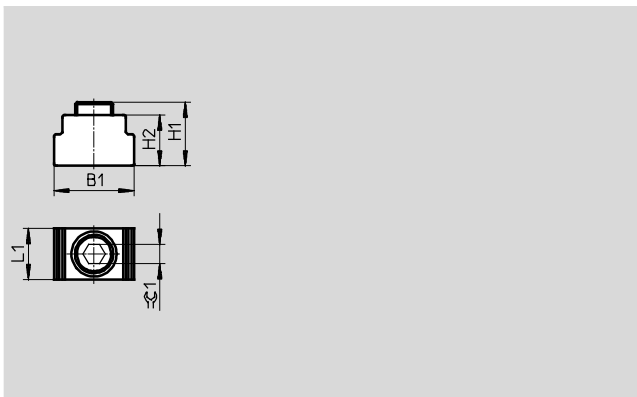
## Positioning component SMM

Insertable in slot lengthwise

Ambient temperature: -40 ... +120 °C

### Materials:

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



Dimensions and ordering data								
B1	H1	H2	L1	$\approx \varnothing 1$	CRC <sup>1)</sup>	Part No.	Type	PU <sup>2)</sup>
6.3	5.0	4.0	4.0	1.5	3	547941	SMM-8	10





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



2) Packaging unit

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


Accessories


**FESTO**

Ordering data – Connecting cables				Technical data → Internet: nebu	
		Number of wires	Cable length [m]	Part No.	Type
<b>Socket M8x1, 3-pin</b>					
	For SMT/SME-8... and SMT0/SMTSO/SME0-8E	3	2.5	541333	NEBU-M8G3-K-2.5-LE3
			5	541334	NEBU-M8G3-K-5-LE3
	For SMT/SME-8... and SMT0/SMTSO/SME0-8E	3	2.5	541338	NEBU-M8W3-K-2.5-LE3
			5	541341	NEBU-M8W3-K-5-LE3
<b>Socket M12x1, 5-pin</b>					
	For SMT/SME-8M and SMT0/SMTSO/SME0-8E	3	2.5	541363	NEBU-M12G5-K-2.5-LE3
			5	541364	NEBU-M12G5-K-5-LE3
	For SMT/SME-8M and SMT0/SMTSO/SME0-8E	3	2.5	541367	NEBU-M12W5-K-2.5-LE3
			5	541370	NEBU-M12W5-K-5-LE3

Ordering data – Inscription labels, safety clips				
	Size	Part No.	Type	PU <sup>1)</sup>
	23x4 mm	541598	ASLR-L-423	34
	M8	548067	NEAU-M8-GD	1
	M12	548068	NEAU-M12-GD	1

1) Packaging unit per frame

Ordering data – Mounting attachments			
	For Ø	Part No.	Type
	-	534254	SMBK-8

Ordering data – Sensor tester	
Part No.	Type
	158481 SM-TEST-1