

Proximity sensors SMT/SME

Product overview

FESTO



- Versions for T-slot and -slot
- Switch output contactless or via reed contacts
- Wide range of mounting and connection options
- Heat and corrosion-resistant designs
- Free of copper and PTFE
- Specified types in accordance with ATEX directive for potentially explosive atmospheres → www.festo.com/en/ex

Detailed product information

→ www.festo.com/catalogue/sm

Product overview							
Design	Type of mounting	Measuring principle	Type	Operating voltage range	Switch output	Switching element function	→ Page/Internet
For T slot	Insertable in the slot from above, flush with cylinder profile	Magneto-resistive	SMT-8M	10 ... 30 V DC	PNP/NPN	N/O contact N/C contact	5
		Magnetic reed	SME-8M	5 ... 30 V AC/DC	Contacting	N/O contact	7
	Insertable in the slot lengthwise, flush with the cylinder profile	Magneto-resistive	SMT-8	10 ... 30 V DC	PNP/NPN	N/O contact	11
		Magneto-resistive, corrosion-resistant	CRSMT-8	10 ... 30 V DC	PNP	N/O contact	11
		Magnetic reed	SME-8	12 ... 30 V AC/DC	Contacting	N/O contact N/C contact	12
		Magnetic reed, heat-resistant up to 120 °C	SME-8-...-S6	0 ... 30 V AC/DC	Contacting	N/O contact	13
		Magnetic reed	SME-8	3 ... 250 V AC	Contacting	N/O contact	13
	Insertable in the slot lengthwise	Magneto-resistive	SMT-8-SL	10 ... 30 V DC	PNP	N/O contact	11
		Magnetic reed	SME-8-SL	10 ... 30 V AC/DC	Contacting	N/O contact	12
	Via accessories	Magneto-resistive	SMT0-8E	10 ... 30 V DC	PNP/NPN	N/O contact	15
		Magneto-inductive, welding field immune	SMTSO-8E	10 ... 30 V DC	PNP/NPN	N/O contact	15
		Magnetic reed	SME0-8E	0 ... 30 V DC	Contacting	N/O contact	16
		Magnetic reed, heat-resistant up to 120 °C	SME0-8E-...-S6	0 ... 30 V DC 5 ... 250 V AC	Contacting	N/O contact	17
		Magnetic reed	SME0-8E	3 ... 250 V AC	Contacting	N/O contact	17
For C-slot	Insertable in the slot from above, flush with cylinder profile	Magneto-resistive	SMT-10F	5 ... 30 V DC	PNP/NPN/contactless, 2-wire	N/O contact	21
		Magnetic reed	SME-10F	10 ... 30 V AC/DC	Contacting	N/O contact	22
	Insertable in the slot lengthwise	Magneto-resistive	SMT-10	10 ... 30 V DC	PNP/NPN	N/O contact	24
		Magnetic reed	SME-10	12 ... 27 V AC/DC	Contacting	N/O contact	25

Proximity sensors

Selection aid

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Drive		SMT-8, SMT0-8E CRSMT-8 SME-8, SME0-8E SMPO-8E	SMT-10 SME-10	SMT0-4U SME0-4U CRSME0-4	SMT0-1 SMT0-6 SME0-1 SMPO-1	SMT-C1
Standards-based cylinders						
Standard cylinders DSNU, ESNU	Ø 8 ... 25 mm	■	■	■	■	–
Standard cylinders DSN, ESN	Ø 8 ... 25 mm	■	■	■	■	–
Standard cylinders DNCB		■	–	–	–	–
Standard cylinders DNC		■	–	–	–	–
Standard cylinders DNG		■	–	–	■	–
Standard cylinders CDN-...-R with sensor strip		–	–	–	–	■
Standard cylinders ADN		■	–	–	–	–
Cylinders with piston rod						
Compact cylinders ADVU, AEVU		■	–	–	–	–
Short-stroke cylinders ADVC, AEVC	Ø 6 ... 25 mm	–	■	–	–	–
	Ø 32 ... 100 mm	■	–	–	–	–
Flat cylinders EZH-10/40-40-A-B		■	–	–	–	–
Flat cylinders DZF		■	–	–	–	–
Flat cylinders DZH	Ø 16 ... 25 mm	■	–	–	–	–
	Ø 32 ... 63 mm	–	–	–	■	–
Round cylinders DSNU, ESNU	Ø 32 ... 63 mm	■	■	■	■	–
Round cylinders DSW, ESW		■	■	■	■	–
Round cylinders DSEU, ESEU		■	■	■	■	–
Multimount cylinders DMM, EMM		■	–	–	–	–
Round cylinders CRDG		–	–	■	–	–
Round cylinders CRDSW		■	■	■	■	–
Standard cylinders CRHD		■	–	–	–	–
Standard cylinders CRDSNU		■	–	■	–	–
Standard cylinders CRDNG		■	–	■	–	–
Standard cylinders CRDNGS		■	–	■	–	–
Rodless cylinders						
Linear drives DGC	Ø 8, 12 mm	–	■	–	–	–
	Ø 18 ... 63 mm	■	–	–	–	–
Linear drives DGP, DGPL		■	–	–	–	–
Linear drives SLG		–	■	–	–	–
Linear drives DGO		–	–	■	–	–
Linear drives SLM		■	–	–	–	–
Semi-rotary drives						
Swivel modules DSM	Ø 6 ... 10 mm	–	■	–	–	–
Semi-rotary drives DSM-B	Ø 12 ... 40 mm	–	■	–	–	–
	Ø 63 mm	■	–	–	■	–
Semi-rotary drives DRQ	Ø 16 ... 32 mm	■	–	–	–	–
	Ø 40 ... 100 mm	–	–	–	■	–
Semi-rotary drives DRQD	Ø 6 ... 12 mm	–	■	–	–	–
	Ø 16 ... 32 mm	■	–	–	–	–
Technical data → Page/Internet						
		5, nut 8	21	smt0, crsmeo	smt0	smt-c1

Proximity sensors

Selection aid

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Drive	SMT-8, SMT0-8E CRSMT-8 SME-8, SME0-8E, SMP0-8E	SMT-10 SME-10	SMH-S1
Function-oriented drives			
Stopper cylinders STA, STAF	■	–	–
Linear/swivel clamps CLR	■	–	–
Swivel/linear units DSL	■	–	–
Swivel/linear units DSL-B	–	■	–
Drives with linear guide			
Mini slides SLS, SLF, SLT	–	■	–
Mini slides DGSL	–	■	–
Twin cylinders SPZ	■	–	–
Slide units SLZ	■	–	–
Guided cylinders DFP	Ø 6 ... 16 mm	■	–
	Ø 25 ... 80 mm	–	–
Mini guide units DFC	–	■	–
Guided drives DFM	■	–	–
Guided drives DFM-B	■ ¹⁾	–	–
Linear units SLE	Ø 32 ... 50 mm	–	–
Twin cylinders DPZC	–	■	–
Twin cylinders DPZ	■	–	–
Handling units			
Linear modules HMP	■	–	–
Linear modules HMPL	■	–	–
Handling modules HSP, HSW	■	–	–
Feed separators HPV	■	–	–
Three-point grippers HGD	Ø 16 mm	–	■
	Ø 32, 50 mm	■ ²⁾	–
Three-point grippers HGDT	–	■	–
Parallel grippers HGP	Ø 6 mm	–	■
	Ø 10 ... 35 mm	■ ²⁾	–
Parallel grippers HGPC	–	■	–
Parallel grippers HGPP	Ø 12 ... 32 mm	–	■
Parallel grippers HGPT	Ø 16 ... 63 mm	■	–
Angle grippers HGW	Ø 10 mm	–	■
	Ø 16 ... 40 mm	■	–
Radial grippers HGR	Ø 10 mm	–	■
	Ø 16 ... 40 mm	■	–
Swivel/gripper units HGDS	–	■	–
Cushioning components			
Hydraulic stop elements YSRWJ	■	–	–
Electrical positioning systems			
Toothed belt axes DGE-ZR	■	–	–
Spindle axes DGE-SP	■	–	–
System components			
Heavy-duty guides HD	■	–	–
Valve actuators			
Copac linear actuators DLP-A	■	–	–
Technical data → Page/Internet			
	5, nut 8	21	smh

1) Not SM...0-8E.

2) SME-8M only for HGD-50, HGP-20 ... 35.

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

Type codes

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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													
Switch 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													
Rated operating voltage														
24V	24 V DC													
Cable attribute														
K	Standard + Drag chain													
E	Drag chain + Robots													
Cable length [m]														
Connection technology														
OE	Open end													
M5D	Cable with plug M5x0.5, turnable													
M8	Cable with plug M8x1, snap-on flange													
M8D	Cable with plug M8x1, turnable													
M12	Cable with plug M12x1, turnable													

Proximity sensors SMT-8M, for T-slot

Technical data – Magneto-resistive

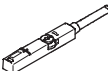
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Technical data				
Type of mounting		Screwed in slot, insertable from above, flush with cylinder profile		
Electrical connection		Cable, 3-wire	Cable with plug, turnable	
			M5x0.5, 3-pin	M8x1, 3-pin
Cable length		[m]	0.2 ... 30	
Cable attribute ¹⁾		Standard + Drag chain		
		Drag chain + Robots		
Test conditions	Standard + Drag Chain	Drag chain: 5 million cycles, bending radius 75 mm		
		Resistance to bending: To Festo standard; test conditions on request		
	Drag Chain + Robots	Drag 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		
Operating voltage range DC		[V]	10 ... 30	
Max. output current		[mA]	100	
Max. switching capacity DC		[W]	3.0	
Protection against short circuit		Pulsed		
Protection against overloading		Yes		
Protection against polarity reversal		For all electrical connections		
Protection class		IP65, IP68		

1) If the relevant option is selected: Modular products → 6

Operating and environmental conditions		
Ambient temperature [°C]	-20 ... +70	
Ambient temperature with flexible cable installation [°C]	-5 ... +70	
CE mark (see declaration of conformity)	In accordance with EU EMC directive	
Certification	c UL us - Listed (OL) C-Tick	

Materials	
Housing	Polyamide; polyurethane; high-alloy stainless steel
Cable sheath	Polyurethane

Ordering data									
	Switch output	Electrical connection				Cable length [m]	Part No.	Type	
		Cable	Cable with plug, turnable						
			M5x0.5	M8x1	M12x1				
	N/O contact								
	PNP	3-wire	–	–	–	2.5	543 867	SMT-8M-PS-24V-K-2,5-OE	
			–	–	–	5.0	543 868	SMT-8M-PS-24V-K-5,0-OE	
		–	3-pin	–	–	0.3	543 865	SMT-8M-PS-24V-K-0,3-M5D	
				–	3-pin		–	543 866	SMT-8M-PS-24V-K-0,3-M8D
				–	–		3-pin	543 869	SMT-8M-PS-24V-K-0,3-M12
	NPN	3-wire	–	–	–	2.5	543 870	SMT-8M-NS-24V-K-2,5-OE	
		–	–	3-pin	–	0.3	543 871	SMT-8M-NS-24V-K-0,3-M8D	
	N/C contact								
	PNP	3-wire	–	–	–	7.5	543 873	SMT-8M-PO-24V-K-7,5-OE	

Proximity sensors SMT-8M, for T-slot

Modular products – Magneto-resistive

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M Mandatory data

Module No.	Function	Switch output	Nominal operating voltage	Cable attribute	Cable length	Connection technology
543 893	SMT-8M	PS NS PO	24V	K E	0.2 ... 30	OE M8D M8 M12
Order example						
543 893	SMT-8M	– NS	– 24V	– E	– 3	– M8D

Ordering table					
Size	8	Condi- tions	Code	Enter code	
M Module No.	543 893				
Function	Proximity sensor for T-slot, contactless		SMT-8M		SMT-8M
			–		–
Switch output	3-wire PNP N/O contact		PS		
	3-wire NPN N/O contact		NS		
	3-wire PNP N/C contact		PO		
			–		–
Nominal operating voltage [V DC]	24		24V		24V
			–		–
Cable attribute	Standard + Drag Chain		K		
	Drag chain + Robots		E		
			–		–
Cable length [m]	0.2 ... 30 (0.2 ... 2.5 m in 0.1 m steps, 2.5 ... 15 m in 0.5 m steps, 15 ... 30 m in 1 m steps)		...		
			–		–
Connection technology	Open end		OE		
	M8, turnable		M8D		
	M8, snap flange		M8		
	M12, turnable		M12		

Transfer order code

543 893	SMT-8M	–		–	24V	–		–		–	
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Proximity sensors SME-8M, for T-slot

Technical data – Magnetic reed

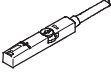
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Technical data					
Type of mounting		Screwed in slot, insertable from above, flush with cylinder profile			
Electrical connection		Cable, 3-wire	Cable with plug, turnable		Cable, 2-wire
			M5x0.5, 3-pin	M8x1, 3-pin	
Cable length [m]		0.2 ... 10			
Cable attribute ¹⁾		Standard + Drag chain			
		Drag chain + Robots			
Test conditions	Standard + Drag Chain	Drag chain: 5 million cycles, bending radius 75 mm			
		Resistance to bending: To Festo standard; test conditions on request			
	Drag Chain + Robots	Drag 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			
Operating voltage range DC [V]		5 ... 30			
Operating voltage range AC [V]		5 ... 30			
Max. output current [mA]		500		80	
Max. output current in mounting kits [mA]		80			
Max. switching capacity DC [W]		10.0		2.4	
Max. switching capacity AC [VA]		10.0		2.4	
Max. switching capacity DC in mounting kits [W]		2.4			
Max. switching capacity AC in mounting kits [VA]		2.4			
Protection against short circuit		No			
Protection against overloading		Not available			
Protection against polarity reversal		No			
Protection class		IP65, IP68			

1) If the relevant option is selected: Modular products → 8

Operating and environmental conditions	
Ambient temperature [°C]	−20 ... +70
Ambient temperature with flexible cable installation [°C]	−5 ... +70
CE mark (see declaration of conformity)	In accordance with EU EMC directive
Certification	c UL us - Listed (OL) C-Tick

Materials	
Housing	Polyamide; polyurethane; high-alloy stainless steel
Cable sheath	Polyurethane

Ordering data							
	Switch output	Electrical connection			Cable length [m]	Part No.	Type
		Cable	Cable with plug, turnable				
			M5x0.5	M8x1			
	N/O contact						
	Contacting, bipolar	3-wire	–	–	2.5	543 862	SME-8M-DS-24V-K-2,5-OE
					5.0	543 863	SME-8M-DS-24V-K-5,0-OE
					7.5	543 876	SME-8M-DS-24V-K-7,5-OE
		–	3-pin	–	0.3	543 864	SME-8M-DS-24V-K-0,3-M5D
		–	–	3-pin		543 861	SME-8M-DS-24V-K-0,3-M8D
		2-wire	–	–	2.5	543 872	SME-8M-ZS-24V-K-2,5-OE

Proximity sensors SME-8M, for T-slot

Modular products – Magnetic reed

FESTO

Mandatory data

Module No.	Function	Switch output	Nominal operating voltage	Cable attribute	Cable length	Connection technology
543 892	SME-8M	DS ZS	24V	K E	0.2 ... 10	OE M8D M8 M12
Order example						
543 892	SME-8M	– ZS	– 24V	– K	– 0.8	– OE

Ordering table					
Size	8			Condi- tions	Code
Enter code					
M Module No.	543 892				
Function	Proximity sensor for T-slot, contacting				SME-8M
					–
Switch output	3-wire N/O contact				DS
	2-wire N/O contact				ZS
					–
Nominal operating voltage [V DC]	24				24V
					–
Cable attribute	Standard + Drag chain				K
	Drag chain + Robots				E
					–
Cable length [m]	0.2 ... 10 (0.2 ... 2.5 m in 0.1 m steps, 2.5 ... 10 m in 0.5 m steps)				...
					–
Connection technology	Open end				OE
	M8, turnable				M8D
	M8, snap flange				M8
	M12, turnable				M12

Transfer order code

543 892	SME-8M	–		–	24V	–		–		–	
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Proximity sensors SMT/CRSMT/SME-8, for T-slot

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Type codes

SMT/SME-8

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

SMT/SME-8-SL

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

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

FESTO

Type codes

CRSMT-8

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

SME-8-ZS-230V

		SME	–	8	–	ZS	–	230V	–	K2,5Q	–	OE											
Function																							
SME	Proximity sensor, magnetic reed																						
Design																							
8	For T-slot, insertable in slot lengthwise																						
Switch output, switching element function																							
ZS	N/O contact, 2-wire																						
Rated operating voltage																							
230V	230 V AC/DC																						
Electrical connection, cable length, connection direction																							
K2,5Q	Cable, 2.5 m, lateral																						
K5,0Q	Cable, 5.0 m, lateral																						
Connection technology																							
OE	Open end																						

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

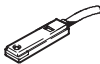
Technical data – Magneto-resistive

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Technical data				
		SMT-8	SMT-8-SL	CRSMT-8, corrosion-resistant
Type of mounting	Clamped in T-slot, insertable in slot lengthwise			
	Flush with cylinder profile		–	Flush with cylinder profile
Electrical connection	Cable, 3-wire		Plug, M8x1, 3-pin	Cable, 3-wire
	Cable with plug, turnable M8x1, 3-pin			
Operating voltage range DC	[V]	10 ... 30		
Max. output current	[mA]	100	200	100
Max. switching capacity DC	[W]	3.0	6.0	3.0
Protection against short circuit	Yes			
Protection against overloading	Not available			
Protection against polarity reversal	For all electrical connections			
Protection class	IP65, IP67			IP65, IP68

Operating and environmental conditions				
		SMT-8	SMT-8-SL	CRSMT-8, corrosion-resistant
Ambient temperature	[°C]	–20 ... +60	–25 ... +70	–20 ... +60
Ambient temperature with flexible cable installation	[°C]	–5 ... +60	–	–5 ... +60
CE mark (see declaration of conformity)		In accordance with EU EMC directive		

Materials				
		SMT-8	SMT-8-SL	CRSMT-8, corrosion-resistant
Housing		Polyurethane	Polyamide	Polypropylene, thermoplastic styrene elastomer
Cable sheath		Polyurethane	–	Polyurethane

Ordering data							
	Switch output	Electrical connection			Cable length [m]	Part No.	Type
		Cable	Cable with plug, turnable M8x1	Plug M8x1			
N/O contact, basic version							
	PNP	3-wire	–	–	2.5	175 436	SMT-8-PS-K-LED-24-B
					5.0	175 434	SMT-8-PS-K5-LED-24-B
		–	3-pin	–	0.3	175 484	SMT-8-PS-S-LED-24-B
	NPN	3-wire	–	–	2.5	171 180	SMT-8-NS-K-LED-24-B
		–	3-pin	–	0.3	171 181	SMT-8-NS-S-LED-24-B
	PNP	–	–	3-pin	–	531 145	SMT-8-SL-PS-LED-24
N/O contact, corrosion-resistant							
	PNP	3-wire	–	–	2.5	525 563	CRSMT-8-PS-K-LED-24
					5.0	525 564	CRSMT-8-PS-K5-LED-24

Proximity sensors SME-8, for T-slot

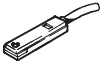
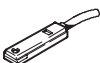
Technical data – Magnetic reed

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Technical data					
	SME-8-K...	SME-8-S	SME-8-ZS	SME-8-SL	SME-8-O
Type of mounting	Clamped in T-slot, insertable in slot lengthwise				
	Flush with cylinder profile			–	Flush with cylinder profile
Switch output	Contacting, bipolar				
Switching element function	N/O contact				N/C contact
Electrical connection	Cable, 3-wire	Cable with plug M8x1, 3-pin	Cable, 2-wire	Plug, M8x1, 3-pin	Cable, 3-wire
Operating voltage range DC [V]	12 ... 30		12 ... 27	10 ... 30	12 ... 30
Operating voltage range AC [V]	12 ... 30		–	10 ... 30	12 ... 30
Max. output current [mA]	500		80	500	50
Max. switching capacity DC [W]	10.0		2.0	10.0	1.5
Protection against short circuit	No				
Protection against overloading	Not available				
Protection against polarity reversal	No				
Protection class	IP65, IP67				IP67

Operating and environmental conditions					
	SME-8-K...	SME-8-S	SME-8-ZS	SME-8-SL	SME-8-O
Ambient temperature [°C]	–20 ... +70		–20 ... +60	–20 ... +60	–20 ... +60
Ambient temperature with flexible cable installation [°C]	–5 ... +70		–5 ... +60	–	–5 ... +60
CE mark (see declaration of conformity)	In accordance with EU EMC directive				

Materials					
	SME-8-K...	SME-8-S	SME-8-ZS	SME-8-SL	SME-8-O
Housing	Polyethylene terephthalate			Polyamide	Polyethylene terephthalate
Cable sheath	Polyurethane			–	Polyurethane

Ordering data							
	Switch output	Electrical connection			Cable length [m]	Part No.	Type
		Cable	Cable with plug M8x1	Plug M8x1			
N/O contact, basic version							
	Contacting, bipolar	3-wire	–	–	2.5	150 855	SME-8-K-LED-24
					5.0	175 404	SME-8-K5-LED-24
					7.5	530 491	SME-8-K-7,5-LED-24
		–	3-pin	–	0.3	150 857	SME-8-S-LED-24
		2-wire	–	–	2.5	171 169	SME-8-ZS-KL-LED-24
	Contacting, bipolar	–	–	3-pin	–	526 622	SME-8-SL-LED-24
N/C contact							
	Contacting, bipolar	3-wire	–	–	7.5	160 251	SME-8-O-K-LED-24

Proximity sensors SME-8, for T-slot

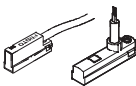
Technical data – Magnetic reed

FESTO

Technical data			
	SME-8-...-S6	SME-8-...-230	SME-8-ZS-230V-...
Type of mounting	Clamped, insertable in the slot lengthwise		
	Flush with cylinder profile	–	
Electrical connection	Cable, 2-wire		
Connection direction	In-line		Lateral
Operating voltage range DC	[V] 0 ... 30	3 ... 250	5 ... 250
Operating voltage range AC	[V] 0 ... 30	3 ... 250	5 ... 250
Max. output current	[mA] 500	120	120
Max. switching capacity DC	[W] 10.0	10.0	10.0
Max. switching capacity AC	[VA] 10.0	10.0	10.0
Protection against short circuit	No		
Protection against overloading	Not available		
Protection against polarity reversal	No		
Protection class	IP67		IP65, IP67

Operating and environmental conditions			
	SME-8-...-S6	SME-8-...-230	SME-8-ZS-230V-...
Ambient temperature [°C]	–40 ... +120	–20 ... +60	
Ambient temperature with flexible cable installation [°C]	–5 ... +120	–5 ... +60	
CE mark (see declaration of conformity)	In accordance with EU EMC directive		
	–	In accordance with EU Low Voltage Directive	

Materials			
	SME-8-...-S6	SME-8-...-230	SME-8-ZS-230V-...
Housing	Polyethylene terephthalate		
Cable sheath	Thermoplastic styrene elastomer	Polyvinyl chloride	Polyurethane

Ordering data						
	Switch 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	161 756	SME-8-K-24-S6
N/O contact, operating voltage range 3 ... 250 V AC/DC						
	Contacting, bipolar	2-wire	Lateral	2.5	538 816	SME-8-ZS-230V-K2,5Q-OE
				5.0	538 817	SME-8-ZS-230V-K5,0Q-OE
			In-line	2.5	152 820	SME-8-K-LED-230

Proximity sensors SMT0/SMTSO/SME0-8E, for T-slot

Type codes

FESTO

SMT0/SMTSO/SME0-8E

		SMT0	–	8E	–	PS	–	M12	–	LED	–	24	–	
Function														
SMT0	Proximity sensor, magneto-resistive													
SMTSO	Proximity sensor, magneto-inductive, welding field immune													
SME0	Proximity sensor, magnetic reed													
Design														
8E	For T-slot, mounting via accessories													
Switch output, switching element function														
PS	PNP, N/O contact, 3-wire													
NS	NPN, N/O contact, 3-wire													
Electrical connection, cable length														
K	Cable, 2.5 m or 7.5 m													
S	Plug M8x1													
M12	Plug M12x1													
Switching status display														
LED	Yellow LED													
Rated operating voltage														
24	24 V DC													
230	230 V AC													
Variant														
S6	Heat-resistant													

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

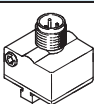
FESTO

Technical data – Magneto-resistive

Technical data			
		SMT0-8E	SMTSO-8E, welding field immune
Type of mounting		Via accessories	
Electrical connection		Plug, M8x1, 3-pin	Plug M12x1, 3-pin
		Plug M12x1, 3-pin	
Operating voltage range DC	[V]	10 ... 30	
Max. output current	[mA]	100	200
Max. switching capacity DC	[W]	3.0	6.0
Protection against short circuit		Yes	
Protection against overloading		Not available	
Protection against polarity reversal		For all electrical connections	
Resistance to interference from magnetic fields		–	Alternating magnetic field 45 ... 65 Hz
Protection class		IP65, IP67	

Operating and environmental conditions			
	SMT0-8E		SMTSO-8E, welding field immune
Ambient temperature [°C]	–20 ... +60		–25 ... +70
CE mark (see declaration of conformity)	In accordance with EU EMC directive		

Materials			
	SMT0-8E		SMTSO-8E, welding field immune
Housing	Polyurethane		Polyamide

Ordering data					
	Switch output	Electrical connection		Part No.	Type
		Plug M8x1	Plug M12x1		
N/O contact, basic version					
	PNP	3-pin	–	171 178	SMT0-8E-PS-S-LED-24
		–	3-pin	171 179	SMT0-8E-PS-M12-LED-24
	NPN	3-pin	–	171 166	SMT0-8E-NS-S-LED-24
		–	3-pin	171 176	SMT0-8E-NS-M12-LED-24
N/O contact, welding field immune					
	PNP	–	3-pin	191 986	SMTSO-8E-PS-M12-LED-24
	NPN	–	3-pin	175 825	SMTSO-8E-NS-M12-LED-24

 Note
Mounting kit not included in scope of delivery. Corresponding mounting kits, Peripherals overview → 18

Proximity sensors SMEO-8E, for T-slot

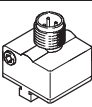
Technical data – Magnetic reed

FESTO

Technical data		
Type of mounting	Via accessories	
Electrical connection	Plug, M8x1, 3-pin	Plug M12x1, 3-pin
Operating voltage range DC	[V]	12 ... 30
Max. output current	[mA]	500
Max. switching capacity DC	[W]	10.0
Protection against short circuit	No	
Protection against overloading	Not available	
Protection against polarity reversal	No	
Protection class	IP65, IP67	

Operating and environmental conditions		
Ambient temperature	[°C]	–20 ... +60
CE mark (see declaration of conformity)	In accordance with EU EMC directive	

Materials	
Housing	Polyurethane

Ordering data					
	Switch output	Electrical connection		Part No.	Type
		Plug M8x1	Plug M12x1		
N/O contact, basic version					
	Contacting, bi-polar	3-pin	–	171 163	SME0-8E-S-LED-24
		–	3-pin	171 164	SME0-8E-M12-LED-24

-  - Note

Mounting kit not included in scope of delivery. Corresponding mounting kits, Peripherals overview ➔ 18

Proximity sensors SMEO-8E, for T-slot

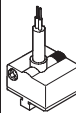
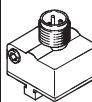
Technical data – Magnetic reed

FESTO

Technical data			
		SMEO-8E-...-S6	SMEO-8E-...-230
Type of mounting	Via accessories, insertable in the slot from above		
Electrical connection	Cable, 2-wire		Plug M12x1, 3-pin
Operating voltage range DC	[V]	0 ... 30	3 ... 250
Operating voltage range AC	[V]	0 ... 30	3 ... 250
Max. output current	[mA]	500	120
Max. switching capacity DC	[W]	10.0	10.0
Max. switching capacity AC	[VA]	10.0	10.0
Protection against short circuit	No		
Protection against overloading	Not available		
Protection against polarity reversal	No		
Protection class	IP65, IP67		

Operating and environmental conditions			
		SMEO-8E-...-S6	SMEO-8E-...-230
Ambient temperature	[°C]	–40 ... +120	–20 ... +60
Ambient temperature with flexible cable installation	[°C]	–40 ... +120	–
CE mark (see declaration of conformity)	Not necessary		In accordance with EU EMC directive In accordance with EU Low Voltage Directive

Materials			
		SMEO-8E-...-S6	SMEO-8E-...-230
Housing	Polyurethane		
Cable sheath	Thermoplastic styrene elastomer		–

Ordering data						
	Switch output	Electrical connection		Cable length [m]	Part No.	Type
		Cable	Plug			
N/O contact, heat-resistant						
	Contacting, bipolar	2-wire	–	2.5	171 158	SME0-8E-K-24-S6
N/O contact, operating voltage range 3 ... 250 V AC/DC						
	Contacting, bipolar	–	3-pin	–	171 160	SME0-8E-M12-LED-230

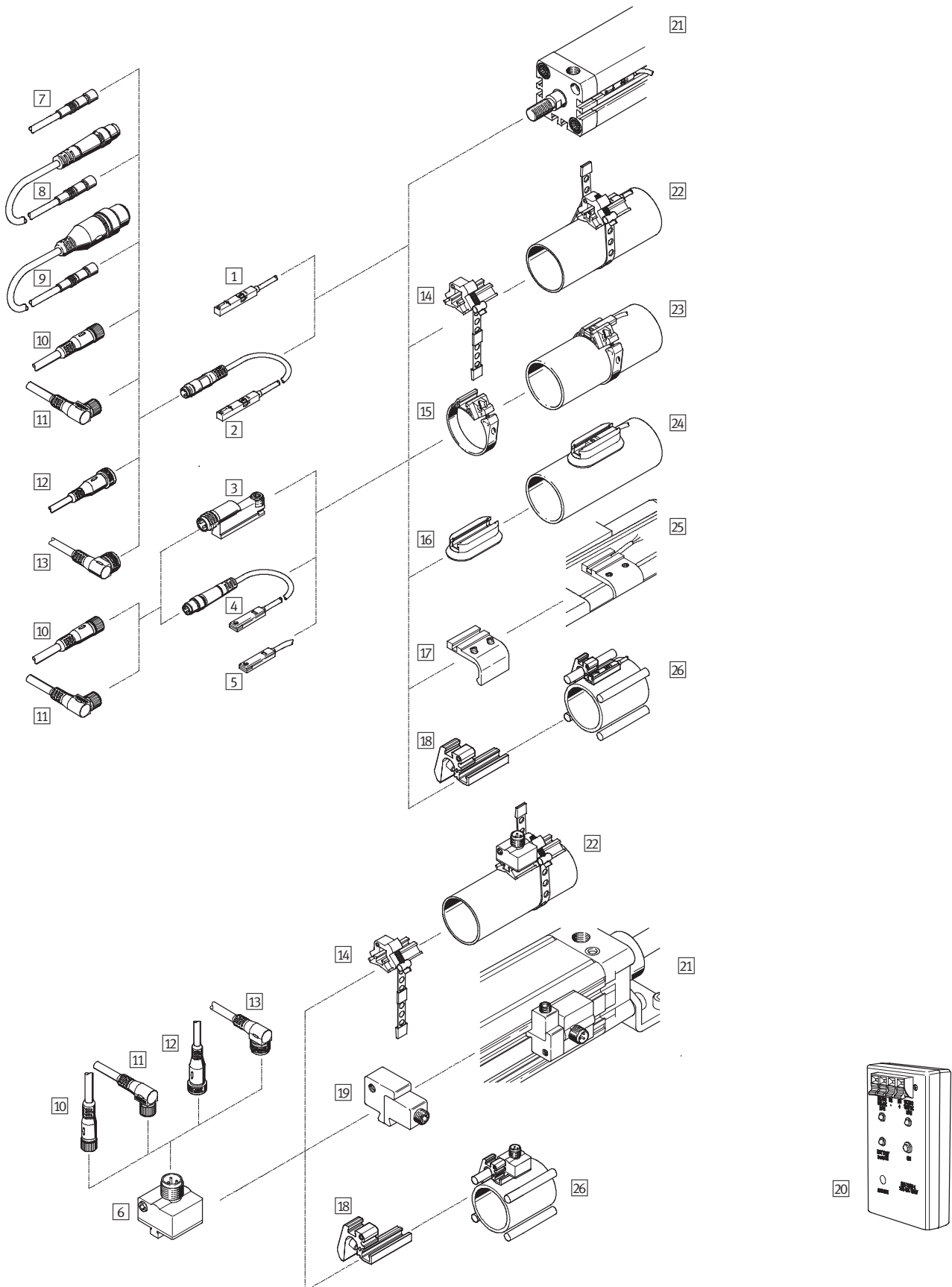
-  - Note

Mounting kit not included in scope of delivery. Corresponding mounting kits → Peripherals overview 18

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

Peripherals overview

FESTO



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

Accessories

FESTO

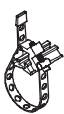
Mounting attachments and accessories				
Proximity sensors				
1	SMT/SME-8M-...-OE, with cable			
2	SMT/SME-8M-...-M..., with cable and plug			
3	SMT/SME-8-SL-..., with plug			
4	SMT/SME-8-S-..., with cable and plug			
5	SMT/SME-8-K-..., with cable			
	CRSMT-8-K-..., with cable, corrosion-resistant			
6	SMT/SMTS0/SME0-8E, with cable or plug			
Connecting cables				
7	NEBU-M5...-5-Q3-LE3			
8	NEBU-M5...-1-Q3-M8G3			
9	NEBU-M5...-1-Q3-M12G4			
10	NEBU-M8G3, SIM-M8-3GD			
11	NEBU-M8W3, SIM-M8-3WD			
12	NEBU-M12G5, SIM-M12-3GD			
13	NEBU-M12W5, SIM-M12-3WD			

Ordering data – Connecting cables				
	Number of wires	Cable length [m]	Part No.	Technical data → Internet: nebu Type
M5x0.5, straight socket				
	3	2.5	539 508	NEBU-M5G4-K-5-Q3-LE3
		1.0	539 510	NEBU-M5G4-K-1-Q3-M8G3
	4	1.0	539 512	NEBU-M5G4-K-1-Q3-M12G4
M8x1, straight socket				
	3	2.5	541 333	NEBU-M8G3-K-2.5-LE3
		5	541 334	NEBU-M8G3-K-5-LE3
M8x1, angled socket				
	3	2.5	541 338	NEBU-M8W3-K-2.5-LE3
		5	541 341	NEBU-M8W3-K-5-LE3
M12x1, straight socket				
	3	2.5	541 363	NEBU-M12G5-K-2.5-LE3
		5	541 364	NEBU-M12G5-K-5-LE3
M12x1, angled socket				
	3	2.5	541 367	NEBU-M12W5-K-2.5-LE3
		5	541 370	NEBU-M12W5-K-5-LE3

Ordering data – Inscription labels, safety clips				
	Size	Part No.	Type	PU ¹⁾
	23x4 mm	541 598	ASLR-L-423	34
	M8	548 067	NEAU-M8-GD	1
	M12	548 068	NEAU-M12-GD	1

1) Packaging unit in quantity per frame

Mounting attachments and accessories				
Mounting kits and accessories				
14	Mounting kit SMBR-8-8/100-S6, heat-resistant			
15	Mounting kit SMBR			
16	Mounting kit CRSMB, corrosion-resistant			
17	Mounting kit SMB-8-FENG			
18	Mounting SMBZ-8-...			
19	Mounting kit SMB-8E			
20	Sensor tester SM-TEST-1			
–	Clip SMBK-8			
Drive units				
21	Drives with T-slot			
22	Round cylinders			
23	Round cylinders			
24	Round cylinders			
25	Standard cylinders DNC, DNCB, DNCKE			
26	Drives with tie or mounting rod			

Ordering data – Mounting attachments			
	For Ø	Part No.	Type
	8 ... 100	538 937	SMBR-8-8/100-S6
	8	175 091	SMBR-8-8
	10	175 092	SMBR-8-10
	12	175 093	SMBR-8-12
	16	175 094	SMBR-8-16
	20	175 095	SMBR-8-20
	25	175 096	SMBR-8-25
	32	175 097	SMBR-8-32
	40	175 098	SMBR-8-40
	50	175 099	SMBR-8-50
	63	175 100	SMBR-8-63
	32 ... 100	525 565	CRSMB-8-32/100
	32/40	175 705	SMB-8-FENG-32/40
	50/63	175 706	SMB-8-FENG-50/63
	80/100	175 707	SMB-8-FENG-80/100
	32 ... 100	537 806	SMBZ-8-32/100
	125 ... 320	537 808	SMBZ-8-125/320
	–	178 230	SMB-8E
	–	534 254	SMBK-8

Ordering data – Sensor tester		
	Part No.	Type
	158 481	SM-TEST-1

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

Type codes

FESTO

SMT/SME-10F

SMT		–	10F	–	PS	–	24V	–	K2,5L	–	OE
Function											
SMT	Proximity sensor, magneto-resistive										
SME	Proximity sensor, magnetic reed										
Design											
10F	For C-slot, insertable in slot from above										
Switch output, switching element function											
PS	PNP, N/O contact, 3-wire										
NS	NPN, N/O contact, 3-wire										
DS	N/O contact, 3-wire										
ZS	N/O contact, 2-wire (SMT)										
	N/O contact, 2-wire (SME)										
Rated operating voltage											
24V	24 V DC										
Cable length, connection direction											
K0,3L	0.3 m, in-line										
K0,3Q	0.3 m, lateral										
K2,5L	2.5 m, in-line										
K2,5Q	2.5 m, lateral										
Electrical connection											
OE	Cable										
M5D	Cable with plug M5x0.5										
M8D	Cable with plug M8x1										

Proximity sensors SMT-10F, for C-slot

Technical data – Magneto-resistive

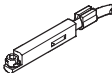
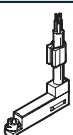
FESTO

Technical data					
Type of mounting		Clamped in C-slot, insertable in slot from above, flush with cylinder profile ¹⁾			
Electrical connection		Cable, 3-wire	Cable with plug, turnable		Cable, 2-wire
			M5x0.5, 3-pin	M8 x 1, 3-pin	
Operating voltage range DC	[V]	5 ... 30			10 ... 30
Max. output current	[mA]	200			50
Max. switching capacity DC	[W]	6.0			1.5
Protection against short circuit		Yes			
Protection against overloading		Yes			
Protection against polarity reversal		For all electrical connections			
Protection class		IP65, IP67			

1) Applies to in-line connection.

Operating and environmental conditions		
Ambient temperature	[°C]	–20 ... +60
Ambient temperature with flexible cable installation	[°C]	–5 ... +60
CE mark (see declaration of conformity)	In accordance with EU EMC directive	
Certification	c UL us - Listed (OL) C-Tick	

Materials	
Housing	Polyamide
Cable sheath	Polyurethane

Ordering data							
	Switch output	Electrical connection			Cable length [m]	Part No.	Type
		Cable	Cable with plug, turnable				
			M5x0.5	M8x1			
In-line connection							
	N/O contact						
	PNP	3-wire	–	–	2.5	525 915	SMT-10F-PS-24V-K2,5L-OE
		–	3-pin	–	0.3	539 495	SMT-10F-PS-24V-K0,3L-M5D
		–	–	3-pin		525 916	SMT-10F-PS-24V-K0,3L-M8D
	NPN	3-wire	–	–	2.5	526 678	SMT-10F-NS-24V-K2,5L-OE
		–	–	3-pin	0.3	526 679	SMT-10F-NS-24V-K0,3L-M8D
	Contactless, 2-wire	2-wire	–	–	2.5	526 677	SMT-10F-ZS-24V-K2,5L-OE
Lateral connection							
	N/O contact						
	PNP	3-wire	–	–	2.5	526 674	SMT-10F-PS-24V-K2,5Q-OE
		–	–	3-pin	0.3	526 675	SMT-10F-PS-24V-K0,3Q-M8D
	NPN	3-wire	–	–	2.5	526 680	SMT-10F-NS-24V-K2,5Q-OE
		–	–	3-pin	0.3	526 681	SMT-10F-NS-24V-K0,3Q-M8D
	Contactless, 2-wire	2-wire	–	–	2.5	526 676	SMT-10F-ZS-24V-K2,5Q-OE

Proximity sensors SME-10F, for C-slot

Technical data – Magnetic reed

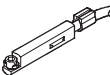
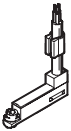
FESTO

Technical data			
Type of mounting	Clamped in C-slot, insertable in slot from above, flush with cylinder profile ¹⁾		
Electrical connection	Cable, 3-wire	Cable with plug, turnable M8x1, 3-pin	Cable, 2-wire
Operating voltage range DC [V]	10 ... 30		5 ... 30
Operating voltage range AC [V]	10 ... 30		5 ... 30
Max. output current [mA]	500		100
Max. switching capacity DC [W]	10.0		3.0
Max. switching capacity DC [VA]	10.0		3.0
Protection against short circuit	No		
Protection against overloading	Not available		
Protection against polarity reversal	No		
Protection class	IP65, IP67		

1) Applies to in-line connection.

Operating and environmental conditions	
Ambient temperature [°C]	–20 ... +60
Ambient temperature with flexible cable installation [°C]	–5 ... +60
CE mark (see declaration of conformity)	In accordance with EU EMC directive
Certification	c UL us - Listed (OL)

Materials	
Housing	Polyamide
Cable sheath	Polyurethane

Ordering data							
	Switch output	Electrical connection			Cable length [m]	Part No.	Type
		Cable	Cable with plug, turnable				
			M5x0.5	M8x1			
In-line connection							
	N/O contact						
	Contacting, bi-polar	3-wire	–	–	2.5	525 913	SME-10F-DS-24V-K2,5L-OE
		–	3-pin	–	0.3	539 494	SME-10F-DS-24V-K0,3L-M5D
		–	–	3-pin		525 914	SME-10F-DS-24V-K0,3L-M8D
		2-wire	–	–	2.5	526 672	SME-10F-ZS-24V-K2,5L-OE
Lateral connection							
	N/O contact						
	Contacting, bi-polar	3-wire	–	–	2.5	526 670	SME-10F-DS-24V-K2,5Q-OE
		–	–	3-pin	0.3	526 671	SME-10F-DS-24V-K0,3Q-M8D
		2-wire	–	–	2.5	526 673	SME-10F-ZS-24V-K2,5Q-OE

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

Type codes

FESTO

SMT/SME-10

SMT – 10 – PS – KL – LED – 24

Function

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

Design

10	For C-slot, insertable in slot lengthwise
----	---

Switch output, switching element function

PS	PNP, N/O contact, 3-wire
NS	NPN, N/O contact, 3-wire
ZS	N/O contact, 2-wire

Electrical connection, cable length, connection direction

KL	Cable, 2.5 m, in-line
KQ	Cable, 2.5 m, lateral
SL	Plug M8x1 with cable, 0.3 m, in-line
SQ	Plug M8x1 with cable, 0.3 m, lateral

Switching status display

LED	Yellow LED
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Rated operating voltage

24	24 V DC
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Proximity sensors SMT-10, for C-slot

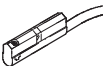
Technical data – Magneto-resistive

FESTO

Technical data		
Type of mounting	Clamped in C-slot, insertable in slot lengthwise	
Electrical connection	Cable, 3-wire	Cable with plug, turnable M8x1, 3-pin
Operating voltage range DC	[V]	10 ... 30
Max. output current	[mA]	200
Max. switching capacity DC	[W]	6.0
Protection against short circuit	Yes	
Protection against overloading	Yes	
Protection against polarity reversal	For all electrical connections	
Protection class	IP65, IP67	

Operating and environmental conditions		
Ambient temperature	[°C]	−20 ... +60
Ambient temperature with flexible cable installation	[°C]	−5 ... +60
CE mark (see declaration of conformity)	In accordance with EU EMC directive	

Materials	
Housing	Polyamide
Cable sheath	Polyurethane

Ordering data						
	Switch output	Electrical connection		Cable length [m]	Part No.	Type
		Cable	Cable with plug, turnable M8x1			
In-line connection						
	N/O contact					
	PNP	3-wire	–	2.5	173 218	SMT-10-PS-KL-LED-24
		–	3-pin	0.3	173 220	SMT-10-PS-SL-LED-24
	NPN	3-wire	–	2.5	173 222	SMT-10-NS-KL-LED-24
		–	3-pin	0.3	173 224	SMT-10-NS-SL-LED-24
Lateral connection						
	N/O contact					
	PNP	3-wire	–	2.5	173 219	SMT-10-PS-KQ-LED-24
		–	3-pin	0.3	173 221	SMT-10-PS-SQ-LED-24
	NPN	3-wire	–	2.5	173 223	SMT-10-NS-KQ-LED-24
		–	3-pin	0.3	173 225	SMT-10-NS-SQ-LED-24

Proximity sensors SME-10, for C-slot

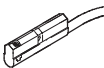
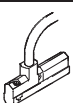
Technical data – Magnetic reed

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Technical data		
Type of mounting	Clamped in C-slot, insertable in slot lengthwise	
Electrical connection	Cable, 3-wire	Cable with plug, turnable M8x1, 3-pin
Operating voltage range DC	[V]	12 ... 27
Operating voltage range AC	[V]	12 ... 27
Max. output current	[mA]	100
Max. switching capacity DC	[W]	1.0
Max. switching capacity AC	[VA]	1.0
Protection against short circuit	No	
Protection against overloading	Not available	
Protection against polarity reversal	No	
Protection class	IP65, IP67	

Operating and environmental conditions		
Ambient temperature	[°C]	–20 ... +70
Ambient temperature with flexible cable installation	[°C]	–5 ... +70
CE mark (see declaration of conformity)		In accordance with EU EMC directive

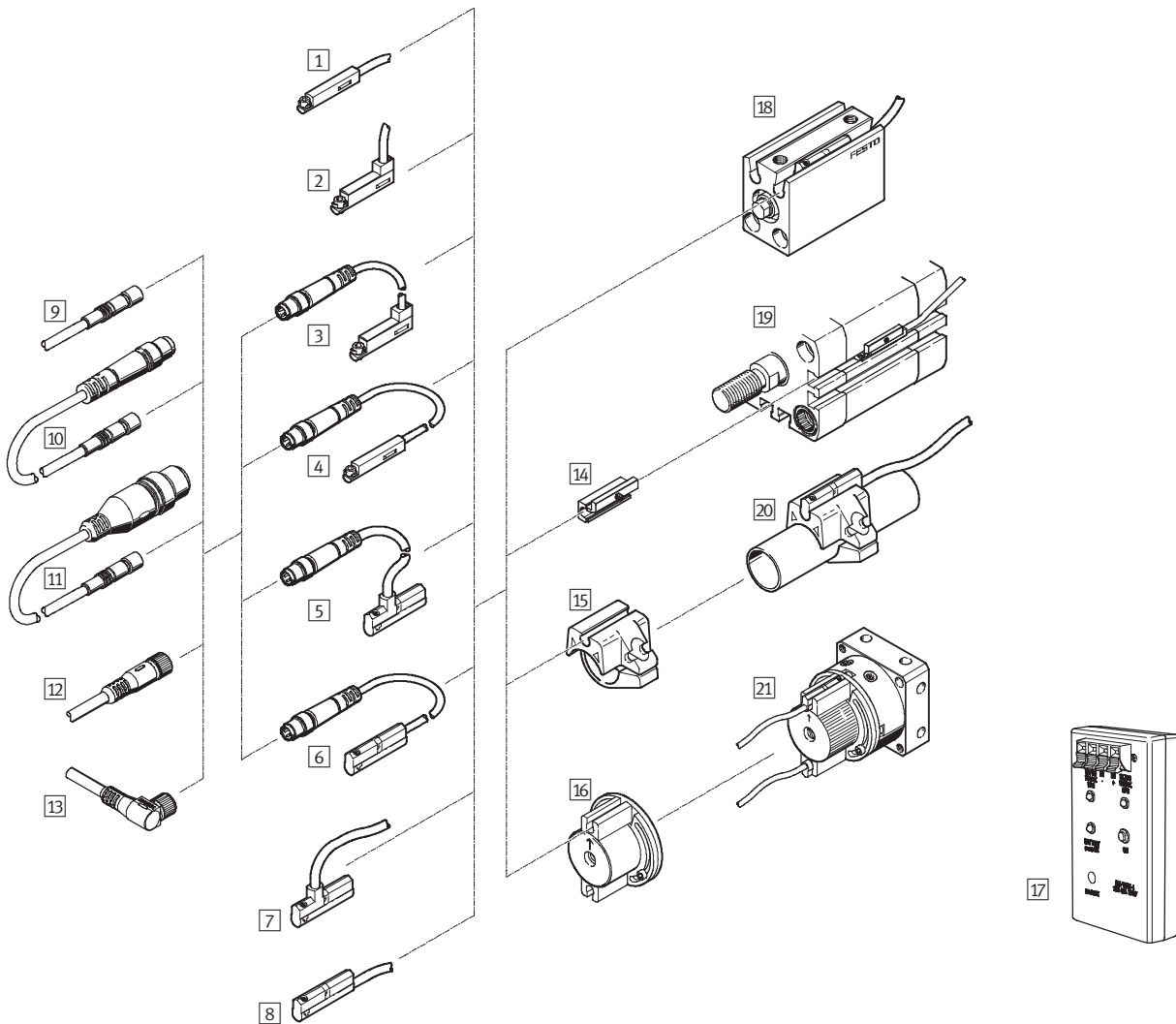
Materials	
Housing	Polyphenylene sulphide
Cable sheath	Polyurethane

Ordering data						
	Switch output	Electrical connection		Cable length [m]	Part No.	Type
		Cable	Cable with plug, turnable M8x1			
In-line connection						
	N/O contact					
	Contacting, bi-polar	3-wire	–	2.5	173 210	SME-10-KL-LED-24
		–	3-pin	0.3	173 212	SME-10-SL-LED-24
Lateral connection						
	N/O contact					
	Contacting, bi-polar	3-wire	–	2.5	173 211	SME-10-KQ-LED-24
		–	3-pin	0.3	173 213	SME-10-SQ-LED-24

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

Peripherals overview

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Mounting attachments and accessories	
Proximity sensors	
1	SM...-10F-...-K2,5L-OE, with cable
2	SM...-10F-...-K2,5Q-OE, with cable
3	SM...-10F-...-K0,3Q-M..., with cable and plug
4	SM...-10F-...-K0,3L-M..., with cable and plug
5	SM...-10-KQ-..., with cable and plug
6	SM...-10-KL-..., with cable and plug
7	SM...-10-SQ-..., with cable
8	SM...-10-SL-..., with cable
Connecting cables	
9	Connecting cable NEBU-M5...-5-Q3-LE3
10	Connecting cable NEBU-M5...-1-Q3-M8G3
11	Connecting cable NEBU-M5...-1-Q3-M12G4
12	Connecting cable NEBU-M8G3
13	Connecting cable NEBU-M8W3

Mounting attachments and accessories	
Mounting kits and accessories	
14	Mounting kit SMBN-10
15	Mounting kit SMBR-10-...
16	Mounting kit WSM-...-SME-10
17	Sensor tester SM-TEST-1
-	Clip SMBK-10
Drive units	
18	Drive units with C-slot
19	Drive units with T-slot
20	Round cylinders
21	Swivel module DSM

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

Accessories

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Ordering data – Connecting cables				Technical data ➔ Internet: nebu	
	Number of wires	Cable length [m]	Part No.	Type	
M5x0.5, straight socket					
	3	2.5	539 508	NEBU-M5G4-K-5-Q3-LE3	
		1.0	539 510	NEBU-M5G4-K-1-Q3-M8G3	
	4	1.0	539 512	NEBU-M5G4-K-1-Q3-M12G4	
M8x1, straight socket					
	3	2.5	541 333	NEBU-M8G3-K-2.5-LE3	
		5	541 334	NEBU-M8G3-K-5-LE3	
M8x1, angled socket					
	3	2.5	541 338	NEBU-M8W3-K-2.5-LE3	
		5	541 341	NEBU-M8W3-K-5-LE3	

Ordering data – Inscription labels, safety clips				
	Size	Part No.	Type	PU ¹⁾
	23x4 mm	541 598	ASLR-L-423	34
	M8	548 067	NEAU-M8-GD	1
	M12	548 068	NEAU-M12-GD	1

1) Packaging unit in quantity per frame

Ordering data – Mounting attachments			
	For Ø	Part No.	Type
	6	173 205	WSM-6-SME-10
	8	173 206	WSM-8-SME-10
	10	173 207	WSM-10-SME-10
	6	173 226	SMBR-10-6
	8	175 101	SMBR-10-8
	10	173 227	SMBR-10-10
	12	175 102	SMBR-10-12
	16	173 228	SMBR-10-16
	20	175 103	SMBR-10-20
	25	175 104	SMBR-10-25
	32	175 105	SMBR-10-32
	40	175 106	SMBR-10-40
	50	175 107	SMBR-10-50
	63	175 108	SMBR-10-63
	125 ... 320	537 809	SMBN-10
	–	234 255	SMBK-10

Ordering data – Sensor tester		
	Part No.	Type
	158 481	SM-TEST-1