



Proximity Sensors SMT/SME

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
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	15
		Magnetic reed	SME-8M	5 ... 30 V AC/DC	Contacting	N/O contact	17
	Insertable in the slot lengthwise, flush with the cylinder profile	Magneto-resistive	SMT-8	10 ... 30 V DC	PNP/NPN	N/O contact	21
		Magneto-resistive, corrosion-resistant	CRSMT-8	10 ... 30 V DC	PNP	N/O contact	21
		Magnetic reed	SME-8	12 ... 30 V AC/DC	Contacting	N/O contact N/C contact	22
		Magnetic reed, heat-resistant up to 120 °C	SME-8-...-S6	0 ... 30 V AC/DC	Contacting	N/O contact	23
		Magnetic reed	SME-8	3 ... 250 V AC	Contacting	N/O contact	23
	Insertable in the slot lengthwise	Magneto-resistive	SMT-8-SL	10 ... 30 V DC	PNP	N/O contact	21
		Magnetic reed	SME-8-SL	10 ... 30 V AC/DC	Contacting	N/O contact	22
	Via accessories	Magneto-resistive	SMT0-8E	10 ... 30 V DC	PNP/NPN	N/O contact	25
		Magneto-inductive, welding field immune	SMTSO-8E	10 ... 30 V DC	PNP/NPN	N/O contact	25
		Magnetic reed	SME0-8E	0 ... 30 V DC	Contacting	N/O contact	26
		Magnetic reed, heat-resistant up to 120 °C	SME0-8E-...-S6	0 ... 30 V DC 5 ... 250 V AC	Contacting	N/O contact	27
		Magnetic reed	SME0-8E	3 ... 250 V AC	Contacting	N/O contact	27
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	31
		Magnetic reed	SME-10F	10 ... 30 V AC/DC	Contacting	N/O contact	32
	Insertable in the slot lengthwise	Magneto-resistive	SMT-10	10 ... 30 V DC	PNP/NPN	N/O contact	34
		Magnetic reed	SME-10	12 ... 27 V AC/DC	Contacting	N/O contact	35

Proximity sensors

Selection aid

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Sensors
Sensors for drive units

1.1

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						
		15	31	www.festo.com		

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	∅ 6 ... 16 mm	■	–
	∅ 25 ... 80 mm	–	–
Mini guide units DFC	–	■	–
Guided drives DFM	■	–	–
Guided drives DFM-B	■ ¹⁾	–	–
Linear units SLE	∅ 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	∅ 16 mm	–	■
	∅ 32, 50 mm	■ ²⁾	–
Three-point grippers HGDT	–	■	–
Parallel grippers HGP	∅ 6 mm	–	■
	∅ 10 ... 35 mm	■ ²⁾	–
Parallel grippers HGPC	–	■	–
Parallel grippers HGPP	∅ 12 ... 32 mm	–	■
Parallel grippers HGPT	∅ 16 ... 63 mm	■	–
Angle grippers HGW	∅ 10 mm	–	■
	∅ 16 ... 40 mm	■	–
Radial grippers HGR	∅ 10 mm	–	■
	∅ 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			
	15	31	50

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													
E	Suitable for drag chain													
R	Suitable for 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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Sensors
Sensors for drive units

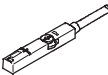
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Technical data				
Type of mounting	Screwed in slot, insertable from above, flush with cylinder profile			
Electrical connection	Cable, 3-wire	Cable with plug, turnable		
		M5x0.5, 3-pin	M8 x 1, 3-pin	M12 x 1, 3-pin
Cable length [m]	0.2 ... 30			
Cable attribute ¹⁾	Standard			
	Suitable for drag chain			
	Suitable for robots			
Test conditions for standard cables	Drag chain: 5 million cycles, bending radius 75 mm			
	Resistance to bending: To Festo standard; test conditions on request			
Test conditions for suitability for drag chain	Drag chain: 5 million cycles, bending radius 28 mm			
	Resistance to bending: To Festo standard; test conditions on request			
Test conditions for suitability for 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 products¹⁶

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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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 R	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		K		
	Suitable for drag chain		E		
	Suitable for robots		R		
			–		–
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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Sensors
Sensors for drive units

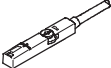
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Technical data			
Type of mounting	Screwed in slot, insertable from above, flush with cylinder profile		
Electrical connection	Cable, 3-wire	Cable with plug, turnable	
		M5x0.5, 3-pin	M8 x 1, 3-pin
Cable length [m]	0.2 ... 10		
Cable attribute ¹⁾	Standard		
	Suitable for drag chain		
	Suitable for robots		
Test conditions for standard cables	Drag chain: 5 million cycles, bending radius 75 mm		
	Resistance to bending: To Festo standard; test conditions on request		
Test conditions for suitability for drag chain	Drag chain: 5 million cycles, bending radius 28 mm		
	Resistance to bending: To Festo standard; test conditions on request		
Test conditions for suitability for 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 products18

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	Part No.	Type
		Cable	Cable with plug, turnable				
			M5x0.5	M8x1			
					[m]		
	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

M 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 R	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		SME-8M
			–		–
Switch output	3-wire N/O contact		DS		
	2-wire N/O contact		ZS		
			–		–
Nominal operating voltage [V DC]	24		24V		24V
			–		–
Cable attribute	Standard		K		
	Suitable for drag chain		E		
	Suitable for robots		R		
			–		–
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

Type codes

FESTO

Sensors
Sensors for drive units

1.1

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

Type codes

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CRSMT-8

CRSMT	8	PS	K2,5	LED	24
ent to					
se					

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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
Sensors
Sensors for drive units

1.1

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		

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, bi-polar	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, bi-polar	–	–	3-pin	–	526 622	SME-8-SL-LED-24
N/C contact							
	Contacting, bi-polar	3-wire	–	–	7.5	160 251	SME-8-O-K-LED-24

Proximity sensors SME-8, for T-slot

Technical data – Magnetic reed

FESTO


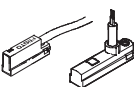
Sensors
Sensors for drive units

1.1

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

Technical data – Magneto-resistive

FESTO



Sensors
Sensors for drive units

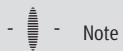
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Technical data		
	SMT0-8E	SMTSO-8E, welding field immune
Type of mounting	Via accessories	
Electrical connection	Plug, M8x1, 3-pin	Plug M12x1, 3-pin
	Plug M12x1, 3-pin	
Operating voltage range DC [V]	10 ... 30	
Max. output current [mA]	100	200
Max. 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 28

Proximity sensors SMEO-8E, for T-slot

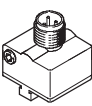
Technical data – Magnetic reed


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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	SMEO-8E-S-LED-24
		–	3-pin	171 164	SMEO-8E-M12-LED-24

-  - Note

Mounting kit not included in scope of delivery. Corresponding mounting kits → Peripherals overview 28

Proximity sensors SMEO-8E, for T-slot

Technical data – Magnetic reed

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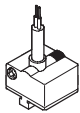
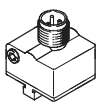
Sensors
Sensors for drive units

1.1

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	–

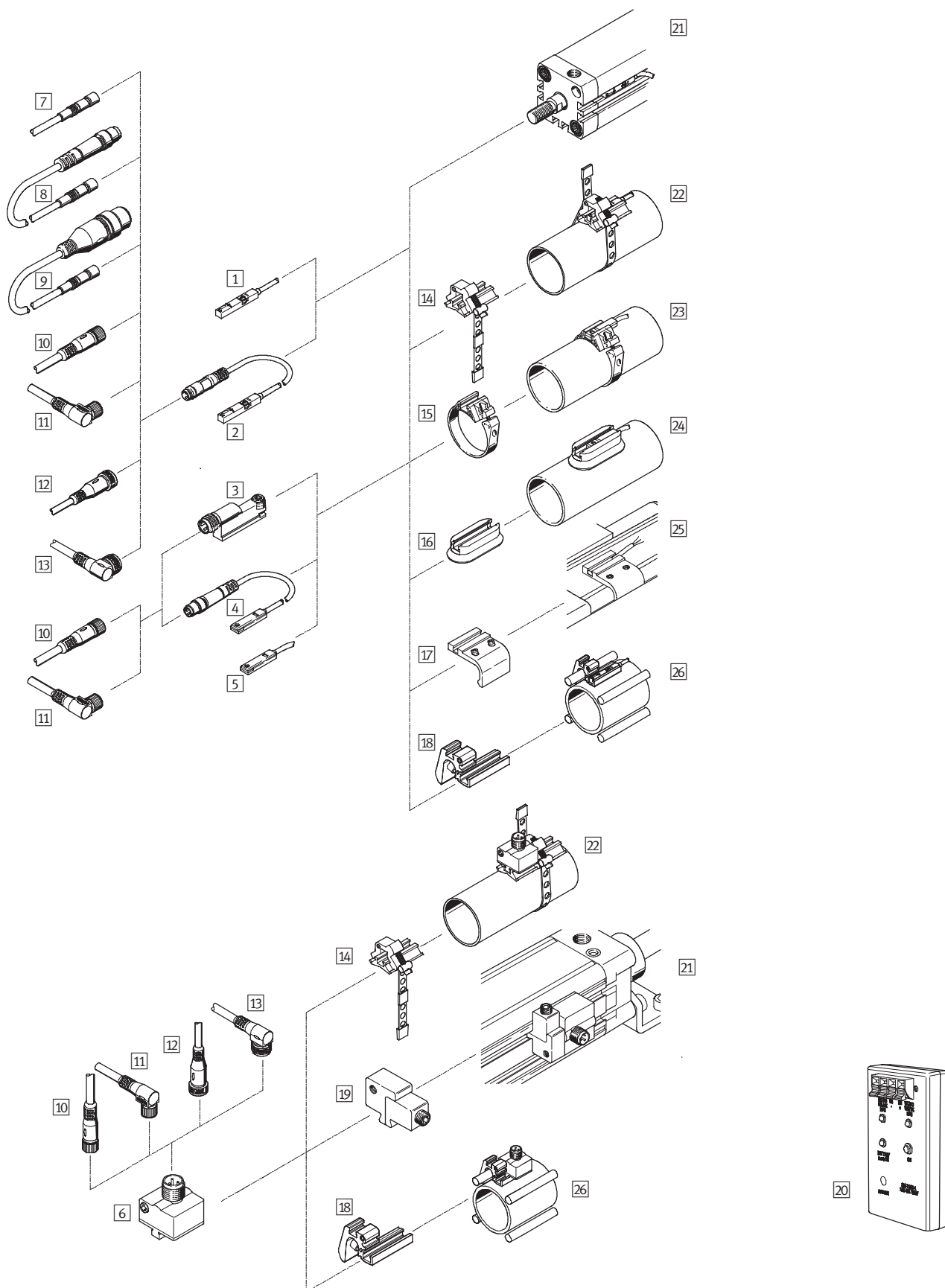
Ordering data					
	Switch output	Electrical connection		Cable length [m]	Part No. Type
		Cable	Plug		
N/O contact, heat-resistant					
	Contacting, bipolar	2-wire	–	2.5	171 158 SMEO-8E-K-24-S6
N/O contact, operating voltage range 3 ... 250 V AC/DC					
	Contacting, bipolar	–	3-pin	–	171 160 SMEO-8E-M12-LED-230

-  - Note

Mounting kit not included in scope of delivery. Corresponding mounting kits → Peripherals overview 28

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

Peripherals overview










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/SMTSO/SMEO-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			Technical data ➔ 261	
	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
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⁾
	18x4 mm	546 111	ASLR-L-418	57
	23x4 mm	541 598	ASLR-L-423	51
	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, DNCCE			
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

Sensors
Sensors for drive units

1.1

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

Sensors
Sensors for drive units

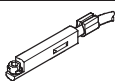
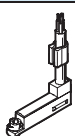
1.1

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

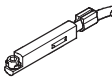
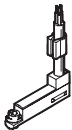
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Technical data			
Type of mounting	Clamped in C-slot, insertable in slot from above, flush with cylinder profile ¹⁾		
Electrical connection	Cable, 3-wire	Cable with plug, turnable M8x1, 3-pin	Cable, 2-wire
Operating voltage range DC [V]	10 ... 30		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	Part No.	Type
		Cable	Cable with plug, turnable				
			M5x0.5	M8x1			
					[m]		
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											
Rated operating voltage												
24	24 V DC											

Proximity sensors SMT-10, for C-slot

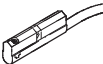

Technical data – Magneto-resistive

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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]	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

FESTO

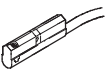

Sensors
Sensors for drive units

1.1

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	

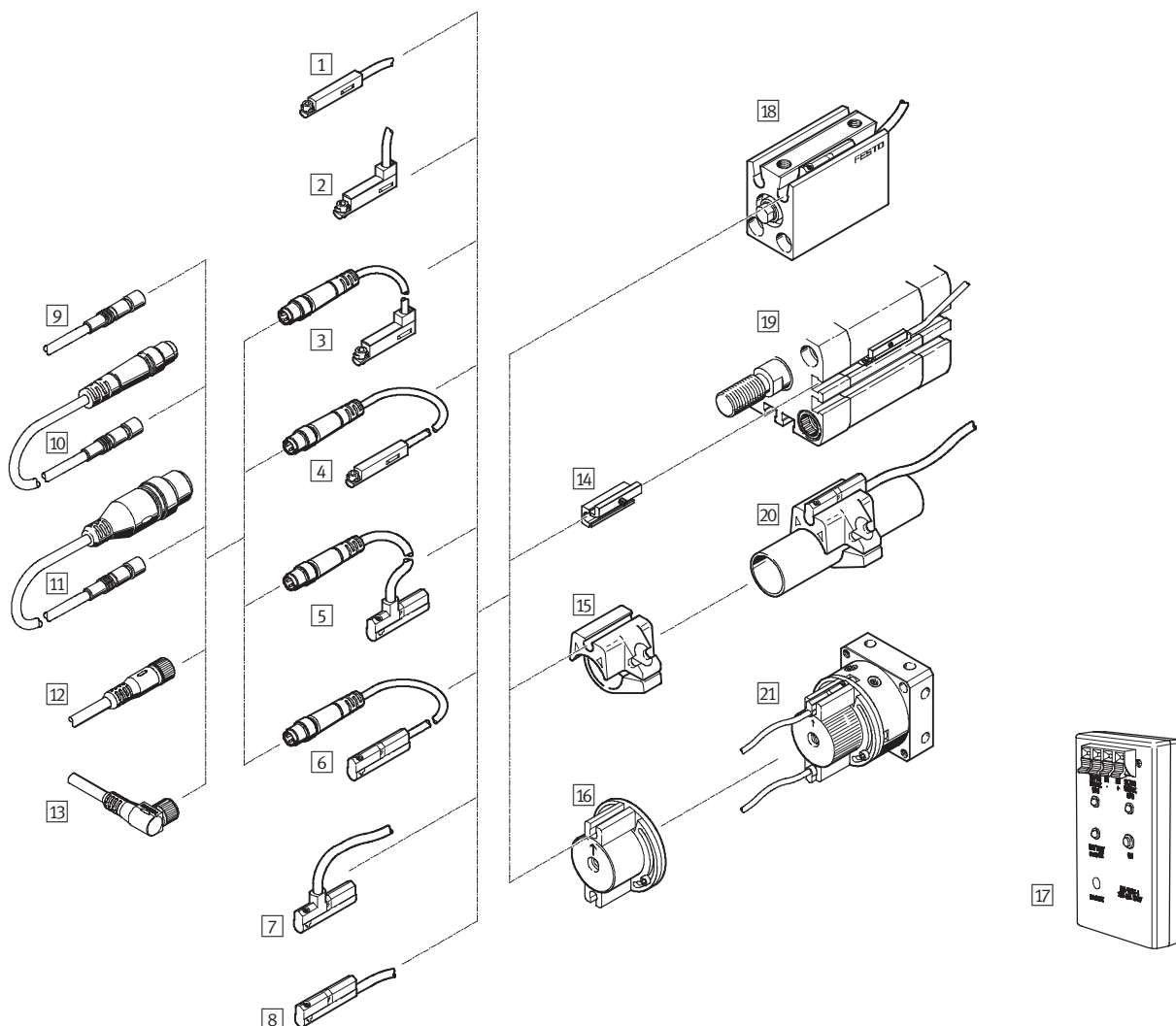
Operating and environmental conditions		
Ambient temperature	[°C]	–20 ... +70
Ambient temperature with flexible cable installation	[°C]	–5 ... +70
CE mark (see declaration of conformity)		In accordance with EU EMC directive

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






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 → 261	
	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⁾
	18x4 mm	546 111	ASLR-L-418	57
	23x4 mm	541 598	ASLR-L-423	51
	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

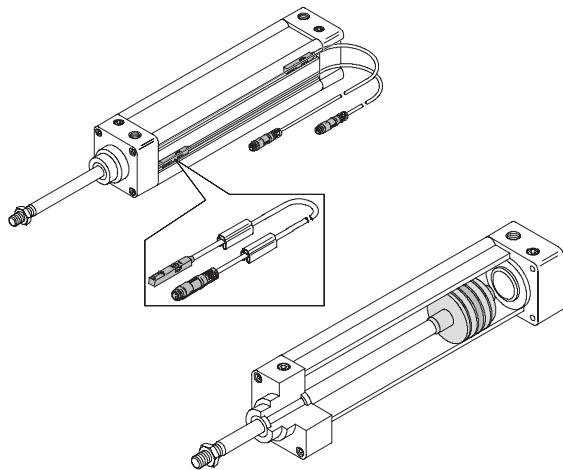
Sensors
Sensors for drive units

1.1

Proximity sensors SMT/SME

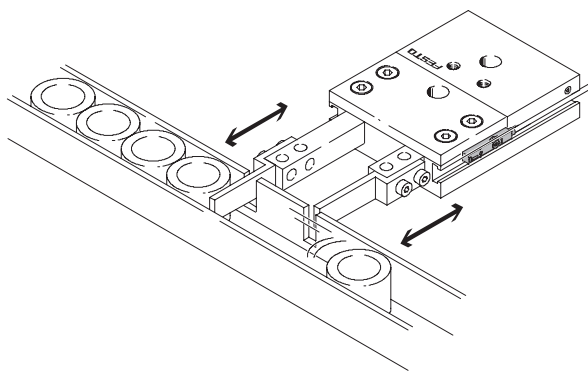
Application examples

General application examples



- Proximity sensors are used for sensing the piston position of pneumatic drives. The signal is logically

linked to the controller and used for process control.



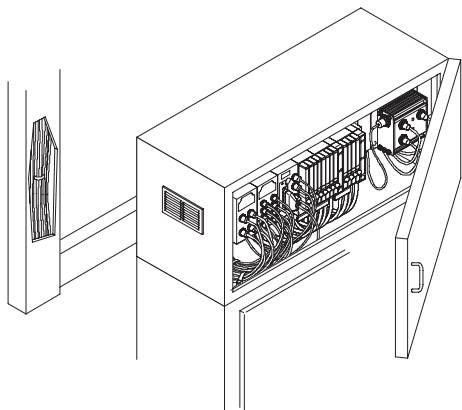
- End-position sensing for piston position detection and consequent feedback of process events

Cable attributes

The connecting cables of the proximity sensors can be configured using the modular system. You can select qua-

lities that are suited to standard, drag chain or robot applications.

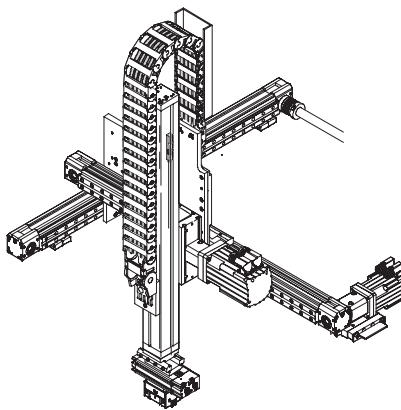
Standard application



- Standard applications are characterised by fixed cable installation or small to medium mechanical loads.

Above a bending radius of 75 mm, the Festo standard qualities are also suitable for drag chains.

Drag chain application



- High mechanical loads occur in the case of drag chain applications,

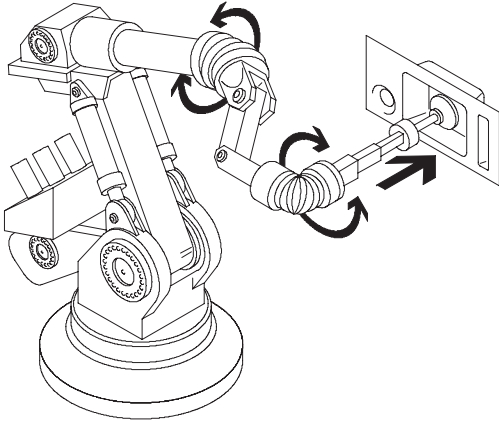
particularly when the drag chain has small radii.

Proximity sensors SMT/SME

Application examples

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Robot application

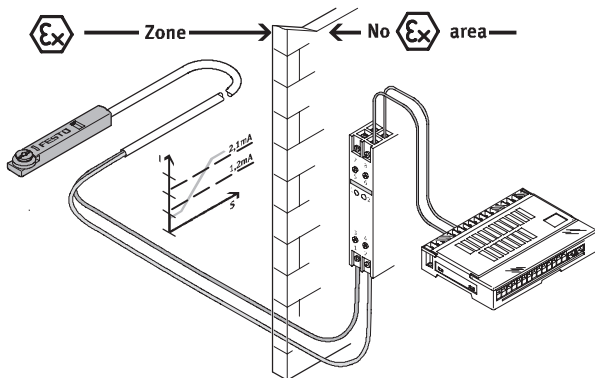


- Robot applications are characterised by high mechanical loads, which are primarily caused by torsion.

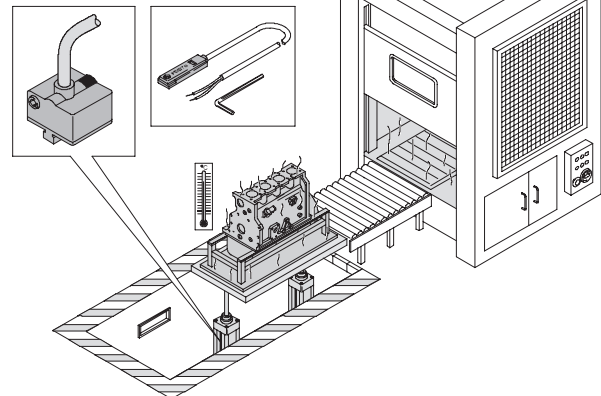
Special application

Areas at risk of explosion → www.festo.com

Extreme temperature ranges



- The range also includes sensors for device categories 1GD and 3GD.
- The sensor meets the high requirements of device category 1GD thanks to its Namur interface. The sensor must be operated with an isolation amplifier to analyse the signal. The isolation amplifier analyses the proximity sensor signal and provides the conventional binary output signal.
- Proximity sensors for device category 3GD have a normal switch output and can be connected directly to the fieldbus unit or PLC.



- Proximity sensors with the identifier "S6" in the type code are for increased temperature range and for use up to 120 °C. Some of these sensors are also suitable for a temperature range down to -40 °C.

Proximity sensors SMT/SME

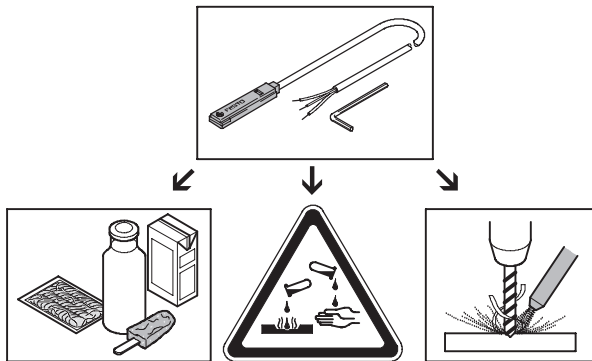
Application examples

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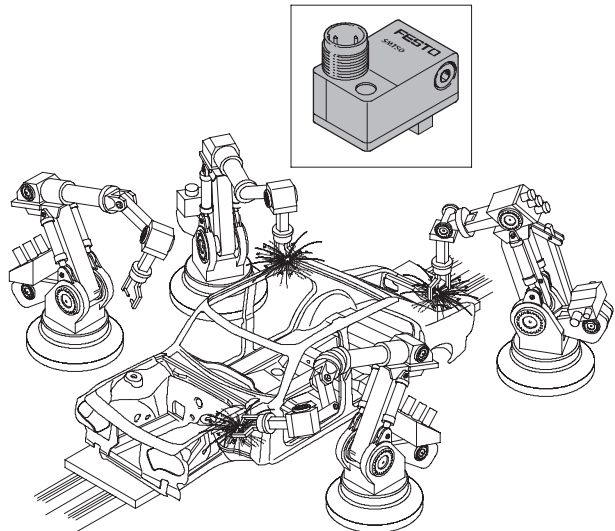
Special proximity sensors

CRSMT-8 – Corrosion-resistant

SMTSO-8E – Welding field immune



- The sensor is suitable for the food industry and ideal for use in the food sector.
- The sensor is acid-resistant and can be used in electroplating, for example.
- The sensor demonstrates very good resistance to lubricant coolants.
- The sensor has the highest corrosion resistance class (Festo CRC4).
- Good resistance to media such as:
 - Acids, for example phosphoric acid
 - Alkalines, for example caustic soda lye
 - Disinfectants, for example sodium hypochlorite
 - Polar solvents, for example esters, ketones, alcohols
 - Brake fluids
 - Lubricant coolants
 - Water (60°C/hydrolysis)
- Limited resistance to media such as:
 - Aliphatic hydrocarbons, for example fats and oils
- No resistance to media such as:
 - Fuels
 - Aromatic hydrocarbons



- The SMTSO-8E series provides welding field immune proximity sensors.
- This electronic proximity sensor is designed for use in welding areas with alternating fields from 45 ... 65 Hz. The switching signal is

“frozen” as soon as the proximity sensor detects an alternating magnetic field. This prevents incorrect switching during welding operations.

Product Range and Company Overview

A Complete Suite of Automation Services

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



Custom Automation Components

Complete custom engineered solutions



Custom Control Cabinets

Comprehensive engineering support and on-site services



Complete Systems

Shipment, stocking and storage services

The Broadest Range of Automation Components

With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.



Electromechanical

Electromechanical actuators, motors, controllers & drives



Pneumatics

Pneumatic linear and rotary actuators, valves, and air supply



PLCs and I/O Devices

PLC's, operator interfaces, sensors and I/O devices

Supporting Advanced Automation... As No One Else Can!

Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 12,000 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

Quality Assurance, ISO 9001 and ISO 14001 Certifications

Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.



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