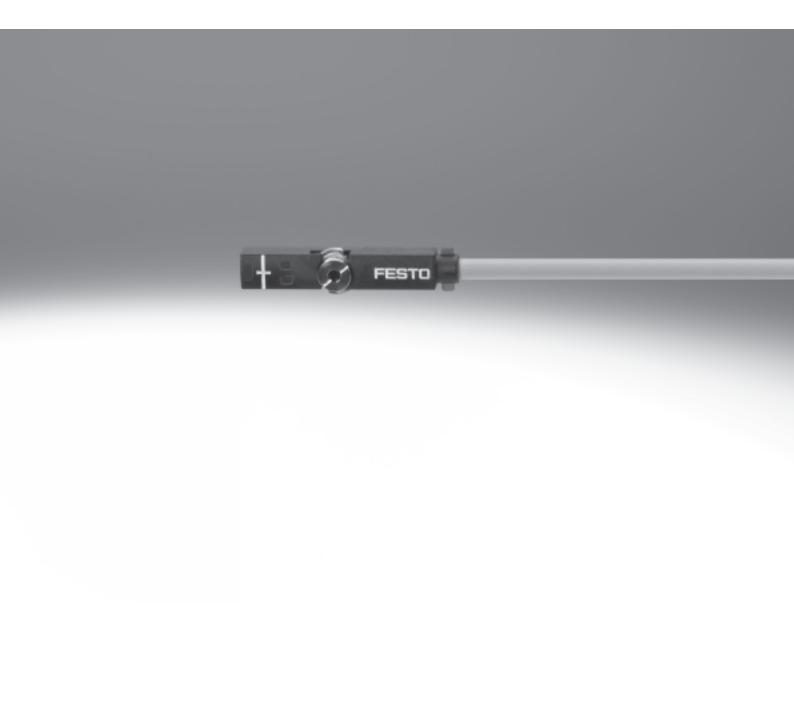
Proximity sensors SMT/SME-8, for T-slot

FESTO



Proximity sensors SMT/SMEProduct range overview



sign	Type of mounting	Measuring principle	Туре	Operating voltage range	Switching output	Switching element function	→ Page/Inter net
r T-slot	Standard						
	Insertable in the slot	Magneto-resistive	SMT-8M-A	5 30 V DC	PNP	N/O contact	7
	from above, flush with				NPN	N/C contact	
	the cylinder profile				Non-contacting,		
	Insertable in the slot	Magnetic reed	SME-8M	5 30 V AC/DC	2-wire Contacting, bipolar	N/O contact	15
	from above, flush with	Magnetic reed	SIME OIM	3 30 V NC/DC	contacting, pipotai	Ny o contact	15
	the cylinder profile					N/C contact	
	Insertable in the slot	Magnetic reed	SME-8	12 30 V AC/DC	Contacting, bipolar	N/O contact	26
	lengthwise, flush with					N/C contact	
	the cylinder profile			3 230 V AC/DC		N/O contact	29
	Insertable in the slot	Magneto-resistive	SMT-8G	10 30 V DC	PNP	N/O contact	31
	lengthwise	Magneto-resistive	SMT-8-SL	10 30 V DC	PNP	N/O contact	22
		Magnetic reed	SME-8-SL	10 30 V AC/DC	Contacting, bipolar	N/O contact	26
	Insertable in slot from above	Magnetic reed	SME-8-FM	10 30 V AC/DC	Contacting, bipolar	N/O contact	37
	Via accessories	Magneto-resistive	SMTO-8E	10 30 V DC	PNP	N/O contact	40
					NPN		
		Magnetic reed	SMEO-8E	12 30 V DC	Contacting, bipolar	N/O contact	44
				3 250 V DC			
				3 230 V AC			
	Corrosion-resistant						
	Insertable in the slot lengthwise, flush with the cylinder profile	Magneto-resistive	CRSMT-8	10 30 V DC	PNP	N/O contact	22
	Welding field immune						
	Via accessories	Magneto-inductive	SMTSO-8E	10 30 V DC	PNP NPN	N/O contact	40
	Heat-resistant up to 120) °C					
	Insertable in the slot	Magnetic reed	SME-8S6	0 30 V AC/DC	Contacting, bipolar	N/O contact	29
	lengthwise, flush with	magnetic reed	SWIE 0 30	0 30 V AC/DC	contacting, bipotai	N/O contact	2)
	the cylinder profile						
	Via accessories	Magnetic reed	SMEO-8ES6	0 30 V DC	Contacting	N/O contact	44
				0 30 V AC			
	To EU Explosion Protecti	on Directive (ATFX)					
	Clamped in T-slot	Magneto-inductive	SMT-8F-I	8.2 V DC	NAMUR	NAMUR	34
	Clamped III 1-5101	magneto-muuttive	JIVII-01-1	0.2 V DC	INVINION	INVINION	74

Proximity sensors SMT/SMEProduct range overview



Design	Type of mounting	Measuring principle	Туре	Operating voltage range	Switching output	Switching element function	Page/Inter
For C-slot	Standard						
	Insertable in the slot	Magneto-resistive	SMT-10F	5 30 V DC	PNP	N/O contact	C-slot
	from above, flush with				NPN	1	
	the cylinder profile			10 30 V DC	Non-contacting,	1	
					2-wire		
		Magnetic reed	SME-10F	10 30 V AC/DC	Contacting, bipolar	N/O contact	
				5 30 V AC/DC	1		
	Insertable in the slot	Magneto-resistive	SMT-10G	10 30 V DC	PNP	N/O contact	
	lengthwise	Magneto-resistive	SMT-10	10 30 V DC	PNP	N/O contact	
					NPN	1	
		Magnetic reed	SME-10	12 27 V AC/DC	Contacting	N/O contact	

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

Exceptions



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

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

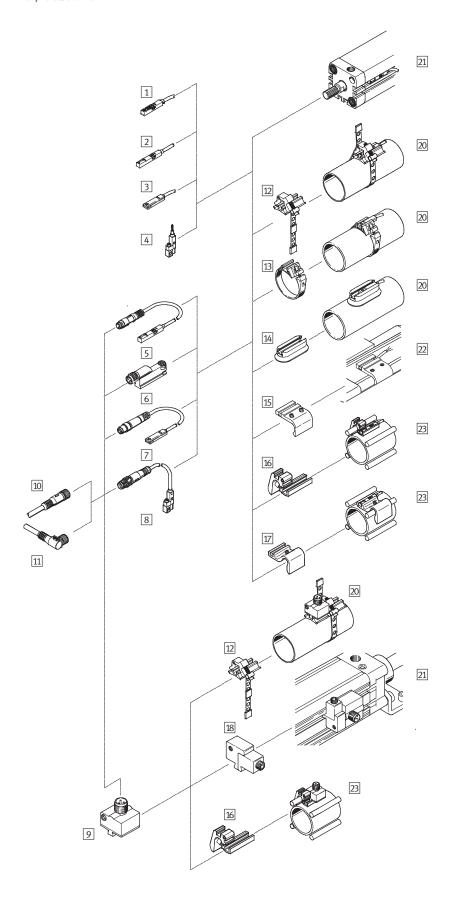
Exceptions



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

Proximity sensors SMT/SME-8, for T-slotPeripherals overview







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



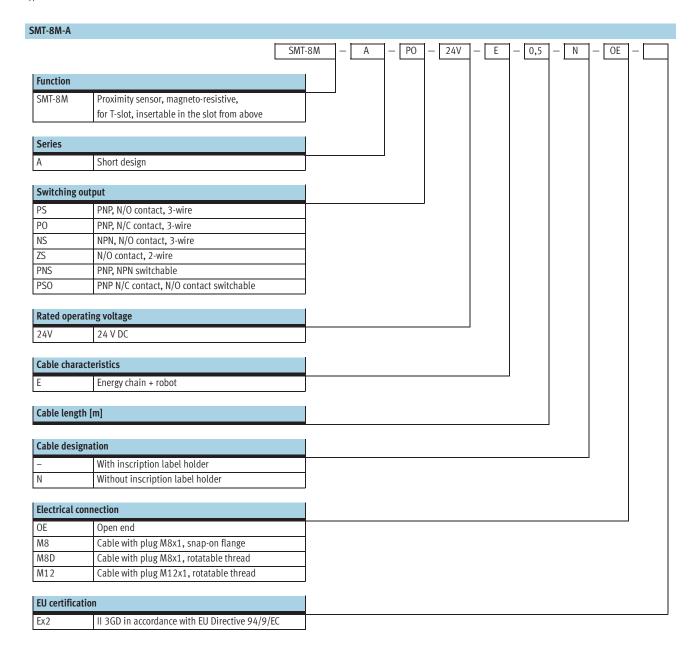
Mounting attachments and accessories	→ Page/ Internet					
Proximity sensors						
1 SMT-8M-A, with cable	7					
2 SME-8MOE, with cable	15					
3 SME-8-FMK, with cable	37					
CRSMT-8-K, with cable, corrosion-resistant	22					
4 SMT-8GOE, with cable	32					
5 SME-8MM, with cable and plug	15					
6 SMT-8-SL, with plug	22					
SME-8-SL, with plug	26					
7 SMT-8-S, with cable and plug	22					
SME-8-S, with cable and plug	26					
8 SMT-8GM, with cable and plug	32					
9 SMTO/SMTSO, with plug	40					
SMEO-8E, with cable or plug	44					
	•					
Connecting cables						
10 NEBU-MG	52					
11 NEBU-MW	52					

Mou	Mounting attachments and accessories						
Mou	nting kits and accessories						
12	Mounting kit SMBR-8-8/100-S6, heat-resistant	48					
13	Mounting kit SMBR	48					
14	Mounting kit CRSMB, corrosion-resistant	49					
15	Mounting kit SMB-8-FENG	49					
16	Mounting component SMBZ-8	51					
17	Sensor retainer DASP-M4 for DSBG-125	50					
18	Mounting kit SMB-8E	50					
19	Sensor tester SM-TEST-1	52					
-	Position marker SMM-8	51					
-	Clip SMBK-8	52					
-	Inscription label ASLR	52					
-	Safety clip NEAU	52					
Driv	es						
20	Round cylinders	-					
21	Drives with T-slot						
22	Standard cylinders DNC, DNCKE						
23	Drives with tie or mounting rod						

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



Type code:



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

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Technical data – Magneto-resistive

Function E.g. PNP, N/O contact, with cable



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



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





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

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

Switching output							
Туре		PS	NS	PO	ZS	PNS	PS0
Switching output		PNP	NPN	PNP	Non-contacting, 2-wire	PNP, NPN switchable	PNP
Switching element function		N/O contact	N/O contact	N/C contact	N/O contact	N/O contact	N/C contact, N/O contact switchable
Repetition accuracy	[mm]	±0.1	•	•	•	•	•
Switch-on time	[ms]	≤ 1					
Switch-off time	[ms]	≤ 1					
Max. output current	[mA]	100 ¹⁾	100 ¹⁾	1001)	801)	100	100
Max. output current in mounting kits	[mA]	100	·	·	801)	100	·
Max. switching capacity DC	[W]	2.8	2.8	2.8	1.9	2.7	2.7
Max. switching capacity DC in mounting kits	[W]	2.8 ²⁾	2.8 ²⁾	2.8 ²⁾	1.5 ²⁾	2.7	2.7
Max. switching frequency	[Hz]	180					
Voltage drop ¹⁾	[V]	0 1.5		0 1.5	0 6	0 2.5	0 2.5

¹⁾ Variant ...-PS/NS/PO-...-Ex2: max. output current in mounting kits 80 mA, T_a 70 °C Variant ...-ZS-...-Ex2: max. output current in mounting kits 50 mA, T_a 70 °C

²⁾ Variant ...-PS/NS/PO-...-Ex2: max. switching capacity 2.2 W Variant ...-ZS-...-Ex2: max. switching capacity 1.2 W

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

Proximity sensors SMT-8M-A, for T-slot Technical data – Magneto-resistive



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

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

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

Proximity sensors SMT-8M-A, for T-slot Technical data – Magneto-resistive



Display/operation			
	PS, NS, PO, ZS	PNS	PS0
Switching status display		, ,,,	Yellow LED (for N/O contact)/ white LED (for N/C contact)
Operating reserve display	Orange LED	_	

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

ATEX	
SMT-8M-A	Ex2
ATEX category for gas	II 3G
Explosion ignition protection type for gas	Ex nA IIC T4 X Gc
ATEX category for dust	II 3D
Explosion ignition protection type for dust	Ex tc IIIC T120°C X Dc IP65
Explosion-proof temperature rating	-40 °C <= Ta <= +70 °C
Explosion protection	Zone 2 (ATEX)
	Zone 22 (ATEX)
CE marking (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

Pin allocation to EN 60947-5-2						
M8x1, 2-pin						
N/O contact						
	Pin	Wire colour	Allocation			
1	1	Brown	+			
(+) A	4	Blue	-			
±)*						

1	M12x1, 2-pin							
	N/O contact							
I		Pin	Wire colour	Allocation				
Ī	1	1	Brown	+				
	(+++) A	4	Blue	_				
	+ / 4							
1								

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

M12x1, 3-pin						
N/O contact						
	Pin	Wire colour	Allocation			
1	1	Brown	+			
(+ +) A	3	Blue	-			
4	4	Black	Output			
3		•	•			

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

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

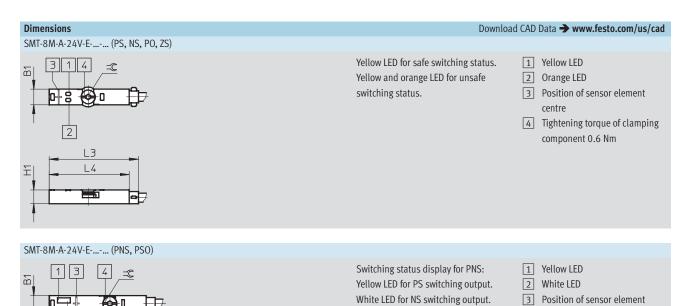


centre
4 Slot for screwdriver

Technical data – Magneto-resistive

L3

L4



Туре	B1	H1	L3	L4	=©
SMT-8M-A24V-E- (PS, NS, PO, ZS)	5	4.6	29.3	26.3	1.5
SMT-8M-A24V-E- (PNS, PSO)	,	4.6	34.8	31.8	1.5

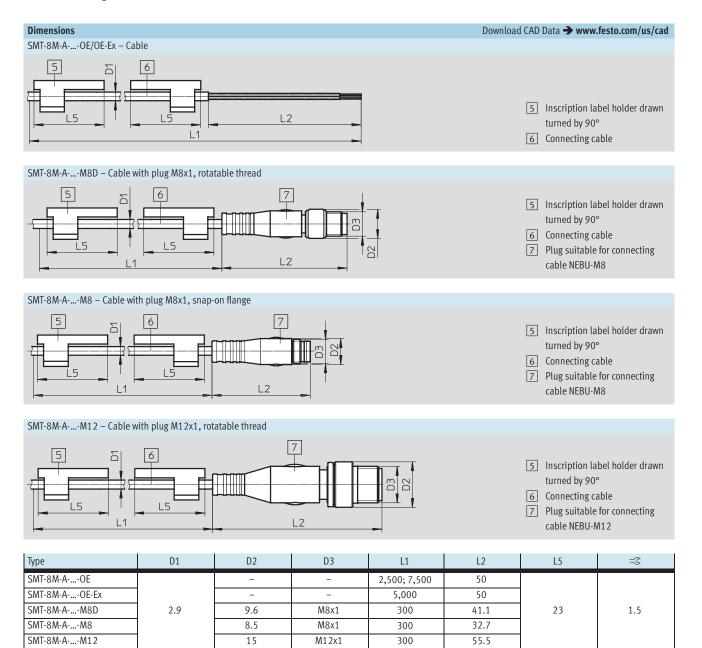
Switching status display for PSO: Yellow LED for PS switching output.

White LED for PO switching output.

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



Technical data – Magneto-resistive



Proximity sensors SMT-8M-A, for T-slot Technical data – Magneto-resistive



Ordering data								
	Switching	Electrical connection			Cable	Weight	Part No.	Туре
	output	Cable Cable with plug, rotatable thread	,	length				
			M8x1	M12x1	[m]	[g]		
	N/O contact							
	PNP	-	3-pin	1-	0.3	8.9	574334	SMT-8M-A-PS-24V-E-0,3-M8D
	PNP	3-wire	-	-	2.5	29.1	574335	SMT-8M-A-PS-24V-E-2,5-0E
	PNP	3-wire	-	-	5	57.1	574336	SMT-8M-A-PS-24V-E-5,0-OE
	PNP	-	-	3-pin	0.3	15.9	574337	SMT-8M-A-PS-24V-E-0,3-M12
	NPN	3-wire	-	-	2.5	29.1	574338	SMT-8M-A-NS-24V-E-2,5-0E
		-	3-pin	-	0.3	8.9	574339	SMT-8M-A-NS-24V-E-0,3-M8D
	PNP	-	3-pin	-	0.3	8.9	574342	SMT-8M-A-PS-24V-E-0,3-M8D-Ex2
	Non-contacting	2-wire	-	-	5	57.1	574341	SMT-8M-A-ZS-24V-E-5,0-OE-Ex2
		1	•			•		
	Switchable							
	PNP/NPN	-	3-pin	-	0.3	9	574343	SMT-8M-A-PNS-24V-E-0,3-M8D
	PNP PS/PO	-	3-pin	-	0.3	9	574344	SMT-8M-A-PSO-24V-E-0,3-M8D
				•		•		
	N/C contact							
	PNP	3-wire	-	T-	7.5	85.1	574340	SMT-8M-A-PO-24V-E-7,5-0E

Proximity sensors SMT-8M-A, for T-slotModular products – Magneto-resistive



Ordering table					
Size		8	Condition s	Code	Enter code
M Module No.		574333			
Function		Proximity sensor for T-slot, electronic		SMT-8M	SMT-8N
				-	-
Series		Short design		Α	А
				-	-
Switching output		3-wire PNP N/O contact		PS	
		3-wire NPN N/O contact		NS	
		3-wire PNP N/C contact		PO	
		2-wire PNP N/O contact		ZS	
		PNP/NPN switchable		PNS	
		PNP N/C contact, N/O contact switchable		PS0	
				-	_
Rated operating voltage	[V DC]	24		24V	24V
				-	<u> </u>
Cable characteristics		Energy chain + robot		E	E
				-	-
Cable length	[m]	0.1 30			
		(0.1 5.0 in 0.1 increments, 5.0 30 in 0.5 increments)			_
Cable designation		With inscription label holder			-
Cable designation		Without inscription label holder		N	
		without inscription tabet notice		-	-
Connection technology		Open end		OE	
		M8, rotatable thread		M8D	
		M8, snap-on flange		M8	
		M12, rotatable thread		M12	
EU certification		II 3GD in accordance with EU Directive 94/9/EC	1	-Ex2	

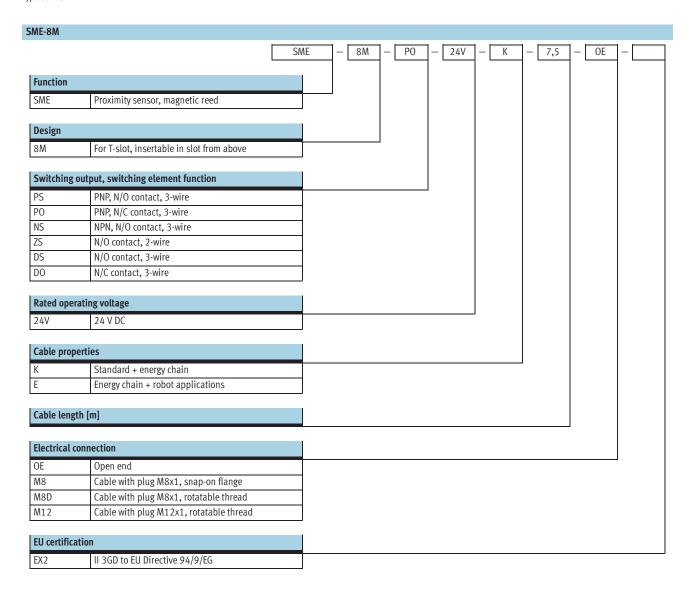
¹ Ex2 Not with switching output PNS, PSO, minimum cable length 0.2 \mbox{m}



Proximity sensors SME-8M, for T-slot

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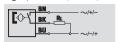
Type codes



Proximity sensors SME-8M, for T-slot Technical data – Magnetic reed

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



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



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





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

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

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

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

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

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

Proximity sensors SME-8M, for T-slot Technical data – Magnetic reed

FESTO

Electromechanical components	S								
Switching element function		DS/DO				ZS			
Electrical connection		0E	M8D	M8	M12	OE	M8D	M8	M12
Electrical connection		Cable,	Cable, Cable with plug, 3-pin			Cable,	Cable, Cable with plug, 2-pin		
		3-wire	M8x1	M8x1	M12x1	2-wire	M8x1	M8x1	M12x1
			Rotatable	Snap-on	Rotatable		Rotatable	Snap-on	Rotatable
			thread	flange	thread		thread	flange	thread
Connection direction		In-line						•	•
Cable test conditions	K	Energy chain	Energy chain: 5 million cycles, bending radius 75 mm						
		Resistance to	Resistance to bending: to Festo standard; test conditions on request						
	E	Energy chain: 5 million cycles, bending radius 28 mm							
		Torsional str	ength: ±270°/0	0.1 m					
		Resistance to	o bending: to F	esto standard;	test conditions	on request			
Cable length	[m]	0.2 10							
Cable properties	K	Standard + 6	energy chain						
	E	Energy chair	+ robot applic	ations					
Cable sheath material	K	TPE-U(PU), o	il resistant						
	E	TPE-U(PU), o	il resistant, ha	logen free					

Mechanical components				
Electrical connection	0E	M		
Type of mounting	Screw-clamped in slot, insertable from above			
Housing	PA	PA		
	High-alloy stainless steel	High-alloy stainless steel		
	-	Nickel-plated brass		
	-	TPE-U(PU)		

Display/operation	
Switching status display	Yellow LED

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

Pin allocation to EN 6	0947-5-2		
M8x1, 2-pin			
N/O contact			
	Pin	Wire colour	Allocation
1	1	Brown	+
(+) A	4	Black	Output
\psi^*			•

M12x1, 2-pin			
N/O contact			
	Pin	Wire colour	Allocation
1	1	Brown	+
(+) A	4	Black	Output
(+)*			

Pin allocation to EN 6	0947-5-2		
M8x1, 3-pin			
N/O contact and N/C of	ontact		
	Pin	Wire colour	Allocation
1	1	Brown	+
	3	Blue	
(T +) &	,	blue	_
4	4	Black	Output

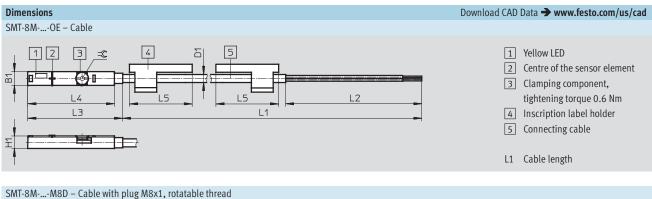
	M12x1, 3-pin						
ſ	N/O contact						
		Pin	Wire colour	Allocation			
Ī	1	1	Brown	+			
	(+ + +) A	3	Blue	-			
	(+)*	4	Black	Output			
	3						

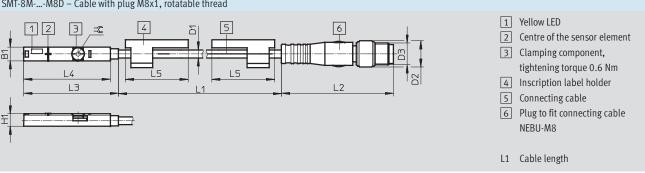
Proximity sensors SME-8M, for T-slot

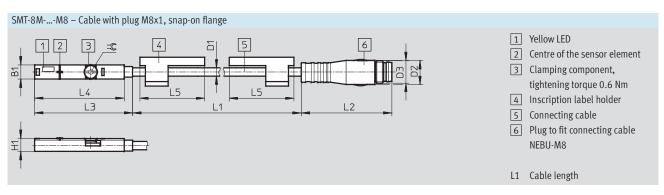


Technical data - Magnetic reed

Pin allocation to EN 6	0947-5-2		
M12x1, 3-pin			
N/C contact			
	Pin	Wire colour	Allocation
1	1	Brown	+
2 (+++)	3	Blue	-
2 (++++++++++++++++++++++++++++++++++++	2	Blue White	- Output



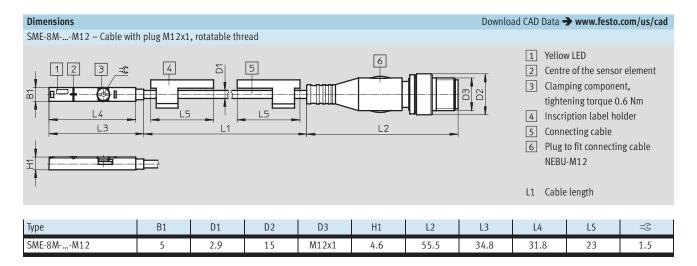




Туре	B1	D1	D2	D3	H1	L2	L3	L4	L5	=©
SME-8MOE			-	-		50				
SME-8MM8D	5	2.9	9.6	M8x1	4.6	41	34.8	31.8	23	1.5
SME-8MM8			8.8	M8x1		35				

Proximity sensors SME-8M, for T-slot Technical data – Magnetic reed





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

Proximity sensors SME-8M, for T-slotModular products – Magnetic reed



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

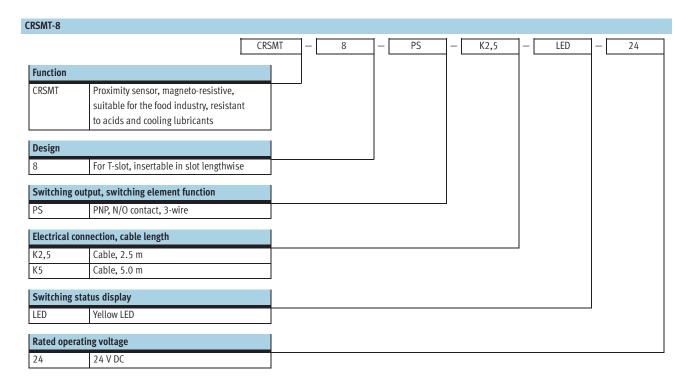
0r	dering table				
Siz	ze	8	Condition s	Code	Enter code
M	Module No.	543892			
	Function	Proximity sensor for T-slot, contacting		SME-8M	SME-8M
				-	-
	Switching output	3-wire N/O contact		DS	
		2-wire N/O contact		ZS	
		3-wire N/C contact		DO	
				-	-
	Rated operating voltage [V DC]	24		24V	24V
				-	-
	Cable properties	Standard + energy chain		K	
		Energy chain + robot applications		E	
				-	-
	Cable length [m]	0.2 10			
		(0.2 5.0 m in 0.1 m steps, 5.0 10 m in 0.5 m steps)			
				-	-
	Connection technology	Open end		OE	
		M8, rotatable thread		M8D	
		M8, snap-on flange		M8	
		M12, rotatable thread		M12	

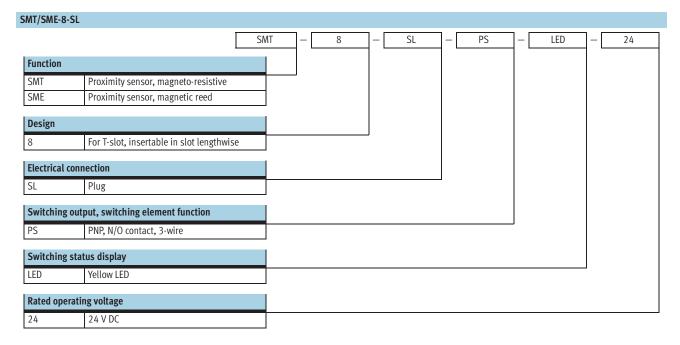
Transfer order co	ode	е						_		
543892		SME-8M	-[-]	24V	-	-		-	

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

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Type codes

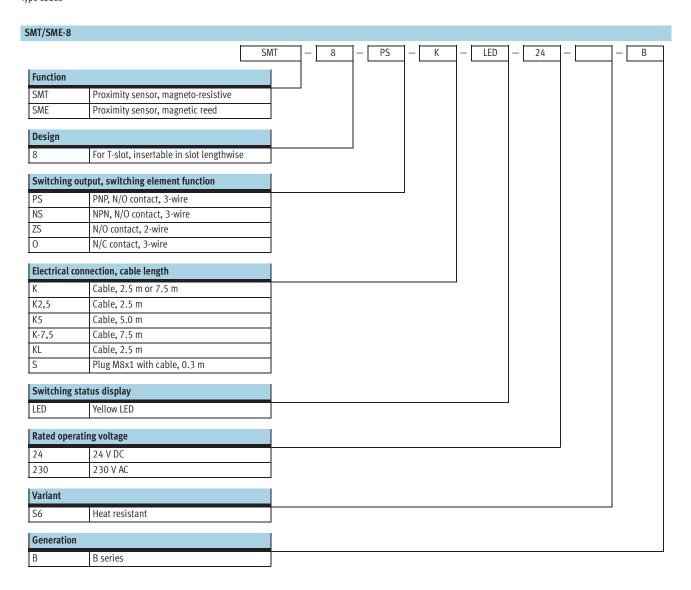




Proximity sensors CRSMT-8/SMT-8-SL/SME-8, for T-slot



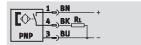
Type codes



Proximity sensors CRSMT-8/SMT-8-SL, for T-slot Technical data – Magneto-resistive

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



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

SMT-8-SL

- Sturdy thanks to long guides
- Plug directly on sensor





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

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

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

Output, additional data		
Туре	CRSMT	SMT-8-SL
Switching output	PNP	PNP
Protection against short circuit	Yes	Yes
Protection against overloading	-	Yes

Proximity sensors CRSMT-8/SMT-8-SL for T-slot Technical data – Magneto-resistive



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

Electromechanical components			
Туре		CRSMT	SMT-8-SL
Switching output		PNP	PNP
Electrical connection		Cable, 3-wire	Plug M8x1, 3-pin
Connection direction		-	In-line
Cable length	[m]	2.5	_
		5	
Cable sheath material		TPE-0	-

Mechanical components		
Туре	CRSMT	SMT-8-SL
Switching output	PNP	PNP
Electrical connection	Cable, 3-wire	Plug M8x1, 3-pin
Type of mounting	Clamped in T-slot	Screw-clamped
Type of mounting	Clamped in T-slot	Screw-clamped Insertable in slot lengthwise
Type of mounting Housing material	Clamped in T-slot - High-alloy stainless steel	

Display/operation	
Switching status display	Yellow LED

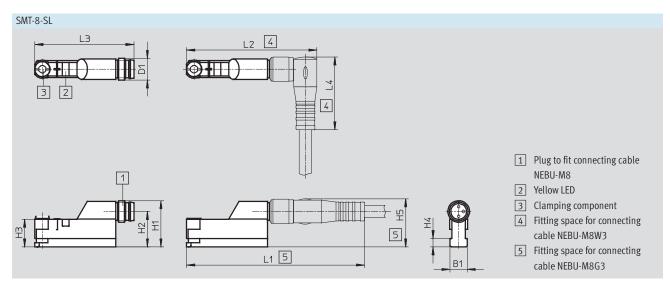
Immissions/emissions			
Туре		CRSMT	SMT-8-SL
Ambient temperature with flexible cable installation	[°C]	-5 +60	-
Protection class		IP65	IP65
		IP68	IP68
		IP69K	_
Insulation voltage	[V]	500	_
Degree of contamination		3	_
Corrosion resistance class CRC		4	3

Pin allocation to EN 60947-5-2								
PS/NS								
Plug, 3-pin								
M8x1	Pin Wire colour Allocation							
1	1	D						
1	1	Brown	+					
1		Blue	-					
1 + 4			<u>'</u>					

Proximity sensors CRSMT-8/SMT-8-SL, for T-slot Technical data – Magneto-resistive







Туре	B1	B2	D1	D2	D3	H1	H2	Н3	H4	H5	L1	L2	L3	L4
CRSMT	6.3	5	2.9	-	-	4.9	-	-	-	-	32.4	-	-	-
SMT-8-SL	6.7	-	M8x1	-	-	17.1	13.1	10.2	3.1	17.6	66	48.4	36.6	26.9

Proximity sensors CRSMT-8/SMT-8-SL, for T-slot Technical data – Magneto-resistive



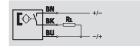
Ordering data										
	Switching output	Electrical connection		Cable length	Part No.	Туре				
		Cable	Plug M8x1	[m]						
N/O contact, basic	N/O contact, basic version									
	PNP	-	3-pin	_	562019	SMT-8-SL-PS-LED-24-B				
N/O contact, corro	sion resistant									
	PNP	3-wire	_	2.5	525563	CRSMT-8-PS-K-LED-24				
~				5.0	525564	CRSMT-8-PS-K5-LED-24				

Proximity sensors SME-8, for T-slot Technical data – Magnetic reed

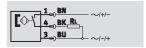
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Function

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



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



- Magnetic reed measuring principle
- Insertable in slot lengthwise

SME-8-SL

- Sturdy thanks to long guides
- Plug directly on sensor





General technical data									
Туре	SME-8-K	SME-8-S	SME-8-ZS	SME-8-0	SME-8-SL				
Design	For T-slot	For T-slot							
Conforms to	EN 60947-5-2								
Certification	C-Tick								
CE mark (see declaration of conformity)	To EU EMC Directive ¹⁾								
Note on materials	Free of copper and PTI	Free of copper and PTFE							
	RoHS-compliant	-	RoHS-compliant						

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

Input signal/measuring element									
Туре		SME-8-K	SME-8-K5	SME-8-K-7,5	SME-8-S	SME-8-ZS	SME-8-0	SME-8-SL	
Measuring principle	Magnetic reed								
Ambient temperature	[°C]	-40 +60	-40 +70	-40 +70	-40 +70	-40 +60	-40 +60	-40 +60	

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

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

Electronic components						
Туре		SME-8-K	SME-8-S	SME-8-ZS	SME-8-0	SME-8-SL
Operating voltage range	[V AC]	12 30	12 30	-	12 30	10 30
Operating voltage range	[V DC]	12 30	12 30	12 27	12 30	10 30
Reverse polarity protection		No				

Proximity sensors SME-8, for T-slot Technical data – Magnetic reed



Electromechanical components								
Туре		SME-8-K	SME-8-K5	SME-8-K-7,5	SME-8-S	SME-8-ZS	SME-8-0	SME-8-SL
Electrical connection		Cable, 3-wire			Cable with plug M8x1, 3-pin	Cable, 2-wire	Cable, 3-wire	Plug M8x1, 3-pin
Connection direction		In-line						
Cable length	[m]	2.5	5	7.5	0.3	2.5	7.5	-
Cable sheath material		TPE-U (PUR)						-

Mechanical components									
Туре	SME-8-K	SME-8-K5	SME-8-K-7,5	SME-8-S	SME-8-ZS	SME-8-0	SME-8-SL		
Type of mounting	Clamped in T-slot								
	Insertable in slot lengthwise								
Housing material	Epoxy resin								
	Polycarbonate								
	Polybutylene terephthalate								
	High-alloy stain	less steel							

Display/operation	
Switching status display	Yellow LED

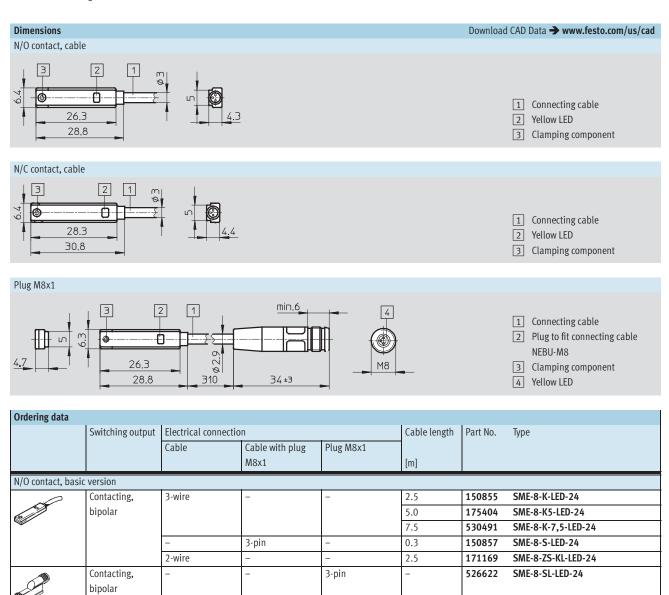
Immissions/emissions								
Туре		SME-8-K	SME-8-K5	SME-8-K-7,5	SME-8-S	SME-8-ZS	SME-8-0	SME-8-SL
Ambient temperature with flexible	[°C]	-5 +60	-5 +70	-5 +70	-5 +70	-5 +60	-5 +60	-
cable installation								
Protection class		IP65			-	IP65	-	IP65
		IP67			IP67	IP67	IP67	IP67
Insulation voltage	[V]	50						
Surge capacity	[kV]	3	3	3	3	3	3	3
Degree of contamination		3	•	•		•	•	•

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

Proximity sensors SME-8, for T-slot



Technical data - Magnetic reed



7.5

160251

SME-8-0-K-LED-24

N/C contact

Contacting,

bipolar

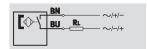
3-wire

Proximity sensors SME-8, for T-slot Technical data – Magnetic reed

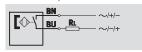
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Function

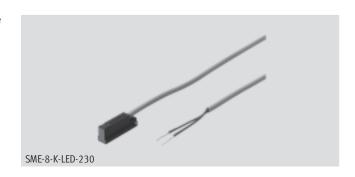
e.g. N/O contact, with cable, 2-wire, 0 ... 30 V AC/DC



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



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



General technical data				
	SME-8S6	SME-8230		
Design	For T-slot			
Conforms to	EN 60947-5-2	EN 60947-5-2		
CE mark (see declaration of conformity)	- To EU EMC Directive ¹⁾			
	-	To EU Low Voltage Directive		
Note on materials	Free of copper and PTFE			
	RoHS-compliant			

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

Input signal/measuring element			
	SME-8S6	SME-8230	
Measuring principle	Magnetic reed		
Ambient temperature [°C]	-40 +120	-30 +60	

Switching output	Switching output			
		SME-8S6	SME-8230	
Switching output		Contacting, bipolar	Contacting, bipolar, without LED function	
Switching element function		N/O contact		
Reproducibility of switching value	[mm]	±0.1	±0.1	
Switch-on time	[ms]	≤ 0.5	2	
Switch-off time	[ms]	≤ 0.03	0.03	
Max. switching frequency	[Hz]	800	500	
Max. output current	[mA]	500	120	
Max. switching capacity AC	[VA]	10		
Max. switching capacity DC	[W]	10		
Voltage drop	[V]	≤ 0	≤ 3.9	
Residual current	[mA]	-	0	

Output, additional data				
	SME-8S6	SME-8230		
Protection against short circuit	No			
Protection against overloading	No			

Electronic components			
		SME-8S6	SME-8230
Operating voltage range	[V AC]	0 30	3 230
Operating voltage range	[V DC]	0 30	3 230
Reverse polarity protection		No	

Proximity sensors SME-8, for T-slot Technical data – Magnetic reed

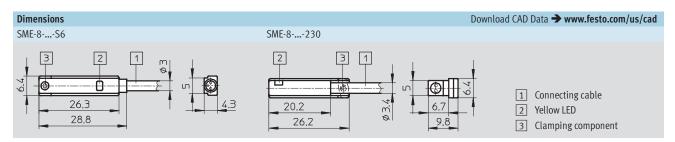


Electromechanical components				
		SME-8S6	SME-8230	
Electrical connection		Cable, 2-wire		
Connection direction		In-line		
Cable length	[m]	2.5	2.5	
		-	-	
Cable sheath material		TPE-S	TPE-U (PUR)	

Mechanical components				
	SME-8S6	SME-8230		
Type of mounting	Clamped in T-slot			
	Insertable in slot lengthwise	Insertable in slot lengthwise		
Housing material	Epoxy resin	Epoxy resin		
	Polycarbonate	Polystyrene		
	Polyethylene terephthalate	Polyethylene terephthalate		
	High-alloy stainless steel	High-alloy stainless steel		

Display/operation			
	SME-8S6	SME-8230	
Switching status display	-	Yellow LED	

Immissions/emissions			
		SME-8S6	SME-8230
Ambient temperature with flexible	[°C]	-5 +120	−5 +60
cable installation			
Protection class		-	_
		IP67	IP67
Insulation voltage	[V]	50	_
Surge capacity	[kV]	0.8	4
Degree of contamination		3	3



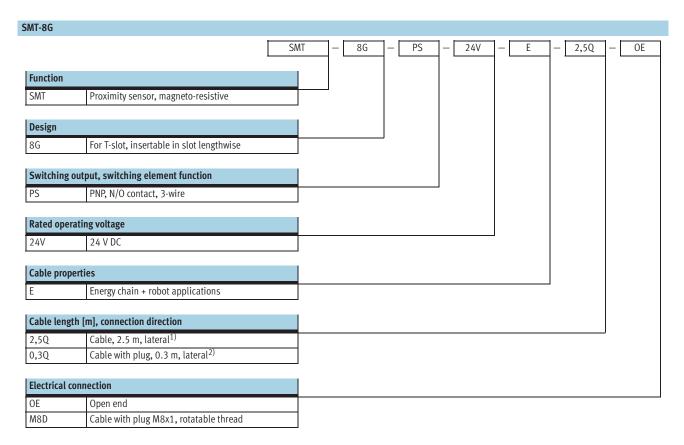
Ordering data						
	Switching output	Electrical connection Cable	Connection direction	Cable length [m]	Part No.	Туре
N/O contact, heat	resistant					
	Contacting, bipolar	2-wire	In-line	2.5	161756	SME-8-K-24-S6
N/O contact opera	ating voltage range up to	n 230 V AC/DC				
The contact, open	Contacting,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

30

Proximity sensors SMT-8G, for T-slot



Type codes

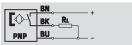


- 1) Only with electrical connection OE
- 2) Not with electrical connection OE

Proximity sensors SMT-8G, for T-slot Technical data – Magneto-resistive

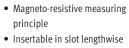
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Function PNP, N/O contact, with cable, 3-wire



PNP, N/O contact, with plug BN A BK RL PNP 3_BU

• Design ideally matched to gripper sensing







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

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

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

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

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

Electromechanical componer	nts		
Туре		SMT-8GOE	SMT-8GM8D
Electrical connection		Cable, 3-wire	Cable with plug M8x1, 3-pin, rotatable thread
Connection direction		Lateral	·
Cable test conditions		Energy chain: 5 million cycles, bend	ng radius 28 mm
		Torsional strength: > 300,000 cycle	s, ±270°/0.1 m
		Resistance to bending: to Festo stan	dard; test conditions on request
Cable length	[m]	2.5	0.3
Cable properties		Energy chain + robot applications	·
Cable sheath material		Thermoplastic polyurethane elaston	er

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

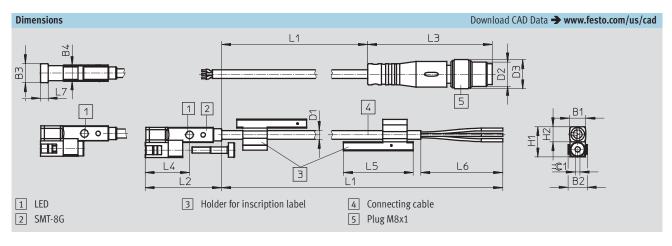
Proximity sensors SMT-8G, for T-slot Technical data – Magneto-resistive



Display/operation	
Switching status display	Yellow LED

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

Pin allocation to EN 60947-5-2											
P\$											
Plug, 3-pin											
M8x1	Pin	Wire colour	Allocation								
1	1	Brown	+								
1	3	Brown Blue	+								
1 + 4	1 3 4		+ - Output								



	D1	D2	D3	B1	B2	В3	B4	H1	H2	L1	L2	L3	L4	L5	L6	L7	=©
SMT-8GOE	2.0	-	-	5 /	5	6.3	5	10	5	2500 +70	25	-	14.4	23	50	2.5	1.5
SMT-8GM8D	2.9	M8x1	9.6	5.4	,	6.3	J	10	J	300 +30	23	41.1	14.4	2.3	30	2.5	1.5

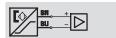
Ordering data						
	Switching output	Electrical connection		Cable length	Part No.	Туре
		Cable	Cable with plug,			
			rotatable thread, M8x1	[m]		
N/O contact	N/O contact					
1	PNP	3-wire	-	2.5	547859	SMT-8G-PS-24V-E-2,5Q-0E
		-	3-pin	0.3	547860	SMT-8G-PS-24V-E-0,3Q-M8D
	_					
¥						

Proximity sensors SMT-8F-I, to EU Explosion Protection Directive (ATEX)

FESTO

Technical data

Function NAMUR, with cable



- EU conformity in accordance with EU EMC Directive, to EU Explosion Protection Directive (ATEX)
- Magneto-inductive measuring principle
- Insertable in the slot from above
- Cable clip included in the scope of delivery



Technical data		
Switching element function		NAMUR
Switching output		NAMUR
Design		For T-slot
Type of mounting		Clamped in T-slot
Reproducibility of switching value ¹⁾	[mm]	±0.1
Electrical connection		Cable, 2-wire
Mounting position		Any
Cable length	[m]	5
Rated operating voltage	[V DC]	8.2
Max. output current in NAMUR operation	[mA]	0 4.5
Residual current	[mA]	0 0.7
Switch-on time	[ms]	0 0.5
Switch-off time	[ms]	0 0.5
Protection against short circuit		For all electrical connections
Protection against incorrect polarity		
Conforms to standard		EN 60947-5-6
Certificate issuing authority		KEMA 04 ATEX 1114 X
Switching status display		Yellow LED
Product weight	[g]	70

1) Only applicable to drives secured against rotation

Operating and environmental conditions				
Cable installation	Fixed	Flexible		
Ambient temperature [°C]	-25 +70	−5 +70		
Protection class	IP65, IP67			
Certification	C-Tick			

Note

When used in hazardous areas, the proximity sensor SMT-8F-I must always be operated on an isolated

switch amplifier according to DIN EN 60 947-5-6.

Note

Operating instructions, declarations and statements of conformity

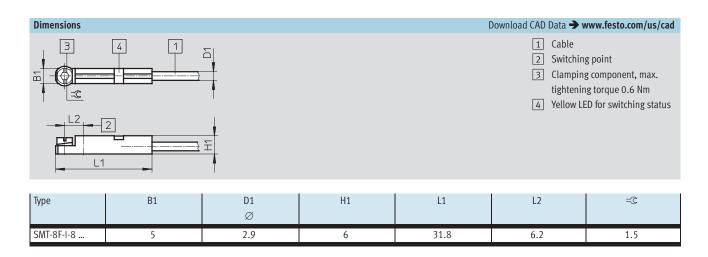
→ www.festo.com

Proximity sensors SMT-8F-I, to EU Explosion Protection Directive (ATEX) Technical data



ATEX	
ATEX category for gas	II 1G
Explosion ignition protection type for	Ex ia IIC T4 T6
gas	
ATEX category for dust	II 1D
Explosion ignition protection type for	Ex iaD 20 IP67 T95°C
dust	
Explosion-proof temperature [°C]	-10 °C <= Ta <= +70 °C
Explosion protection certification	EPL Da (RU)
outside the EU	EPL Db (RU)
	EPL Dc (RU)
	EPL Ga (RU)
	EPL Gb (RU)
	EPL Gc (RU)
CE marking	To EU EMC Directive
(see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

Materials					
Housing	PA				
Cable sheath	PVC				
Note on materials	Free of copper and PTFE				

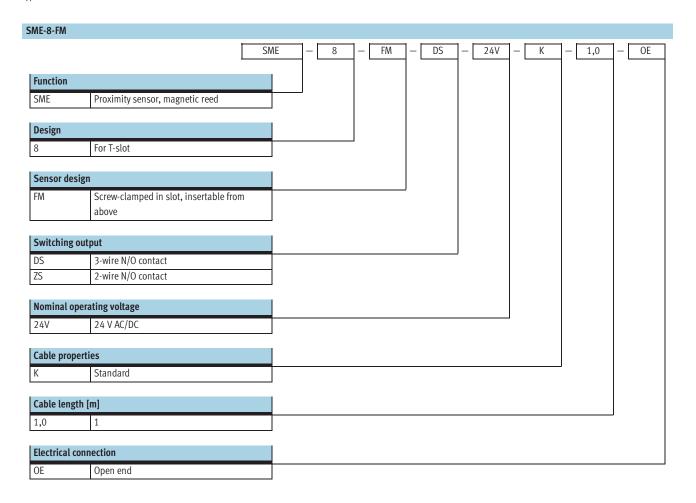


Ordering data					
	Switching output	Electrical connection	Cable length [m]	Part No.	Туре
	NAMUR	Cable, 2-wire	5.0	536956	SMT-8F-I-8,2V-K5,0-OE-Ex

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

FESTO

Type codes

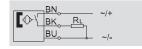


Proximity sensors SME-8-FM, for T-slot Technical data – Magnetic reed

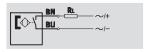
FESTO

Function

N/O contact, with cable, 3-wire



N/O contact, with cable, 2-wire



- Magnetic reed measuring principle
- Insertable in slot from above





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

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

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

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

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

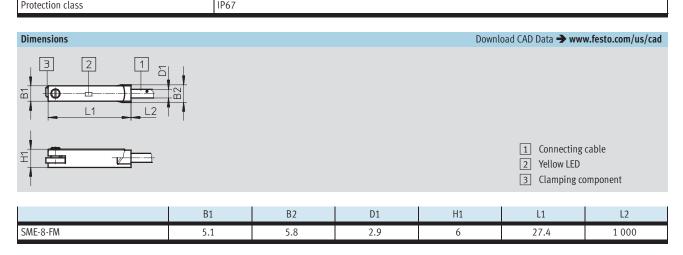
Electromechanical components				
Туре		SME-8-FM-DS	SME-8-FM-ZS	
Electrical connection		Cable, 3-wire	Cable, 2-wire	
Connection direction		In-line		
Cable test conditions		Test conditions on request		
Cable length [m] 1		1		
Cable properties		Standard		
Cable sheath material		Polyvinyl chloride		

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

Proximity sensors SME-8-FM, for T-slot Technical data – Magnetic reed

FESTO

Display/operation		
Switching status display		Yellow LED
Immissions/emissions		
Ambient temperature with flexible	[°C]	-5 +60
cable installation		
Protection class		ID47

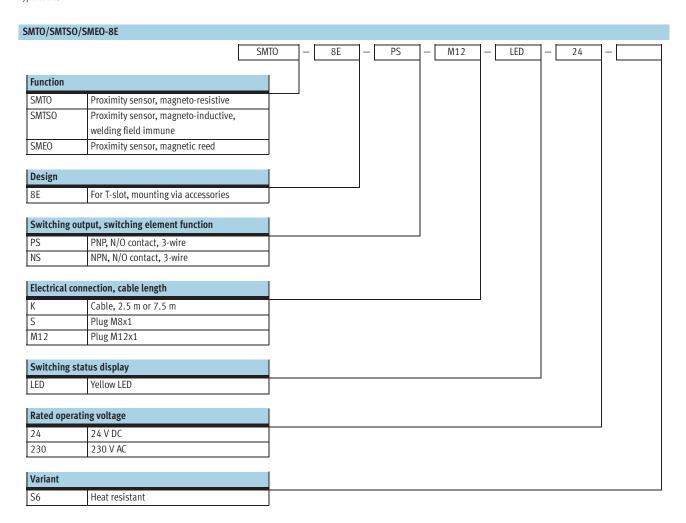


Ordering data					
	Switching output	Electrical connection	Cable length	Part No.	Туре
		Cable	[m]		
	Contacting, bipolar	3-wire	1	562515	SME-8-FM-DS-24V-K-1,0-OE
		2-wire	1	562516	SME-8-FM-ZS-24V-K-1,0-0E

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



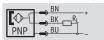
Type code:



Proximity sensors SMTO-8E/SMTSO-8E, for T-slot Technical data – Magneto-resistive

FESTO

Function PNP, N/O contact, with plug



NPN, N/O contact, with plug

- Magneto-resistive measuring principle
- Welding field immune designs





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

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

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

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

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

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

Proximity sensors SMTO-8E/SMTSO-8E, for T-slot Technical data – Magneto-resistive



Electromechanical components						
Туре		SMTO-8ES	SMTO-8EM12	SMTSO-8EM12, welding field		
				immune		
Electrical connection		Plug M8x1, 3-pin	Plug M12x1, 3-pin	Plug M12x1, 3-pin		
Connection direction		Lateral				
Max. tightening torque for plug	[Nm]	0.3	0.5	0.5		

Mechanical components						
Туре		SMTO-8ES	SMTO-8EM12	SMTSO-8EM12, welding field		
				immune		
Type of mounting		Clamped in T-slot	Clamped in T-slot			
			Insertable in slot from above			
		Via accessories				
Tightening torque	[Nm]	1	0.5	0.5		
Housing materials		TPE-U(PU)	TPE-U(PU)	TPE-U(PU)		
		Nickel-plated brass	High-alloy stainless steel	High-alloy stainless steel		
		-	Wrought aluminium alloy	Wrought aluminium alloy		
			-	PA		

Display/operation	
Switching status display	Yellow LED

Immissions/emissions			
Туре	SMTO-8ES	SMTO-8EM12	SMTSO-8EM12, welding field immune
Protection class	IP65		
	IP67		
Resistance to interference from magnetic	-	-	Alternating magnetic field
fields			45 65 Hz

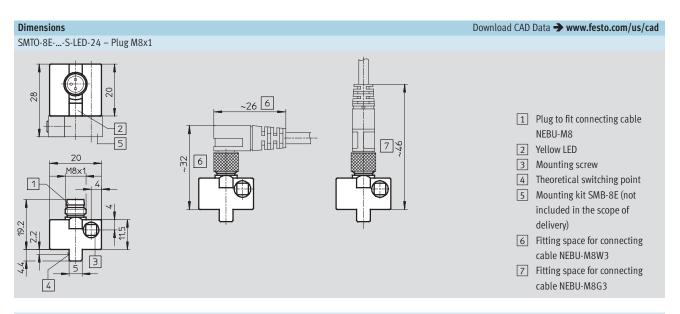
Pin allocation to EN 60947-5-2							
M8x1, 3-pin	M8x1, 3-pin						
N/O contact							
	Pin Wire colour Allocation						
	4	В					
1	1	Brown	+				
+ 4	3	Blue	-				
++++4	3 4		- Output				

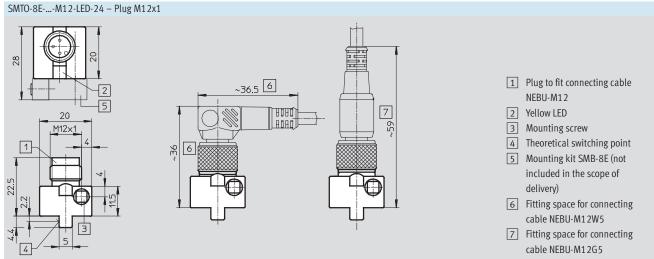
M12x1, 3-pin						
N/O contact						
	Pin	Wire colour	Allocation			
1	1	Brown	+			
(+++) A	3	Blue	-			
17. 17.00	1.	Black	Output			
(±)	4	Diack	Output			

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

FESTO

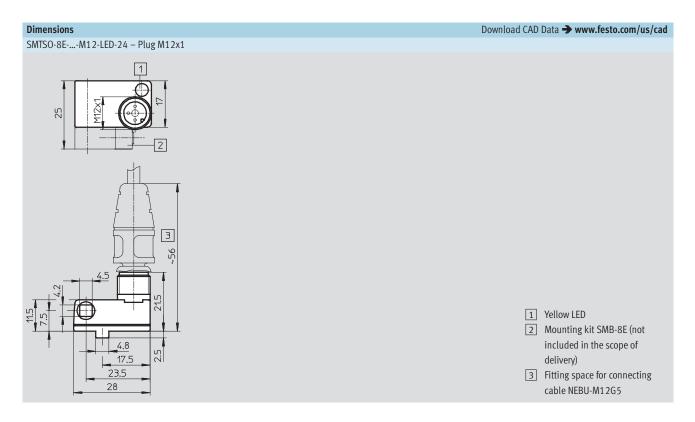
Technical data – Magneto-resistive





Proximity sensors SMTO-8E/SMTSO-8E, for T-slot Technical data – Magneto-resistive





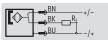
Ordering data	Ordering data						
	Switching output	Electrical connection		Part No.	Туре		
		Plug M8x1	Plug M12x1				
N/O contact, basic	version						
	PNP	3-pin	-	171178	SMTO-8E-PS-S-LED-24		
		-	3-pin	171179	SMTO-8E-PS-M12-LED-24		
	NPN	3-pin	-	171166	SMTO-8E-NS-S-LED-24		
		_	3-pin	171176	SMTO-8E-NS-M12-LED-24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

Proximity sensors SMEO-8E, for T-slot Technical data – Magnetic reed

FESTO

Function

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



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



- Magnetic reed measuring principle
- Heat-resistant variant



General technical data			
	SMEO-8E24	SMEO-8E24-S6, heat-resistant	SMEO-8E230
Design	For T-slot	For T-slot	For T-slot
Conforms to	EN 60947-5-2	-	EN 60947-5-2
Certification	C-Tick	-	C-Tick
CE mark	To EU EMC Directive ¹⁾	-	To EU EMC Directive ¹⁾
(see declaration of conformity)	-		To EU Low Voltage Directive
Note on materials	Free of copper and PTFE	Free of copper and PTFE	Free of copper and PTFE
	RoHS-compliant	-	-

Input signal/measuring element						
		SMEO-8E24	SMEO-8E24-S6, heat-resistant	SMEO-8E230		
Measuring principle		Magnetic reed	Magnetic reed	Magnetic reed		
Ambient temperature	[°C]	-40 +60	-40 +120	-20 +60		

Switching output				
		SMEO-8E24	SMEO-8E24-S6, heat-resistant	SMEO-8E230
Switching output		Contacting, bipolar	Contacting	Contacting, bipolar
		-	-	Without LED function
Switching element function		N/O contact	N/O contact	N/O contact
Reproducibility of switching value	[mm]	±0.1	±0.1	±0.1
Switch-on time	[ms]	0 0.5	0 0.5	0 2
Switch-off time	[ms]	0.03	0.03	0.03
Max. switching frequency	[Hz]	800	500	500
Max. output current	[mA]	500	500	120
Max. switching capacity DC	[W]	10	10	10
Max. switching capacity AC	[VA]	10	10	10
Voltage drop	[V]	-	0.5	3.9

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

Electronic components						
		SMEO-8E24	SMEO-8E24-S6, heat-resistant	SMEO-8E230		
Operating voltage range DC	[V]	12 30	0 30	3 250		
Operating voltage range AC	[V]	12 30	0 30	3 230		
Reverse polarity protection		No	For all electrical connections	No		

Proximity sensors SMEO-8E, for T-slot Technical data – Magnetic reed



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

Mechanical components					
Туре		SMEO-8E-S-LED-24	SMEO-8E-M12-LED-24	SMEO-8E-K-24-S6,	SMEO-8E-M12-LED-230
				heat-resistant	
Type of mounting		Via accessories		Via accessories	Via accessories
Tightening torque	[Nm]	0.5	0.5	0.5	0.5
Housing materials		TPE-U(PU)	TPE-U(PU)	TPE-U(PU)	TPE-U(PU)
		High-alloy stainless steel	High-alloy stainless steel	-	High-alloy stainless steel
		Wrought aluminium alloy	Wrought aluminium alloy		Wrought aluminium alloy
		Nickel-plated brass	-	1	-

Display/operation					
	SMEO-8E24	SMEO-8E24-S6, heat-resistant	SMEO-8E230		
Switching status display	Yellow LED	-	Yellow LED		

Immissions/emissions						
		SMEO-8E24	SMEO-8E24-S6, heat-resistant	SMEO-8E230		
Ambient temperature with flexible	[°C]	-	-40 +120	-		
cable installation						
Protection class		IP65	IP65	IP65		
		IP67	IP67	IP67		
Insulation voltage	[V]	_	50	_		
Surge capacity	[kV]	0.8	-	4		
Degree of contamination		3	3	3		

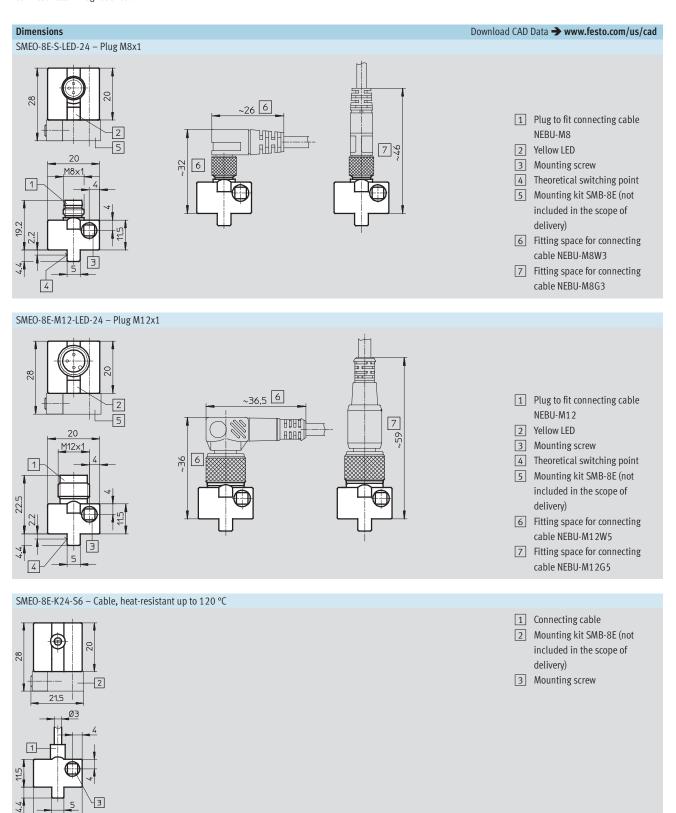
Pin allocation to EN 60947-5-2							
M8x1, 3-pin	M8x1, 3-pin						
N/O contact							
	Pin	Wire colour	Allocation				
1	1	Brown	+				
+ 4	3	Blue	-				
4	4	Black	Output				
3							

M12x1, 3-pin, 24 V						
N/O contact						
	Pin	Wire colour	Allocation			
1	1	Brown	+			
(+++) A	3	Blue	-			
+ 7	4	Black	Output			
3						

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



Technical data - Magnetic reed



Proximity sensors SMEO-8E, for T-slot Technical data – Magnetic reed



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

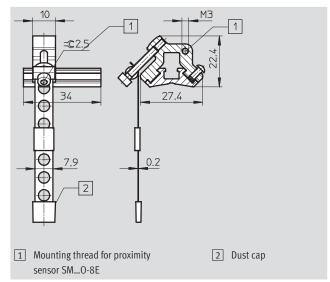


Accessories

Mounting kit SMBR-8-8/100-S6

Materials: Rail: Anodised wrought aluminium alloy Clamping strap, screws: High-alloy stainless steel Free of copper and PTFE RoHS-compliant





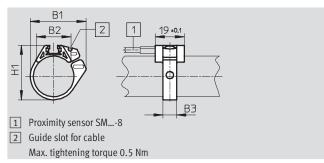
Dimensions and ordering data			
For piston \varnothing	Corrosion resistance class CRC ¹⁾	Part No.	Туре
8 100	4	538937	SMBR-8-8/100-S6

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

Mounting kit SMBR

Material: Polyacetal RoHS-compliant





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

FESTO Accessories

Mounting kit CRSMB

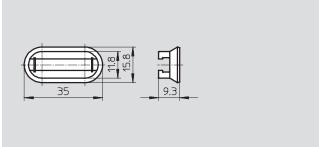
Design: For round cylinders Type of mounting: Bonded using enclosed adhesive tape

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

Housing: Polyurethane Rail: Hard anodised aluminium

Free of copper and PTFE





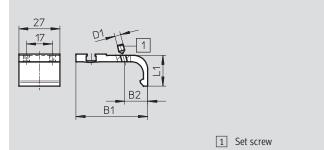
Ordering data			
For piston \varnothing	CRC ¹⁾	Part No.	Туре
32 100	4	525565	CRSMB-8-32/100

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

Mounting kit SMB-8-FENG

Material: Wrought aluminium alloy Free of copper and PTFE





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

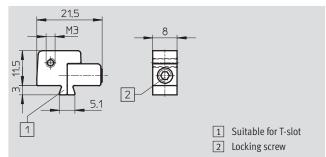
FESTO

Accessorie

Mounting kit SMB-8E

Material: Polyacetal





Ordering data		
For piston \varnothing	Part No.	Туре
10 125	178230	SMB-8E

Sensor retainer DASP-M4-125-A

Material:

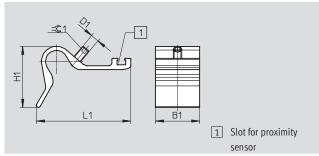
Housing: Anodised wrought

 $aluminium \ alloy$

Screws: High-alloy stainless steel

RoHS-compliant





Dimensions and ordering data										
Туре	B1	D1	H1	L1	=©1	Tightening torque [Nm]	CRC ¹⁾	Weight [g]	Part No.	Туре
DASP-M4-125-A	32.5	M5	28	45.4	2.5	1	3	26.5	1451483	DASP-M4-125-A

¹⁾ Corrosion resistance class 3 according to Festo standard 940 070 Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.



Accessories

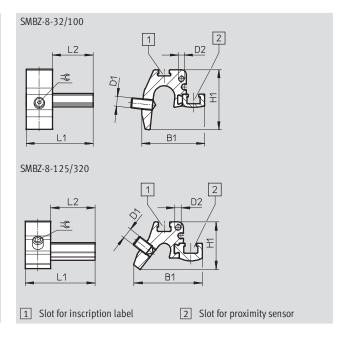
Mounting SMBZ-8-...

Materials:

Rail: Anodised wrought aluminium alloy

Screws: High-alloy stainless steel Free of copper and PTFE RoHS-compliant





Dimensions and ordering data									
For piston \varnothing	B1	D1	D2	H1	L1	L2	=©	Part No.	Туре
32 100	31	M5	M3	30	22	20	1.5	537806	SMBZ-8-32/100
125 320	32.3	CINI	CIVI	22	, , ,	20	2.5	537808	SMBZ-8-125/320

Positioning component SMM

Insertable in slot lengthwise

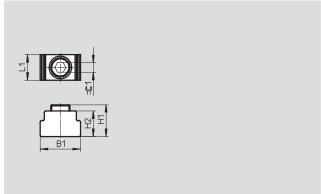
Ambient temperature: -40 ... +120 °C

Materials:

Housing: Anodised wrought aluminium alloy

Screws: High-alloy stainless steel Note on materials: RoHS-compliant





Dimensions and ordering data								
B1	H1	H2	L1	= ©1	CRC ¹⁾	Part No.	Туре	PU ²⁾
6.3	5.0	4.0	4.0	1.5	3	547941	SMM-8	10

¹⁾ CRC3: Corrosion resistance class to Festo standard 940 070 Components with heavy corrosion exposure. Externally visible components in direct contact with normal industrial atmosphere or media such as solvents and cleaning agents, where the surface requirement is predominantly functional.

2) Packaging unit

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



Ordering da	ta – Connecting cables				Technical data → Internet: nebu
		Number of wires	Cable length [m]	Part No.	Туре
Socket M8x1	1, 3-pin				
	For SMT/SME-8 and	3	2.5	541333	NEBU-M8G3-K-2.5-LE3
OF JE	SMTO/SMTSO/SMEO-8E		5	541334	NEBU-M8G3-K-5-LE3
	For SMT/SME-8 and	3	2.5	541338	NEBU-M8W3-K-2.5-LE3
	SMTO/SMTSO/SMEO-8E		5	541341	NEBU-M8W3-K-5-LE3
Socket M12	<1, 5-pin				
	For SMT/SME-8M and	3	2.5	541363	NEBU-M12G5-K-2.5-LE3
6	SMTO/SMTSO/SMEO-8E		5	541364	NEBU-M12G5-K-5-LE3
	For SMT/SME-8M and	3	2.5	541367	NEBU-M12W5-K-2.5-LE3
6	SMTO/SMTSO/SMEO-8E		5	541370	NEBU-M12W5-K-5-LE3

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

¹⁾ Packaging unit per frame

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

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

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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