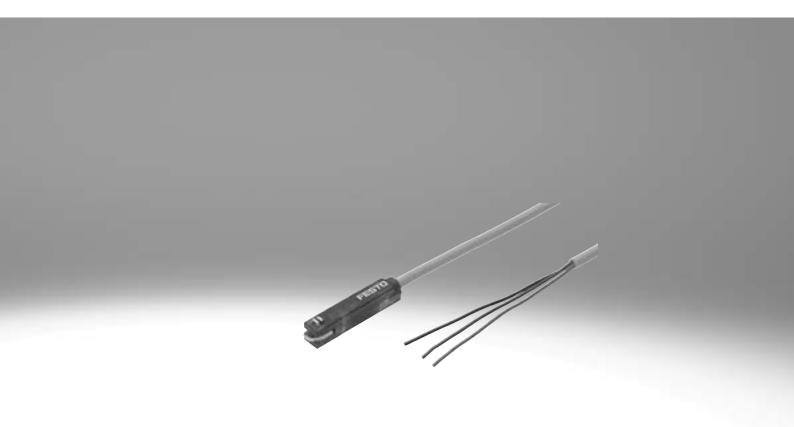
Proximity switch for T-slot





★/☆

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Proximity switches

Product range overview

esign	Type of mounting	Measuring principle	Туре	Operating voltage range	Switching output	Switching element function	→ Page							
T-slot	Standard	1	1	'	-	'	•							
	Screw-clamped, insertable in the slot from above	Magnetic Hall	SDBT-MSX	10 30 V DC	PNP/NPN, switchable	N/O / N/C contact, switchable	-							
	Insertable in the slot from above, flush with	Magneto-resistive	SMT-8M-A	5 30 V DC	PNP	N/O contact N/C contact								
	the cylinder profile				NPN Non-contacting, 2-wire	N/O contact N/O contact]							
	Insertable in the slot from above, flush with the cylinder profile	Magnetic reed	SME-8M	5 30 V AC/DC	Contacting, bipolar	N/O contact N/C contact	-							
	Insertable in the slot lengthwise, flush with the cylinder profile	Magnetic reed	SME-8	12 30 V AC/DC	Contacting, bipolar	N/O contact N/C contact	7							
	Insertable in the slot	Managara analatina	SMT-8G	3 230 V AC/DC	DND NDN	N/O contact	11							
	lengthwise	Magneto-resistive Magneto-resistive	SMT-8G SMT-8-SL	10 30 V DC	PNP, NPN	N/O contact	_							
	tengthwise	Magnetic reed	SME-8-SL	10 30 V AC/DC	Contacting, bipolar	N/O contact	7							
	With accessories	Magneto-resistive	SMTO-8E	10 30 V DC	PNP NPN	N/O contact	-							
		Magnetic reed	SMEO-8E	12 30 V DC 3 250 V DC 3 230 V AC	Contacting, bipolar	N/O contact	-							
	Corrosion-resistant													
	Insertable in the slot from above, flush with the cylinder profile	Magneto-resistive	CRSMT-8M	5 30 V DC	PNP	N/O contact	_							
	Welding-field-resistant													
	Insertable in the slot from above, screw- clamped	Magneto-resistive	SDBT-BSW	10 30 V DC	PNP NPN Non-contacting, 2-wire	N/O contact	-							
	With accessories	Magneto-inductive	SMTSO-8E	10 30 V DC	PNP NPN	N/O contact	-							
	Heat-resistant up to 120)°C												
	Insertable in the slot lengthwise, flush with the cylinder profile	Magnetic reed	SME-8S6	0 30 V AC/DC	Contacting, bipolar	N/O contact	11							
	With accessories	Magnetic reed	SMEO-8ES6	0 30 V DC 0 30 V AC	Contacting	N/O contact	-							
	To EU Explosion Protecti	on Directive (ATEX)												
	Insertable in the slot from above, screw-	Magneto-resistive	SDBT-MSEX6	8.2 V DC	NAMUR	NAMUR	-							
	clamped													

Product range overview

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

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

Exceptions



- DFM-B: SMTO-8E, SMTSO-8E, SMEO-8E and SMPO-8E cannot be used
- DHDS: SME-8M can only be used on Ø 50
- DHPS: SME-8M can only be used on Ø 20 ... 35
- HGDD-63-A: SMT-8M-A cannot be used
- HGPT-B: only SMT-8G can be used from size 40 and upwards
- SDBT-BSW- ... -PU/NU can only be used on a limited number of drive series. Page → 53

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

Exceptions



- ADVC Ø 100: SMT-10M and SME-10M cannot be used (ADVC has a T-slot and C-slot)
- DSM/DSM-B-6/8/10: SME-10M cannot be used
- DSM/DSM-B-1 0/16: SMT-10M cannot be used
- HGPT-B: only SMT-10G can be used for sizes up to and including size 35

For drives with sensor rail: these are available with 2 cylinder barrel contours

Only T-slot switches CRSMT-8M, SMT-8M-A and SDBT-MS- ... -EX6 can be used, and only with the identified profile. CRSMT-8M and SMT-8M-A can be used for all diameters; SDBT-MS- ... -EX6 cannot be used for diameters 40 and 50.

Example: DSBF

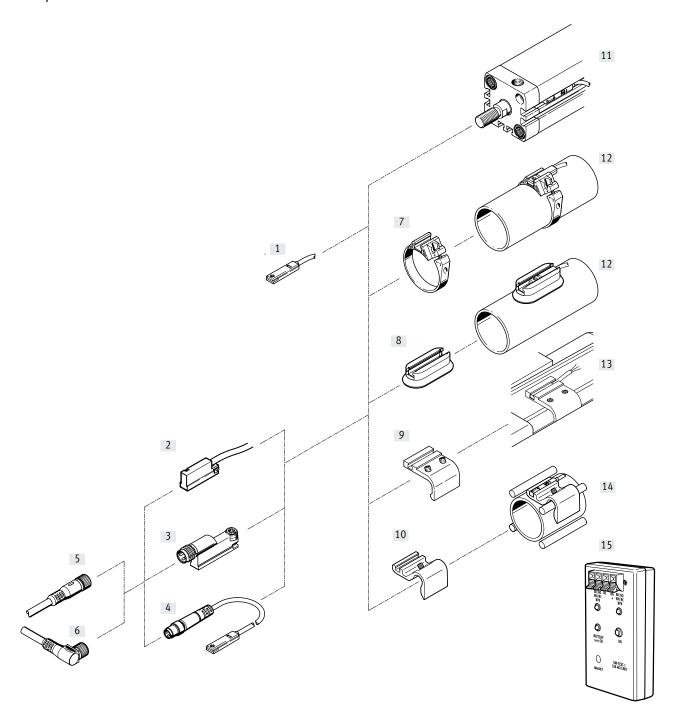




Suitable

Not suitable

Peripherals overview



Peripherals overview

Mou	nting components and accessories	→ Page		Mounting components and accessories → Page					
Proxi	mity switches			Mounti	ng kits and accessories				
[1]	SME-8-K, with cable	7		[7]	Mounting kit SMBR	14			
[2]	SME-8-K-LED-230	11		[8]	Mounting kit CRSMB, corrosion-resistant	15			
[3]	SME-8-SL, with plug	7		[9]	Mounting kit SMB-8-FENG	15			
[4]	SME-8-S, with cable and plug	7		[10]	Sensor bracket DASP-M4	16			
				[15]	Sensor tester SM-TEST-1	17			
				-	Positioning element SMM-8	16			
			İ	-	Clip SMBK-8	17			
				-	Inscription label ASLR	17			
				-	Safety clip NEAU	17			
Conn	ecting cables			Drives					
[5]	NEBU-MG	17		[11]	Drives with T-slot	_			
[6]	NEBU-MW	17		[12]	Round cylinders	_			
				[13]	Standards-based cylinders DSBC	_			
				[14]	Drives with tie or mounting rod	-			

Proximity switches SME-8, for T-slot

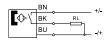
Type codes

001	Series
SME	Proximity sensor
002	Design type
8	For T-slot
003	Sensor version
	Inserted in the slot lengthwise
SL	Inserted in the slot lengthwise, sturdy due to long guides
004	Switching output
	None
0	N/C contact, 3-wire
ZS	2-wire PNP N/O contact
005	Switching status indication
	None
LED	Yellow LED

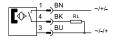
006	Rated operating voltage
24	24 V DC
230	230 V AC
007	Cable characteristic
	None
K	Standard/suitable for energy chains
008	Cable length [m]
5,0	5.0 m
7,5	7.5 m
009	Electrical connection
OE	Open end
SL	Plug

Function

N/O contact, with cable, 3-wire



N/O contact, with plug



- Magnetic reed measuring principle
- Insertable in the 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				
Conforms to standard	EN 60947-5-2				'
Certification	RCM compliance mark				
CE marking (see declaration of conformity)	To EU EMC Directive ¹⁾				
Note on materials	Free of copper and PTFE				
	RoHS-compliant	-	RoHS-compliant		

1) For information about the area of use, see the EC declaration of conformity at: www.festo.com/sp
Certificates.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of 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	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	
Short circuit protection	No
Overload protection	Not present

Electronics						
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				

Electromechanics								
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	Cable, 2-wire	Cable, 3-wire	Plug M8x1,
					M8x1, 3-pin			3-pin
Outlet direction of connection		In-line						
Cable length	[m]	2.5	5	7.5	0.3	2.5	7.5	_
Information on materials: cable sheath		TPE-U (PUR)						-

Mechanics									
Туре	SME-8-K	SME-8-K5	SME-8-K-7.5	SME-8-S	SME-8-ZS	SME-8-O	SME-8-SL		
Type of mounting	Clamped in T-s	lot	-			-			
	Insertable in th	e slot lengthwise							
Information on materials: housing	Epoxy resin								
	PC						,		
	PET	PET							
	High-alloy stair	nless steel							

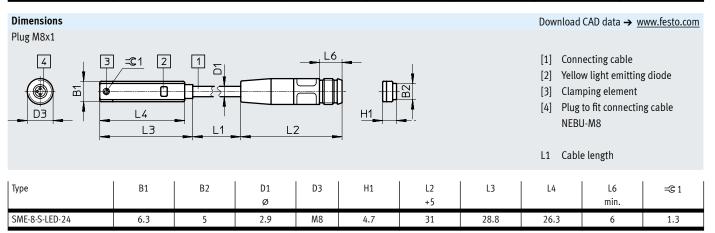
Display/operation	
Switching status indication	Yellow LED

Immission/emission								
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 cable	[°C]	-5 +60	-5 +70	-5 +70	-5 +70	-5 +60	-5 +60	-
installation								
Degree of protection		IP65			-	IP65	-	IP65
		IP67			IP67	IP67	IP67	IP67
Insulation voltage	[V]	50	50					
Surge resistance	[kV]	3	3	3	3	3	3	3
Pollution degree		3						

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

Dimensions Download CAD data → www.festo.com N/O contact, cable [1] Connecting cable, 3-wire cable, 3 x 0.14 mm² [2] Yellow light emitting diode [3] Max. tightening torque 0.2 Nm Туре В1 B2 D1 Н1 L3 L4 **=**© 1

SME-8-K	6.4	5	2.9	4.3	28.8	26.3	1.3	
Dimensions N/C contact, cable [1] Connecting cable, 3-wire cable 3 x 0.14 mm² [2] Yellow light emitting diode [3] Max. tightening torque 0.2 Nm								
Туре	B1	B2	D1 Ø	H1	L3	L4	= © 1	
SME-8-0-K-LED-24	6.4	5	2.9	4.4	30.8	28.3	1.3	



Proximity switches SME-8, for T-slot

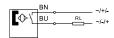
Data sheet – Magnetic reed

Ordering data							
	Switching output	Electrical connection			Cable length	Part no.	Туре
		Cable	Cable with plug	Plug M8x1	[m]		
			M8x1				
N/O contact, basic v	ersion						
~/	Contacting, bipolar	3-wire	_	-	2.5	150855	SME-8-K-LED-24
					5.0	175404	SME-8-K5-LED-24
					7.5	530491	SME-8-K-7.5-LED-24
		-	3-pin	_	0.3	150857	SME-8-S-LED-24
		2-wire	-	_	2.5	171169	SME-8-ZS-KL-LED-24
	Contacting, bipolar	_	_	3-pin	_	526622	SME-8-SL-LED-24
N/C contact							
N/C COIICACT	Contacting himolar	3-wire	1		7.5	160251	SME-8-0-K-LED-24
	Contacting, bipolar	3-wire	_	_	7.5	160251	SME-8-U-R-LEU-24

Function

N/O contact, with cable, 2-wire

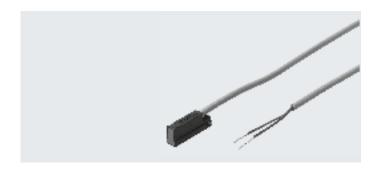
0-...-30 V AC/DC



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



- Magnetic reed measuring principle
- Insertable in the 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 standard	EN 60947-5-2				
Certification	-	RCM compliance mark			
	-	CCC			
CE marking (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 area of use, see the EC declaration of conformity at: www.festo.com/sp -> Certificates.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

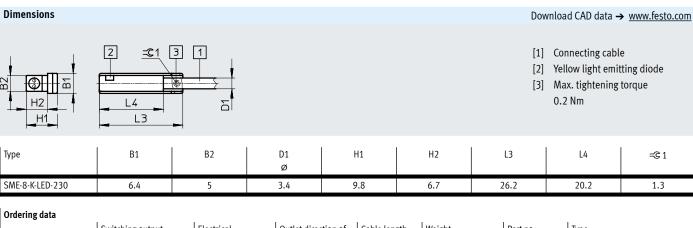
Input signal/measuring element									
	SME-8S6	SME-8230							
Measuring principle	Magnetic reed								
Ambient temperature [°C]	-40 +120	-30 +60							

Switching output			
·		SME-8S6	SME-8230
Switching output		Contacting, bipolar	Contacting, bipolar
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
Off-state current	[mA]	-	0

Output, additional data			
Output, additional data	SME-8S6	SME-8230	
Short circuit protection	No		
Overload protection	Not present		
Electronics	Louis	Louis	
	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		
Electromechanics			
Electrometrianics	SME-8S6	SME-8230	
Electrical connection	Cable, 2-wire, open end		
Outlet direction of connection	In-line		
Cable length [m]	2.5	2.5	
Information on materials: cable sheath	TPE-S	TPE-U (PUR)	
+			
Mechanics			
	SME-8S6	SME-8230	
Type of mounting	Clamped in T-slot		
	Insertable in the slot lengthwise		
Information on materials: housing	Epoxy resin		
	PET		
	High-alloy stainless steel	I ()	
Information on materials: cable sheath	TPE-S	TPE-U (PUR)	
Display/operation			
Display/operation	SME-8S6	SME-8230	
Switching status indication	S.II.2 S III.3 S	Yellow LED	
Switching Status indication	_	TELLOW LED	
Immission/emission			
	SME-8S6	SME-8230	
Ambient temperature with flexible cable [°C]	−5 +120	-5 +60	
installation			
Ambient temperature	-40 +120	-	
Degree of protection	-	-	
	IP67	IP68	
Insulation voltage [V]	50	-	
Surge resistance [kV] Pollution degree	0.8	4	
		3	

→ Internet: www.festo.com/catalogue/...

Dimensions Download CAD data → www.festo.com [1] Connecting cable, 3-wire cable, 3 x 0.14 mm² [2] Max. tightening torque 0.2 Nm L4 L3 Туре В1 В2 D1 Н1 L3 L4 **=**© 1 ±0.05 -0.08 ±0.05...-0.1 -0.1 +0.2 SME-8- ... -S6 6.4 5 2.9 4.3 28.8 26.3 1.3

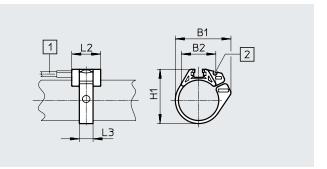


Ordering data							
	Switching output	Electrical connection	Outlet direction of connection	Cable length	Weight	Part no.	Туре
		Cable		[m]	[g]		
N/O contact, heat-res	istant						
	Contacting, bipolar	2-wire, open end	In-line	2.5	50	161756	SME-8-K-24-S6
N/O contact, operatin	g voltage range up to 230	V AC/DC					
	Contacting, bipolar	2-wire, open end	In-line	2.5	39	152820	SME-8-K-LED-230

Mounting kit SMBR

Material: Polyacetal RoHS-compliant





Dimensions and ordering data									
For piston Ø	B1	B2	H1	L2	L3	Part no.	Туре		
8	18.9	12.3	17.5	19	7	175091	SMBR-8-8		
10	20.4	13.7	19.9	19	7	175092	SMBR-8-10		
12	22.7	14.3	21.9	19	7	★ 175093	SMBR-8-12		
16	28.2	16.9	25.7	19	8	★ 175094	SMBR-8-16		
20	34.5	20.8	30.4	19	9	★ 175095	SMBR-8-20		
25	36.7	22.7	35.6	19	9	★ 175096	SMBR-8-25		
32	41.7	24.6	42.7	19	9	175097	SMBR-8-32		
40	47.1	26.5	50.7	19	9	175098	SMBR-8-40		
50	56.4	28.6	61.5	19	9	175099	SMBR-8-50		
63	69.4	32	74.5	19	9	175100	SMBR-8-63		

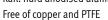
Mounting kit CRSMB

Design: for round cylinders Type of mounting: bonded using enclosed adhesive tape

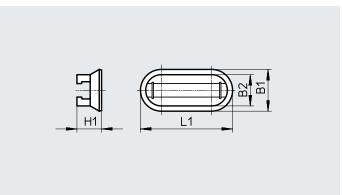
Degree of protection: IP65, IP68, IP69K Ambient temperature: -40 ... +90°C

Material:

Housing: polyurethane Rail: hard anodised aluminium







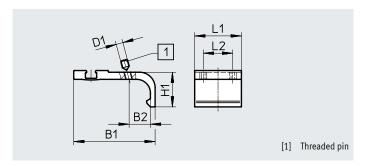
Ordering data										
For piston Ø	B1	B2	H1	L1	CRC ¹⁾	Part no.	Туре			
32 100	15.8	11.8	9.3	35	4	525565	CRSMB-8-3 2/100			

¹⁾ Corrosion resistance class CRC 4 to Festo standard FN 940070
Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, e.g. in the chemical or food industries. Such applications may need to be safeguarded by means of special testing (also FN 940082), using appropriate media.

Mounting kit SMB-8-FENG

Material: Wrought aluminium alloy Free of copper and PTFE





Dimensions and ordering data										
For piston Ø	B1	B2	D1	H1	L1	L2	Tightening torque [Nm]	Part no.	Туре	
32/40	35.1	8.7	M3	15.5	27	17	0.2	175705	SMB-8-FENG-3 2/40	
50/63	47	12.3	M4	20	27	17	0.5	175706	SMB-8-FENG-50/63	
80/100	64.3	15.7	M5	24.3	27	17	0.7	175707	SMB-8-FENG-80/100	

Positioning element SMM

Insertable in the slot lengthwise

Ambient temperature: -40 ... +120°C

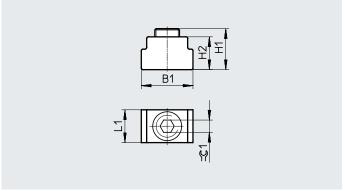
Materials:

 $\label{thm:constraint} \mbox{Housing: anodised wrought aluminium}$

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		

Corrosion resistance class CRC 3 to Festo standard FN 940070
 High corrosion stress. Outdoor exposure under moderate corrosive conditions. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment.

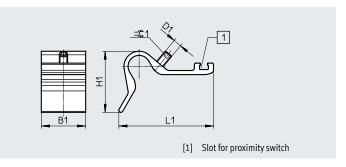
Sensor bracket DASP-M4-...-A

Material:

Anodised wrought aluminium alloy Screws: high-alloy stainless steel

RoHS-compliant





Dimensions and ordering data										
Туре	B1	D1	H1	L1	= © 1	Tightening torque	CRC ¹⁾	Weight	Part no.	Туре
						[Nm]		[g]		
DASP-M4-125-A	32.5	M5	28	45.4	2.5	1	3	26.5	1451483	DASP-M4-125-A
DASP-M4-160-A	32.5	M6	44.7	69.4	3	1	3	41.5	1553813	DASP-M4-160-A
DASP-M4-250-A	32.5	M6	56.3	88	3	1	3	60	1456781	DASP-M4-250-A
DASP-M4-320-A	32.5	M6	56.3	88	3	1	3	60	3015256	DASP-M4-320-A

¹⁾ Corrosion resistance class CRC 3 to Festo standard FN 940070

²⁾ Packaging unit

High corrosion stress. Outdoor exposure under moderate corrosive conditions. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment.

			Number of wires	Cable length [m]	Part no.	Туре			
ket M8x	x1, 3-pin								
	For SMT/SMI		3	2.5	★ 541333	NEBU-M8G3-K-2.5-LE3			
	SMTO/SMTS	O/SMEO-8E		5	★ 541334	NEBU-M8G3-K-5-LE3			
	For SMT/SMI	E-8 and	3	3 2.5		NEBU-M8W3-K-2.5-LE3			
	SMTO/SMTS	O/SMEO-8E		5	★ 541341	NEBU-M8W3-K-5-LE3			
et M1	2x1, 5-pin								
	For SMT/SMI	E-8M and	3	2.5	★ 541363	NEBU-M12G5-K-2.5-LE3			
	SMTO/SMTS	O/SMEO-8E		5	★ 541364	NEBU-M12G5-K-5-LE3			
	For SMT/SMI	E-8M and	3	2.5	541367	NEBU-M12W5-K-2.5-LE3			
	SMTO/SMTS	O/SMEO-8E		5	541370	NEBU-M12W5-K-5-LE3			
et M12	2x1, resistant to	welding spatter							
>	For SDBT and		3	3	30450	SIM-M12-RS-3GD-3			
7	For SDBT and	d SMTSO	3	3	30451	SIM-M12-RS-3WD-3			
~	TOTSBUTAN	u 3M130	,		30432				
	M8	simple disconnection	at is not intrinsically safe" in zo	mes z una zz agamst	548067	NEAU-M8-GD	1		
	M12	simple disconnection • ATEX category: gas: II 30	G / dust: II 3D		548068	NEAU-M12-GD	1		
)*									
ckaging	gunit								
ring da	ata - Mounting	components			Part no.	Туре			
	·	nnosting cables in place				SMBK-8			
3	FOI HIXING COI	nnecting cables in place		534254	SWIDN-6				
ring da	ata – Sensor tes	ter							
	Description			Part no.	Туре				
		e functionality of proximity swite		ge supply	158481	SM-TEST-1			
	Adjusting	proximity switches on the cylind	ler						
olas a d	ata Incaninti	- labala							
ring da	ata – Inscription Size	1 ladels			Part no.	Туре	PU ¹		
	1 5170								

1) Packaging unit

23x4 mm

Festo core product range

Generally ready for shipping ex works in 24 hours

Generally ready for shipping ex works in 5 days

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ASLR-L-423

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