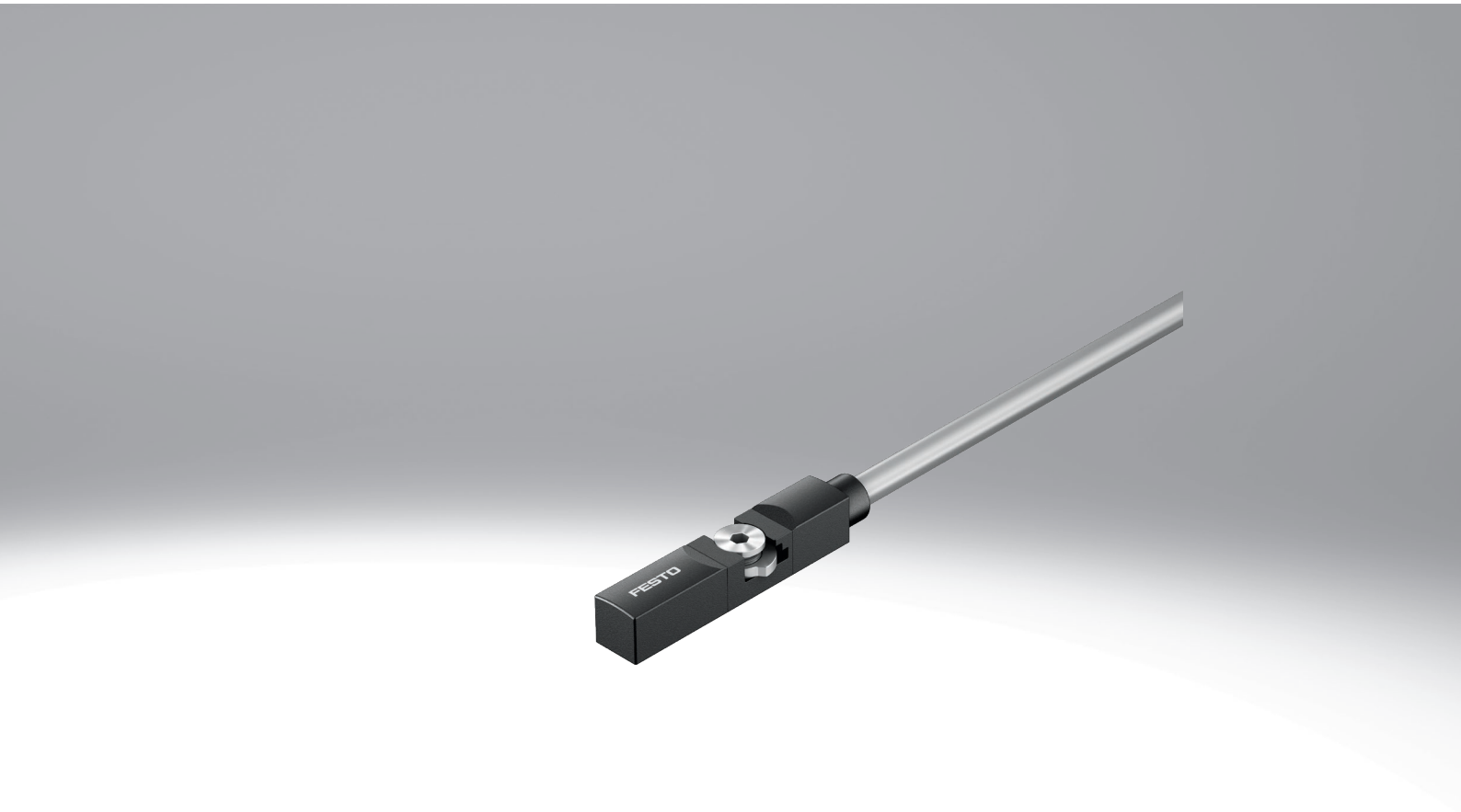
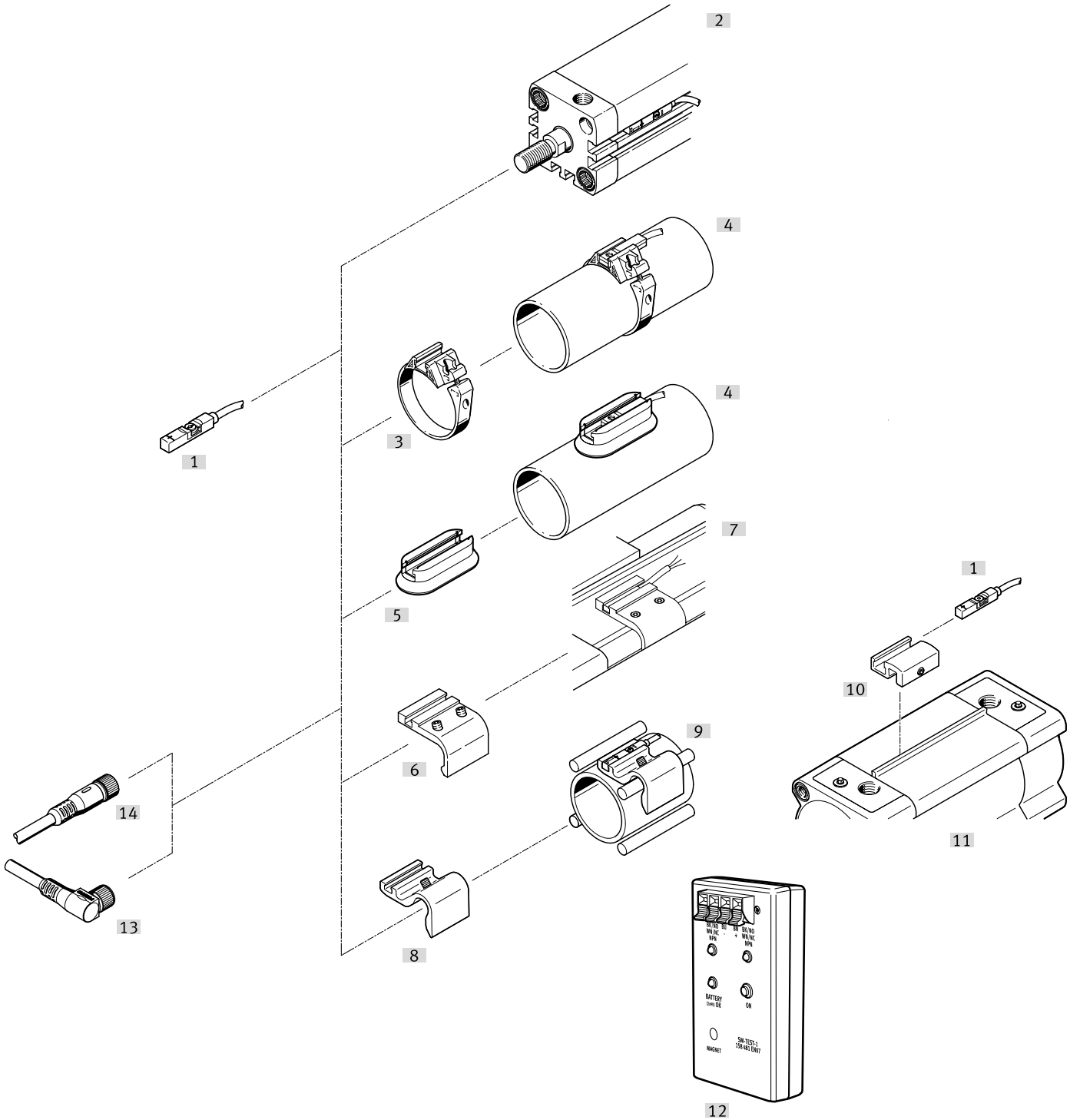
Proximity switches for T-slot



★	Festo Core Range Solves the majority of your automation tasks	With the Festo Core Range, we have selected the most important products and functions from our broad product catalogue, and added the quickest delivery.
Worldwide:	Quickest delivery – wherever, whenever	The Core Range offers you the best value for your automation tasks.
Simply good:	Expected high Festo quality	
Fast:	Easy and fast to select	

Just look for the star!

Peripherals overview



Peripherals overview

Mounting components and accessories		→ Page
Proximity switches		
[1]	CRSMT-8M-..., with cable	5
Connecting cables		
[14]	NEBU-M...G...	12
[13]	NEBU-M...W...	12

Mounting components and accessories		→ Page
Mounting kits and accessories		
[3]	Mounting kit SMBR	9
[5]	Mounting kit CRSMB, corrosion-resistant	9
[6]	Mounting kit SMB-8-FENG	10
[8]	Sensor bracket DASP-M4-...	11
[10]	Mounting kit SMB-8-C	10
[12]	Sensor tester SM-TEST-1	12
–	Positioning element SMM-8	11
–	Clip SMBK-8	12
–	Inscription label ASLR	12
–	Safety clip NEAU	12
Drives		
[2]	Drives with T-slot	–
[4]	Round cylinder	–
[7]	Standards-based cylinder DSBC	–
[9]	Drives with tie or mounting rod	–
[11]	Standards-based cylinders DSBF	–

Type codes

001	Series	
CRSMT	Proximity sensor	

002	Design type	
8	For T-slot	

003	Sensor version	
M	Can be inserted in the slot	

004	Switching output	
PS	3-wire PNP N/O contact	

005	Rated operating voltage	
24V	24 V	

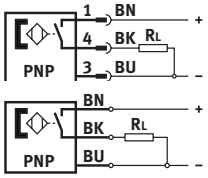
006	Cable characteristic	
K	Standard/suitable for energy chains	

007	Cable length [m]	
0,3	0.3 m	
5,0	5 m	
10,0	10 m	

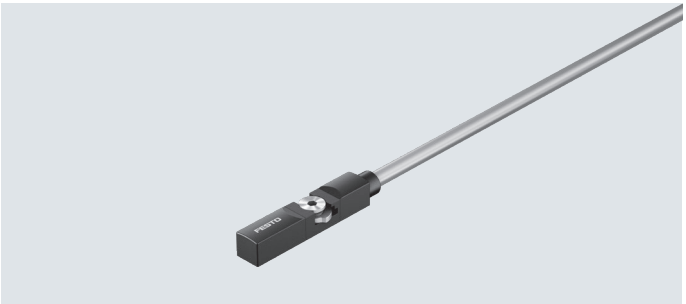
008	Connection technology	
OE	Open end	
M8D	M8, rotatable thread	
M12	M12, rotatable thread	

Data sheet – Magneto-resistive

Function
PNP, N/O contact, with plug



- Food-safe
- Acid resistant
- Alkali resistant
- Resistant to cooling lubricants



General technical data	
Design	For T-slot
Based on standard	EN 60947-5-2
Application information	Support / Actuator-sensor overview “The right sensor for the actuator”
CE marking (see declaration of conformity)	To EU EMC Directive
	To EU Explosion Protection Directive (ATEX)
	To EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC
	To UK EX instructions
	To UK RoHS instructions
Certification	RCM compliance mark
KC mark	KC EMC
Special characteristics	Resistant to acids, alkalis, cooling lubricants
Inductive protective circuit	Adapted to MZ, MY, ME coils
Resistance to interference from magnetic fields	Design insensitive to permanent magnetic fields < Bon
Food-safe[1)]	See supplementary information on materials
Note on materials	RoHS-compliant, halogen-free
PWIS conformity	VDMA24364-B2-L

1) Additional information is available at www.festo.com/sp → Certificates.

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

Switching output		
Switching element function		N/O contact
Switching output		PNP
Repetition accuracy	[mm]	0.2
Switch-on time	[ms]	≤ 1
Switch-off time	[ms]	≤ 1
Max. switching frequency	[Hz]	180
Max. output current	[mA]	100
Max. output current in mounting kit	[mA]	100
Max. switching capacity DC	[W]	2.8
Max. switching capacity DC in mounting kits	[W]	2.8
Voltage drop	[V]	< 1.5
Off-state current	[mA]	< 0.05

Output, additional data	
Short circuit current rating	Yes
Overload protection	Provided

Data sheet – Magneto-resistive

Electronics				
Switching output		PNP		
Rated operating voltage	[V DC]	24		
Operating voltage range	[V DC]	5 ... 30		
Residual ripple	[%]	10		
Reverse polarity protection		For all electrical connections		

Electromechanics			
Electrical connection	OE	M8D	M12
Connection type	Cable	Cable with plug	
Connection technology	Open end	M8x1, A-coded to EN 61076-2-104	M12x1, A-coded to EN 61076-2-101
Number of pins/wires	3		
Type of mounting	–	Screw-type lock	
	Screw-clamped		
	Inserted in the slot from above		
Outlet direction of connection	In-line		
Cable characteristic	Standard + energy chain		
Cable test conditions	Cable chain: 5 million cycles, bending radius 75 mm		
	Torsional resistance: › 300,000 cycles, ±270°/0.1 m		
	Bending strength: to Festo standard		

Mechanics			
Electrical connection	OE	M8D	M12
Mounting position	Any		
Tightening torque [Nm]	0.1 ... 0.6		
Max. tightening torque [Nm]	0.6		
Information on materials			
Housing	High-alloy stainless steel, PA, PP		
Union nut	–	Nickel-plated brass	
Cable sheath	TPE-O		
Insulating sheath	PP		
Plug housing	–	PP	
Wire ends	Wire end sleeves	–	
Pin contacts	–	Nickel-plated and gold-plated brass	

Display/operation	
Switching status indication	Yellow LED
Function reserve indication	Orange LED

Immission/emission		
Ambient temperature with flexible cable installation	[°C]	–20 ... 85
Degree of protection		IP65
		IP68
		IP69K

ATEX		
ATEX category for gas		II 3G
Type of ignition protection for gas		Ex nA IIC T4 X Gc
ATEX category for dust		II 3D
Type of ignition protection for dust		Ex tc IIIC T120°C X Dc
Explosion-proof ambient temperature	[°C]	–40°C <= Ta <= +85°C
CE marking (see declaration of conformity)		To EU EMC Directive
		To EU Explosion Protection Directive (ATEX)

Data sheet – Magneto-resistive

Pin allocation to EN 60947-5-2

M8x1, 3-pin
N/O contact



Pin	Wire colour	Allocation
1	Brown	+
3	Blue	–
4	Black	Output

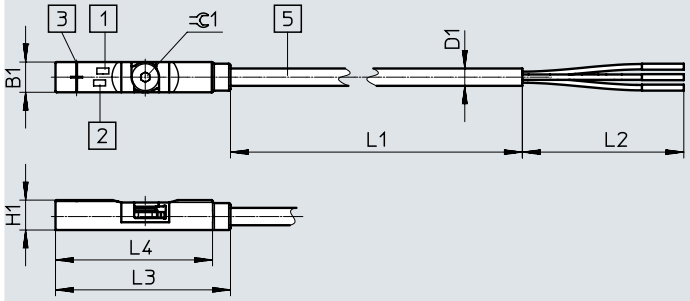
M12x1, 3-pin
N/O contact



Pin	Wire colour	Allocation
1	Brown	+
3	Blue	–
4	Black	Output

Dimensions, open end

Download CAD data ➔ www.festo.com



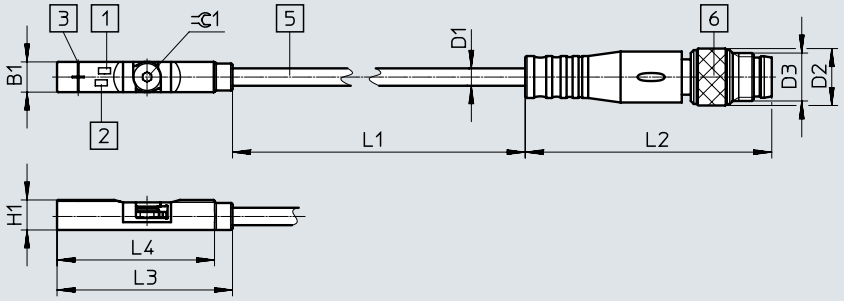
[1] Yellow light emitting diode
[2] Orange light emitting diode
[3] Centre of the sensor element
[5] Connecting cable

Type	B1	D1 ø	H1	L1	L2	L3	L4	⊂1
CRSMT-8M-PS-24V-K-5.0-OE	5	2.9	5	5000	50	29.3	26.3	1.5
CRSMT-8M-PS-24V-K-10.0-OE				10000				

Data sheet – Magneto-resistive

Dimensions with plug

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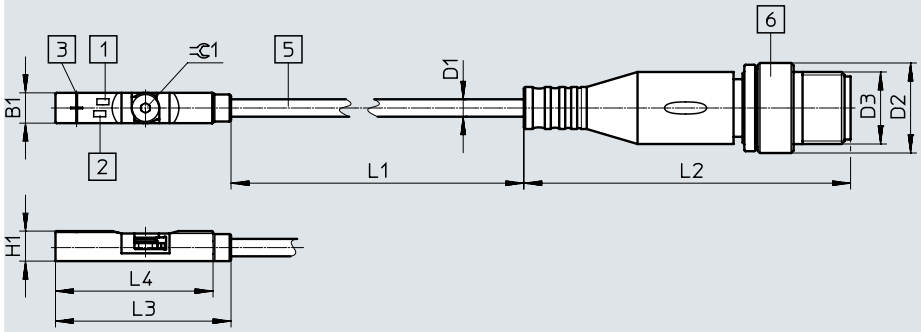
[1] Yellow light emitting diode
[2] Orange light emitting diode
[3] Centre of the sensor element
[4] Slot for screwdriver
[5] Connecting cable
[6] Plug module M8D

L1 Cable length

Type	B1	D1 ø	D2	D3	H1	L2	L3	L4	=C 1
CRSMT-8M-PS-24V-K-0.3-M8D	5	2.9	9.5	M8x1	5	41.1	29.3	26.3	1.5

Dimensions with plug

Download CAD data ➔ www.festo.com



[1] Yellow light emitting diode
[2] Orange light emitting diode
[3] Centre of the sensor element
[4] Slot for screwdriver
[5] Connecting cable
[6] Plug module M12 3-pin

L1 Cable length

Type	B1	D1 ø	D2 ø	D3	H1	L2	L3	L4	=C 1
CRSMT-8M-PS-24V-K-0.3-M12	5	2.9	15	M12x1	5	54.5	29.3	26.3	1.5

Ordering data

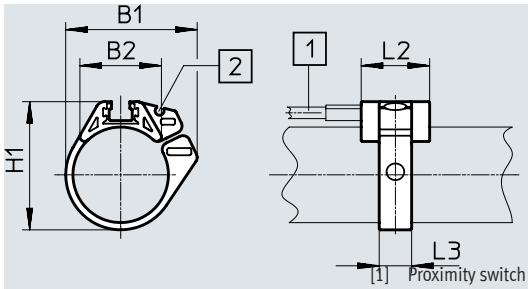
	Switching output	Electrical connection Cable	Electrical connection Cable with plug, screw-type lock	Cable length [m]	Weight [g]	Part no.	Type
N/O contact, corrosion-resistant							
	PNP	3-wire, open end	–	5	47.6	**574380**	**CRSMT-8M-PS-24V-K-5,0-OE-EX2**
	PNP	3-wire, open end	–	10	93.4	**574381**	**CRSMT-8M-PS-24V-K-10,0-OE-EX2**
	PNP	3-pin with plug	M12x1, A-coded To EN 61076-2-101	0.3	9.1	**574382**	**CRSMT-8M-PS-24V-K-0,3-M12-EX2**
	PNP	3-pin with plug	M8x1, A-coded To EN 61076-2-104	0.3	16.1	**574383**	**CRSMT-8M-PS-24V-K-0,3-M8D-EX2**

Accessories

Mounting kit SMBR

Material:
Polyacetal
RoHS-compliant





[1] Proximity switch SME-8-..., SMT-8-...
[2] Guide groove for switch cable

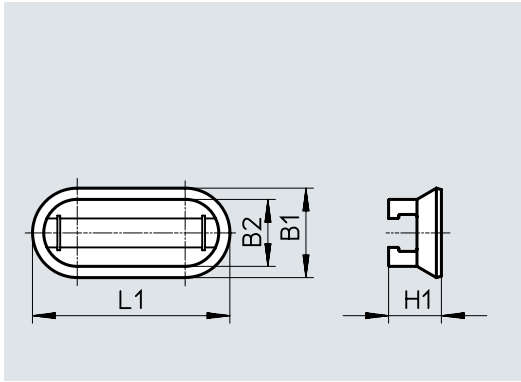
Dimensions and ordering data

For piston ⌀	B1	B2	H1	L2	L3	Part no.	Type
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
Free of copper and PTFE





Ordering data

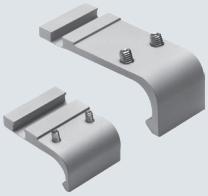
For piston ⌀	B1	B2	H1	L1	CRC[1)]	Part no.	Type
32 ... 100	15.8	11.8	9.3	35	4	**525565**	**CRSMB-8-32/100**

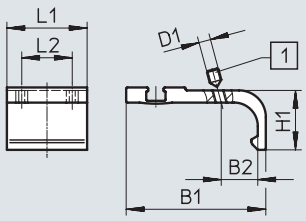
1) Corrosion resistance class CRC 4 to Festo standard FN 940070
Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, e.g. in the chemical or food industries. Such applications may need to be safeguarded by means of special testing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

Accessories

Mounting kit
SMB-8-FENG

Material:
Wrought aluminium alloy
Free of copper and PTFE





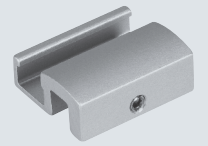
[1] Threaded pin

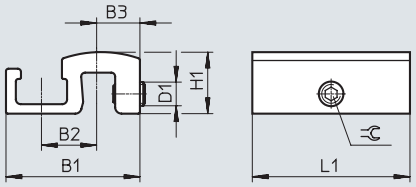
Dimensions and ordering data

For piston ø	B1	B2	D1	H1	L1	L2	Tightening torque [Nm]	Part no.	Type
32/40	35.1	8.7	M3	15.5	27	17	0.2	**175705**	**SMB-8-FENG-32/40**
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**

Mounting kit SMB-8-C

Temperature: –40 ... 120°C
Material:
Retaining bracket: Anodised wrought aluminium alloy
Screws: High-alloy stainless steel
Free of copper and PTFE,
RoHS-compliant





Dimensions and ordering data

Type	B1	B2	B3	D1	H1	L1	⊂ 1	Tightening torque [Nm]	CRC[1]	Weight [g]	Part no.	Type
SMB-8-C	17	7	5.5	M3	7.8	20	1.5	0.2 ... 0.6	3	3.5	**1806790**	**SMB-8-C**

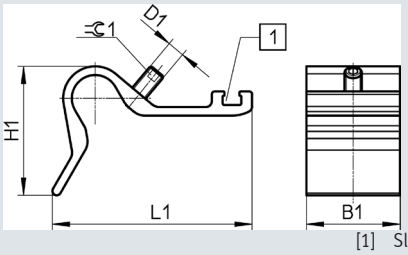
1) Corrosion resistance class CRC 3 to Festo standard FN 940070
High corrosion stress. Outdoor exposure under moderate corrosive conditions. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment.

Accessories

Sensor bracket DASP-M4-...-A

Material:
Anodised wrought aluminium alloy
Screws: High-alloy stainless steel
RoHS-compliant





[1] Slot for proximity switch

Dimensions and ordering data

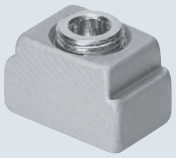
Type	B1	D1	H1	L1	⊂ 1	Tightening torque [Nm]	CRC[1]	Weight [g]	Part no.	Type
DASP-M4-125-A	32.5	M5	28	45.4	2.5	1	3	26.5	**1451483**	**DASP-M4-125-A**
DASP-M4-160-A	32.5	M6	44.7	69.4	3	1	3	41.5	**1553813**	**DASP-M4-160-A**
DASP-M4-250-A	32.5	M6	56.3	88	3	1	3	60	**1456781**	**DASP-M4-250-A**
DASP-M4-320-A	32.5	M6	56.3	88	3	1	3	60	**3015256**	**DASP-M4-320-A**

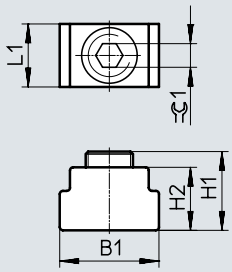
1) Corrosion resistance class CRC 3 to Festo standard FN 940070
High corrosion stress. Outdoor exposure under moderate corrosive conditions. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment.

Positioning element SMM
Inserted in the 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.	Type	PU[2]
6.3	5.0	4.0	4.0	1.5	3	**547941**	**SMM-8**	**10**

1) 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.
2) Packaging unit

Accessories

Ordering data – Sensor mounting

	Description	Part no.	Type
	Stainless steel sensor mounting for piston ⌀ 32 ... 63	8174843	DASP-V4-8-A-R1
	Stainless steel sensor mounting for piston ⌀ 80 ... 125	8174844	DASP-V4-12-A-R1

Ordering data – Connecting cables

Data sheets → Internet: nebu/sim

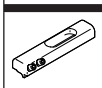
		Number of wires	Cable length [m]	Part no.	Type
Socket M8x1, 3-pin					
	For SMT/SME-8... and SMTO/SMTSO/SMEO-8E	3	2.5	★ 541333	NEBU-M8G3-K-2.5-LE3
			5	★ 541334	NEBU-M8G3-K-5-LE3
	For SMT/SME-8... and SMTO/SMTSO/SMEO-8E	3	2.5	★ 541338	NEBU-M8W3-K-2.5-LE3
			5	★ 541341	NEBU-M8W3-K-5-LE3
Socket M12x1, 5-pin					
	For SMT/SME-8M and SMTO/SMTSO/SMEO-8E	3	2.5	★ 541363	NEBU-M12G5-K-2.5-LE3
			5	★ 541364	NEBU-M12G5-K-5-LE3
	For SMT/SME-8M and SMTO/SMTSO/SMEO-8E	3	2.5	541367	NEBU-M12W5-K-2.5-LE3
			5	541370	NEBU-M12W5-K-5-LE3

Ordering data – Safety clip for ATEX zone

	Size	Description	Part no.	Type	PU[1]
	M8	• Protects "equipment that is not intrinsically safe" in zones 2 and 22 against simple disconnection • ATEX category: gas: II 3G / dust: II 3D	548067	NEAU-M8-GD	1
	M12		548068	NEAU-M12-GD	1

1) Packaging unit

Ordering data – Impact protection

	Description	Part no.	Type
	Accessories for CRSMT-8M use in EX environment zone 2/22	8184143	SACC-N8-SP

Ordering data – Mounting components

	Description	Part no.	Type
	For fixing connecting cables in place	534254	SMBK-8

Ordering data – Sensor tester

	Description	Part no.	Type
	• Testing the functionality of proximity switches using the integrated voltage supply • Adjusting proximity switches on the cylinder	158481	SM-TEST-1

Ordering data – Inscription labels

	Size	Part no.	Type	PU[1]
	23x4 mm	541598	ASLR-L-423	34

1) Packaging unit

Unikeyic Electronics

Global Electronic Components Distributor

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FESTO:

CRVZS-0.4 153367 HGL-1/8-QS-6 QS-1/2-16 QSML-6 153307 153269 NPQP-Y-R12-Q12-FD VBQF-U-G14-E NPQP-D-Q4-S8-FD-P10 QSF-1/4-8-B VABM-B10-25S-G38-10 SASC-P4-A-M8-A QSF-3/8-8-B NPQP-LQ-R18-Q4-FD-P10 NPQP-LQ-R18-Q8-FD-P10 NPQP-T-Q8-E-FD-P10 QS-10H-6 QS-1/8-8-I SGS-M10X1,25 VABM-B10-25S-G38-6-P3 NPQP-Y-Q6-E-FD-P10 153151 153031 QSY-6H-4 QSLL-G1/2-12 QSS-8-F DSBC-80-20-D3-PPSA-N3 NPQP-L-Q10-E-FD-P10 NPQH-T-Q14-E-P10