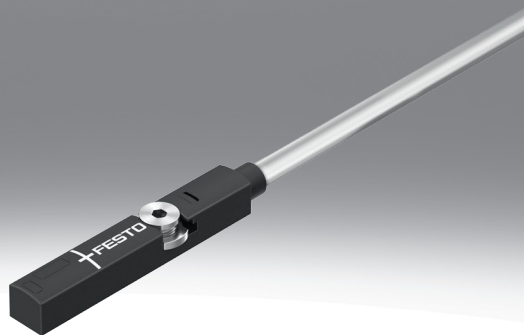


# Proximity switch SME-8M

**FESTO**



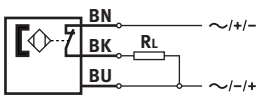
## Characteristics

### At a glance

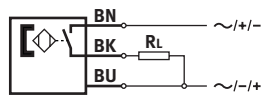
- Measuring principle: Magnetic reed
- LED switching status indication
- Cable length 0 to 3 m, 2 to 5 m, 5 m, 7.5 m, 0.2 ... 10 m

### Switching output

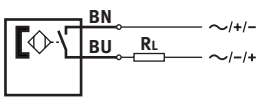
[DO] 3-wire N/C contact



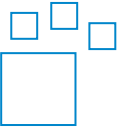
[DS] 3-wire N/O contact



[ZS] Normally open contact, 2-wire



### Ordering data - modular system



Configurable product

This product and all its product options can be ordered online via the configurator.

## Type code

001	Series
<b>SME</b>	Proximity sensor
002	Design type
<b>8</b>	For T-slot
003	Sensor version
<b>M</b>	Inserted in the slot from above
004	Switching output
<b>DO</b>	3-wire N/C contact
<b>DS</b>	3-wire N/O contact
<b>ZS</b>	Normally open contact, 2-wire
005	Rated operating voltage
	None
<b>24V</b>	24 V

006	Cable characteristic
<b>E</b>	Suitable for energy chains/robots
<b>K</b>	Standard/suitable for energy chains
007	Cable length [m]
	0.2 ... 10 m
<b>0,3</b>	0.3 m
<b>2,5</b>	2.5 m
<b>5,0</b>	5.0 m
<b>7,5</b>	7.5 m
008	Connection technology
<b>OE</b>	Open end
<b>M8</b>	M8, snap-on flange
<b>M8D</b>	M8, rotatable thread
<b>M12</b>	M12, rotatable thread

## Datasheet

## General technical data

Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104	Open end
Approval	RCM trademark, c UL us listed (OL)	
CE mark (see declaration of conformity) <sup>1)</sup>	To EU EMC Directive, In accordance with EU RoHS Directive	
UKCA marking (see declaration of conformity) <sup>2)</sup>	To UK instructions for EMC, To UK RoHS instructions	
Special characteristics	Oil resistant	
Note on materials	RoHS-compliant	
Instructions on use	<a href="https://www.festo.com/Drive-Sensor-Overview">https://www.festo.com/Drive-Sensor-Overview</a>	
LABS (PWIS) conformity	VDMA24364-B2-L	
Corrosion resistance class CRC <sup>3)</sup>	2 - Moderate corrosion stress	3 - high corrosion stress
Degree of protection	IP65, IP68	

1) For information about the area of use, see the EC declaration of conformity at: [www.festo.com/catalogue/smt](http://www.festo.com/catalogue/smt) → Support/Downloads.

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

2) For information about the area of use, see the EC declaration of conformity at: [www.festo.com/catalogue/smt](http://www.festo.com/catalogue/smt) → Support/Downloads.

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

3) More information [www.festo.com/x/topic/kbk](http://www.festo.com/x/topic/kbk)

## Input signal/measuring element

Measuring principle	Magnetic reed
Ambient temperature	-40 ... 70°C
Ambient temperature with moving cable	-5 ... 70°C

## Switching output

Switching output	3-wire N/C contact [D0]	3-wire N/O contact [DS]	Normally open contact, 2-wire [ZS]
Switching element function	N/C contact	N/O contact	
Switching output	Contacting, bipolar		
Voltage drop	4.25 V	1.17 ... 2.25 V	4.8 V
Max. output current	80 mA	500 mA	80 mA
Max. output current using mounting kits	80 mA		
Max. switching capacity AC	2.4 VA	10 VA	2.4 VA
Max. switching capacity DC	2.4 W	10 W	2.4 W
Max. switching capacity DC using mounting kits	2.4 W		
Max. switching capacity AC using mounting kits	2.4 VA		

## Output, additional data

Short circuit current rating	no
Overload protection	Not available

## Electronics

Switching output	Contacting, bipolar
Operational voltage range DC	5 ... 30 V
Operational voltage range AC	5 ... 30 V
Reverse polarity protection	no

## Datasheet

Electromechanics			
Connection technology	Open end [OE], M8, snap-on flange [M8], M8, rotatable thread [M8D], M12, rotatable thread [M12]	Open end [OE]	M8, rotatable thread [M8D]
Electrical connection 1, connection type	Cable, Cable with plug	Cable	Cable with plug
Electrical connection 1, connector system	M12x1, A-coded to EN 61076-2-101, M8x1, A-coded, to EN 61076-2-104, Open end	Open end	M8x1, A-coded, to EN 61076-2-104
Electrical connection 1, number of connections/cores	2, 3		3
Electrical connection 1, type of mounting	Snap-locking, Screw-type lock, Rotatable, Not rotatable	–	Screw-type lock, Rotatable
Electrical connection 1, compatible type of mounting	Compatible with latching lock, Compatible with rotatable screw-type lock, Compatible with rotatable/non-rotatable screw-type lock	–	Compatible with rotatable/non-rotatable screw-type lock
Connection outlet orientation	In-line		
Test conditions cable	Bending strength: to Festo standard, Test conditions on request, Energy chain: > 5 million cycles, bending radius 75 mm		
Cable length	0.2 ... 10 m	2.5 ... 7.5 m	0.3 m
Cable characteristic	Standard/suitable for energy chains		

Mechanics	
Type of mounting	Screw-clamped, Insertable in the slot from above
Material housing	PA, High-alloy stainless steel
Material cable sheath	TPE-U(PUR)
Material electrical contact	Gold-plated copper alloy
Material connector housing	TPE-U(PU)
Material screw-type lock	Nickel-plated brass

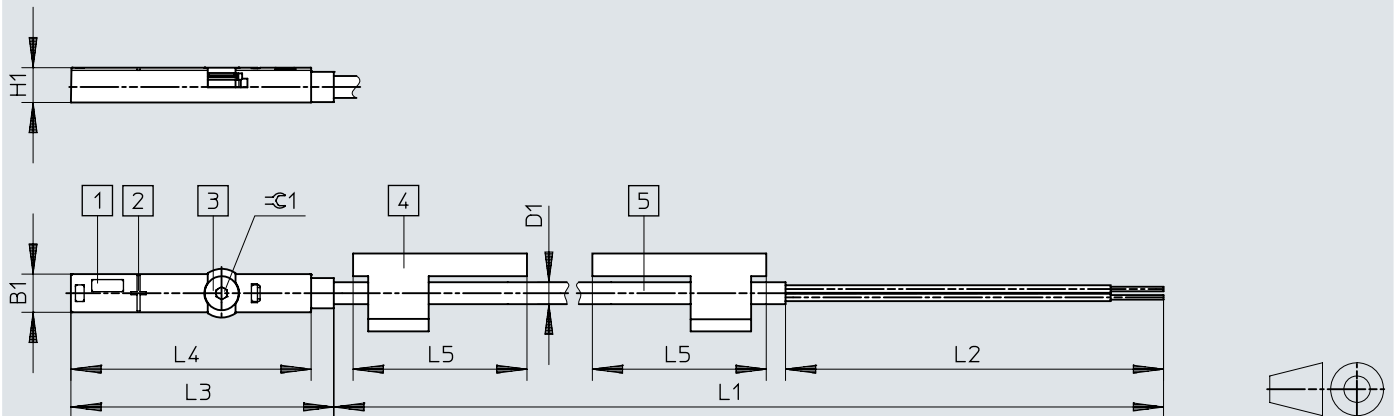
Display/operation	
Switching status indication	Yellow LED

Immission/emission	
Ambient temperature with moving cable	-5 ... 70°C
Degree of protection	IP65, IP68

## Dimensions

### Dimensions – SME-8M-...-OE – Cable

Download CAD data [www.festo.com](http://www.festo.com)

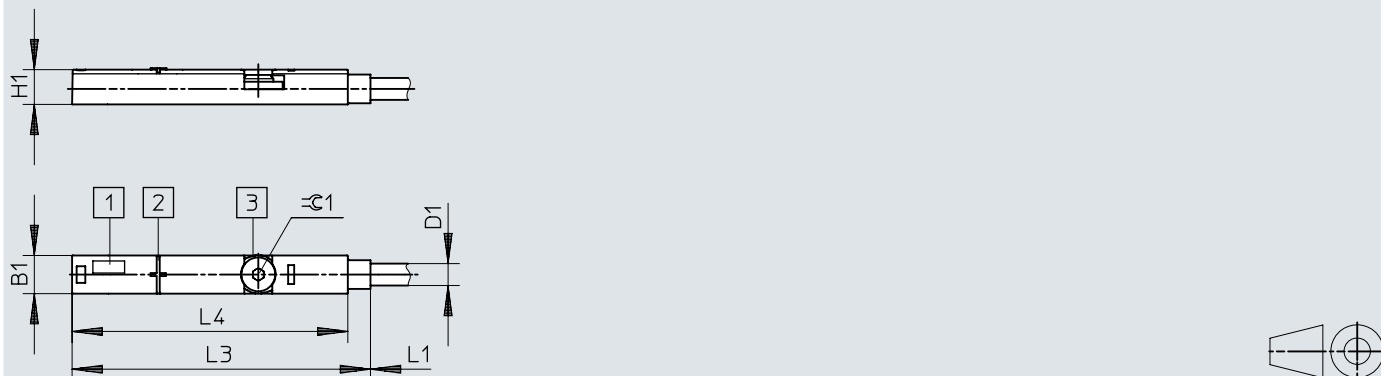


- [1] Yellow light emitting diode
- [2] Internal hex
- [3] Clamping piece, tightening torque 0.6 Nm
- [4] Inscription label holder
- [5] Connecting cable
- [6] L1 cable length

	B1 ±0,05	D1 ∅	H1 ±0,05	L2	L3	L4 ±0,1	L5	∅ 1
SME-8M-...-OE	5	2,9	4,6	50	34,8	31,8	23	1,5

## Dimensions

## Dimensions – SME-8M-DO-...-OE – Cable

Download CAD data [www.festo.com](http://www.festo.com)

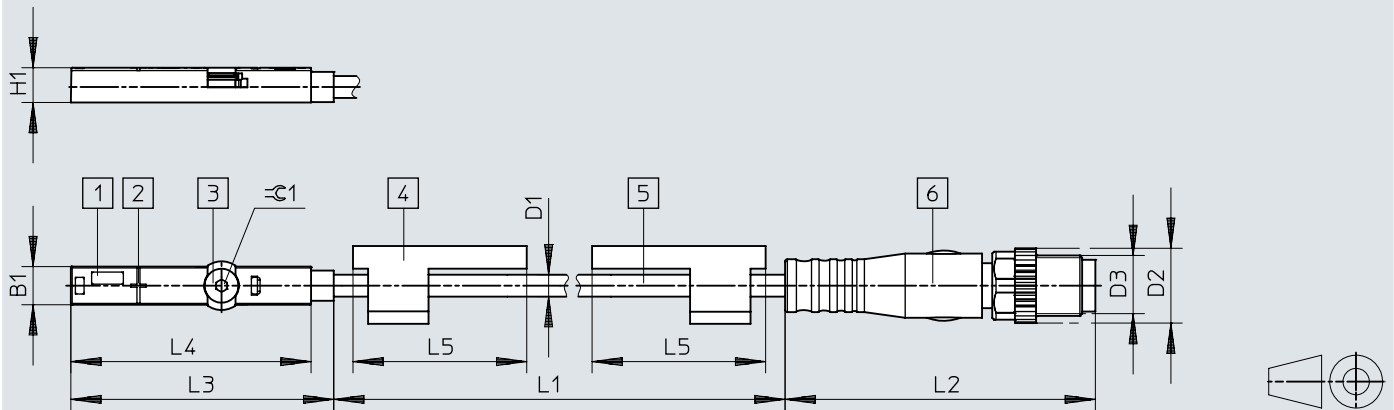
- [1] Light emitting diode
- [2] Internal hex
- [3] Clamping piece, tightening torque 0.6 Nm
- [4] L1 cable length

	B1 ±0,05	D1 ∅	H1 ±0,05	L3	L4 ±0,1	⌀ 1
SME-8M-DO-...-OE	5	2,9	4,6	39,5	36,5	1,5

## Dimensions

Dimensions – SME-8M-...-M8D – Cable with plug M8x1, rotatable thread

Download CAD data [www.festo.com](http://www.festo.com)



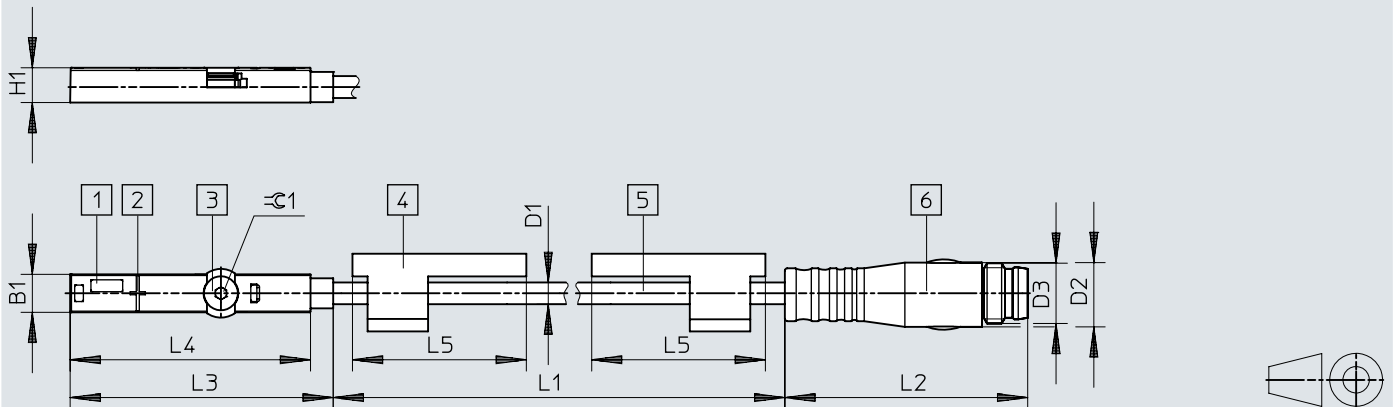
- [1] Yellow light emitting diode
- [2] Internal hex
- [3] Clamping piece, tightening torque 0.6 Nm
- [4] Inscription label holder
- [5] Connecting cable
- [6] Plug suitable for connecting cable NEBU-M8
- [7] L1 cable length

	B1 ±0,05	D1 ∅	D2 ∅	D3	H1 ±0,05	L2	L3	L4 ±0,1	L5	⌀ 1
SME-8M-...-M8D	5	2,9	9,6	M8x1	4,6	41,1	34,8	31,8	23	1,5



## Dimensions

Dimensions – SME-8M-...-M8 – Cable with M8x1 plug, snap collar

Download CAD data [www.festo.com](http://www.festo.com)

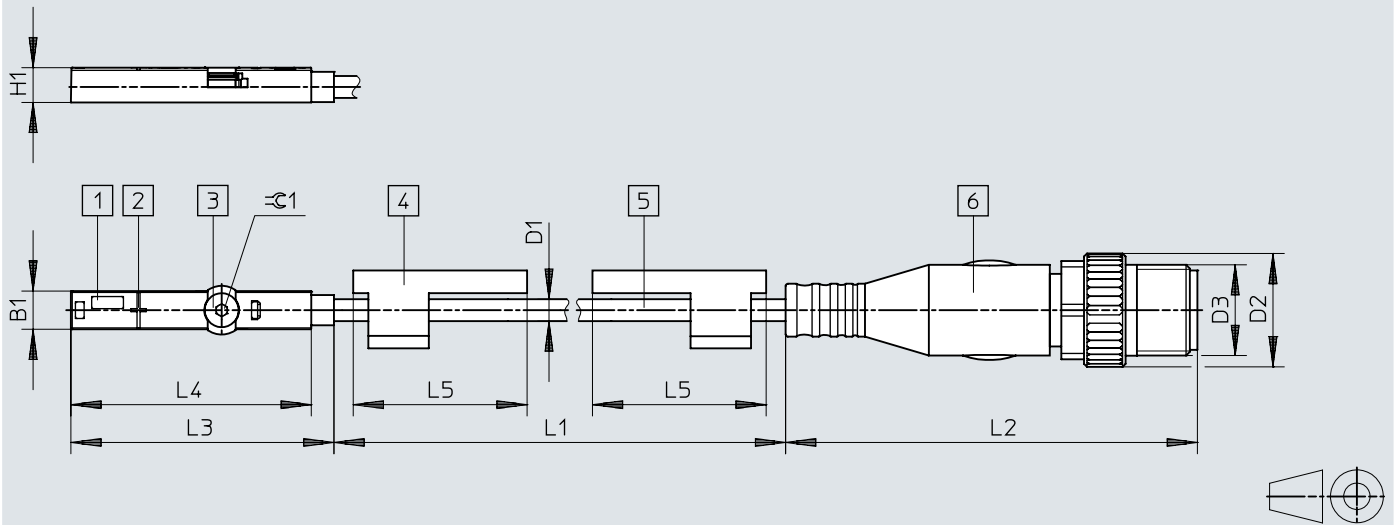
- [1] Yellow light emitting diode
- [2] Internal hex
- [3] Clamping piece, tightening torque 0.6 Nm
- [4] Inscription label holder
- [5] Connecting cable
- [6] Plug suitable for connecting cable NEBU-M8
- [7] L1 cable length

	B1 ±0,05	D1 ∅	D2 ∅	D3	H1 ±0,05	L2	L3	L4 ±0,1	L5	±0.1
SME-8M-...-M8	5	2,9	8,5	M8x1	4,6	32,7	34,8	31,8	23	1,5

## Dimensions

Dimensions – SME-8M-...-M12 – Cable with plug M12x1, rotatable thread

Download CAD data [www.festo.com](http://www.festo.com)

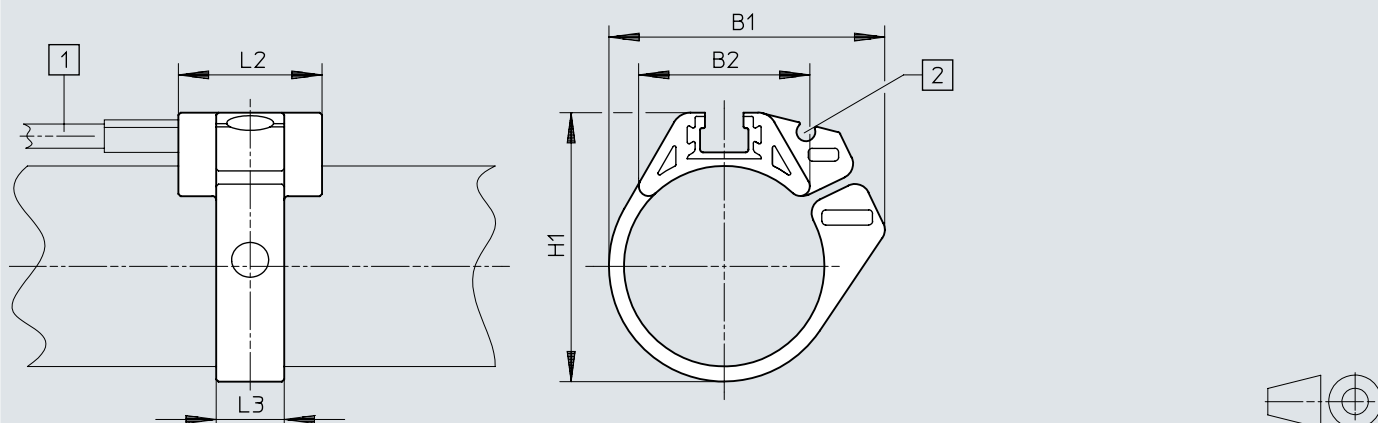


- [1] Yellow light emitting diode
- [2] Internal hex
- [3] Clamping piece, tightening torque 0.6 Nm
- [4] Inscription label holder
- [5] Connecting cable
- [6] Plug suitable for connecting cable NEBU-M12
- [7] L1 cable length

	B1	D1 ∅	D2	D3	H1	L2	L3	L4	L5	⌀ 1
SME-8M-...-M12	5	2,9	15	M12x1	4,6	54,5	34,8	31,8	23	1,5

## Dimensions

## Dimensions – Mounting kit SMBR

Download CAD data [www.festo.com](http://www.festo.com)

[1] Proximity switches SME-8- ..., SMT-8- ...

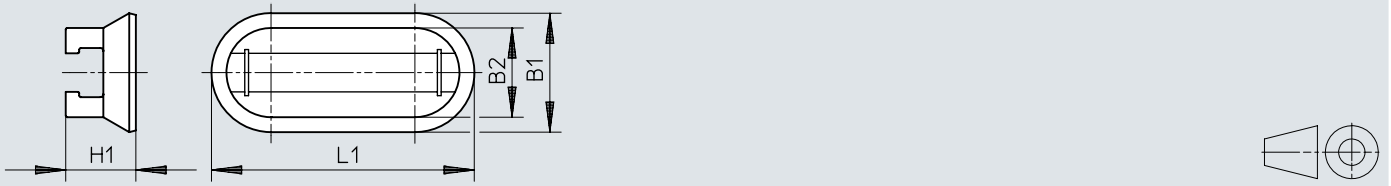
[2] Guide slot for switch cable

	B1	B2	H1	L2	L3
SMBR-8-8	18,9	12,3	17,5	19	7
SMBR-8-10	20,4	13,7	19,9	19	7
SMBR-8-12	22,7	14,3	21,9	19	7
SMBR-8-16	28,2	16,9	25,7	19	8
SMBR-8-20	34,5	20,8	30,4	19	9
SMBR-8-25	36,7	22,7	35,6	19	9
SMBR-8-32	41,7	24,6	42,7	19	9
SMBR-8-40	47,1	26,5	50,7	19	9
SMBR-8-50	56,4	28,6	61,5	19	9
SMBR-8-63	69,4	32	74,5	19	9

## Dimensions

### Dimensions – Mounting kit CRSMB

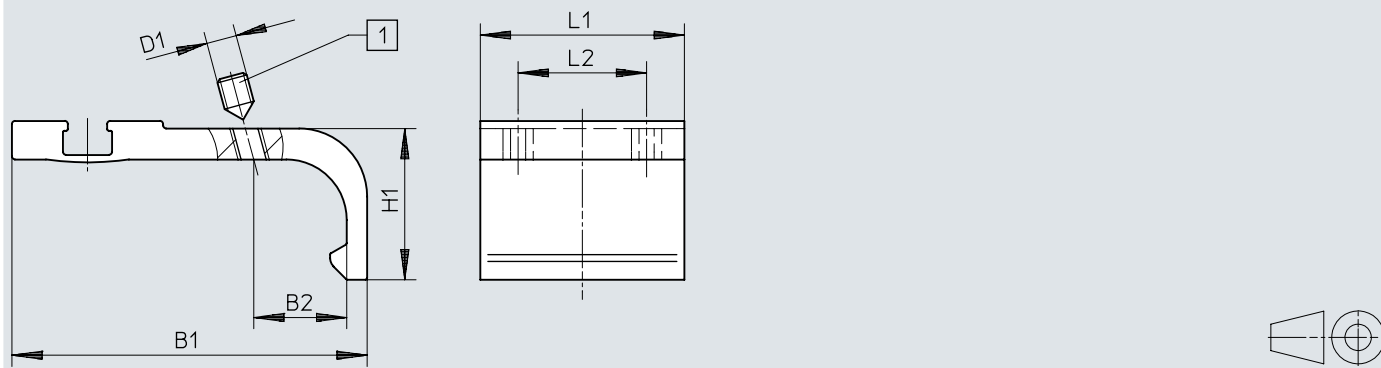
Download CAD data [www.festo.com](http://www.festo.com)



	B1	B2	H1	L1
CRSMB-8-32/100	15,8	11,8	9,3	35

## Dimensions

## Dimensions – Mounting kit SMB-8-FENG

Download CAD data [www.festo.com](http://www.festo.com)

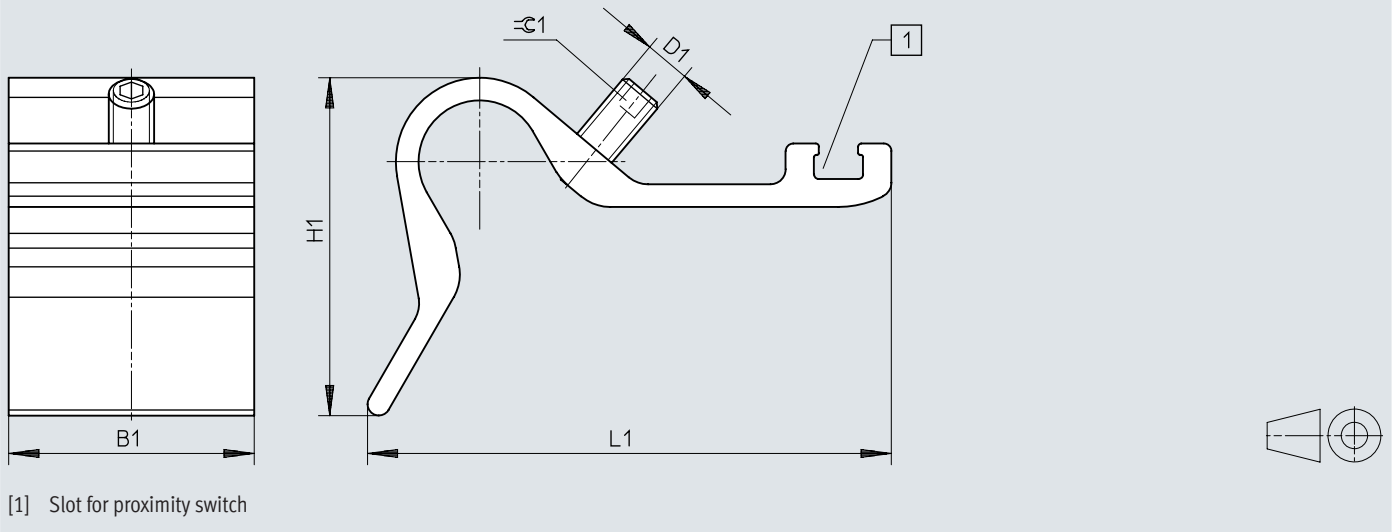
[1] Threaded pin

	B1	B2	D1	H1	L1	L2
SMB-8-FENG-32/40	35,1	8,7	M3	15,5	27	17
SMB-8-FENG-50/63	47	12,3	M4	20	27	17
SMB-8-FENG-80/100	64,3	15,7	M5	24,3	27	17

## Dimensions

Dimensions – Sensor bracket DASP-M4-...-A

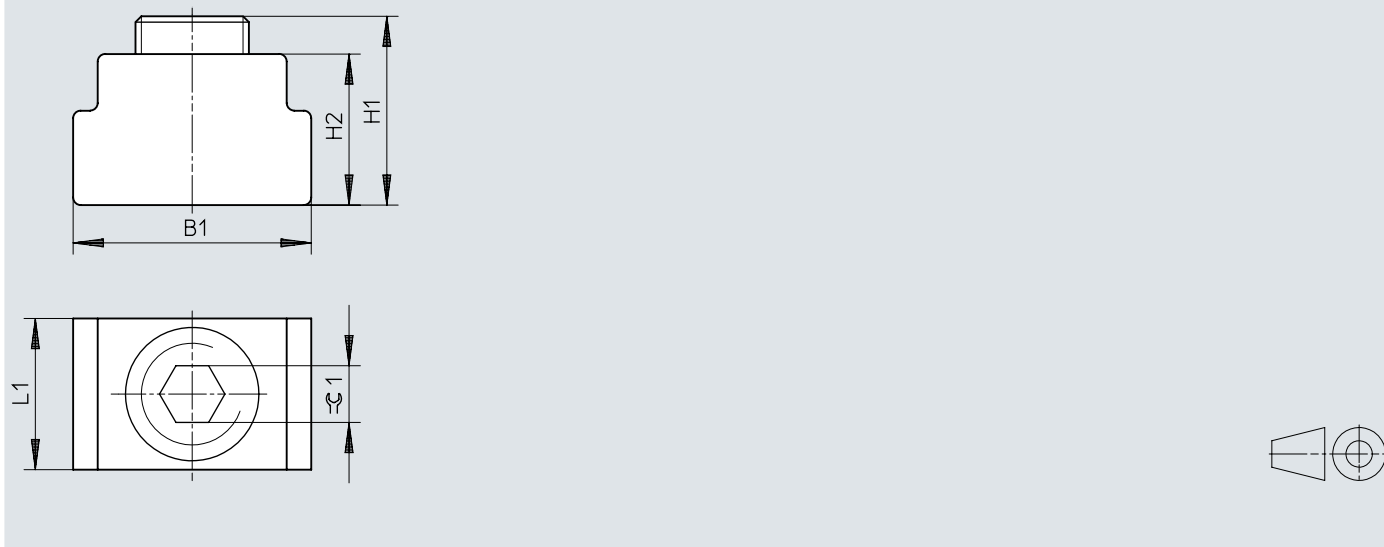
Download CAD data [www.festo.com](http://www.festo.com)



	B1	D1	H1	L1	$\pm 0.1$
DASP-M4-125-A	32,5	M5	28	45,4	2,5
DASP-M4-160-A	32,5	M6	44,7	69,4	3
DASP-M4-250-A	32,5	M6	56,3	88	3
DASP-M4-320-A	32,5	M6	56,3	88	3


## Dimensions

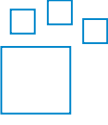
## Dimensions – Positioning element SMM

Download CAD data [www.festo.com](http://www.festo.com)

	B1	H1	H2	L1	$\varnothing 1$
SMM-8	6,3	5,0	4,0	4,0	1,5

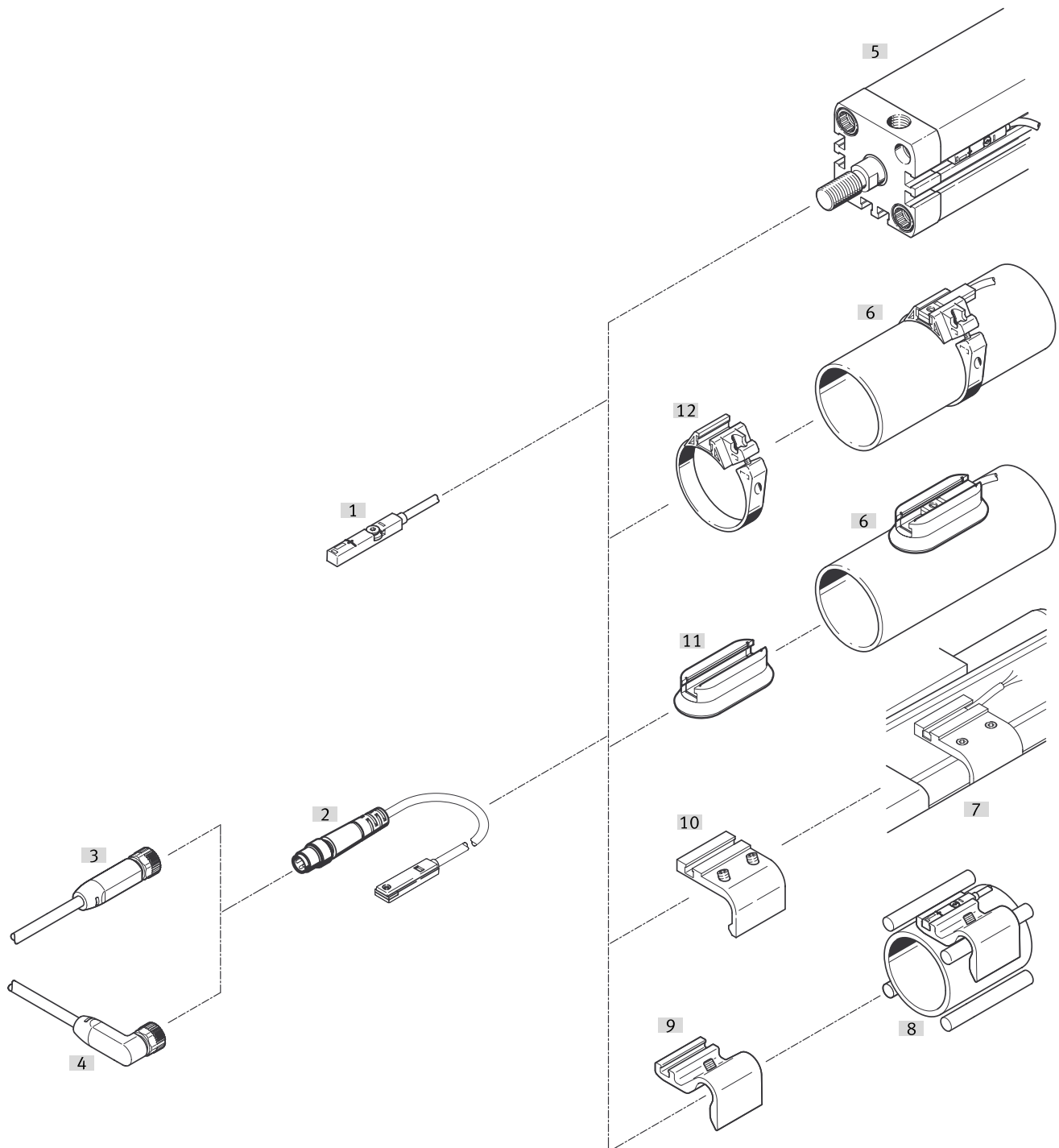
## Ordering data

Ordering data					
	Electrical connection 1, connector system	Cable length	Product weight	Part no.	Type
	M8x1, A-coded, to EN 61076-2-104	0.3 m	8.9 g	543861	SME-8M-DS-24V-K-0,3-M8D
	Open end	2.5 m	26.3 g	543872	SME-8M-ZS-24V-K-2,5-OE
			29.8 g	543862	SME-8M-DS-24V-K-2,5-OE
		5 m	58.3 g	543863	SME-8M-DS-24V-K-5,0-OE
		7.5 m	86.8 g	543876	SME-8M-DS-24V-K-7,5-OE
			87.1 g	546799	SME-8M-DO-24V-K-7,5-OE

Modular product system – ordering information					
	Electrical connection 1, connector system	Cable length	Product weight	Part no.	Type
	M12x1, A-coded to EN 61076-2-101, M8x1, A-coded, to EN 61076-2-104, Open end	0.2 ... 10 m	8.9 ... 87.1 g	543892	SME-8M-...-



## Peripherals




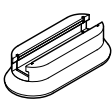
Accessories			→ Link
Type/order code	Description		
[1] SME-8-K-...	With cable		<a href="#">sme-8</a>
[2] SME-8-K-LED-230	Operating voltage range up to 230V direct current/AC		<a href="#">sme-8</a>
[3] NEBA-M...G...	Straight socket		19
[4] NEBA-M...W...	Angled socket		20
[5] Drives with T-slot	-		<a href="#">-</a>
[6] Round cylinder	-		<a href="#">-</a>
[7] Mounting kit SMBR	-		<a href="#">-</a>
[8] Drives with tie rod or mounting rod	-		<a href="#">-</a>
[9] Sensor bracket DASP-M4	-		19

## Peripherals

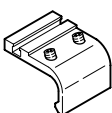
Accessories		→ Link
Type/order code	Description	
[10] Mounting kit SMB-8-FENG	–	<a href="#">19</a>
[11] Mounting kit CRSMB	Corrosion resistant	<a href="#">19</a>
[12]		<a href="#">19</a>


## Accessories


Mounting kit SMBR						
	Material retaining bracket	Material profile	Ambient temperature	Corrosion resistance class CRC	Part no.	Type
	POM	Wrought aluminium alloy	-20 ... 70 °C	2 - Moderate corrosion stress	175096	SMBR-8-25
					175092	SMBR-8-10
					175099	SMBR-8-50
					175091	SMBR-8-8
					175098	SMBR-8-40
					175094	SMBR-8-16
					175095	SMBR-8-20
					175100	SMBR-8-63
					175093	SMBR-8-12
175097	SMBR-8-32					

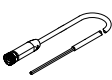
Mounting kit CRSMB					
	For piston diameter	Ambient temperature	Corrosion resistance class CRC <sup>1)</sup>	Part no.	Type
	Ø32 - Ø100	-40 ... 90 °C	4 - Very high corrosion stress	525565	CRSMB-8-32/100

1) More information [www.festo.com/x/topic/kbk](http://www.festo.com/x/topic/kbk)

Mounting kit SMB-8-FENG					
	Size	Note on materials	LABS (PWIS) conformity	Part no.	Type
	8	RoHS-compliant	VDMA24364-B2-L	175706	SMB-8-FENG-50/63
				175707	SMB-8-FENG-80/100
				175705	SMB-8-FENG-32/40

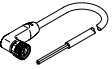
Positioning element SMM						
	Material housing	Type of mounting	Ambient temperature	Corrosion resistance class CRC	Part no.	Type
	Wrought aluminium alloy, Anodised	Clamped in T-slot, Insertable in the slot lengthwise	-40 ... 120 °C	3 - high corrosion stress	547941	SMM-8

Sensor bracket DASP-M4-...-A						
	Tightening torque	Material housing	Corrosion resistance class CRC	Product weight	Part no.	Type
	0.6 ... 1 Nm	Wrought aluminium alloy, Anodised	3 - high corrosion stress	26.5 g	1451483	DASP-M4-125-A
				41.5 g	1553813	DASP-M4-160-A
				60 g	3015256	DASP-M4-320-A
					1456781	DASP-M4-250-A

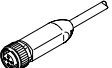
Connecting cables socket M8x1, 3-pin, straight socket					
	Electrical connection 1, number of connections/cores	Electrical connection 1, connector system	Cable length	Part no.	Type
	3	M8x1, A-coded, to EN 61076-2-104	2.5 m	8078223	NEBA-M8G3-U-2.5-N-LE3
			5 m	8078224	NEBA-M8G3-U-5-N-LE3

## Accessories


## Connecting cables socket M8x1, 3-pin, angled plug socket

	Electrical connection 1, number of connections/cores	Electrical connection 1, connector system	Cable length	Part no.	Type
	3	M8x1, A-coded, to EN 61076-2-104	2.5 m	<b>8078230</b>	<b>NEBA-M8W3-U-2.5-N-LE3</b>
			5 m	<b>8078231</b>	<b>NEBA-M8W3-U-5-N-LE3</b>


## Connecting cables socket M12x1, 5-pin, straight socket

	Electrical connection 1, number of connections/cores	Electrical connection 1, connector system	Cable length	Part no.	Type
	5	M12x1, A-coded to EN 61076-2-101	2.5 m	<b>8078236</b>	<b>NEBA-M12G5-U-2.5-N-LE3</b>
			5 m	<b>8078237</b>	<b>NEBA-M12G5-U-5-N-LE3</b>

## Connecting cables socket M12x1, 5-pin, angled plug socket

	Electrical connection 1, number of connections/cores	Electrical connection 1, connector system	Cable length	Part no.	Type
	5	M12x1, A-coded to EN 61076-2-101	2.5 m	<b>8078245</b>	<b>NEBA-M12W5-U-2.5-N-LE3</b>

## Mounting components

	Type of mounting	Size of pack	Part no.	Type
	Clamped in T-slot	10	<b>534254</b>	<b>SMBK-8</b>

## Inscription labels

	Material label	Part no.	Type
	PC	<b>541598</b>	<b>ASLR-L-423</b>