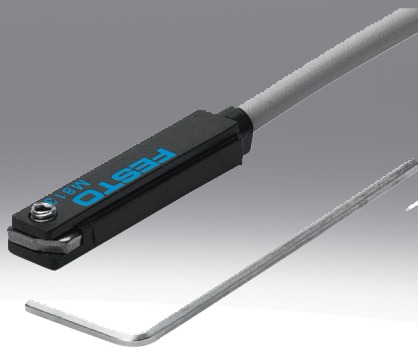


## Proximity switch SME-8

**FESTO**



## Characteristics

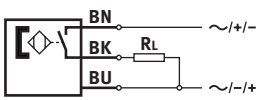
### At a glance

Reed proximity switch for T-slot, can be inserted in the slot from the side.

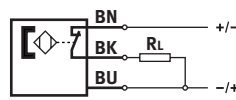
- Measuring principle: Magnetic reed
- Can be inserted in the slot lengthwise
- LED switching status indication
- Cable length 0 to 3 m, 2 to 5 m, 5 m, 7.5 m, 0.2 ... 10 m

### Switching output

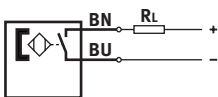
[ ] None



[0] N/C contact, 3-wire



[ZS] 2-wire N/O contact



## Type code

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

<b>006</b>	<b>Rated operating voltage</b>	
<b>24</b>	24 V DC	
<b>230</b>	230 V AC	
<b>007</b>	<b>Cable characteristic</b>	
<b>K</b>	Standard/suitable for energy chains	
<b>008</b>	<b>Cable length [m]</b>	
<b>5,0</b>	5.0 m	
<b>7,5</b>	7.5 m	
<b>009</b>	<b>Electrical connection</b>	
<b>OE</b>	Open end	
<b>010</b>	<b>Variant</b>	
	None	
<b>S6</b>	Heat-resistant	

## Datasheet

## General technical data

Switching output	None [ ]	N/C contact, 3-wire [O]	2-wire N/O contact [ZS]
Design	For T-slot		
Mounting position	optional		
Conforms to standard	EN 60947-5-2		
Approval	CCC, RCM trademark	RCM trademark	
Instructions on use	Only for fixed cable installation, Support / actuator-sensor overview“The right sensor for the actuator“	Support / actuator-sensor overview“The right sensor for the actuator“	
CE mark (see declaration of conformity) <sup>1)</sup>	To EU EMC Directive To EU Low Voltage Directive In accordance with EU RoHS Directive	To EU EMC Directive In accordance with EU RoHS Directive	
UKCA marking (see declaration of conformity)	To UK instructions for EMC, To UK RoHS instructions, To UK regulations for electrical equipment	To UK instructions for EMC, To UK RoHS instructions	
Note on materials	RoHS-compliant		

1) Please refer to the area of use in the declaration of conformity: [www.festo.com/catalogue/sme-8](http://www.festo.com/catalogue/sme-8) → Support/Downloads.

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

## General technical data, 230 V AC

Switching output	None [ ]
Design	For T-slot
Mounting position	optional
Conforms to standard	EN 60947-5-2
Approval	CCC, RCM trademark
Instructions on use	Support / actuator-sensor overview“The right sensor for the actuator“
CE mark (see declaration of conformity) <sup>1)</sup>	To EU EMC Directive To EU Low Voltage Directive In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC, To UK RoHS instructions, To UK regulations for electrical equipment
Note on materials	RoHS-compliant

1) Please refer to the area of use in the declaration of conformity: [www.festo.com/catalogue/sme-8](http://www.festo.com/catalogue/sme-8) → Support/Downloads.

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

## Input signal/measuring element

Switching output	None [ ]	N/C contact, 3-wire [O]	2-wire N/O contact [ZS]
Measured variable	Position		
Measuring principle	Magnetic reed		
Ambient temperature	-40 ... 70°C	-40 ... 60°C	
Ambient temperature with moving cable	-5 ... 70°C	-5 ... 60°C	

## Input signal/measuring element

Switching output	None [ ]
Measured variable	Position
Measuring principle	Magnetic reed
Ambient temperature	-30 ... 60°C
Ambient temperature with moving cable	-5 ... 60°C

## Input signal/measuring element

Switching output	None [ ]
Measured variable	Position
Measuring principle	Magnetic reed
Ambient temperature	-40 ... 120°C
Ambient temperature with moving cable	-5 ... 120°C

## Datasheet

Switching output			
Switching output	None [ ]	N/C contact, 3-wire [0]	2-wire N/O contact [ZS]
Switching output	Contacting, bipolar		Contacting, bipolar, Without LED function
Switching element function	N/O contact	N/C contact	N/O contact
Repetition accuracy	0.2 mm		
Reproducibility of switching value	+/-0.1 mm	-	
Switch-on time	0.5 ms	2 ms	≤0.5 ms
Switch-off time	0.03 ms	0.2 ms	0.03 ms
Max. output current	500 mA	50 mA	80 mA
Max. switching frequency	800 Hz	500 Hz	800 Hz
Max. switching capacity AC	10 VA	1.5 VA	-
Max. switching capacity DC	10 W	1.5 W	2.16 W
Voltage drop	0 V	≤2.5 V	≤3.5 V

Switching output	
Switching output	None [ ]
Switching output	Contacting, bipolar
Switching element function	N/O contact
Repetition accuracy	0.2 mm
Reproducibility of switching value	+/-0.1 mm
Switch-on time	2 ms
Switch-off time	0.03 ms
Max. output current	120 mA
Max. switching frequency	500 Hz
Max. switching capacity AC	10 VA
Max. switching capacity DC	10 W
Voltage drop	≤3.9 V

Output, further data	
Short circuit current rating	no
Overload protection	Not available
Inductive protective circuit	Adapted to MZ, MY, ME coils

Electronics			
Switching output	None [ ]	N/C contact, 3-wire [0]	2-wire N/O contact [ZS]
Operational voltage range DC	0 ... 230 V	12 ... 30 V	12 ... 27 V
Operational voltage range AC	0 ... 230 V	12 ... 30 V	-
Reverse polarity protection	no		
Short circuit current rating	no		
Overload protection	Not available		
Switching status indication	Yellow LED		
Degree of protection	IP65, IP67, IP68	IP67	
Insulation voltage	50 ... 2,500 V	50 V	
Immunity to surge	0.8 ... 4 kV	0.8 kV	

Electronics	
Switching output	None [ ]
Operational voltage range DC	3 ... 230 V
Operational voltage range AC	3 ... 230 V
Reverse polarity protection	no
Short circuit current rating	no
Overload protection	Not available
Switching status indication	Yellow LED
Degree of protection	IP68
Insulation voltage	2,500 V
Immunity to surge	4 kV

## Datasheet

**Electronics**

Switching output	None [L]
Operational voltage range DC	0 ... 30 V
Operational voltage range AC	0 ... 30 V
Reverse polarity protection	no
Short circuit current rating	no
Overload protection	Not available
Degree of protection	IP67
Insulation voltage	50 V
Immunity to surge	0.8 kV

**Electromechanics**

Electrical connection 1, connection type	Cable	Plugs
Electrical connection 1, function	Switching output, Power supply	
Electrical connection 1, connector system	Open end	M8x1, A-coded, to EN 61076-2-104
Electrical connection 1, type of mounting	–	Snap-locking, Screw-type lock, Not rotatable
Electrical connection 1, compatible type of mounting	–	Compatible with latching lock, Compatible with rotatable screw-type lock
Electrical connection 1, number of connections/cores	2, 3	3
Electrical connection 1, used connections/cores	2, 3	3
Material connector housing	–	TPE-U(PU)
Material electrical contact	–	Brass, Nickel-plated
Material cable sheath	TPE-U(PUR)	
Cable sheath colour	Grey	

**Electromechanics**

Electrical connection 1, connection type	Cable
Electrical connection 1, function	Switching output
Electrical connection 1, number of connections/cores	2
Electrical connection 1, connector system	Open end
Electrical connection 1, used connections/cores	2
Material cable sheath	TPE-S

**Mechanics**

Switching output	None [L]	N/C contact, 3-wire [O]	2-wire N/O contact [ZS]
Type of mounting	Clamped in T-slot, Insertable in the slot lengthwise		
Connection outlet orientation	In-line		
Tightening torque	0.2 Nm		
Material housing	Epoxy resin PC PET High-alloy stainless steel		
Housing colour	Black		
Corrosion resistance class CRC	2 - Moderate corrosion stress, 4 - Very high corrosion stress	4 - Very high corrosion stress	
LABS (PWIS) conformity	VDMA24364-B2-L		
Pollution degree	3		

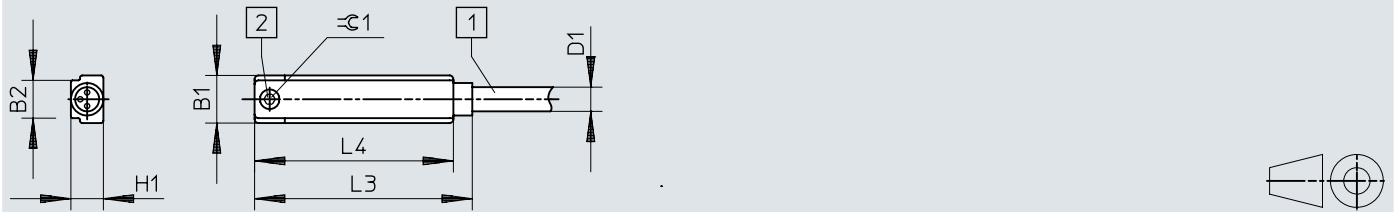
## Datasheet

Mechanics	
Switching output	None [ ]
Type of mounting	Clamped in T-slot, Insertable in the slot lengthwise
Connection outlet orientation	In-line
Tightening torque	0.2 Nm
Material housing	Epoxy resin PET High-alloy stainless steel
Housing colour	Black
Corrosion resistance class CRC	4 - Very high corrosion stress
LABS (PWIS) conformity	VDMA24364-B2-L
Pollution degree	3

## Dimensions

### Dimensions – N/O contact, cable

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



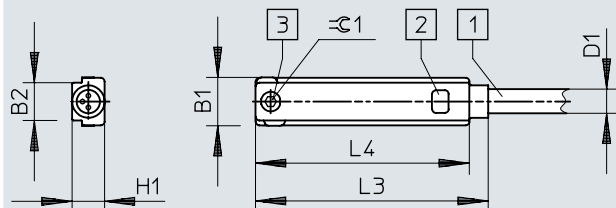
- [1] Connecting cable, 3-core cable, 3 x 0.14 mm<sup>2</sup>
- [2] Max. tightening torque 0.2 Nm

	B1	B2	D1 ø	H1	L3	L4	⊖ 1
SME-8-K- ...	6,4	5	2,9	4,3	28,8	26,3	1,3



## Dimensions

## Dimensions – N/C contact, cable

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

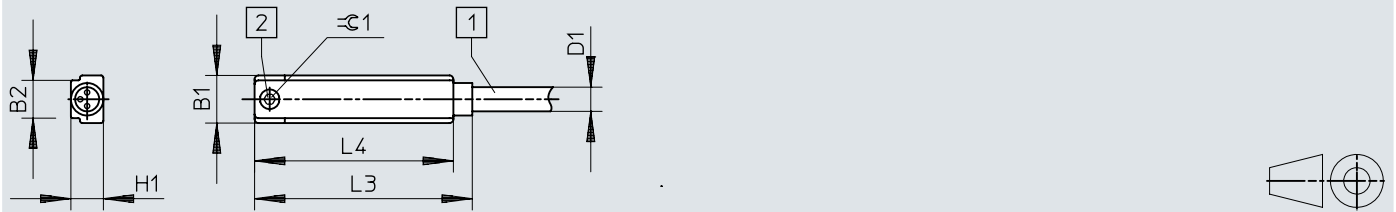
- [1] Connecting cable, 3-core cable, 3 x 0.14 mm<sup>2</sup>
- [2] Yellow LED
- [3] Max. tightening torque 0.2 Nm

	B1	B2	D1 ∅	H1	L3	L4	⊖ 1
SME-8-O-K-LED-24	6,4	5	2,9	4,4	30,8	28,3	1,3

## Dimensions

### Dimensions – SME-8-...-S6

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

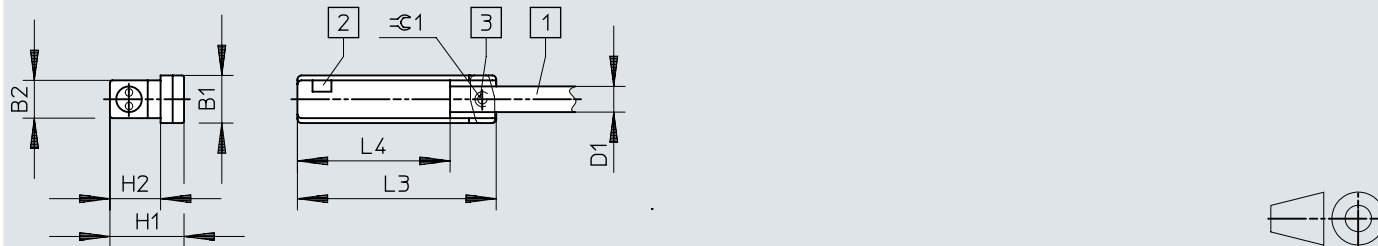


- [1] Connecting cable, 3-core cable, 3 x 0.14 mm<sup>2</sup>
- [2] Max. tightening torque 0.2 Nm

	B1	B2	D1 ∅	H1	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

## Dimensions

## Dimensions – SME-8-K-LED-230

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

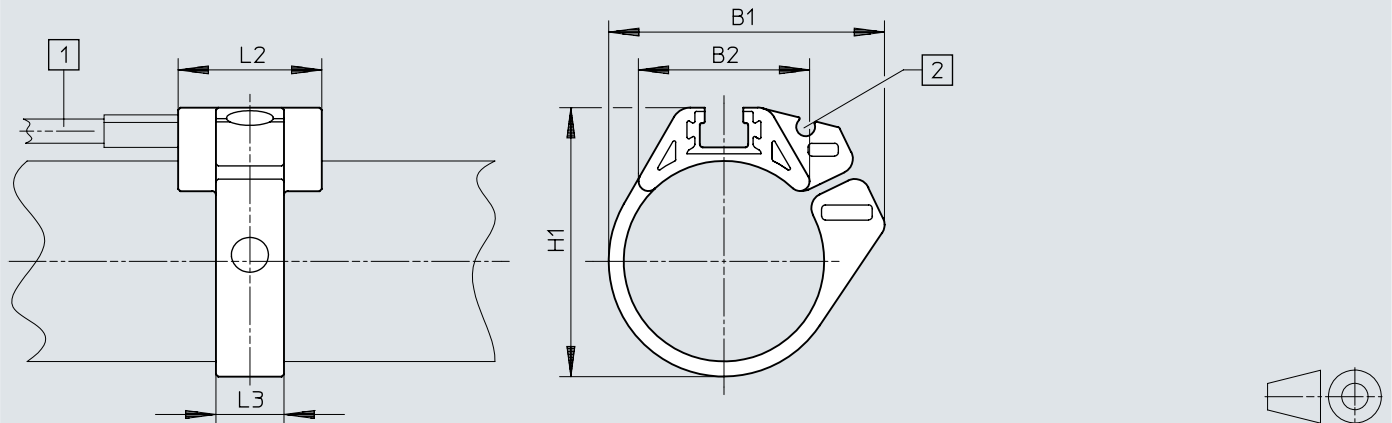
- [1] Connecting cable
- [2] Yellow LED
- [3] Max. tightening torque 0.2 Nm

	B1	B2	D1 ∅	H1	H2	L3	L4	∅1
SME-8-K-LED-230	6,4	5	3,4	9,8	6,7	26,2	20,2	1,3

## Dimensions

### Dimensions – Mounting kit SMBR

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

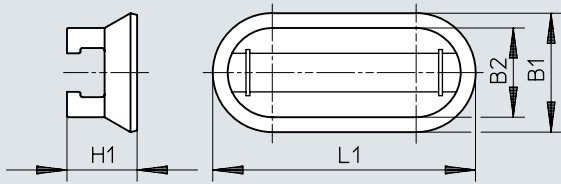


- [1] Proximity switches SME-8- ..., SMT-8- ...
- [2] Guide slot for switch cable

	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

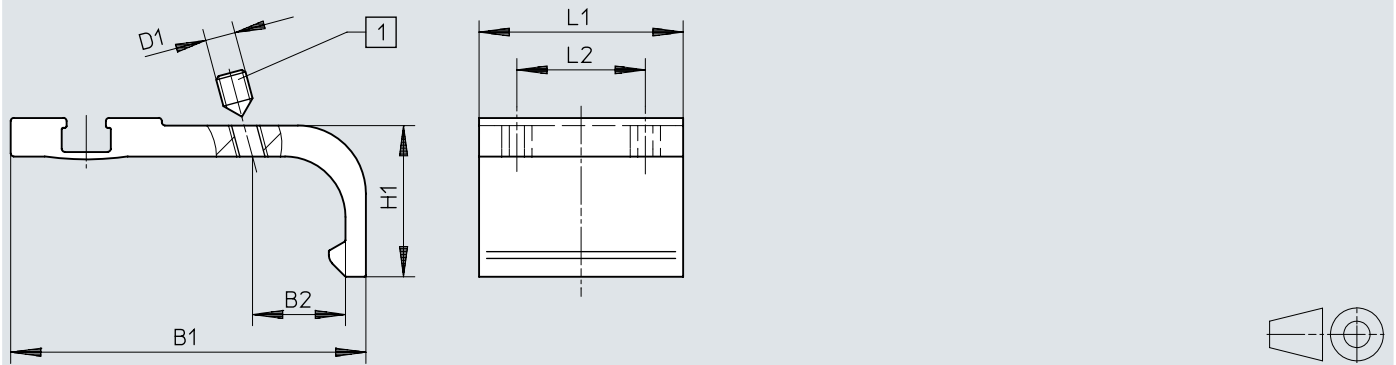
Download CAD data [www.festo.com](http://www.festo.com)

	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)

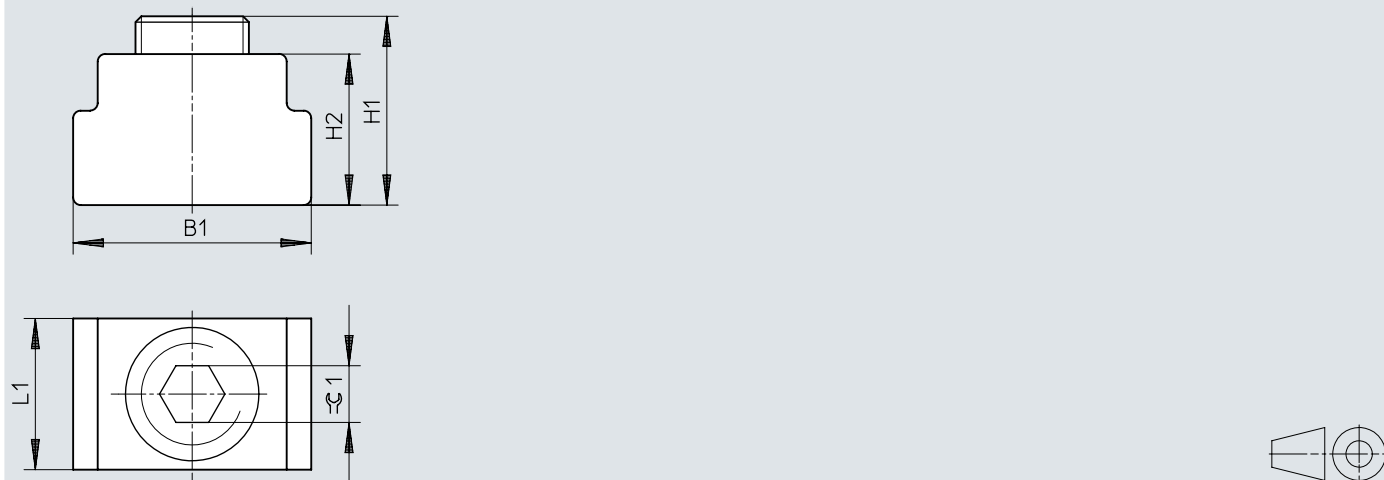


[1] Threaded pin

	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 – Positioning element SMM

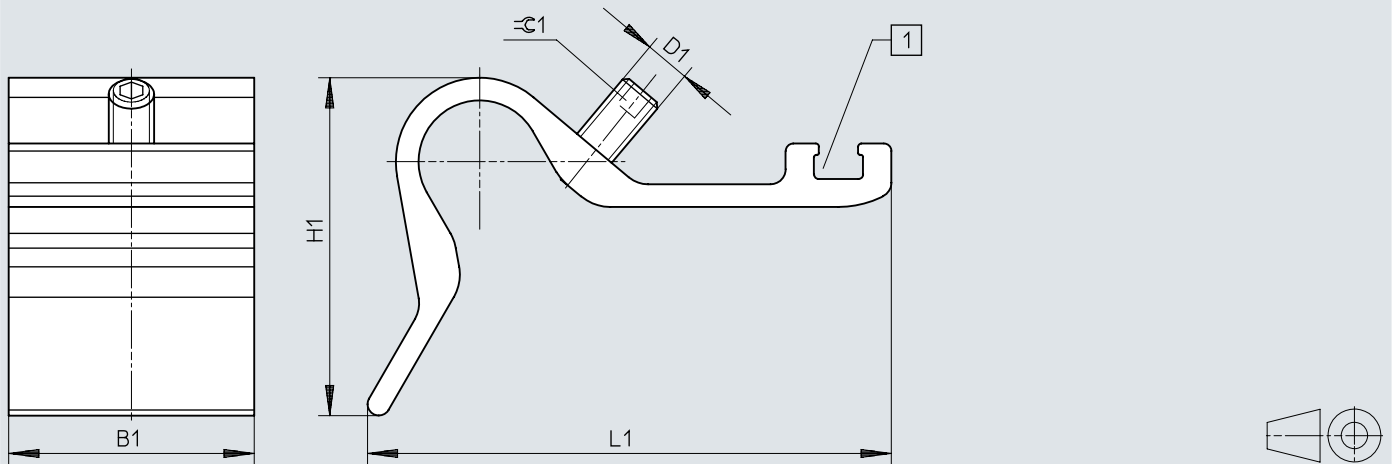
Download CAD data [www.festo.com](http://www.festo.com)

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

## Dimensions

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

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





[1] Slot for proximity switch


	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




## Ordering data

Order details magnetic Reed, normally open						
	Switching output	Switching element function	Cable length	Product weight	Part no.	Type
	Contacting, bipolar	N/O contact	0.3 m	8 g	150857	SME-8-S-LED-24
	Contacting, bipolar, Without LED function		2.5 m	27.9 g	171169	SME-8-ZS-KL-LED-24
	Contacting, bipolar			30 g	150855	SME-8-K-LED-24
			5 m	60 g	175404	SME-8-K5-LED-24
			7.5 m	85 g	530491	SME-8-K-7,5-LED-24

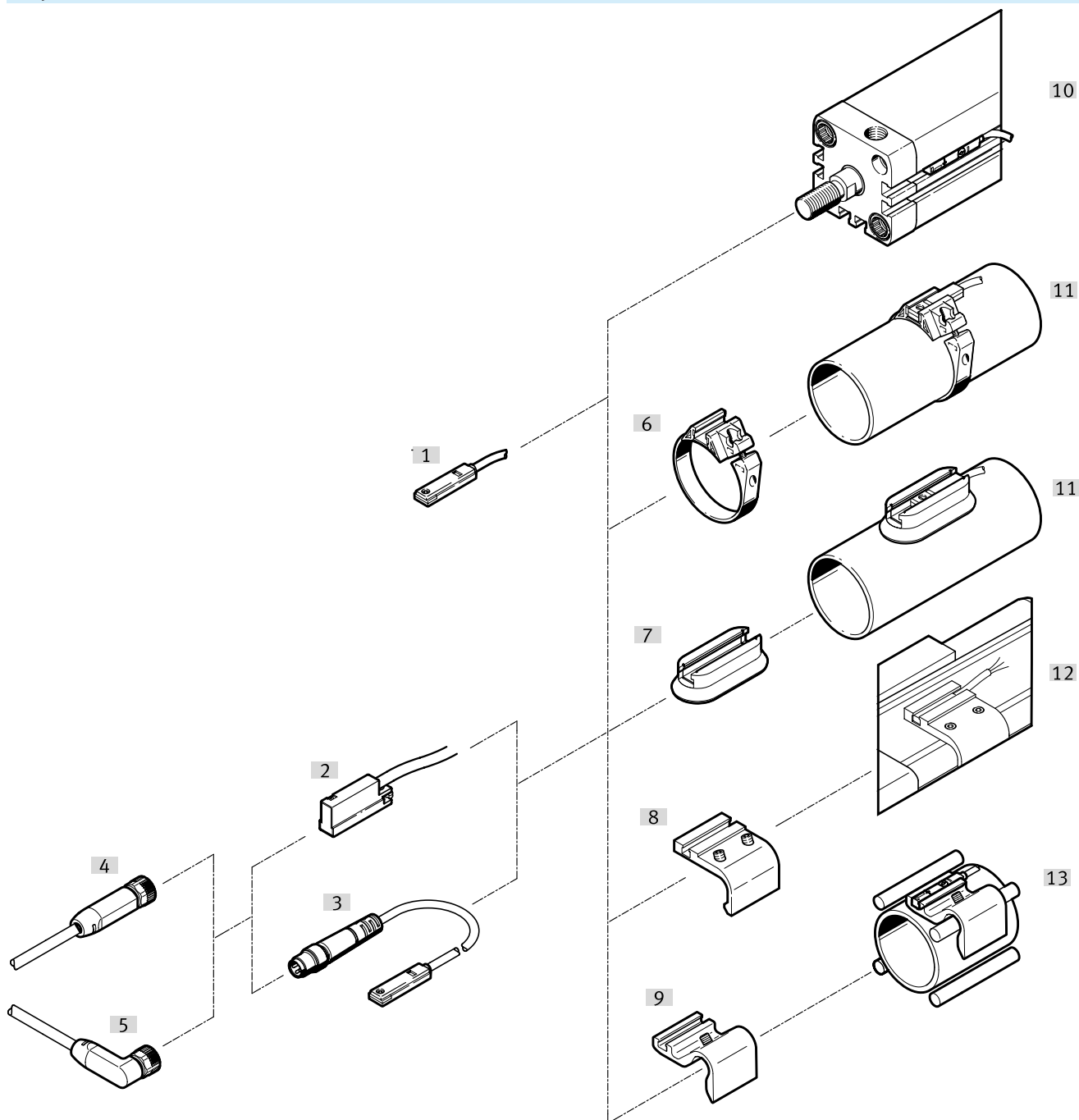
Ordering information magnetic reed, normally closed						
	Switching output	Switching element function	Cable length	Product weight	Part no.	Type
	Contacting, bipolar	N/C contact	7.5 m	50 g	160251	SME-8-O-K-LED-24

Ordering information Normally open contact, S6, heat-resistant						
	Switching output	Switching element function	Cable length	Product weight	Part no.	Type
	Contacting, bipolar	N/O contact	2.5 m	50 g	161756	SME-8-K-24-S6

Ordering information Normally open contacts up to 230 V AC						
	Switching output	Switching element function	Cable length	Product weight	Part no.	Type
	Contacting, bipolar	N/O contact	2.5 m	39 g	152820	SME-8-K-LED-230

## Peripherals

### Peripherals overview




Accessories		→ Link
Type/order code	Description	
[1] SME-8-S-...	Heat-resistant design	<a href="#">☞ sme-8</a>
[2] SME-8-K-LED-230 V	Operating voltage range up to 230V DC/AC	<a href="#">☞ sme-8</a>
[3] SME-8-K-...	With cable	<a href="#">☞ sme-8</a>
[4] NEBA-M...G...	Straight socket	<a href="#">21</a>
[5] NEBA-M...W...	Angled socket	<a href="#">21</a>
[6] Mounting kit SMBR	-	<a href="#">20</a>
[7] Mounting kit CRSMB	Corrosion resistant	<a href="#">20</a>
[8] Mounting kit SMB-8-FENG	-	<a href="#">20</a>
[9] Sensor bracket DASP-M4	-	<a href="#">20</a>
[10] Drives with T-slot	-	<a href="#">☞ -</a>
[11] Round cylinder	-	<a href="#">☞ -</a>

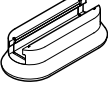
## Peripherals

Accessories		→ Link
Type/order code	Description	
[12]	Standards-based cylinder DSBC	<a href="#">-</a>
[13]	Drives with tie rod or mounting rod	<a href="#">-</a>

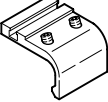
## Accessories


Mounting kit SMBR						
	Material retaining bracket	Material profile	Ambient temperature	Corrosion resistance class CRC <sup>1)</sup>	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					

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


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

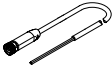
Positioning element SMM						
	Material housing	Type of mounting	Ambient temperature	Corrosion resistance class CRC <sup>1)</sup>	Part no.	Type
	Wrought aluminium alloy, Anodised	Clamped in T-slot, Insertable in the slot lengthwise	-40 ... 120 °C	3 - high corrosion stress	547941	SMM-8

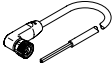
1) More information [www.festo.com/x/topic/kbk](http://www.festo.com/x/topic/kbk)

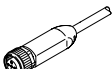
Sensor bracket DASP-M4-...-A						
	Tightening torque	Material housing	Corrosion resistance class CRC <sup>1)</sup>	Product weight	Part no.	Type
	0.6 ... 1 Nm	Wrought aluminium alloy, Anodised	3 - high corrosion stress	26.5 g	1451483	DASP-M4-125-A
				41.5 g	1553813	DASP-M4-160-A
				60 g	3015256	DASP-M4-320-A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


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


## Accessories

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


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	8078230	NEBA-M8W3-U-2.5-N-LE3
			5 m	8078231	NEBA-M8W3-U-5-N-LE3

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	8078236	NEBA-M12G5-U-2.5-N-LE3
			5 m	8078237	NEBA-M12G5-U-5-N-LE3


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	8078245	NEBA-M12W5-U-2.5-N-LE3

Safety clip for ATEX zone					
	Material safety clip	Ambient temperature	Corrosion resistance class CRC <sup>1)</sup>	Part no.	Type
	PA	-20 ... 60 °C	3 - high corrosion stress	548068	NEAU-M12-GD
				548067	NEAU-M8-GD

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

Mounting components					
	Type of mounting	Size of pack	Part no.	Type	
	Clamped in T-slot	10	534254	SMBK-8	

## Accessories

Inscription labels	Material label	Part no.	Type
	PC	541598	ASLR-L-423