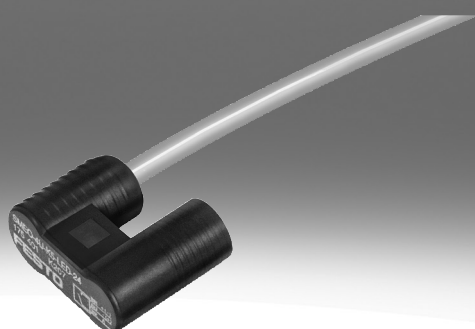


Proximity switch SMEO-4U

FESTO



Type code

001	Series	
SMEO	Proximity sensor, magnetic, reed	
002	Design type	
4U	Round shape, U-shaped housing	
003	Electrical connection, cable length	
K	Cable, 2.5 m	
K5	Cable, 5 m	
S	Plug M8x1	

004	Switching status indication	
LED	Yellow LED	
005	Rated operating voltage	
24	24 V DC	
230	230 V AC	
006	Generation	
B	Series B	

Datasheet

General technical data

Magnetic reed measuring principle

Electrical connection 1, connection type	Cable	Plugs
Design	Round	
Mounting position	optional	
Conforms to standard	DIN EN 60947-5-2	–
Approval	RCM trademark	
CE mark (see declaration of conformity) ¹⁾	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	–	

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

Input signal/measuring element

Measuring principle	Magnetic reed
Ambient temperature	-20 ... 60°C

Switching output

Electrical connection 1, connection type	Cable	Plugs
Switching output	Contacting, bipolar, Without LED function	Contacting, bipolar
Switching element function	N/O contact	
Reproducibility of switching value	–	
Repetition accuracy	0.2 mm	
Switch-on time	≤2 ms	≤0.5 ms
Switch-off time	0.03 ... 0.05 ms	0.03 ms
Max. switching frequency	500 ... 800 Hz	800 Hz
Max. output current	500 mA	
Max. output current DC	120 mA	–
Max. output current AC	250 mA	–
Max. switching capacity DC	10 W	
Max. switching capacity AC	10 VA	–
Voltage drop	≤4.5 V	–

Output, additional data

Electrical connection 1, connection type	Cable	Plugs
Short circuit current rating	no	
Overload protection	Not available	–

Electronics

Electrical connection 1, connection type	Cable		Plugs
Rated operating voltage	24 V DC	230 V AC	24 V DC
Operational voltage range DC	12 ... 27 V	12 ... 250 V	12 ... 27 V
Operational voltage range AC	–	12 ... 250 V	–
Reverse polarity protection	no		

Datasheet

Electromechanics

Electrical connection 1, connection type	Cable		Plugs
Electrical connection 1, number of connections/cores	2	3	
Electrical connection 1, connector system	Open end		M8x1, A-coded, to EN 61076-2-104
Cable length	2.5 m	2.5 ... 5 m	–
Connection outlet orientation	In-line		–
Material cable sheath	PVC	TPE-U(PUR)	–

Mechanics

Electrical connection 1, connection type	Cable		Plugs
Electrical connection 1, number of connections/cores	2	3	
Type of mounting	With accessories		
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
Tightening torque	0.8 Nm	–	
Product weight	70 g	70 ... 130 g	6 g
Material housing	PET, TPE-O	PET	

Display/operation

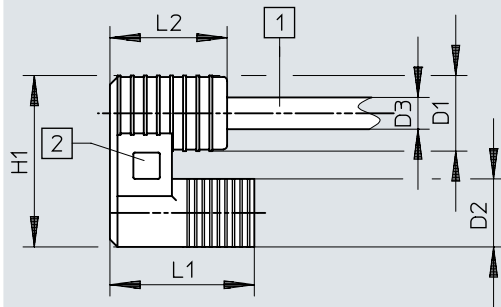
Switching status indication	–
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Immission/emission

Electrical connection 1, connection type	Cable	Plugs
Ambient temperature with moving cable	-5 ... 60°C	–
Degree of protection	IP67	
Immunity to surge	4 kV	–
Pollution degree	3	–
LABS (PWIS) conformity	VDMA24364-B2-L	

Dimensions

Dimensions – SMEO-4U-K – Cable

[Download CAD data](#) www.festo.com


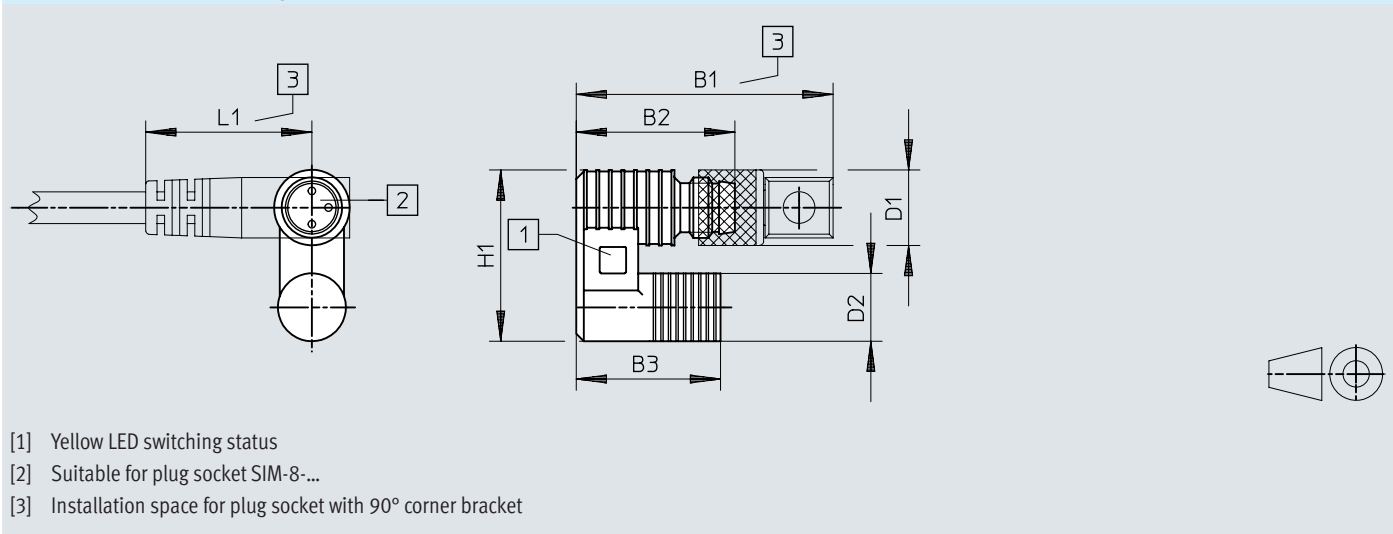
[1] 2-wire cable, 3-wire cable for SMEO-4U-K-LED-220

[2] Yellow LED switching status

	L1	L2	D1 ø	D2 ø	D3 ø	H1
SMEO-4U- ... -K-LED-24	19	15,5	9,4	9	4,2	23

Dimensions

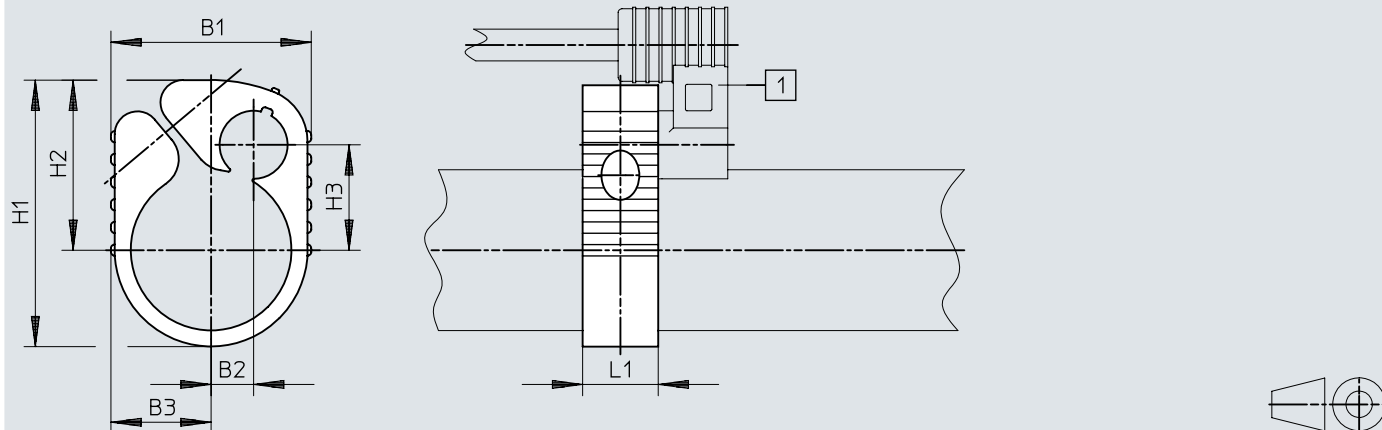
Dimensions – SMEO-4U-S – Plug M8x1 Download CAD data www.festo.com



	L1	L2	L3	L4	D1 ø	D2 ø	H1
SMEO-4U- ... -S-LED-24	19	21	~34	~22	10	9	23

Dimensions

Dimensions – Mounting kit SMBR

[Download CAD data](#) www.festo.com


[1] Proximity switch SM...-4, tightening torque 0.5 Nm

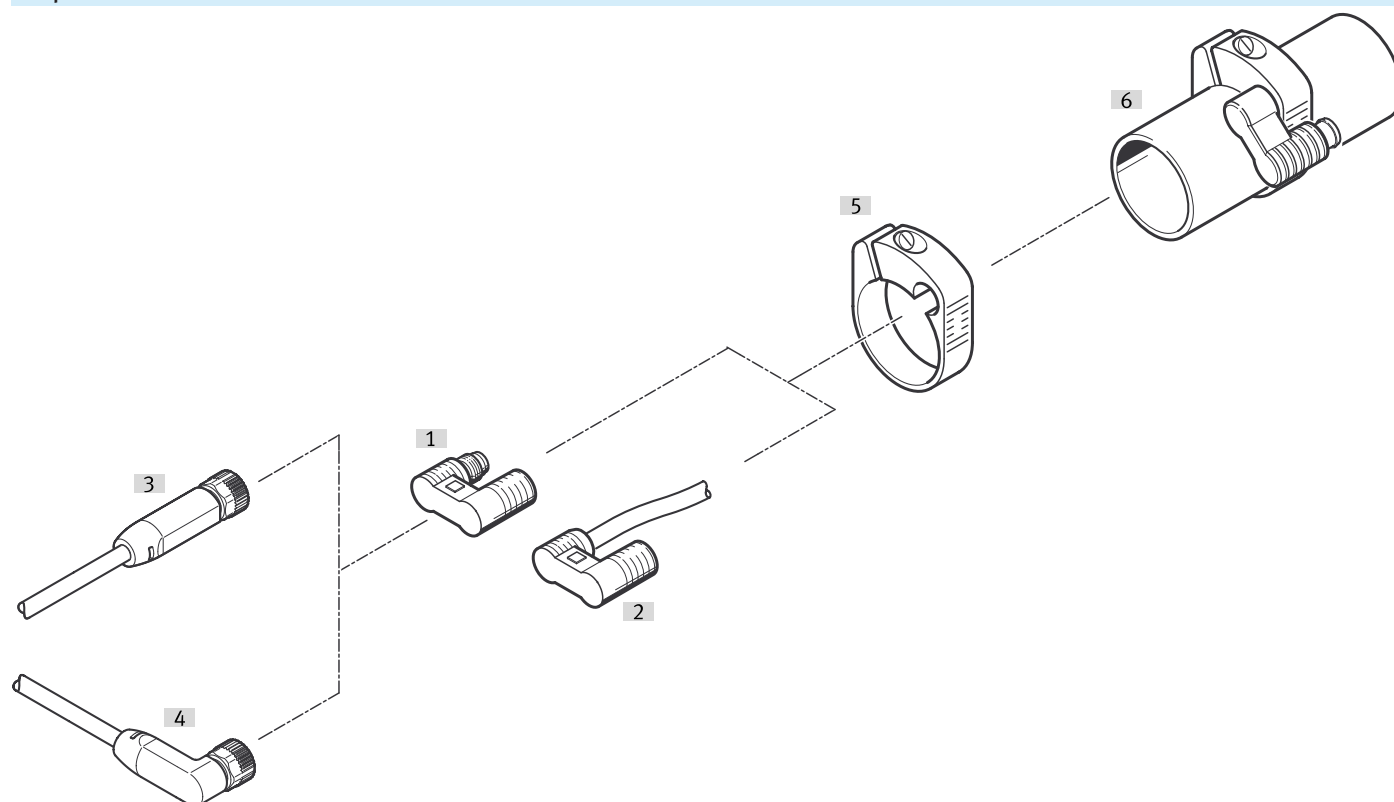
	B1	B2	B3	H1	H2	H3
SMBR-8	21	–	14	23,5	16,5	9
SMBR-10	22	0,5	14	26	18,5	10
SMBR-12	22	4	11	28,5	20	10,2
SMBR-16	22,5	4	11,5	33,5	22,5	12,4
SMBR-20	26,5	5,5	13,5	35,5	22,5	14
SMBR-25	31,5	7,5	16	40,5	25	16

Ordering data

Ordering data						
	Electrical connection 1, connection type	Electrical connection 1, number of connections/cores	Cable length	Product weight	Part no.	Type
	Cable	2	2.5 m	70 g	150011	SMEO-4U-K-LED 230
		3			36198	SMEO-4U-K-LED-24
	Plugs		5 m	130 g	175401	SMEO-4U-K5-LED-24
				6 g	151526	SMEO-4U-S-LED-24 B

Peripherals

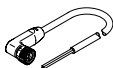
Peripherals overview



Accessories			→ Link
Type/order code	Description		
[1]	Proximity switch SMEO-4U-S	Magnetic reed, with plug M8x1	smeo-4u
[2]	Proximity switch SMEO-4U-K	Magnetic reed, with cable	smeo-4u
[3]	Connecting cable NEBA, socket M8x1, 3-pin, straight	Socket, straight, M8x1 3-pin	10
[4]	Connecting cable NEBA, socket M8x1, 3-pin, angled	Angled socket, M8x1, 3-pin	10
[5]	Mounting kit SMBR	For round cylinders	10
[6]	Round cylinder	Ø 8 ... 25 mm	-

Accessories

Connecting cable NEBA, socket M8x1, 3-pin, angled

	Connection technology left, field device side	Electrical connection 1, cable outlet	Connection technology right, controller side	Cable length	Part no.	Type
	Socket M8x1 A-coded, EN 61076-2-104	Angled	Open end	2.5 m	8078230	NEBA-M8W3-U-2.5-N-LE3
				5 m	8078231	NEBA-M8W3-U-5-N-LE3

Connecting cable NEBA, socket M8x1, 3-pin, straight

	Connection technology left, field device side	Electrical connection 1, cable outlet	Connection technology right, controller side	Cable length	Part no.	Type
	Socket M8x1 A-coded, EN 61076-2-104	Straight	Open end	2.5 m	8078223	NEBA-M8G3-U-2.5-N-LE3
				5 m	8078224	NEBA-M8G3-U-5-N-LE3

Mounting kit SMBR

	Size	LABS (PWIS) conformity	Part no.	Type
	8	VDMA24364-B2-L	19272	SMBR-8
	10		19273	SMBR-10
	12		19274	SMBR-12
	16		19275	SMBR-16
	20		19276	SMBR-20
	25		19277	SMBR-25