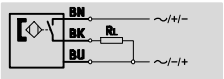
Proximity sensors SME-8M, for T-slot

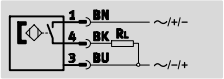
Technical data – Magnetic reed

Function

e.g. N/O contact, 3-wire, with cable



e.g. N/O contact, 3-wire, with plug



- Magnetic reed measuring principle
- Insertable in the slot from above, does not protrude over the cylinder profile
- Cable clip and inscription labels included in the scope of delivery

General technical data	
Design	For T-slot
Based on standard	EN 60947-5-2
Approval certificate	c UL us - listed (OL)
	RCM trademark
CE marking (see declaration of conformity)	To EU EMC Directive
Special characteristics	Oil resistant
Note on materials	Free of copper and PTFE
	RoHS-compliant

Input signal/measuring element		
Measuring principle		Magnetic reed
Ambient temperature	[°C]	–40 … +70

Switching output				
Type		SME-8M-DS	SME-8M-ZS	SME-8M-DO
Switching output		Contacting, bipolar		
Switching element function		N/O contact	N/O contact	N/C contact
Max. output current	[mA]	500	80	
Max. output current in mounting kits	[mA]	80	80	
Max. switching capacity DC	[W]	10	2.4	
Max. switching capacity DC in mounting kits	[W]	2.4	2.4	
Max. switching capacity AC	[VA]	10	2.4	
Max. switching capacity AC in mounting kits	[VA]	2.4	2.4	
Voltage drop[1)]	[V]	≤1.5	≤4.8	≤3.5

1) Applies to cable length 2.5m. Max. 0.15V voltage drop per metre of additional cable length

Output, additional data	
Protection against short circuit	No
Overload protection	No

Electronic components		
Operating voltage range DC	[V]	5 … 30
Operating voltage range AC	[V]	5 … 30
Reverse polarity protection		No

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Electromechanical components									
Switching element function		DS/DO				ZS			
Electrical connection		OE	M8D	M8	M12	OE	M8D	M8	M12
Electrical connection		Cable, 3-wire	Cable with plug, 3-pin			Cable, 2-wire	Cable with plug, 2-pin		
			M8x1	M8x1	M12x1		M8x1	M8x1	M12x1
			Rotatable thread	Snap-on flange	Rotatable thread		Rotatable thread	Snap-on flange	Rotatable thread
Connection direction		In-line							
Cable test conditions	K	Energy chain: 5 million cycles, bending radius 75 mm							
		Resistance to bending: to Festo standard; test conditions on request							
	E	Energy chain: 5 million cycles, bending radius 28 mm							
		Torsional strength: ±270°/0.1 m							
		Resistance to bending: to Festo standard; test conditions on request							
Cable length	[m]	0.2 … 10							
Cable characteristics	K	Standard + energy chain							
	E	Energy chain + robot							
Cable sheath materials	K	TPE-U(PUR)							
	E	TPE-U(PUR), halogen-free							

Mechanical components			
Electrical connection		OE	M…
Type of mounting		Screw-clamped, insertable in the slot from above	
Housing		PA	PA
		High-alloy stainless steel	High-alloy stainless steel
		–	Nickel-plated brass
		–	TPE-U(PUR)

Display/operation	
Switching status indication	Yellow LED

Immissions/emissions		
Ambient temperature with flexible cable installation	[°C]	–5 … +70
Degree of protection		IP65, IP68

Pin allocation to EN 60947-5-2

M8x1, 2-pin

N/O contact

	Pin	Wire colour	Allocation
	1	Brown	+
	4	Black	Output

M12x1, 2-pin

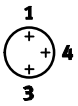
N/O contact

	Pin	Wire colour	Allocation
	1	Brown	+
	4	Black	Output

Pin allocation to EN 60947-5-2

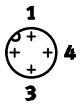
M8x1, 3-pin

N/O contact and N/C contact

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

M12x1, 3-pin

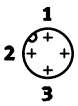
N/O contact

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

Pin allocation to EN 60947-5-2

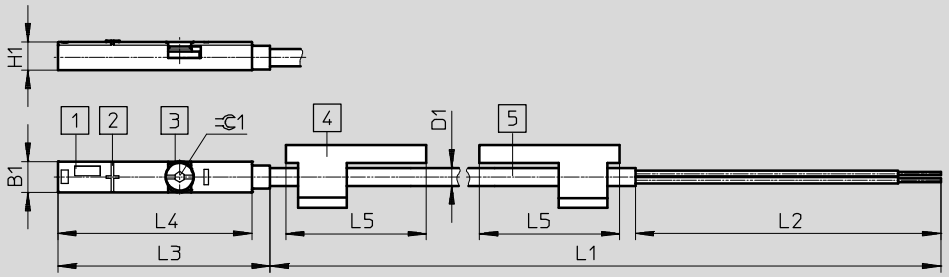
M12x1, 3-pin

N/C contact

	Pin	Wire colour	Allocation
	1	Brown	+
	3	Blue	–
	2	White	Output

Dimensions Download CAD data ➔ **www.festo.com**

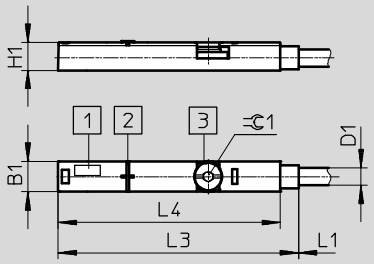
SME-8M-...-OE – Cable



1 Yellow LED
2 Centre of the sensor element
3 Clamping component, tightening torque 0.6 Nm
4 Inscription label holder
5 Connecting cable

L1 Cable length

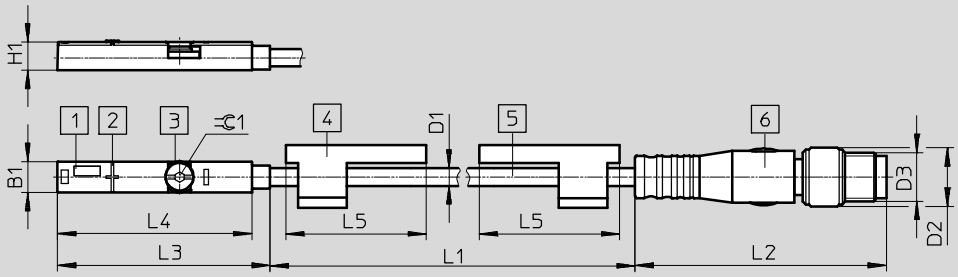
SME-8M-DO-...-OE – Cable



1 Light-emitting diode (LED)
2 Centre of the sensor element
3 Clamping component, tightening torque 0.6 Nm

L1 Cable length

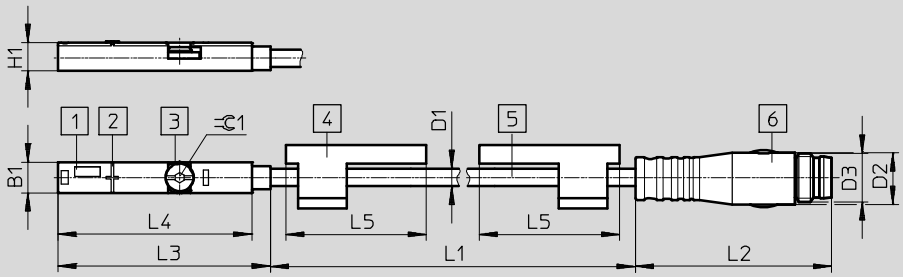
SME-8M-...-M8D – Cable with plug M8x1, rotatable thread



1 Yellow LED
2 Centre of the sensor element
3 Clamping component, tightening torque 0.6 Nm
4 Inscription label holder
5 Connecting cable
6 Plug to fit connecting cable NEBU-M8

L1 Cable length

SME-8M-...-M8 – Cable with plug M8x1, snap-on flange



1 Yellow LED
2 Centre of the sensor element
3 Clamping component, tightening torque 0.6 Nm
4 Inscription label holder
5 Connecting cable
6 Plug to fit connecting cable NEBU-M8

L1 Cable length

Type	B1 ±0.05	D1 ∅	D2 ∅	D3	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
SME-8M-DO-...-OE			–	–		–	39.5	36.5	–	
SME-8M-...-M8D			9.6	M8x1		41	34.8	31.8	23	
SME-8M-...-M8			8.5	M8x1		33				

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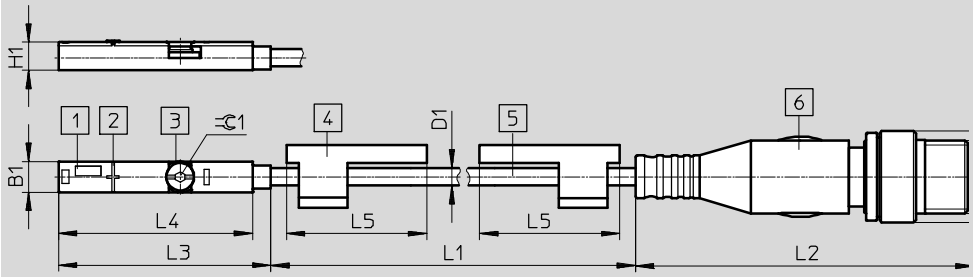
Technical data – Magnetic reed

Dimensions Download CAD data ➔ **www.festo.com**

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

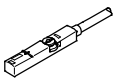


1 Yellow LED
2 Centre of the sensor element
3 Clamping component, tightening torque 0.6 Nm
4 Inscription label holder
5 Connecting cable
6 Plug to fit connecting cable NEBU-M12

L1 Cable length

Type	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

Ordering data

	Switching output	Electrical connection		Cable length [m]	Part No.	Type
		Cable	Cable with plug, rotatable thread, M8x1			
	N/O contact					
	Contacting, bipolar	3-wire	–	2.5	**543862**	**SME-8M-DS-24V-K-2,5-OE**
				5.0	**543863**	**SME-8M-DS-24V-K-5,0-OE**
				7.5	**543876**	**SME-8M-DS-24V-K-7,5-OE**
		–	3-pin	0.3	**543861**	**SME-8M-DS-24V-K-0,3-M8D**
		2-wire	–	2.5	**543872**	**SME-8M-ZS-24V-K-2,5-OE**
	N/C contact					
	Contacting, bipolar	3-wire	–	7.5	**546799**	**SME-8M-DO-24V-K-7,5-OE**

Proximity sensors SME-8M, for T-slot

Modular products – Magnetic reed

FESTO

M Mandatory data												
Module No.	**Function**		**Switching output**		**Rated operating voltage**		**Cable characteristics**		**Cable length**		**Connection technology**
543892	SME-8M		DS ZS DO		24V		K E		0.2 … 10		OE M8D M8 M12
Ordering example											
543892	**SME-8M**	–	**ZS**	–	**24V**	–	**K**	–	**0.8**	–	**OE**

Ordering table

Size		8	Condi-tions	Code		Entry code
M	Module No.	**543892**				
	Function	Proximity sensor for T-slot, contacting		**SME-8M**		SME-8M
				–		–
	Switching output	3-wire N/O contact		**DS**		
		2-wire N/O contact		**ZS**		
		3-wire N/C contact		**DO**		
				–		–
	Rated operating voltage [V DC]	24		**24V**		24V
				–		–
	Cable characteristics	Standard + energy chain		**K**		
		Energy chain + robot		**E**		
				–		–
	Cable length [m]	0.2 … 10 (0.2 … 5.0 m in 0.1 m increments, 5.0 … 10 m in 0.5 m increments)		**…**		
				–		–
	Connection technology	Open end		**OE**		
		M8, rotatable thread		**M8D**		
		M8, snap-on flange		**M8**		
		M12, rotatable thread		**M12**		

Transfer order code

543892	**SME-8M**	–		–	**24 V**	–		–		–		