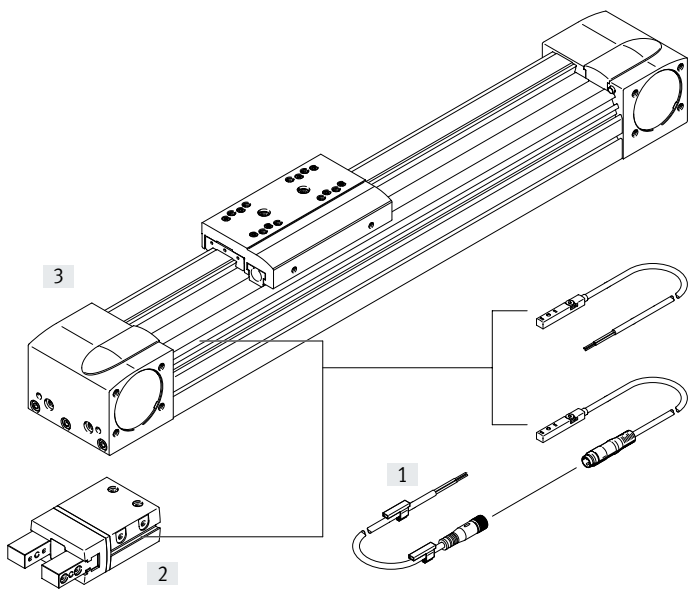


## Proximity switches SIES-8M, inductive for T-slot

**FESTO**



Peripherals overview and type codes



Mounting components and accessories		→ Page/Internet
[1]	Connecting cable NEBU-M8...3	7
[2]	Gripper with T-slot e.g. parallel gripper DHPS	gripper
[3]	Electric axis EGC	egc

001	Series
SIE	Proximity switch, inductive

002	Design type
S	Special design

003	Design
8M	For T-slot

004	Switching input/output
N	NPN
P	PNP

005	Switching element function
O	N/C contact
S	N/O contact

006	Rated operating voltage
24V	24 V

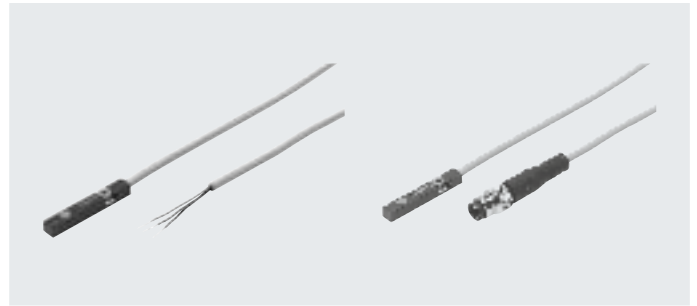
007	Cable characteristic
K	Standard/suitable for energy chains

008	Cable length [m]
0.3	0.3
2.5	2.5
5	5
7.5	7.5
10	10


009	Electrical connection
OE	Open end
M8D	Cable with M8x1 plug, 3-pin, rotatable thread

## Data sheet

- Inductive proximity switch for T-slot, insertable from above
- Suitable for position sensing for electric axes EGC and grippers with T-slot
- 2 LEDs for improved visibility regardless of the side from which the axis is approaching the sensor



General technical data	SIES-8M-...-OE	SIES-8M-...-M8D
Design	For T-slot	
Size	Slot 8	
Measured variable	Position	
Measuring principle	Inductive	
Type of mounting	Screw-clamped, inserted in the slot from above, flush with T-slot	
Outlet direction of connection	In-line	
Conforms to standard	EN 60947-5-2	
Suitable for the production of lithium-ion batteries	Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils	–
Cleanroom class	Class 4 to ISO 14644-1	
Cable characteristic	Standard + cable chain	
Cable test conditions	Energy chain: 5 million cycles, bending radius 75 mm Resistance to bending: to Festo standard; test conditions on request	
Pollution degree	3	

Electrical data	SIES-8M-...-OE	SIES-8M-...-M8D
Switching output	PNP NPN	
Switching element function	N/C contact N/O contact	
Max. switching frequency [Hz]	4500	
Switching status indication	Yellow LED	
Electrical connection 1		
Connection type	Cable	Cable with plug
Connection technology	Open end	M8x1, A-coded to EN 61076-2-104
Poles/wires	3	
Type of mounting	–	Screw-type lock
Port pattern	–	
Operating voltage range DC [V]	10 ... 30	
Insulation voltage [V]	50	
Max. output current [mA]	150	
Surge resistance [kV]	0.8	
No-load supply current [mA]	≤ 10	
Short circuit current rating	Pulsed	
Reverse polarity protection	For all electrical connections	
Degree of protection	IP65 IP67	

## Data sheet

Sensors		
Rated operating distance $S_n$	[mm]	1.5
Repetition accuracy under constant conditions	[mm]	$\leq 0.05$ approach from the side
		$\leq 0.02$ axial approach
Reduction factors		Aluminium = 0.62
		Stainless steel V2A = 0.95
		Copper = 0.6
		Brass = 0.72
		Steel St 37 = 1.0

Operating and environmental conditions		
Ambient temperature	[°C]	-25 ... +70
Ambient temperature with flexible cable installation	[°C]	-5 ... +70
CE marking (see declaration of conformity) <sup>1)</sup>		To EU EMC Directive
		To EU RoHS Directive
KC mark		KC EMC
Certification		RCM compliance mark
		c UL us listed (OL)

- 1) For information about the area of use, see the EC declaration of conformity at: [www.festo.com/sp](http://www.festo.com/sp) → Certificates.  
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

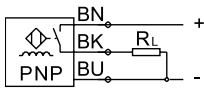
Materials	SIES-8M-...-OE	SIES-8M-...-M8D
	Housing	– PA PUR High-alloy stainless steel
Cable sheath	TPE-U(PU)	
Note on materials	RoHS-compliant	
PWIS conformity	VDMA24364-B2-L	

## Data sheet

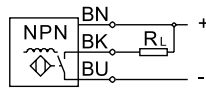
### Terminal allocation

Cable

PNP, N/O

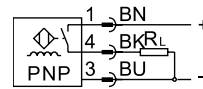


NPN, N/O

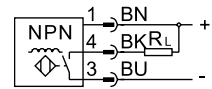


Plug

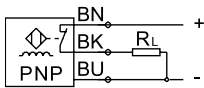
PNP, N/O



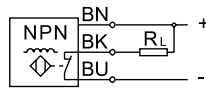
NPN, N/O



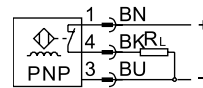
PNP, N/C



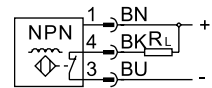
NPN, N/C



PNP, N/C



NPN, N/C



Wire colours

BN = Brown

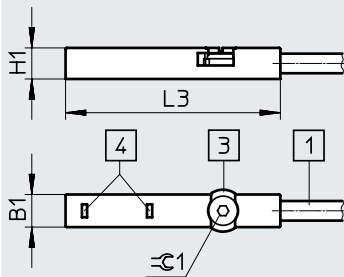
BK = Black

BU = Blue

### Dimensions

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

SIES-8M-...-OE



- [1] 3-wire cable (3x0.14 mm<sup>2</sup>)
- [3] Clamping element, max. tightening torque 0.6 Nm
- [4] Yellow LED for switching status

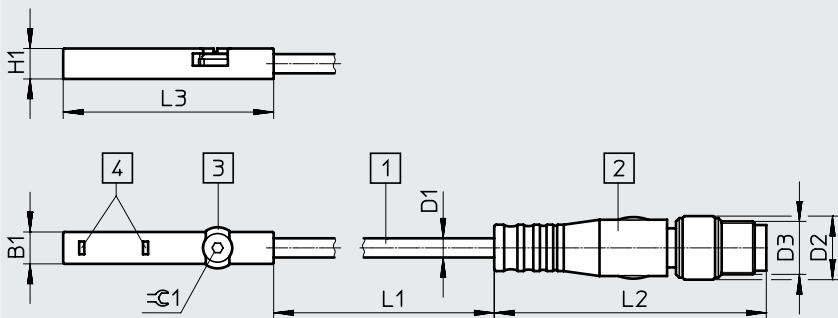
	B1	H1	L3	$\varnothing 1$
SIES-8M-...-24V-K7.5-OE	5	4.6	31.8	1.5

Data sheet

Dimensions

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

SIES-8M-...-M8D



- [1] 3-wire cable (3x0.14 mm<sup>2</sup>)
- [2] 3-pin plug, pin allocation to DIN EN 60947-5-2
- [3] Clamping element, max. tightening torque 0.3 Nm
- [4] Yellow LED for switching status

	B1	D1 ø	D2 ø	D3	H1	L1	L2	L3	±0.1
SIES-8M-...-0.3-M8D	5	2.9	9.6	M8x1	4.6	300 <sup>+50</sup>	41.1	31.8	1.5
SIES-8M-...-2.5-M8D						2500 <sup>+50</sup>			
SIES-8M-...-5.0-M8D						5000 <sup>+50</sup>			
SIES-8M-...-7.5-M8D						7500 <sup>+75</sup>			
SIES-8M-...-10-M8D						10000 <sup>+100</sup>			

Ordering data

Size	S <sub>n</sub> <sup>1)</sup> [mm]	Type of installation	Switching output	Switching element function	Cable length [m]	Part no.	Type
<b>Cable</b>							
	1.5	Flush	PNP	N/O contact	7.5	551386	SIES-8M-PS-24V-K-7.5-OE
				N/C contact	7.5	551391	SIES-8M-PO-24V-K-7.5-OE
			NPN	N/O contact	7.5	551396	SIES-8M-NS-24V-K-7.5-OE
				N/C contact	7.5	551401	SIES-8M-NO-24V-K-7.5-OE
<b>Cable with plug</b>							
	1.5	Flush	PNP	N/O contact	0.3	551387	SIES-8M-PS-24V-K-0.3-M8D
					2.5	551388	SIES-8M-PS-24V-K-2.5-M8D
					5.0	551389	SIES-8M-PS-24V-K-5.0-M8D
					10	551390	SIES-8M-PS-24V-K-10-M8D
				N/C contact	0.3	551392	SIES-8M-PO-24V-K-0.3-M8D
					2.5	551393	SIES-8M-PO-24V-K-2.5-M8D
					5.0	551394	SIES-8M-PO-24V-K-5.0-M8D
					10	551395	SIES-8M-PO-24V-K-10-M8D
			NPN	N/O contact	0.3	551397	SIES-8M-NS-24V-K-0.3-M8D
					2.5	551398	SIES-8M-NS-24V-K-2.5-M8D
					5.0	551399	SIES-8M-NS-24V-K-5.0-M8D
					10	551400	SIES-8M-NS-24V-K-10-M8D
				N/C contact	0.3	551402	SIES-8M-NO-24V-K-0.3-M8D
					2.5	551403	SIES-8M-NO-24V-K-2.5-M8D
					5.0	551404	SIES-8M-NO-24V-K-5.0-M8D
					10	551405	SIES-8M-NO-24V-K-10-M8D

1) S<sub>n</sub> Rated operating distance [mm]

## Accessories

### Sensor bracket SIEZ-8M

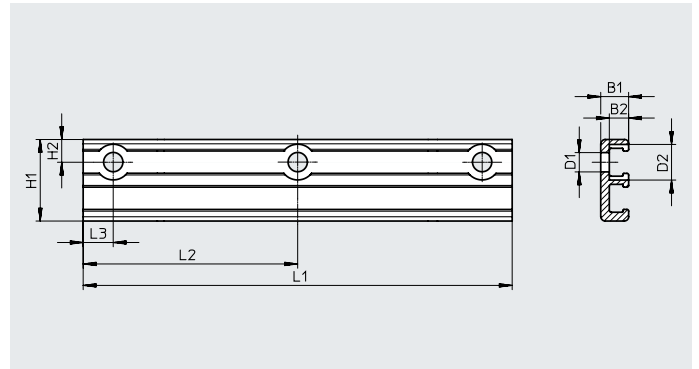
For mounting proximity switches  
SIES-8M on any housing

#### Material:

Wrought aluminium alloy, steel,  
thermoplastic polyurethane elastomer



Note on materials:

RoHS-compliant



Dimensions and ordering data											
Type	L1	L2	L3	D1 ∅	D2 ∅	H1	H2	B1	B2	Part no.	Type
SIEZ-8M-200	200	–	7	4.5	8.3	19	5.3	6.5	4.5	551406	SIEZ-8M-200
SIEZ-8M-400	400	200	7	4.5	8.3	19	5.3	6.5	4.5	551407	SIEZ-8M-400

Ordering data – Slot cover for T-slot				
	Mounting	Length	Part no.	Type
	Insertable	2x 0.5 m	563360	ABP-5-S1

Ordering data – Connecting cables M8x1				Data sheets → Internet: nebu	
	Electrical connection, left	Electrical connection, right	Cable length [m]	Part no.	Type
	Straight socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541333	NEBU-M8G3-K-2.5-LE3
			5	541334	NEBU-M8G3-K-5-LE3
			10	541332	NEBU-M8G3-K-10-LE3
	Angled socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541338	NEBU-M8W3-K-2.5-LE3
			5	541341	NEBU-M8W3-K-5-LE3
			10	541335	NEBU-M8W3-K-10-LE3