

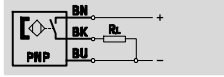
Proximity sensors SMT-10M, for C-slot

Technical data – Magneto-resistive

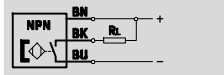


Function

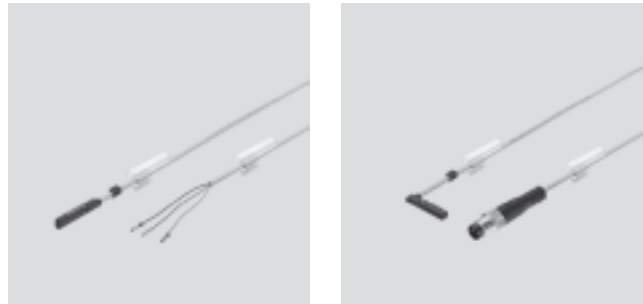
E.g. PNP, N/O contact, with cable



E.g. NPN, N/O contact, with cable



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



General technical data	
Design	For C-slot
Conforms to	EN 60947-5-2
Certification	RCM trademark
CE mark (see declaration of conformity)	To EU EMC Directive ¹⁾
Note on materials	Cable resistant to oil
	Cable free of halogen
	Free of copper and PTFE
	RoHS-compliant

- 1) For information about the applicability of the component see the manufacturer's EC declaration of conformity at: www.festo.com → Support → User documentation.
If the component is subject to restrictions on usage in residential, office or commercial environments or small businesses, further measures to reduce the emitted interference may be necessary.

Input signal/measuring element	
Measured variable	Position
Measuring principle	Magneto-resistive
Ambient temperature [°C]	-20 ... +70

Switching output			
Type SMT-10M	PS	NS	ZS
Switching output	PNP	NPN	Non-contacting, 2-wire
Switching element function	N/O contact		
Repetition accuracy of switching output in ± mm	0.1		
Switch-on time [ms]	0 ... 1		
Switch-off time [ms]	0 ... 1		
Max. switching frequency [Hz]	150		
Max. output current [mA]	100		
Max. output current in mounting kits [mA]	50		
Max. switching capacity DC [W]	3	3	2.4
Max. switching capacity DC in mounting kits [W]	1.5		1.2
Voltage drop [V]	0 ... 1.7	0 ... 1.5	0 ... 6

Output, additional data	
Protection against short circuit	Pulsed
Protection against overloading	Yes

Electronic components	
Rated operating voltage [V DC]	24
Operating voltage range [V DC]	10 ... 30
Reverse polarity protection	For all electrical connections

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Electromechanical components								
Type SMT-10M	PS/NS				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							
	Lateral							
Cable test conditions	Energy chain: 5 million cycles, bending radius 28 mm							
	Torsional strength: >300,000 cycles, ±270°/0.1 m							
	Resistance to bending: to Festo standard; test conditions on request							
Cable length [m]	0.2 ... 30							
Cable attribute	Energy chain + robot applications							
Cable sheath materials	TPE-U(PU)							

Mechanical components	
Type of mounting	Screw-clamped in slot, insertable from above
Max. tightening torque [Nm]	0.4
Mounting position	Any
Housing	PA reinforced
	High-alloy stainless steel

Display/operation	
Switching status display	Yellow LED

Immissions/emissions	
Ambient temperature with flexible cable installation [°C]	−20 ... +70
Protection class	IP65
	IP68

Pin allocation to EN 60947-5-2			
M8x1, 2-pin			
N/O contact			
	Pin	Wire colour	Allocation
	1	Brown	+
	4	Black	Output
M8x1, 3-pin			
N/O contact			
	Pin	Wire colour	Allocation
	1	Brown	+
	3	Blue	−
	4	Black	Output

Pin allocation to EN 60947-5-2			
M12x1, 2-pin			
N/O contact			
	Pin	Wire colour	Allocation
	1	Brown	+
	4	Black	Output
M12x1, 3-pin			
N/O contact			
	Pin	Wire colour	Allocation
	1	Brown	+
	3	Blue	−
	4	Black	Output

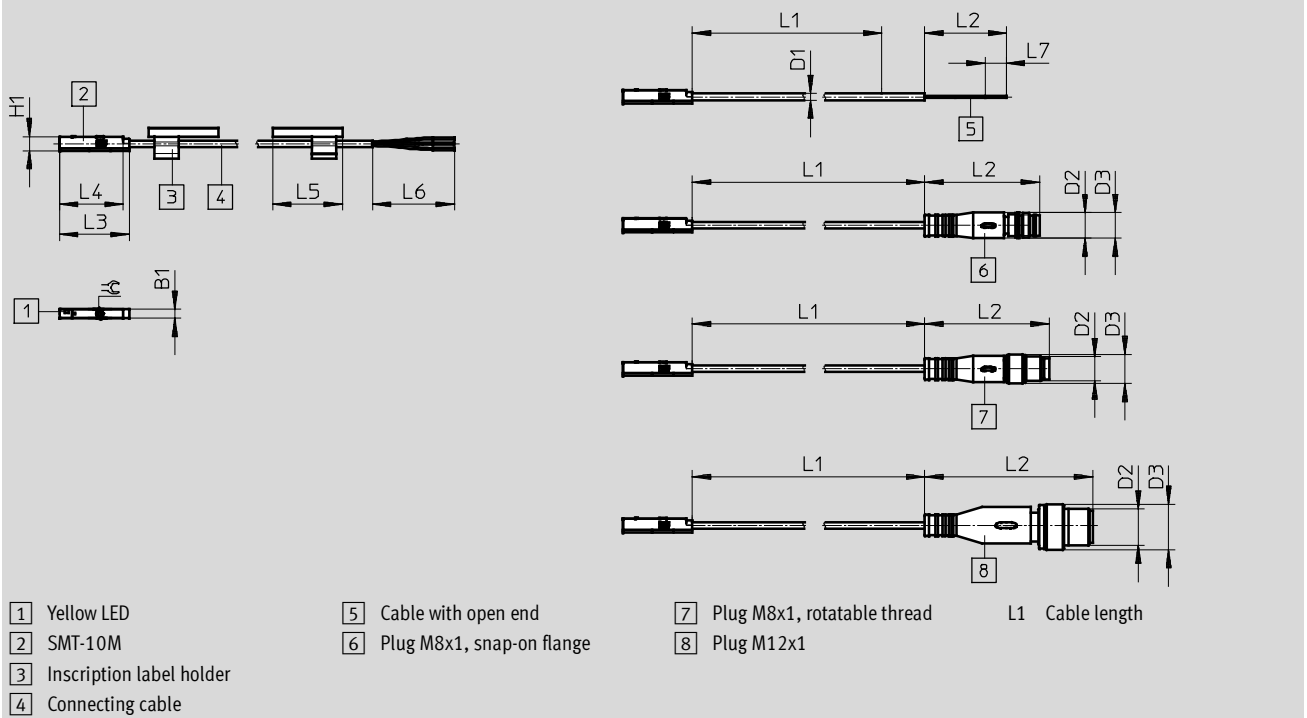
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Technical data – Magneto-resistive

Dimensions

Download CAD data → www.festo.com

SMT-10M-...-L, in-line connection



Type	B1	D1	D2	D3	H1	L2	L3	L4	L5	L6	L7	⌀
SMT-10M-...-OE	2.9	2.15	-	-	4.6	50	22.9	20.9	23	50	7	1.5
SMT-10M-...-M8D			M8x1	8.5		32.7					-	
SMT-10M-...-M8			M8x1	9.6		41.1					-	
SMT-10M-...-M12			M12x1	15		55.5					-	

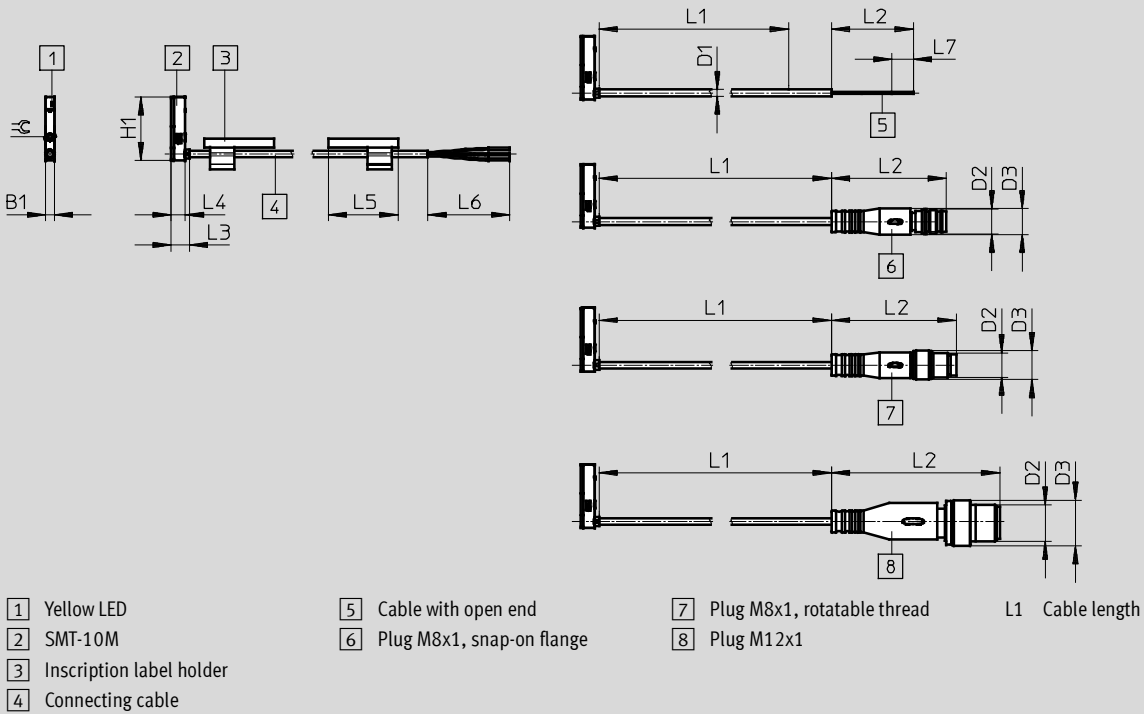
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Technical data – Magneto-resistive

Dimensions

Download CAD data → www.festo.com

SMT-10M-...-Q, lateral connection



Type	B1	D1	D2	D3	H1	L2	L3	L4	L5	L6	L7	⊘
SMT-10M-...-OE	2.9	2.15	-	-	20.9	50	6	4.6	23	50	7	1.5
SMT-10M-...-M8D			M8x1	8.5		32.7					-	
SMT-10M-...-M8			M8x1	9.6		41.1					-	
SMT-10M-...-M12			M12x1	15		55.5					-	

Ordering data

	Switching output	Electrical connection		Cable length [m]	Weight [g]	Part No.	Type	
		Cable	Cable with plug, rotatable thread					
	N/O contact							
	PNP	3-wire	-	-	2.5	16.8	551373	SMT-10M-PS-24V-E-2,5-L-OE
			-	M8x1, 3-pin	0.3	6.7	551374	SMT-10M-PS-24V-E-2,5-Q-OE
	PNP	-	M8x1, 3-pin	-	0.3	6.7	551375	SMT-10M-PS-24V-E-0,3-L-M8D
				-	0.3	6.7	551376	SMT-10M-PS-24V-E-0,3-Q-M8D
	NPN	3-wire	-	-	2.5	16.8	551377	SMT-10M-NS-24V-E-2,5-L-OE
			-	M8x1, 3-pin	0.3	6.7	551378	SMT-10M-NS-24V-E-2,5-Q-OE
	NPN	-	M8x1, 3-pin	-	0.3	6.7	551379	SMT-10M-NS-24V-E-0,3-L-M8D
-				0.3	6.7	551380	SMT-10M-NS-24V-E-0,3-Q-M8D	
Non-contacting, 2-wire	2-wire	-	-	2.5	14.6	551382	SMT-10M-ZS-24V-E-2,5-L-OE	
		-	-	2.5	14.6	551383	SMT-10M-ZS-24V-E-2,5-Q-OE	

Proximity sensors SMT-10M, for C-slot

Modular product system – Magneto-resistive



M Mandatory data							O Options	M
Module No.	Function	Switching output	Rated operating voltage	Cable attribute	Cable length in m	Cable outlet	Cable designation	Connection technology
551372	SMT-10M	PS NS ZS	24V	E	0.2 ... 30	L Q	N	OE M8D M8 M12
Ordering example								
551372	SMT-10M	NS	24V	E	3	L	N	M8D

Ordering table				
Size		Condi-tions	Code	Enter code
M	Module No.	551372		
	Function	Proximity sensor for C-slot, non-contacting	SMT-10M	SMT-10M
	Switching output	3-wire PNP N/O contact	PS	
		3-wire NPN N/O contact	NS	
		2-wire N/O contact	ZS	
	Rated operating voltage [V DC]	24	24V	24V
	Cable attribute	Energy chain + robot applications	E	E
	Cable length [m]	0.2 ... 30 (0.2 ... 5.0 m in 0.1 m increments, 5.0 ... 30 m in 0.5 m increments)	...	
	Cable outlet	In-line	L	
		Lateral	Q	
O	Cable designation	With inscription label holder	-	
		Without inscription label holder	N	
M	Connection technology	Open end	OE	
		M8, rotatable thread	M8D	
		M8, snap-on flange	M8	
		M12, rotatable thread	M12	

Transfer order code

551372	SMT-10M	-		-	24V	-	E	-		-		-		-	
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