

# Proximity switch for T-slot

FESTO



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Simply good:	Expected high Festo quality		
Fast:	Easy and fast to select		

Type codes

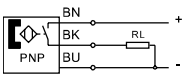
001	Series	
SMT	Proximity sensor	
002	Design type	
8	For T-slot	
003	Sensor version	
M	Inserted in the slot from above	
004	Design	
A	Short	
005	Switching output	
NO	3-wire N/C contact NPN	
NS	3-wire NPN N/O contact	
PO	3-wire PNP N/C contact	
PS	3-wire PNP N/O contact	
ZS	2-wire PNP N/O contact	
006	Rated operating voltage	
24V	24 V	

007	Cable characteristic	
E	Suitable for energy chains/robot applications	
008	Cable length [m]	
	0.1 ... 30 m	
0,3	0.3 m	
2,5	2.5 m	
5,0	5 m	
7,5	7.5 m	
009	Cable identification	
	With label holder	
N	Without label holder	
010	Connection technology	
OE	Open end	
M8	M8, snap-on flange	
M8D	M8, rotatable thread	
M12	M12, rotatable thread	

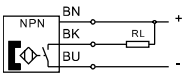
Data sheet – Magneto-resistive

Function

PNP, N/O contact, with cable



NPN, N/O contact, with cable



- Magneto-resistive measuring principle
- Insertable in the slot from above, does not protrude over the cylinder profile



General technical data			
Electrical connection	M8, M8D, M12	OE	NO- ... -OE
Design	For T-slot		
Mounting position	Any		
Based on standard	EN 60947-5-2		
Certification	c UL us - Listed (OL) RCM		-
CE marking	To EU EMC Directive		
(see declaration of conformity)	To EU RoHS Directive		
UKCA marking	To UK EMC regulations		
(see declaration of conformity) <sup>1)</sup>	To UK RoHS regulations		
Application information	Support / Actuator-sensor overview "The right sensor for the actuator"		
Note on materials	Halogen-free RoHS-compliant		
PWIS conformity	VDMA24364-B2-L		
Certificate-issuing authority	UL E232949		
Special characteristics	Oil-resistant		
Suitable for the production of lithium-ion batteries	-	Metals with more than 1% by mass of copper, zinc or nickel 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	-

1) For information about the area of use, see the EC declaration of conformity at: [www.festo.com/catalogue/...](http://www.festo.com/catalogue/...) → Support/Downloads.  
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.

Input signal/measuring element	
Measured variable	Position
Measuring principle	Magneto-resistive
Ambient temperature	[°C] -40 ... +85

## Data sheet – Magneto-resistive

Switching output						
Type		PS	NS	PO	NO	ZS
Switching output		PNP	NPN	PNP	NPN	Non-contacting, 2-wire
Switching element function		N/O contact	N/O contact	N/C contact	N/C contact	N/O contact
Repetition accuracy	[mm]	0.2				
Switch-on time	[ms]	≤ 1.3				
Switch-off time	[ms]	≤ 1.4				
Max. output current	[mA]	100	100	100	100	80
Max. output current in mounting kits	[mA]	100				
Max. switching capacity DC	[W]	2.8	2.8	2.8	2.8	1.9
Max. switching capacity DC in mounting kits	[W]	2.8	2.8	2.8	2.8	1.5
Max. switching frequency	[Hz]	180				
Voltage drop	[V]	< 1.5				
Output, additional data						
Short circuit protection		Yes				
Overload protection		Present				
Electronics						
Type		PS, NS, PO, NO			ZS	
Operating voltage range	[V DC]	5 ... 30			7 ... 30	
Rated operating voltage	[V DC]	24				
Reverse polarity protection		For all electrical connections				
Electromechanics						
Electrical connection		M8	M8D	M12	OE	ZS-...-OE
Connection type		Cable with plug			Cable	
Connection technology		Open end	M8x1, A-coded to EN 61076-2-104	M12x1, A-coded to EN 61076-2-101	Open end	
Number of pins/wires		3			3	2
Type of mounting		–	Screw-type lock		–	
Outlet direction of connection		In-line				
Cable test conditions		Cable chain: 5 million cycles, bending radius 28 mm				
		Torsional resistance: > 300,000 cycles, ±270°/0.1 m				
		Resistance to bending: to Festo standard; test conditions on request				
Cable characteristic		Cable chain + robot				
Information on materials: cable sheath		TPE-U(PUR)				
Cable sheath colour		Grey				

## Ordering data – Modular product system

Ordering table		Conditions	Code	Enter code
Size	8			
Module no.	<b>574333</b>			
Function	Proximity switch for T-slot, electronic		<b>SMT-8M</b>	SMT-8M
			–	–
Series	Short design		<b>A</b>	A
			–	–
Switching output	3-wire PNP N/O contact		<b>PS</b>	
	3-wire NPN N/O contact		<b>NS</b>	
	3-wire PNP N/C contact		<b>PO</b>	
	2-wire PNP N/O contact		<b>ZS</b>	
	PNP / NPN, switchable		<b>PNS</b>	
	PNP N/C contact / N/O contact, switchable		<b>PSO</b>	
	3-wire NPN N/C contact		<b>NO</b>	
			–	–
Rated operating voltage [V DC]	24		<b>24V</b>	24V
			–	–
Cable characteristic	Cable chain + robot		<b>E</b>	E
			–	–
Cable length [m]	0.1 ... 30 (0.1 ... 5.0 in increments of 0.1, 5.0 ... 30 in increments of 0.5)		<b>...</b>	
			–	–
Cable designation	With inscription label holder			
	Without inscription label holder		<b>N</b>	
			–	–
Connection technology	Open end		<b>OE</b>	
	M8, rotatable thread		<b>M8D</b>	
	M8, snap-on flange		<b>M8</b>	
	M12, rotatable thread		<b>M12</b>	