

# Proximity sensor SMT-8M-A

Part number: 574333

FESTO



## Data sheet

Feature	Value
Design	For T-slot
Based on standard	EN 60947-5-2
Approval	RCM trademark c UL us listed (OL)
CE mark (see declaration of conformity)	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
Certificate issuing authority	UL E232949
Special characteristics	Oil resistant
Note on materials	RoHS-compliant Free of halogen
Instructions on use	<a href="https://www.festo.com/Drive-Sensor-Overview">https://www.festo.com/Drive-Sensor-Overview</a>
Measured variable	Position
Measuring principle	Magneto-resistive
Ambient temperature	-40 °C...85 °C
Repetition accuracy	0.2 mm
Switching output	NPN PNP Non-contacting, 2-wire
Switching element function	N/C contact N/O contact
Switch-on time	1.3 ms
Switch-off time	7.3 ms
Max. switching frequency	130 Hz
Max. output current	100 mA
Max. output current using mounting kits	100 mA
Max. switching capacity DC	1.9 W...2.8 W
Max. switching capacity DC using mounting kits	1.5 W...2.8 W
Voltage drop	6 V
Short circuit current rating	yes
Overload protection	Available
Rated operational voltage DC	24 V

Feature	Value
Operational voltage range DC	5 V...30 V
Reverse polarity protection	For all electrical connections
Electrical connection 1, connection type	Cable Cable with plug
Electrical connection 1, connector system	M12x1, A-coded to EN 61076-2-101 M8x1, A-coded, to EN 61076-2-104 Open end
Electrical connection 1, number of connections/cores	2 3 4
Electrical connection 1, type of mounting	Snap-locking Screw-type lock Rotatable Not rotatable
Electrical connection 1, compatible type of mounting	Compatible with latching lock Compatible with rotatable screw-type lock Compatible with rotatable/non-rotatable screw-type lock
Connection outlet orientation	In-line
Material electrical contact	Gold-plated copper alloy
Material connector housing	TPE-U(PU)
Material screw-type lock	Nickel-plated brass
Test conditions cable	Test conditions on request Torsional strength: > 300,000 cycles, $\pm 270^\circ/0.1$ m Flexural strength: > 50000 cycles, bending radius 5 mm Energy chain: > 5 million cycles, bending radius 28 mm
Cable length	0.1 m...30 m
Cable characteristic	Suitable for energy chains/robot applications
Cable sheath colour	Grey
Material cable sheath	TPE-U(PUR)
Material insulating sheath	PP
Type of mounting	Screw-clamped Insertable in the slot from above
Max. tightening torque	0.6 Nm
Mounting position	optional
Housing colour	Black
Material housing	PA-reinforced High-alloy stainless steel
Material union nut	Nickel-plated brass
Switching status indication	Yellow LED
Function reserve indication	Orange LED
Ambient temperature with moving cable	-20 °C...85 °C
Degree of protection	IP65 IP68 IP69K
LABS (PWIS) conformity	VDMA24364-B2-L
Suitability for the production of Li-ion batteries	Product corresponds to the internal product definition from Festo for use in battery production: Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils
Cleanroom class	Element installed statically, no meaningful evaluation possible according to ISO 14644-1