

# Proximity sensor SMT-10M-NS-24V-E-0,3-Q-M8D

Part number: 551380

FESTO



[General operating condition](#)

## Data sheet

Feature	Value
Design	for round slot
Conforms to standard	EN 60947-5-2
Symbol	00991150
Certification	RCM compliance mark
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK RoHS instructions
Special features	Oil-resistant
Note on materials	RoHS-compliant Halogen-free
Application note	<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 ... 70 °C
Repetition accuracy	0.2 mm
Switching output	NPN
Switching element function	N/O contact
On time	≤1.3 ms
Switch-off time	4.2 ms ... 7.3 ms
Max. switching frequency	130 Hz
Max. output current	100 mA
Max. output current in mounting kits	50 mA
Max. switching capacity DC	2.8 W
Max. switching capacity DC in mounting kits	1.5 W
Voltage drop	≤1.5 V
Residual current	<0.15 mA
Short-circuit protection	yes
Overload protection	Yes
Rated operating voltage DC	24 V
DC operating voltage range	5 V ... 30 V
Residual ripple	10 %
Reverse polarity protection	for all electrical connections
Electrical connection 1, connection type	Cable with plug
Electrical connection 1, connection technology	M8x1 A-coded as per EN 61076-2-104
Electrical connection 1, number of pins/wires	3
Electrical connection 1, type of mounting	rotatable

Feature	Value
Electrical connection 1, type of mounting	Compatible with rotatable/non-rotatable screw-type lock
Electrical connection for input 1, connection pattern	00991155
Connection outlet orientation	Transverse
Material of pin contacts	Brass, gold-plated
Material of plug housing	TPE-U(PU)
Material of screw-type lock	Brass, nickel-plated
Connector cable test conditions	Flexural strength: as per Festo standard Test conditions on request Torsion resistance: > 300,000 cycles, ±270°/0.1 m Energy chain: > 5 million cycles, bending radius 28 mm
Cable length	0.3 m
Cable characteristic	suitable for energy chains/robot applications
Color cable sheath	Gray
Material of cable sheath	TPE-U(PUR)
Insulating sheath material	PP
Type of mounting	Screwed tightly Can be inserted in slot from above
Max. tightening torque	0.4 Nm
Mounting position	Any
Product weight	6.7 g
Housing colour	Black
Housing material	High-alloy stainless steel
Switching status indication	LED yellow
Ambient temperature with flexible cable installation	-20 °C ... 70 °C
Degree of protection	IP65 IP68
LABS (PWIS) conformity	VDMA24364-B2-L
Suitability for the production of Li-ion batteries	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)
Cleanroom suitability, measured according to ISO 14644-14	Statically installed element, no meaningful evaluation possible according to ISO 14644-1