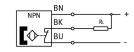
Proximity switch SMT-8M-A-NO-24V-E-2,5-OE Part number: 8138000

FESTO





General operating condition

Data sheet

Based on norm Symbol O0997287 Certification Certification RCM compliance mark cult us - Listed (0L) CE marking (see declaration of conformity) As per EU RLM clirective As per EU RLM clirective UKCA marking (see declaration of conformity) To UK instructions for EMC To UK RoH5 instructions Certificate issuing authority UL E232949 Special features Oil-resistant Note on materials RoH5-compliant Halogen-free Application note Intrast//www.festo.com/Drive-Sensor-Overview Measured variable Measuring principle Magneto-resistive Ambient temperature Ambient temperature Aviance Aviance Switching output NPN Switching element function N/C contact On time Aliance Aliance Aliance Aliance Awa. switching frequency 130 Hz Max. output current 100 mA Max. output current in mounting kits 100 mA Max. switching capacity DC Awa. switching capacity DC Awa. switching capacity DC Awa. switching capacity DC in mounting kits 2.8 W Voltage drop Available Rated operating voltage ange Sv-vs-30 V Reverse polarity protection For all electrical connection 1, connection technology Open end	Feature	Value
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Gertification CE marking (see declaration of conformity) CE marking (see declaration of conformity) As per EU EMC directive As per EU ROHS directive UKCA marking (see declaration of conformity) To UK mistructions for EMC To UK RoHS instructions Gertificate issuing authority UL E232949 Special features Oil-resistant Note on materials Application note https://www.festo.com/Drive-Sensor-Overview Measured variable Application note https://www.festo.com/Drive-Sensor-Overview Measuring principle Ambient temperature 40° C 85° C Repetition accuracy 0.2 mm Switching output NPN Switching element function N/C contact 41.3 ms Switch off time 37.3 ms Max. switching frequency 130 Hz Max. output current 100 mA Max. output current in mounting kits 100 mA Max. switching capacity DC Amax. switching capacity DC in mounting kits 2.8 W Voltage drop Available Rated operating voltage DC 2a V DC operating voltage range Reverse polarity protection For all electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3 a	Based on norm	EN 60947-5-2
C UL us - Listed (OL) CE marking (see declaration of conformity) As per EU RMC directive As per EU RMIS directive As per EU RMIS directive UKCA marking (see declaration of conformity) To UK instructions for EMC TO UK ROHS instructions Certificate issuing authority UL E232949 Special features Oil-resistant Note on materials ROHS-compliant Halogen-free Application note https://www.festo.com/Drive-Sensor-Overview Measured variable Position Measuring principle Magneto-resistive Ambient temperature -40 °C 85 °C Repetition accuracy 0.2 mm Switching element function N/C contact On time \$1.3 ms Switching element function N/C contact On time \$7.3 ms Max. switching frequency 130 Hz Max. switching frequency 130 Hz Max. suitching capacity DC 2.8 W Max. switching capacity DC 2.8 W Max. switching capacity DC 2.8 W Max. switching capacity DC in mounting kits 2.8 W Voltage drop 4.5 V Short-circuit prot	Symbol	00997287
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To UK RoHS instructions Certificate issuing authority UL 232949 Special features Oil-resistant Note on materials RoHS-compliant Halogen-free Application note https://www.festo.com/Drive-Sensor-Overview Measured variable Measuring principle Ambient temperature Ao °C 85 °C Repetition accuracy O.2 mm Switching output NPN Switching element function N/C contact On time \$1.3 ms Switch-off time \$7.3 ms Ams. switching frequency 130 Hz Max. output current in mounting kits 100 mA Max. output current in mounting kits 100 mA Max. witching capacity DC in mounting kits 2.8 W Max. switching pode forp Short-circuit protection Reted operating voltage arage Available Reter so plantily protection Reverse polarity protection Feverse polarity protection Feverse polarity protection to pee Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires Oil-resistant Nell-Scand Polar-Circuit protection Polar electrical connection 1, number of pins/wires Oil-resistant Nell-Scand Polar-Circuit protection For all electrical connection 1, connection technology Open end Electrical connection 1, connection technology Open end	CE marking (see declaration of conformity)	'
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Halogen-free Application note Application note Measured variable Measuring principle Ambient temperature Application accuracy Applicati	Special features	Oil-resistant
Measured variable Measuring principle Measuring principle Ambient temperature 40 °C 85 °C Repetition accuracy 0.2 mm Switching output NPN Switching element function N/C contact On time \$1.3 ms Switch-off time \$7.3 ms Max. switching frequency 130 Hz Max. output current 100 mA Max. output current in mounting kits 100 mA Max. switching capacity DC 2.8 W Max. switching capacity DC in mounting kits 2.8 W Short-circuit protection Short-circuit protection Available Rated operating voltage DC 24 V DC operating voltage range Severse polarity protection Felectrical connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires 3 Severse polarity number of pins/wires Position Magneto-resistive Ador C 85 °C Ador	Note on materials	· '
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Ambient temperature 40°C 85°C Repetition accuracy 0.2 mm Switching output NPN Switching element function N/C contact On time \$1.3 ms Switch-off time \$7.3 ms Max. switching frequency 130 Hz Max. output current 100 mA Max. output current in mounting kits 100 mA Max. switching capacity DC 2.8 W Max. switching capacity DC in mounting kits 2.8 W Voltage drop \$1.5 V Short-circuit protection yes Overload protection Available Rated operating voltage DC 24 V DC operating voltage range 5 V 30 V Reverse polarity protection 1, connection type Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3	Measured variable	Position
Repetition accuracy Switching output NPN Switching element function N/C contact On time \$1.3 ms Switch-off time \$7.3 ms Max. switching frequency Max. output current 100 mA Max. output current in mounting kits 100 mA Max. switching capacity DC 2.8 W Max. switching capacity DC in mounting kits 2.8 W Voltage drop \$1.5 V Short-circuit protection yes Overload protection Available Rated operating voltage DC \$2 V V DC operating voltage range \$5 V 30 V Reverse polarity protection \$1 connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires 3 a Simbal And	Measuring principle	Magneto-resistive
Switching output NPN Switching element function N/C contact On time \$1.3 ms Switch-off time \$7.3 ms Max. switching frequency 130 Hz Max. output current 100 mA Max. output current in mounting kits 100 mA Max. switching capacity DC 2.8 W Max. switching capacity DC in mounting kits 2.8 W Voltage drop \$1.5 V Short-circuit protection yes Overload protection Available Rated operating voltage DC Coperating voltage arnge \$5 V30 V Reverse polarity protection For all electrical connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires 3	Ambient temperature	-40 °C 85 °C
Switching element function N/C contact On time \$1.3 ms Switch-off time \$7.3 ms Max. switching frequency 130 Hz Max. output current 100 mA Max. output current in mounting kits 100 mA Max. switching capacity DC 2.8 W Max. switching capacity DC in mounting kits 2.8 W Voltage drop 1.5 V Short-circuit protection yes Overload protection 4vailable Rated operating voltage DC 24 V DC operating voltage range 5 V 30 V Reverse polarity protection type Cable Electrical connection 1, connection type Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3	Repetition accuracy	0.2 mm
On time \$1.3 ms Switch-off time \$7.3 ms Max. switching frequency 130 Hz Max. output current 100 mA Max. output current in mounting kits 100 mA Max. switching capacity DC 2.8 W Max. switching capacity DC in mounting kits 2.8 W Voltage drop \$1.5 V Short-circuit protection yes Overload protection Available Rated operating voltage DC 24 V DC operating voltage range 5 V 30 V Reverse polarity protection for all electrical connections 1, connection type Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3	Switching output	NPN
Switch-off time \$7.3 ms Max. switching frequency 130 Hz Max. output current 100 mA Max. output current in mounting kits 100 mA Max. switching capacity DC 2.8 W Max. switching capacity DC in mounting kits 2.8 W Voltage drop 1.5 V Short-circuit protection yes Overload protection 4vailable Rated operating voltage DC 24 V DC operating voltage range 5 V 30 V Reverse polarity protection for all electrical connections Electrical connection 1, connection type Cable Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3	Switching element function	N/C contact
Max. switching frequency Max. output current Max. output current in mounting kits Max. switching capacity DC 2.8 W Max. switching capacity DC in mounting kits 2.8 W Voltage drop Voltage drop Voltage drop Voltage drop Vorload protection Available Rated operating voltage DC DC operating voltage arnge S V 30 V Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires 3 130 Hz 130 HZ 130 HZ 130 HZ 140 MAX. Switching frequency 100 mA 100 mA 2.8 W 4.5 V 4.5 V 5 V 5 V 5 V 6 To Aliable Cable Electrical connection 1, connection type Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires	On time	≤1.3 ms
Max. output current Max. output current in mounting kits 100 mA Max. switching capacity DC 2.8 W Max. switching capacity DC in mounting kits 2.8 W Voltage drop C1.5 V Short-circuit protection Ves Overload protection Available Rated operating voltage DC DC operating voltage range 5 V 30 V Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires 100 mA 100 ma 100 ma 100 ma 100 ma 100 ma 100 ma 100 ma 100 ma 100 ma 100 ma 100	Switch-off time	≤7.3 ms
Max. output current in mounting kits Max. switching capacity DC 2.8 W Max. switching capacity DC in mounting kits 2.8 W Voltage drop C1.5 V Short-circuit protection Short-circuit protection Wes Overload protection Available Rated operating voltage DC DC operating voltage range S V 30 V Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, connection technology Den end Electrical connection 1, number of pins/wires 3	Max. switching frequency	130 Hz
Max. switching capacity DC Max. switching capacity DC in mounting kits 2.8 W Voltage drop C1.5 V Short-circuit protection Overload protection Rated operating voltage DC DC operating voltage range S V 30 V Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires 2.8 W 2.8 W C1.5 V SV SV SV SV SV SV SV SV SV	Max. output current	100 mA
Max. switching capacity DC in mounting kits Voltage drop C1.5 V Short-circuit protection Overload protection Available Rated operating voltage DC DC operating voltage range S V 30 V Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires 2.8 W C1.5 V Available S v 30 V for all electrical connections Cable Open end Electrical connection 1, number of pins/wires 3	Max. output current in mounting kits	100 mA
Voltage drop \$\text{Voltage drop}\$ \text{Voltage drop}\$ \text{Short-circuit protection}\$ \text{yes}\$ Overload protection}\$ Available Rated operating voltage DC 24 V DC operating voltage range 5 V 30 V Reverse polarity protection} \text{for all electrical connections}\$ Electrical connection 1, connection type} Cable Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3	Max. switching capacity DC	2.8 W
Short-circuit protection yes Overload protection Available Rated operating voltage DC 24 V DC operating voltage range 5 V 30 V Reverse polarity protection for all electrical connections Electrical connection 1, connection type Cable Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3	Max. switching capacity DC in mounting kits	2.8 W
Overload protection Available Rated operating voltage DC 24 V DC operating voltage range 5 V 30 V Reverse polarity protection for all electrical connections Electrical connection 1, connection type Cable Electrical connection 1, number of pins/wires 3	Voltage drop	<1.5 V
Rated operating voltage DC DC operating voltage range 5 V 30 V Reverse polarity protection Electrical connection 1, connection type Cable Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3	Short-circuit protection	yes
DC operating voltage range 5 V 30 V Reverse polarity protection for all electrical connections Electrical connection 1, connection type Cable Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3	Overload protection	Available
Reverse polarity protection for all electrical connections Electrical connection 1, connection type Cable Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3	Rated operating voltage DC	24 V
Electrical connection 1, connection type Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3	DC operating voltage range	5 V 30 V
Electrical connection 1, connection technology Electrical connection 1, number of pins/wires 3	Reverse polarity protection	for all electrical connections
Electrical connection 1, number of pins/wires 3	Electrical connection 1, connection type	Cable
	Electrical connection 1, connection technology	Open end
Connection outlet orientation Longitudinal	Electrical connection 1, number of pins/wires	3
	Connection outlet orientation	Longitudinal

Feature	Value
Connector cable test conditions	Flexural strength: as per Festo standard Test conditions on request Torsional resistance: > 300 000 cycles, ±270°/0.1 m Energy chain > 5 million cycles, bending radius 28 mm
Cable length	2.5 m
Cable characteristic	Suitable for energy chains/robot applications
Color cable sheath	Gray
Material of cable sheath	TPE-U(PUR)
Type of mounting	Screwed tightly Can be inserted in slot from above
Max. tightening torque	0.6 Nm
Mounting position	Any
Product weight	29.1 g
Housing colour	Black
Housing material	PA-reinforced High-alloy stainless steel
Switching status indication	LED yellow
Function reserve indication	LED orange
Ambient temperature with flexible cable installation	-20 ℃ 85 ℃
Degree of protection	IP65 IP68 IP69K
LABS (PWIS) conformity	VDMA24364-B2-L
Suitability for the production of Li-ion batteries	Metals with more than 1% by mass of 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 according to ISO 14644-1