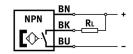
Proximity sensor SMT-8M-A-NS-24V-E-2,5-OE

Part number: 574338







General operating condition

Data sheet

Based on norm Symbol Certification RCM compliance mark cult us - Listed (OL) CE marking (see declaration of conformity) As per EU ENC directive As per EU ROHS directive As per EU ROHS directive UKCA marking (see declaration of conformity) To UK instructions for ENC To UK RoHS instructions Certificate issuing authority UL E232949 Special features Oil-resistant Note on materials RoHS-compliant Halogen-free Application note Intrast/Newsurfesto.com/Drive-Sensor-Overview Measured variable Measuring principle Magneto-resistive Ambient temperature Andient temperature Andient temperature Andient temperature Andient temperature Andient temperature Andient function N/O contact On time All and Andient All and Andient Andient function N/O contact On time All and Andient Andient function Andient termine and Andient Andient function Andient termine and Andient Andient function Andi	Feature	Value
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C UL us - Listed (OL) CE marking (see declaration of conformity) As per EU RMC directive As per EU RMC directive Certificate issuing authority UL E237949 Special features Oil-resistant Note on materials Note on materials Application note Application note Attps://www.festo.com/Drive-Sensor-Overview Measured variable Position Measuring principle Magneto-resistive Ambient temperature 40° C 85° C Repetition accuracy O.2 mm Switching output NPN Switching element function N/O contact On time 41.3 ms Switching frequency 130 Hz Max. switching frequency 130 Hz Max. switching capacity DC Max. support current Max. switching capacity DC Max. switching capacity DC Max. switching capacity DC in mounting kits 2.8 W Voltage drop 4.1.5 V Short-circuit protection Verenating voltage range 8 Evers polarity protection Reverse polarity protection For all electrical connection 1, connection technology Flectrical connection 1, number of pins/wires Electrical connection 1, number of pins/wires Electrical connection 1, number of pins/wires Electrical connection 1, number of pins/wires 3 A EUR CHURCHICATION As per EU RMC directive As per EU RMC directive As per EU RMS (instructions And (instructions) Augustation of EUR CHICATION BAS (instructions) Augustation of EUR CHICATION As per EU RMC direction As per EU RMS (instructions) BAS (instructions) Augustation of EUR CHICATION As per EU RMS (instructions) As per EU RMS (instructions) BAS (instructions) Augustation of EUR CHICATION As per EU RMS (instructions) As per EU RMS (instructions) BAS (instructions) As per EU RMS (instructions) As per EU RMS (instructions) BAS (instructions) As per EU	Symbol	00991149
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Halogen-free Application note Application note Measured variable Measuring principle Ambient temperature Application accuracy Applicati	Special features	Oil-resistant
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Ambient temperature -40 °C 85 °C Repetition accuracy 0.2 mm Switching output NPN Switching element function N/O 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 Querload protection Rated operating voltage DC Coperating voltage range \$5 V 30 V Reverse polarity protection for all electrical connection 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/O 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 C operating voltage range \$5 V 30 V Reverse polarity protection for all electrical connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires 3	Measuring principle	Magneto-resistive
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Switching element function 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 connection 1, connection type Electrical connection 1, connection technology Doen end Electrical connection 1, number of pins/wires 3	Repetition accuracy	0.2 mm
Switch-off 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 Querload protection Available Rated operating voltage DC DC operating voltage range \$5 V 30 V Reverse polarity protection \$1.5 V Cable Electrical connection 1, connection type Electrical connection 1, connection technology Dopen 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 Available Rated operating voltage DC DC operating voltage range \$5 V 30 V Reverse polarity protection for all electrical connections Electrical connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires 3	Switching element function	N/O 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 \$\text{1.5 V}\$ Short-circuit protection \$\text{yes}\$ Overload protection Available Rated operating voltage DC 24 V DC operating voltage range \$\text{5 V 30 V}\$ Reverse polarity protection for all electrical connections Electrical connection 1, connection type Electrical connection 1, connection technology Doen end Electrical connection 1, number of pins/wires 3	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 <1.5 V Short-circuit protection 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 3	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 Doen end Electrical connection 1, number of pins/wires 2.8 W 2.9 W 4.15 V 5 V 5 V 6 Cable Cable Cable Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3	Max. output current	100 mA
Max. switching capacity DC in mounting kits 2.8 W Voltage drop 4.5 V Short-circuit protection 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 Doen end Electrical connection 1, number of pins/wires 2.8 W 4.5 V 5 V 6.5 V	Max. output current in mounting kits	100 mA
Voltage drop Voltage drop Voltage drop 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 Dopen end Electrical connection 1, number of pins/wires Voltage drop Value Ves Voltage drop Ves Ves Voltage drop Ves Ves Ves Ves Ves Ves Ves Ve	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 Open end 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
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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