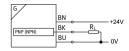
Proximity sensors SDBT-MSX-1L-PU-E-5-N-LE

FESTO

Part number: 8059122





Data sheet

EN 60947-5-2 Symbol 0995964 Retrification RCM compliance mark cUL us - Usted (OL) ET marking (see declaration of conformity) As per EU EMC directive As per EU EMC dir	Feature	Value
Armonia (Symbol (Symbol (Street (Fication) (Street (Fication) (Street (Fication) (Street (Fication) (Street (S	Design	for T-slot
ertification RCM compliance mark c UL us - Usted (OL) E marking (see declaration of conformity) E marking (see declaration of conformity) A per EU RMC directive As per EU RMC directive As per EU RMC directive As per EU RMC directive To UK instructions for EMC To UK RMS his instructions CC characters KC EMC CE Characters KC EMC CE LABOR COMPLIANT COMPLI	Based on norm	EN 60947-5-2
C UL us - Listed (OL) Et marking (see declaration of conformity) As per EU RMC directive IXCA marking (see declaration of conformity) To UK instructions for EMC To UK ROHS instructions IXC characters KC EMC Iterificate issuing authority UL E232949 Iote on materials RoHS-compliant Halogen-free Aeasured variable Aeasured variable Aeasuring principle Magnetic Hall Indianate	Symbol	00995964
As per EU RoHS directive TO UK instructions for EMC TO UK ROHS instructions CC characters KC EMC CE characters KC EMC UL E232949 RoHS-compliant Halogen-free Aleasured variable Aleasuring principle Aleasuring pr	Certification	· · · · · · · · · · · · · · · · · · ·
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Letrificate issuing authority Liu E232949 RoHS-compliant Halogen-free Position Aleasuring principle Aleasuring output Aleasuring output Aleasuring output Aleasuring output Aleasuring element function Aleasuring frequency Aleasuring frequency Aleasuring frequency Aleasuring frequency Aleasuring frequency Aleasuring element in mounting kits Aleasuring element in mounting element in mounting kits Aleasuring element in mounting element in moun	UKCA marking (see declaration of conformity)	
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Halogen-free Aleasured variable Aleasuring principle Aleasuring princip	Certificate issuing authority	UL E232949
Measuring principle Magnetic Hall Aux. travel speed Aux. switching element function Aux. switching frequency Aux. output current Aux. output current Aux. output current in mounting kits Aux. switching capacity DC Aux. switching capacity DC Aux. switching capacity DC in mounting kits Aux. switching capacity DC in Max. switching capacity Aux. switching capacity Aux. switching capacity Aux. switching capacity Aux. switc	Note on materials	'
Ax. switching frequency Ax. output current in mounting kits Ax. switching capacity DC in mounting kits Ax. switching capacity DC Ax. switching capacity DC Ax. switching capacity DC Ax. switching capacity DC Ax. switching frequency Ax. switching capacity DC Ax. switching capacity Ax. switch	Measured variable	Position
Aax. travel speed 2 m/s Repetition accuracy 2.1 mm PNP/NPN switchable N/C contact/N/O contact switchable N/C contact/N/O	Measuring principle	Magnetic Hall
tepetition accuracy 0.1 mm PNP/NPN switchable N/C contact/N/O contact switchable N/C contact/N/O c	Ambient temperature	-40 °C 85 °C
witching output PNP/NPN switchable N/C contact/N/O contact switchable N/C contact/N/O contact switchable N/C contact/N/O contact switchable O.2 mm Soft time Soft time Soft time Soft time Soft time Soft time Soft time Soft time Soft time Soft	Max. travel speed	3 m/s
witching element function N/C contact/N/O contact switchable 0.2 mm 2 ms witch-off time 2 ms Aax. switching frequency Aax. output current 100 mA Aax. output current in mounting kits 100 mA Aax. switching capacity DC 2.8 W Aax. switching capacity DC in mounting kits 2.8 W Ainimum load current 0.15 mA desidual current 0.2 mA chort-circuit protection yes Overload protection Available stated operating voltage DC 24 V Everse polarity protection for all electrical connections	Repetition accuracy	0.1 mm
Available	Switching output	PNP/NPN switchable
in time s2 ms Switch-off time s2 ms Max. switching frequency 200 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 41.5 V Minimum load current 0.15 mA Residual current 0.2 mA Residual current 0.2 mA Reversidual current 0.3 mA Reversidual current 0.4 maximum load current 0.5 mA Reversidual current 0.5 mA Reversidual current 0.5 mA Reversidual current 0.7 maximum load current 0.8 maximum load current 0.9 maximum l	Switching element function	N/C contact/N/O contact switchable
Switch-off time Aax. switching frequency Aax. output current Aax. output current in mounting kits Aax. switching capacity DC Aax. switching capacity DC Aax. switching capacity DC in mounting kits Aax. switching capacity DC in mounting kits	Hysteresis	0.2 mm
Anax. switching frequency Anax. output current Anax. output current in mounting kits Anax. output current in mounting kits Anax. switching capacity DC Anax. switching capacity DC Anax. switching capacity DC in mounting kits Anax. switching capacity DC Anax. switching capacit	On time	≤2 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 Minimum load current 0.15 W Minimum load current 0.2 mA Short-circuit protection Available Maxed operating voltage DC 24 V More operating voltage range 10 V 30 V Reverse polarity protection for all electrical connections	Switch-off time	≤2 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 V1.5 V Minimum load current V0.2 mA Short-circuit protection Ves Overload protection Available Rated operating voltage DC Coperating voltage range Vereroad protection Vereverse polarity protection Vereverse polarity protection Value of the connections Value of the connections Value of the connections	Max. switching frequency	200 Hz
Axx. switching capacity DC Axx. switching capacity DC in mounting kits 2.8 W Axiolated drop Axiolated current Axiolated current Axiolated operating voltage DC Coperating voltage range Axiolated current Coperating voltage range Axiolated connection Axiolated connections Axiolated connections Axiolated connections	Max. output current	100 mA
Alax. switching capacity DC in mounting kits 2.8 W Alnimum load current 0.15 mA Residual current 0.2 mA Short-circuit protection Verload protection Available Rated operating voltage DC CO operating voltage range 10 V 30 V Reverse polarity protection for all electrical connections	Max. output current in mounting kits	100 mA
Voltage drop Vo	Max. switching capacity DC	2.8 W
Alinimum load current O.15 mA desidual current O.2 mA Short-circuit protection Ves Overload protection Available Stated operating voltage DC OC operating voltage range 10 V 30 V Reverse polarity protection for all electrical connections	Max. switching capacity DC in mounting kits	2.8 W
Residual current Chort-circuit protection Chort-circuit protection Chort-circuit protection Chort-circuit protection Available Cated operating voltage DC Chort-circuit protection Coperating voltage range	Voltage drop	<1.5 V
Short-circuit protection yes Overload protection Available Rated operating voltage DC 24 V OC operating voltage range 10 V 30 V Reverse polarity protection for all electrical connections	Minimum load current	0.15 mA
Overload protection Available Rated operating voltage DC 24 V OC operating voltage range 10 V 30 V Reverse polarity protection for all electrical connections	Residual current	<0.2 mA
Rated operating voltage DC C operating voltage range 10 V 30 V Reverse polarity protection for all electrical connections	Short-circuit protection	yes
OC operating voltage range 10 V 30 V Reverse polarity protection for all electrical connections	Overload protection	Available
Reverse polarity protection for all electrical connections	Rated operating voltage DC	24 V
	DC operating voltage range	10 V 30 V
Sectrical connection 1 connection type	Reverse polarity protection	for all electrical connections
Cable	Electrical connection 1, connection type	Cable

Feature	Value
Electrical connection 1, connection technology	Open end
Electrical connection 1, number of pins/wires	3
Connection outlet orientation	Longitudinal
Connector cable test conditions	Flexural strength: as per Festo standard Test conditions on request Energy chain > 5 million cycles, bending radius 28 mm Torsional resistance: > 300 000 cycles, ±270°/0.1 m
Cable length	5 m
Cable characteristic	Suitability for energy chains/robot applications
Color cable sheath	Gray
Material of cable sheath	TPE-U(PUR)
Wire ends	Cable end sleeve
Type of mounting	Screwed tightly Can be inserted in slot from above
Max. tightening torque	0.6 Nm
Mounting position	Any
Product weight	56 g
Housing colour	Black
Housing material	PA-reinforced High-alloy stainless steel
Switching status indication	LED yellow
Status indicator	LED green
Setting options	Auto teach-in Capacitive pushbutton
Ambient temperature with flexible cable installation	-20 °C 85 °C
Degree of protection	IP68
LABS (PWIS) conformity	VDMA24364-B2-L
Suitability for the production of Li-ion batteries	Metals with more than 1% 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