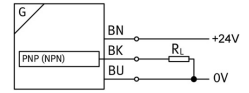# Proximity sensors
SDBT-MSX-1L-PU-E-5-N-LE
Part number: 8059122

📄 General operating condition

Data sheet

Feature	Value
Design	for T-slot
Based on norm	EN 60947-5-2
Symbol	00995964
Certification	RCM compliance mark c UL us - Listed (OL)
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Certificate issuing authority	UL E232949
Note on materials	RoHS-compliant Halogen-free
Application note	https://www.festo.com/Drive-Sensor-Overview
Measured variable	Position
Measuring principle	Magnetic Hall
Ambient temperature	-40 ºC ... 85 ºC
Max. travel speed	3 m/s
Repetition accuracy	0.1 mm
Switching output	PNP/NPN switchable
Switching element function	N/C contact/N/O contact switchable
Hysteresis	0.2 mm
On time	≤2 ms
Switch-off time	≤2 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	‹1.5 V
Minimum load current	0.15 mA
Residual current	‹0.2 mA
Short-circuit protection	yes
Overload protection	Available
Rated operating voltage DC	24 V
DC operating voltage range	10 V ... 30 V
Reverse polarity protection	for all electrical connections
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 Torsional resistance: › 300 000 cycles, ±270°/0.1 m Energy chain › 5 million cycles, bending radius 28 mm
Cable length	5 m
Cable characteristic	Suitable 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% 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