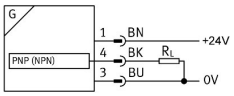
Proximity sensors
SDBT-MSX-1L-PU-E-0.3-N-M8

Part number: 8059120





Data sheet

Feature	Value
Design	For T-slot
Based on norm	EN 60947-5-2
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 °C...85 °C
Max. travel speed	3 m/s
Repetition accuracy	0.1 mm
Switching output	PNP/NPN switchable
Switching element function	N/O-N/C 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	Yes

Feature	Value
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 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	Screw-type lock Rotatable Compatible with rotatable/non-rotatable screw-type lock
Connection outlet orientation	Longitudinal
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)
Type of mounting	Screwed on Can be inserted in slot from above
Max. tightening torque	0.6 Nm
Mounting position	Any
Product weight	10 g
Housing colour	Black
Housing material	PA-reinforced high-alloy stainless steel
Switching status indication	Yellow LED
Status indicator	Green LED
Setting options	Auto teach-in Capacitive key
Ambient temperature with flexible cable installation	-20 °C...85 °C
Degree of protection	IP65 IP68 IP69K
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