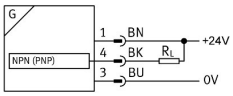
Proximity sensor
SDBT-MSX-1L-NU-E-0.3-N-M8

Part number: 8059123





Data sheet

Feature	Value
Design	For T-slot
Based on standard	EN 60947-5-2
Approval	RCM c UL us - Listed (Oil)
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with 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 Free of halogen
Instructions on use	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 or N/C contact, switchable
Hysteresis	0.2 mm
Switch-on time	2 ms
Switch-off time	2 ms
Max. switching frequency	200 Hz
Max. output current	100 mA
Max. output current using mounting kits	100 mA
Max. switching capacity DC	2.8 W
Max. switching capacity DC using mounting kits	2.8 W
Voltage drop	1.5 V
Min. load current	0.15 mA
Off-state current	0.2 mA
Short circuit current rating	Yes
Overload protection	Yes

Feature	Value
Rated operational voltage DC	24 V
Operational voltage range DC	10 V...30 V
Reverse polarity protection	For all electrical connections
Electrical connection 1, connection type	Cable with plug
Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 1, number of connections/cores	3
Electrical connection 1, type of mounting	Screw-type lock Rotatable
Electrical connection 1, compatible type of mounting	Compatible with rotatable/non-rotatable screw-type lock
Connection outlet orientation	In-line
Material screw-type lock	Brass, nickel-plated
Test conditions cable	Bending strength: to Festo standard Test conditions on request Torsional strength: > 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
Cable sheath colour	Grey
Material cable sheath	TPE-U(PUR)
Type of mounting	Screw-clamped Insertable in the slot from above
Max. tightening torque	0.6 Nm
Mounting position	Any
Product weight	10 g
Housing colour	Black
Material housing	Reinforced PA High-alloy stainless steel
Switching status indication	Yellow LED
Status indication	Green LED
Setting options	Auto teach-in Capacitive pushbutton
Ambient temperature with moving cable	-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	Element installed statically, no meaningful evaluation possible according to ISO 14644-1