

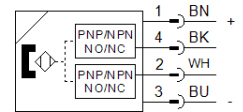
position sensor SRBS-Q1-10-E270-EP-1-S-M8

Part number: 2412001

★ Core product range

is used to detect the rotation of the shaft for quarter turn actuators, sensing is magnetic and contactless.

FESTO



Data sheet

Feature	Value
Design	Round
Based on the standard	EN 60947-5-2
Authorisation	RCM Mark c UL us - Listed (OL)
CE mark (see declaration of conformity)	to EU directive for EMC in accordance with EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
KC mark	KC-EMV
Special characteristics	Oil resistant
Materials note	Conforms to RoHS Halogen-free
Measured variable	Rotation angle
Measuring principle	Hall magnetic
Sensing range	> 270 deg
Ambient temperature	-20 ... 70 °C
Typical scanning interval	3 ms
Switch output	2 x PNP or 2 x NPN switchable
Switching element function	N/C or N/O contact, switchable
Switching point reproducibility	≤ 1 °
Switch-on time	< 4 ms
Switch-off time	< 4 ms
Max. switching frequency	125 Hz
Max. output current	50 mA
Max. contact rating DC	1.5 W
Voltage drop	< 1 V
Residual current	< 0.05 mA
Short circuit strength	Yes
Overload withstand capability	Available
Nominal operating voltage DC	24 V
Operating voltage range DC	10 ... 30 V
Residual ripple	10 %
Idle current	≤ 20 mA
Polarity protected	for all electrical connections
Electrical connection 1, connection type	Cable with plug
Electrical connection 1, connection technology	M8x1, A-coded to EN 61076-2-104
Electrical connection 1, number of pins/wires	4
Electrical connection 1, type of mounting	Screw lock
Connector exit direction	axial
Material electrical contact	Gold-plated copper alloy
Test conditions of cable	Bending strength according to Festo standard Torsion resistance: > 300,000 cycles, ±270°/0.1 m Energy chain: > 5 million cycles, bending radius 28 mm

Feature	Value
Cable length	0.3 m
Cable attribute	Suitable for energy chains/robot applications
Cable sheath colour	Grey
Material cable sheath	TPE-U(PUR)
Cable diameter	2.9 mm
Mounting type	Tightened
Assembly position	Any
Product weight	35 g
Housing colour	Black
Material housing	PA-reinforced Polyester
Material of union nut	Nickel-plated brass
Material foil	Polyester
Operating status display	Yellow LED
Setting options	Pushbutton
Storage temperature	-30 ... 70 °C
Ambient temperature with flexible cable installation	-20 ... 70 °C
Protection class	IP65 IP68
Safety class	III
Shock resistance	Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27
Vibration resistance	Transport application test with severity level 3 in accordance with FN 942017-4 and EN 60068-2-6
Corrosion resistance classification CRC	2 - Moderate corrosion stress
PWIS conformity	VDMA24364-B2-L