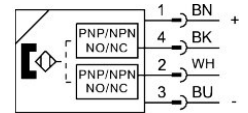


Position sensor SRBS-Q12-12-E270-EP-1-S-M8

Part number: 2393546

FESTO



General operating condition

Data sheet

| Feature | Value |
|--|---|
| Design | Round |
| Based on standard | EN 60947-5-2 |
| Symbol | 00995400 |
| 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 RoHS instructions |
| Special characteristics | Oil-resistant |
| Note on materials | RoHS compliant Free of halogen |
| Measured variable | Rotation angle |
| Measuring principle | Magnetic Hall |
| Sensing range | >270 deg |
| Ambient temperature | -20 °C ... 70 °C |
| Typical sampling interval | 3 ms |
| Switching output | 2 x PNP or 2 x NPN, switchable |
| Switching element function | NC or NO, switchable |
| Repetition accuracy of switching point | ≤ 1° |
| Switch-on time | ≤ 4 ms |
| Switch-off time | ≤ 4 ms |
| Max. switching frequency | 125 Hz |
| Max. output current | 50 mA |
| Max. switching capacity DC | 1.5 W |
| Voltage drop | ≤ 1 V |
| Off-state current | ≤ 0.05 mA |
| Short circuit current rating | Yes |
| Overload protection | Yes |
| Rated operational voltage DC | 24 V |
| Operational voltage range DC | 10 V ... 30 V |
| Residual ripple | 10% |
| No-load supply current | ≤ 20 mA |
| 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 | 4 |

| Feature | Value |
|---|--|
| Electrical connection 1, type of mounting | Rotatable |
| Electrical connection 1, compatible type of mounting | Compatible with rotatable/non-rotatable screw-type lock |
| Electrical connection 1, connection pattern | 00991171 |
| Connection outlet orientation | In-line |
| Material electrical contact | Gold-plated copper alloy |
| Test conditions cable | Bending strength: to Festo standard 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) |
| Cable diameter | 2.9 mm |
| Type of mounting | Screw-clamped |
| Mounting position | Any |
| Product weight | 42 g |
| Housing colour | Black |
| Material housing | Polyester |
| Material foil | Polyester |
| Switching status indication | Yellow LED |
| Setting options | Key |
| Storage temperature | -30 °C ... 70 °C |
| Ambient temperature with moving cable | -20 °C ... 70 °C |
| Degree of protection | IP65 IP68 |
| Protection class | III |
| Shock resistance | Shock test with severity level 2 to 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 class CRC | 2 - Moderate corrosion stress |
| LABS (PWIS) conformity | VDMA24364-B2-L |
| Suitability for the production of Li-ion batteries | Metals with more than 5% by mass of copper, zinc or nickel are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils. |
| Cleanroom suitability, measured according to ISO 14644-14 | Class 4 according to ISO 14644-1 |