Air gap sensor SOPA-M1-R1-HQ6-PNLK-A-M12 Part number: 8093817







Data sheet

| Feature | Value |
|--|--|
| Authorization | RCM Mark |
| | c UL us - Recognized (OL) |
| CE symbol (see declaration of conformity) | according to EU-EMV guideline |
| | 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 |
| Materials note | Conforms to RoHS |
| Detected variable | Distance |
| Measuring principle | pneumatic |
| Sensing range | 20 200 μm |
| Supply pressure | 0.8 1.6 bar |
| Operating medium | Compressed air in accordance with ISO8573-1:2010 [7:4:4] |
| Note on operating and pilot medium | Lubricated operation possible (subsequently required for further |
| | operation) |
| Ambient temperature | 0 50 °C |
| Repetition accuracy in ± µm | 2.5 μm |
| Switch output | PNP/NPN, switchable |
| Switching function | Window comparator |
| | Threshold value with variable hysteresis |
| Switching element function | N/C or N/O contact, switchable |
| Max. output current | 100 mA |
| Analog output | 4 - 20 mA |
| Start value distance characteristic curve | 0 μm |
| End value distance characteristic curve | 300 μm |
| Rise time | 22 ms |
| Max. load resistance, current output | 500 Ohm |
| Short circuit strength | Yes |
| Protocol | IO-Link |
| IO-Link, protocol | Device V 1.1 |
| IO-Link, profile | Smart sensor profile |
| IO-Link, function classes | Process Data Variable (PDV) |
| | Identification |
| | diagnosis |
| | Teach channel |
| | Switching signal channel (SSC) |
| IO-Link, communication mode | COM2 (38,4 kBaud) |
| IO-Link, SIO mode support | Yes |
| IO-Link, port type | A |
| IO-Link, process data width OUT | 0 Byte |
| IO-Link, process data width IN | 2 Byte |
| IO-Link, process data content IN | 2-bit SSC (distance monitoring) |
| | 1-bit SSC (supply pressure monitoring) |
| | 10-bit PDV (distance) |
| IO-Link, Service data contents IN | 14-bit supply pressure |
| IO-Link, minimum cycle time | 3 ms |



| Feature | Value |
|--|--|
| IO-Link, data memory required | < 500 Byte |
| Operating voltage range DC | 20 30 V |
| Max. current consumption | 170 mA |
| Polarity protected | for all electrical connections |
| Electrical connection 1, connection type | Plug |
| Electrical connection 1, connection technology | M12x1, A-coded in accordance with EN 61076-2-101 |
| Electrical connection 1, number of pins/wires | 5 |
| Electrical connection 1, type of mounting | Screw lock |
| Mounting type | with through hole |
| | with top-hat rail |
| | Optional |
| Pneumatic connection | QS-6 |
| Product weight | 60 g |
| Material housing | PA-reinforced |
| Type of display | Illuminated LCD, multicolored |
| Setting options | IO-Link |
| | Teach-In |
| | Via display and buttons |
| Protection against manipulation | Electronic locking |
| Protection class | IP65 |
| Corrosion resistance classification CRC | 2 - Moderate corrosion stress |
| PWIS conformity | VDMA24364-C1-L |