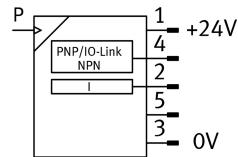


# Air gap sensor SOPA-CM1H-R1-HQ6-PNLK-A-M12

Part number: 8093819

FESTO



## Data sheet

| Feature                                      | Value  |
|--|--|
| Certification                                | RCM compliance mark<br>c UL us - Recognized (OL)                   |
| CE marking (see declaration of conformity)   | As per EU EMC directive<br>As per EU RoHS directive                |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions              |
| KC characters                                | KC EMC   |
| Note on materials                            | RoHS-compliant   |
| Detected variable                            | Gap  |
| Measuring principle                          | Pneumatic  |
| Sensing range                                | 20 µm...200 µm   |
| Operating pressure                           | 4 bar...7 bar  |
| Supply pressure                              | 0.8 bar...1.6 bar  |
| Operating medium                             | Compressed air as per ISO 8573-1:2010 [7:4:4]                      |
| Information on operating and pilot media     | Operation with oil lubrication possible (required for further use) |
| Ambient temperature                          | 0 °C...50 °C   |
| Repetition accuracy in ± µm                  | 2.5 µm   |
| Switching output                             | PNP/NPN switchable   |
| Switching function                           | Window comparator<br>Threshold value with variable hysteresis      |
| Switching element function                   | N/C contact/N/O contact switchable                                 |
| Max. output current                          | 100 mA   |
| Analog output                                | 4 - 20 mA  |
| Distance characteristic curve start value    | 0 µm   |
| Distance characteristic curve end value      | 300 µm   |
| Rise time                                    | 22 ms  |
| Max. load resistance of current output       | 500 Ohm  |
| Short-circuit protection                     | yes  |
| Protocol                                     | IO-Link®   |
| IO-Link®, protocol version                   | Device V 1.1   |
| IO-Link®, profile                            | Smart sensor profile   |

| Feature  | Value   |
|--|---|
| IO-Link®, function classes                     | Process data variable (PDV)<br>Identification<br>Diagnostics<br>Teach channel<br>Switching signal channel (SSC) |
| IO-Link®, communication mode                   | COM2 (38,4 kBd)   |
| IO-Link®, SIO mode support                     | Yes   |
| IO-Link®, port class                           | 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)<br>1-bit SSC (supply pressure monitoring)<br>10-bit PDV (distance)              |
| IO-Link®, service data contents IN             | 14-bit supply pressure  |
| IO-Link®, minimum cycle time                   | 3 ms  |
| IO-Link®, data memory required                 | 0,5 kB  |
| DC operating voltage range                     | 22.8 V...26.4 V   |
| Max. current consumption                       | 270 mA  |
| Reverse polarity protection                    | for all electrical connections  |
| Electrical connection 1, connection type       | Plug  |
| Electrical connection 1, connection technology | M12x1 A-coded as per EN 61076-2-101   |
| Electrical connection 1, number of pins/wires  | 5   |
| Electrical connection 1, type of mounting      | Screw-type lock   |
| Type of mounting                               | Optionally:<br>With through-hole<br>With H-rail   |
| Pneumatic connection                           | QS-6  |
| Product weight                                 | 510 g   |
| Housing material                               | PA-reinforced   |
| Display type                                   | Illuminated LCD, multi-color  |
| Setting options                                | IO-Link®<br>Teach-in<br>Via display and pushbuttons   |
| Protection against tampering                   | Electronic interlock  |
| Degree of protection                           | IP65  |
| Corrosion resistance class (CRC)               | 2 - Moderate corrosion stress   |
| LABS (PWIS) conformity                         | VDMA24364-C1-L  |