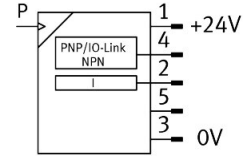


# Air gap sensor SOPA-M1-R1-HQ6-PNLK-A-M12

Part number: 8093817

FESTO



[PDF General operating condition](#)

## Data sheet

Feature	Value
Symbol	00997316
Certification	RCM compliance mark c UL us - Recognized (OL)
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	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
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 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
IO-Link®, function classes	Process data variable (PDV) Identification Diagnostics Teach channel Switching signal channel (SSC)
IO-Link®, communication mode	COM2 (38,4 kBd)
IO-Link®, SIO mode support	Yes

Feature	Value
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	1-bit SSC (supply pressure monitoring) 10-bit PDV (distance) 2-bit SSC (distance monitoring)
IO-Link®, service data contents IN	14-bit supply pressure
IO-Link®, minimum cycle time	3 ms
IO-Link®, data memory required	<500 byte
DC operating voltage range	20 V ... 30 V
Max. current consumption	170 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	not rotatable
Electrical connection 1, type of mounting	Compatible with rotatable screw-type lock
Electrical connection for input 1, connection pattern	00991172
Type of mounting	With through-hole With H-rail
Pneumatic connection	QS-6
Product weight	60 g
Housing material	PA-reinforced
Display type	Illuminated LCD, multi-color
Setting options	IO-Link® Teach-in 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