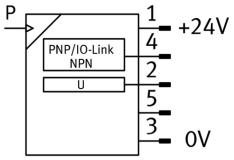
Air gap sensor
SOPA-CM3H-R1-HQ6-PNLK-VB-M12

Part number: 8093822





Data sheet

Feature	Value
Type code	SOPA
Electrical connection 1, connection type	Plug
Electrical connection 1, type of mounting	Screw-type lock
Electrical connection 1, connection technology	M12x1 A-coded as per EN 61076-2-101
KC characters	KC EMC
Electrical connection for input 1, connection pattern	00991172
Electrical connection 1, number of pins/wires	5
Detected variable	Gap
Analog output	0 - 10 V
Distance characteristic curve start value	0 µm
Distance characteristic curve end value	300 µm
Rise time	22 ms
Repetition accuracy in ± µm	2.5 µm
Min. load resistance of voltage output	20 kOhm
Symbol	00997315
Certification	RCM compliance mark
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
Note on materials	Free of copper and PTFE RoHS-compliant
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
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
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) Identification Diagnostics Teach channel 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) 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
IO-Link®, data memory required	‹500 byte
DC operating voltage range	22.8 V ... 26.4 V
Reverse polarity protection	for all electrical connections
Type of mounting	Optionally: With through-hole With H-rail
Pneumatic connection	QS-6
Product weight	630 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