Air gap sensor SOPA-M1-R1-HQ6-PNLK-VB-M12 Part number: 8093816







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	0 - 10 V
Start value distance characteristic curve	0 μm
End value distance characteristic curve	300 μm
Rise time	22 ms
Min. load resistance, voltage output	20 kOhm
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	150 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