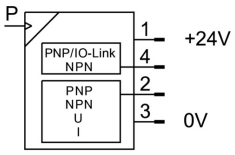
Pressure sensor
SPAU-P10R-T-N18M-L-PNLK-PNVBA-M8D

Part number: 8001202





Data sheet

Feature	Value
Symbol	00995410
Certification	RCM compliance mark c UL us - Listed (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 instructions for EMC To UK RoHS instructions
KC characters	KC EMC
Note on materials	RoHS-compliant
Measured variable	Relative pressure
Method of measurement	Piezoresistive pressure sensor
Pressure measuring range initial value	0 bar
Pressure measuring range end value	10 bar
Max. overload pressure	15 bar
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas
Information on operating and pilot media	Operation with oil lubrication possible
Temperature of medium	0 °C ... 50 °C
Ambient temperature	0 °C ... 50 °C
ADC resolution	12 bit
Accuracy in ± % FS	1.5 %FS
Repetition accuracy in ± %FS	0.3 %FS
Temperature co-efficient in ± %FS/K	0.05 %FS/K
Switching output	2 x PNP or 2 x NPN switchable
Switching function	Freely programmable
Switching element function	N/C contact/N/O contact switchable
Max. output current	100 mA
Analog output	0 - 10 V 4 - 20 mA 1 - 5 V
Rise time	3 ms
Max. load resistance of current output	500 Ohm
Min. load resistance of voltage output	10 kOhm
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	Binary data channel (BDC) Process data variable (PDV) Identification Diagnostics Teach channel
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	14 bit PDV (pressure measurement) 2 bit BDC (pressure monitoring)
IO-Link®, minimum cycle time	3 ms
IO-Link®, data memory required	500 byte
DC operating voltage range	20 V ... 30 V
Reverse polarity protection	for all electrical connections
Electrical connection 1, connection type	Plug
Electrical connection 1, connection technology	M8x1 A-coded as per EN 61076-2-104
Electrical connection 1, number of pins/wires	4
Electrical connection for input 1, connection pattern	00991171
Type of mounting	With thread
Mounting position	Any
Pneumatic connection	1/8 NPT
Product weight	80 g
Display type	Illuminated LCD
Displayable unit(s)	MPa bar inH2O inHg kPa kgf/cm² mmHg psi
Setting options	IO-Link® Teach-in Via display and pushbuttons
Protection against tampering	IO-Link® PIN code
Setting range threshold value	0 % ... 100 %
Setting range hysteresis	0 % ... 90 %
Degree of protection	IP65 IP67
Corrosion resistance class (CRC)	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L