

pressure sensor SPAU-P10R-T-N18M-L-PNLK-PNVBA-M12D

Part number: 8001205

FESTO

Suitable for monitoring compressed air and non-corrosive gases,
mounting using thread, with display.



Data sheet

Feature	Value
Authorisation	RCM Mark c UL us - Listed (OL)
CE mark (see declaration of conformity)	to EU directive for EMC 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
Measured variable	Relative pressure
Measurement method	Piezoresistive pressure sensor
Pressure measuring range, initial value	0 bar
Pressure measuring range, final value	10 bar
Overload range	15 bar
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4] Inert gases
Note on operating and pilot medium	Lubricated operation possible
Medium temperature	0 ... 50 °C
Ambient temperature	0 ... 50 °C
Resolution of analogue/digital converter	12 Bit
Accuracy, FS	1.5 %FS
Repetition accuracy in ± %FS	0.3 %FS
Temperature co-efficient in ± %FS/K	0.05 %FS/K
Switch output	2 x PNP or 2 x NPN switchable
Switching function	Freely programmable
Switching element function	N/C or N/O contact, switchable
Max. output current	100 mA
Analogue output	0 - 10 V 4 - 20 mA 1 - 5 V
Rise time	3 ms
Max. load resistance, current output	500 Ohm
Min. load resistance, voltage output	10 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	Binary Data Channels (BDC) Process Data Variable (PDV) Identification diagnosis Teach channel
IO-Link, communication mode	COM2 (38,4 kBaud)
IO-Link, SIO mode support	Yes

Feature	Value
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	14 bit PDV (pressure reading) 2 bit BDC (pressure monitoring)
IO-Link, minimum cycle time	3 ms
IO-Link, data memory required	0.5 Kilobyte
Operating voltage range DC	20 ... 30 V
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	4
Mounting type	with thread
Assembly position	Any
Pneumatic connection	1/8 NPT
Product weight	80 g
Type of display	illuminated LCD
Unit(s) that can be displayed	MPa bar inchH2O inchHg kPa kgf/cm ² mmHg psi
Setting options	IO-Link Teach-In Via display and buttons
Protection against manipulation	IO-Link PIN-Code
Threshold value setting range	0 ... 100 %
Hysteresis setting range	0 ... 90 %
Protection class	IP65 IP67
Corrosion resistance classification CRC	2 - Moderate corrosion stress
PWIS conformity	VDMA24364-B1/B2-L