

# Pressure sensor SPAU-P16R-H-G18FD-L-PNLK-PNVBA-M12U

Part number: 8001222

FESTO

Suitable for monitoring compressed air and non-corrosive gases,  
mounting H-rail, with display.



## Data sheet

Feature	Value
Authorization	RCM Mark c UL us - Listed (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
Measured variable	Relative pressure
Measurement method	Piezoresistive pressure sensor
Pressure measuring range, initial value	0 bar
Pressure measuring range, final value	16 bar
Overload range	20 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	2 %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
Analog 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 top-hat rail
Assembly position	Any
Pneumatic connection	G1/8
Product weight	70 g
Type of display	illuminated LCD
Unit(s) that can be displayed	MPa bar inchH2O inchHg kPa kgf/cm <sup>2</sup> 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