

# pressure sensor SPAN-P10R-Q4-PNLK-PNVBA-L1

Part number: 8035541

FESTO



## 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
Certificate issuing department	UL E322346
Materials note	Conforms to RoHS
Measured variable	Relative pressure
Measurement method	Piezoresistive pressure sensor
Pressure measuring range start value (MPa)	0 MPa
Pressure measuring range, initial value	0 bar
Pressure measuring range start value (psi)	0 psi
Pressure measuring range end value (MPa)	1 MPa
Pressure measuring range, final value	10 bar
Pressure measuring range end value (psi)	145 psi
Overload range	15 bar
Overload pressure	1.5 MPa 15 bar
Overload pressure (psi)	217.5 psi
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
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	Window comparator Threshold value comparator Auto difference monitoring
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
Max. load resistance, current output	500 Ohm
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	Binary Data Channels (BDC) Process Data Variable (PDV) Identification

Feature	Value
	diagnosis Teach channel
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	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	15 ... 30 V
Polarity protected	for all electrical connections
Electrical connection 1, connection type	Plug
Electrical connection 1, connection technology	Connection pattern L1J
Electrical connection 1, number of pins/wires	4
Mounting type	Front panel installation with wall/surface fixing
Assembly position	Any
Pneumatic connection	For tubing outside diameter 4 mm
Product weight	25 g
Material housing	PA-reinforced
Materials in contact with media	FPM NBR PA-reinforced
Type of display	illuminated LCD
Unit(s) that can be displayed	MPa bar inchH2O inchHg kPa kgf/cm <sup>2</sup> mbar 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	IP40
Corrosion resistance classification CRC	2 - Moderate corrosion stress
PWIS conformity	VDMA24364-B1/B2-L
Cleanroom class	ISO class 4