

Pressure sensor SPA-E-V1R-Q3-PNLK-2.5K

Part number: 8001442

FESTO



General operating condition

Data sheet

Feature	Value
Symbol	00995430
Approval	RCM trademark c UL us - Recognized (OL)
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK RoHS instructions
Certificate issuing authority	UL E322346
Note on materials	RoHS-compliant
Measured variable	Relative pressure
Measurement method	Piezoresistive pressure sensor with display
Start value for pressure measuring range	0 MPa
Start value for pressure measuring range	0 bar
Start value for pressure measuring range	0 psi
End value for pressure measuring range	-0.1 MPa
End value for pressure measuring range	-1 bar
End value for pressure measuring range	-14.5 psi
Overload pressure	0.5 MPa
Overload pressure	5 bar
Overload pressure	72.5 psi
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible
Media temperature	0 °C ... 50 °C
Ambient temperature	0 °C ... 50 °C
Resolution ADC	10 bit
Accuracy in ± % FS	1.5 %FS
Repetition accuracy in ± %FS	0.3 %FS
Temperature coefficient in ± %FS/K	0.05 %FS/K
Switching output	PNP/NPN, switchable
Switching function	Freely programmable
Switching element function	Switchable
Switch-on time	1 ms
Switch-off time	1 ms
Max. output current	100 mA
Display range start value	0 %FS
Display range end value	99 %FS
Short circuit current rating	yes

Feature	Value
Protocol	IO-Link®
IO-Link, Protocol version	Device V 1.1
IO-Link, Profile	Smart sensor profile
IO-Link, Function classes	Binary data channel (BDC) Process data variable (PDV) Identification Diagnostics Teach channel
IO-Link, communication mode	COM2 (38.4 kBaud)
IO-Link, SIO-Mode support	Yes
IO-Link, Port class	A
IO-Link, Process data length OUT	0 bytes
IO-Link, Process data length IN	2 bytes
IO-Link, Process data content IN	14 bit PDV (pressure measurement value) 2 bit BDC (pressure monitoring)
IO-Link, Min. cycle time	3 ms
IO-Link, Data storage required	500 Byte
Operational voltage range DC	18 V ... 30 V
Reverse polarity protection	For all electrical connections
Electrical connection	3-wire Cable Open end
Cable length	2.5 m
Type of mounting	With accessories
Mounting position	optional
Pneumatic connection	QS-3
Product weight	40 g
Material housing	PA-reinforced
Material sealing ring	FPM NBR
Display type	LED indicator 2-digit
Displayable units	%FS
Switching status indication	Yellow LED
Setting options	IO-Link® Teach-in Via display and keys
Protection against tampering	PIN code
Setting range threshold value	1 % ... 98 %
Degree of protection	IP40
Corrosion resistance class CRC	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B2-L
Cleanroom suitability, measured according to ISO 14644-14	Class 4 according to ISO 14644-1