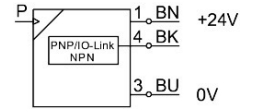


# Pressure sensor SPA-E-P10R-S4-PNLK-2.5K

Part number: 8001445

**FESTO**



## Data sheet

Feature	Value
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 instructions for EMC 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 0 bar 0 psi
End value for pressure measuring range	1 MPa 10 bar 145 psi
Overload pressure	1.5 MPa 15 bar 217.5 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	N/C contact N/O contact Switchable
Switch-on time	1 ms
Switch-off time	1 ms

Feature	Value
Max. output current	100 mA
Display range start value	0 %FS
Display range end value	99 %FS
Short circuit current rating	yes
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	0.5 KB
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	Plug-in
Mounting position	optional
Pneumatic connection	Push-in sleeve QS-4
Product weight	40 g
Material housing	PA-reinforced
Material sealing ring	FPM
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
Suitability for the production of Li-ion batteries	Product corresponds to the internal product definition from Festo for use in battery production: Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils
Cleanroom class	Class 4 according to ISO 14644-1