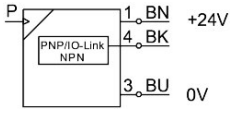
Pressure sensor
SPAE-V1R-S4-PNLK-2.5K

Part number: 8001440





Data sheet

Feature	Value
Certification	RCM compliance mark c UL us - recognized (OL)
CE marking (see declaration of conformity)	As per EU EMC directive As per 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
Method of measurement	Piezoresistive pressure sensor with display
Pressure measuring range initial value	0 MPa 0 bar 0 psi
Pressure measuring range end value	-0.1 MPa -1 bar -14.5 psi
Overload pressure	0.5 MPa 5 bar 72.5 psi
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
Information on operating and pilot media	Lubricated operation possible
Temperature of medium	0 °C...50 °C
Ambient temperature	0 °C...50 °C
ADC resolution	10 bit
Accuracy in ± % FS	1.5 %FS
Repetition accuracy in ± %FS	0.3 %FS
Temperature co-efficient in ± %FS/K	0.05 %FS/K
Switching output	PNP/NPN switchable
Switching function	Freely programmable
Switching element function	NC contact N.O. contact Switchable
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 protection	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 kBd)
IO-Link®, SIO mode support	Yes
IO-Link®, port class	A
IO-Link®, process data width OUT	0 bytes
IO-Link®, process data width IN	2 Byte
IO-Link®, process data content IN	14 bit PDV (pressure measurement) 2 bit BDC (pressure monitoring)
IO-Link®, minimum cycle time	3 ms
IO-Link®, data memory required	0.5 KB
DC operating voltage range	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	Insertable
Mounting position	Any
Pneumatic connection	Push-in sleeve QS-4
Product weight	40 g
Housing material	PA-reinforced
Sealing ring material	FPM
Display type	LED indicator 2-digit
Displayable unit(s)	% 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	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)
Cleanroom suitability, measured according to ISO 14644-14	Class 4 according to ISO 14644-1