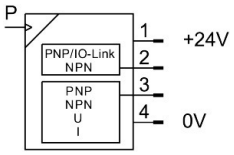
Pressure sensor
SPAN-P10R-G18F-PNLK-PNVBA-L1

Part number: 8134897



Data sheet

Feature	Value
Certification	RCM compliance mark c UL us - Listed (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
Pressure measuring range initial value	0 MPa 0 bar 0 psi
Pressure measuring range end value	1 MPa 10 bar 145 psi
Max. overload pressure	15 bar
Overload pressure	1.5 MPa 15 bar 217.5 psi
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas
Information on operating and pilot media	Operation with oil lubrication possible
Temperature of medium	0 °C...50 °C
Ambient temperature	0 °C...50 °C
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	2 x PNP or 2 x NPN switchable
Switching function	Window comparator Threshold value comparator Auto difference monitoring
Switching element function	N/C contact/N/O contact switchable
Max. output current	100 mA

Feature	Value
Analog output	0 - 10 V 4 - 20 mA 1 - 5 V
Max. load resistance of current output	500 Ohm
Min. load resistance of voltage output	20 kOhm
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 Byte
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	15 V...30 V
Reverse polarity protection	for all electrical connections
Electrical connection 1, connection type	Plug
Electrical connection 1, connection technology	Connection diagram L1J
Electrical connection 1, number of pins/wires	4
Type of mounting	Front panel mounting With thread With wall/surface bracket
Mounting position	Any
Pneumatic connection	Internal thread G1/8
Product weight	34 g
Housing material	PA-reinforced
Materials in contact with the media	FPM High-alloy stainless steel
Display type	Illuminated LCD
Displayable unit(s)	MPa bar inH2O inHg kPa kgf/cm² mbar mmHg psi
Setting options	IO-Link® Teach-in Via display and pushbuttons
Protection against tampering	IO-Link® PIN code
Setting range threshold value	0 %...100 %
Setting range hysteresis	0 %...90 %
Degree of protection	IP40
Corrosion resistance class (CRC)	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Feature	Value
Suitability for the production of Li-ion batteries	Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils
Cleanroom class	Class 4 according to ISO 14644-1