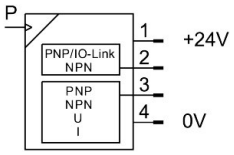
Pressure sensor
SPAN-P10R-M5F-PNLK-PNVBA-L1

Part number: 8035539



General operating condition

Data sheet

Feature	Value
Symbol	00995685
Approval	RCM c UL us - Listed (Oil)
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
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	1 MPa
End value for pressure measuring range	10 bar
End value for pressure measuring range	145 psi
Max. overload pressure	15 bar
Overload pressure	1.5 MPa
Overload pressure	15 bar
Overload pressure	217.5 psi
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4] Inert gas
Note on operating and pilot medium	Lubricated operation possible
Media temperature	0 °C ... 50 °C
Ambient temperature	0 °C ... 50 °C
Accuracy in ± % FS	1.5 %FS
Repetition accuracy in ± %FS	0.3 %FS
Temperature coefficient 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	NC or NO, switchable
Max. output current	100 mA
Analogue output	0 - 10 V 4 - 20 mA 1 - 5 V

Feature	Value
Max. load resistance current output	500 Ohm
Min. load resistance voltage output	20 kOhm
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	500 Byte
Operational voltage range DC	15 V ... 30 V
Reverse polarity protection	For all electrical connections
Electrical connection 1, connection type	Plug
Electrical connection 1, connector system	Plug pattern L1J
Electrical connection 1, number of connections/cores	4
Electrical connection 1, connection pattern	00995428
Type of mounting	Front panel mounting Via wall/surface bracket
Mounting position	Any
Pneumatic connection	Female thread M5
Product weight	34 g
Material housing	Reinforced PA
Material in contact with the medium	Fluoro rubber High-alloy stainless steel
Display type	Illuminated LCD
Displayable units	MPa bar inH2O inHg kPa kgf/cm² mbar mmHg psi
Setting options	IO-Link® Teach-in Via display and buttons
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
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