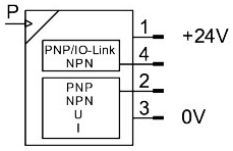
Pressure sensor
SPAU-V1R-H-G18FD-L-PNLK-PNVBA-M8U

Part number: 8001223



General operating condition

Data sheet

Feature	Value
Symbol	00995410
Approval	RCM trademark c UL us listed (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
KC mark	KC-EMV
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	-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] Inert gases
Note on operating and pilot medium	Lubricated operation possible
Media temperature	0 °C ... 50 °C
Ambient temperature	0 °C ... 50 °C
Resolution ADC	12 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	2 x PNP or 2 x NPN, switchable
Switching function	Freely programmable
Switching element function	N/C or N/O contact, switchable
Max. output current	100 mA
Analogue output	0 - 10 V 4 - 20 mA 1 - 5 V
Rise time	3 ms

Feature	Value
Max. load resistance current output	500 Ohm
Min. load resistance voltage output	10 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	20 V ... 30 V
Reverse polarity protection	For all electrical connections
Electrical connection 1, connection type	Plugs
Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 1, number of connections/cores	4
Electrical connection 1, type of mounting	Not rotatable
Electrical connection 1, compatible type of mounting	Compatible with latching lock Compatible with rotatable screw-type lock
Electrical connection 1, connection pattern	00991171
Type of mounting	With H-rail
Mounting position	optional
Pneumatic connection	G1/8
Product weight	70 g
Material in contact with the medium	FPM PA-reinforced High-alloy stainless steel
Display type	Illuminated LCD
Displayable units	MPa bar inH2O inHg kPa kgf/cm² mmHg psi
Setting options	IO-Link® Teach-in Via display and keys
Protection against tampering	IO-Link PIN code
Setting range threshold value	0 % ... 100 %
Setting range hysteresis	0 % ... 90 %
Degree of protection	IP65 IP67
Corrosion resistance class CRC	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L