Pressure sensor
SPAU-

Part number: 8001200

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
KC characters	KC EMC
Note on materials	RoHS-compliant
Measured variable	Relative pressure
Method of measurement	Piezoresistive pressure sensor
Pressure measuring range initial value	-0.1 MPa -1 bar -14.5 psi
Pressure measuring range end value	1.6 MPa 16 bar 232 psi
Overload pressure	2 MPa 20 bar 290 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
ADC resolution	12 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	2 x PNP or 2 x NPN switchable 2xPNP
Switching function	Freely programmable
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
Rise time	3 ms
Max. load resistance of current output	500 Ohm
Min. load resistance of voltage output	10 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	20 V...30 V
Reverse polarity protection	for all electrical connections
Electrical connection 1, connection type	Plug
Electrical connection 1, connection technology	M12x1 A-coded as per EN 61076-2-101 M8x1 A-coded as per EN 61076-2-104
Electrical connection 1, number of pins/wires	4
Electrical connection 1, type of mounting	not rotatable Compatible with latching lock Compatible with screw lock rotatable
Type of mounting	Front panel mounting On service unit With thread With H-rail With wall/surface bracket Optionally:
Mounting position	Any
Pneumatic connection	M5 M7 G1/8 R1/8 R1/4 1/8 NPT QS-4 QS-6 QS-5/32
Product weight	40 g...80 g
Materials in contact with the media	FPM Brass, nickel-plated NBR PA-reinforced High-alloy stainless steel
Display type	Illuminated LCD LED
Displayable unit(s)	MPa
Degree of protection	IP65 IP67
Corrosion resistance class (CRC)	2 - Moderate corrosion stress

Feature	Value
LABS (PWIS) conformity	VDMA24364-B1/B2-L