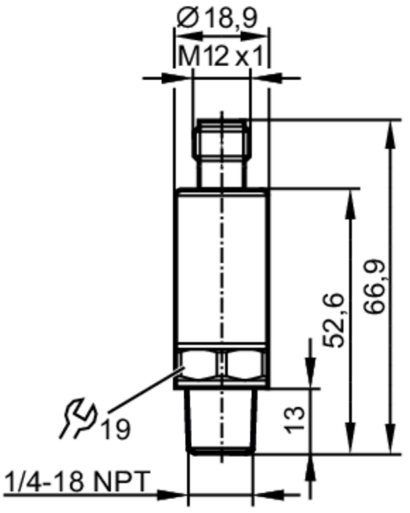
PV7601

Electronic pressure monitor

PV-250-SEN14-UFRVG/US/ /



Product characteristics				
Output signal		switching signal; IO-Link; (configurable)		
Measuring range		0...250 bar	0...3626 psi	0...25 MPa
Process connection		threaded connection 1/4 NPT external thread internal threadM5		
Application				
Measuring element		metallic thin film cell		
Application		for industrial applications		
Media		liquids and gases		
Medium temperature	[°C]	-40...90		
Pressure rating		625 bar	9060 psi	62.5 MPa
Note on pressure rating		static		
Min. bursting pressure		1200 bar	17400 psi	120 MPa
Vacuum resistance	[mbar]	-1000		
Type of pressure		relative pressure		
MAWP (for applications according to CRN)	[bar]	625		
Electrical data				
Operating voltage	[V]	18...30 DC		
Current consumption	[mA]	< 15		
Min. insulation resistance	[MΩ]	100; (500 V DC)		
Protection class		III		
Reverse polarity protection		yes		
Power-on delay time	[s]	< 0.3		
Inputs / outputs				
Number of inputs and outputs		Number of digital outputs: 2		

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Outputs				
Total number of outputs		2		
Output signal		switching signal; IO-Link; (configurable)		
Electrical design		PNP/NPN		
Number of digital outputs		2		
Output function		normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC	[V]	2		
Permanent current rating of switching output DC	[mA]	100		
Switching frequency DC	[Hz]	< 170		
Short-circuit protection		yes		
Type of short-circuit protection		pulsed		
Overload protection		yes		
Measuring/setting range				
Measuring range		0...250 bar	0...3626 psi	0...25 MPa
Set point SP		2.5...250 bar	37...3626 psi	0.25...25 MPa
Reset point rP		1.3...248.8 bar	18...3608 psi	0.13...24.88 MPa
In steps of		0.1 bar	1 psi	0.01 MPa
Factory setting		SP1 = 62.5 bar	rP1 = 57.5 bar	ou1 = Hno;
		SP2 = 187.5 bar	rP2 = 182.5 bar	ou2 = Hno;
		dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
		coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations				
Switch point accuracy	[% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability	[% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation	[% of the span]	< ± 0,5 (nach DIN EN 61298-2); (incl. drift when overtightened, zero point and span error, non-linearity, hysteresis)		
Linearity deviation	[% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation	[% of the span]	< ± 0,2		
Long-term stability	[% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times				
Response time	[ms]	< 3		
Software / programming				
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		

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Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
IO-Link device ID		852 d / 00 03 54 h	
Profiles		Smart Sensor: Process Data Variable; Device Identification, Device Diagnosis	
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	668	
UL approval		UL Approval no.	J016
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	66.5	
Materials		1.4542 (17-4 PH / 630); stainless steel (1.4404 / 316L); PEI	
Materials (wetted parts)		stainless steel (1.4305 / 303); 1.4542 (17-4 PH / 630)	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	50; (recommended tightening torque; depends on lubrication, seal and pressure rating)	
Process connection		threaded connection 1/4 NPT external thread internal threadM5	
Restrictor element integrated		yes	
Remarks			
Remarks		BFSL = Best Fit Straight Line LS = limit value setting	
Pack quantity		1 pcs.	

Electrical connection

Connector: 1 x M12

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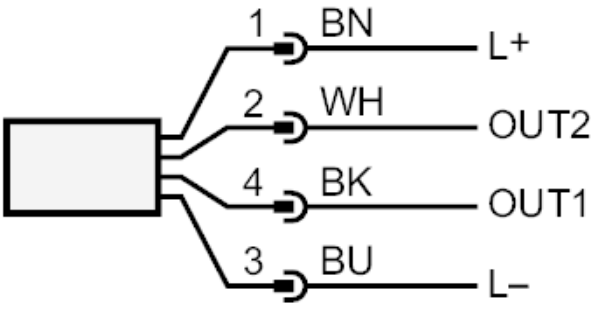
Connection



OUT1	switching output
	IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white