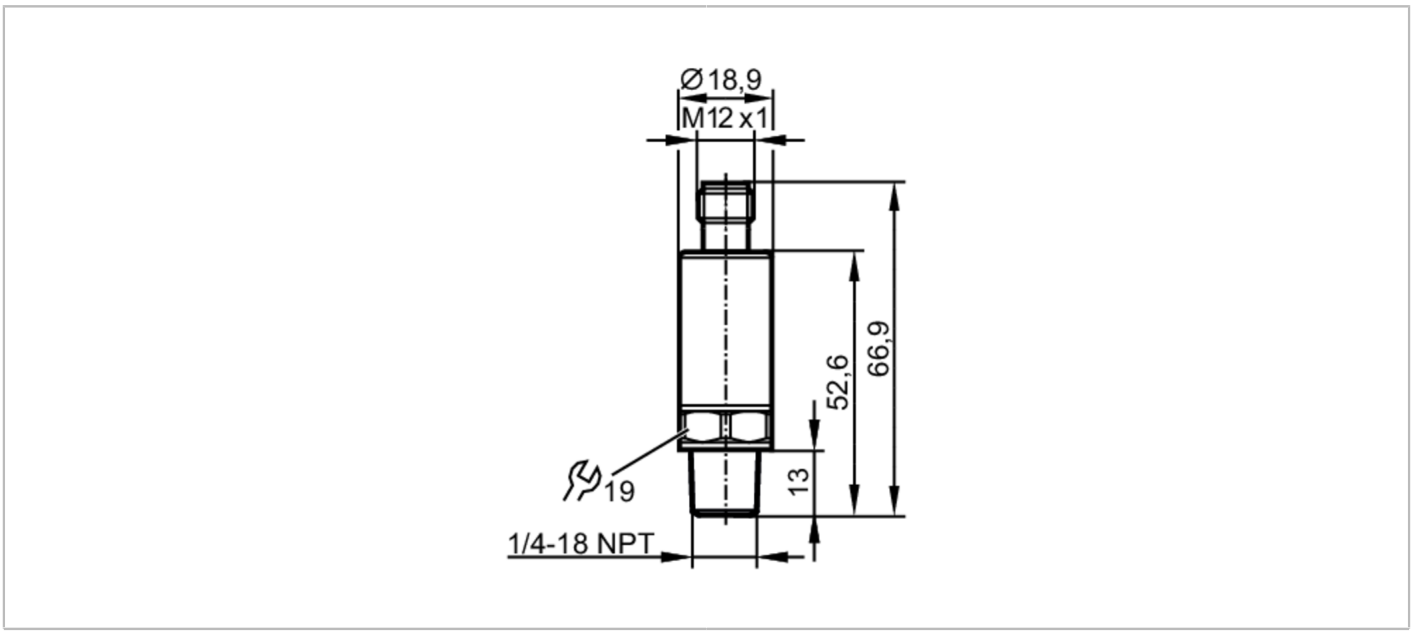
PV7602

Pressure switch with IO-Link

PV-100-SEN14-UFRVG/US/ /



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...100 bar	0...1450 psi	0...10 MPa
Process connection	threaded connection 1/4" NPT external thread internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	1000 bar	14500 psi	100 MPa
Pressure rating	250 bar	3625 psi	25 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
MAWP for applications according to CRN [bar]	250		
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		
Outputs			
Total number of outputs	2		

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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...100 bar	0...1450 psi	0...10 MPa
Set point SP	1...100 bar	15...1450 psi	0.1...10 MPa
Reset point rP	0.5...99.5 bar	7...1443 psi	0.05...9.95 MPa
In steps of	0.05 bar	1 psi	0.005 MPa
Factory setting	SP1 = 25 bar	rP1 = 23 bar	ou1 = Hno;
	SP2 = 75 bar	rP2 = 73 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; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)	
Linearity deviation [% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)	
Zero-point stabilisation [% of the span]	IO-Link	1,0; (see operating instructions zero-point behaviour)
	switching output	1,0
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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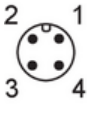
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Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	853
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]	65	
Housing		cylindrical	
Dimensions	[mm]	Ø 18.9 / L = 66.9	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	50; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection 1/4" NPT external thread internal thread:M5	
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; coding: A; Contacts: 4

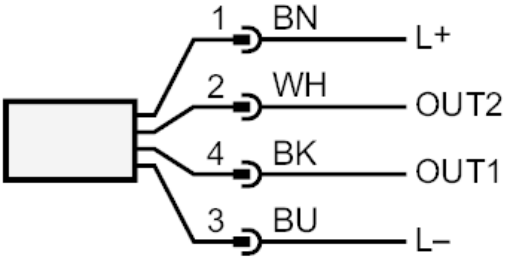


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Connection



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