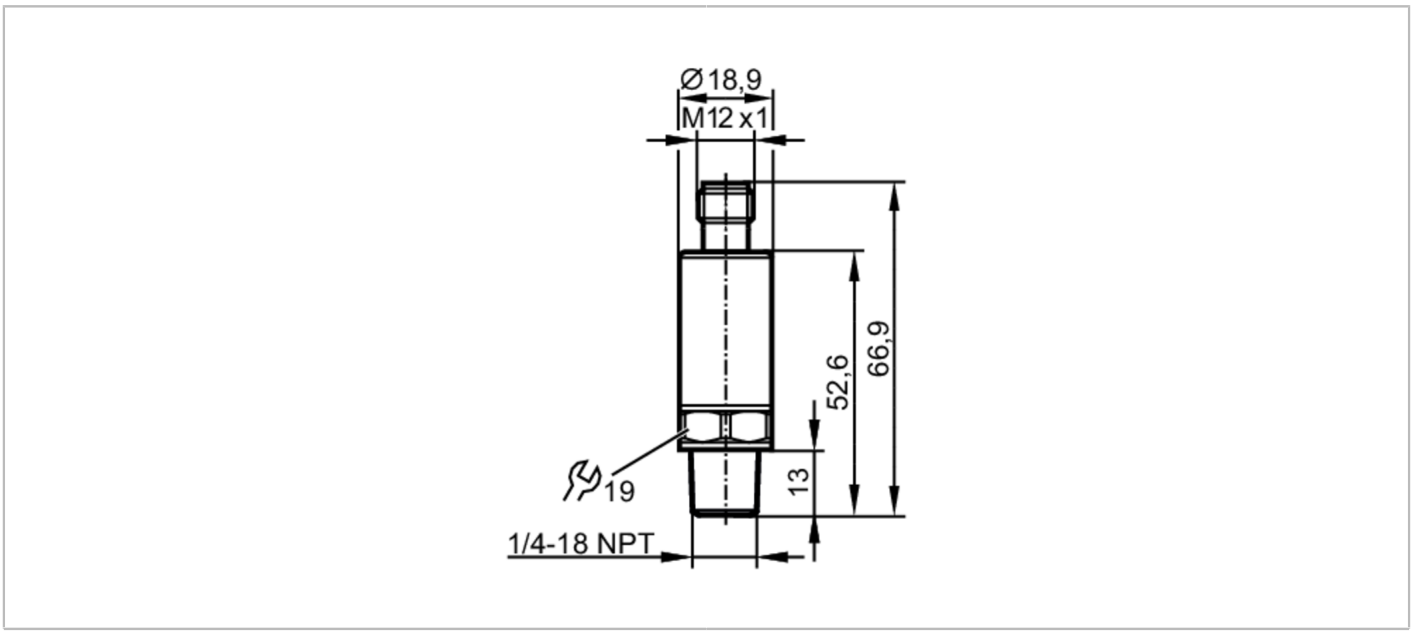
PV7601

Pressure switch with IO-Link

PV-250-SEN14-UFRVG/US/ /



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...250 bar	0...3626 psi	0...25 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	1200 bar	17400 psi	120 MPa
Pressure rating	625 bar	9060 psi	62.5 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]	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		
Outputs			
Total number of outputs	2		

PV7601

Pressure switch with IO-Link

PV-250-SEN14-UFRVG/US/ /

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; (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	

PV7601

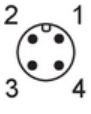
Pressure switch with IO-Link

PV-250-SEN14-UFRVG/US/ /

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	852
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	
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

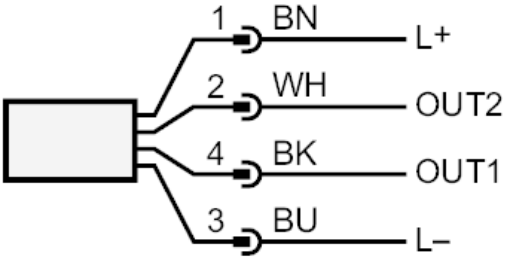


PV7601

Pressure switch with IO-Link

PV-250-SEN14-UFRVG/US/ /

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