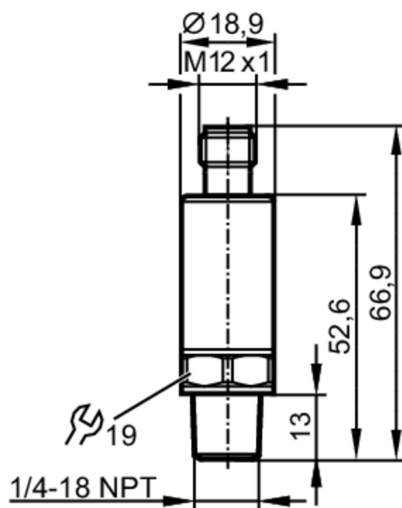


PV7601



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		
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Outputs

Total number of outputs	2		
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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 / closed; (configurable)
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	yes (non-latching)
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)
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)

Reaction times	
Response time [ms]	< 3

Software / programming	
Parameter setting options	hysteresis / window; normally open / closed; switching logic; switch-on/switch-off delay; Damping

Interfaces	
Communication interface	IO-Link
Transmission type	COM2 (38,4 kBaud)

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Pressure switch with IO-Link

PV-250-SEN14-UFRVG/US/ I

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 class	A	
Process data analog	2	
Process data binary	2	
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 number	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	tubular
Dimensions [mm]	Ø 18.9 / L = 66.9
Material	stainless steel (630/1.4542/17-4 PH); stainless steel (1.4404 / 316L); PEI
Materials (wetted parts)	stainless steel (1.4305 / 303); 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 lubrication, seal and pressure rating)
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.

PV7601



Pressure switch with IO-Link

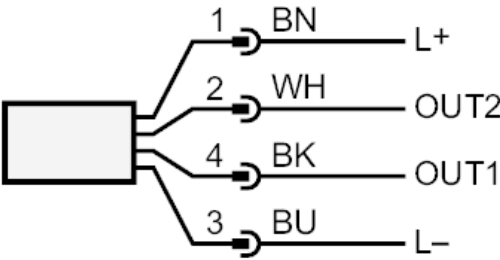
PV-250-SEN14-UFRVG/US/ I

Electrical connection

Connector: 1 x M12; coding: A



Connection



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