

PV7060



Pressure switch with IO-Link

PV-600-SEG14-UFRVG/US/ I



1 Sealing



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...600 bar	0...8700 psi	0...60 MPa
Process connection	threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5		

Application

Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. bursting pressure	2500 bar	36255 psi	250 MPa
Pressure rating	1500 bar	21755 psi	150 MPa
Note on pressure rating	static		
Vacuum resistance [mbar]	-1000		
Vacuum resistance [MPa]	-0.1		
Type of pressure	relative pressure		

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)



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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...600 bar	0...8700 psi	0...60 MPa
Set point SP	6...600 bar	85...8700 psi	0.6...60 MPa
Reset point rP	3...597 bar	45...8660 psi	0.3...59.7 MPa
In steps of	0.2 bar	5 psi	0.02 MPa
Factory setting	SP1 = 150 bar	rP1 = 138 bar	ou1 = Hno;
	SP2 = 450 bar	rP2 = 438 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)

Response times

Response time [ms]	< 3
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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



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SDCI standard		IEC 61131-9	
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	
Supported DeviceIDs		Type of operation	DeviceID
		default	1204
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
		File number UL	E174189
Pressure Equipment Directive		Modul A; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight [g]		63	
Housing		cylindrical	
Dimensions [mm]		Ø 19 / L = 66	
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]		30...50; (recommended tightening torque; depends on lubrication, seal and pressure rating)	
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5	
Process connection sealing		FKM (DIN EN ISO 1179-2)	
Restrictor element integrated		yes	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

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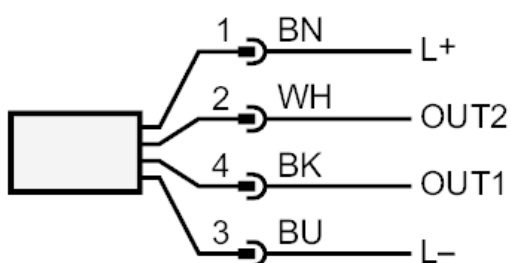
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Electrical connection

Connector: 1 x M12; coding: A



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