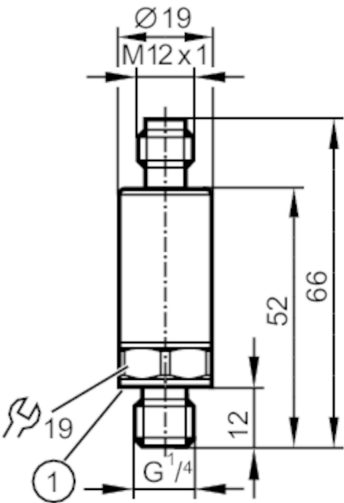


PV7001



Pressure switch with IO-Link

PV-250-SEG14-UFRVG/US/ I



1 Sealing



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 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	1200 bar	17400 psi	120 MPa
Pressure rating	625 bar	9060 psi	62.5 MPa
Note on pressure rating	static		
Vacuum resistance [mbar]	-1000		
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		
Outputs			
Total number of outputs	2		
Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP/NPN		



Pressure switch with IO-Link

PV-250-SEG14-UFRVG/US/ /

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 [X21]	< ± 0,5 (nach DIN EN 61298-2)
Repeatability [X21]	< ± 0,05; (with temperature fluctuations < 10 K)
Characteristics deviation [X21]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation [X21]	< ± 0,1 (BFSL) / < ± 0,2 (LS)
Hysteresis deviation [X21]	< ± 0,2
Long-term stability [X21]	< ± 0,1; (per 6 months)
Temperature coefficient zero point [X22]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)
Temperature coefficient span [X22]	< 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

Interfaces	
Communication interface	IO-Link
Transmission type	COM2 (38,4 kBaud)
IO-Link revision	1.1
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

PV7001



Pressure switch with IO-Link

PV-250-SEG14-UFRVG/US/ I

Min. process cycle time	[ms]	5
Supported DeviceIDs	Type of operation	DeviceID
	default	709

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	[ANN]	667.77
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]	64.5
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]	25...35; (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.	

Electrical connection

Connector: 1 x M12; coding: A



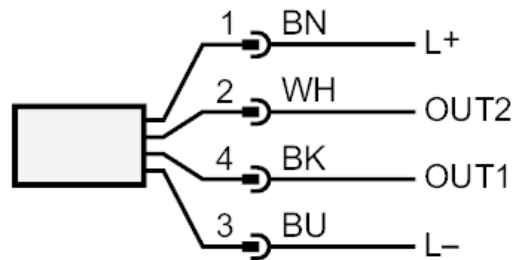
PV7001



Pressure switch with IO-Link

PV-250-SEG14-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