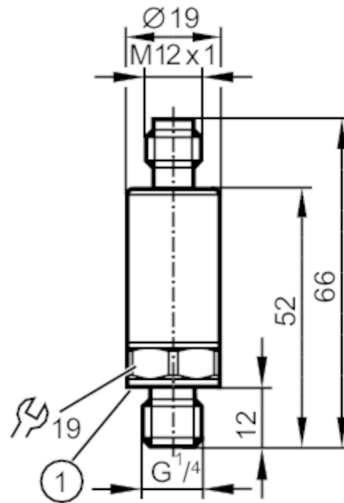


PV7000



Pressure switch with IO-Link

PV-400-SEG14-UFRVG/US/1



1 Sealing



Product characteristics

Output signal	switching signal; IO-Link; (configurable)		
Measuring range	0...400 bar	0...5800 psi	0...40 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		
Pressure rating	1000 bar	14500 psi	100 MPa
Note on pressure rating	static		
Min. bursting pressure	1700 bar	24655 psi	170 MPa
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
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Pressure switch with IO-Link

PV-400-SEG14-UFRVG/US/ /

Outputs			
Total number of outputs	2		
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...400 bar	0...5800 psi	0...40 MPa
Set point SP	4...400 bar	58...5802 psi	0.4...40 MPa
Reset point rP	2...398 bar	30...5773 psi	0.2...39.8 MPa
In steps of	0.2 bar	1 psi	0.02 MPa
Factory setting	SP1 = 100 bar	rP1 = 92 bar	ou1 = Hno;
	SP2 = 300 bar	rP2 = 292 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 (nach DIN EN 61298-2); (incl. drift when overtightened, zero point and span error, non-linearity, hysteresis)		
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		
Software / programming			
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		

PV7000



Pressure switch with IO-Link

PV-400-SEG14-UFRVG/US/ I

Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9	
IO-Link device ID	708 d / 00 02 c4 h	
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	
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]	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]	63.5	
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 (to DIN 3869)	
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		

PV7000

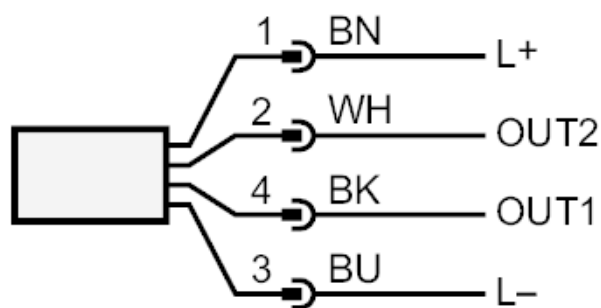


Pressure switch with IO-Link

PV-400-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