

PT5414



Pressure transmitter

PT-016-SEG14-A-ZVG/US/ IW



1 sealing



Product characteristics

Output signal	analog signal		
Measuring range	0...16 bar	0...230 psi	0...1.6 MPa
Process connection	threaded connection G 1/4 external thread (DIN EN ISO 1179-2)		

Application

Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. bursting pressure	450 bar	6525 psi	45 MPa
Pressure rating	40 bar	580 psi	4 MPa
Note on pressure rating	static		
Vacuum resistance [mbar]	-1000		
Type of pressure	relative pressure		

Electrical data

Operating voltage [V]	8.5...36 DC		
Min. insulation resistance [MΩ]	100; (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1		
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Outputs			
Total number of outputs	1		
Output signal	analog signal		
Number of analog outputs	1		
Analog current output [mA]	4...20		
Max. load [Ω]	720; ($U_b = 24 \text{ V}$; ($U_b - 8,5 \text{ V}$) / 21,5 mA)		
Short-circuit proof	yes		
Overload protection	yes		
Measuring/setting range			
Measuring range	0...16 bar	0...230 psi	0...1.6 MPa
Accuracy / deviations			
Repeatability [% of the span]	< $\pm 0,05$; (with temperature fluctuations < 10 K)		
Characteristics deviation [% of the span]	< $\pm 0,5$; (incl. drift when overtightened, zero point and span error, non-linearity, hysteresis)		
Linearity deviation [% of the span]	< $\pm 0,1$ (BFSL) / < $\pm 0,2$ (LS)		
Hysteresis deviation [% of the span]	< $\pm 0,2$		
Long-term stability [% of the span]	< $\pm 0,1$; (per 6 months)		
Temperature coefficient zero point and span [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Reaction times			
Step response time analogue output [ms]	1		
Operating conditions			
Ambient temperature [°C]	-40...90		
Storage temperature [°C]	-40...100		
Protection	IP 67; IP 69K		
Tests / approvals			
EMC	DIN EN 61000-6-2		
	DIN EN 61000-6-3		
Shock resistance	DIN EN 60068-2-27	50 g (11 ms)	
Vibration resistance	DIN EN 60068-2-6	20 g (10...2000 Hz)	
MTTF [years]	784		
UL approval	UL approval number	J027	
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request		

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Mechanical data	
Weight [g]	59
Material	1.4542 (17-4 PH / 630); stainless steel (1.4404 / 316L); PEI
Materials (wetted parts)	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)
Process connection sealing	FKM (to DIN 3869)
Restrictor element integrated	no (can be retrofitted)

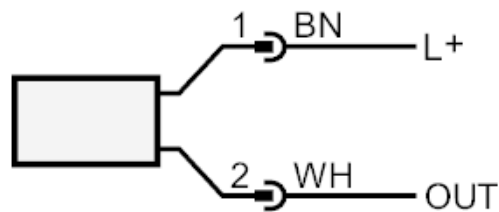
Remarks	
Remarks	BFSL = Best Fit Straight Line LS = limit value setting
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12



Connection



OUT analog output
The following pin connection is available at article number PT53xx Pin 1: L+, Pin 3: OUT
Colours to DIN EN 60947-5-2
Core colors :

BN brown
WH white

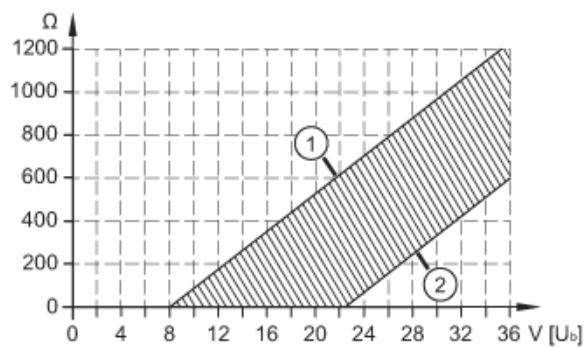
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Diagrams and graphs



1: Max. load

2: Min. load