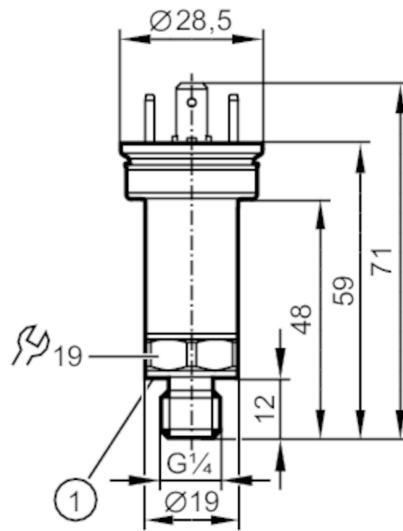


PT5014



Pressure transmitter

PT-016-SEG14-A-ZVG/VE



1 Sealing



Product characteristics

Output signal	analogue 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

Measuring element	metallic thin film cell		
Application	for mobile applications; for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...125		
Pressure rating	40 bar	580 psi	4 MPa
Note on pressure rating	static		
Min. bursting pressure	450 bar	6525 psi	45 MPa
Vacuum resistance [mbar]	-1000		
Type of pressure	relative pressure		

Electrical data

Operating voltage [V]	8...36 DC		
Min. insulation resistance [MΩ]	100; (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Power-on delay time [s]	0.1		

Inputs / outputs

Number of inputs and outputs	Number of analogue outputs: 1
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Pressure transmitter

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Outputs			
Output signal	analogue signal		
Number of analogue outputs	1		
Analogue current output [mA]	4...20		
Max. load [Ω]	$(U_b - 8 \text{ V}) / 23 \text{ mA}$		
Min. load [Ω]	$(U_b - 22,5 \text{ V}) / 23 \text{ mA}$		
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 $< 10 \text{ K}$)		
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 [% of the span / 10 K]	$< \pm 0,1$ (0...80 °C); $< \pm 0,2$ (-40...0 °C / 80...125 °C)		
Temperature coefficient span [% of the span / 10 K]	$< \pm 0,1$ (0...80 °C); $< \pm 0,2$ (-40...0 °C / 80...125 °C)		
Response times			
Step response time analogue output [ms]	2		
Operating conditions			
Ambient temperature [°C]	-40...100		
Storage temperature [°C]	-40...100		
Protection	IP 67		
Tests / approvals			
EMC	Compliant with ECE R 10, rev. 5	(E1 compliant)	
	DIN EN 13309 : 2010	construction machines	
	DIN EN ISO 13766-1 : 2018	earthworks and construction machines	
	DIN EN ISO 14982 : 2009	agricultural and forestry machines	
	ISO 11452-2	100 V/m	
	ISO 7637-2 : 2011 pulse 1	Test severity III. function state C	
Shock resistance	DIN EN 61326-1		
Vibration resistance	DIN EN 60068-2-27	500 g (1 ms)	
	DIN EN 60068-2-6	20 g (10...2000 Hz)	
MTTF [years]	715		
Pressure Equipment Directive	Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request		

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Pressure transmitter

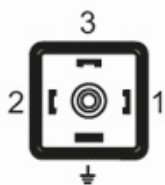
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Mechanical data	
Weight [g]	67
Materials	1.4542 (17-4 PH / 630); stainless steel (1.4404 / 316L); PPS
Materials (wetted parts)	1.4542 (17-4 PH / 630); stainless steel (1.4305 / 303)
Min. pressure cycles	60 million; (at 1.2 times nominal pressure)
Tightening 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	yes

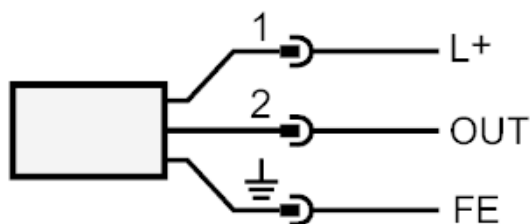
Remarks	
Remarks	BFSL = Best Fit Straight Line LS = limit value setting
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x valve plug type A DIN (EN17501-803-A); Maximum cable length: 30 m



Connection



OUT analogue output
FE functional earth

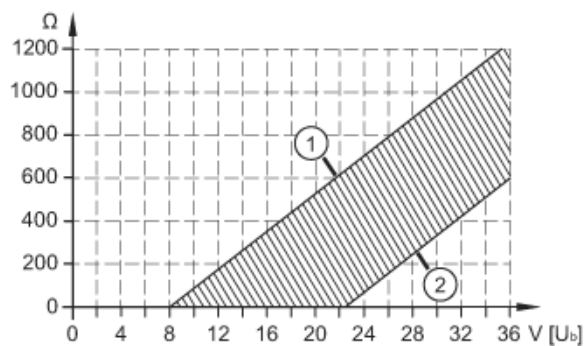
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Diagrams and graphs



1: Max. load

2: min. load