

PTU500



Pressure transmitter

PT-400-SEG14-A-ZVG/US



1 Sealing



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1	
Measuring range	0...400 bar	0...40 MPa
Process connection	threaded connection G 1/4 external thread (DIN EN ISO 1179-2)	

Application

Application	for mobile applications	
Media	liquids and gases	
Medium temperature [°C]	-40...125	
Min. bursting pressure	1700 bar	170 MPa
Pressure rating	1000 bar	100 MPa
Note on pressure rating	static	
Vacuum resistance [mbar]	-1000	
Type of pressure	relative pressure	

Electrical data

Operating voltage [V]	8...32 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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Outputs

Total number of outputs	1
Output signal	analogue signal
Number of analogue outputs	1
Analogue current output [mA]	4...20
Max. load [Ω]	(U _b - 8 V) / 21,5 mA; @8V = 0 Ω; @12V max. 200 Ω; @24V max. 750 Ω



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Short-circuit proof	yes
Overload protection	yes
Measuring/setting range	
Measuring range	0...400 bar 0...40 MPa
Accuracy / deviations	
Repeatability [% of the span]	$< \pm 0,05$; (with temperature fluctuations < 10 K)
Characteristics deviation [% of the span]	$< \pm 0,8$; (incl. drift when overtightened, zero point and span error, non-linearity, hysteresis)
Linearity deviation [% of the span]	$< \pm 0,25$ (BFSL) / $< \pm 0,5$ (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; IP 69K
Tests / approvals	
EMC	compliant with UN ECE R10, rev. 5 (E1 compliant) ISO 11452-2 100 V/m 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]	711
UL approval	UL Approval no. J073 File number UL E174189
Pressure Equipment Directive	Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request
Mechanical data	
Weight [g]	58.1
Materials	stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI
Materials (wetted parts)	stainless steel (630/1.4542/17-4 PH)
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	HNBR (DIN EN ISO 1179-2)
Restrictor element integrated	yes



Pressure transmitter

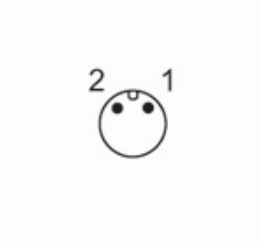
PT-400-SEG14-A-ZVG/US

Remarks

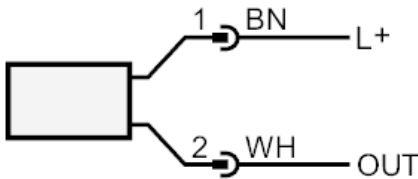
Remarks	BFSL = Best Fit Straight Line
	LS = limit value setting
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A



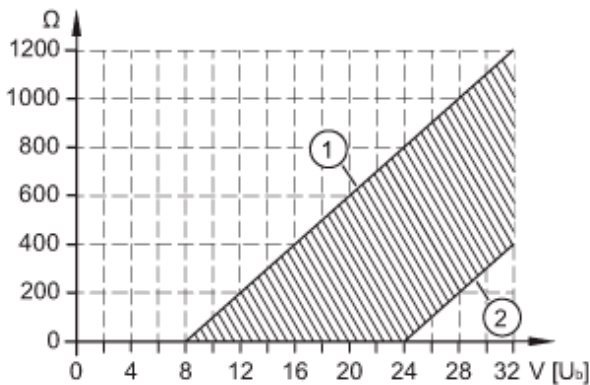
Connection



OUT analogue output
 colours to DIN EN 60947-5-2
 Core colours :
BN = brown
WH = white

Diagrams and graphs

characteristic load curve of current output



1: Max. load
2: min. load