

PU8503



Electronic pressure sensor

PU-025-SEG14-C-DVG/US



1 Sealing



Application	
Application	for mobile applications
Media	liquids and gases
Medium temperature [°C]	-40...125
Pressure rating [bar]	65
Note on pressure rating	static
Min. bursting pressure [bar]	600
Vacuum resistance [mbar]	-1000
Type of pressure	relative pressure
Electrical data	
Operating voltage [V]	8...32 DC
Current consumption [mA]	< 12
Min. insulation resistance [MΩ]	100; (500 V DC)
Protection class	III
Reverse polarity protection	yes
Inputs / outputs	
Number of inputs and outputs	Number of analogue outputs: 1
Outputs	
Total number of outputs	1
Output signal	analogue signal
Number of analogue outputs	1
Analogue voltage output [V]	0.5...4.5
Min. load resistance [Ω]	2000
Short-circuit proof	yes
Overload protection	yes
Measuring/setting range	
Measuring range [bar]	0...25



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Accuracy / deviations		
Repeatability	[% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)
Characteristics deviation	[% of the span]	< ± 0,8; (incl. drift when overtightened, zero point and span error, non-linearity, hysteresis)
Linearity deviation	[% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (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 (0...80 °C); < ± 0,2 (-40...0 °C / 80...125 °C)
Temperature coefficient span	[% of the span / 10 K]	< ± 0,1 (0...80 °C); < ± 0,3 (-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	conforms to UN ECE 10 rev. 4	
	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]	658
Pressure Equipment Directive	Sound Engineering Practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	58.2
Materials	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	HNBR (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; Maximum cable length: 30 m		

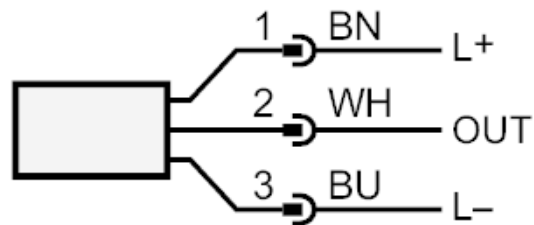
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Connection



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