

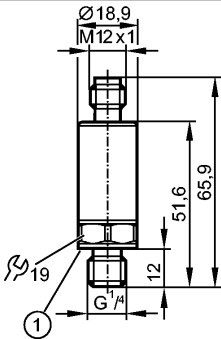


PT5401

PT-250-SEG14-A-ZVG/US/ /W



Pressure sensors



1: Process connection sealing FKM / DIN 3869



Product characteristics		
Electronic pressure sensor		
for industrial applications		
Process connection: G ¼ A (according to DIN EN ISO 1179-2)		
Analog output		
Measuring range: 0...250 bar		
Application		
Application		Type of pressure: relative pressure Group 2 fluids according to the Pressure Equipment Directive (PED), group 1 fluids on request
Pressure rating	[bar]	625 (static)
Bursting pressure min.	[bar]	1200
Vacuum resistance	[mbar]	-1000
Medium temperature	[°C]	-40...90
Electrical data		
Electrical design		DC
Operating voltage	[V]	8.5...36 DC
Insulation resistance	[MΩ]	> 100 (500 V DC)
Protection class		III
Reverse polarity protection		yes
Outputs		
Output		Analog output
Output function		4...20 mA analog
Short-circuit proof		yes
Overload protection		yes
Analog output		4...20 mA
Max. load	[Ω]	(Ub - 8.5 V) / 21.5 mA; 720 at Ub = 24 V
Measuring / setting range		
Measuring range	[bar]	0...250
Accuracy / deviations		
Accuracy / deviations (in % of the span)		
Characteristics deviation *)		< ± 0.5
Linearity		< ± 0.1 (BFSL) / < ± 0.2 (LS)
Hysteresis		< ± 0.2
Repeatability **)		< ± 0.05



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Long-term stability ***)	< ± 0.1
Temperature coefficients (TEMPCO) in the temperature range -40...90° C (in % of the span per 10 K)	
Greatest TEMPCO of the zero point + span	< 0.1 (-25...90 °C) / < 0.2 (-40...-25 °C)

Reaction times

Step response time analogue output [ms]	1
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Environment

Ambient temperature [°C]	-40...90
Storage temperature [°C]	-40...100
Protection	IP 67 / IP 69K

Tests / approvals

Pressure equipment directive	sound engineering practice	
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]	686	

Mechanical data

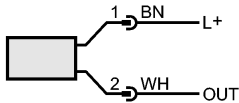
Process connection	G ¼ A (according to DIN EN ISO 1179-2)	
Process connection sealing	FKM (to DIN 3869)	
Materials (wetted parts)	1.4542 (17-4 PH / 630) ²	
Housing materials	1.4542 (17-4 PH / 630) ² ; stainless steel (316L / 1.4404); PEI	
Min. pressure cycles	60 millions in the course of the lifetime (at 1.2 times the nominal pressure)	
Tightening torque [Nm]	25...35 (recommended tightening torque ¹)	
Restrictor element integrated	no	
Weight [kg]	0.057	

Electrical connection

Connection	M12 connector
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Wiring

Core colors
BN brown
WH white



OUT: 4...20 mA
The following pin connection is available on request:
pin 1: L+, pin 3: OUT
Colours to DIN EN 60947-5-2

Remarks

Remarks	*) incl. drift when overtightened, zero point and span error, non-linearity, hysteresis **) with temperature fluctuations < 10 K ***) in% of the span / 6 months 1) Depends on lubrication, seal and pressure rating 2) Characteristics similar to stainless steel (e.g. 304/1.4301) but higher strength.
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Pressure sensors

	BFSL = Best Fit Straight Line / LS = Limit Value Setting	
Pack quantity	[piece]	1

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