

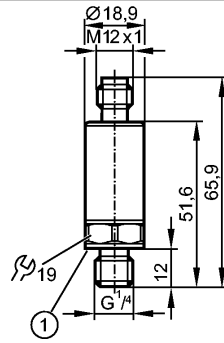


# PU5400

PU-400-SEG14-B-DVG/US/ IW



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...400 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]	1000 (static)	
Bursting pressure min. [bar]	1700	
Vacuum resistance [mbar]	-1000	
Medium temperature [°C]	-40...90	

## Electrical data

Electrical design	DC	
Operating voltage [V]	16...36 DC	
Current consumption [mA]	< 12	
Insulation resistance [MΩ]	> 100 (500 V DC)	
Protection class	III	
Reverse polarity protection	yes	

## Outputs

Output	Analog output	
Output function	0...10 V analog	
Short-circuit proof	yes	
Overload protection	yes	
Min. load resistance [Ω]	2000	

## Measuring / setting range

Measuring range [bar]	0...400	
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## 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 <sup>***)</sup>	< ± 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]	762	

### Mechanical data

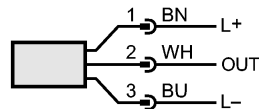
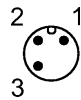
Process connection	G ¼ A (according to DIN EN ISO 1179-2)	
Process connection sealing	FKM (to DIN 3869)	
Materials (wetted parts)	1.4542 (17-4 PH / 630) <sup>2</sup>	
Housing materials	1.4542 (17-4 PH / 630) <sup>2</sup> ; stainless steel (316L / 1.4404); PEI	
Min. pressure cycles	60 millions in the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

### Electrical connection

Connection	M12 connector
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#### Wiring

Core colors  
 BN brown  
 BU blue  
 WH white



OUT: 0...10 V  
 Colours to DIN EN 60947-5-2

### Remarks

Remarks	<p>*) incl. drift when overtightened, zero point and span error, non-linearity, hysteresis          **) with temperature fluctuations &lt; 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.          BFSL = Best Fit Straight Line / LS = Limit Value Setting</p>
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Pack quantity [piece]	1
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