

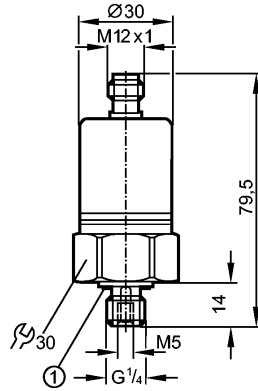


PA3589

PA-,10BRBG14-A-ZVG/US/ IV



Pressure sensors



1: sealing FKM / DIN 3869



Product characteristics

Electronic pressure sensor

Quick disconnect

e1 compliant

Process connection: G 1/4 A / M5 I (according to DIN EN ISO 1179-2)

Analog output

Measuring range: 0...100 mbar

Application

Application	Type of pressure: relative pressure liquids and gases of the fluid group 2 according to Article 9 of the Pressure Equipment Directive (PED)
Pressure rating [mbar]	4000
Bursting pressure min. [mbar]	30000
Medium temperature [°C]	-25...90 ****)

Electrical data

Electrical design	DC
Operating voltage [V]	9.6...32 DC
Insulation resistance [MΩ]	> 100 (500 V DC)
Protection class	III
Reverse polarity protection	yes

Outputs

Output	Analog output
Output function	4...20 mA
Overload protection	yes
Max. load [Ω]	(UB - 9.6 V) / 20 mA; 720 at UB = 24 V

Measuring / setting range

Measuring range [mbar]	0...100
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Accuracy / deviations

Accuracy / deviations (in % of the span)	
Characteristics deviation *)	< ± 0.5 (BFSL) / < ± 1 (LS)
Repeatability **)	< 0.2
Long-term stability ***)	< ± 0.1



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Pressure sensors

Temperature coefficients (TEMPCO) in the temperature range 0...80° C (in % of the span per 10 K)

Greatest TEMPCO of the zero point	< ± 0.5
Greatest TEMPCO of the span	< ± 0.5

Reaction times

Step response time analogue output [ms]	3
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Environment

Ambient temperature [°C]	-25...80
Storage temperature [°C]	-40...100
Protection	IP 65

Tests / approvals

Pressure equipment directive	article 3, section 3 - sound engineering practice		
EMC	EN 61000-4-2 ESD:	4 kV CD / 8 kV AD	
	EN 61000-4-3 HF radiated:	30 V/m	
	EN 61000-4-4 Burst:	2 kV	
	EN 61000-4-6 HF conducted:	10 V	
	radiation of interference CISPR25	according to the automotive directive 2004/104/EC	
Railway applications	DIN EN 50155 / IEC 60571	class T3, C1, S1	
	Shock resistance	DIN EN 60068-2-27	50 g (11 ms)
		DIN EN 61373:	Category 3
Vibration resistance	DIN EN 60068-2-6	20 g (10...2000 Hz)	
	DIN EN 61373:	Category 2	
MTTF [Years]	658		

Mechanical data

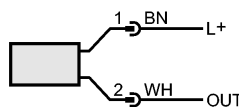
Process connection	G ¼ A / M5 I (according to DIN EN ISO 1179-2)	
Materials (wetted parts)	stainless steel (303S22); ceramics; sealing: FKM	
Housing materials	stainless steel 316L / 1.4404; FKM; PA; EPDM/X	
Min. pressure cycles	100 million	
Tightening torque [Nm]	25...35 (recommended tightening torque ¹)	
Weight [kg]	0.216	

Electrical connection

Connection	M12 connector; gold-plated contacts
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Wiring

Core colors
 BN brown
 WH white



OUT: Analog output
 Colours to DIN EN 60947-5-2

Remarks



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Pressure sensors

Remarks

*) BFSL = Best Fit Straight Line / LS = Limit Value Setting
**) with temperature fluctuations < 10 K
***) in % of value of measuring range / 6 months
****) -40...90 °C upon request
1) Depends on lubrication, seal and pressure rating

Pack quantity

[piece]

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