

Product characteristics
Electronic pressure sensor
Quick disconnect
e1 compliant
Process connection: G ¼ I
Analog output
Measuring range: 0...1 bar

Application
Application

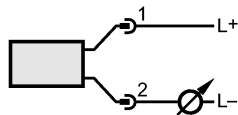
Type of pressure: relative pressure
Liquids and gases

Pressure rating [bar]	10
Bursting pressure min. [bar]	30
Medium temperature [°C]	-25...90 ****)
Electrical data	
Electrical design	DC
Operating voltage [V]	9.6...32 DC ¹)
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]	(U _b - 9.6 V) x 50; 720 at U _b = 24 V
Measuring / setting range	
Measuring range [bar]	0...1
Accuracy / deviations	
Accuracy / deviations (in % of the span)	
Characteristics deviation *)	< ± 0.25 (BFSL) / < ± 0.5 (LS)
Repeatability **)	< 0.1
Long-term stability ***)	< ± 0.05
Temperature coefficients (TEMPCO) in the temperature range 0...80° C (in % of the span per 10 K)	
Greatest TEMPCO of the zero point	0.1
Greatest TEMPCO of the span	0.2
Reaction times	
Step response time analogue output [ms]	3
Environment	

PA3027 - Electronic pressure sensor - eclass: 27201302 / 27-20-13-02

Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 65
Tests / approvals		
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 according to the automotive directive 2004/104/EC CISPR25 noise immunity according to the automotive directive 2004/104/EC ISO 11452-2 HF radiated: 100 V/m ISO 7637-2 pulse: severity level 4
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]	506
Mechanical data		
Process connection		G ¼ I
Materials (wetted parts)		stainless steel (303S22); ceramics; FPM (Viton)
Housing materials		stainless steel 316L / 1.4404; FPM (Viton); PA; EPDM/X (Santoprene)
Min. pressure cycles		100 million
Weight	[kg]	0.222
Electrical connection		
Connection		M12 connector; gold-plated contacts

Wiring



Remarks

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- *) 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

Pack quantity [piece]

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