

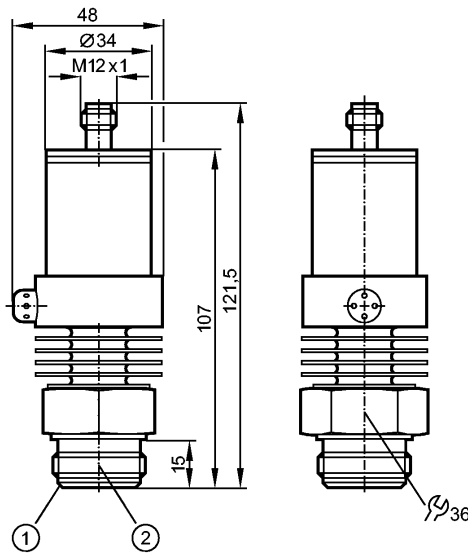


PM2057

PM-001BRES30-E-ZVG/US/ /P



Pressure sensors



- 1: Aseptoflex sealing edge
- 2: Aseptoflex thread



EC 1935/2004 EHEDG Certified



Product characteristics

Electronic pressure sensor

Quick disconnect

no dead space

Zero and span adjustable

Programmable via EPS interface

Process connection: for Aseptoflex adapter

Analog output

Measuring range: -50...1000 mbar / -0.7...14.5 psi / -5.0...100 kPa

Application

Application	Type of pressure: relative pressure Hygienic systems, viscous media and liquids with suspended particles Liquids and gases		
Pressure rating	10000 mbar	145 psi	1000 kPa
Bursting pressure min.	30000 mbar	450 psi	3000 kPa
Medium temperature [°C]	-25...125 (145 max. 1h)		

Electrical data

Electrical design	DC
Operating voltage [V]	14...30 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
Overload protection	yes
Analog output	4...20 mA



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Max. load [Ω] max. (U_b - 13 V) / 20 mA; 550 at U_b = 24 V

Measuring / setting range

Measuring range	-50...1000 mbar	-0.7...14.5 psi	-5.0...100 kPa
Setting range			
Analog start point, ASP	-50...749 mbar	-0.7...10.9 psi	-5.0...74.9 kPa
Analog end point, AEP	200...999 mbar	2.9...14.5 psi	20 ...99.9 kPa
in steps of	1 mbar	0.1 psi	0.1 kPa
Factory setting	ASP = 0 mbar; AEP = 999 mbar		

Accuracy / deviations

Accuracy / deviations (in % of the span) Turn down 1:1			
Characteristics deviation *)	< ± 0.6		
Linearity	< ± 0.5		
Hysteresis	< ± 0.1		
Repeatability **)	< ± 0.1		
Long-term stability ***)	< ± 0.1		
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

Response time analog output [ms]	3
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Environment

Ambient temperature [°C]	-25...80
Storage temperature [°C]	-40...100
Protection	IP 67

Tests / approvals

EMC	EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-6 HF conducted: 10 V
Shock resistance	DIN IEC 68-2-27: 50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6: 20 g (10...2000 Hz)
MTTF [Years]	271

Mechanical data

Process connection	for Aseptoflex adapter
Materials (wetted parts)	ceramics (99.9 % Al ₂ O ₃); PTFE; stainless steel 316L / 1.4404; surface characteristics: Ra < 0.4 / Rz 4
Housing materials	stainless steel 316L / 1.4404; PEI; FPM (Viton)
Min. pressure cycles	100 million
Weight [kg]	0.466

Electrical connection

Connection	M12 connector; gold-plated contacts
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Wiring

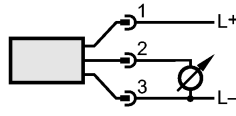
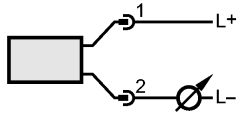


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Remarks

Remarks

*) linearity, incl. hysteresis and repeatability;
(limit value setting to DIN 16086)
**) with temperature fluctuations < 10 K
***) in % of the span per year
The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.

Pack quantity	[piece]	1
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