

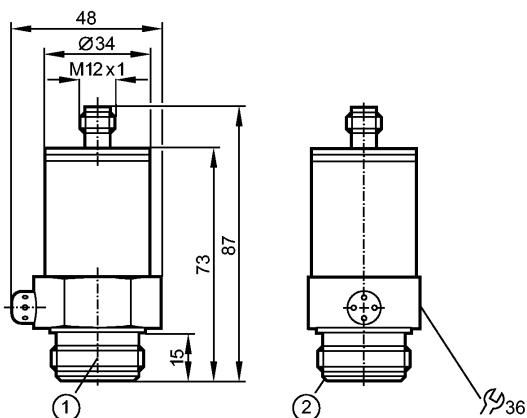


PL2057

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



Pressure sensors



1: Aseptoflex thread

2: Aseptoflex sealing edge



CE



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...80

Electrical data

Electrical design

3-wire DC; 2-wire 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

Max. load

[Ω]

max. (Ub - 13 V) / 20 mA; 550 at Ub = 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



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Pressure sensors

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: EN 61000-4-3 HF radiated: EN 61000-4-4 Burst: EN 61000-4-6 HF conducted:	4 kV CD / 8 kV AD 10 V/m 2 kV 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 / 1.4435; surface characteristics: Ra < 0.4 / Rz 4
Housing materials	stainless steel 316L / 1.4404; PEI; FPM (Viton)
Min. pressure cycles	100 million
Weight [kg]	0.317

Electrical connection

Connection	M12 connector; gold-plated contacts
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Wiring



Remarks

Remarks	*) linearity, incl. hysteresis and repeatability;
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**Pressure sensors**

(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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