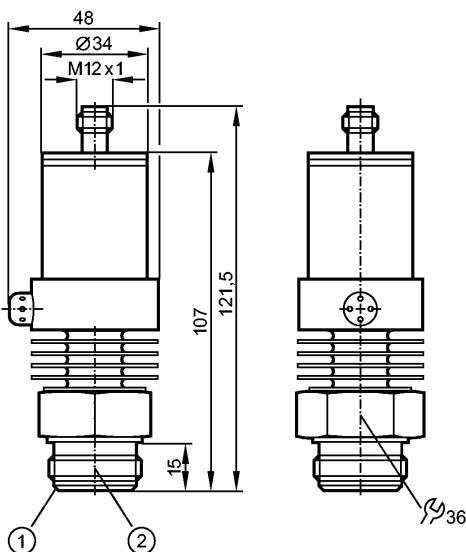




PM2055

PM-004-RES30-E-ZVG/US/ /P

Pressure sensors



1: Aseptoflex sealing edge

2: Aseptoflex thread



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: -0.99...4.00 bar / -14.4...58.0 psi / -99...400 kPa

Application

Application

Type of pressure: relative pressure
Hygienic systems, viscous media and liquids with suspended particles
Liquids and gases

Pressure rating

30 bar

435 psi

3000 kPa

Bursting pressure min.

100 bar

1450 psi

10000 kPa

Medium temperature

[°C]

-25...125 (145 max. 1h)

Electrical data

Electrical design

DC

Operating voltage

[V]

14...30 DC¹⁾

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



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Pressure sensors

Measuring range	-0.99...4.00 bar	-14.4...58.0 psi	-99...400 kPa
Setting range			
Analog start point, ASP	-0.99...1.00 bar	-14.4...14.5 psi	-99...100 kPa
Analog end point, AEP	0.26...4.00 bar	3.7...58.0 psi	26...400 kPa
in steps of	0.01 bar	0.1 psi	1 kPa
Factory setting	ASP = 0.00 bar; AEP = 4.00 bar		

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]		269

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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Pressure sensors



Remarks

Remarks

¹⁾ cULus - Class 2 source required

^{*}) 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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