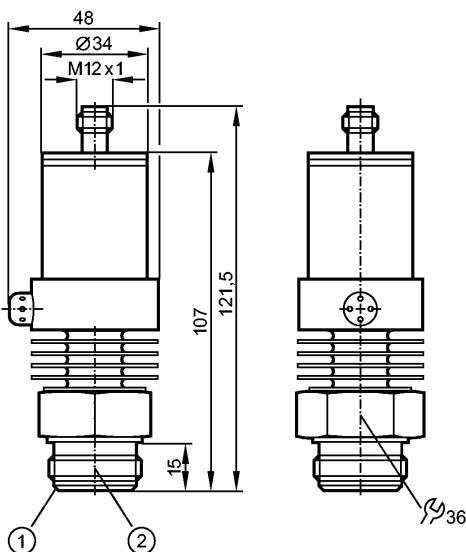


**PM2053**

PM-025-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: -1...25 bar / -15...363 psi / -0.1...2.5 MPa

**Application**

Application

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

Pressure rating

100 bar

1450 psi

10 MPa

Bursting pressure min.

350 bar

5070 psi

35 MPa

Medium temperature

[°C]

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

**Electrical data**

Electrical design

DC

Operating voltage [V]

14...30 DC

Insulation resistance [MΩ]

&gt; 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**

**PM2053**

PM-025-RES30-E-ZVG/US/ /P

Pressure sensors

Measuring range	-1...25 bar	-15...363 psi	-0.1...2.5 MPa
Setting range			
Analog start point, ASP	-1.0...18.8 bar	-15...272 psi	-0.10...1.88 MPa
Analog end point, AEP	5.3...25.0 bar	76...363 psi	0.53...2.50 MPa
in steps of	0.1 bar	1 psi	0.01 MPa
Factory setting	ASP = 0.0 bar; AEP = 25.0 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]		271

**Mechanical data**

Process connection	for Aseptoflex adapter
Materials (wetted parts)	ceramics (99.9 % Al <sub>2</sub> O <sub>3</sub> ); 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]	0.467

**Electrical connection**

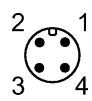
Connection	M12 connector; gold-plated contacts
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**Wiring**

**PM2053**

PM-025-RES30-E-ZVG/US/ /P

Pressure sensors

**Remarks**

Remarks

\*) linearity, incl. hysteresis and repeatability;  
(limit value setting to DIN 16086)

\*\*) with temperature fluctuations &lt; 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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