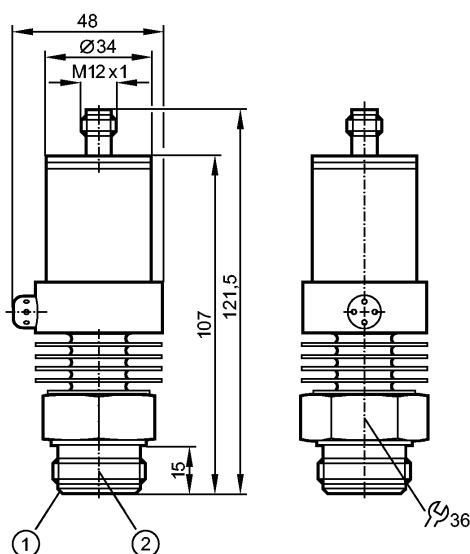


PM2053

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

Pressure sensors



1: Aseptoflex sealing edge

2: Aseptoflex thread



Made in Germany

Product characteristics

Electronic pressure sensor

Quick disconnect

Process connection: for Aseptoflex adapter

no dead space

Zero and span adjustable

Programmable via EPS interface

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]	> 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. (U _b - 13 V) x 50; 550 at U _b = 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: 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]	0.467

Electrical connection

Connection	M12 connector; gold-plated contacts
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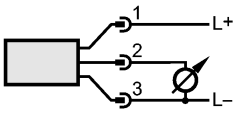
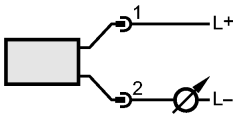
Wiring



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 < 10 K
***) in % of the span per year
The 3A authorization is only valid if adapters with 3A authorization are
used for installation.

Pack quantity [piece]

1