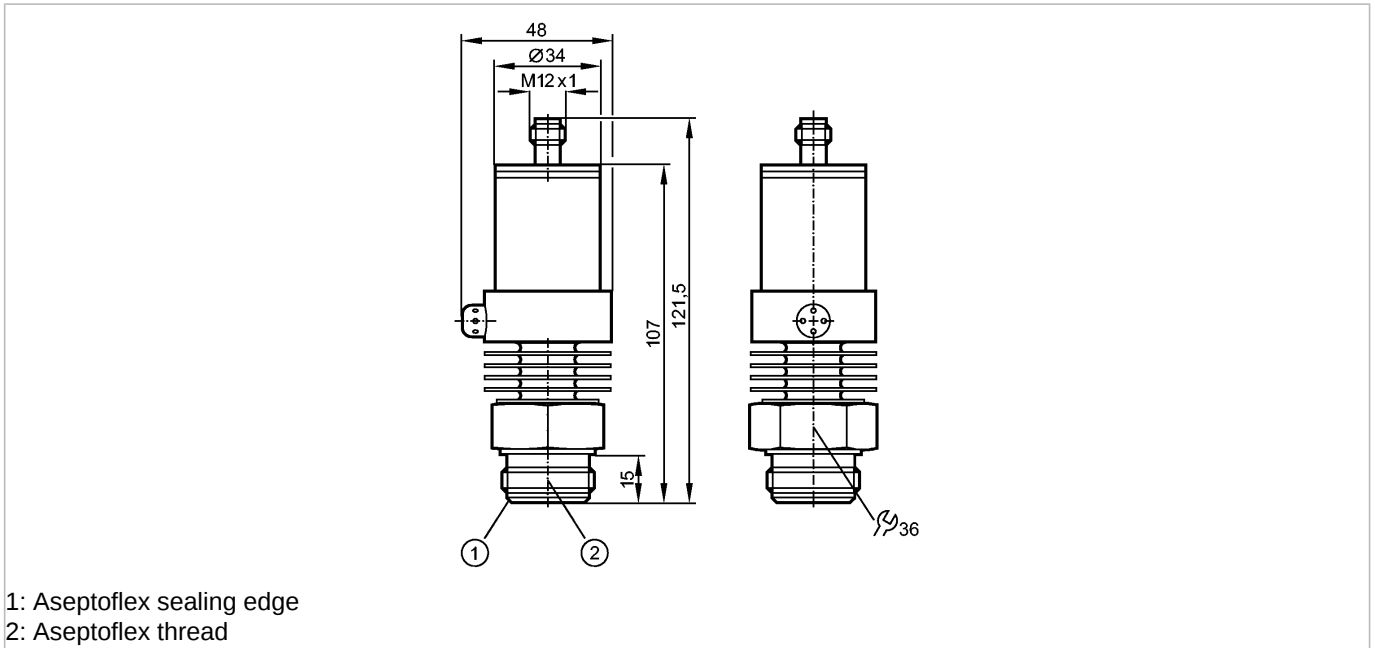


PM2054

PM-010-RES30-E-ZVG/US/ /P

Pressure sensors







 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: -0.5...10 bar / -7...145 psi / -50...1000 kPa

Application

Application	Type of pressure: relative pressure Hygienic systems, viscous media and liquids with suspended particles Liquids and gases		
Pressure rating	50 bar	725 psi	5000 kPa
Bursting pressure min.	150 bar	2175 psi	15000 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



PM2054

PM-010-RES30-E-ZVG/US/ /P

Pressure sensors

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

Measuring / setting range

Measuring range	-0.5...10 bar	-7...145 psi	-50...1000 kPa
Setting range			
Analog start point, ASP	-0.50...7.49 bar	-7...109 psi	-50...749 kPa
Analog end point, AEP	2.0...9.99 bar	29...145 psi	200...999 kPa
in steps of	0.01 bar	1 psi	1 kPa
Factory setting	ASP = 0.00 bar; AEP = 9.99 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
----------------------------------	---

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]	0.465

Electrical connection

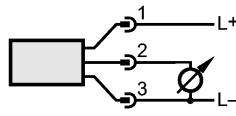
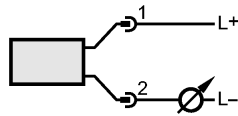
Connection	M12 connector; gold-plated contacts
------------	-------------------------------------

Wiring

PM2054

PM-010-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 3-A qualification is only valid if adapters with 3-A qualification are used for installation.

Pack quantity

[piece]

1