

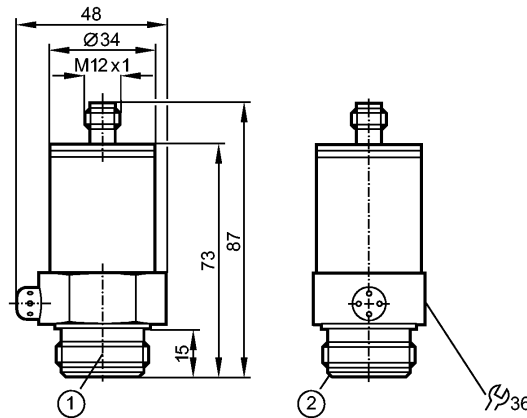


PL2053

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



Pressure sensors



- 1: Aseptoflex thread
- 2: Aseptoflex sealing edge



US

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: -1.0...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...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. (U _b - 13 V) / 20 mA; 550 at U _b = 24 V		

Measuring / setting range

Measuring range	-1.0...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



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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

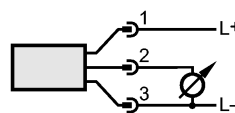
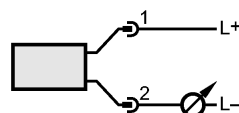
Mechanical data

Process connection	for Aseptoflex adapter
Materials (wetted parts)	ceramics (99.9 % Al ₂ O ₃); PTFE; stainless steel 316L / 1.4435; surface characteristics: Ra < 0.4 / Rz 4
Housing materials	stainless steel 316L / 1.4404; PEI; FPM (Viton)
Min. pressure cycles	100 million
Weight [kg]	0.306

Electrical connection

Connection	M12 connector; gold-plated contacts
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Wiring



Remarks

Remarks	*) linearity, incl. hysteresis and repeatability;
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(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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