

- 1: Aseptoflex thread
2: Aseptoflex sealing edge



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

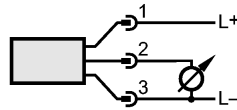
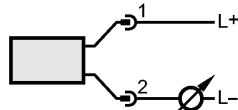
Type of pressure: relative pressure
Hygienic systems, viscous media and liquids with suspended particles
Liquids and gases

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	2-wire DC; 3-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. (Ub - 13 V) / 20 mA; 550 at Ub = 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
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

PL2053 - Electronic pressure sensor - eclass: 27201302 / 27-20-13-02

Factory setting	ASP = 0.0 bar; AEP = 25.0 bar	
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 / 1.4435; 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	

Wiring



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]

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