

1: tightening torque 20 Nm



EC 1935/2004 EHEDG Certified



Product characteristics

Electronic pressure sensor

Quick disconnect

no dead space

Zero and span adjustable

Programmable via EPS interface

Sealing cone G 1 male

Process connection: Sealing cone G 1 male

Analogue output

Measuring range: -1.0...25 bar / -15...363 psi / -0.1...2.5 MPa

Application

Application

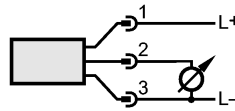
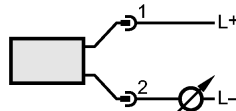
Type of pressure: relative pressure
Hygienic systems, viscous media and liquids with suspended particles
Liquids and gases

Pressure rating	100 bar	1450 psi	10 MPa
Bursting pressure min.	350 bar	5070 psi	35 MPa
Medium temperature [°C]	-25...80		
Electrical data	2-wire DC; 3-wire DC		
Electrical design	14...30 DC		
Operating voltage [V]	> 100 (500 V DC)		
Insulation resistance [MΩ]	III		
Protection class	yes		
Reverse polarity protection	Analog output		
Outputs	4...20 mA analog		
Output	yes		
Output function	4...20 mA		
Overload protection	max. (U _b - 13 V) / 20 mA; 550 at U _b = 24 V		
Analog output	max. (U _b - 13 V) / 20 mA; 550 at U _b = 24 V		
Max. load [Ω]	-1.0...25 bar -15...363 psi -0.1...2.5 MPa		
Measuring / setting range	-1.0...25 bar -15...363 psi -0.1...2.5 MPa		
Measuring range	-1.0...25 bar -15...363 psi -0.1...2.5 MPa		
Setting range	-1.0...25 bar -15...363 psi -0.1...2.5 MPa		

PL2653 - Electronic pressure sensor - eclass: 27201302 / 27-20-13-02

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		
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	Sealing cone G 1 male		
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]	0.388		
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]

1