

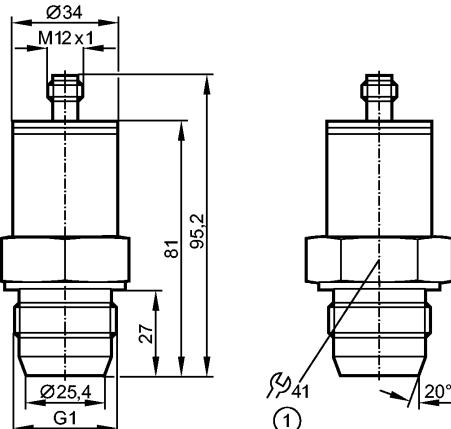


PL2652

PL-100-SEA01-E-ZVG/US/ /P



Pressure sensors



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

Analog output

Measuring range: -1...100 bar / -10...1450 psi / -0.1...10 MPa

Application

Application

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

Use in gases at pressures > 25 bar only after contacting the manufacturer ifm

Pressure rating

200 bar

2900 psi

20 MPa

Bursting pressure min.

650 bar

9425 psi

65 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. (Ub - 13 V) / 20 mA; 550 at Ub = 24 V

Measuring / setting range

Measuring range

-1...100 bar

-10...1450 psi

-0.1...10 MPa



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Setting range

Analog start point, ASP	-1.0...75.0 bar	-10...1090 psi	-0.10...7.50 MPa
Analog end point, AEP	24.0...100.0 bar	350...1450 psi	2.40...10.00 MPa
in steps of	0.1 bar	10 psi	0.01 MPa
Factory setting	ASP = 0.0 bar; AEP = 100.0 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: EN 61000-4-3 HF radiated: EN 61000-4-4 Burst: EN 61000-4-6 HF conducted:	4 kV CD / 8 kV AD 10 V/m 2 kV 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]		248

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]	0.349

Electrical connection

Connection	M12 connector; gold-plated contacts
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Wiring





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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

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