

1: Pressure relief mechanism

No mechanical force must be exerted on the pressure relief mechanism.



Product characteristics

Electronic pressure sensor

Connector

e1 compliant

Process connection: 1/4" NPT A / M5 I

Analogue output

Measuring range: 0...5000 psi

Application

Application

Type of pressure: relative pressure
Liquids and gases
For gaseous media the application is limited to max. 25 bar

Pressure rating [psi]
Bursting pressure min. [psi]
Medium temperature [°C]

11600
17400
-25...90

Electrical data

Electrical design

DC

Operating voltage [V]

9.6...32 DC

Insulation resistance [MΩ]

> 100 (500 V DC)

Protection class

III

Reverse polarity protection

yes

Outputs

Output

Analogue output

Output function

4...20 mA

Overload protection

yes

Max. load [Ω]

($U_b - 9.6 \text{ V}$) x 50; 720 at $U_b = 24 \text{ V}$

Measuring / setting range

Measuring range [psi]

0...5000

Accuracy / deviations

Accuracy / deviations

(in % of the span)

Characteristics deviation *)

< ± 0.35 (BFSL) / < ± 0.75 (LS)

Repeatability **)

< 0.15

Long-term stability ***)

< ± 0.05

Temperature coefficients (TEMPCO) in the temperature range 0...80° C (in % of the span per 10 K)

Greatest TEMPCO of the zero point

0.3

Greatest TEMPCO of the span

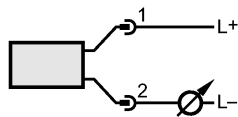
0.4

Reaction times

PX3220 - Electronic pressure sensor - eclass: 27201302 / 27-20-13-02

Step response time analogue output [ms]	3
Environment	
Ambient temperature [°C]	-25...80
Storage temperature [°C]	-40...100
Protection	IP 68 / IP 69K
Tests / approvals	
EMC	
EN 61000-4-2 ESD:	4 kV CD / 8 kV AD
EN 61000-4-3 HF radiated:	30 V/m
EN 61000-4-4 Burst:	2 kV
EN 61000-4-6 HF conducted:	10 V
radiation of interference	according to the automotive directive 2004/104/EC / CISPR25 according to the automotive directive 2004/104/EC / ISO
noise immunity HF radiated	11452-2 100 V/m
pulse resistance	according to ISO7637-2 / severity level 3
Shock resistance	DIN IEC 68-2-27: 50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6: 20 g (10...2000 Hz)
Mechanical data	
Process connection	1/4" NPT A / M5 I
Materials (wetted parts)	stainless steel (303S22); ceramics; FPM (Viton)
Housing materials	stainless steel 316L / 1.4404; FPM (Viton); PA; EPDM/X (Santoprene)
Min. pressure cycles	100 million
Weight [kg]	0.208
Electrical connection	
Connection	M12 connector; Gold-plated contacts

Wiring



Remarks

Remarks

*) BFSL = Best Fit Straight Line / LS = Limit Value Setting
 **) with temperature fluctuations < 10 K
 ***) in % of value of measuring range / 6 months

Pack quantity [piece]

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