

Product characteristics  
Electronic pressure sensor

Quick disconnect

e1 compliant

Process connection: G 1/4 I

Analog output

Measuring range: 0...100 bar

Application

Application

Type of pressure: relative pressure  
Liquids and gases  
Use in gases at pressures > 25 bar only after contacting the manufacturer ifm

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

300  
650  
-25...90 \*\*\*\*)

Electrical data

Electrical design

DC

Operating voltage [V]

16...32 DC 1)

Current consumption [mA]

< 18

Insulation resistance [MΩ]

> 100 (500 V DC)

Protection class

III

Reverse polarity protection

yes

Outputs

Output

Analog output

Output function

0...10 V

Overload protection

yes

Min. load [Ω]

2000

Measuring / setting range

Measuring range [bar]

0...100

Accuracy / deviations

Accuracy / deviations

(in % of the span)

Characteristics deviation \*)

< ± 0.25 (BFSL) / < ± 0.5 (LS)

Repeatability \*\*)

< 0.1

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

0.1

Greatest TEMPCO of the span

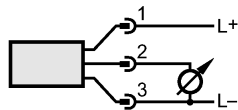
0.2

Reaction times

**PA9022 - 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 CISPR25	according to the automotive directive 2004/104/EC
noise immunity	according to the automotive directive 2004/104/EC
ISO 11452-2 HF radiated:	100 V/m
ISO 7637-2 pulse:	severity level 4
Railway applications	DIN EN 50155 / IEC 60571 class T3, C1, S1
Shock resistance	DIN EN 60068-2-27 50 g (11 ms) DIN EN 61373: Category 3
Vibration resistance	DIN EN 60068-2-6 20 g (10...2000 Hz) DIN EN 61373: Category 2
MTTF [Years]	478
Mechanical data	
Process connection	G ¼ 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]	0.221
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
- \*\*\*\*\*) -40...90 °C upon request

Pack quantity

[piece]

1