

1: Pressure relief mechanism

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



Product characteristics

Electronic pressure sensor

e1 compliant

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

Analogue output

Measuring range: 0...5000 psi

Application

Application

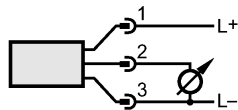
Type of pressure: relative pressure  
Liquids and gases  
Use in gases at pressures > 363 psi (25 bar) only after contacting the manufacturer ifm

Pressure rating	[psi]	11600
Bursting pressure min.	[psi]	17400
Medium temperature	[°C]	-25...90
Electrical data		
Electrical design		DC
Operating voltage	[V]	16...32 DC
Current consumption	[mA]	< 18
Insulation resistance	[MΩ]	> 100 (500 V DC)
Protection class		III
Reverse polarity protection		yes
Outputs		
Output		Analogue output
Output function		0...10 V analogue
Overload protection		yes
Analogue output		0...10 V
Max. load	[Ω]	min. 2000
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

**PX9110 - Electronic pressure sensor - eclass: 27201302 / 27-20-13-02**

Greatest TEMPCO of the span	0.4
Reaction times	
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 11452-2 HF radiated 100 V/m according to ISO7637-2 / severity level 3 pulse resistance 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)
MTTF [Years]	531
Mechanical data	
Process connection	¼" 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]	0.215
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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