

Product characteristics

Electronic pressure sensor

Quick disconnect

e1 compliant

Process connection: 1/4" NPT I

Analog output

Measuring range: 0...250 bar / 0...3625 psi

Application

Application

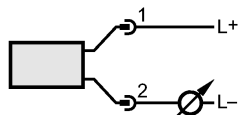
Type of pressure: relative pressure
Liquids and gases
Use in gases at pressures > 25 bar only after contacting the manufacturer ifm

Pressure rating	600 bar	8700 psi
Bursting pressure min.	1000 bar	14500 psi
Medium temperature [°C]	-25...90 ****)	
Electrical data	DC	
Electrical design	DC	
Operating voltage [V]	9.6...32 DC 1)	
Insulation resistance [MΩ]	> 100 (500 V DC)	
Protection class	III	
Reverse polarity protection	yes	
Outputs	Analog output	
Output	Analog output	
Output function	4...20 mA	
Overload protection	yes	
Max. load [Ω]	(U _b - 9.6 V) x 50; 720 at U _b = 24 V	
Measuring / setting range		
Measuring range	0...250 bar	0...3625 psi
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		
Step response time analogue output [ms]	3	

PA3221 - Electronic pressure sensor - eclass: 27201302 / 27-20-13-02

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 DIN EN 61373:	50 g (11 ms) Category 3
Vibration resistance	DIN EN 60068-2-6 DIN EN 61373:	20 g (10...2000 Hz) Category 2
MTTF	[Years]	507
Mechanical data		
Process connection		¼" NPT 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]	0.228
Electrical connection		
Connection		M12 connector; gold-plated contacts

Wiring



Remarks	
Remarks	<p>*) BFSL = Best Fit Straight Line / LS = Limit Value Setting</p> <p>***) with temperature fluctuations < 10 K</p> <p>****) in % of value of measuring range / 6 months</p> <p>*****) -40...90 °C upon request</p>
Pack quantity	[piece] 1