

Product characteristics

Electronic pressure sensor

e1 compliant

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

Analogue output

Measuring range: 0...1000 psi

Application

Application

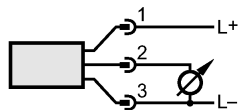
Type of pressure: relative pressure  
Liquids and gases  
Use in gases at pressures > 363 psi (25 bar) only after contacting the manufacturer  
ifm

|  |                                 |
|--|---------------------------------|
| Pressure rating [psi]  | 4350                            |
| Bursting pressure min. [psi]   | 9400                            |
| 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...1000                        |
| 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  | 0.2                             |
| Greatest TEMPCO of the span  | 0.3                             |
| Reaction times   |                                 |

**PX9112 - 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<br>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]                             | 0.212   |
| 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]

1