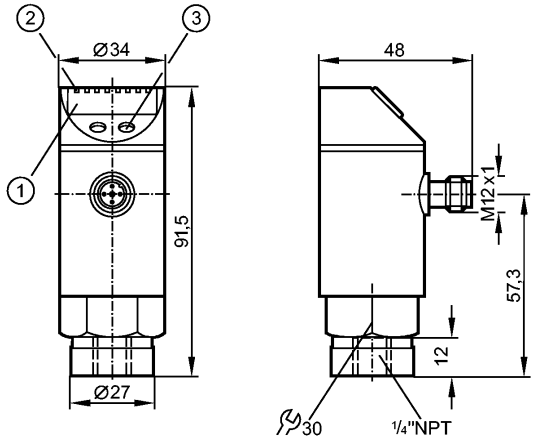
New generation available: PN7297

efectorsoo

PN7207

PN-001BRBR14-QFRKG/US/ /V

Pressure sensors




1: 4-digit alphanumeric display
2: LEDs (display unit / switching status)
3: Programming button

CE cULus LISTED IO-Link

| Product characteristics | | | |
|---|---|---|---|
| Electronic pressure monitor | | | |
| Quick disconnect | | | |
| Function programmable | | | |
| Process connection: ¼" NPT | | | |
| 2 outputs<br>OUT1 = switching output<br>OUT2 = switching output or diagnostic output | | | |
| 4-digit alphanumeric display | | | |
| Measuring range: 0...14.5 psi / 0...1000 mbar | | | |
| **Application** | | | |
| Application | | Type of pressure: relative pressure<br>Liquids and gases | |
| Pressure rating | | 145 psi | 10000 mbar |
| Bursting pressure min. | | 450 psi | 30000 mbar |
| Medium temperature | [°C] | -25...80 | |
| **Electrical data** | | | |
| Electrical design | | DC PNP/NPN | |
| Operating voltage | [V] | 18...36 DC [1]) | |
| Current consumption | [mA] | < 50 | |
| Insulation resistance | [MΩ] | > 100 (500 V DC) | |
| Protection class | | III | |
| Reverse polarity protection | | yes | |
| Overvoltage protection | [V] | up to 40 V | |
| **Outputs** | | | |
| Output | | 2 outputs<br>OUT1 = switching output<br>OUT2 = switching output or diagnostic output | |
| Output function | | 2 x normally open / closed programmable or 1 x normally open / closed programmable + 1 x normally closed (diagnostic function) | |
| Current rating | [mA] | 250 | |
| Voltage drop | [V] | < 2 | |
| Short-circuit protection | | yes (non-latching) | |
| Switching frequency | [Hz] | ≤ 170 | |

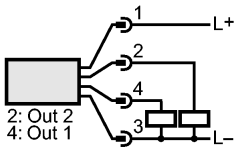
# PN7207 - Electronic pressure monitor - eclass: 27201302 / 27-20-13-02

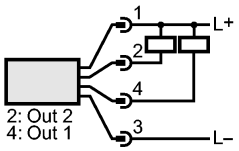
| | | | |
|---|---|---|---|
| Measuring / setting range | | | |
| Display unit | | mbar, kPa, psi, inHg | |
| Measuring range | | 0...14.5 psi | 0...1000 mbar |
| Setting range | | | |
| Set point, SP | | 0.2...14.5 psi | 10...1000 mbar |
| Reset point, rP | | 0.1...14.4 psi | 5...995 mbar |
| in steps of | | 0.1 psi | 5 mbar |
| Factory setting | | SP1 = 3.6 psi; rP1 = 3.3 psi<br>SP2 = 10.8 psi; rP2 = 10.5 psi | |
| Accuracy / deviations | | | |
| Accuracy / deviations (in % of the span) | | | |
| Switch point accuracy | | < ± 0.5 | |
| Characteristics deviation *) | | < ± 0.25 (BFSL) / < ± 0.5 (LS) | |
| Hysteresis | | < ± 0.25 | |
| Repeatability **) | | < ± 0.1 | |
| Long-term stability ***) | | < ± 0.05 | |
| Temperature coefficients (TEMPCO) in the temperature range -20...80° C (in % of the span per 10 K) | | | |
| Greatest TEMPCO of the zero point | | 0.2 | |
| Greatest TEMPCO of the span | | 0.2 | |
| Reaction times | | | |
| Power-on delay time | [s] | 0.3 | |
| Delay time programmable dS, dr | [s] | 0; 0.2...50 | |
| Integrated watchdog | | yes | |
| Software / programming | | | |
| Programming options | | hysteresis / window function; N.O. / N.C; diagnostic function; output polarity; on delay, off delay; damping; display unit | |
| Interfaces | | | |
| IO-Link Device | | | |
| Transfer type | | COM2 (38.4 kBaud) | |
| IO-Link revision | | 1.1 | |
| IO-Link Device ID | | 332 d / 00 01 4C h | |
| Profiles | | no profile | |
| SIO mode | | yes | |
| Required master port class | | A | |
| Process data analogue | | 1 | |
| Process data binary | | 2 | |
| Min. process cycle time | [ms] | 2.3 | |
| Environment | | | |
| Ambient temperature | [°C] | -20...80 (UB < 32 V) / -20...60 (UB > 32 V) | |
| Storage temperature | [°C] | -40...100 | |
| Protection | | IP 65 | |
| Tests / approvals | | | |
| EMC | | EN 61000-6-2<br>EN 61000-6-3 | |
| Shock resistance | | DIN EN 60068-2-27 | 50 g (11 ms) |
| Vibration resistance | | DIN EN 60068-2-6 | 20 g (10...2000 Hz) |
| MTTF | [Years] | 219 | |
| Mechanical data | | | |
| Process connection | | ¼" NPT | |
| Materials (wetted parts) | | stainless steel (303S22); ceramics; FPM | |
| Housing materials | | stainless steel (304S15); stainless steel 316L / 1.4404; PC; PBT; PEI; FPM; PTFE | |
| Switching cycles min. | | 100 million | |
| Weight | [kg] | 0.264 | |
| Displays / operating elements | | | |
| Display | | Display unit 4 x LED green<br>Switching status 2 x LED yellow<br>Function display 4-digit alphanumeric display | |

# PN7207 - Electronic pressure monitor - eclass: 27201302 / 27-20-13-02

| | |
|---|---|
| | Measured values 4-digit alphanumeric display |
| Electrical connection | |
| Connection | M12 connector; gold-plated contacts |
| **Wiring** | |

Programming of the output function
----------OUT1----------
Hno = hysteresis / normally open
Hnc = hysteresis / normally closed
Fno = window function / normally open
Fnc = window function / normally closed
----------OUT2----------
Hno = hysteresis / normally open
Hnc = hysteresis / normally closed
Fno = window function / normally open
Fnc = window function / normally closed
dESI = diagnostic function (normally closed)


| | |
|---|---|
| Remarks | |
| Remarks | [1]) to EN50178, SELV, PELV<br>*) BFSL = Best Fit Straight Line / LS = Limit Value Setting<br>**) with temperature fluctuations < 10 K<br>***) in% of the span / 6 months |
| Pack quantity [piece] | 1 |



New generation available: PN7297