

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



Product characteristics
Electronic pressure monitor

Quick disconnect

Sealing of the measuring cell: EPDM

Function programmable

Process connection: G 1/4 I

2 outputs

OUT1 = switching output

OUT2 = switching output or diagnostic output

4-digit alphanumeric display

Measuring range: 0...2.5 bar / 0...36.3 psi / 0...250 kPa

Application

Application


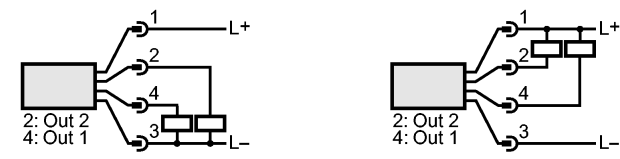
Type of pressure: relative pressure
Liquids and gases
Cannot be used for oils

| | | | |
|-----------------------------|---|---------|----------|
| Pressure rating | 20 bar | 290 psi | 2000 kPa |
| Bursting pressure min. | 50 bar | 725 psi | 5000 kPa |
| Medium temperature [°C] | -25...80 | | |
| Electrical data | DC PNP/NPN | | |
| 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 | 2 outputs | | |
| Output | OUT1 = switching output 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) | | |

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| | | | |
|--|--|---------------------|-------------|
| Switching frequency [Hz] | ≤ 170 | | |
| Measuring / setting range | | | |
| Measuring range | 0...2.5 bar | 0...36.3 psi | 0...250 kPa |
| Setting range | | | |
| Set point, SP | 0.02...2.50 bar | 0.4...36.2 psi | 2...250 kPa |
| Reset point, rP | 0.01...2.49 bar | 0.2...36.0 psi | 1...249 kPa |
| in steps of | 0.01 bar | 0.2 psi | 1 kPa |
| Factory setting | SP1 = 0.63 bar; rP1 = 0.58 bar SP2 = 1.88 bar; rP2 = 1.83 bar | | |
| 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 | 312 d / 00 01 38 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 67 | | |
| Tests / approvals | | | |
| EMC | EN 61000-6-2 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] | 237 | | |
| Mechanical data | | | |
| Process connection | G ¼ I | | |
| Materials (wetted parts) | stainless steel 316L / 1.4404; ceramics (99.9 % Al2 O3); Sealing of the measuring cell; EPDM | | |
| Housing materials | stainless steel (304S15); stainless steel 316L / 1.4404; PC; PBT; PEI; FPM; EPDM/X; PTFE | | |
| Switching cycles min. | 100 million | | |
| Weight [kg] | 0.261 | | |
| Displays / operating elements | | | |
| Display | Display unit | 3 x LED green | |

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|---|--|
| | Switching status 2 x LED yellow Function display 4-digit alphanumeric display 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 *) 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 |