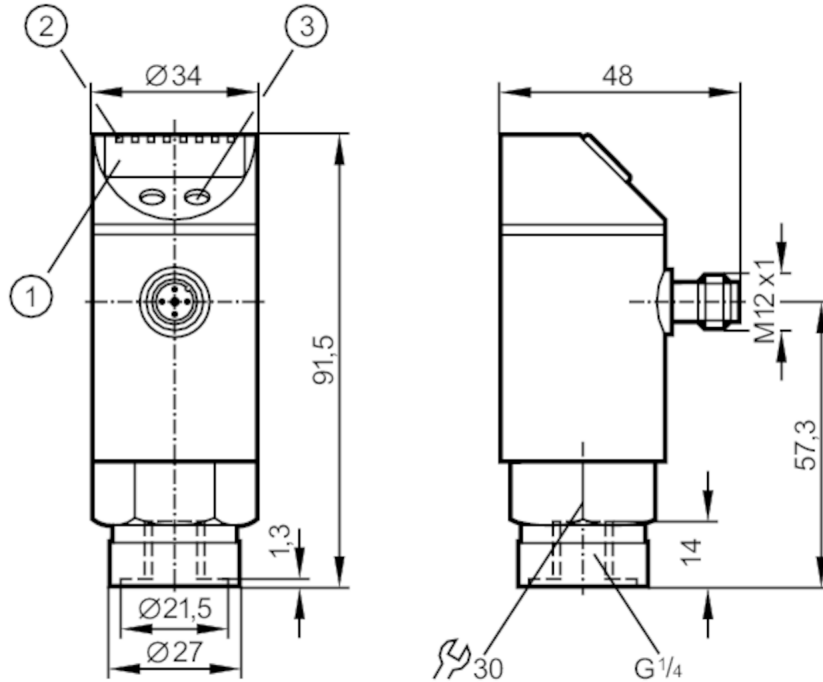


PY2068



Pressure sensor with display

PN-+,2BRBR14-MFRKG/US IV



- 1 alphanumeric display 4-digit
- 2 LEDs Display unit / switching status
- 3 programming button



Application

| | | | |
|-------------------------|-------------------|---------|----------|
| Media | liquids and gases | | |
| Medium temperature [°C] | -25...80 | | |
| Pressure rating | 6000 mbar | 87 psi | 600 kPa |
| Min. bursting pressure | 30000 mbar | 435 psi | 3000 kPa |
| Type of pressure | relative pressure | | |

Electrical data

| | | | |
|---------------------------------|-----------------|--|--|
| Operating voltage [V] | 18...32 DC | | |
| Current consumption [mA] | < 50 | | |
| Min. insulation resistance [MΩ] | 100; (500 V DC) | | |
| Protection class | III | | |
| Reverse polarity protection | yes | | |
| Power-on delay time [s] | 0.5 | | |
| Integrated watchdog | yes | | |



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| Outputs | |
|--|--|
| Total number of outputs | 2 |
| Output signal | switching signal; analogue signal; (configurable) |
| Electrical design | PNP/NPN |
| Number of digital outputs | 1 |
| Output function | normally open / normally closed; (parameterisable) |
| Max. voltage drop switching output DC [V] | 2 |
| Permanent current rating of switching output DC [mA] | 250 |
| Switching frequency DC [Hz] | 6 |
| Number of analogue outputs | 1 |
| Analogue current output [mA] | 4...20; (scalable 1:4) |
| Max. load [Ω] | (U _b - 10 V) / 20 mA |
| Analogue voltage output [V] | 0...10; (scalable 1:4) |
| Min. load resistance [Ω] | 2000 |
| Short-circuit protection | yes |
| Type of short-circuit protection | pulsed |
| Overload protection | yes |

| Measuring/setting range | | | |
|-------------------------|-----------------|------------------|----------------|
| Measuring range | -250...250 mbar | -3.63...3.63 psi | -25...25 kPa |
| Set point SP | -248...250 mbar | -3.61...3.63 psi | -24.8...25 kPa |
| Reset point rP | -250...248 mbar | -3.63...3.6 psi | -25...24.8 kPa |
| Analogue start point | -250...125 mbar | -3.63...1.82 psi | -25...12.5 kPa |
| Analogue end point | -125...250 mbar | -1.82...3.63 psi | -12.5...25 kPa |
| In steps of | 1 mbar | 0.01 psi | 0.1 kPa |

| Accuracy / deviations | |
|---|---|
| Switch point accuracy [% of the span] | < ± 0,2; (Turn down 1:1) |
| Repeatability [% of the span] | < ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1) |
| Characteristics deviation [% of the span] | < ± 0,2; (Turn down 1:1 linearity, incl. hysteresis and repeatability limit value setting to DIN 16086) |
| Linearity deviation [% of the span] | < ± 0,1; (Turn down 1:1) |
| Hysteresis deviation [% of the span] | < ± 0,1; (Turn down 1:1) |
| Long-term stability [% of the span] | < ± 0,1; (Turn down 1:1; per year) |
| Temperature coefficient zero point [% of the span / 10 K] | < ± 0,2; (0...70 °C) |
| Temperature coefficient span [% of the span / 10 K] | < ± 0,2; (0...70 °C) |

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| Response times | | |
|---|---|-------------------------------|
| Response time | [ms] | < 100 |
| Damping for the switching output dAP | [s] | 0.1...100 |
| Damping for the analogue output dAA | [s] | 0.1...100 |
| Max. response time analogue output | [ms] | 100 |
| Software / programming | | |
| Parameter setting options | hysteresis / window; normally open / normally closed; switching logic; current/voltage output; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit; zero point; span | |
| Operating conditions | | |
| Ambient temperature | [°C] | -25...80 |
| Storage temperature | [°C] | -40...100 |
| Protection | | IP 65 |
| Tests / approvals | | |
| EMC | EN 61000-4-2 ESD | 4 kV CD / 8 kV AD |
| | EN 61000-4-3 HF radiated | 10 V/m |
| | EN 61000-4-4 Burst | 2 kV |
| | EN 61000-4-5 Surge | 0,5/1 kV |
| | EN 61000-4-6 HF conducted | 10 V |
| 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] | 181.26 |
| Mechanical data | | |
| Weight | [g] | 288 |
| Materials | stainless steel (1.4301 / 304); PC; PBT; PA; FKM | |
| Materials (wetted parts) | stainless steel (1.4305 / 303); ceramics; FKM | |
| Min. pressure cycles | 100 million | |
| Process connection | threaded connection G 1/4 internal thread | |
| Displays / operating elements | | |
| Display | Display unit | 4 x LED, green |
| | switching status | LED, yellow |
| | function display | alphanumeric display, 4-digit |
| | measured values | alphanumeric display, 4-digit |
| Display unit | mbar; kPa; psi; % of the span | |
| Remarks | | |
| Pack quantity | 1 pcs. | |
| Electrical connection | | |
| Connector: 1 x M12; Contacts: gold-plated | | |

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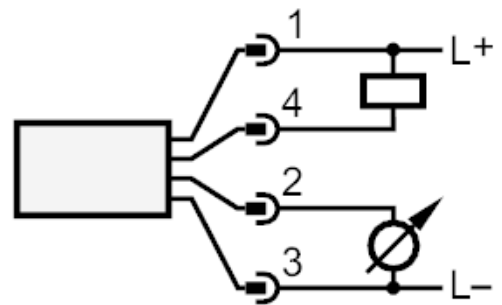
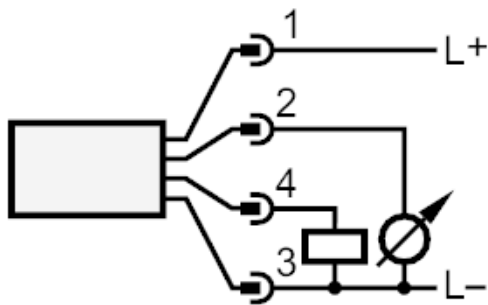


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Connection



OUT1 switching output
OUT2 analogue output