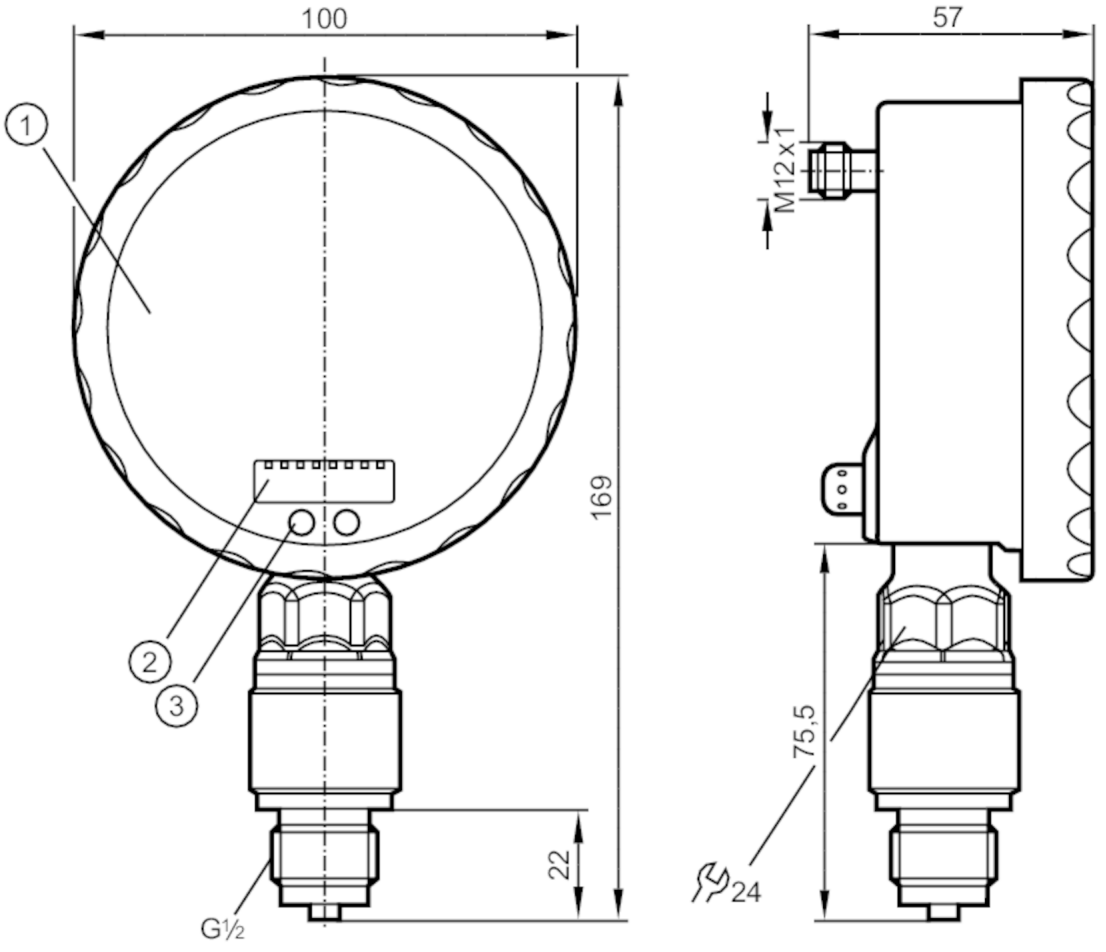
# PG2455

## Pressure sensor with analogue display

PG-005-REB12-MFRKG/US/ /P

phase-out article

Alternative articles: PG1405
When selecting an alternative article and accessories please note that technical data may differ!




1 analogue display
2 alphanumeric display 4-digit
3 sensor field (programming button)

| Product characteristics | | | |
|---|---|---|---|
| Number of inputs and outputs | Number of digital outputs: 1; Number of analogue outputs: 1 | | |
| Measuring range | -1...4 bar | -14.5...58 psi | |
| Process connection | threaded connection G 1/2 external thread | | |
| **Application** | | | |
| Special feature | Gold-plated contacts | | |
| Application | for industrial applications | | |
| Media | liquids and gases | | |
| Medium temperature [°C] | -25...80 | | |
| Min. burst pressure | 100 bar | 1450 psi | 10 MPa |
| Pressure rating | 30 bar | 435 psi | 3 MPa |
| Type of pressure | relative pressure; vacuum | | |

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| | | | |
|---|---|---|---|
| **Electrical data** | | | |
| Operating voltage | [V] | 18...32 DC | |
| Current consumption | [mA] | < 70; (24 V) | |
| Min. insulation resistance | [MΩ] | 100; (500 V DC) | |
| Protection class | | III | |
| Reverse polarity protection | | yes | |
| Power-on delay time | [s] | 6 | |
| Integrated watchdog | | yes | |
| **Inputs / outputs** | | | |
| Number of inputs and outputs | | Number of digital outputs: 1; Number of analogue outputs: 1 | |
| **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] | 75 | |
| Number of analogue outputs | | 1 | |
| Analogue current output | [mA] | 4...20, invertible; (scalable) | |
| Max. load | [Ω] | (Ub - 10 V) / 20 mA | |
| Short-circuit protection | | yes | |
| Type of short-circuit protection | | pulsed | |
| Overload protection | | yes | |
| **Measuring/setting range** | | | |
| Measuring range | | -1...4 bar | -14.5...58 psi |
| Set point SP | | -0.98...6.4 bar | -14.2...92.8 psi |
| Reset point rP | | -1...6.38 bar | -14.5...92.5 psi |
| Analogue start point | | -1...5.4 bar | -14.5...78.3 psi |
| Analogue end point | | 0...6.4 bar | 0...92.8 psi |
| In steps of | | 0.01 bar | 0.1 psi |
| **Accuracy / deviations** | | | |
| Switch point accuracy | [% of the span] | < ± 0,5; (Turn down 1:1) | |
| Repeatability | [% of the span] | < ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1) | |
| Characteristics deviation | [% of the span] | < ± 0,25 (BFSL) / < ± 0,5 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line) | |
| Hysteresis deviation | [% of the span] | < ± 0,25; (Turn down 1:1) | |
| Long-term stability | [% of the span] | < ± 0,1; (Turn down 1:1; per 6 months) | |

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| | | | |
|---|---|---|---|
| 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) | |
| **Response times** | | | |
| Response time | [ms] | < 9 | |
| Damping process value dAP | [s] | 0.01...30 | |
| Damping for the analogue output dAA | [s] | 0.01...30 | |
| Step response time analogue output | [ms] | 28 | |
| **Operating conditions** | | | |
| Ambient temperature | [°C] | -20...80 | |
| Storage temperature | [°C] | -40...100 | |
| Protection | | IP 67; IP 69K | |
| **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 EN 60068-2-27 | 50 g (11 ms) |
| Vibration resistance | | DIN EN 60068-2-6 | 10 g (10...2000 Hz) |
| MTTF | [years] | 103 | |
| Pressure Equipment Directive | | Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request | |
| **Mechanical data** | | | |
| Weight | [g] | 567.4 | |
| Dimensions | [mm] | 169 x 100 x 57 | |
| Materials | | stainless steel (316L/1.4404); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm | |
| Materials (wetted parts) | | Al2O3 (ceramics); FKM; stainless steel (316L/1.4404) | |
| Min. pressure cycles | | 100 million | |
| Process connection | | threaded connection G 1/2 external thread | |
| Restrictor element integrated | | no (can be retrofitted) | |
| **Displays / operating elements** | | | |
| Display | | Display unit | 2 x LED, green |
| | | switching status | LED, yellow |
| | | switch points | LED ring, red |
| | | function display | alphanumeric display, red 4-digit |
| | | measured values | analogue display, 0...350° rotatable, pointer not visible when unit disconnected |
| | | measured values | alphanumeric display, red 4-digit |
| With scale | | yes | |
| Extended display range (max.) | | 6.4 bar | 92.8 psi |
| **Remarks** | | | |
| Remarks | | switch point accuracy in the extended display range: 1.5 % of the span | |

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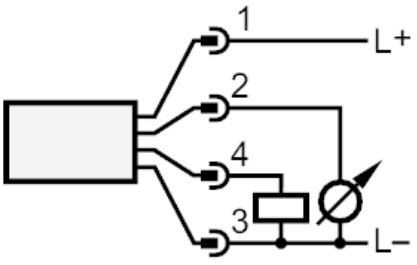
| | |
|---|---|
| Pack quantity | 1 pcs. |

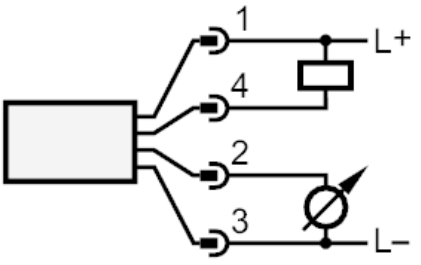
## Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated




### Connection




| | |
|---|---|
| OUT1 | switching output |
| OUT2 | analogue output |