

PG2456



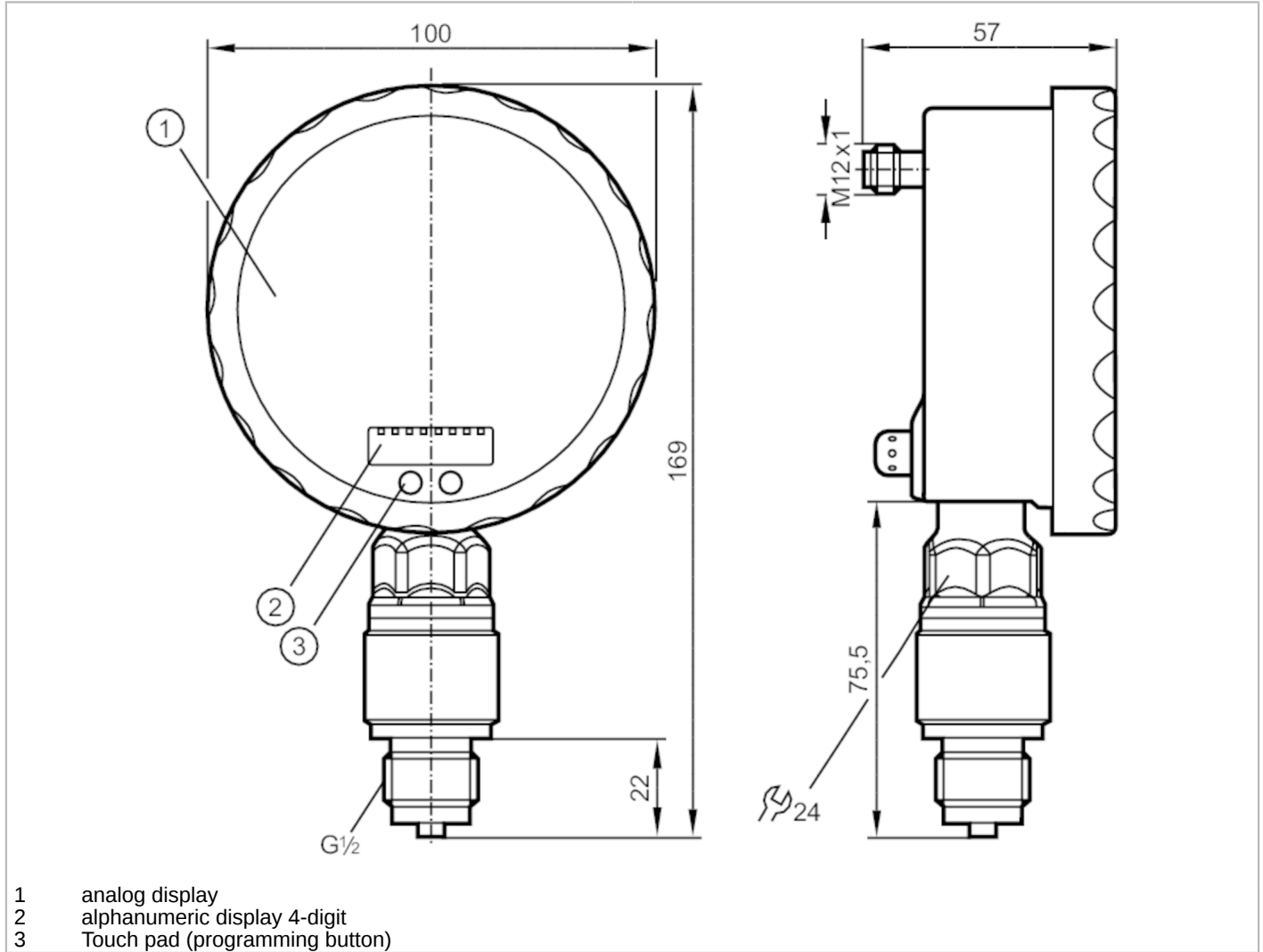
Pressure sensor with analog display

PG-2,5-REB12-MFRKG/US/ /P

Article to be discontinued

Alternative articles: PG1406

When selecting an alternative article and accessories please note that technical data may differ!



Product characteristics

| | | | |
|------------------------------|---|------------------|------------------|
| Number of inputs and outputs | Number of digital outputs: 1; Number of analog outputs: 1 | | |
| Measuring range | -0.125...2.5 bar | -125...2500 mbar | -1.8...36.25 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 | 50 bar | 725 psi | 5 MPa |
| Pressure rating | 20 bar | 290 psi | 2 MPa |
| Type of pressure | relative pressure | | |

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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 analog outputs: 1 | |
| Outputs | | | |
| Total number of outputs | | 2 | |
| Output signal | | switching signal; analog signal; (configurable) | |
| Electrical design | | PNP/NPN | |
| Number of digital outputs | | 1 | |
| Output function | | normally open / closed; (configurable) | |
| Max. voltage drop switching output DC | [V] | 2 | |
| Permanent current rating of switching output DC | [mA] | 250 | |
| Switching frequency DC | [Hz] | 75 | |
| Number of analog outputs | | 1 | |
| Analog current output | [mA] | 4...20, invertible; (scalable) | |
| Max. load | [Ω] | (U _b - 10 V) / 20 mA | |
| Short-circuit protection | | yes | |
| Type of short-circuit protection | | yes (non-latching) | |
| Overload protection | | yes | |
| Measuring/setting range | | | |
| Measuring range | | -0.125...2.5 bar | -125...2500 mbar -1.8...36.25 psi |
| Set point SP | | -0.115...4 bar | -1.65...58 psi |
| Reset point rP | | -0.125...3.99 bar | -1.8...57.85 psi |
| Analog start point | | -0.125...3.35 bar | -1.8...48.6 psi |
| Analog end point | | 0.525...4 bar | 7.6...58 psi |
| In steps of | | 0.005 bar | 0.05 psi |
| Accuracy / deviations | | | |
| Switch point accuracy | | < ± 0,5; (Turn down 1:1) | |
| | [% of the span] | | |
| Repeatability | | < ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1) | |
| | [% of the span] | | |
| Characteristics deviation | | < ± 0,25 (BFSL) / < ± 0,5 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line) | |
| | [% of the span] | | |
| Hysteresis deviation | | < ± 0,25; (Turn down 1:1) | |
| | [% of the span] | | |
| Long-term stability | | < ± 0,1; (Turn down 1:1; per 6 months) | |
| | [% of the span] | | |

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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) |

| Reaction times | |
|---------------------------------------|-----------|
| Response time [ms] | < 9 |
| Damping process value dAP [s] | 0.01...30 |
| Damping for the analog output dAA [s] | 0.01...30 |
| Step response time analog 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 |
| 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] | 565.7 |
| Dimensions [mm] | 169 x 100 x 57 |
| Material | stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm |
| Materials (wetted parts) | Al2O3 (ceramics); FKM; stainless steel (1.4404 / 316L) |
| 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 | analog display, 0...350° rotatable, pointer not visible when unit disconnected |
| | Measured values | alphanumeric display, red 4-digit |
| With scale | yes | |
| Extended display range (max.) | 4 bar | 58 psi |

| Remarks | |
|---------|--|
| Remarks | switch point accuracy in the extended display range: 1.5 % of the span |

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Pack quantity

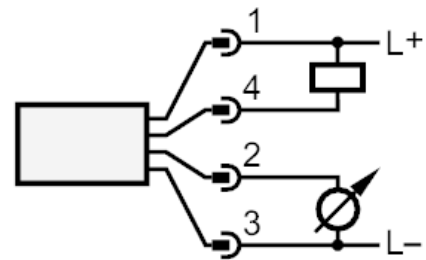
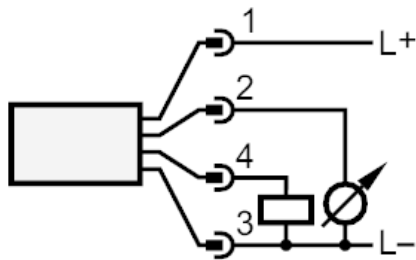
1 pcs.

Electrical connection

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



Connection



OUT1
OUT2

Switching output
analog output