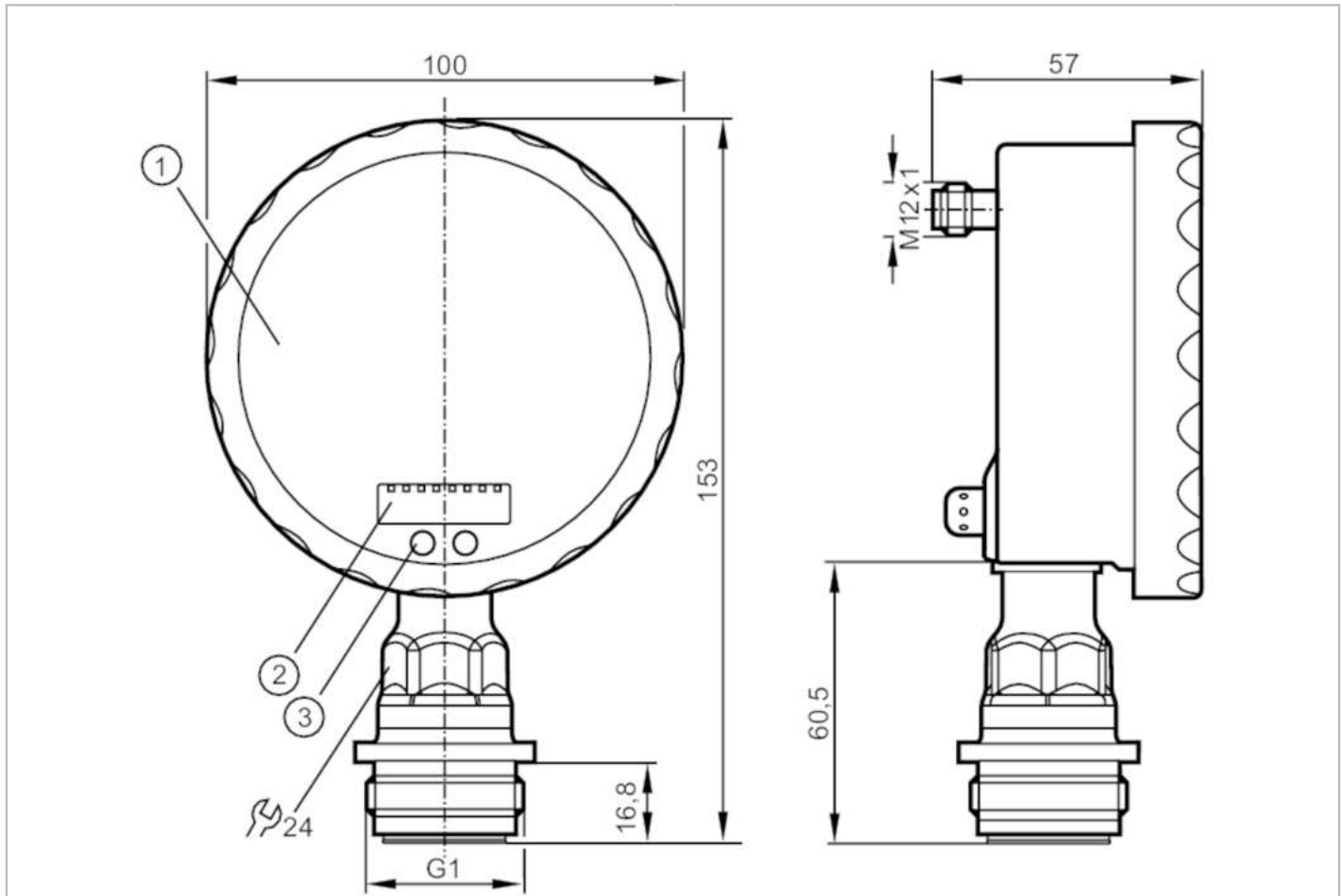


PG2798



Flush pressure sensor with analogue display

PG-,25BREA01-MFRKG/US/ IP



- 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 | -0.0124...0.25 bar -12.4...250 mbar -5...100.4 inH2O |
| Process connection | threaded connection G 1 external thread Aseptoflex Vario |
| Application | |
| Special feature | Gold-plated contacts |
| Application | flush mountable for the food and beverage industry |
| Media | viscous media and liquids with suspended particles; liquids and gases |
| Medium temperature [°C] | -25...125; (145 max. 1h) |
| Min. bursting pressure | 30000 mbar 12043 inH2O |
| Pressure rating | 6000 mbar 2400 inH2O |
| Type of pressure | relative pressure |
| No dead space | yes |
| MAWP (for applications according to CRN) [bar] | 10 |



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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 |
| Measuring principle | hydrostatic |
| 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] | 50 |
| Number of analogue outputs | 1 |
| Analogue 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 | pulsed |
| Overload protection | yes |
| Measuring/setting range | |
| Measuring range | -0.0124...0.25 bar -12.4...250 mbar -5...100.4 inH2O |
| Set point SP | -12...400 mbar -4.8...160.6 inH2O |
| Reset point rP | -12.4...399.6 mbar -5...160.4 inH2O |
| Analogue start point | -12.4...337.6 mbar -5...135.5 inH2O |
| Analogue end point | 50...400 mbar 20.1...160.6 inH2O |
| In steps of | 0.2 mbar 0.1 inH2O |
| 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 EN IEC 62828-1) |
| Linearity deviation [% of the span] | < ± 0,15; (Turn down 1:1) |
| Hysteresis deviation [% of the span] | < ± 0,15; (Turn down 1:1) |



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| | |
|--------------------------------------------------------------|------------------------------------|
| Long-term stability [% of the span] | < ± 0,1; (Turn down 1:1; per year) |
| Temperature coefficient zero point [% of the span / 10 K] | < ± 0,05; (0...70 °C) |
| Temperature coefficient span [% of the span / 10 K] | < ± 0,15; (0...70 °C) |

Response times

| | |
|-----------------------------------------|-----------|
| Response time [ms] | < 10 |
| Damping process value dAP [s] | 0.01...30 |
| Damping for the analogue output dAA [s] | 0.01...30 |
| Step response time analogue output [ms] | 25 |

Operating conditions

| | |
|--------------------------|---------------|
| Ambient temperature [°C] | -25...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 IEC 68-2-27 | 50 g (11 ms) |
| Vibration resistance | DIN IEC 68-2-6 | 20 g (10...2000 Hz) |
| MTTF [years] | | 100 |
| Note on approval | factory certificate available as download at www.factory-certificate.ifm | |
| UL approval | File number UL | E174189 |

Mechanical data

| | |
|--------------------------|----------------------------------------------------------------------------------------------------------|
| Weight [g] | 520.75 |
| Materials | stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm |
| Materials (wetted parts) | ceramics (99.9 % Al2O3); stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4; PTFE |
| Min. pressure cycles | 100 million |
| Process connection | threaded connection G 1 external thread Aseptoflex Vario |

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.) | 400 mbar | 160.6 inH2O |

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Remarks

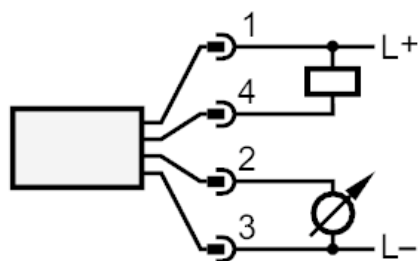
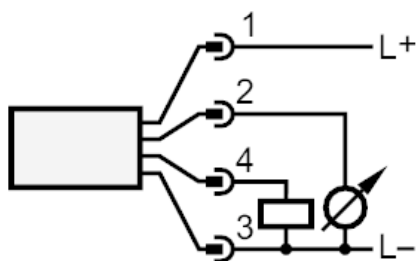
| | |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Remarks | characteristics deviation in the extended display range: 1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span |
| Pack quantity | 1 pcs. |

Electrical connection

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



Connection



OUT1 switching output
OUT2 analogue output