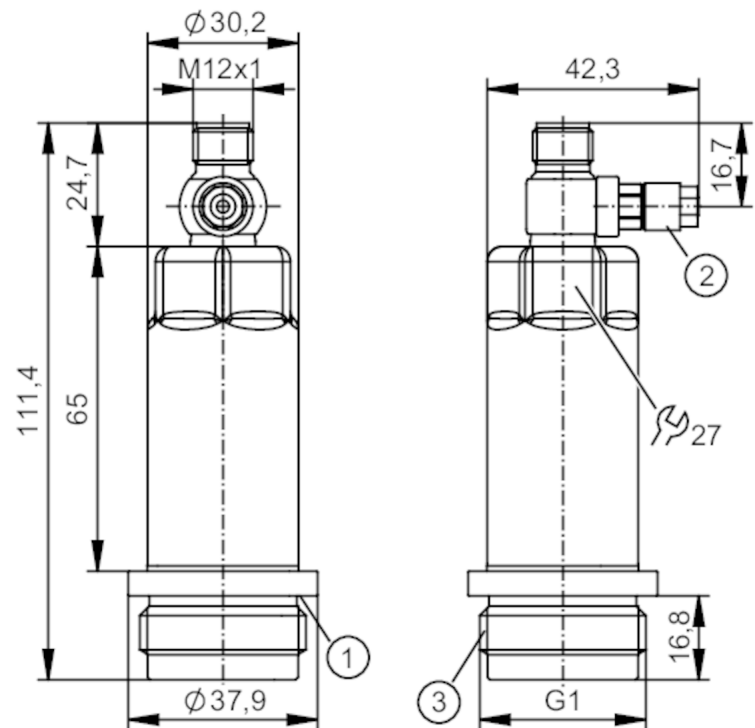


# PY1708



## Flush pressure transmitter

PM-,25BREA01-E-ZVG/US



- 1 groove with sealing ring (DIN EN ISO 1179-2)
- 2 fitting for tube  $\varnothing 6 \times 4$
- 3 external thread G1



### Product characteristics

|                              |                                         |                  |                    |                |
|------------------------------|-----------------------------------------|------------------|--------------------|----------------|
| Number of inputs and outputs | Number of analogue outputs: 1           |                  |                    |                |
| Measuring range              | -0.0125...0.25 bar                      | -12.5...250 mbar | -0.182...3.626 psi | -1.25...25 kPa |
| Process connection           | threaded connection G 1 external thread |                  |                    |                |

### Application

|                          |                                             |         |          |
|--------------------------|---------------------------------------------|---------|----------|
| Special feature          | Gold-plated contacts                        |         |          |
| Measuring element        | ceramic-capacitive pressure measuring cell  |         |          |
| Application              | flush mountable for industrial applications |         |          |
| Media                    | liquids and gases                           |         |          |
| Medium temperature [°C]  | -25...80                                    |         |          |
| Min. bursting pressure   | 30000 mbar                                  | 435 psi | 3000 kPa |
| Pressure rating          | 6000 mbar                                   | 87 psi  | 600 kPa  |
| Vacuum resistance [mbar] | -1000                                       |         |          |
| Type of pressure         | relative pressure                           |         |          |

### Electrical data

|                                 |                 |
|---------------------------------|-----------------|
| Operating voltage [V]           | 18...30 DC      |
| Min. insulation resistance [MΩ] | 100; (500 V DC) |
| Protection class                | III             |
| Reverse polarity protection     | yes             |



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|                                                           |                                                                                                    |                   |                    |                |
|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------|--------------------|----------------|
| Measuring principle                                       | hydrostatic                                                                                        |                   |                    |                |
| Integrated watchdog                                       | yes                                                                                                |                   |                    |                |
| 2-wire                                                    |                                                                                                    |                   |                    |                |
| Current consumption [mA]                                  | 3.5...21.5                                                                                         |                   |                    |                |
| Power-on delay time [s]                                   | 1                                                                                                  |                   |                    |                |
| 3-wire                                                    |                                                                                                    |                   |                    |                |
| Current consumption [mA]                                  | < 45                                                                                               |                   |                    |                |
| Power-on delay time [s]                                   | 0.5                                                                                                |                   |                    |                |
| Inputs / outputs                                          |                                                                                                    |                   |                    |                |
| Number of inputs and outputs                              | Number of analogue outputs: 1                                                                      |                   |                    |                |
| Outputs                                                   |                                                                                                    |                   |                    |                |
| Total number of outputs                                   | 1                                                                                                  |                   |                    |                |
| Output signal                                             | analogue signal                                                                                    |                   |                    |                |
| Number of analogue outputs                                | 1                                                                                                  |                   |                    |                |
| Analogue current output [mA]                              | 4...20; (scalable)                                                                                 |                   |                    |                |
| Max. load [Ω]                                             | 700; (Ub = 24 V; (Ub - 9 V) / 21.5 mA)                                                             |                   |                    |                |
| Short-circuit proof                                       | yes                                                                                                |                   |                    |                |
| Overload protection                                       | yes                                                                                                |                   |                    |                |
| Measuring/setting range                                   |                                                                                                    |                   |                    |                |
| Measuring range                                           | -0.0125...0.25 bar                                                                                 | -12.5...250 mbar  | -0.182...3.626 psi | -1.25...25 kPa |
| Analogue start point                                      | -12.5...200 mbar                                                                                   | -0.182...2.9 psi  | -1.25...20 kPa     |                |
| Analogue end point                                        | 37.5...250 mbar                                                                                    | 0.544...3.626 psi | 3.75...25 kPa      |                |
| In steps of                                               | 0.5 mbar                                                                                           | 0.007 psi         | 0.05 kPa           |                |
| Factory setting                                           | ASP = 0.0 mbar                                                                                     | AEP = 250 mbar    |                    |                |
| Accuracy / deviations                                     |                                                                                                    |                   |                    |                |
| Repeatability [% of the span]                             | < ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)                                     |                   |                    |                |
| Characteristics deviation [% of the span]                 | < ± 0,6; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1) |                   |                    |                |
| Linearity deviation [% of the span]                       | < ± 0,5; (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] | < ± 0,1; (0...70 °C)                                                                               |                   |                    |                |
| Temperature coefficient span [% of the span / 10 K]       | < ± 0,4; (0...70 °C)                                                                               |                   |                    |                |
| Response times                                            |                                                                                                    |                   |                    |                |
| Damping for the analogue output dAA [s]                   | 0...4                                                                                              |                   |                    |                |
| 2-wire                                                    |                                                                                                    |                   |                    |                |
| Step response time analogue output [ms]                   | 30                                                                                                 |                   |                    |                |

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3-wire

Step response time analogue output [ms]

7

### Operating conditions

Ambient temperature [°C]

-25...80

Storage temperature [°C]

-40...100

Protection

IP 67; IP 68; IP 69K

### Tests / approvals

EMC

DIN EN 61000-6-2

DIN 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]

323

### Mechanical data

Weight [g]

279.4

Materials

stainless steel (316L/1.4404); PBT; FKM; PTFE; nickel-plated brass

Materials (wetted parts)

ceramics (96 % Al<sub>2</sub>O<sub>3</sub>); FKM; stainless steel (316L/1.4404)

Min. pressure cycles

100 million

Tightening torque [Nm]

35; (recommended tightening torque; depends on lubrication, seal and pressure rating)

Process connection

threaded connection G 1 external thread

### Remarks

Pack quantity

1 pcs.

### Electrical connection

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

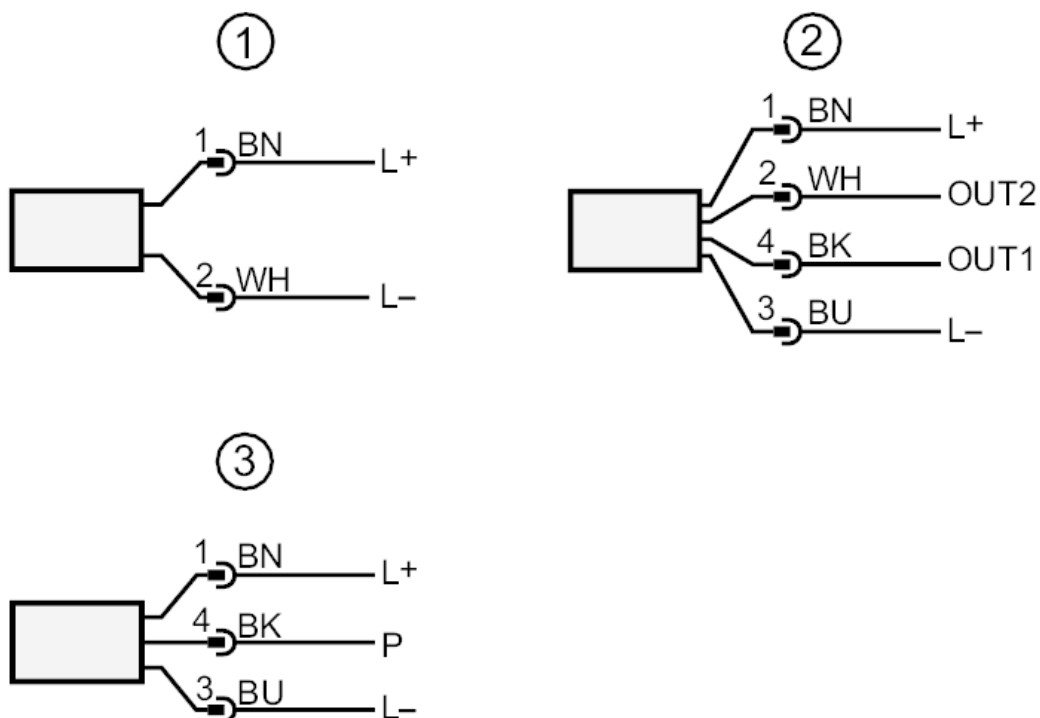




## Flush pressure transmitter

PM-,25BREA01-E-ZVG/US

### Connection



- colours to DIN EN 60947-5-2
- 1 connection for 2-wire operation
- 2 connection for 3-wire operation
- 3 connection for IO-Link parameter setting (P = communication via IO-Link)
- Core colours :
- BK = black
- BN = brown
- BU = blue
- WH = white