

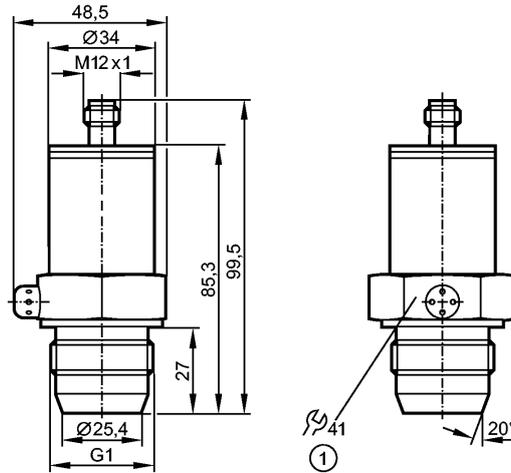


# PL2658

PL-,25BREA01-E-ZVG/US/ /P



Pressure sensors



1: tightening torque 20 Nm



EC 1935/2004 EHEDG Certified



### Product characteristics

Electronic pressure sensor

Quick disconnect

no dead space

Zero and span adjustable

Programmable via EPS interface

Sealing cone G 1 male

Process connection: Sealing cone G 1 male

Analog output

Measuring range: -12.5...250 mbar / -5.0...100.4 inH2O / -1.25...25.00 kPa

### Application

|                         |  |             |          |
|-------------------------|--|-------------|----------|
| Application             | Type of pressure: relative pressure<br>Hygienic systems, viscous media and liquids with suspended particles<br>Liquids and gases |             |          |
| Pressure rating         | 10000 mbar   | 4000 inH2O  | 1000 kPa |
| Bursting pressure min.  | 30000 mbar   | 12000 inH2O | 3000 kPa |
| Medium temperature [°C] | -25...80   |             |          |

### Electrical data

|                             |                      |  |  |
|-----------------------------|----------------------|--|--|
| Electrical design           | 3-wire DC; 2-wire DC |  |  |
| Operating voltage [V]       | 14...30 DC           |  |  |
| Insulation resistance [MΩ]  | > 100 (500 V DC)     |  |  |
| Protection class            | III                  |  |  |
| Reverse polarity protection | yes                  |  |  |

### Outputs

|                     |  |  |  |
|---------------------|--|--|--|
| Output              | Analog output  |  |  |
| Output function     | 4...20 mA analog   |  |  |
| Overload protection | yes  |  |  |
| Analog output       | 4...20 mA  |  |  |
| Max. load [Ω]       | max. (U <sub>b</sub> - 13 V) / 20 mA; 550 at U <sub>b</sub> = 24 V |  |  |

### Measuring / setting range

|                 |                  |                    |                   |
|-----------------|------------------|--------------------|-------------------|
| Measuring range | -12.5...250 mbar | -5.0...100.4 inH2O | -1.25...25.00 kPa |
|-----------------|------------------|--------------------|-------------------|



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## Setting range

|                         |                    |                    |                   |
|-------------------------|--------------------|--------------------|-------------------|
| Analog start point, ASP | -12.5...100.0 mbar | -5.0...40.2 inH2O  | -1.25...10.00 kPa |
| Analog end point, AEP   | 50.0...250.0 mbar  | 20.2...100.4 inH2O | 5.00...25.00 kPa  |
| in steps of             | 0.5 mbar           | 0.2 inH2O          | 0.05 kPa          |

## Accuracy / deviations

### Accuracy / deviations

(in % of the span) Turn down 1:1

|  |         |
|--|---------|
| Characteristics deviation *)   | < ± 0.6 |
| Linearity  | < ± 0.5 |
| Hysteresis   | < ± 0.1 |
| Repeatability **)  | < ± 0.1 |
| Long-term stability ***)   | < ± 0.1 |
| Temperature coefficients (TEMPCO) in the temperature range 0...80° C (in % of the span per 10 K) |         |
| Greatest TEMPCO of the zero point  | < ± 0.1 |
| Greatest TEMPCO of the span  | < ± 0.4 |

## Reaction times

|                                  |   |
|----------------------------------|---|
| Response time analog output [ms] | 3 |
|----------------------------------|---|

## Environment

|                          |           |
|--------------------------|-----------|
| Ambient temperature [°C] | -25...80  |
| Storage temperature [°C] | -40...100 |
| Protection               | IP 67     |

## 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 61000-4-6 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]         |                            | 271                 |

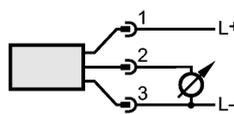
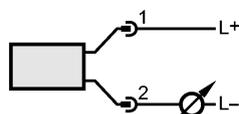
## Mechanical data

|                          |  |
|--------------------------|--|
| Process connection       | Sealing cone G 1 male  |
| Materials (wetted parts) | ceramics (99.9 % Al <sub>2</sub> O <sub>3</sub> ); PTFE; stainless steel 316L / 1.4435; surface characteristics: Ra < 0.4 / Rz 4 |
| Housing materials        | stainless steel 316L / 1.4404; PEI; FPM (Viton)  |
| Min. pressure cycles     | 100 million  |
| Weight [kg]              | 0.386  |

## Electrical connection

|            |               |
|------------|---------------|
| Connection | M12 connector |
|------------|---------------|

## Wiring



## Remarks



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Remarks

\*) linearity, incl. hysteresis and repeatability;  
(limit value setting to DIN 16086)  
) with temperature fluctuations < 10 K  
) in % of the span per year  
The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.

Pack quantity

[piece]

1