

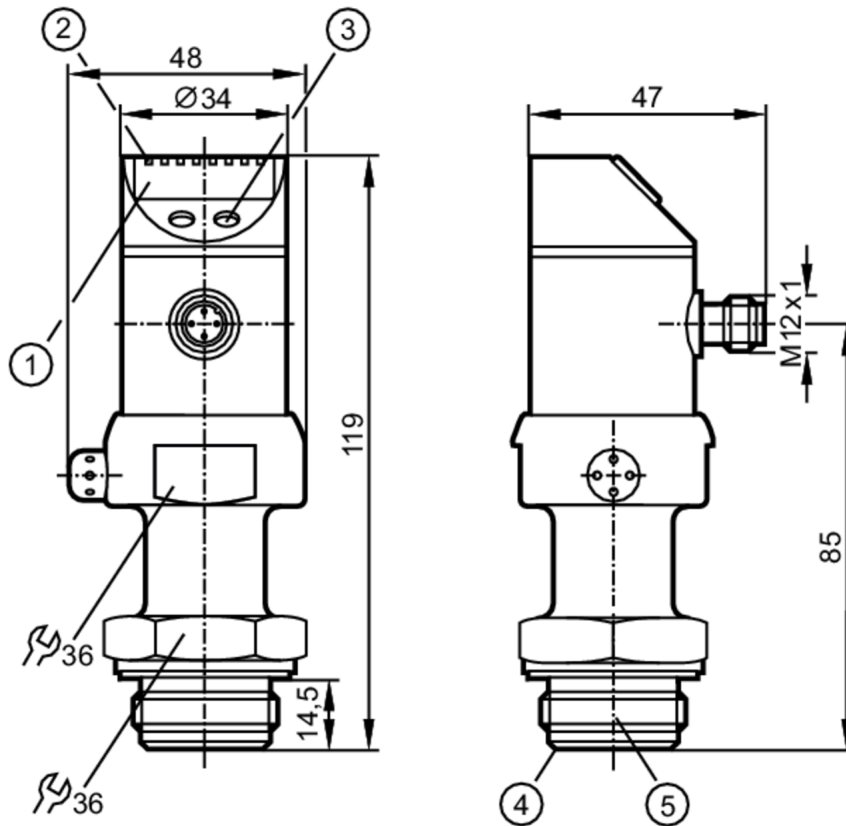
# PI1093



## Flush pressure sensor with display

PI-025-RES30-E-ZVG/US/ IP

Please do not use for new projects.  
no more adapters available as accessories



- 1 alphanumeric display 4-digit
- 2 status LEDs
- 3 Programming button
- 4 Aseptoflex sealing edge
- 5 Aseptoflex thread



EC 1935/2004 EHEDG Tested FCM FDA UK CA

### Product characteristics

|                              |                                                           |                   |                |
|------------------------------|-----------------------------------------------------------|-------------------|----------------|
| Number of inputs and outputs | Number of analog outputs: 1                               |                   |                |
| Measuring range              | -1...25 bar                                               | -14.4...362.7 psi | -0.1...2.5 MPa |
| Process connection           | threaded connection Aseptoflex external thread Aseptoflex |                   |                |

### Application

|                         |                                                                       |          |        |
|-------------------------|-----------------------------------------------------------------------|----------|--------|
| System                  | gold-plated contacts                                                  |          |        |
| Application             | flush mountable for the food and beverage industry                    |          |        |
| Installation            | Freely rotatable housing 350°                                         |          |        |
| Media                   | viscous media and liquids with suspended particles; liquids and gases |          |        |
| Medium temperature [°C] | -25...125; (145 max. 1h)                                              |          |        |
| Min. bursting pressure  | 350 bar                                                               | 5070 psi | 35 MPa |
| Pressure rating         | 100 bar                                                               | 1450 psi | 10 Mpa |
| Type of pressure        | relative pressure                                                     |          |        |
| No dead space           | yes                                                                   |          |        |

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| Electrical data                    |                        |                                                                                                                    |                   |
|------------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------|
| Operating voltage                  | [V]                    | 20...32 DC                                                                                                         |                   |
| Min. insulation resistance         | [MΩ]                   | 100; (500 V DC)                                                                                                    |                   |
| Protection class                   |                        | III                                                                                                                |                   |
| Reverse polarity protection        |                        | yes                                                                                                                |                   |
| Power-on delay time                | [s]                    | 0.5                                                                                                                |                   |
| Switch-on peak current             | [mA]                   | 6                                                                                                                  |                   |
| Switch-on peak current duration    | [ms]                   | 30                                                                                                                 |                   |
| Integrated watchdog                |                        | yes                                                                                                                |                   |
| Inputs / outputs                   |                        |                                                                                                                    |                   |
| Number of inputs and outputs       |                        | Number of analog outputs: 1                                                                                        |                   |
| Outputs                            |                        |                                                                                                                    |                   |
| Total number of outputs            |                        | 1                                                                                                                  |                   |
| Output signal                      |                        | analog signal                                                                                                      |                   |
| Number of analog outputs           |                        | 1                                                                                                                  |                   |
| Analog current output              | [mA]                   | 4...20, invertible; (scalable 1:4)                                                                                 |                   |
| Max. load                          | [Ω]                    | 300                                                                                                                |                   |
| Overload protection                |                        | yes                                                                                                                |                   |
| Measuring/setting range            |                        |                                                                                                                    |                   |
| Measuring range                    |                        | -1...25 bar                                                                                                        | -14.4...362.7 psi |
| Analog start point                 |                        | -1...18.74 bar                                                                                                     | -14.4...271.8 psi |
| Analog end point                   |                        | 5.24...25 bar                                                                                                      | 76.2...362.7 psi  |
| In steps of                        |                        | 0.02 bar                                                                                                           | 0.3 psi           |
| Factory setting                    |                        |                                                                                                                    | ASP = 0.00 bar    |
|                                    |                        |                                                                                                                    | AEP = 25.00 bar   |
| Accuracy / deviations              |                        |                                                                                                                    |                   |
| 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)                                                                                          |                   |
| 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)                                                                                              |                   |
| Reaction times                     |                        |                                                                                                                    |                   |
| Damping for the analog output dAA  | [s]                    | 0.1...100                                                                                                          |                   |
| Max. response time analog output   | [ms]                   | 40                                                                                                                 |                   |

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| Software / programming                                                              |                           |                                                                                                                                    |
|-------------------------------------------------------------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Parameter setting options                                                           |                           | Zero point; span                                                                                                                   |
| 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]                   | 238                                                                                                                                |
| Mechanical data                                                                     |                           |                                                                                                                                    |
| Weight                                                                              | [g]                       | 405                                                                                                                                |
| Material                                                                            |                           | stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE                                                                           |
| Materials (wetted parts)                                                            |                           | ceramics (99.9 % Al <sub>2</sub> O <sub>3</sub> ); stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4; PTFE |
| Min. pressure cycles                                                                |                           | 100 million                                                                                                                        |
| Process connection                                                                  |                           | threaded connection Aseptoflex external thread Aseptoflex                                                                          |
| Displays / operating elements                                                       |                           |                                                                                                                                    |
| Display                                                                             | Display unit              | 4 x LED, green                                                                                                                     |
|                                                                                     | Function display          | alphanumeric display, 4-digit                                                                                                      |
|                                                                                     | Measured values           | alphanumeric display, 4-digit                                                                                                      |
| Display unit                                                                        |                           | bar; psi; MPa; % of the span                                                                                                       |
| Remarks                                                                             |                           |                                                                                                                                    |
| Remarks                                                                             |                           | The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.                                  |
| Notes                                                                               |                           | Please do not use for new projects.; no more adapters available as accessories                                                     |
| Pack quantity                                                                       |                           | 1 pcs.                                                                                                                             |
| Electrical connection                                                               |                           |                                                                                                                                    |
| Connector: 1 x M12; coding: A; Contacts: gold-plated                                |                           |                                                                                                                                    |
|  |                           |                                                                                                                                    |

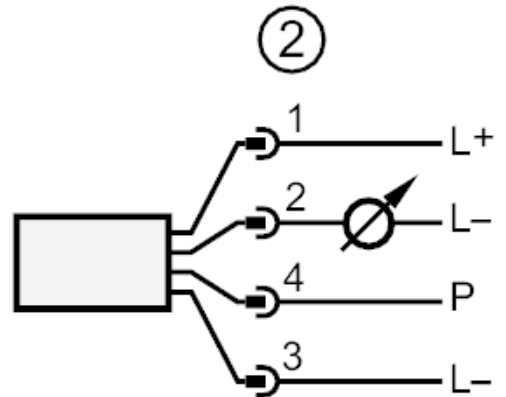
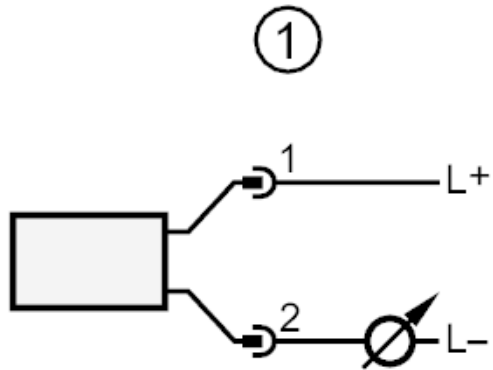
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### Connection



- 1: Normal operation
- 2: Programming operation (P = communication via EPS / FDT interface)