

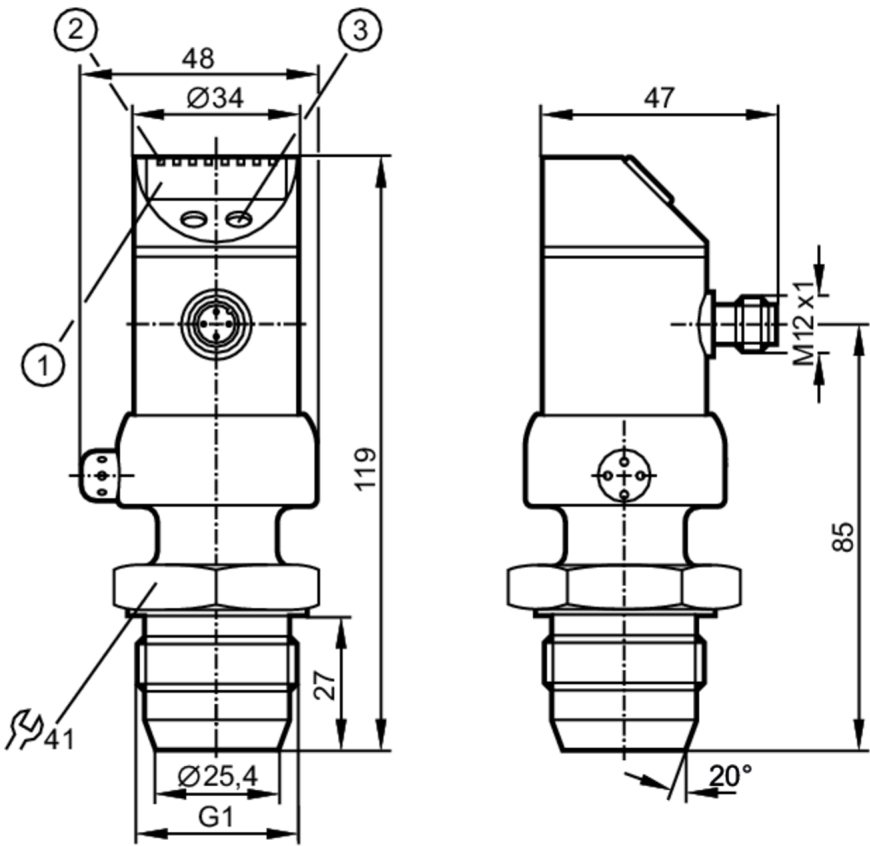


Flush pressure sensor with display

PI-004-REA01-E-ZVG/US/ /P

Article to be discontinued

Alternative articles: PI2895 or PI2795  
When selecting an alternative article and accessories please note that technical data may differ!



- 1 alphanumeric display 4-digit
- 2 status LEDs
- 3 Programming button



Product characteristics

|                              |                                                      |                |                |
|------------------------------|------------------------------------------------------|----------------|----------------|
| Number of inputs and outputs | Number of analog outputs: 1                          |                |                |
| Measuring range              | -1...4 bar                                           | -14.5...58 psi | -100...400 kPa |
| Process connection           | threaded connection G 1 external thread sealing cone |                |                |

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  | 100 bar                                                               | 1450 psi | 10000 kPa |
| Pressure rating         | 30 bar                                                                | 435 psi  | 3000 kPa  |
| 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...4 bar                                                                                                           | -14.5...58 psi<br>-100...400 kPa   |
| Analog start point                 |                        | -1...3 bar                                                                                                           | -14.5...43.5 psi<br>-100...300 kPa |
| Analog end point                   |                        | 0...4 bar                                                                                                            | 0...58 psi<br>0...400 kPa          |
| In steps of                        |                        | 0.005 bar                                                                                                            | 0.05 psi<br>0.5 kPa                |
| Factory setting                    |                        |                                                                                                                      | ASP = 0.000 bar<br>AEP = 4.000 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                                                                                                                   |                                    |

# PI1695



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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]                                                                                                      | 440.6                         |
| Material                                                                                       | stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE                                                 |                               |
| 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 sealing cone                                                     |                               |
| 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; kPa; % of the span                                                                             |                               |
| Remarks                                                                                        |                                                                                                          |                               |
| Remarks                                                                                        | The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.        |                               |
| Pack quantity                                                                                  | 1 pcs.                                                                                                   |                               |
| Electrical connection                                                                          |                                                                                                          |                               |
| Connector: 1 x M12; coding: A; Contacts: gold-plated                                           |                                                                                                          |                               |
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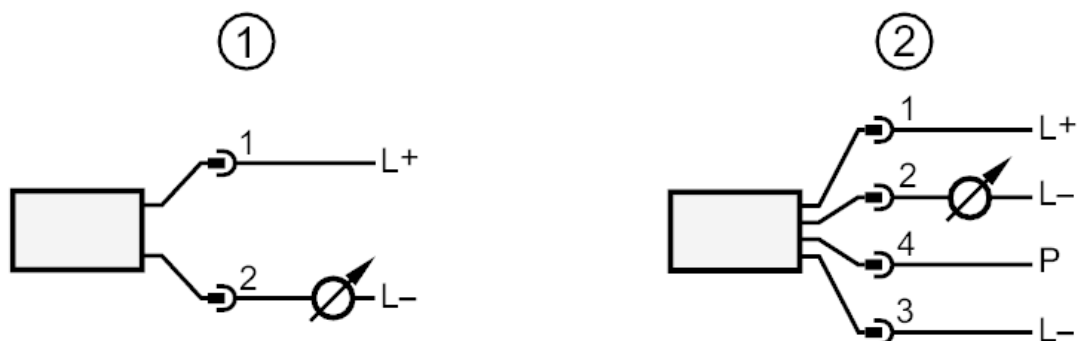




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### Connection



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