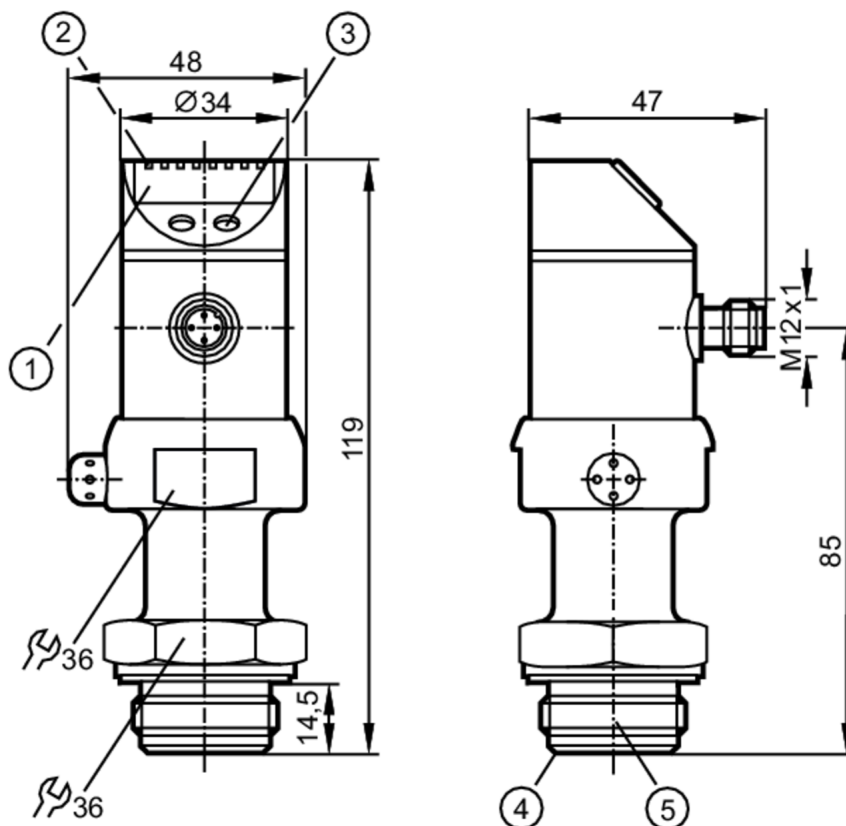




## Flush pressure sensor with display

PI-025-RES30-QFRKG/US/ /P

Article no longer available - archive entry



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



EC 1935/2004 EHEDG Certified FDA

### Product characteristics

|                              |                                                           |                   |                |
|------------------------------|-----------------------------------------------------------|-------------------|----------------|
| Number of inputs and outputs | Number of digital outputs: 2                              |                   |                |
| Measuring range              | -1...25 bar                                               | -14.4...362.7 psi | -0.1...2.5 MPa |
| Process connection           | threaded connection Aseptoflex external thread Aseptoflex |                   |                |

### Application

|                         |                                                                       |          |        |
|-------------------------|-----------------------------------------------------------------------|----------|--------|
| Special feature         | 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]             | 18...32 DC                                                                                                           |                  |
| Current consumption                             | [mA]            | < 50                                                                                                                 |                  |
| Min. insulation resistance                      | [MΩ]            | 100; (500 V DC)                                                                                                      |                  |
| Protection class                                |                 | III                                                                                                                  |                  |
| Reverse polarity protection                     |                 | yes                                                                                                                  |                  |
| Power-on delay time                             | [s]             | 0.5                                                                                                                  |                  |
| Integrated watchdog                             |                 | yes                                                                                                                  |                  |
| Inputs / outputs                                |                 |                                                                                                                      |                  |
| Number of inputs and outputs                    |                 | Number of digital outputs: 2                                                                                         |                  |
| Outputs                                         |                 |                                                                                                                      |                  |
| Total number of outputs                         |                 | 2                                                                                                                    |                  |
| Output signal                                   |                 | switching signal                                                                                                     |                  |
| Electrical design                               |                 | PNP/NPN                                                                                                              |                  |
| Number of digital outputs                       |                 | 2                                                                                                                    |                  |
| 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]            | 85                                                                                                                   |                  |
| Short-circuit protection                        |                 | yes                                                                                                                  |                  |
| Type of short-circuit protection                |                 | pulsed                                                                                                               |                  |
| Overload protection                             |                 | yes                                                                                                                  |                  |
| Measuring/setting range                         |                 |                                                                                                                      |                  |
| Measuring range                                 | -1...25 bar     | -14.4...362.7 psi                                                                                                    | -0.1...2.5 MPa   |
| Set point SP                                    | -0.96...25 bar  | -13.8...362.7 psi                                                                                                    | -0.096...2.5 MPa |
| Reset point rP                                  | -1...24.96 bar  | -14.4...362.1 psi                                                                                                    | -0.1...2.496 MPa |
| In steps of                                     | 0.02 bar        | 0.3 psi                                                                                                              | 0.002 MPa        |
| Factory setting                                 |                 | SP1 = 6.24 bar                                                                                                       | rP1 = 5.74 bar   |
|                                                 |                 | SP2 = 18.74 bar                                                                                                      | rP2 = 18.30 bar  |
| Accuracy / deviations                           |                 |                                                                                                                      |                  |
| Switch point accuracy                           | [% of the span] | < ± 0,2; (Turn down 1:1)                                                                                             |                  |
| Repeatability                                   |                 | < ± 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                             |                 | < ± 0,15; (Turn down 1:1)                                                                                            |                  |
| Hysteresis deviation                            | [% of the span] | < ± 0,15; (Turn down 1:1)                                                                                            |                  |
| Long-term stability                             |                 | < ± 0,1; (Turn down 1:1; per year)                                                                                   |                  |
| Temperature coefficient zero point              |                 | < ± 0,05; (0...70 °C)                                                                                                |                  |



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|                               |                                                                                                                                                                                         |                               |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| [% of the span / 10 K]        |                                                                                                                                                                                         |                               |
| Temperature coefficient span  |                                                                                                                                                                                         | < ± 0,15; (0...70 °C)         |
| [% of the span / 10 K]        |                                                                                                                                                                                         |                               |
| Response times                |                                                                                                                                                                                         |                               |
| Response time                 | [ms]                                                                                                                                                                                    | < 6                           |
| Damping process value dAP     | [s]                                                                                                                                                                                     | 0...100                       |
| Software / programming        |                                                                                                                                                                                         |                               |
| Parameter setting options     | hysteresis / window; normally open / normally closed; switching logic; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit; 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)           |
| Mechanical data               |                                                                                                                                                                                         |                               |
| Weight                        | [g]                                                                                                                                                                                     | 400.8                         |
| Materials                     | stainless steel (316L/1.4404); PC; PBT; PEI; FKM; PTFE                                                                                                                                  |                               |
| Materials (wetted parts)      | ceramics (99.9 % Al2O3); PTFE; stainless steel (316L/1.4435); surface characteristics: Ra < 0,4 / Rz 4                                                                                  |                               |
| Min. pressure cycles          | 100 million                                                                                                                                                                             |                               |
| Process connection            | threaded connection Aseptoflex external thread Aseptoflex                                                                                                                               |                               |
| Displays / operating elements |                                                                                                                                                                                         |                               |
| Display                       | Display unit                                                                                                                                                                            | 4 x LED, green                |
|                               | switching status                                                                                                                                                                        | 2 x LED, yellow               |
|                               | measured values                                                                                                                                                                         | alphanumeric display, 4-digit |
|                               | parameter setting                                                                                                                                                                       | 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.                                                                                       |                               |
| Pack quantity                 | 1 pcs.                                                                                                                                                                                  |                               |

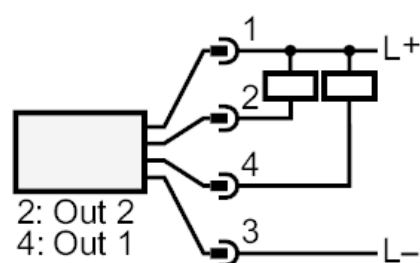
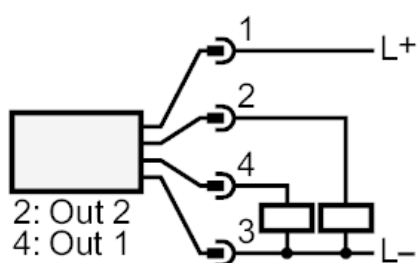


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### Electrical connection

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



|      |                                       |
|------|---------------------------------------|
| OUT1 | switching output<br>Diagnostic output |
| OUT2 | switching output                      |