

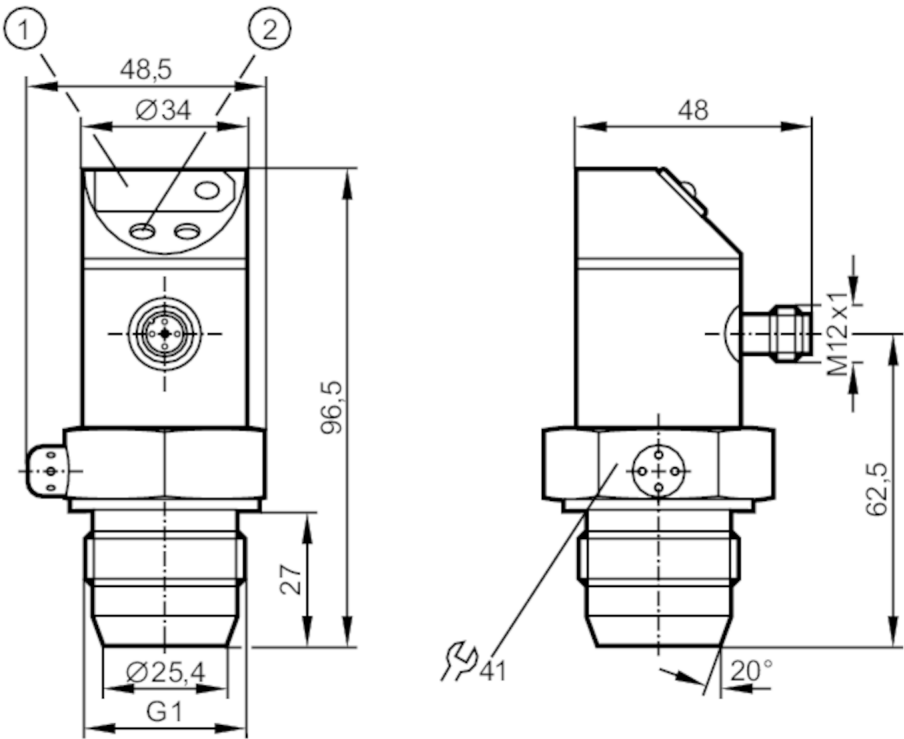


Flush pressure sensor

PF-010-REA01-QFPKG/US/ IV

Article no longer available - archive entry

Alternative articles: PF2654  
When selecting an alternative article and accessories please note that technical data may differ!



- 1 7-segment LED display
- 2 programming button



| Product characteristics      |                                                                       |
|------------------------------|-----------------------------------------------------------------------|
| Number of inputs and outputs | Number of digital outputs: 2                                          |
| Measuring range [bar]        | 0...10                                                                |
| Process connection           | threaded connection G 1 external thread                               |
| 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...80                                                              |
| Min. bursting pressure [bar] | 150                                                                   |
| Pressure rating [bar]        | 50                                                                    |
| Type of pressure             | relative pressure                                                     |
| No dead space                | yes                                                                   |



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| Electrical data                                                 |                        |                                                                                             |     |    |    |    |    |    |     |     |     |
|-----------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------|-----|----|----|----|----|----|-----|-----|-----|
| Operating voltage                                               | [V]                    | 18...30 DC                                                                                  |     |    |    |    |    |    |     |     |     |
| Current consumption                                             | [mA]                   | < 60                                                                                        |     |    |    |    |    |    |     |     |     |
| Min. insulation resistance                                      | [MΩ]                   | 100; (500 V DC)                                                                             |     |    |    |    |    |    |     |     |     |
| Protection class                                                |                        | III                                                                                         |     |    |    |    |    |    |     |     |     |
| Reverse polarity protection                                     |                        | yes                                                                                         |     |    |    |    |    |    |     |     |     |
| Power-on delay time                                             | [s]                    | 0.2                                                                                         |     |    |    |    |    |    |     |     |     |
| 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                                                                                         |     |    |    |    |    |    |     |     |     |
| 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                                                                                         |     |    |    |    |    |    |     |     |     |
| Short-circuit protection                                        |                        | yes                                                                                         |     |    |    |    |    |    |     |     |     |
| Type of short-circuit protection                                |                        | pulsed                                                                                      |     |    |    |    |    |    |     |     |     |
| Overload protection                                             |                        | yes                                                                                         |     |    |    |    |    |    |     |     |     |
| Measuring/setting range                                         |                        |                                                                                             |     |    |    |    |    |    |     |     |     |
| Measuring range                                                 | [bar]                  | 0...10                                                                                      |     |    |    |    |    |    |     |     |     |
| Set point SP                                                    | [bar]                  | 0.1...10                                                                                    |     |    |    |    |    |    |     |     |     |
| Reset point rP                                                  | [bar]                  | 0.05...9.95                                                                                 |     |    |    |    |    |    |     |     |     |
| In steps of                                                     | [bar]                  | 0.05                                                                                        |     |    |    |    |    |    |     |     |     |
| Accuracy / deviations                                           |                        |                                                                                             |     |    |    |    |    |    |     |     |     |
| Switch point accuracy                                           |                        | < ± 1                                                                                       |     |    |    |    |    |    |     |     |     |
|                                                                 | [% of the final value] |                                                                                             |     |    |    |    |    |    |     |     |     |
| Repeatability                                                   |                        | < ± 0,25; (with temperature fluctuations < 10 K)                                            |     |    |    |    |    |    |     |     |     |
|                                                                 | [% of the final value] |                                                                                             |     |    |    |    |    |    |     |     |     |
| Temperature drift per 10 K                                      |                        | < ± 0.3                                                                                     |     |    |    |    |    |    |     |     |     |
| Response times                                                  |                        |                                                                                             |     |    |    |    |    |    |     |     |     |
| Switching frequency for a given set response time of one output | Response time (dAP)    | [ms]                                                                                        | 3   | 6  | 10 | 17 | 30 | 60 | 125 | 250 | 500 |
|                                                                 | Switching frequency    | [Hz]                                                                                        | 170 | 80 | 50 | 30 | 16 | 8  | 4   | 2   | 1   |
| Response time                                                   | [ms]                   | at rectangular pressure characteristic; switch point (SPx) = 70 %; reset point (rPx) = 30 % |     |    |    |    |    |    |     |     |     |
| Delay time programmable dS, dr                                  | [s]                    | 0, 0,2,...10, 11,...50                                                                      |     |    |    |    |    |    |     |     |     |

# PF7654



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### Software / programming

|                                |                                                                                           |
|--------------------------------|-------------------------------------------------------------------------------------------|
| Adjustment of the switch point | programming button                                                                        |
| Parameter setting options      | hysteresis / window; normally open / normally closed; switch-on/switch-off delay; Damping |

### Operating conditions

|                     |      |           |
|---------------------|------|-----------|
| 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) |

### Mechanical data

|                          |                                                               |
|--------------------------|---------------------------------------------------------------|
| Materials                | EPDM/X; FKM; PA; PBT; PC; PTFE; stainless steel (316L/1.4404) |
| Materials (wetted parts) | ceramics; PTFE; stainless steel (316L/1.4404)                 |
| Min. pressure cycles     | 100 million                                                   |
| Process connection       | threaded connection G 1 external thread                       |

### Displays / operating elements

|         |                  |                       |
|---------|------------------|-----------------------|
| Display | switching status | 2 x LED, red          |
|         | function display | 7-segment LED display |
|         | measured values  | 7-segment LED display |

### Remarks

|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

### Electrical connection

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



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### Connection

