



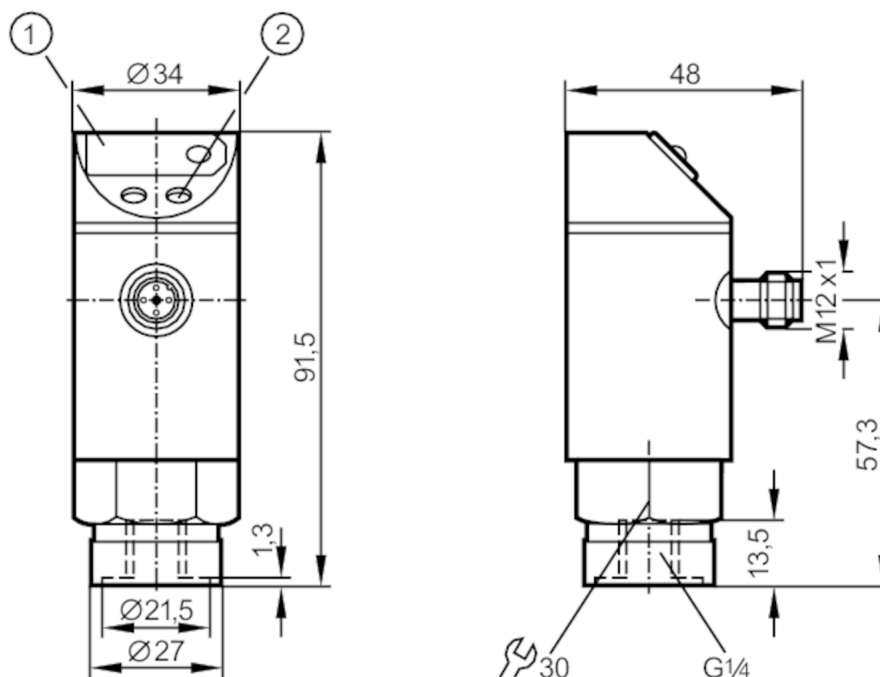
## Pressure sensor with display

PN-2,5-RBR14-LFPKG/US/ IV

Article no longer available - archive entry

Alternative articles: PN3006

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: 1; Number of analogue outputs: 1 |
| Measuring range [bar]        | 0...2.5                                                     |
| Process connection           | threaded connection G 1/4 internal thread                   |

### Application

|                              |                             |
|------------------------------|-----------------------------|
| Application                  | for industrial applications |
| Media                        | liquids and gases           |
| Medium temperature [°C]      | -25...80                    |
| Min. bursting pressure [bar] | 50                          |
| Pressure rating [bar]        | 20                          |
| Type of pressure             | relative pressure           |

### Electrical data

|                                 |                 |
|---------------------------------|-----------------|
| Operating voltage [V]           | 20...30 DC      |
| Current consumption [mA]        | < 60            |
| Min. insulation resistance [MΩ] | 100; (500 V DC) |
| Protection class                | III             |
| Reverse polarity protection     | yes             |



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|                                                                 |                     |                                                                                             |
|-----------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------------|
| Power-on delay time                                             | [s]                 | 0.2                                                                                         |
| Integrated watchdog                                             |                     | yes                                                                                         |
| <b>Inputs / outputs</b>                                         |                     |                                                                                             |
| Number of inputs and outputs                                    |                     | Number of digital outputs: 1; Number of analogue outputs: 1                                 |
| <b>Outputs</b>                                                  |                     |                                                                                             |
| Total number of outputs                                         |                     | 2                                                                                           |
| Output signal                                                   |                     | switching signal; analogue signal; (configurable)                                           |
| Electrical design                                               |                     | PNP                                                                                         |
| Number of digital outputs                                       |                     | 1                                                                                           |
| Max. voltage drop switching output DC                           | [V]                 | 2                                                                                           |
| Permanent current rating of switching output DC                 | [mA]                | 250                                                                                         |
| Number of analogue outputs                                      |                     | 1                                                                                           |
| Analogue voltage output                                         | [V]                 | 0...10                                                                                      |
| Min. load resistance                                            | [Ω]                 | 2000                                                                                        |
| Short-circuit protection                                        |                     | yes                                                                                         |
| Type of short-circuit protection                                |                     | pulsed                                                                                      |
| Overload protection                                             |                     | yes                                                                                         |
| <b>Measuring/setting range</b>                                  |                     |                                                                                             |
| Measuring range                                                 | [bar]               | 0...2.5                                                                                     |
| Set point SP                                                    | [bar]               | 0.02...2.5                                                                                  |
| Reset point rP                                                  | [bar]               | 0.01...2.48                                                                                 |
| In steps of                                                     | [bar]               | 0.01                                                                                        |
| <b>Accuracy / deviations</b>                                    |                     |                                                                                             |
| Switch point accuracy                                           | [X16]               | < ± 1,5                                                                                     |
| Repeatability                                                   | [X16]               | < ± 0,25; (with temperature fluctuations < 10 K)                                            |
| Characteristics deviation                                       | [X16]               | < ± 1,0                                                                                     |
| Temperature drift per 10 K                                      |                     | < ± 0.3                                                                                     |
| <b>Response times</b>                                           |                     |                                                                                             |
| Switching frequency for a given set response time of one output | Response time (dAP) | 3 6 10 17 30 60 125 250 500                                                                 |
|                                                                 | Switching frequency | 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                                                                      |
| Max. response time analogue output                              | [ms]                | 3                                                                                           |
| <b>Software / programming</b>                                   |                     |                                                                                             |
| Adjustment of the switch point                                  |                     | programming button                                                                          |
| <b>Operating conditions</b>                                     |                     |                                                                                             |
| Ambient temperature                                             | [°C]                | -25...80                                                                                    |

PN9026



Pressure sensor with display

PN-2,5-RBR14-LFPKG/US/ IV

|                     |      |           |
|---------------------|------|-----------|
| Storage temperature | [°C] | -40...100 |
| Protection          |      | IP 65     |

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; NBR; PBT; PC; PTFE; stainless steel (1.4301 / 304) |
| Materials (wetted parts) | FKM; ceramics; stainless steel (1.4305 / 303)                   |
| Min. pressure cycles     | 100 million                                                     |
| Process connection       | threaded connection G 1/4 internal thread                       |

Displays / operating elements

|         |                  |                       |
|---------|------------------|-----------------------|
| Display | switching status | 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



Connection

