

# PE5026

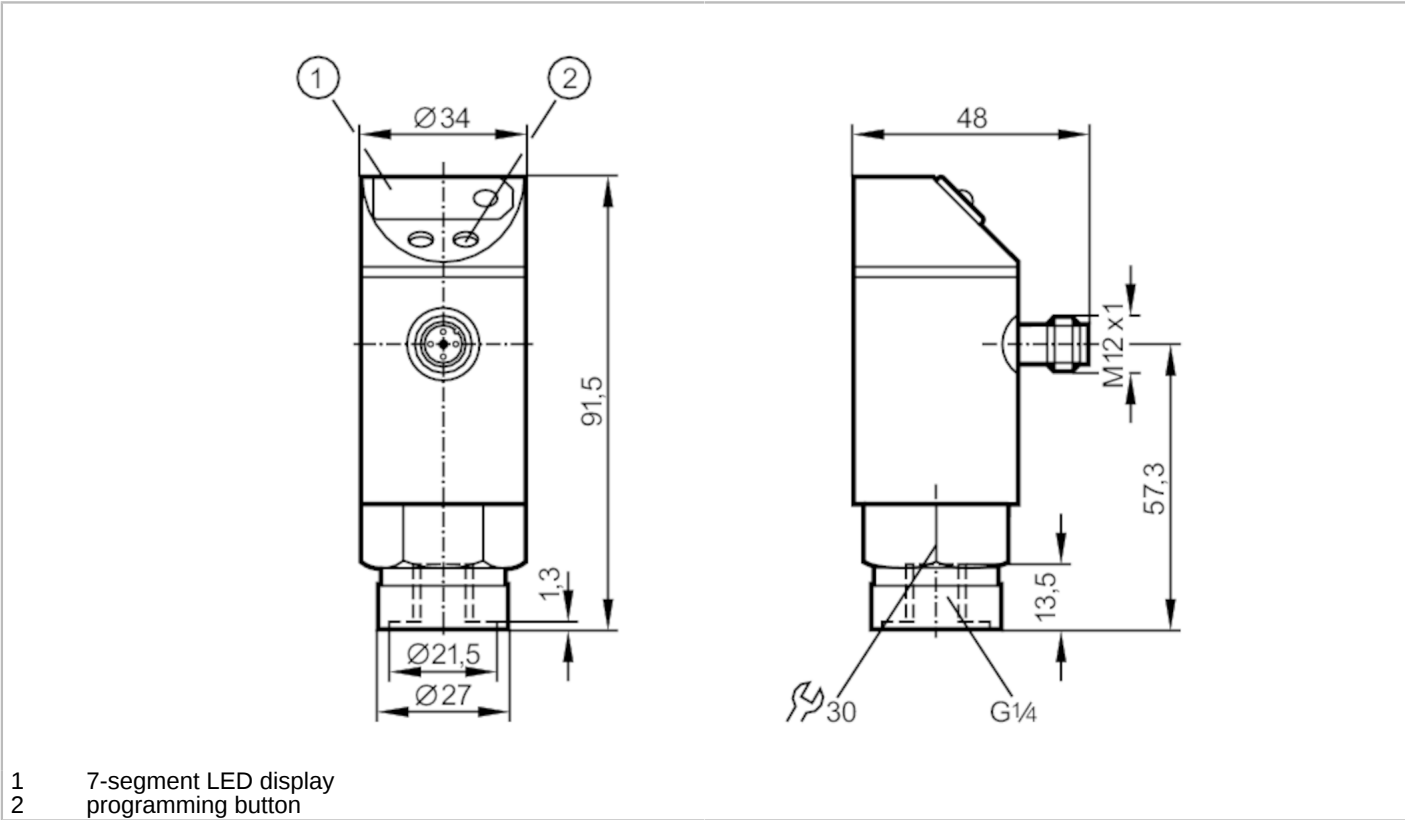


## Pressure sensor with display

PE-2,5-RBR14-HFPKG/US/ IE

Article no longer available - archive entry

Alternative articles: PE7006  
When selecting an alternative article and accessories please note that technical data may differ!



| Product characteristics         |                                           |
|---------------------------------|-------------------------------------------|
| Number of inputs and outputs    | Number of digital outputs: 1              |
| Measuring range [bar]           | 0...2.5                                   |
| Process connection              | threaded connection G 1/4 internal thread |
| Application                     |                                           |
| Special feature                 | Gold-plated contacts                      |
| Application                     | for industrial applications               |
| Media                           | liquids and gases                         |
| Cannot be used for              | oils                                      |
| Medium temperature [°C]         | -25...80                                  |
| Min. bursting pressure [bar]    | 50                                        |
| Pressure rating [bar]           | 20                                        |
| Type of pressure                | relative pressure                         |
| Electrical data                 |                                           |
| Operating voltage [V]           | 18...30 DC                                |
| Current consumption [mA]        | < 60                                      |
| Min. insulation resistance [MΩ] | 100; (500 V DC)                           |



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|                                                                 |                                                                                             |     |    |    |    |    |    |     |     |     |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----|----|----|----|----|----|-----|-----|-----|
| 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: 1                                                                |     |    |    |    |    |    |     |     |     |
| Outputs                                                         |                                                                                             |     |    |    |    |    |    |     |     |     |
| Total number of outputs                                         | 1                                                                                           |     |    |    |    |    |    |     |     |     |
| Output signal                                                   | switching signal                                                                            |     |    |    |    |    |    |     |     |     |
| Electrical design                                               | PNP                                                                                         |     |    |    |    |    |    |     |     |     |
| Number of digital outputs                                       | 1                                                                                           |     |    |    |    |    |    |     |     |     |
| 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...2.5                                                                                     |     |    |    |    |    |    |     |     |     |
| Set point SP [bar]                                              | 0.02...2.5                                                                                  |     |    |    |    |    |    |     |     |     |
| Reset point rP [bar]                                            | 0.01...2.48                                                                                 |     |    |    |    |    |    |     |     |     |
| In steps of [bar]                                               | 0.01                                                                                        |     |    |    |    |    |    |     |     |     |
| Accuracy / deviations                                           |                                                                                             |     |    |    |    |    |    |     |     |     |
| Switch point accuracy [% of the final value]                    | < ± 1,0                                                                                     |     |    |    |    |    |    |     |     |     |
| Repeatability [% of the final value]                            | < ± 0,25; (with temperature fluctuations < 10 K)                                            |     |    |    |    |    |    |     |     |     |
| 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                                                                      |     |    |    |    |    |    |     |     |     |
| 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                                                                                    |     |    |    |    |    |    |     |     |     |

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|                     |      |           |
|---------------------|------|-----------|
| 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; PA; PBT; PC; PTFE; stainless steel (304/1.4301) |
| Materials (wetted parts) | ceramics; stainless steel (303/1.4305); EPDM                 |
| 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; Contacts: gold-plated



### Connection

