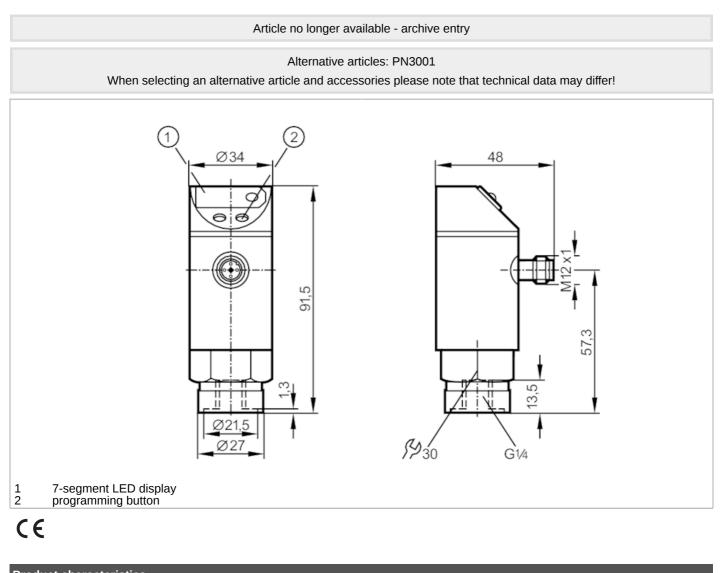
# PN8021

#### Pressure sensor with display

PN-250-SBR14-KFPKG/US/ /V





| Product characteristics    |       |  |  |  |  |
|----------------------------|-------|--|--|--|--|
| Number of inputs and outp  | outs  | Number of digital outputs: 1; Number of analogue outputs: 1  |  |  |  |
| Measuring range            | [bar] | 0250   |  |  |  |
| Process connection         |       | threaded connection G 1/4 internal thread                    |  |  |  |
| Application                |       |  |  |  |  |
| Application                |       | for industrial applications                                  |  |  |  |
| Media                      |       | liquids and gases  |  |  |  |
| Conditionally suitable for |       | For gaseous media the application is limited to max. 25 bar. |  |  |  |
| Medium temperature         | [°C]  | -2580  |  |  |  |
| Min. bursting pressure     | [bar] | 850  |  |  |  |
| Pressure rating            | [bar] | 400  |  |  |  |
| Type of pressure           |       | relative pressure  |  |  |  |
| Electrical data            |       |  |  |  |  |
| Operating voltage          | [V]   | 2030 DC  |  |  |  |
| Current consumption        | [mA]  | < 60   |  |  |  |
| Inputs / outputs           |       |  |  |  |  |
| Number of inputs and outp  | outs  | Number of digital outputs: 1; Number of analogue outputs: 1  |  |  |  |
|                            |       |  |  |  |  |

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| Outputs   |   |   |       |    |    |         |           |             |     |     |
|---|---|---|-------|----|----|---------|-----------|-------------|-----|-----|
| 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 current output   | [mA]  | 420   |       |    |    |         |           |             |     |     |
| Max. load   | [Ω]   | 500   |       |    |    |         |           |             |     |     |
| Measuring/setting range   |   |   |       |    |    |         |           |             |     |     |
| Measuring range   | [bar]   |   |       |    |    | 025     | D         |             |     |     |
| Set point SP  | [bar]   | 12.5250   |       |    |    |         |           |             |     |     |
| Reset point rP  | [bar]   |   |       |    |    | 7.524   | 45        |             |     |     |
| In steps of   | [bar]   |   |       |    |    | 2.5     |           |             |     |     |
| Accuracy / deviations   |   |   |       |    |    |         |           |             |     |     |
| Switch point accuracy   |   |   |       |    |    | < + 21  | n         |             |     |     |
| [% of the final   | value]  | < ± 2,0   |       |    |    |         |           |             |     |     |
| Repeatability   | $< \pm 0.25$ ; (with temperature fluctuations $< 10$ K) |   |       |    |    |         |           |             |     |     |
| [% of the final   | value]  |   |       |    |    |         |           |             |     |     |
| Characteristics deviation                                       | < ± 2,0   |   |       |    |    |         |           |             |     |     |
| [% of the final   |   |   |       |    |    |         |           |             |     |     |
| Temperature drift per 10 K                                      |   |   |       |    |    | < ± 0.3 | 3         |             |     |     |
| Response times  |   | _   |       |    |    |         |           |             |     |     |
| Switching frequency for a given set response time of one output |   | Response<br>time<br>(dAP)                         | e[ms] | 15 | 20 | 30      | 50        | 90          | 170 | 330 |
|   |   | Switching<br>frequency                            |       | 50 | 35 | 30      | 20        | 15          | 9   | 5   |
| Response time   | [ms]  |   |       |    |    |         |           | rPx) = 30 % |     |     |
| Delay time programmable dS,<br>dr                               | [s]   | 0, 0,2, 0,4,3                                     |       |    |    |         |           |             |     |     |
| Software / programming  |   |   |       |    |    |         |           |             |     |     |
| Adjustment of the switch point                                  |   | programming button                                |       |    |    |         |           |             |     |     |
| Operating conditions  |   |   |       |    |    |         |           |             |     |     |
| Ambient temperature   | [°C]  | -2580   |       |    |    |         |           |             |     |     |
| Storage temperature   | [°C]  | -40100  |       |    |    |         |           |             |     |     |
| Protection  |   | IP 67   |       |    |    |         |           |             |     |     |
| Tests / approvals   |   |   |       |    |    |         |           |             |     |     |
| EMC   |   | IEC 801/2   |       |    |    | 4       | kV CD / 8 | kV AD       |     |     |
|   |   | IEC 801/3   |       |    |    |         | V/m       |             |     |     |
|   |   | IEC 801/4   | Burst |    |    | 2       | κV        |             |     |     |

# PN8021

### Pressure sensor with display

PN-250-SBR14-KFPKG/US/ /V



| Mechanical data               |   |                                  |  |  |  |  |
|-------------------------------|---|----------------------------------|--|--|--|--|
| Materials                     | bi  | brass nickel-plated; PBT; PC; PA |  |  |  |  |
| Materials (wetted parts)      | brass nickel-plated; ceramics; FKM; NBR; EPDM/X |                                  |  |  |  |  |
| 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 |   |                                  |  |  |  |  |
|                               |   |                                  |  |  |  |  |
|                               |   |                                  |  |  |  |  |
| 2 1                           |   |                                  |  |  |  |  |
|                               |   |                                  |  |  |  |  |
| 34                            |   |                                  |  |  |  |  |
|                               |   |                                  |  |  |  |  |
|                               |   |                                  |  |  |  |  |
|                               |   |                                  |  |  |  |  |

