# PN8051

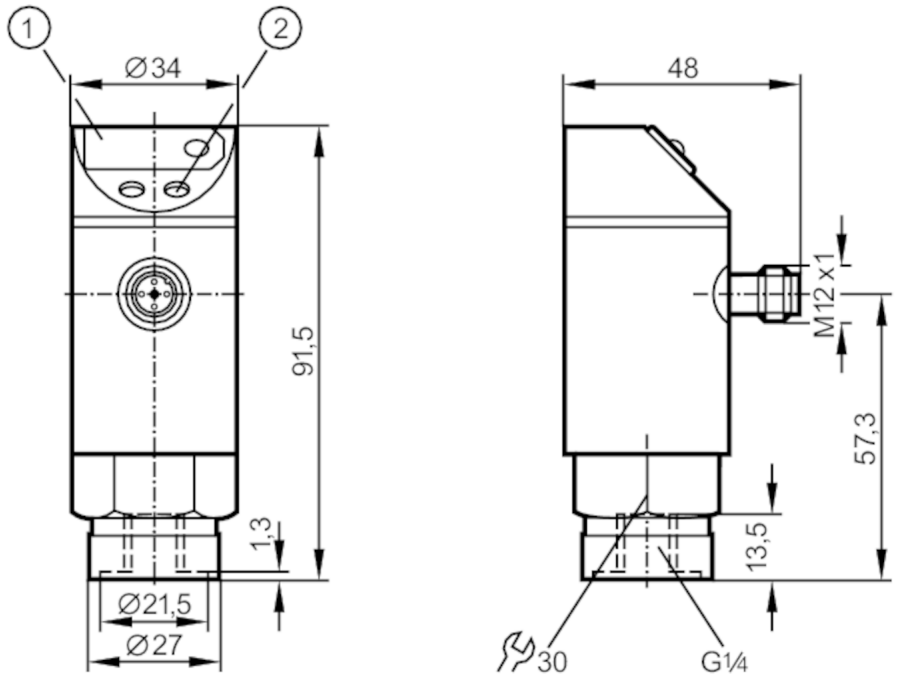
## Pressure sensor with display

PN-250-SDR14-KFPKG/US/ /V

Article no longer available - archive entry

Alternative articles: PE3001

When selecting an alternative article and accessories please note that technical data may differ!




1 7-segment LED display
2 programming button

CE

| | | |
|---|---|---|
| **Product characteristics** | | |
| Number of inputs and outputs | | Number of digital outputs: 1; Number of analogue outputs: 1 |
| Measuring range | [bar] | 0...250 |
| 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] | -25...80 |
| Min. bursting pressure | [bar] | 850 |
| Pressure rating | [bar] | 400 |
| Type of pressure | | relative pressure |
| **Electrical data** | | |
| Operating voltage | [V] | 20...30 DC |
| Current consumption | [mA] | < 60 |
| Reverse polarity protection | | yes |
| Power-on delay time | [s] | 0.2 |

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| | | |
|---|---|---|
| Integrated watchdog | | yes |
| **Inputs / outputs** | | |
| Number of inputs and outputs | | Number of digital outputs: 1; Number of analogue outputs: 1 |
| **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] | 4...20 |
| Max. load | [Ω] | 500 |
| Short-circuit protection | | yes |
| Type of short-circuit protection | | pulsed |
| Overload protection | | yes |
| **Measuring/setting range** | | |
| Measuring range | [bar] | 0...250 |
| Set point SP | [bar] | 12.5...250 |
| Reset point rP | [bar] | 7.5...245 |
| In steps of | [bar] | 2.5 |
| **Accuracy / deviations** | | |
| Repeatability [% of the final value] | | < ± 0,25; (with temperature fluctuations < 10 K) |
| Characteristics deviation [% of the final value] | | < ± 2,0 |
| Temperature drift per 10 K | | < ± 0.3 |
| **Response times** | | |
| Switching frequency for a given set response time of one output | | Response time (dAP) [ms]: 15 / 20 / 30 / 50 / 90 / 170 / 330<br>Switching frequency [Hz]: 50 / 35 / 30 / 20 / 15 / 9 / 5 |
| Response time | [ms] | at rectangular pressure characteristic; switch point (SPx) = 70 %; reset point (rPx) = 30 % |
| Delay time programmable dS, dr | [s] | 0, 0,2, 0,4,...3 |
| **Software / programming** | | |
| Adjustment of the switch point | | programming button |
| **Operating conditions** | | |
| Ambient temperature | [°C] | -25...80 |
| Storage temperature | [°C] | -40...100 |
| Protection | | IP 67 |

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| | | |
|---|---|---|
| **Tests / approvals** | | |
| EMC | IEC 801/2 ESD | 4 kV CD / 8 kV AD |
| | IEC 801/3 HF | 10 V/m |
| | IEC 801/4 Burst | 2 kV |
| 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 | stainless steel (1.4404 / 316L); PBT; PC; NBR; EPDM/X; FKM | |
| Materials (wetted parts) | stainless steel (1.4571/316Ti ); ceramics; FKM | |
| 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

