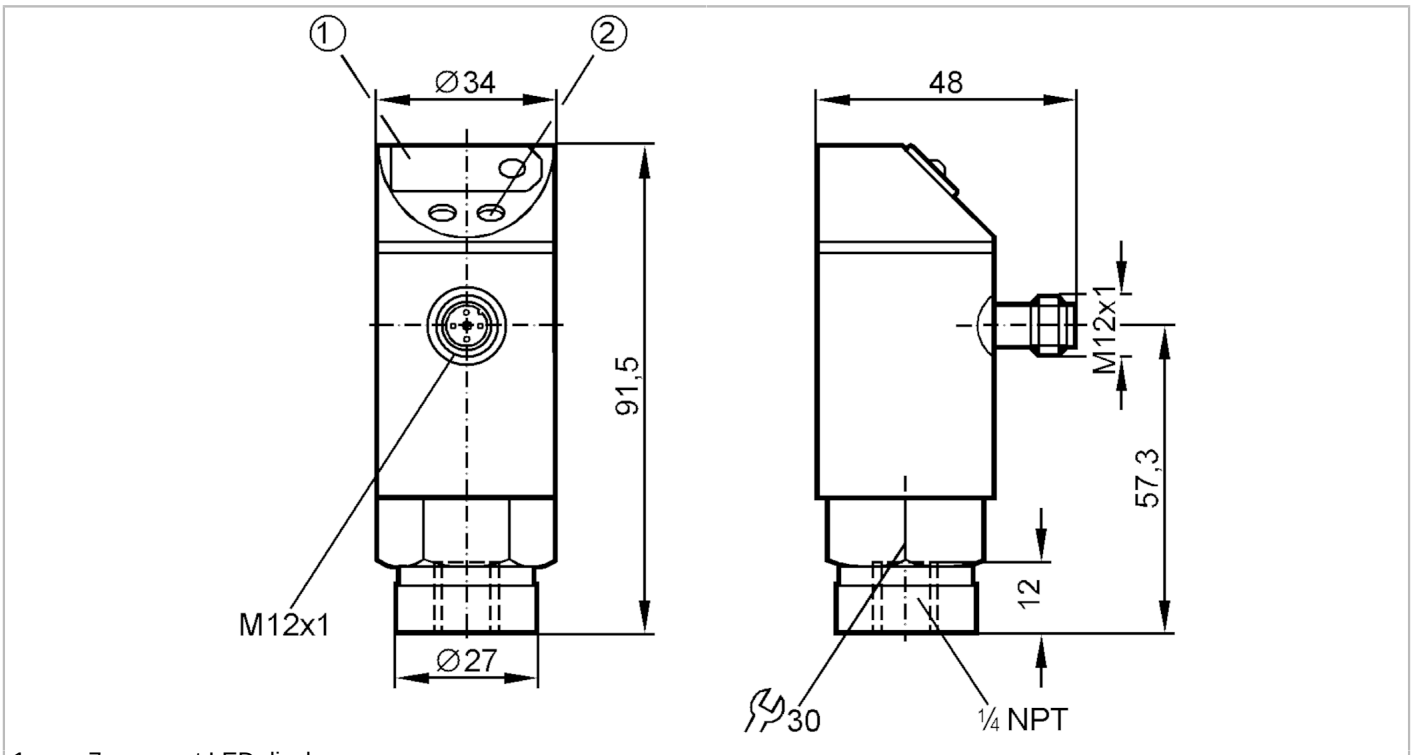
# PN5224

## Pressure sensor with display

PN-015PRBN14-HFPKG/US/ /V

Article no longer available - archive entry




1 7-segment LED display
2 programming button

| | | |
|---|---|---|
| **Product characteristics** | | |
| Number of inputs and outputs | | Number of digital outputs: 1 |
| Measuring range | [psi] | 0...150 |
| Process connection | | threaded connection 1/4" NPT internal thread |
| **Application** | | |
| Application | | for industrial applications |
| Media | | liquids and gases |
| Medium temperature | [°C] | -25...80 |
| Min. bursting pressure | [psi] | 2175 |
| Pressure rating | [psi] | 700 |
| 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) |
| Protection class | | III |
| Reverse polarity protection | | yes |
| Power-on delay time | [s] | 0.2 |
| Integrated watchdog | | yes |

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| | | |
|---|---|---|
| **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 | [psi] | 0...150 |
| Set point SP | [psi] | 3...150 |
| Reset point rP | [psi] | 1...148 |
| In steps of | [psi] | 2 |
| **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 |
| **Operating conditions** | | |
| Ambient temperature | [°C] | -25...80 |
| Storage temperature | [°C] | -40...100 |
| Protection | | IP 65 |

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| | | |
|---|---|---|
| **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; PA; 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 1/4" NPT 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

