

# PN7226



## Pressure sensor with display

PN-003PRBN14-QFPKG/US/ IV

Article no longer available - archive entry

Alternative articles: PN7206

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: 2                 |
| Measuring range [psi]        | 0...30                                       |
| Process connection           | threaded connection 1/4" NPT external thread |

### Application

|                              |                             |
|------------------------------|-----------------------------|
| Special feature              | Gold-plated contacts        |
| Application                  | for industrial applications |
| Media                        | liquids and gases           |
| Medium temperature [°C]      | -25...80                    |
| Min. bursting pressure [psi] | 725                         |
| Pressure rating [psi]        | 290                         |
| 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             |



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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: 2                                                                |
| <b>Outputs</b>                                                  |                        |                                                                                             |
| Total number of outputs                                         |                        | 2                                                                                           |
| Output signal                                                   |                        | switching signal                                                                            |
| Electrical design                                               |                        | PNP                                                                                         |
| Number of digital outputs                                       |                        | 2                                                                                           |
| 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                                                                                         |
| <b>Measuring/setting range</b>                                  |                        |                                                                                             |
| Measuring range                                                 | [psi]                  | 0...30                                                                                      |
| Set point SP                                                    | [psi]                  | 0.3...30                                                                                    |
| Reset point rP                                                  | [psi]                  | 0.1...29.8                                                                                  |
| In steps of                                                     | [psi]                  | 0.2                                                                                         |
| <b>Accuracy / deviations</b>                                    |                        |                                                                                             |
| 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                                                                                     |
| <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                                                                      |
| <b>Software / programming</b>                                   |                        |                                                                                             |
| Adjustment of the switch point                                  |                        | programming button                                                                          |
| Parameter setting options                                       |                        | hysteresis / window; normally open / normally closed; switch-on/switch-off delay; Damping   |
| <b>Operating conditions</b>                                     |                        |                                                                                             |
| 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; PA; PBT; PC; PTFE; stainless steel (304/1.4301) |
| Materials (wetted parts) | stainless steel (303/1.4305); ceramics; FKM                  |
| Min. pressure cycles     | 100 million                                                  |
| Process connection       | threaded connection 1/4" NPT external thread                 |

| Displays / operating elements |                  |                       |
|-------------------------------|------------------|-----------------------|
| Display                       | switching status | 2 x 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

