

# PN7220



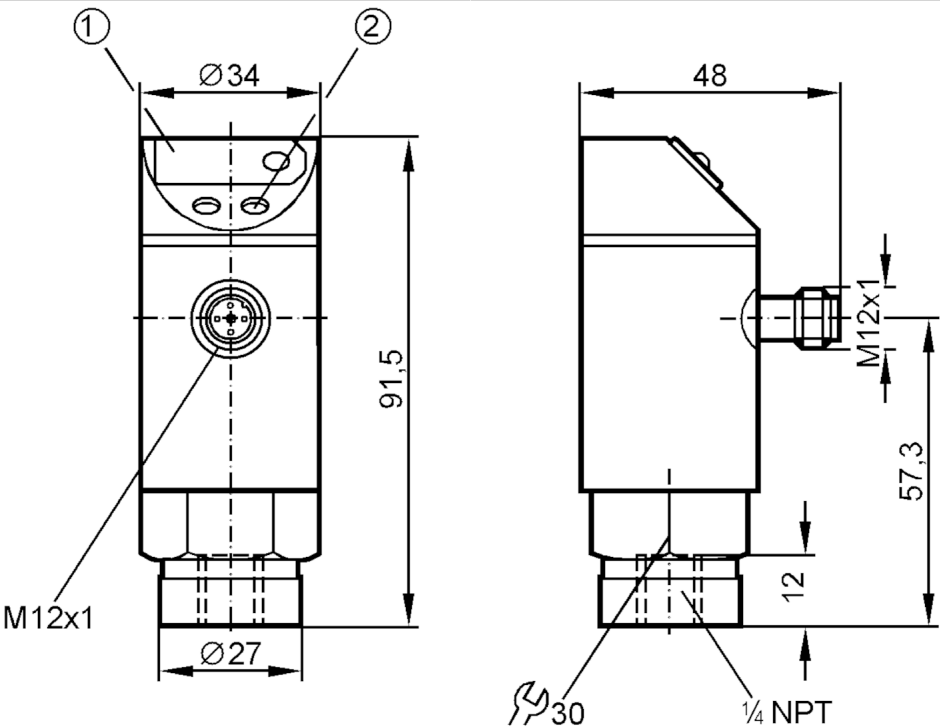
## Pressure sensor with display

PN-600PSBN14-QFPKG/US/ IV

Article no longer available - archive entry

Alternative articles: PN7200

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...6000                                     |
| Process connection           | threaded connection 1/4" NPT external thread |

### Application

|                              |  |
|------------------------------|--|
| System                       | gold-plated contacts   |
| 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 [psi] | 14000  |
| Pressure rating [psi]        | 8500   |
| 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             |

# PN7220



## Pressure sensor with display

PN-600PSBN14-QFPKG/US/ IV

|                             |     |
|-----------------------------|-----|
| 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: 2 |
|------------------------------|------------------------------|

### Outputs

|  |  |
|--|--|
| Total number of outputs                              | 2                                      |
| Output signal  | switching signal                       |
| Electrical design                                    | PNP                                    |
| Number of digital outputs                            | 2                                      |
| Output function                                      | normally open / closed; (configurable) |
| 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                     | yes (non-latching)                     |
| Overload protection                                  | yes                                    |

### Measuring/setting range

|                       |           |
|-----------------------|-----------|
| Measuring range [psi] | 0...6000  |
| Set point SP [psi]    | 60...6000 |
| Reset point rP [psi]  | 30...5970 |
| In steps of [psi]     | 30        |

### Accuracy / deviations

|  |   |
|--|---|
| Switch point accuracy [% of the final value] | $< \pm 1,0$   |
| Repeatability [% of the final value]         | $< \pm 0,25$ ; (with temperature fluctuations $< 10$ K) |
| Temperature drift per 10 K                   | $< \pm 0.3$   |

### Reaction 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; Set 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 / closed; switch-on/switch-off delay; Damping |

### Operating conditions

|                          |           |
|--------------------------|-----------|
| Ambient temperature [°C] | -25...80  |
| Storage temperature [°C] | -40...100 |

PN7220



Pressure sensor with display

PN-600PSBN14-QFPKG/US/ IV

|            |       |
|------------|-------|
| Protection | IP 67 |
|------------|-------|

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

|                          |  |
|--------------------------|--|
| Material                 | EPDM/X; FKM; PA; PBT; PC; PTFE; stainless steel (1.4301 / 304) |
| Materials (wetted parts) | stainless steel (1.4305 / 303); 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

