

# PN7322



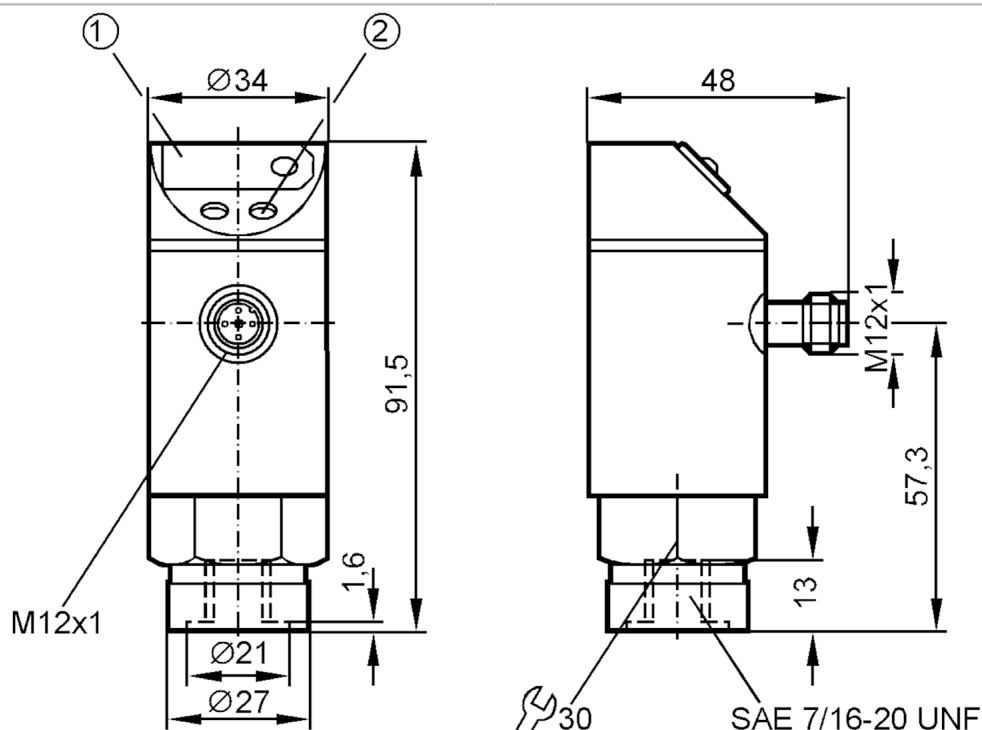
## Pressure sensor with display

PN-100PSBU76-QFPKG/US/ IV

Article no longer available - archive entry

Alternative articles: PN7302

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...1000                                           |
| Process connection           | threaded connection 7/16" - 20 UNF internal thread |

### Application

|                              |                                                              |
|------------------------------|--------------------------------------------------------------|
| Special feature              | 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] | 9000                                                         |
| Pressure rating [psi]        | 4500                                                         |
| 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             |



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|                             |     |
|-----------------------------|-----|
| 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 / 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...1000 |
| Set point SP [psi]    | 10...999 |
| Reset point rP [psi]  | 5...995  |
| In steps of [psi]     | 5        |

### Accuracy / deviations

|                             |                                                       |
|-----------------------------|-------------------------------------------------------|
| Switch point accuracy [X16] | $\pm 1,0$                                             |
| Repeatability [X16]         | $\pm 0,25$ ; (with temperature fluctuations $< 10$ K) |
| Temperature drift per 10 K  | $\pm 0,3$                                             |

### Response times

|                                                                 |                                                                                             |     |    |    |    |    |    |     |     |     |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----|----|----|----|----|----|-----|-----|-----|
| Switching frequency for a given set response time of one output | Response time [ms] (dAP)                                                                    | 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                                                                        |
| Parameter setting options      | hysteresis / window; normally open / normally closed; switch-on/switch-off delay; Damping |

### Operating conditions

|                          |           |
|--------------------------|-----------|
| Ambient temperature [°C] | -25...80  |
| Storage temperature [°C] | -40...100 |
| Protection               | IP 67     |

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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; stainless steel (1.4301 / 304) |
| Materials (wetted parts) | stainless steel (1.4305 / 303); ceramics; FKM            |
| Min. pressure cycles     | 100 million                                              |
| Process connection       | threaded connection 7/16" - 20 UNF internal 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

