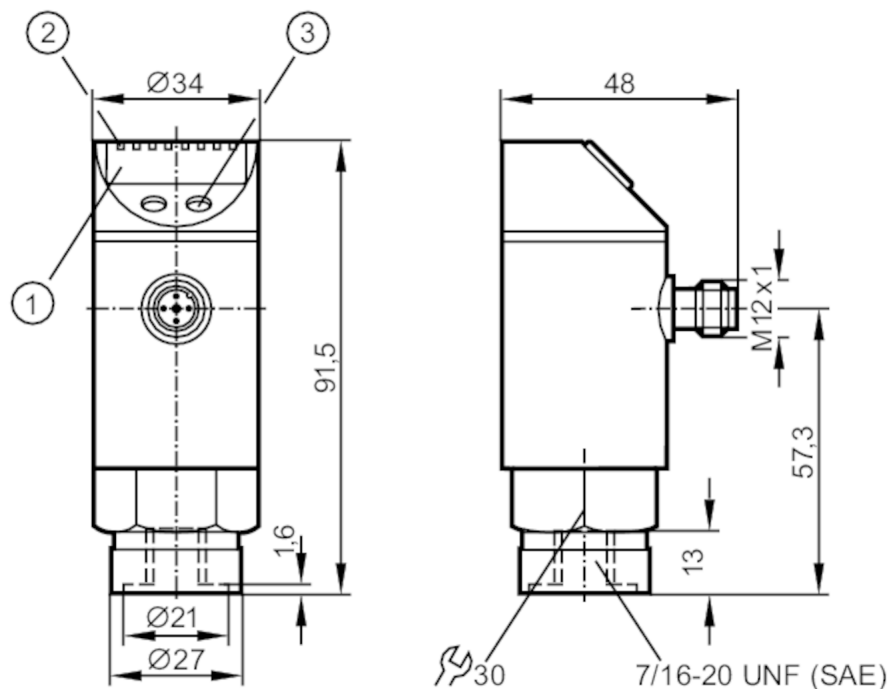


# PN7300



## Pressure sensor with display

PN-400-SBU76-QFRKG/US/ IV



- 1 alphanumeric display 4-digit
- 2 LEDs Display unit / switching status
- 3 programming button



### Application

|                            |                                                    |           |         |
|----------------------------|----------------------------------------------------|-----------|---------|
| Media                      | liquids and gases                                  |           |         |
| Conditionally suitable for | use in gases at pressures > 25 bar only on request |           |         |
| Medium temperature [°C]    | -25...80                                           |           |         |
| Pressure rating            | 600 bar                                            | 8700 psi  | 60 MPa  |
| Min. bursting pressure     | 1000 bar                                           | 14500 psi | 100 MPa |
| Type of pressure           | relative pressure                                  |           |         |

### Electrical data

|                                 |                                               |  |  |
|---------------------------------|-----------------------------------------------|--|--|
| Operating voltage [V]           | 18...36 DC; (according to EN 50178 SELV/PELV) |  |  |
| Current consumption [mA]        | < 50                                          |  |  |
| Min. insulation resistance [MΩ] | 100; (500 V DC)                               |  |  |
| Protection class                | III                                           |  |  |
| Reverse polarity protection     | yes                                           |  |  |
| Overvoltage protection          | yes; (< 40 V)                                 |  |  |
| Power-on delay time [s]         | 0.3                                           |  |  |
| Integrated watchdog             | yes                                           |  |  |

### Inputs / outputs

|                              |                              |
|------------------------------|------------------------------|
| Number of inputs and outputs | Number of digital outputs: 2 |
|------------------------------|------------------------------|



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| Outputs                                                   |                                                                                                                                               |                |                |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|
| Total number of outputs                                   | 2                                                                                                                                             |                |                |
| Output signal                                             | switching signal; IO-Link; (configurable)                                                                                                     |                |                |
| Electrical design                                         | PNP/NPN                                                                                                                                       |                |                |
| 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                                                                                                                                           |                |                |
| Switching frequency DC [Hz]                               | < 170                                                                                                                                         |                |                |
| Short-circuit protection                                  | yes                                                                                                                                           |                |                |
| Type of short-circuit protection                          | pulsed                                                                                                                                        |                |                |
| Measuring/setting range                                   |                                                                                                                                               |                |                |
| Measuring range                                           | 0...400 bar                                                                                                                                   | 0...5800 psi   | 0...40 MPa     |
| Set point SP                                              | 4...400 bar                                                                                                                                   | 60...5790 psi  | 0.4...40 MPa   |
| Reset point rP                                            | 2...398 bar                                                                                                                                   | 30...5760 psi  | 0.2...39.8 MPa |
| In steps of                                               | 2 bar                                                                                                                                         | 30 psi         | 0.2 MPa        |
| Factory setting                                           |                                                                                                                                               | SP1 = 1440 psi | rP1 = 1320 psi |
|                                                           |                                                                                                                                               | SP2 = 4350 psi | rP2 = 4230 psi |
| Accuracy / deviations                                     |                                                                                                                                               |                |                |
| Switch point accuracy [% of the span]                     | < ± 0,5                                                                                                                                       |                |                |
| Repeatability [% of the span]                             | < ± 0,1; (with temperature fluctuations < 10 K)                                                                                               |                |                |
| Characteristics deviation [% of the span]                 | < ± 0,25 (BFSL) / < ± 0,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)                                                     |                |                |
| Hysteresis deviation [% of the span]                      | < ± 0,25                                                                                                                                      |                |                |
| Long-term stability [% of the span]                       | < ± 0,05; (per 6 months)                                                                                                                      |                |                |
| Temperature coefficient zero point [% of the span / 10 K] | 0,2; (0...80 °C)                                                                                                                              |                |                |
| Temperature coefficient span [% of the span / 10 K]       | 0,2; (0...80 °C)                                                                                                                              |                |                |
| Response times                                            |                                                                                                                                               |                |                |
| Delay time programmable dS, dr [s]                        | 0; 0,2...50                                                                                                                                   |                |                |
| Software / programming                                    |                                                                                                                                               |                |                |
| Parameter setting options                                 | hysteresis / window; normally open / normally closed; diagnostic function; switching logic; switch-on/switch-off delay; Damping; Display unit |                |                |

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## Pressure sensor with display

PN-400-SBU76-QFRKG/US/ IV

| Interfaces                |                    |     |
|---------------------------|--------------------|-----|
| Communication interface   | IO-Link            |     |
| Transmission type         | COM2 (38,4 kBaud)  |     |
| IO-Link revision          | 1.1                |     |
| IO-Link device ID         | 326 d / 00 01 46 h |     |
| Profiles                  | no profile         |     |
| SIO mode                  | yes                |     |
| Required master port type | A                  |     |
| Process data analogue     | 1                  |     |
| Process data binary       | 2                  |     |
| Min. process cycle time   | [ms]               | 2.3 |

| Operating conditions |       |           |
|----------------------|-------|-----------|
| Ambient temperature  | [°C]  | -20...80  |
| Storage temperature  | [°C]  | -40...100 |
| Protection           | IP 67 |           |

| Tests / approvals    |                   |                     |
|----------------------|-------------------|---------------------|
| EMC                  | EN 61000-6-2      |                     |
|                      | EN 61000-6-3      |                     |
| Shock resistance     | DIN EN 60068-2-27 | 50 g (11 ms)        |
| Vibration resistance | DIN EN 60068-2-6  | 20 g (10...2000 Hz) |
| MTTF                 | [years]           | 219                 |

| Mechanical data          |                                                                                    |       |
|--------------------------|------------------------------------------------------------------------------------|-------|
| Weight                   | [g]                                                                                | 268.2 |
| Materials                | stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM |       |
| 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                       | Display unit     | 3 x LED, green                |
|                               | switching status | 2 x LED, yellow               |
|                               | function display | alphanumeric display, 4-digit |
|                               | measured values  | alphanumeric display, 4-digit |

| Remarks       |                      |  |
|---------------|----------------------|--|
| Notes         | discontinued article |  |
| Pack quantity | 1 pcs.               |  |

### Electrical connection

Connector: 1 x M12; Contacts: gold-plated

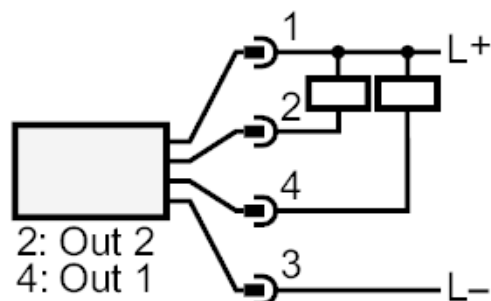
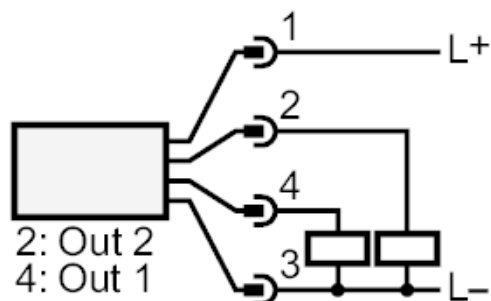


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## Pressure sensor with display

PN-400-SBU76-QFRKG/US/ IV



|      |                   |
|------|-------------------|
| OUT1 | switching output  |
| OUT2 | switching output  |
|      | Diagnostic output |