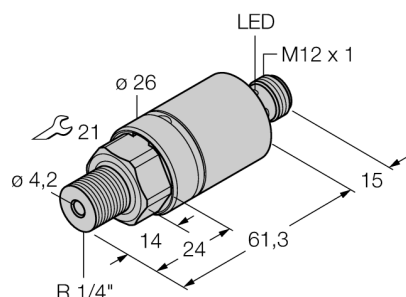


# Pressure switch

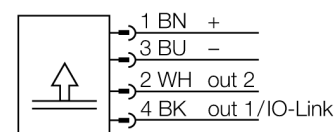
## 2 PNP/NPN transistor switching outputs

### PC003V-210-2UPN8X-H1141



- Cylindrical version without display
- 2 PNP/NPN switching outputs
- Communication via IO-Link
- Display of switching state and communication via LED at M12 connector
- Pressure range -1 ... 2.5 bar rel.

#### Wiring diagram



#### Functional principle

The IO-Link pressure transmitters of the PC 200 series operate with piezoresistive ceramic measuring cells. The ceramic diaphragm is unbalanced in proportion to the pressure applied. The digitally processed signal is made available via IO-Link or as switching output. Highest flexibility and 0.5 % f.s. accuracy guarantee secure connection to your processes.

|                                                   |                                       |
|---------------------------------------------------|---------------------------------------|
| <b>Type</b>                                       | PC003V-210-2UPN8X-H1141               |
| Ident-No.                                         | 6833764                               |
| <b>Switch point SP1</b>                           | customized                            |
| Release point rP1                                 | customized                            |
| Relative pressure                                 | -1...2.5bar rel.                      |
| Admissible overpressure                           | ≤ 12 bar                              |
| Burst pressure                                    | ≥ 12 bar                              |
| <b>Operating voltage</b>                          | 15...30VDC                            |
| No-load current I <sub>0</sub>                    | ≤ 12 mA                               |
| Protective measure                                | SELV; PELV according to EN 50178      |
| Short-circuit/reverse polarity protection         | yes/ yes                              |
| Protection type and class                         | IP69K/ III                            |
| <b>Output 1</b>                                   | Switching output or IO-Link mode      |
| Output 2                                          | switching output                      |
| <b>Output function</b>                            | NO/NC , PNP/NPN                       |
| Switching point accuracy                          | ± 0.5 % of full scale                 |
| Repeatability                                     | ± 0.1 % of full scale                 |
| Voltage drop at I <sub>e</sub>                    | ≤ 2 V                                 |
| Rated operational current                         | 0.15 A                                |
| Switching frequency                               | ≤ 180 Hz                              |
| Switching point distance                          | ≥ 0.5 %                               |
| Switch point:                                     | (min + 0.005 x range) up to 100% f.s. |
| Release point(s)                                  | min up to (SP - 0.005 x range)        |
| Switching cycles                                  | ≥ 100 mil.                            |
| <b>Response time</b>                              | < 3 ms                                |
| <b>IO-Link</b>                                    |                                       |
| Communication                                     | specified acc. to version 1.0         |
| Parameterization                                  | FDT / DTM                             |
| Transmission physics                              | corresponds to 3-wire physics (PHY2)  |
| Transmission rate                                 | COM 2 / 38.4 kbps                     |
| Process data width                                | 16 bit                                |
| Measured value information                        | 14 bit                                |
| Switchpoint information                           | 2 bit                                 |
| Frame type                                        | 2.3                                   |
| <b>Temperature behaviour</b>                      | &#x0020;                              |
| Temperature coefficient zero point T <sub>0</sub> | ± 0.15 % of full scale / 10 K         |
| Temperature coefficient span T <sub>15</sub>      | ± 0.15 % of full scale / 10 K         |

# Pressure switch

## 2 PNP/NPN transistor switching outputs

### PC003V-210-2UPN8X-H1141

|                                                |                                                                                                           |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| <b>Ambient conditions</b>                      | &#x0020;                                                                                                  |
| Medium temperature                             | -40...85 °C                                                                                               |
| Ambient temperature                            | -40...80 °C                                                                                               |
| Storage temperature                            | -40...+80°C                                                                                               |
| Vibration resistance                           | 20 g (9...2000 Hz), according to IEC 68-2-6                                                               |
| Shock resistance                               | 50 , according to IEC 61508                                                                               |
| <b>Housing</b>                                 |                                                                                                           |
| Housing material                               | Stainless steel, 1.4305 (AISI 303)/PBT-GF15                                                               |
| material pressure connection                   | Stainless steel A2 1.4305 (AISI 303)                                                                      |
| material pressure element                      | Ceramics AL2O3                                                                                            |
| Sealing material                               | FPM                                                                                                       |
| Mechanical connection                          | R1/4" female thread per DIN 2999                                                                          |
| Wrench size pressure connection / coupling nut | 21                                                                                                        |
| Connection                                     | connector, M12 x 1                                                                                        |
| <b>Switching state</b>                         | LED                                                                                                       |
| Programming options                            | Switch/release point, PNP/NPN, NO/NC, hysteresis/window mode, muting, pressure unit, peak pressure memory |