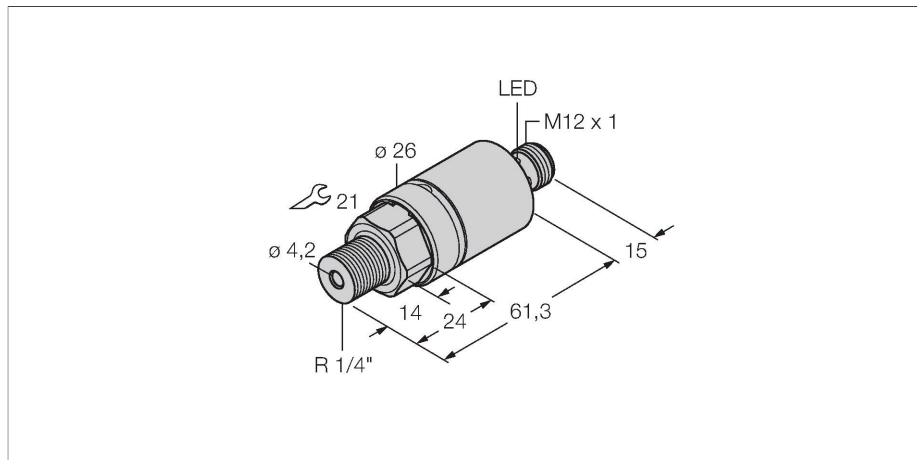


PC010V-210-2UPN8X-H1141

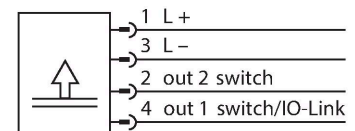
Pressure Sensor – 2 PNP/NPN Transistor Switching Outputs



Features

- Cylindrical version without display
- 2 PNP/NPN switching outputs
- Communication via IO-Link
- Display of communication via LED at M12 connector
- Pressure range -1...10 bar rel.

Wiring diagram



Technical data

| | |
|---|----------------------------------|
| Type | PC010V-210-2UPN8X-H1141 |
| ID no. | 6833765 |
| Pressure range | |
| Pressure type | Relative pressure |
| Pressure range | -1...10 bar |
| | -14.5...145.04 psi |
| | -0.1...1 MPa |
| Admissible overpressure | ≤ 50 bar |
| Burst pressure | ≥ 50 bar |
| Response time | < 3 ms |
| Power supply | |
| Operating voltage | 15...30 VDC |
| Current consumption | ≤ 12 mA |
| Voltage drop at I _o | ≤ 2 V |
| Protective measure | SELV; PELV according to EN 50178 |
| Short-circuit/reverse polarity protection | yes / yes |
| Protection type and class | IP67 IP69K / III |
| Outputs | |
| Output 1 | Switching output or IO-Link mode |
| Output 2 | switching output |
| Switching output | |
| Communication protocol | IO-Link |
| Output function | NO/NC, PNP/NPN |
| Accuracy | ± 0.5 % FS BSL |
| Rated operational current | 0.15 A |
| Switching frequency | ≤ 180 Hz |

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.

Technical data

| | |
|---|---|
| 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. |
| Switch point SP1 | configurable |
| Release point rP1 | customized |
| IO-Link | |
| IO-Link specification | V 1.0 |
| Programming | 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 | 2.2 |
| Accuracy | ± 0.5 % FS BSL |
| Included in the SIDI GSDML | Yes |
| Temperature behaviour | |
| Medium temperature | -40...+85 °C |
| Temperature coefficient zero point Tk0 | ± 0.15 % of full scale/10 K |
| Temperature coefficient span T _{ks} | ± 0.15 % of full scale/10 K |
| Ambient conditions | |
| 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 , acc. to IEC 68-2-27 |
| Housing | |
| Housing material | Stainless steel, 1.4305 (AISI 303)/PBT-GF15 |
| Pressure connection material | Stainless steel 1.4305 (AISI 303) |
| Pressure transducer material | Ceramics Al ₂ O ₃ |
| Sealing material | FPM |
| Process connection | R 1/4" male thread DIN 2999 |
| Wrench size pressure connection / coupling nut | 21 |
| Electrical connection | Connector, M12 × 1 |
| Reference conditions acc. to IEC 61298-1 | |
| Temperature | 15...+25 °C |
| Atmospheric pressure | 860...1060 hPa abs. |
| Humidity | 45...75 % rel. |

Technical data

| | |
|---------------------|---|
| Auxiliary power | 24 VDC |
| Programming options | switch/release point, PNP/NPN, NO/NC, hysteresis/window mode, muting, pressure unit, peak pressure memory |
| MTTF | 2079 years acc. to SN 29500 (Ed. 99) 40 °C |

Accessories

| Dimension drawing | Type | ID no. | |
|-------------------|---------------------|---------|--|
| | WKC4.4T-2/TEL | 6625025 | Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com |
| | RKC4.4T-2/TEL | 6625013 | Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com |
| | RKC4.4T-2/TXL | 6625503 | Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com |
| | WKC4.4T-2/TXL | 6625515 | Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com |
| | RKC4.4T-P7X2-10/TXL | 6626184 | Connection cable, female M12, angled, 4-pin, cable length: 10m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com |

Accessories

| Dimension drawing | Type | ID no. | |
|-------------------|----------------|---------|---|
| | USB-2-IOL-0002 | 6825482 | IO-Link Master with integrated USB port |

