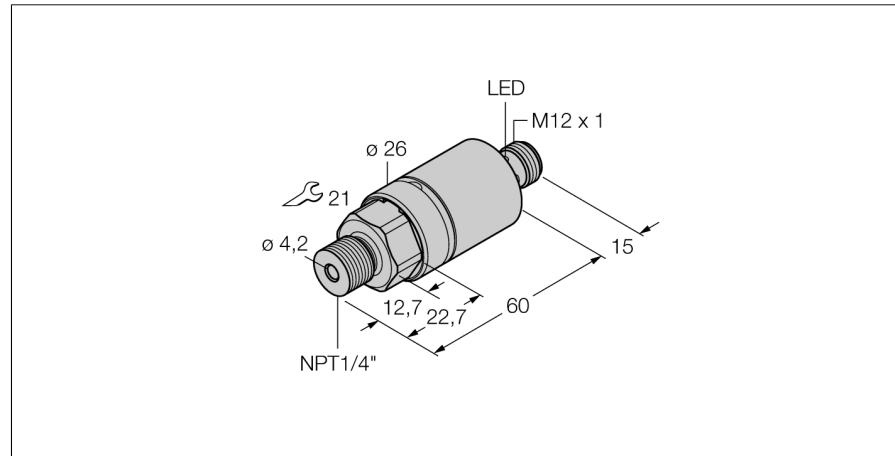


Pressure switch
2 PNP/NPN transistor switching outputs
PC040V-203-2UPN8X-H1141



- 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 ... 40 bar rel.

Wiring diagram



| | |
|---|---------------------------------------|
| Type code | PC040V-203-2UPN8X-H1141 |
| Ident no. | 6833744 |
| Relative pressure | -1...40bar rel. |
| Operating range | -14.5...580.2psi |
| Operating range | -0.1...4MPa |
| Switch point SP1 | customized |
| Release point rP1 | customized |
| Admissible overpressure | ≤ 200 bar |
| Burst pressure | ≥ 200 bar |
| Power supply | |
| Operating voltage | 15...30VDC |
| No-load current I ₀ | ≤ 12 mA |
| Voltage drop at I ₀ | ≤ 2 V |
| Protective measure | SELV; PELV according to EN 50178 |
| Short-circuit/reverse polarity protection | yes/ yes |
| Protection type and class | IP69K/ III |
| Output 1 | Switching output or IO-Link mode |
| Output 2 | switching output |
| Switching output | |
| Output function | NO/NC , PNP/NPN |
| Accuracy switching output | ± 0.5 % v. E. BSL |
| 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. |
| Switch point SP1 | customized |
| Release point rP1 | customized |
| Response time | < 3 ms |
| IO-Link | |
| 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 | 2.2 |
| Genauigkeit | ± 0.5 % of final value BSL |

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.

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Temperature behaviour

| | |
|---|-----------------------------------|
| Medium temperature | -40...85 °C |
| Temperature coefficient zero point T_{k0} | ± 0.15 % of full scale / 10 K |
| Temperature coefficient span $T_{k\Delta}$ | ± 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 , according to IEC 61508 |

Housing

| | |
|--|---|
| 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 |
| Process connection | NPT 1/4" - 18 male thread |
| Wrench size pressure connection / coupling nut | 21 |
| Connection | male, M12 x 1 |

Reference conditions acc. to IEC 61298-1

| | |
|----------------------|---------------------|
| temperature | 15...25 °C |
| Atmospheric pressure | 860...1060 hPa abs. |
| Humidity | 45...75 % rel. |
| Auxiliary power | 24 VDC |

Switching state

| | |
|---------------------|--|
| Programming options | LED switch/release point, PNP/NPN, NO/NC, hysteresis/window mode, muting, pressure unit, peak pressure memory |
|---------------------|--|

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Wiring accessories

| Type code | Ident no. | Description | Dimension drawing |
|---------------|-----------|--|-------------------|
| 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 | |
| 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/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 | |