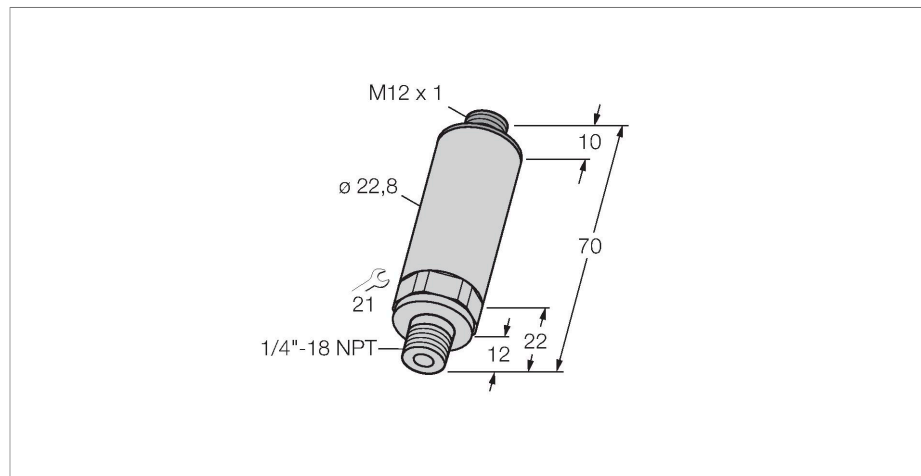


# PT250R-13-LI3-H1131

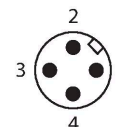
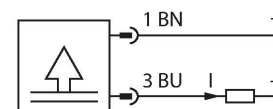
## Pressure Transmitter – With Current Output (2-Wire)



### Features

- Compact and robust design
- Pressure connection with integrated peak pressure aperture
- Accuracy hardly affected by temperature within entire range -40...+125°C
- Excellent EMC properties
- Pressure range 0...250 bar rel.

### Wiring diagram



### Technical data

|   |   |
|---|---|
| Type                                      | PT250R-13-LI3-H1131                     |
| Ident. no.                                | 6831509                                 |
| <b>Pressure range</b>                     |   |
| Relative pressure bar                     | 0...250 bar rel.                        |
|   | 0...3625.95 psi                         |
|   | 0...25 MPa                              |
| Admissible overpressure                   | ≤ 625 bar                               |
| Burst pressure                            | ≥ 625 bar                               |
| Response time                             | < 2 ms, typ. 1 ms                       |
| Long-term stability                       | 1 % FS, In accordance with DIN EN 60770 |
| <b>Power supply</b>                       |   |
| Operating voltage                         | 8...33 VDC                              |
| Current consumption                       | ≤ 20 mA                                 |
| Protective measure                        | SELV according to EN 50178              |
| Short-circuit/reverse polarity protection | yes / yes                               |
| Protection type and class                 | IP67 / III                              |
| Insulation voltage                        | 500 VDC                                 |
| <b>Outputs</b>                            |   |
| Output 1                                  | Analog output                           |
| Output function                           | Analog output current                   |
| <b>Analog output</b>                      |   |
| Current output                            | 4...20 mA                               |

### Functional principle

The pressure transmitters of the PT...-1 series operate with piezo-resistive ceramic measuring cells. The ceramic diaphragm is unbalanced in proportion to the pressure applied. Depending on the sensor type used, the processed signal is provided as an analog output signal 4...20mA (2-wire) or 0...10V (3-wire).

## Technical data

|  |   |
|--|---|
| Load   | ≤ 1 kΩ  |
| Accuracy LHR                                       | ± 0.3 % FS BSL  |
| Calibration accuracy 0-point                       | 0.3 % FS  |
| Calibration accuracy full scale                    | 0.3 % FS  |
| <b>Temperature behaviour</b>                       |   |
| Medium temperature                                 | -40...+125 °C   |
| Temperature coefficient zero point T <sub>k0</sub> | ± 0.15 % of full scale/10 K   |
| Temperature coefficient span T <sub>ks</sub>       | ± 0.15 % of full scale/10 K   |
| <b>Ambient conditions</b>                          |   |
| Ambient temperature                                | -40...+85 °C  |
| Storage temperature                                | -40...+85 °C  |
| Vibration resistance                               | 20 x g (9...2000 Hz, 2...9 Hz with an amplitude +/-15 mm), acc. to IEC 68-2-6 |
| Shock resistance                                   | 100 g (11 ms) , acc. to IEC 68-2-27   |
| <b>Housing</b>                                     |   |
| Housing material                                   | Stainless-steel/Plastic, 1.4305 (AISI 303)                                    |
| Pressure connection material                       | Stainless steel 1.4305 (AISI 303)   |
| Pressure transducer material                       | Ceramics Al <sub>2</sub> O <sub>3</sub>                                       |
| Sealing material                                   | FPM   |
| Process connection                                 | 1/4" NPT-18 male thread   |
| Wrench size pressure connection / coupling nut     | SW 21   |
| Electrical connection                              | Connector, M12 × 1  |
| Max. tightening torque of housing nut              | 20 Nm   |
| <b>Reference conditions acc. to IEC 61298-1</b>    |   |
| Temperature  | 15...+25 °C   |
| Atmospheric pressure                               | 860...1060 hPa abs.   |
| Humidity   | 45...75 % rel.  |
| Auxiliary power                                    | 24 VDC  |
| MTTF   | 760 years acc. to SN 29500 (Ed. 99) 40 °C                                     |