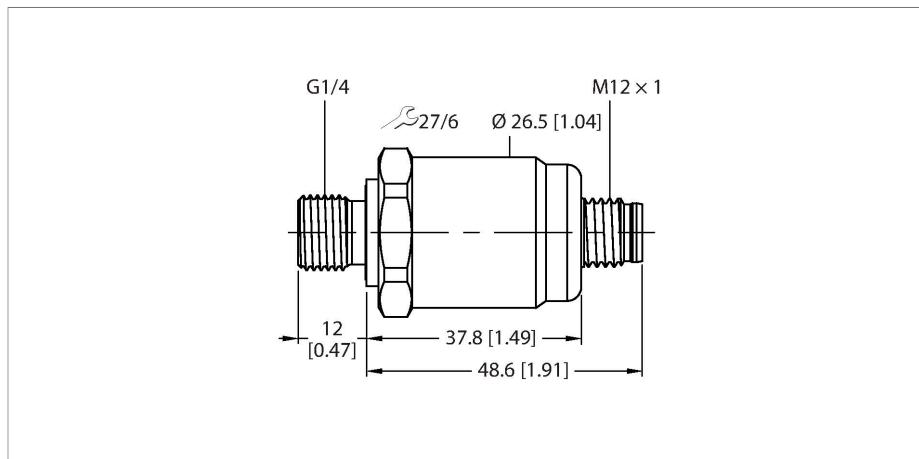


# PT0.3R-1504-I2-H1143/D840

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



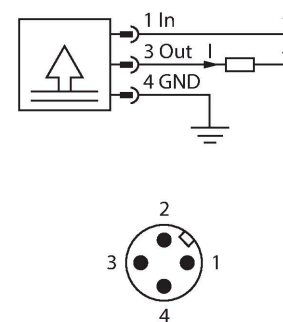
### Technical data

|   |   |
|---|---|
| Type  | PT0.3R-1504-I2-H1143/D840               |
| Ident. no.  | 100008535                               |
| <b>Pressure range</b>                               |   |
| Relative pressure bar                               | 0...0.3 bar rel.                        |
|   | 0...4.35 psi                            |
|   | 0...0.03 MPa                            |
| Admissible overpressure                             | ≤ 2 bar                                 |
| Permissible vacuum                                  | - 0.3 bar                               |
| Burst pressure                                      | ≥ 2 bar                                 |
| Response time                                       | < 150 ms                                |
| Adjustment position                                 | Vertical, pressure connection at bottom |
| Vertical position error, pressure connection at top | + 0.2 mbar                              |
| Horizontal position error                           | + 0.1 mbar                              |
| Long-term stability                                 | 0.25 % FS, , acc. to EN 60770-1         |
| <b>Power supply</b>                                 |   |
| Operating voltage                                   | 10...30 VDC                             |
| Current consumption                                 | ≤ 23 mA                                 |
| Short-circuit/reverse polarity protection           | yes / yes                               |
| Protection type and class                           | IP67 / III                              |
| Insulation voltage                                  | 500 VDC                                 |
| <b>Outputs</b>                                      |   |
| Output 1  | Analog output                           |

### Features

- Ceramic measuring cell
- Extremely high measuring accuracy
- Compact and robust design
- Excellent temperature behavior
- Pressure range 0...300 mbar rel.
- 10...30 VDC
- Analog output 4...20 mA
- Process connection G1/4" male thread, back sealing DIN 3852-E
- Plug-in device, M12 × 1

### Wiring diagram



### Functional principle

The pressure sensors in the PT...-1500 product series operate with a ceramic measuring cell in various micropressure ranges of up to -100...600 mbar in 2- or 3-wire technology. Depending on the sensor variant, the processed signal is available as an analog

## Technical data

| Analog output                                  |  |
|--|--|
| Current output                                 | 4...20 mA  |
| Load   | $\leq (\text{Supply voltage} - 10)/20 \text{ k}\Omega$   |
| Resolution                                     | $<\pm 0.1 \text{ \% FS}$   |
| Accuracy LHR                                   | $\pm 0.35 \text{ \% FS BSL}$   |
| Temperature behaviour                          |  |
| Medium temperature                             | -25...+85 °C   |
| Temperature coefficient span TkS               | $\pm 0.07 \text{ \% FS}/10 \text{ K}$  |
| Ambient conditions                             |  |
| Ambient temperature                            | -25...+85 °C   |
| Storage temperature                            | -40...+85 °C   |
| Vibration resistance                           | 20 g, 15...2000 Hz, 15...25 Hz with amplitude $\mu$ 15 mm, 1 octave/minute in all 3 directions, 50 continuous loads, according to IEC 68-2-6 |
| Shock resistance                               | 50 g, 6 ms, half sinusoidal curve, all 6 directions, free fall from 1 m onto concrete (6x) , acc. to IEC 68-2-27                             |
| Housing  |  |
| Housing material                               | Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0   |
| Pressure connection material                   | Stainless steel 1.4404 (AISI 316L)   |
| Pressure transducer material                   | Ceramics $\text{Al}_2\text{O}_3$   |
| Sealing material                               | FPM  |
| Process connection                             | G 1/4" male thread DIN 3852-E (rear sealing)   |
| Wrench size pressure connection / coupling nut | 27   |
| Electrical connection                          | Connector, M12 × 1   |
| Max. tightening torque of housing nut          | 27 Nm  |
| Reference conditions acc. to IEC 61298-1       |  |
| Temperature                                    | 15...+25 °C  |
| Atmospheric pressure                           | 800...1060 hPa abs.  |
| Humidity                                       | 45 % rel.  |
| Auxiliary power                                | 24 VDC   |
| MTTF   | 965 years acc. to SN 29500 (Ed. 99) 40 °C  |

output signal (4...20 mA, 0...10 V, 0...5 V, ratiometric).

In addition to the standard variants, there are special sensors for uses such as ATEX areas. A wide range of process connections and electrical connections offer a high degree of flexibility in a wide range of applications.