



Pressure sensors  
Pressure transmitter

PFT-FRB010SF20SSVMSSZ



**Model Name** > PFT-FRB010SF2OSSVMSSZ  
**Part No.** > 6043704



*Product may differ from illustration*

**At a glance**

- Gauge pressure measurement ranges from 0 ... 0.1 bar up to 0 ... 600 bar
- Process connections G1 or G 1/2 with flush-mounted membrane
- Accuracy 0.5% or 0.25%
- Process temperature up to 150 °C (optional)
- High shock and vibration resistance
- Output signal 4 ... 20 mA, 0 ... 5 V, or 0 ... 10 V
- Zero and span adjustable
- Electrical connection M12x1, L-connector according to DIN 175301-803 A or flying leads

**Your benefits**

- Reliable and highly accurate measurement technology
- Wide application range: The flush-mounted membrane enables pressure measurement in specific media such as sludges, slurries, pulp or highly viscous liquids
- No mechanical wear, fatigue-proof, maintenance-free as no moving parts
- Simple and cost-saving installation
- Optimal solution for individual requirements due to very versatile configurability



**Features**

|                      |                   |
|----------------------|-------------------|
| Pressure type:       | Gauge pressure    |
| Measuring range:     | 0 bar ... 10 bar  |
| Process temperature: | -30 °C ... 100 °C |
| CE-conformity:       | ✓                 |
| Output signal:       | 0...10 V, 3-wire  |

**Performance**

|   |  |
|---|--|
| Accuracy:   | ≤ +/- 0.5 % (of span)  |
| Non-linearity:                                      | ≤ +/- 0.2 % (of span (Best Fit Straight Line, BFSL) according to IEC 61298-2)  |
| Long-term drift/one-year stability:                 | ≤ +/- 0.2 % of span (at reference conditions)  |
| Temperature coefficient in rated temperature range: | Mean TC of span ≤ 0.2 % of span / 10 K, Mean TC of zero: ≤ 0.2 % of span / 10 K (< 0.4 % for pressure ranges ≤ 0.25 bar) |
| Rated temperature range:                            | 0 °C ... 80 °C   |
| Non-repeatability:                                  | ≤ +/- 0.1 % of span  |
| Response time (10 % ... 90 %):                      | ≤ 1 ms (≤ 10 ms at medium temperatures below < -30°C for pressure ranges up to 25 bar or with flush-mounted membrane)    |

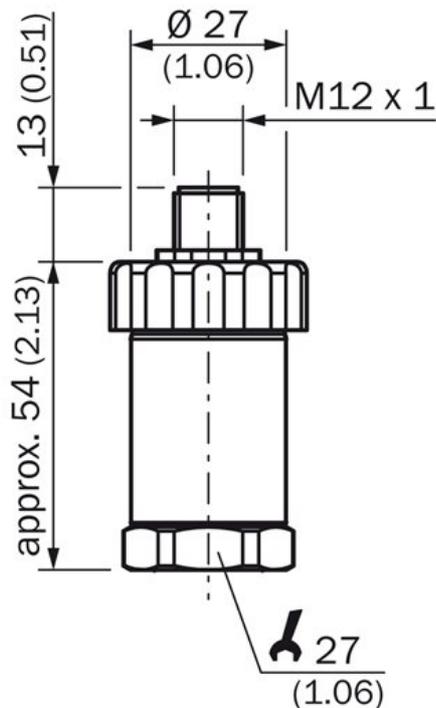
## Mechanics/electronics

|                       |  |
|-----------------------|--|
| Process connection:   | G 1/2 B flush-mounted with O-ring  |
| Wetted parts:         | With flush-mounted diaphragm: Stainless steel O-ring: NBR, FPM/FKM optional (O-ring made of FPM/FKM for version with flush-mounted membrane with integrated cooling element) |
| Seal:                 | With flush-mounted membrane: wetted parts: CrNi-steel + NBR O-Ring   |
| Housing material:     | Stainless steel  |
| Enclosure rating:     | IP 67  |
| Connection type:      | M12 x 1, 4-pin, IP 67  |
| Supply voltage:       | 14 V DC ... 30 V DC  |
| Electrical safety:    | Short-circuit protection: QA towards M, Protection class: III, Overvoltage protection: 36 V DC, Reverse polarity protection: L+ towards M                                    |
| Dielectric strength:  | 500 V DC, NEC Class 02 power supply (low voltage and low current max. 100 VA even under fault conditions)  |
| Protection class III: | ✓  |
| Weight sensor:        | 200 g  |
| CE-conformity:        | Pressure equipment directive: 97/23/EC, EMC directive: 2004/108/EEC, EN 61326-2-3  |

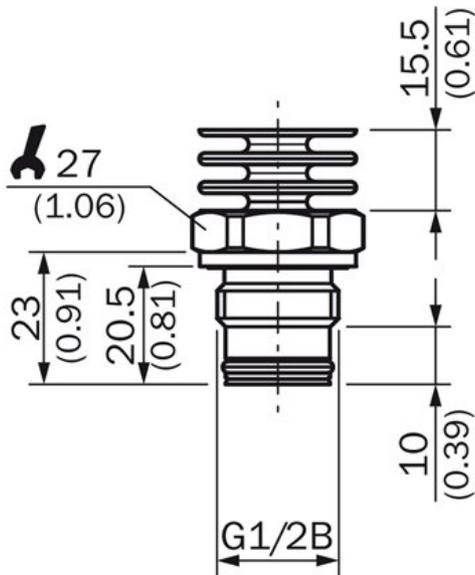
## Ambient data

|                      |   |
|----------------------|---|
| Storage temperature: | -40 °C ... 100 °C   |
| Ambient temperature: | -20 °C ... 80 °C  |
| Shock load:          | 1000 g according to IEC 60068-2-27 (mechanical shock)       |
| Vibration load:      | 20 g according to IEC 60068-2-6 (vibration under resonance) |

## Dimensional drawing housing

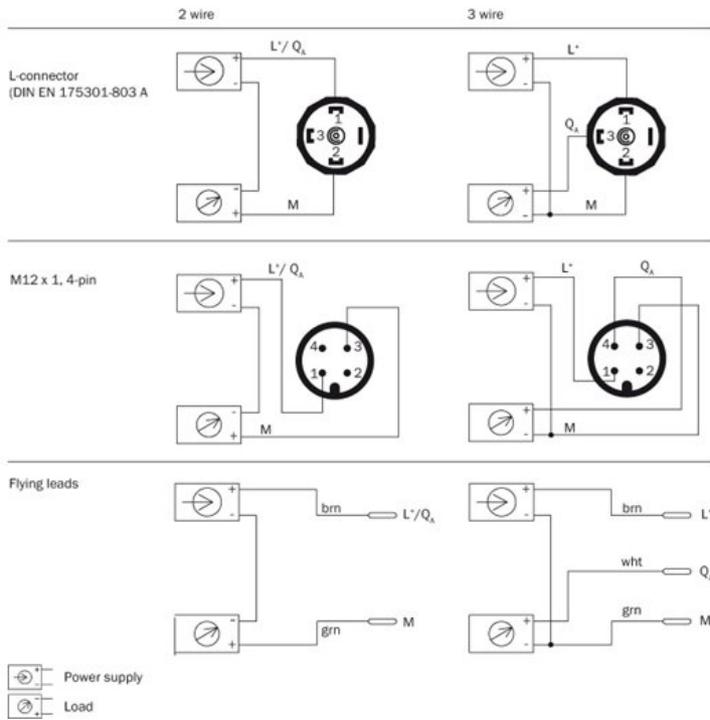


**Dimensional drawing process connection**



All dimensions in mm (inch)

**Connection type**



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