



Pressure sensors  
Pressure transmitter

PFT-FRBX40SF10SSALSSZ



**Model Name** > **PFT-FRBX40SF1OSSALSSZ**  
**Part No.** > **6043390**



*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 ... 0.4 bar |
| Process temperature: | -30 °C ... 100 °C |
| CE-conformity:       | ✓                 |
| Output signal:       | 4...20 mA         |

**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)    |

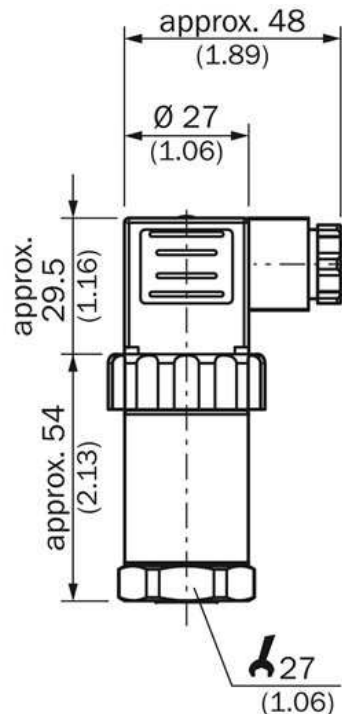
## Mechanics/electronics

|                        |  |
|------------------------|--|
| Process connection:    | G 1 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   |
| Pressure port:         | Front-flush membrane   |
| Housing material:      | Stainless steel  |
| Enclosure rating:      | IP 65  |
| Electrical connection: | L-connector (DIN EN 175301-803 A), IP 65   |
| Supply voltage:        | 10 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/EC, EN 61 326-2-3  |

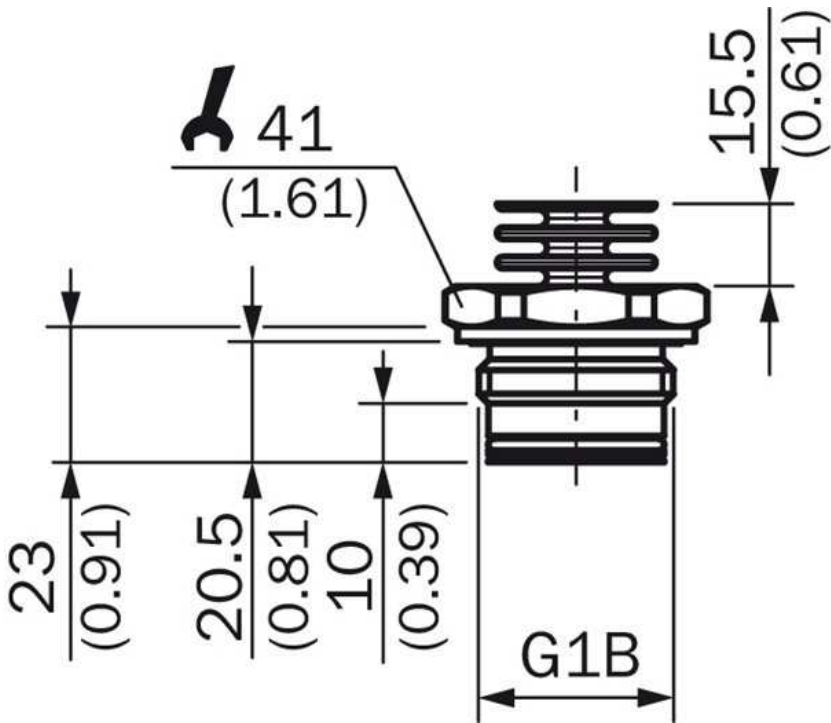
## Ambient data

|                      |   |
|----------------------|---|
| 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



Connection type



**Australia**

Phone +61 3 9457 0600  
1800 33 48 02 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail marketing@sick.com.br

**Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

**Česká republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail info@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-6881000  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 5309 2112  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederland**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail sick@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail sales.gsg@sick.com

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886 2 2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 (0) 4 88 65 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 (800) 325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)