

Pressure sensors Pressure transmitter

PBT-CB1X0SG1SSNVMC0Z







Model Name> PBT-CB1X0SG1SSNVMC0ZPart No.> 6043710



Illustration may differ

# At a glance

- Compound pressure measurement ranges from -1 ... 0 bar up to -1... +24 bar
- A large variety of available process connections
- · No moving parts: No mechanical wear, fatigue-proof, maintenance-free
- · Circularly welded, hermetically sealed stainless steel membrane
- Output signal 4 ... 20 mA, 0 ... 5 V or 0 ... 10 V
- Electrical connection M12x1, L-connector acc. to DIN 175301-803 A or flying leads

### Your benefits

- · Compact size takes up less space
- · Simple and cost-saving installation
- Available in a wide selection of configurations, enabling a perfect match to individual customer requirements
- · Robust design enables higher reliability
- Excellent price/performance ratio



#### Features

Pressure type:	Compound pressure
Measuring range:	-1 bar 0 bar
Process temperature:	0 °C +80 °C
Output signal:	010 V, 3-wire
Gauge pressure:	0 bar 1 bar up to bar 600 bar
Absolute pressure:	0 bar 1 bar up to 0 bar 25 bar
Compound pressure:	-1 bar 0 bar up to -1 bar +24 bar
Medium:	Liquid and gaseous media
Performance	
Accuracy:	$\leq \pm 0.6$ % of Span (with non-linearity 0.25 % and with signal output 0 5 V), $\leq \pm 1$ % of span (with non-linearity 0.25 %), $\leq \pm 1.0$ % of Span (with non-linearity 0.5 %), (Including non-linearity, hysteresis, zero point and full

Non-linearity: Response time: Long-term drift/one-year stability: Rated temperature range: Service life: Non-repeatability:

Minimum 100 Mio. life cycles

≤ 0.1 % of span according to IEC 61298-2

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scale error (corresponds to error of measurement according to IEC 61298-

≤ ± 0.5 % ((Best Fit Straight Line, BFSL) according to IEC 61298-2)

Pressure sensors

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0 °C ... +80 °C

≤ 0.1 % of span

2))

< 4 ms

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Hysteresis: Signal noise: Adjustment accuracy of zero signal: ≤ 0.16 % of span
≤ 0.3 % of span
≤ 0.5 % of span typ., ≤ 0.8 % of span max. (with non-linerarity 0.5 %)

# **Mechanics/electronics**

Process connection:	G ¼ A according to DIN 3852-E
Wetted parts:	Pressure connection: stainless steel 316L, Pressure sensor: stainless steel 316L (for measurement ranges from 0 bar 10 bar rel stainless steel 13-8 PH)
Seal:	NBR
Pressure port:	Standard
Housing material:	Stainless steel 316L
Enclosure rating:	IP 67
Electrical connection:	Round connector M12 x 1, 4-pin, IP 67
Power consumption:	Max. 8 mA for voltage output signal, Signal current (max. 25 mA) for current output
Electrical safety:	Short-circuit protection: QA towards M, Protection class: III, Overvoltage protection: 32 V DC, 36 V DC with 4 mA 20 mA, Reverse polarity protection: L+ towards M
Protection class III:	$\checkmark$
Weight sensor:	Ca. 80 g
Internal transmission fluid:	Silicone oil (only with pressure ranges < 0 bar $\dots$ 10 bar and $\leq$ 0 bar abs $\dots$ 25 bar abs)
Isolation voltage:	500 V DC
CE-conformity:	Pressure equipment directive: 97/23/EC, EMC directive: 2004/108/EC, EN 61 326-2-3
Reference conditions:	Reference conditions: According to IEC 61298-1

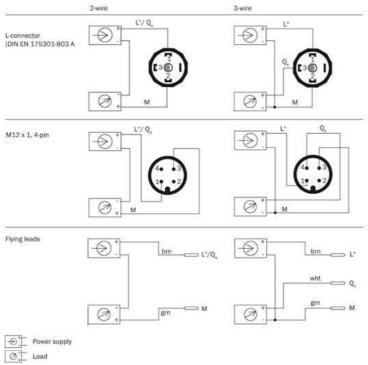
Electrical circuit in accordance with section 9.3 of UL/EN/IEC 61010-1 or an LPS to UL/EN/ IEC 60950-1 or class 2 in accordance with UL1310/UL1585 (NEC or CEC).

The power supply must be suitable for operation above 2,000 m should the pressure transmitter be used at this altitude.;

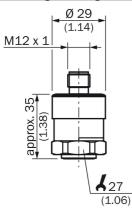
### Ambient data

Storage temperature:	-20 °C +80 °C
Ambient temperature:	0 °C +80 °C
Shock load:	500 g according to IEC 60068-2-27 (mechanical shock)
Vibration load:	10 g according to IEC 60068-2-6 (vibration under resonance), 20 g optional
Relative humidity:	45 % 75 %

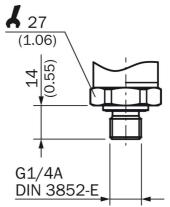
## **Connection type**



Dimensional drawing housing



**Dimensional drawing process connection** 



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