

PBT-CB010SN1SS0VMC0Z







# Pressure sensors Pressure transmitter

Model Name > PBT-CB010SN1SS0VMC0Z

Part No. > 6043380





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:

Measuring range:

Process temperature:

O "C ... +80 "C

Output signal:

Compound pressure

-1 bar ... 9 bar

0 "C ... +80 "C

0...10 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),  $\leq$  ± 1 % of span (with non-linearity 0.25 %),  $\leq$  ± 1,0 % of Span (with non-linearity 0.5 %), (Including non-linearity, hysteresis, zero point and full scale error (corresponds to error of measurement according to IEC 61298-

2))

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

Response time: < 4 m

Long-term drift/one-year stability: ≤ 0.1 % of span according to IEC 61298-2

Rated temperature range: 0 °C ... +80 °C

Service life: Minimum 100 Mio. life cycles

Non-repeatability: ≤ 0.1 % of span

Hysteresis: ≤ 0.16 % of span Signal noise: ≤ 0.3 % of span

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

#### Mechanics/electronics

Process connection: 1/4" NPT

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: Without seal Pressure port: Standard

Stainless steel 316L Housing material:

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

Short-circuit protection: QA towards M, Protection class: III, Overvoltage protection: 32 V DC, 36 V DC with 4 mA  $\dots$  20 mA, Reverse polarity protection: L+ towards M Electrical safety:

Protection class III:

Weight sensor: Ca. 80 q

Internal transmission fluid: Silicone oil (only with pressure ranges < 0 bar ... 10 bar and ≤ 0 bar abs ...

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**

-20 °C ... +80 °C Storage temperature: Ambient temperature: 0 °C ... +80 °C

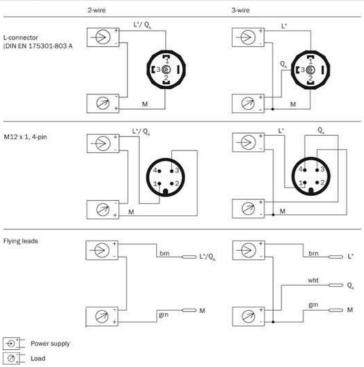
Shock load: 500 g according to IEC 60068-2-27 (mechanical shock)

Vibration load: 10 g according to IEC 60068-2-6 (vibration under resonance), 20 g

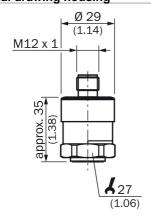
optional

45 % ... 75 % Relative humidity:

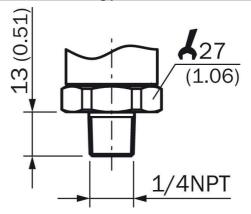
## **Connection type**



Dimensional drawing housing



# Dimensional drawing process connection



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