

PET-1RB100G1NSAMA







# Pressure sensors Pressure transmitter

Model Name > PET-1RB100G1NSAMA

Part No. > 6048928



### At a glance

- Measuring ranges from 0 bar ... 6 bar up to 0 bar ... 600 bar
- Various output signals and electrical connections available
- · Common process connections available
- High overpressure safety. Pressure peak protection available upon request for selected process connections.
- · Circularly welded, hermetically sealed stainless steel membrane
- Stainless steel housing with enclosure rating up to IP 67 (with round connector M12 x 1)

#### Your benefits

- A wide range of variants enables a perfect match to individual requirements
- · Space-saving due to its compact size
- Time-saving due to quick and simple installation
- Manufacturing capabilities that are aligned to OEM demands ensure an excellent price-performance ratio for application-specific solutions
- Wetted parts are made from stainless steel for universal use even with a large variety of corrosive fluids



Illustration may diffe

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## **Features**

Pressure type:

Measuring range:

Process temperature:

Output signal:

Gauge pressure

0 bar ... 100 bar

-30 °C ... 100 °C

4 mA ... 20 mA, 2-wire

Maximum ohmic load RA:  $\leq (L+ - 7 \text{ V})/0.02 \text{ A [Ohm]}$  with current output signal

# Performance

Accuracy:  $\leq \pm 1.2 \%$  of span (at room temperature) Non-linearity:  $\leq \pm 0.5 \%$  of span (best fit straight line, BFSL)

Response time: < 2 ms

Long-term drift/one-year stability:  $\leq \pm 0.3 \%$  of span (per year)

Temperature error:  $\leq \pm 1.5 \%$  of span Rated temperature range:  $0 ^{\circ}$ C ...  $80 ^{\circ}$ C

Service life: Minimum 10 Mio. life cycles

Measurement deviation of zero signal:  $\leq \pm 0.5 \%$  of span

#### Mechanics/electronics

Process connection: G 1/4 A according to DIN 3852-E

Wetted parts: Stainless steel 13-8 PH, Stainless steel 316L

Seal: NBR

Pressure port: 3.5 mm Standard

Housing material: Stainless steel 316L, PBT GF30

Enclosure rating: IP 67 (according to IEC 60529), for round connector <sup>1)</sup>

Connection type: Round connector M12 x 1, 4-pin

Supply voltage: 8 V DC ... 30 V DC <sup>2)</sup>

Isolation voltage: 750 V DC

CE-conformity: 2004/108/EC, EN 61326-1 emission (group 1, class B) and interference

immunity (industrial application) and pressure equipment directive

97/23/EC

Reference conditions: According to IEC 61298-1

Maximum power consumption: 25 mA (signal current, maximum 25 mA)

Initialization time: 15 ms
Protection class: III
Overvoltage protection: 36 V DC

Short-circuit protection: Output QA towards M

Reverse polarity protection: L+ towards M

RoHS certificate: 1

1) The enclosure rating classes specified only apply while the thermometer is connected with female connectors that provide the corresponding enclosure rating. 2)

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**

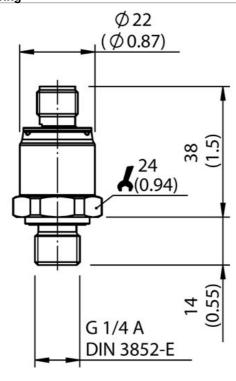
Storage temperature: -30 °C ... 100 °C

Shock load: 40 g (6 ms) according to IEC 60068-2-27 (mechanical shock)

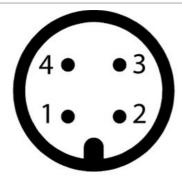
Vibration load: 20 g (20 Hz ... 2000 Hz, 120 min) according to IEC 60068-2-6 (vibration at

resonance)

Ambient operating temperature: -30 °C ... 100 °C



Connection type



- |1| L+: Positive supply connection
- |2| M: Negative supply connection
- |3| QA: Analog output

Assignment	L+	М	Q <sub>A</sub>
2-wire	1	3	-
3-wire	1	3	4

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