



Pressure sensors Pressure transmitter

PET-1RB010G1NSAMA



Model Name > **PET-1RB010G1NSAMA**
Part No. > **6049221**



Illustration may differ

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



Features

Pressure type:	Gauge pressure
Measuring range:	0 bar ... 10 bar
Process temperature:	-30 °C ... 100 °C
Output signal:	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:	$\leq \pm 0.6 \%$ 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 °C ... 80 °C
Service life:	Minimum 10 Mio. life cycles
Measurement deviation of zero signal:	$\leq \pm 0.7 \%$ 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 ¹⁾
Connection type:	Round connector M12 x 1, 4-pin
Supply voltage:	8 V DC ... 30 V DC ²⁾
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⁾

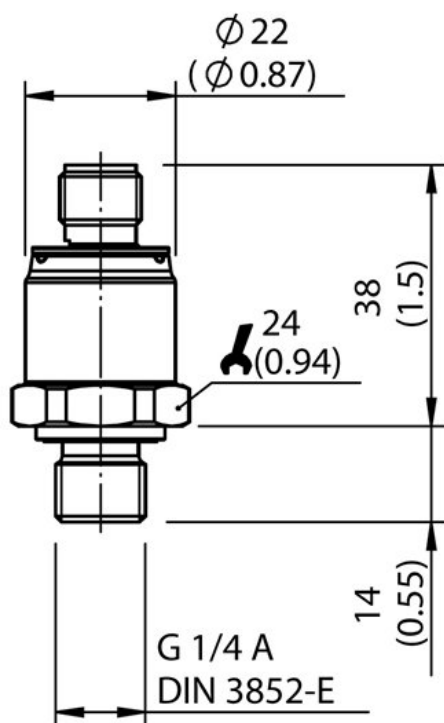
Electrical circuit in accordance with section 9.3 of UL/EN/IEC 61010-1 or an LPS to UL/EN/ IEC 60950-1 or class 2 in accordance with UL1310/UL1585 (NEC or CEC).

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

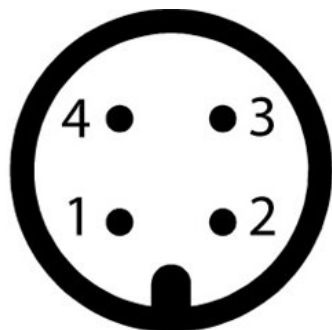
Ambient data

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

Dimensional drawing



Connection type



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

Assignment	L +	M	Q _A
2-wire	1	3	-
3-wire	1	3	4

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