



# PET-1RB010G1NSALA

PET

PRESSURE SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

| Type              | Part no. |
|-------------------|----------|
| PET-1RB010G1NSALA | 6050254  |

Other models and accessories → [www.sick.com/PET](http://www.sick.com/PET)

### Detailed technical data

#### Features

|                            |                        |
|----------------------------|------------------------|
| <b>Pressure type</b>       | Gauge pressure         |
| <b>Measuring range</b>     | 0 bar ... 10 bar       |
| <b>Process temperature</b> | -30 °C ... +100 °C     |
| <b>Output signal</b>       | 4 mA ... 20 mA, 2-wire |
| <b>Pieces per package</b>  | 50 pieces              |

#### Mechanics/electronics

|   |  |
|---|--|
| <b>Process connection</b>               | G ¼ A according to DIN 3852-E  |
| <b>Seal</b>                             | NBR  |
| <b>Wetted parts</b>                     | Stainless steel, stainless steel 13-8 PH   |
| <b>Pressure port</b>                    | 3.5 mm Standard  |
| <b>Housing material</b>                 | Stainless steel 316L, PBT GF30   |
| <b>Connection type</b>                  | For angled plug according to DIN EN 175301-803 A (without mating connector)  |
| <b>Enclosure rating</b>                 | IP65, for L-connector (IEC 60529) <sup>1)</sup>  |
| <b>Supply voltage</b>                   | 8 V DC ... 30 V DC <sup>2)</sup>   |
| <b>Maximum ohmic load R<sub>A</sub></b> | = (L+ - 7 V) / 0.02 A [ohm] for current output signal  |
| <b>Maximum power consumption</b>        | 25 mA (signal current, maximum 25 mA)  |
| <b>Initialization time</b>              | 15 ms  |
| <b>Protection class</b>                 | III  |
| <b>Isolation voltage</b>                | 750 V DC   |
| <b>Overvoltage protection</b>           | 36 V DC  |
| <b>Short-circuit protection</b>         | Output Q <sub>A</sub> towards M  |
| <b>Reverse polarity protection</b>      | L <sup>+</sup> towards M   |
| <b>CE-conformity</b>                    | 2004/108/EC, EN 61326-1 emission (group 1, class B) and interference immunity (industrial application) and pressure equipment directive 97/23/EC |

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

<sup>2)</sup> The pressure transmitter must be supplied with power by a limited energy circuit compliant with 9.3 of UL/EN/IEC 601010-1 or LPS to UL/EN/IEC 60950-1 or Class 2 to UL 1310/UL1585 (NEC or CEC). The power supply must be suitable for operation above 2,000 m if the pressure transmitter is used above this altitude.

|                         |                             |
|-------------------------|-----------------------------|
| <b>RoHS certificate</b> | ✓                           |
| <b>Service life</b>     | Minimum 10 Mio. load cycles |
| <b>MTTF</b>             | > 100 years                 |

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## Performance

|   |  |
|---|--|
| <b>Non-linearity</b>                        | ≤ ± 0.6 % of span (best fit straight line, BFSL) |
| <b>Accuracy</b>                             | ≤ ± 1.2 % of span (at room temperature)          |
| <b>Response time</b>                        | < 2 ms   |
| <b>Measurement deviation of zero signal</b> | ≤ ± 0.7 % of the span                            |
| <b>Temperature error</b>                    | ≤ ± 1.5 % of the span                            |
| <b>Long-term drift/one-year stability</b>   | ≤ ± 0.3 % of span (per year)                     |
| <b>Rated temperature range</b>              | 0 °C ... +80 °C                                  |
| <b>Reference conditions</b>                 | According to IEC 61298-1                         |

## Ambient data

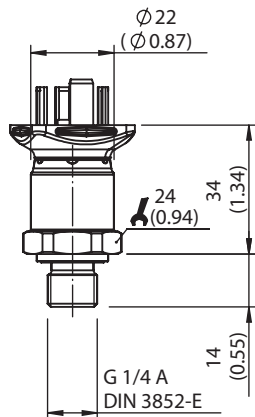
|                                       |   |
|---------------------------------------|---|
| <b>Ambient temperature, operation</b> | -30 °C ... +100 °C  |
| <b>Storage temperature</b>            | -30 °C ... +100 °C  |
| <b>Shock load</b>                     | 40 g (6 ms) according to IEC 60068-2-27 (mechanical shock)                            |
| <b>Vibration load</b>                 | 20 g (20 Hz ... 2000 Hz, 120 min) according to IEC 60068-2-6 (vibration at resonance) |

## Classifications

|                       |          |
|-----------------------|----------|
| <b>ECLASS 5.0</b>     | 27200614 |
| <b>ECLASS 5.1.4</b>   | 27200614 |
| <b>ECLASS 6.0</b>     | 27200614 |
| <b>ECLASS 6.2</b>     | 27200614 |
| <b>ECLASS 7.0</b>     | 27200614 |
| <b>ECLASS 8.0</b>     | 27200614 |
| <b>ECLASS 8.1</b>     | 27200614 |
| <b>ECLASS 9.0</b>     | 27200614 |
| <b>ECLASS 10.0</b>    | 27200614 |
| <b>ECLASS 11.0</b>    | 27200614 |
| <b>ECLASS 12.0</b>    | 27200614 |
| <b>ETIM 5.0</b>       | EC011478 |
| <b>ETIM 6.0</b>       | EC011478 |
| <b>ETIM 7.0</b>       | EC011478 |
| <b>ETIM 8.0</b>       | EC011478 |
| <b>UNSPSC 16.0901</b> | 41112410 |

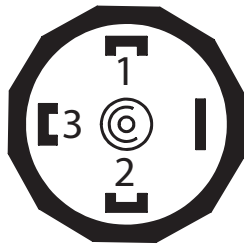
### Dimensional drawing (Dimensions in mm (inch))

Process connection G 1/4" A to DIN 3852-E with connection for angled plug to DIN EN 175301-803 A



### Connection type

Connection for angled plug according to DIN EN 175301-803 A



| Assignment | L <sup>+</sup> | M | Q <sub>A</sub> |
|------------|----------------|---|----------------|
| 2-wire     | 1              | 2 | -              |
| 3-wire     | 1              | 2 | 3              |

- ① L<sup>+</sup>: Positive supply connection
- ② M: Negative supply connection
- ③ Q<sub>A</sub>: Analog output

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We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

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