



# PTAM-1XXXXAVGMZB

PTA

**PRESSURE SENSORS**

**SICK**  
Sensor Intelligence.



Illustration may differ



## Ordering information

| Type             | part no. |
|------------------|----------|
| PTAM-1XXXXAVGMZB | 6091078  |

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

## Detailed technical data

### Features

|                                            |                                          |
|--------------------------------------------|------------------------------------------|
| <b>Medium</b>                              | Liquid, gaseous                          |
| <b>Pressure type</b>                       | Gauge pressure                           |
| <b>Pressure unit</b>                       | bar<br>psi                               |
| <b>Measuring chamber type</b>              | Metallic pressure measuring cell         |
| <b>Measuring range</b>                     | 0 bar ... 10 bar<br>0 psi ... 145 psi    |
| <b>Process temperature</b>                 | -20 °C ... +130 °C <sup>1)</sup>         |
| <b>Maximum ohmic load <math>R_A</math></b> | $R_A < (L + 12) / 0.022 \text{ A (Ohm)}$ |
| <b>Output signal</b>                       | 4 mA ... 20 mA, 2-wire                   |

<sup>1)</sup> Up to +150 °C for short periods (max. 15 min).

### Mechanics/electronics

|                                |                                                                                                                                                            |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Communication interface</b> | Bluetooth                                                                                                                                                  |
| <b>Process connection</b>      | Clamp 1" (DIN 32676, ISO 2852), PN 40, flush-mounted, 316L (Ra < 0.38 µm)                                                                                  |
| <b>Wetted parts</b>            | Stainless steel 316L (1.4404)                                                                                                                              |
| <b>Housing material</b>        | Stainless steel 316L (1.4404), PBT/PC                                                                                                                      |
| <b>Connection type</b>         | M12 round connector x 1, 4-pin                                                                                                                             |
| <b>Supply voltage</b>          | 12 V DC ... 35 V DC                                                                                                                                        |
| <b>Electrical safety</b>       | Overvoltage protection: 36 V DC<br>Short-circuit resistance: All outputs to E<br>Reverse polarity protection: L <sup>+</sup> to M<br>Protection class: III |
| <b>Dielectric strength</b>     | 500 V AC, NEC Class 02 power supply (low voltage and low current max. 100 VA even in the event of a fault)                                                 |

<sup>1)</sup> Emission: Class B/Immunity: Industrial area.

<sup>2)</sup> VP2/A.

<sup>3)</sup> Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply when connected with female connectors that provide the corresponding enclosure rating.

|                      |                                                                                        |
|----------------------|----------------------------------------------------------------------------------------|
| CE-conformity        | EMC Directive: 2014/30 / EU, EN 61326-1, EN 61326-2-3:2013, 2014/53 / EU <sup>1)</sup> |
| Weight sensor        | Approx. 250 g                                                                          |
| Seal                 | FKM <sup>2)</sup>                                                                      |
| Enclosure rating     | IP66 <sup>3)</sup><br>IP67 <sup>3)</sup><br>IP69 <sup>3)</sup>                         |
| Protection class III | ✓                                                                                      |
| MTTF                 | 156 years                                                                              |

1) Emission: Class B/Immunity: Industrial area.  
2) Vp2/A.  
3) Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply when connected with female connectors that provide the corresponding enclosure rating.

Performance

|                                                    |                                      |
|----------------------------------------------------|--------------------------------------|
| Accuracy                                           | ≤ ± 0.3 %, of the span               |
| Response time (10 % ... 90 %)                      | ≤ 6 ms                               |
| Long-term drift/one-year stability                 | < 0.1 % p.a.                         |
| Temperature coefficient in rated temperature range | < 0.15% / 10 K                       |
| Rated temperature range                            | 0 °C ... +100 °C<br>32 °F ... 212 °F |
| Service life                                       | Minimum 10 Mio. load cycles          |

Ambient data

|                                |                                                            |
|--------------------------------|------------------------------------------------------------|
| Ambient temperature, operation | -40 °C ... +80 °C<br>-40 °F ... 176 °F                     |
| Storage temperature            | -40 °C ... +80 °C<br>-40 °F ... 176 °F                     |
| Shock load                     | Class 6M4 according to IEC60721-3-6 (50 g; 2.3 ms)         |
| Vibration load                 | Class 4M8 according to IEC60721-3-4 (5 g, 4 Hz ... 200 Hz) |

Certificates

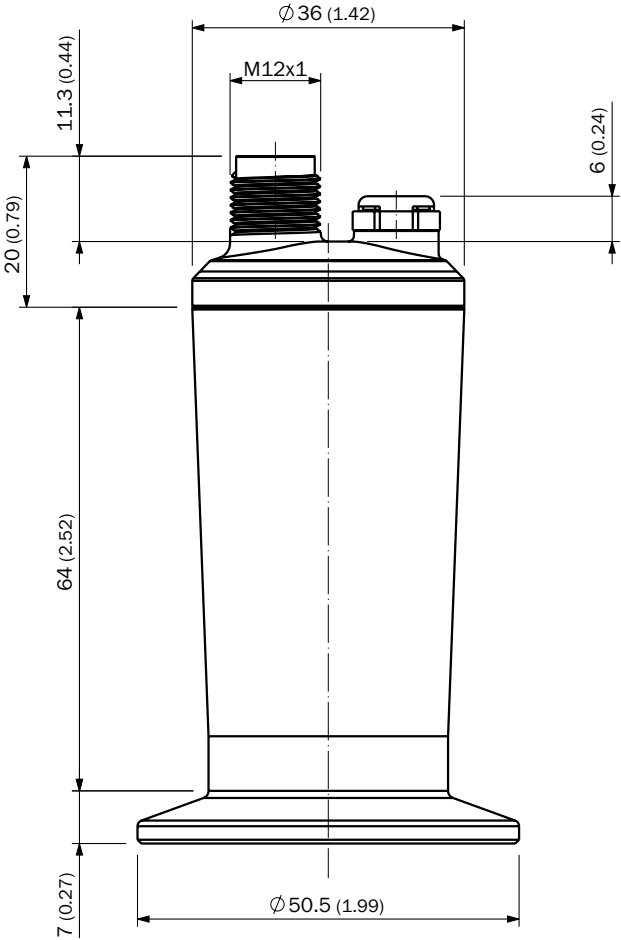
|                                                |   |
|------------------------------------------------|---|
| EU declaration of conformity                   | ✓ |
| UK declaration of conformity                   | ✓ |
| ACMA declaration of conformity                 | ✓ |
| China-RoHS                                     | ✓ |
| cULus certificate                              | ✓ |
| Food contact material manufacturer declaration | ✓ |

Classifications

|              |          |
|--------------|----------|
| ECLASS 5.0   | 27200614 |
| ECLASS 5.1.4 | 27200614 |
| ECLASS 6.0   | 27200614 |
| ECLASS 6.2   | 27200614 |
| ECLASS 7.0   | 27200614 |
| ECLASS 8.0   | 27200614 |

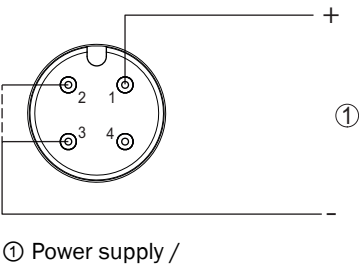
|                       |          |
|-----------------------|----------|
| <b>ECLASS 8.1</b>     | 27200614 |
| <b>ECLASS 9.0</b>     | 27200614 |
| <b>ECLASS 10.0</b>    | 27200614 |
| <b>ECLASS 11.0</b>    | 27200614 |
| <b>ECLASS 12.0</b>    | 27200614 |
| <b>ETIM 5.0</b>       | EC011478 |
| <b>ETIM 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)

Connection type



## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)