



Temperature sensors
Resistance thermometer

THTE-1AAT11006MZ



Model Name > [THTE-1AAT11006MZ](#)
Part No. > [6047632](#)



At a glance

- Pt100, accuracy class A (IEC 60751)
- Measuring ranges -50 °C ... +150 °C and -50 °C ... +250 °C
- Sensor probe spring-loaded in thermowell
- Wetted parts: Corrosion-resistant stainless steel 316L/1.4435, Ra 0.8 µm
- Hygienic process connections
- Pt100 (4-wire) or 4 mA ... 20 mA (2-wire)
- Round connector M12 x 1

Your benefits

- The sensor can be exchanged without opening the process, providing high equipment availability and minimizing hygienic risks
- Safe hygienic operation: Wetted parts are made from high-grade stainless steel, hygienically-graded surface finish, and a gap- and crevice-free design
- Rugged: Connection housing is easily cleaned and splash water proof
- Quick and safe installation
- Very good long-term stability, accuracy and linearity
- Quick response time
- Optimal solutions for individual requirements due to versatile configurability



Features

| | |
|--|---|
| Measuring range: | -50 °C ... 150 °C |
| Sensor element: | Pt100 |
| Signal output and maximum ohmic load RA: | 4 mA ... 20 mA, 2-wire (RA ≤ (L+ - 10 V)/0.023 A [Ohm]) |

Performance

| | |
|-----------------------------|---|
| Accuracy of sensor element: | Class A according to IEC 60751 |
| Transmitter accuracy: | ≤ ± 0.2 % of span |
| Transmitter linearity: | ≤ ± 0.1 % of span |
| Response time: | Response time t50: ≤ 4.7 s ¹⁾ response time t90: ≤ 12.2 s |

¹⁾ Depending on sensor configuration, according to IEC 60751

Mechanics/electronics

| | |
|-------------------------------------|--------------------------------|
| Process connection: | Tri-clamp 1", 1 ½" |
| Insertion length/diameter of probe: | 100 mm/6 mm |
| Housing material: | Stainless steel 1.4571 (316Ti) |

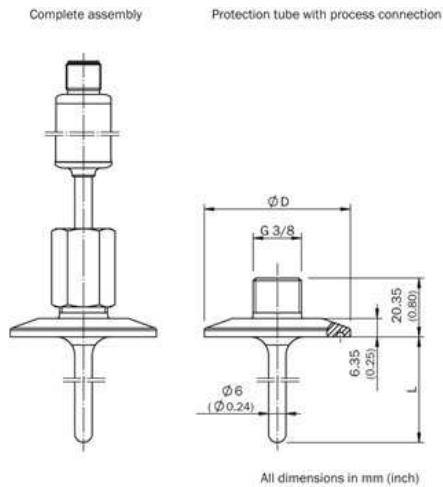
| | |
|--|---|
| Wetted parts: | stainless steel 1.4435 (316L), Ra ≤ 0.8 μm |
| Electrical connection/enclosure rating ¹⁾ : | Round connector M12 x 1, 4-pin/IP 68 and IP 69K |
| Electrical safety: | Dielectric strength: 500 V AC Protection class: III Reverse polarity protection: L+ towards M |
| Supply voltage: | 10 V DC ... 35 V DC |
| Protection class III: | ✓ |
| CE-conformity: | 2004/108/EC, EN 61326-2-3 |
| Pressure resistance: | Max. 16 bar at room temperature |
| Maximum power consumption: | Ca. 30 mA |

¹⁾ Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply while the pressure transmitter is connected with female connectors that provide the corresponding enclosure rating.

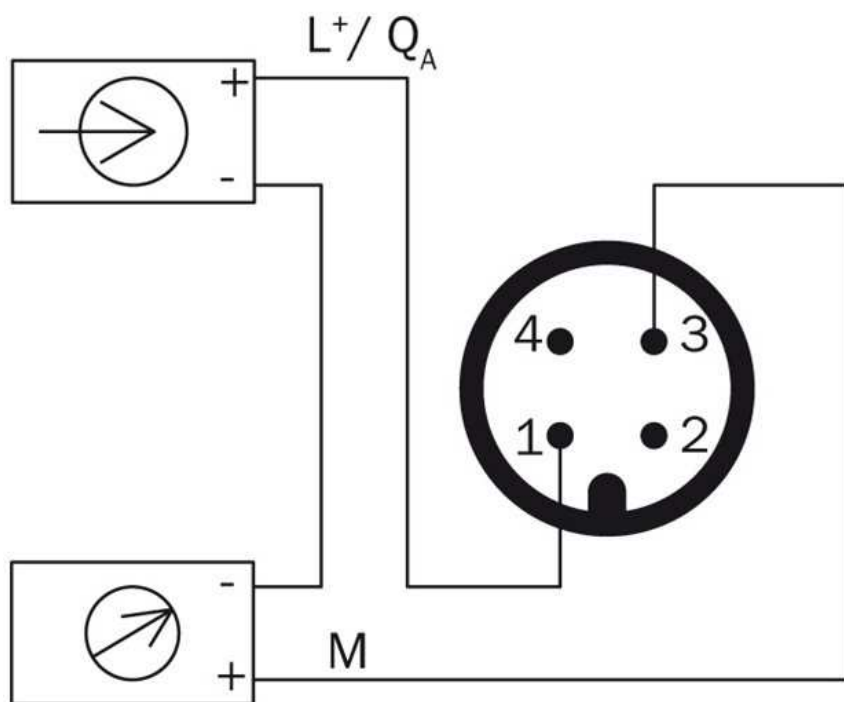
Ambient data

| | |
|--|------------------------|
| Ambient temperature: | -40 °C ... 85 °C |
| Storage and transport temperature: | -40 °C ... 85 °C |
| Vibration resistance according to IEC 60751: | 3 g |
| Shock resistance: | According to IEC 60751 |
| Relative humidity: | ≤ 95 % |

Dimensional drawing process connection



| Design | | Ø D |
|------------------|-------------------|-------------|
| DIN 32676 | DN 10 ... DN 20 | 34.0 (1.34) |
| | DN 25 ... DN 40 | 50.5 (1.99) |
| | DN 50 | 64.0 (2.52) |
| ISO 2852 | DN 12 ... DN 21.3 | 34.0 (1.34) |
| | DN 25 ... DN 38 | 50.5 (1.99) |
| | DN 40, DN 51 | 64.0 (2.52) |
| Tri-Clamp | 1", 1 1/2" | 50.5 (1.99) |
| | 2" | 64.0 (2.52) |



Australia

Phone +61 3 9457 0600
1800 33 48 02 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900
E-Mail marketing@sick.com.br

Canada

Phone +1 905 771 14 44
E-Mail information@sick.com

Česká republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +86 4000 121 000
E-Mail info.china@sick.net.cn
Phone +852-2153 6300
E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301
E-Mail info@sick.de

España

Phone +34 93 480 31 00
E-Mail info@sick.es

France

Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India

Phone +91-22-4033 8333
E-Mail info@sick-india.com

Israel

Phone +972-4-6881000
E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41
E-Mail info@sick.it

Japan

Phone +81 (0)3 5309 2112
E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680
E-Mail office@sick.hu

Nederland

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail sick@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska

Phone +48 22 837 40 50
E-Mail info@sick.pl

România

Phone +40 356 171 120
E-Mail office@sick.ro

Russia

Phone +7-495-775-05-30
E-Mail info@sick.ru

Schweiz

Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732
E-Mail sales.gsg@sick.com

Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

South Africa

Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

South Korea

Phone +82 2 786 6321/4
E-Mail info@sickkorea.net

Suomi

Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00
E-Mail info@sick.se

Taiwan

Phone +886 2 2375-6288
E-Mail sales@sick.com.tw

Türkiye

Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

United Arab Emirates

Phone +971 (0) 4 88 65 878
E-Mail info@sick.ae

USA/México

Phone +1(952) 941-6780
1 (800) 325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at www.sick.com