



## Temperature sensors

TCT-1AAT21006MZ



**Model Name** > **TCT-1AAT21006MZ**  
**Part No.** > **6043260**



### At a glance

- Pt100 element, accuracy class A according to IEC 60751
- Measuring ranges -50 °C ... 150 °C and -50 °C ... 250 °C
- Wetted parts made from corrosion resistant stainless steel 316L
- Integrated transmitter with output signal 4 ... 20 mA (2-wire)
- Measurement accuracy
- Various mechanical adaptations and insertion lengths, also available with thermowell
- Circular connector M12x1 (IP 67) or L-connector according to DIN EN 175301-803 A (IP 65)

### Your benefits

- Reliable operation through rugged design and high-quality materials
- Good long-term stability, accuracy and linearity
- Quick and safe installation
- Convenient system integration through compact dimensions and industry-standard output signals
- Optimal solutions for individual requirements



### Features

|                                          |                                                                                |
|------------------------------------------|--------------------------------------------------------------------------------|
| Measuring range:                         | -50 °C ... 150 °C                                                              |
| Sensor element:                          | Pt100                                                                          |
| Signal output and maximum ohmic load RA: | 4 mA ... 20 mA, 2-wire ( $RA \leq (L + 9 \text{ V}) / 0.023 \text{ A [Ohm]}$ ) |

### Performance

|                             |                                |
|-----------------------------|--------------------------------|
| Accuracy of sensor element: | Class A according to IEC 60751 |
| Transmitter accuracy:       | $\leq \pm 0.2 \%$ of span      |
| Transmitter linearity:      | $\leq 0.1 \%$ of span          |

### Mechanics/electronics

|                                                        |                                                                                              |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Process connection:                                    | Thermowell 1/2" NPT                                                                          |
| Insertion length/diameter of probe:                    | 100 mm / 6 mm                                                                                |
| Housing material:                                      | Stainless steel 1.4571                                                                       |
| Wetted parts:                                          | Stainless steel 1.4571                                                                       |
| Electrical connection/enclosure rating <sup>1)</sup> : | Plug M12 x 1, 4-pin, IP 67                                                                   |
| Measuring current:                                     | 0.3 mA ... 1 mA                                                                              |
| Electrical safety:                                     | Protection class: III, dielectric strength: 500 V, reverse polarity protection: L+ towards M |

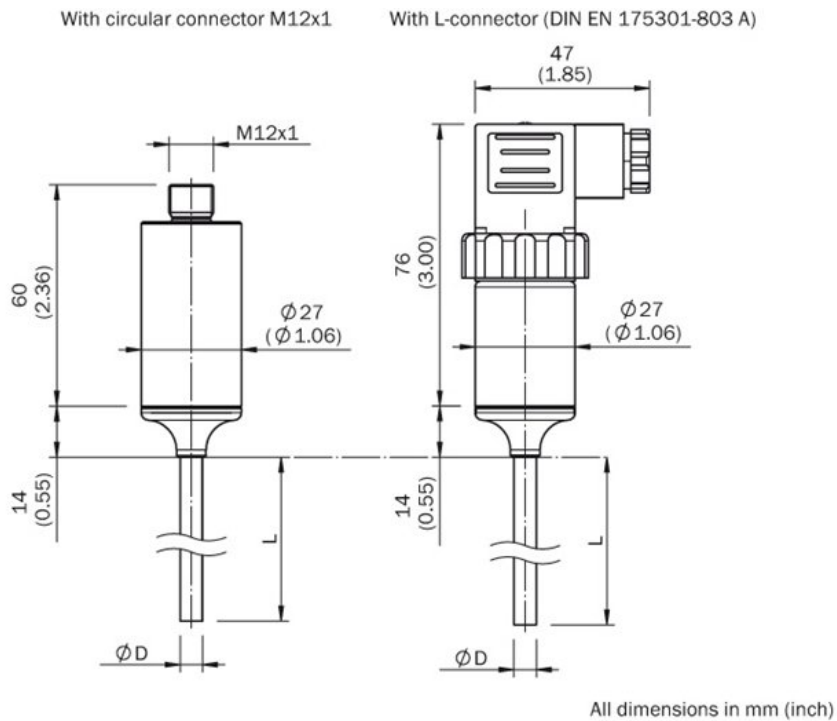
|                       |                                                                 |
|-----------------------|-----------------------------------------------------------------|
| Weight:               | Ca. 145 g (depending on configuration)                          |
| Supply voltage:       | 10 V DC ... 36 V DC for variant with transmitter 4 mA ... 20 mA |
| Protection class III: | ✓                                                               |
| CE-conformity:        | 2004/108/EC, EN 61326-2-3                                       |
| Pressure resistance:  | Max. 220 bar                                                    |

<sup>1)</sup> 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.

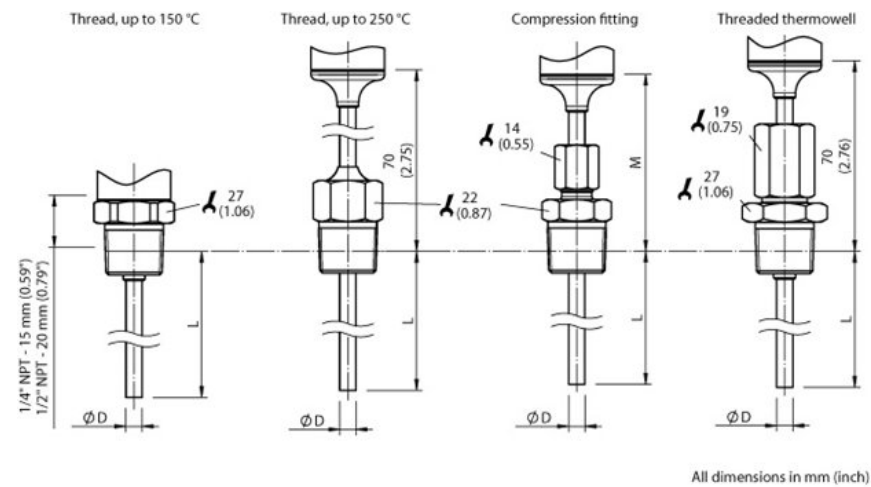
### Ambient data

|                                              |                  |
|----------------------------------------------|------------------|
| Ambient temperature:                         | -40 °C ... 85 °C |
| Storage and transport temperature:           | -40 °C ... 85 °C |
| Shock resistance according to IEC 60751:     | 500 g            |
| Vibration resistance according to IEC 60751: | 3 g              |

### Dimensional drawing housing



Dimensional drawing process connection



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