

## MT-Series - Metal Encapsulated Pt Temperature Sensor

Temperature range -40 °C to +500 °C

Performance Characteristics

- Robust stainless steel housing
- Ideal thermal conductivity
- Highly resistant against most chemicals
- According to DIN EN 60751

Application Examples

- Process industry
- Chromatographs
- HVAC
- High temperature sensing

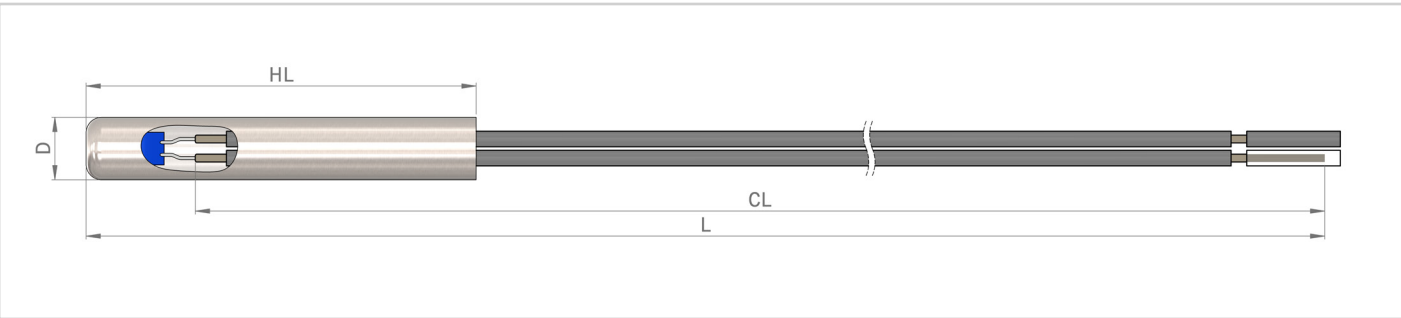


Image for illustration purposes only

Dimensions and Materials

| No. | Product Type | Element Resistance<br>R <sub>0</sub> [Ω] | Dimensions & Tolerances (mm) |       |            |            | Conductor  |            |       | Order Number |
|-----|--------------|------------------------------------------|------------------------------|-------|------------|------------|------------|------------|-------|--------------|
|     |              |                                          | HL                           | D     | CL         | L          | Core (AWG) | Insulation | Color |              |
| 1   | MT2060-C     | Pt100 / F 0.1                            | 20<br>±0.2                   | 6 d10 | 320<br>±10 | 320<br>±10 | 24/01 Ni   | Fiberglass | White | 30500109     |
| 2   | MT2060-C     | Pt1000 / F 0.1                           | 20<br>±0.2                   | 6 d10 | 320<br>±10 | 320<br>±10 | 24/01 Ni   | Fiberglass | White | 31500989     |

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Performance Data

| No. | Temperature Range | Dielectric Strength AC (Housing) | Response Time Water (v = 0.4 m/s) |          | Pull Force [N] | Conductor Resistance [Ω/m] | Application   |
|-----|-------------------|----------------------------------|-----------------------------------|----------|----------------|----------------------------|---------------|
|     |                   |                                  | T0.5 [s]                          | T0.9 [s] |                |                            |               |
| 1   | -40 °C to +500 °C | 500 V / 10 s                     | 3.2                               | 9.6      | > 88           | 0.48 ±10 %                 | Multi-Purpose |
| 2   | -40 °C to +500 °C | 500 V / 10 s                     | 3.2                               | 9.6      | > 88           | 0.48 ±10 %                 | Multi-Purpose |

Temperature Coefficient

TCR = 3850 ppm/K

Measuring Current

Pt100 Ω: 0.3 to 1.0 mA  
Pt1000 Ω: 0.1 to 0.3 mA  
(self-heating has to be considered)

Self-Heating (Sensor Element)

0.4 K/mW at 0 °C

Customization Options

- All housing dimensions
- Sensor element (type and resistance)
- Cable material (core and insulation)
- Cable dimensions (length and diameter)
- Connectors
- Certifications (e.g. IMDS, PPAP, IP rating)

Need more information?  
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Sensor Academy!



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