

## RTD Thermometer TSM187



More information and current pricing:

[www.be.endress.com/TSM187](http://www.be.endress.com/TSM187)

### Benefits:

- High degree of flexibility thanks to modular design with standard terminal heads as per DIN EN 50446 and customer-specific immersion lengths
- High degree of insert compatibility and design as per DIN 43772
- Extension neck to protect the head transmitter from overheating
- Fast response time
- Head transmitter with analog output 4 to 20 mA

### Specs at a glance

- **Accuracy** class A acc. to IEC 60751
- **Response time**  $t_{50} = 18\text{ s}$   $t_{90} = 55\text{ s}$
- **Max. process pressure (static)** at 20 °C: 50 bar (725 psi)
- **Operating temperature range** PT 100: -30 °C ...300 °C (-22 °F ...572 °F)
- **Max. immersion length on request** up to 400,00 mm (15,75")

**Field of application:** The thermometer is mainly used in the chemical industry but also finds its use in other branches. Preferred applications are vessels and pipes where stability and short response times are required. The device with head transmitter is a complete unit ready for use with enhanced measurement accuracy and reliability compared to directly wired sensors. A variety of dimensions offers flexible application possibilities.

### Features and specifications

Thermometer

**Measuring principle**

Resistance Temperature Detector

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## Thermometer

**Characteristic / Application**

metric style  
modular temperature assembly  
threaded process connection  
with neck  
incl. thermowell / protection tube  
(metal)  
transmitter included (fixed range)

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**Thermowell / protection tube**

welded protection tube

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**Insert / probe**

mineral insulated (MI), flexible

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**Outer diameter protection tube / Insert**

9,0 mm (0,35")

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**Max. immersion length on request**

up to 400,00 mm (15,75")

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**Material protection tube/ thermowell**

1.4404 (316L)

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**Process connection**

male thread:  
G1/2"

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**Tip shape**

straight

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**Surface roughness Ra**

Not defined

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**Operating temperature range**

PT 100:  
-30 °C ...300 °C  
(-22 °F ...572 °F)

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Thermometer

**Max. process pressure (static)**

at 20 °C: 50 bar (725 psi)

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**Accuracy**

class A acc. to IEC 60751

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**Response time**

t50 = 18 s

t90 = 55 s

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**Integration head transmitter**

yes (4 ... 20 mA)

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