

# TST90

## Modular RTD thermometer

Comprehensive and common temperature measurement technology for almost all branches of industry



More information and current pricing:

[www.endress.com/TST90](http://www.endress.com/TST90)

### Benefits:

- Fast replaceability of the insert
- High degree of insert compatibility and design as per DIN 43772
- Fast response time with reduced tip

### Specs at a glance

- **Accuracy** +/- 0.05 K (referring to delta-T)
- **Response time** depending on configuration  $t_{50} = 10\text{ s}$   $t_{90} = 31\text{ s}$
- **Max. process pressure (static)** at 20 °C: 50 bar (725 psi)
- **Operating temperature range** PT 100: -50 °C ...200 °C (-58 °F ...392 °F)
- **Max. immersion length on request** up to 4.000,00 mm (157,48")

**Field of application:** The thermometer is mainly used in the chemical industry but also finds its use in other branches. The device is used for high-precision measurement of temperature differences with matched sensor pairs. 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 (paired)  
threaded process connection  
with neck  
incl. thermowell / protection tube  
(metal)

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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 4.000,00 mm (157,48")

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**Material protection tube/ thermowell**

1.4571 (316Ti)

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**Optional coating**

Not defined

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**Process connection**

male thread:  
G1/2"

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**Tip shape**

straight  
tapered

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**Surface roughness Ra**

Not defined

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## Thermometer

**Operating temperature range**

PT 100:

-50 °C ...200 °C

(-58 °F ...392 °F)

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**Max. process pressure (static)**at 20 °C: 50 bar (725 psi)

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**Accuracy**+/- 0.05 K (referring to delta-T)

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**Response time**

depending on configuration

t50 = 10 s

t90 = 31 s

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**Integration head transmitter**no

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