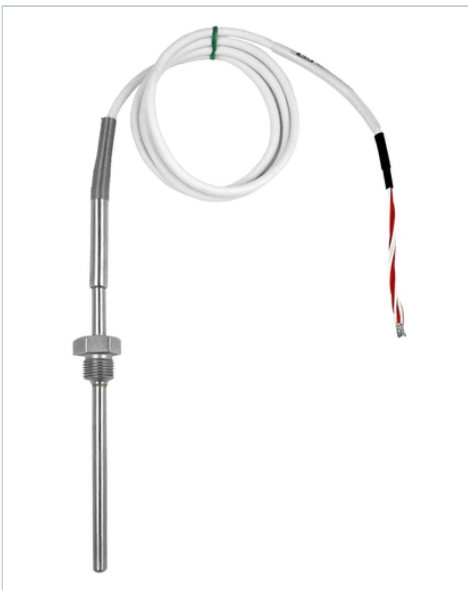


# TST310

## RTD thermometer, temperature cable probe

Cost efficient Pt100 sensor for use in many process and laboratory applications



More information and current pricing:

[www.us.endress.com/TST310](http://www.us.endress.com/TST310)

### Benefits:

- High flexibility through user-specific insertion lengths and variable process connections
- Fast response time
- Single or double Pt100 sensor of accuracy class A, B, or AA as per IEC 60751
- Types of protection for use in hazardous locations: Intrinsic safety (Ex ia) and non-sparking (Ex nA)
- Marine approval

### Specs at a glance

- **Accuracy** class A acc. to IEC 60751 class B acc. to IEC 60751 class AA acc. to IEC 60751
- **Response time**  $t_{50} = 3 \text{ s}$   $t_{90} = 6 \text{ s}$
- **Max. process pressure (static)** at 20 °C: 25 bar (363 psi)
- **Operating temperature range** PT 100: -50 °C ...400 °C (-58 °F ...752 °F)
- **Max. immersion length on request** up to 10.000,00 mm (393,70")

**Field of application:** The RTD cable probe is easy to install and provide a high operational safety due to reliable and accurate temperature measurement in common processes. The probe is specially suited to temperature measurement in machinery, laboratory equipment and plants in gaseous or liquid medium like air, water, oil, etc. Without additional thermowell the probe sheath is directly in contact with the

process medium. This enables the cable probe to detect rapid temperature changes fast and accurate.

## Features and specifications

### Thermometer

**Measuring principle**

Resistance Temperature Detector

**Characteristic / Application**

metric style

cable probe

suitable for hazardous areas

process connection as compression fitting

**Thermowell / protection tube**

without (not intended to use with thermowell)

**Insert / probe**

mineral insulated (MI), flexible

**Outer diameter protection tube / Insert**

3,0 mm (0,12")

6,0 mm (0,24")

**Max. immersion length on request**

up to 10.000,00 mm (393,70")

**Material protection tube/ thermowell**

1.4404 (316L)

1.4571 (316Ti)

## Thermometer

**Process connection**

male thread:

G1/4"

G1/2"

M10x1

M8x1

compression fitting:

G1/8"

G1/4"

G1/2"

NPT1/4"

NPT1/2"

M10x1

M8x1

**Tip shape**

straight

**Operating temperature range**

PT 100:

-50 °C ...400 °C

(-58 °F ...752 °F)

## Thermometer

**Max. process pressure (static)**  
at 20 °C: 25 bar (363 psi)

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**Accuracy**

class A acc. to IEC 60751

class B acc. to IEC 60751

class AA acc. to IEC 60751

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**Response time**

t<sub>50</sub> = 3 s

t<sub>90</sub> = 6 s

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**Integration head transmitter**

no

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**Ex - approvals**

ATEX II

NEPSI

IECEX

Marine approval

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More information [www.us.endress.com/TST310](http://www.us.endress.com/TST310)