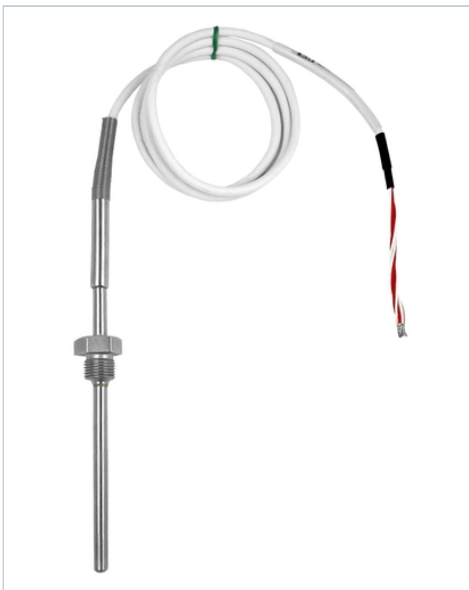


TST310

RTD thermometer, temperature cable probe

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



More information and current pricing:

www.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)

Accuracy

class A acc. to IEC 60751

class B acc. to IEC 60751

class AA acc. to IEC 60751

Response time

t₅₀ = 3 s

t₉₀ = 6 s

Integration head transmitter

no

Ex - approvals

ATEX II

NEPSI

IECEX

Marine approval

More information www.endress.com/TST310