

# TST41N

## Modular RTD thermometer

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



More information and current pricing:

[www.sg.endress.com/TST41N](http://www.sg.endress.com/TST41N)

### 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
- Fast response time with reduced/tapered tip form
- Head transmitter with easy selection: Analog output 4 to 20 mA, HART®, PROFIBUS® PA or FOUNDATION Fieldbus™

### Specs at a glance

- **Accuracy** class A acc. to IEC 60751 class AA acc. to IEC 60751
- **Response time** depending on configuration  $t_{50} = 3\text{ s}$   $t_{90} = 6\text{ s}$
- **Max. process pressure (static)** at 20 °C: 20 bar (290 psi)
- **Operating temperature range** PT 100: -50 °C ... 600 °C (-58 °F ... 1.112 °F)
- **Max. immersion length on request** up to 10.000,00 mm (393,70")

**Field of application:** The thermometer is mainly used in the chemical industry but also finds its use in other branches. 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 process connections, dimensions and materials offer flexible application possibilities.

### Features and specifications

**Thermometer****Measuring principle**Resistance Temperature Detector

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**Characteristic / Application**

metric style

modular temperature assembly

fast response time (reduced/tapered tip)

threaded process connection

without neck

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**Thermowell / protection tube**without (not intended to use with thermowell)

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**Insert / probe**mineral insulated (MI), flexible

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**Outer diameter protection tube / Insert**

6,0 mm (0,24")

9,0 mm (0,35")

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**Max. immersion length on request**up to 10.000,00 mm (393,70")

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**Material protection tube/ thermowell**1.4404 (316L)

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## Thermometer

**Process connection**

male thread:

G1/2"

G3/4"

G1"

NPT1/2"

NPT3/4"

NPT1"

M20x1.5

**Tip shape**

reduced

**Surface roughness Ra**

0,8 µm (31,5 µin.)

**Operating temperature range**

PT 100:

-50 °C ... 600 °C

(-58 °F ... 1.112 °F)

**Max. process pressure (static)**

at 20 °C: 20 bar (290 psi)

**Accuracy**

class A acc. to IEC 60751

class AA acc. to IEC 60751

## Thermometer

### Response time

depending on configuration

t50 = 3 s

t90 = 6 s

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### Integration head transmitter

yes (4 ... 20 mA; HART; PROFIBUS PA; FOUNDATION  
FIELDBUS)

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