

# TST40N

## Modular RTD thermometer

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



More information and current pricing:

[www.endress.com/TST40N](http://www.endress.com/TST40N)

### 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  $t_{50} = 3$  s  $t_{90} = 6$  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 high modular and robust thermometer finds its use in several applications in almost all industries. An optional head transmitter, with all common communication protocols, makes the device ready to use with enhanced measurement accuracy and reliability compared to directly wired sensors. A variety of process connections, dimensions and materials offers 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

with 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

$t_{50} = 3 \text{ s}$

$t_{90} = 6 \text{ s}$

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### Integration head transmitter

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

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### Certification

SIL (transmitter only)

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