

TST41N

Modular RTD thermometer

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



More information and current pricing:

www.ca.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

Characteristic / Application

metric style

modular temperature assembly

fast response time (reduced/tapered tip)

threaded process connection

without neck

Thermowell / protection tubewithout (not intended to use with thermowell)

Insert / probemineral insulated (MI), flexible

Outer diameter protection tube / Insert

6,0 mm (0,24")

9,0 mm (0,35")

Max. immersion length on requestup to 10.000,00 mm (393,70")

Material protection tube/ thermowell1.4404 (316L)

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

Integration head transmitter

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

More information www.ca.endress.com/TST41N