

TR25 Modular RTD thermometer

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



More information and current pricing:

www.in.endress.com/TR25

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 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 $t_{50} = 2 \text{ s}$ $t_{90} = 5 \text{ s}$
- **Max. process pressure (static)** at 20 °C: 40 bar (580 psi)
- **Operating temperature range** PT 100: -200 °C ...600 °C (-328 °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

threaded process connection

without neck

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

Insert / probemineral insulated (MI), flexible

Outer diameter protection tube / Insert6,0 mm (0,24")

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

Material protection tube/ thermowell1.4404 (316L)

Optional coatingNot defined

Thermometer

Process connection

male thread:

G1/4"

G1/2"

NPT1/4"

NPT1/2"

Tip shape

straight

reduced

Surface roughness Ra

Not defined

Operating temperature range

PT 100:

-200 °C ...600 °C

(-328 °F ...1.112 °F)

Max. process pressure (static)

at 20 °C: 40 bar (580 psi)

Accuracy

class A acc. to IEC 60751

class AA acc. to IEC 60751

Thermometer**Response time**

depending on configuration

t50 = 2 s

t90 = 5 s

Integration head transmitteryes (4 ... 20 mA; HART; PROFIBUS PA; FOUNDATION
FIELDBUS)

Certification

Gost Metrology

SIL (transmitter only)

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