

TST40N

Modular RTD thermometer

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



More information and current pricing:

www.at.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 $t_{50} = 3\text{ s}$ $t_{90} = 6\text{ s}$
- **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 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

Characteristic / Application

metric style
modular temperature assembly
fast response time (reduced/tapered tip)
threaded process connection
with neck

Thermowell / protection tube

without (not intended to use with thermowell)

Insert / probe

mineral insulated (MI), flexible

Outer diameter protection tube / Insert

6,0 mm (0,24")
9,0 mm (0,35")

Max. immersion length on request

up to 10.000,00 mm (393,70")

Material protection tube/ thermowell

1.4404 (316L)

Process connection

male thread:

G1/2"
G3/4"
G1"
NPT1/2"
NPT3/4"
NPT1"
M20x1.5

Tip shape

reduced

Thermometer

Surface roughness Ra0,8 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

Response time

depending on configuration

t50 = 3 s

t90 = 6 s

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

CertificationSIL (transmitter only)

More information www.at.endress.com/TST40N