TH14
Modular RTD thermometer, US style

Best in class temperature measurement technology for general applications

More information and current pricing:
www.endress.com/TH14

Benefits:

- High flexibility due to modular assembly with standard terminal heads and customized immersion length
- One source shopping for temperature measurement solutions. World class transmitter with integrated sensor offering for heavy process industry applications. Remove and install straight out of the box!
- Improved galvanic isolation on most devices (2 kV)
- Simplified model structure: Competitively priced, offers great value. Easy to order and reorder. A single model number includes sensor and transmitter assembly for a complete point solution
- All iTEMP® transmitters provide long term stability ≤ 0.05 % per year
- 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 AA acc. to IEC 60751 class A acc. to IEC 60751 class B acc. to IEC 60751
- **Response time** depending on configuration
- **Max. process pressure (static)** at 20 °C: 500 bar (7.252 psi) depends on configuration
- **Operating temperature range** PT100 WW: -200 °C ... 600 °C (-328 °F ... 1.112 °F) StrongSens: -50 °C ... 500 °C (-58 °F ... 932 °F) PT100 TF: -50 °C ... 200 °C (-58 °F ... 392 °F)
- **Max. immersion length on request** up to 24" (609 mm) others on request

Field of application: The high modular thermometer is used for several applications with harsh environments, e.g. in power plants, refineries or

in the chemical or petrochemical industry. The robust device with barstock thermowell and flange connection in SS316 or INCONEL600 and different head transmitter is a complete unit ready for use with enhanced measurement accuracy and reliability.

Features and specifications

Thermometer

Measuring principle
Resistance Temperature Detector

Characteristic / Application
US style
modular temperature assembly
flanged process connection
with extension
incl. thermowell

Thermowell / protection tube
bar stock (drilled)

Insert / probe
mineral insulated (MI), flexible
PTFE-insulated, rigid

Outer diameter protection tube / Insert
3/4" (19,05 mm)
17/16" (26,99 mm)
22,23 mm ... 26,99 mm
(0,88" ... 1,06")

Max. immersion length on request
up to 24" (609 mm)
others on request

Material protection tube/ thermowell
316/316L
others on request

Thermometer

Optional coating

available on request

Process connection

flange:
ASME 1" 150 RF (B16.5)
ASME 1" 300 RF (B16.5)
ASME 1" 600 RF (B16.5)
ASME 1" 900/1500 RF (B16.5)
ASME 1.5" 150 RF (B16.5)
ASME 1.5" 300 RF (B16.5)
ASME 1.5" 600 RF (B16.5)
ASME 1.5" 900/1500 RF (B16.5)
ASME 2" 150 RF (B16.5)
ASME 2" 300 RF (B16.5)
ASME 2" 600 RF (B16.5)
ASME 2" 900/1500 RF (B16.5)
ASME 3" 150 RF (B16.5)
ASME 3" 300 RF (B16.5)
ASME 3" 600 RF (B16.5)
ASME 3" 900/1500 RF (B16.5)

Tip shape

straight
tapered

Surface roughness Ra

32 µin (0.80 µm)

Thermometer

Operating temperature range
PT100 WW:
-200 °C ... 600 °C
(-328 °F ... 1.112 °F)
StrongSens:
-50 °C ... 500 °C
(-58 °F ... 932 °F)
PT100 TF:
-50 °C ... 200 °C
(-58 °F ... 392 °F)

Max. process pressure (static)
at 20 °C: 500 bar (7.252 psi)
depends on configuration

Accuracy
class AA acc. to IEC 60751
class A acc. to IEC 60751
class B acc. to IEC 60751

Response time
depending on configuration

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

Ex - approvals
transmitter only
FM IS
CSA IS
FM/CSA IS

Certification
SIL (transmitter only)

More information **www.endress.com/TH14**