T14
Explosion proof Pt100 thermometer, US style

Safe monitoring of process temperatures in challenging applications e. g. in the Oil & Gas industry

Benefits:
- FM/CSA XP Class I, Div. 1 approved temperature assemblies for maximum safety
- 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, thermowell and transmitter assembly for a complete point solution
- All iTEMP transmitters provide long term stability ≤0.05% per year

Specs at a glance
- **Accuracy** class A acc. to IEC 60751 class B acc. to IEC 60751
- **Response time** depending on configuration 63% rt = 20 s
- **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) PT100 TF: -50 °C ... 200 °C (-58 °F ... 392 °F)
- **Max. immersion length on request** up to 22.5" (571 mm) others on request

Field of application: The robust thermometer is designed for use in demanding and safety relevant applications e.g. in Chemical, Oil & Gas and Energy industry. Harsh environments, corrosive substances and highest pressures can be handled by the use of robust thermowells and...
special materials. A 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. Flexible configuration possible.

## Features and specifications

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Thermometer

**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)

**Tip shape**
straight
tapered

**Surface roughness Ra**
32 μin. (0.80 μm)

**Operating temperature range**
PT100 WW:
-200 °C ... 600 °C
(-328 °F ... 1.112 °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 A acc. to IEC 60751
class B acc. to IEC 60751
Thermometer

**Response time**
depending on configuration
63% rt = 20 s

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

**Ex - approvals**
FM XP DIP Class I,II,III Div. 1+2
FM XP NI DIP Class I,II,III Div. 1+2
CSA XP DIP Class I,II,III Div. 1+2
CSA XP NI DIP Class I,II,III Div. 1+2
FM/CSA XP DIP Class I,II,III Div. 1+2
FM/CSA XP NI DIP Class I,II,III Div.1+2
CSA C/US XP, DIP I, II, III/1/A-G
cCSAus General Purpose

**Certification**
SIL (transmitter only)

More information [www.us.endress.com/T14](http://www.us.endress.com/T14)