

TH55

Modular TC thermometer, US style

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



More information and current pricing:

www.endress.com/TH55

Benefits:

- 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 $\leq 0.05\%$ per year

Specs at a glance

- **Accuracy** class 1 acc. to IEC 60584 class 2 acc. to IEC 60584
- **Response time** 63% $t_r = 1,3$ s
- **Max. process pressure (static)** at 20 °C: 100 bar (1.450 psi)
- **Operating temperature range** Type T: -270 °C ... 400 °C (-454 °F ... 752 °F) Type J: -210 °C ... 1.200 °C (-346 °F ... 2.192 °F) Type E: -270 °C ... 1.000 °C (-454 °F ... 1.832 °F) Type K: -270 °C ... 1.372 °C (-454 °F ... 2.500 °F) Type N: -270 °C ... 1.300 °C (-454 °F ... 2.372 °F)
- **Max. immersion length on request** up to 30" (762 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 is designed for use within an existing thermowell. With different head transmitter it's

a complete unit ready for use with enhanced measurement accuracy and reliability.

Features and specifications

Thermometer

Measuring principle

Thermocouple

Characteristic / Application

TA20J - SS - w. or w/o. display

TMT142 - aluminium - fieldhousing w. or w/o. display

TMT162 - aluminium - fieldhousing w. or w/o. display

TMT162 - SS - fieldhousing w. or w/o. display

Alu - screwed cover w. chain - E+H blue

PP plastic - screwed cover w. chain

TA30H - aluminum w. or w/o. display

Thermowell / protection tube

to use with thermowell

Insert / probe

mineral insulated (MI), flexible

Outer diameter protection tube / Insert

1/4" (6,35 mm)

Max. immersion length on request

up to 30" (762 mm)

others on request

Material protection tube/ thermowell

Sensor sheath

316

Alloy 600

Optional coating

not applicable

Thermometer

Process connection

Thermowell connection
male thread:
NPT1/2"

Tip shape

straight

Surface roughness Ra

Not defined

Operating temperature range

Type T:
-270 °C ... 400 °C
(-454 °F ... 752 °F)
Type J:
-210 °C ... 1.200 °C
(-346 °F ... 2.192 °F)
Type E:
-270 °C ... 1.000 °C
(-454 °F ... 1.832 °F)
Type K:
-270 °C ... 1.372 °C
(-454 °F ... 2.500 °F)
Type N:
-270 °C ... 1.300 °C
(-454 °F ... 2.372 °F)

Max. process pressure (static)

at 20 °C: 100 bar (1.450 psi)

Accuracy

class 1 acc. to IEC 60584
class 2 acc. to IEC 60584

Response time

63% rt = 1,3 s

Thermometer

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/TH55