

TMT162R

Pt100 Thermometer, Field transmitter

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



More information and current pricing:

www.endress.com/TMT162R

Benefits:

- Dual compartment housing
- Backlit display with large measured value, bar graph and fault condition indication
- Galvanic isolation 2 kV (sensor input to the output)
- Wide range of threaded thermowell connections available as standard
- Replaceable measuring insert comprising a mineral insulated tube (SS 316L/1.4404)
- Approvals for hazardous areas: Flameproof enclosure (Ex d), Intrinsic safety (Ex ia), Non-sparking (Ex nA); marine approval
- Aluminum or stainless steel housing, degree of protection IP67, NEMA 4x

Specs at a glance

- **Accuracy** class A acc. to IEC 60751 class AA acc. to IEC 60751
- **Response time** depending on configuration $t_{50} = 4 \text{ s}$ $t_{90} = 8 \text{ s}$
- **Max. process pressure (static)** at 20 °C: 500 bar (7.252 psi)
- **Operating temperature range** PT 100: -200 °C ...600 °C (-328 °F ... 1.112 °F)
- **Max. immersion length on request** Not defined

Field of application: The robust thermometer is designed for use in demanding and safety relevant applications e.g. in the Chemical, Oil & Gas and Energy industry. The thermometer fulfills the corresponding safety requirements due to various certificates and tests. The use of a transmitter leads to higher accuracy and reliability in comparison to directly wired sensors.

Features and specifications

Thermometer

Measuring principle

Resistance Temperature Detector

Characteristic / Application

US style metrical
modular temperature assembly
for heavy duty applications
suitable for hazardous areas
to use with thermowell
backlit display

Thermowell / protection tube

to be used with thermowell

Insert / probe

mineral insulated (MI), flexible

Outer diameter protection tube / Insert

Insert Diameter
6,0 mm (0,24")

Max. immersion length on request

Not defined

Material protection tube/ thermowell

Not defined

Optional coating

Not defined

Thermometer

Process connection

Thermowell connection

male thread:

G1/2"

NPT1/2"

NPT3/4"

cap nut:

NPT1/2"

M24x1.5

Tip shape

Not defined

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: 500 bar (7.252 psi)

Accuracy

class A acc. to IEC 60751

class AA acc. to IEC 60751

Response time

depending on configuration

t50 = 4 s

t90 = 8 s

Integration head transmitter

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

Thermometer

Ex - approvals

ATEX II

Explosion proof

Certification

Gost Metrology

Marine approval

More information www.endress.com/TMT162R