

TR62

Explosion-proof Pt100 Thermometer

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



More information and current pricing:

www.be.endress.com/TR62

Benefits:

- Types of protection for use in hazardous locations: Intrinsic safety (Ex i.a.), flameproof (Ex d), non-sparking (Ex nA)
- 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
- Extension neck, nipple union version, to protect the head transmitter from overheating

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** PT100 TF StrongSens: -50 °C ... 500 °C (-58 °F ... 932 °F) PT100 WW: -200 °C ... 600 °C (-328 °F ... 1.112 °F) PT100 TF: -50 °C ... 400 °C (-58 °F ... 752 °F)
- **Max. immersion length on request** up to 30.000,00 mm (1.181,10")

Field of application: The robust thermometer is designed for use in demanding and safety relevant applications e.g. in the Chemical, Oil & Gas, Energy industry. The sensor is designed for use in a separate thermowell. 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.

The modular design with a variety of options can be adapted to the measurement task. Flexible configuration possible.

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
with neck
to be used with thermowell

Thermowell / protection tube

to be used with thermowell

Insert / probe

mineral insulated (MI), flexible

Outer diameter protection tube / Insert

Insert Diameter

3,0 mm (0,12")

6,0 mm (0,24")

Max. immersion length on request

up to 30.000,00 mm (1.181,10")

Material protection tube/ thermowell

Not defined

Optional coating

Not defined

Thermometer

Process connection

Thermometer connection
male thread:
NPT1/2"

Tip shape

Not defined

Operating temperature range

PT100 TF StrongSens:
-50 °C ...500 °C
(-58 °F ...932 °F)
PT100 WW:
-200 °C ...600 °C
(-328 °F ...1.112 °F)
PT100 TF:
-50 °C ...400 °C
(-58 °F ...752 °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

IECEX

NEPSI

EAC Ex

Explosion proof

Certification

Gost Metrology

SIL (transmitter only)

More information www.be.endress.com/TR62