

Thermocouple TR62



More information and current pricing:

www.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

Process connection

Thermometer connection

male thread:

NPT1/2"

Tip shape

Not defined

Thermometer**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 st₉₀ = 8 s

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

Thermometer

Ex - approvals

ATEX II1/2D Ex ia IIIC,II1G Ex ia IIC T6

ATEX II 2G Ex d IIC

ATEX II 3 G Ex nA IIC T6, II3D

IECEX Ex ia IIC T6 Ga/Gb

IECEX Ex d IIC T6/T5/T4

EAC Ex ia IIC T6 Ga

EAC Ex d IIC T6 Gb

NEPSI Ex ia IIC T6, Ex iaD 20 T85-T450

NEPSI Ex d IIC T6

NEPSI Ex nA IIC T6

Explosion proof

Certification

Gost Metrology

SIL (transmitter only)

More information www.endress.com/TR62