Thermocouple TC62

Benefits:
- Types of protection for use in hazardous locations: Intrinsic safety (Ex ia), 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 1 acc. to IEC 60584
- **Response time** depending on configuration t₅₀ = 3 s t₉₀ = 7 s
- **Max. process pressure (static)** at 20 °C: 500 bar (7.252 psi)
- **Operating temperature range** Type K: -40 °C ...1.100 °C (-40 °F ...2.012 °F) Type J: -40 °C ...750 °C (-40 °F ...1.382 °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 and 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.

Features and specifications

<table>
<thead>
<tr>
<th>Thermometer</th>
<th>Measuring principle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Thermocouple TC62

Thermometer

**Characteristic / Application**
US style
modular temperature assembly
for heavy duty applications
suitable for hazardous areas
threaded process connection
with neck
to use with thermowell

**Thermowell / protection tube**
to use with thermowell

**Insert / probe**
replaceable (without process interruption)

**Outer diameter protection tube / Insert**
Insert Diameter
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**
male thread:
NPT 1/2"

**Tip shape**
straight

**Surface roughness Ra**
0,8 μm (31,5 μin.)
Thermometer

Operating temperature range
Type K:
-40 °C ... 1,100 °C
(-40 °F ... 2,012 °F)
Type J:
-40 °C ... 750 °C
(-40 °F ... 1,382 °F)

Max. process pressure (static)
at 20 °C: 500 bar (7.252 psi)

Accuracy
class 1 acc. to IEC 60584

Response time
depending on configuration
t50 = 3 s
t90 = 7 s

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

Ex - approvals
ATEX II
IECEx
NEPSI
EAC Ex
Explosion proof

Certification
Gost Metrology
SIL (transmitter only)

More information www.endress.com/TC62