

# TMT162C

## TC Thermometer, field transmitter, display

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



More information and current pricing:

[www.in.endress.com/TMT162C](http://www.in.endress.com/TMT162C)

### 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)
- Aluminum or stainless steel housing, degree of protection IP67, NEMA 4x

### Specs at a glance

- **Accuracy** class 1 acc. to IEC 60584 class 2 acc. to IEC 60584
- **Response time** depending on configuration  $t_{50} = 3 \text{ s}$   $t_{90} = 7 \text{ s}$
- **Max. process pressure (static)** up to 20 °C: 480 bar (6.962 psi)
- **Operating temperature range** Type K: -40 °C ...800 °C (-40 °F ...1.472 °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 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

Thermocouple

#### Characteristic / Application

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

#### Thermowell / protection tube

to use with thermowell

#### Insert / probe

mineral insulated (MI), flexible

#### Outer diameter protection tube / Insert

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

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**Thermometer****Process connection**

male thread:

G1/2"

NPT1/2"

NPT3/4"

M24x1.5

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**Tip shape**

straight

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**Operating temperature range**

Type K:

-40 °C ...800 °C

(-40 °F ...1.472 °F)

Type J:

-40 °C ...750 °C

(-40 °F ...1.382 °F)

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**Max. process pressure (static)**

up to 20 °C: 480 bar (6.962 psi)

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**Accuracy**

class 1 acc. to IEC 60584

class 2 acc. to IEC 60584

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**Response time**

depending on configuration

t50 = 3 s

t90 = 7 s

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

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**Ex - approvals**

ATEX II

ATEX Eex

explosion proof

Thermometer

**Certification**

Gost Metrology

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