

# TAF11

## High temperature TC thermometer

Applicable for steel treatment (annealing), concrete furnaces and primaries



More information and current pricing:

[www.sg.endress.com/TAF11](http://www.sg.endress.com/TAF11)

### Benefits:

- Long lifetime by usage of innovative thermowell materials with increased wear and chemical resistance
- Long term stable measurement due to sensor protection with non-porous materials
- Flexible product selection by modular design
- Optimized life cycle costs by means of replaceable spare parts

### Specs at a glance

- **Accuracy** class 2 acc. to IEC 60584
- **Max. process pressure (static)** at 20 °C: 1 bar (15 psi)
- **Operating temperature range** Type K: -40 C ...1.300 C (-40 F ...2.372 F) Type J: -40 C ...750 C (-40 F ...1.382 F) Type N: -40 C ...1.150 C (-40 F ...2.102 F) Type S: 0 C ...1.600 C (32 F ...2.912 F) Type R: 0 C ...1.600 C (32 F ...2.912 F) Type B: 600 C ...1.600 C (1.112 F ...2.912 F)
- **Max. immersion length on request** up to 4.000,00 mm (157,48")

**Field of application:** Measuring points with extremely high process temperatures require these special thermometers with ceramic thermowells and thermocouples made from special metals, such as platinum and rhodium. The thermowell made from special materials serves as protection from mechanical and chemical damages in the process and increases the life span of the used sensors. This leads to: Cost savings for maintenance of the measuring point, quality improvements of the products and increased plant safety.

### Features and specifications

## Thermometer

**Measuring principle**

Thermocouple

**Characteristic / Application**

metric style

modular temperature assembly

high temperature probe (furnace)

incl. single ceramic thermowell

**Thermowell / protection tube**

ceramic protection tube

**Insert / probe**

ceramic capillary, rigid

**Outer diameter protection tube / Insert**

14,0 mm (0,55")

16,0 mm (0,59")

17,0 mm (0,68")

22,0 mm (0,87")

24,0 mm (0,94")

26,6 mm (1,05")

**Max. immersion length on request**

up to 4.000,00 mm (157,48")

## Thermometer

**Material protection tube/ thermowell**

Ceramic (C610)

silicon nitride ceramic (SiN)

sintered silicon carbide (SiC)

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**Process connection**

compression fitting:

G3/4"

G1"

G1 1/2"

adjustable Flange

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**Tip shape**straight

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## Thermometer

**Operating temperature range**

Type K:

-40 C ...1.300 C

(-40 F ...2.372 F)

Type J:

-40 C ...750 C

(-40 F ...1.382 F)

Type N:

-40 C ...1.150 C

(-40 F ...2.102 F)

Type S:

0 C ...1.600 C

(32 F ...2.912 F)

Type R:

0 C ...1.600 C

(32 F ...2.912 F)

Type B:

600 C ...1.600 C

(1.112 F ...2.912 F)

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## Thermometer

### Max. process pressure (static)

at 20 °C: 1 bar (15 psi)

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### Accuracy

class 2 acc. to IEC 60584

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### Integration head transmitter

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

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### Certification

SIL (transmitter only)

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