# TAF16 High temperature TC thermometer

Applicable for cement production, steel treatment, incinerators and fluidized bed furnaces



More information and current pricing: www.apsc.endress.com/TAF16

#### **Benefits:**

- Long lifetime by usage of innovative thermowell materials with increased wear and chemical resistance
- Long term stable measurement due to sensor protection with nonporous 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 ...1.100 C (-40 F ...2.012 F) Type J: -40 C ...750 C (-40 F ...1.382 F) Type N: -40 C ...1.150 C (-40 F ...2102 F) Type S: 0 C ...1.400 C (32 F ...2.552 F)
- Max. immersion length on request up to 4.525,00 mm (178, 15")

Field of application: Measuring points with extremely high process temperatures require these special thermometers with ceramic or metal thermowells as well as thermocouples made from special metals, such as platinum and rhodium. The thermowell made from special materials protects 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. thermowell / protection tube (metal)

#### Thermowell / protection tube

welded protection tube ceramic protection tube

## Insert / probe

mineral insulated (MI), flexible ceramic capilarry, rigid

#### Outer diameter protection tube / Insert

14,0 mm (0,55")

15,0 mm (0,59")

17,2 mm (0,68")

18,0 mm (0,71")

21,3 mm (0,84")

22,0 mm (0,87")

26,7 mm (1,05")

28,0 mm (1,10")

#### Max. immersion length on request

up to 4.525,00 mm (178,15")

## Thermometer

#### Material protection tube/ thermowell

1.4401 (316)

1.4749 (~446)

1.4841 (310)

Alloy 600 (2.4816)

Alloy 601 (2.4851)

Incoloy 800HT (1.4959)

Kanthal AF

Kanthal Super

NiCo

Siliciumnitrid(SiN)

#### **Process connection**

compression fitting:

G1/2"

G3/4"

G1"

G11/4"

G11/2"

adjustable Flange

## Tip shape

straight

## 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)

Type N:

-40 C ...1.150 C

(-40 F ... 2102 F)

Type S:

0 C ... 1.400 C

(32 F ... 2.552 F)

## Thermometer

## Max. process pressure (static)

at 20 °C: 1 bar (15 psi)

## Accuracy

class 2 acc. to IEC 60584

#### Integration head transmitter

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

#### Certification

SIL (transmitter only)

More information www.apsc.endress.com/TAF16

