

iTHERM FlameLine TAF11

High temperature thermometer

Metric TC thermometer with robust ceramic thermowell for high-temperature applications



More information and current pricing:

www.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")

Material protection tube/ thermowell

Ceramic (C610)
silicon nitride ceramic (SiN)
sintered silicon carbide (SiC)

Process connection

compression fitting:
G3/4"
G1"
G1 1/2"
adjustable Flange

Thermometer

Tip shape

straight

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. 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.endress.com/TAF11