

# CJPEC Series

Angled temperature sensor

Ref : 2652

Rev : B



## DESCRIPTION

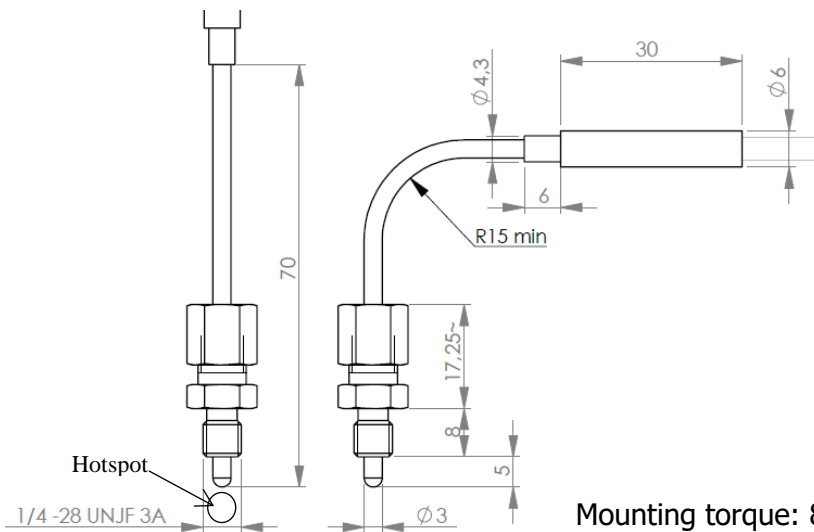
This model of thermocouple, angled and sturdy, is ideal for temperature measurement up to 1000°C in solid, liquid or gaseous environment.

The 2 thermocouple wires are isolated in magnesia compacted in Inconel 600 sheath.

## TECHNICAL DATA

| PARAMETERS                | VALUES  |   |
|---------------------------|---|---|
| Sensor                    | Class 1 sheathed type K thermocouple  |   |
| Response time             | In water: 0.4m/s  | In air: 2m/s  |
|                           | $t_{50\%} = 1.00 \text{ s}$ , $t_{90\%} = 2.80 \text{ s}$   | $t_{50\%} = 22.0 \text{ s}$ , $t_{90\%} = 64.0 \text{ s}$                                 |
|                           | <i>These response times are given for a standard type K thermocouple with insulated hotspot. Response time can be divided by 2 with a hotspot to ground and by 10 with an apparent hotspot.</i> |   |
| Operating Temperature     | Temperature Range<br>from -40°C to 1000°C   | Class 1 tolerances according to IEC584-2<br>$\pm 0.004 t $ or $\pm 1.5^\circ\text{C}$ (1) |
|                           | "t" temperature in °C ; (1) whichever is greater.   |   |
| Storage temperature range | From -20°C to 80°C  |   |
| Maximum pressure          | 500 bars (7500 psi)   |   |
| Insulation Resistance     | 1000 MΩ at 500 Vdc  |   |
| Output                    | Refer to the reference tables of the IEC584-1   |   |
| Electrical connection     | Shielded Teflon PFA isolated type K thermocouple extension (2 meters standard)<br>(Temperature resistance: 250°C peak)  |   |
| Material                  | Inconel 600 (sheathed thermocouple) + Inox 304  |   |
| Sheath curvature radius   | Minimum 15mm  |   |

## SIZE



Mounting torque: 8Nm (70.8 Lb-In)

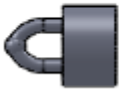
## HOTSPOT



Isolated (standard)



To ground (SM)



Apparent (SA)

*Note: in case of an apparent hotspot, the thermocouple has to be used in a dry, non-conductive environment*

## WIRING

**THERMOCOUPLE EXTENSION  
IEC584-3 COLORS**
**K**

Green

+ Green

- White

## ORDERING INFORMATION

**CJPEC3K5- / special options**

Extension length in meter  
**none**: 2 meters

- **Special options**

| OPTION    | REFERENCE  | FEATURES   |
|-----------|--|--|
| Hotspot   | <b>none</b><br><b>SM</b><br><b>SA</b>  | Isolated (standard)<br>To ground<br>Apparent   |
| Connector | <b>MMK</b><br><b>FMK</b><br><b>MSK</b><br><b>FSK</b><br><b>MUK</b><br><b>FUK</b> | Male miniature type K<br>Female miniature type K<br>Male standard type K<br>Female standard type K<br>Male ultra-miniature type K<br>Female ultra-miniature type K |

## CONTACT

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