

# Electronic Temperature Sensor

Connection Head Type • RTD or Thermocouple

CONTROLLER ACCESSORIES



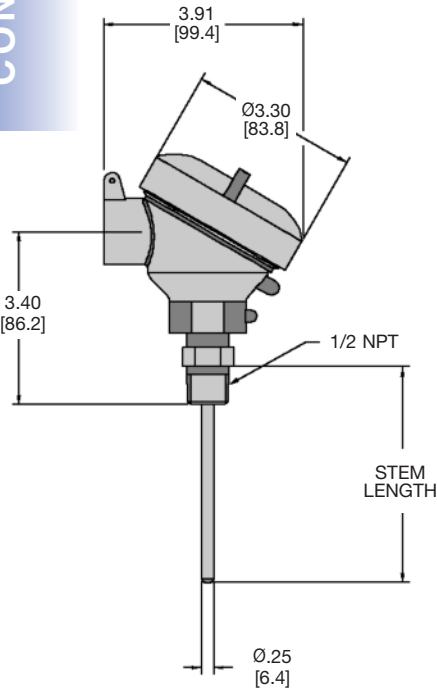
TJDZ04UWA shown

- ▶ Thermocouple or RTD
- ▶ Cast Aluminum Polypropylene or Stainless Steel Head
- ▶ Weather Proof
- ▶ Welded or Spring Loaded Stem

The Trerice **Connection Head** is available with both Type J and Type K Thermocouples, as well as RTD sensors. The weather proof head provides a conduit connection and is available in cast aluminum (screw cover), polypropylene (flip cover) and stainless steel (screw cover). The stem is either welded directly to the 1/2 NPT threaded connection, or is spring-loaded to provide maximum sensitivity. The spring-loaded stem must always be installed in a thermowell.

**Extension wire and transmitter accessories are also available. Please consult the Temperature Sensor Accessories Section for details.**

**For applications where the process media may be corrosive or contained under pressure, the use of a thermowell is required to prevent damage to the sensor and facilitate its removal from the process. To prevent leakage of the process media, spring loaded sensors must always be installed in a thermowell.**



All dimensions are nominal. Dimensions in [ ] are in millimeters.

## Specifications

Sensors	Description
TJD	Type J T/C
TKD	Type K T/C
TDD	100Ω RTD
TMD	1000Ω RTD

### Hot Junction

T/C: Ungrounded  
RTD: Platinum, 3-Wire

**Stem** 316 stainless steel  
1/4" diameter

**Insulation** Ceramic

**Head** Cast aluminum, polypropylene, stainless steel

### Process Connection

1/2 NPT welded or spring-loaded

### Conduit Connection

3/4 NPT Female

### Approximate Shipping Weight

1.1 lbs [0.50 kg]

## Sensor Specifications

### Thermocouple

Type	Color Code	Positive Lead	Negative Lead	Temperature Range
J	Black	Iron* (Fe) [white]	Constantan (Cu-Ni) [red]	32° to 1382°F (0° to 750°C)
K	Yellow	Nickel-Chromium (Ni-Cr) [yellow]	Nickel-Aluminum* (Ni-Al) [red]	32° to 2282°F (0° to 1250°C)

\*magnetic lead

### RTD

Type	Material	Resistance @ 0°C	Temperature Coefficient	Temperature Range
D	Platinum (Pt)	100Ω	a = 0.00385Ω/Ω/°C	-50° to 700°F (-45° to 400°C)
M	Platinum (Pt)	1000Ω	a = 0.00385Ω/Ω/°C	-50° to 700°F (-45° to 400°C)

## HOW TO ORDER

Sample Order Number: **TJD Z 04 U W A**

Sensor	Stem Style	Stem Length	Hot Junction	Connection	Head Material
TJD Type J T/C	Z 316SS, 1/4 O.D.	02 2 1/2" Stem	U Ungrounded (T/C)	S Spring Loaded, 1/2 NPT W Welded, 1/2 NPT	A Aluminum
TKD Type K T/C		04 4" Stem	D 3 Wire (RTD)		P Polypropylene
TDD 100Ω RTD		06 6" Stem			S Stainless Steel
TMD 1000Ω RTD		09 9" Stem			
		12 12" Stem			

Other Lengths: Specify in inches (24" maximum)

Other sensor styles available. Please consult the Trerice Temperature Section.