Electronic Temperature Sensor

Connection Head Type • RTD or Thermocouple Element

TJDZ04UWA shown

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

Specifications

Models	Sensor Type
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 or 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]

The Trerice **Connection Head** is available with both Type J and Type K Thermocouples, as well as RTD sensors. The weatherproofed 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. (Refer to pages 155-161)

HOW TO ORDER

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

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

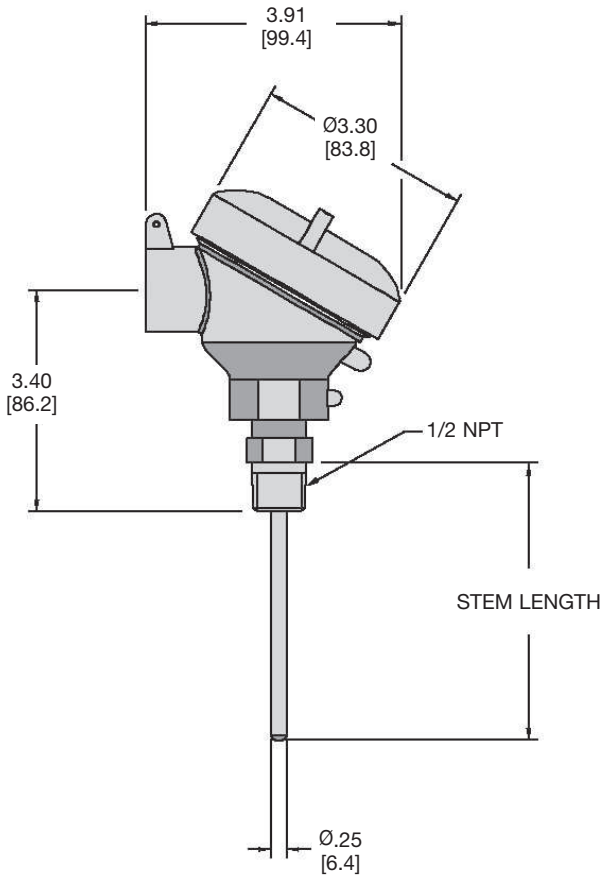
Other stem lengths available: Specify in inches (24" maximum).

12950 W. Eight Mile Road • Oak Park, MI 48237-3288 • TEL:248/399-8000 • FAX: 248/399-7246 • www.TRERICE.com

Electronic Temperature Sensor

Connection Head Type

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



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	Temperature Coefficient	Temperature Range
D	Platinum (Pt)	100Ω	α = 0.00385 Ω/Ω/°C	-50° to 700°F (-45° to 370°C)
M	Platinum (Pt)	1000Ω	α = 0.00385 Ω/Ω/°C	-50° to 700°F (-45° to 370°C)

Electronic Temperature Sensor

Integral Leadwire • RTD or Thermocouple Element

TJDZ06UR120 shown

- **Thermocouple or RTD**
- **Self-Contained Design**
- **Plain or Teflon Covered Stem**

Specifications

Models	Sensor Type
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
Termination	Integral leadwire with spring relief or Teflon sheath (450°F / 230°C maximum)
Leadwire Jacketing	T/C: Fiberglass RTD: Teflon

Approximate Shipping Weight

0.5 lbs [0.23 kg]

Trerice **Integral Leadwire Sensors** are available with an RTD, or a Type J or K Thermocouple. The stem transition includes a spring relief to prevent damage to the leadwire. A Teflon covered sensor and leadwire is offered for use with open tanks or corrosive process media (the Teflon covered sensor does not include a spring relief).

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. (Refer to pages 155-161)

HOW TO ORDER

Sample Order Number: **TDD Z 06 D T 024**

Model	Stem Style	Stem Length	Hot Junction	Connection Style	Leadwire Length
TJD Type J T/C **TKD** Type K T/C **TDD** 100Ω RTD **TMD** 1000Ω RTD	**Z** 316SS, 1/4 O.D.	**02** 2 1/2" Stem **04** 4" Stem **06** 6" Stem **09** 9" Stem **12** 12" Stem	**U** Ungrounded (T/C) **D** 3 Wire (RTD)	**R** Integral Leadwire with Relief Spring **T** Integral Leadwire with Teflon Sheath	Specify Length in inches (i.e., 10 feet=120)

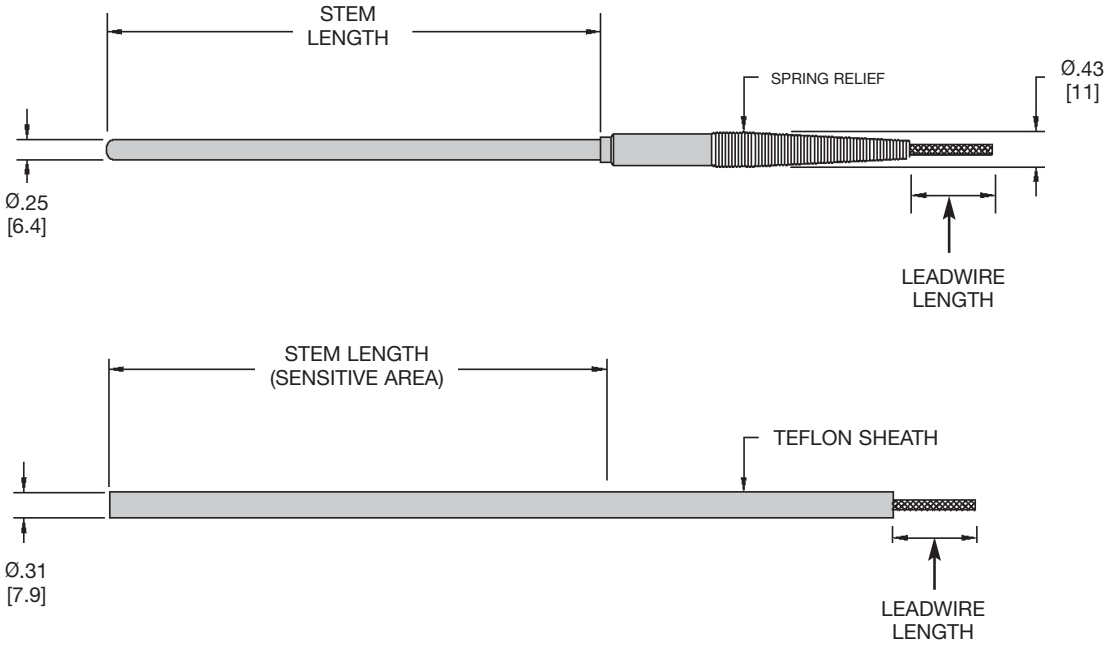
Other stem lengths available: Specify in inches (24" maximum).

12950 W. Eight Mile Road • Oak Park, MI 48237-3288 • TEL:248/399-8000 • FAX: 248/399-7246 • www.TRERICE.com

Electronic Temperature Sensor

Integral Leadwire

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



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	Temperature Coefficient	Temperature Range
D	Platinum (Pt)	100Ω	α = 0.00385 Ω/Ω/°C	-50° to 700°F (-45° to 370°C)
M	Platinum (Pt)	1000Ω	α = 0.00385 Ω/Ω/°C	-50° to 700°F (-45° to 370°C)

Note: Teflon covered sensors are limited to 450°F (232°C).

Electronic Temperature Sensor

Plug with Mating Jack • Thermocouple Element

TJDZ06UP shown

- **Type J or K Thermocouple**
- **Color-coded Plug**
- **Polarized Mating Jack**

The **Trerice Plug** with **Mating Jack Sensor** is available with a Type J or Type K Thermocouple. This sensor is of a simple design, and provides for easy installation or replacement. The plug is color coded by thermocouple type, and the mating jack is polarized to ensure proper installation.

Extension wire is also available. Please consult the Temperature Sensor Accessories Section for details.

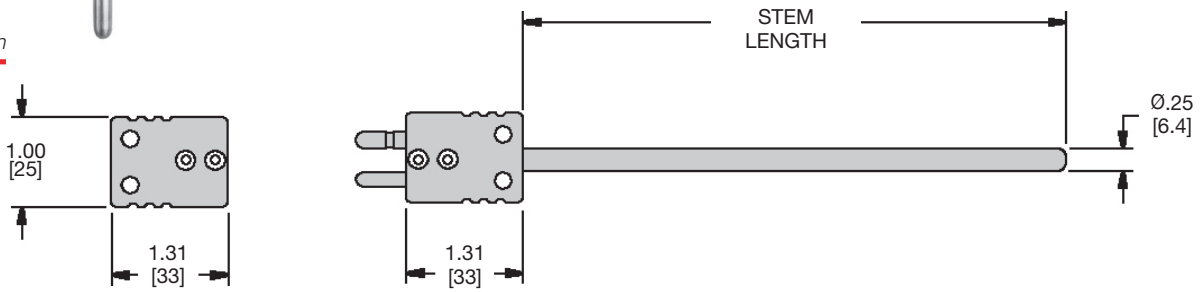
Specifications

Models	Sensor Type
TJD	Type J T/C
TKD	Type K T/C

Hot Junction	Ungrounded
Stem	316 stainless steel 1/4" diameter
Insulation	Ceramic
Connection	Standard size plug with mating jack
Plug	Quick Disconnect, color coded

Approximate Shipping Weight

0.3 lbs [0.14 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*

NOTE: Plug is limited to 400° F (205°C)

HOW TO ORDER

Sample Order Number: **TKD Z 06 U P**

Model	Stem Style	Stem (Length)	Hot Junction	Connection Style
TJD Type J T/C **TKD** Type K T/C	**Z** 316SS, 1/4 O.D.	**02** 2½" Stem **04** 4" Stem **06** 6" Stem **09** 9" Stem **12** 12" Stem	**U** Ungrounded	**P** Plug with Mating Jack

Other stem lengths: Specify in inches (24" maximum).

12950 W. Eight Mile Road • Oak Park, MI 48237-3288 • TEL:248/399-8000 • FAX: 248/399-7246 • www.TRERICE.com