

Watlow RTDs Ensure Precise and Repeatable Temperature Measurement



Watlow provides a complete line of RTDs for a wide variety of process and industrial applications. These sensors have been designed to ensure precise and repeatable measurements as well as meet the environmental requirements for the application. RTD sensors may be configured to meet your specific application need with options including, but not limited to the following: element type, lead wire configuration, termination style, sheath materials, lengths and diameters, process connection heads, transmitters, thermowells, spring loading, flanges and surface mount packages.

Watlow takes pride in working with customers to solve difficult application problems and will work with you to tailor a solution to meet your specific application requirements.

Applications

- Air conditioning and refrigeration servicing
- Furnace servicing
- Food equipment
- Processing
- Stoves and grills
- Textile production
- Plastics processing
- Petrochemical processing
- Micro electronics
- Air, gas and liquid temperature measurement

Your Authorized Watlow Distributor is:

Features and Benefits

Strain-free construction

- Provides highly-repeatable, long-term, accurate readings
- Allows elements from different lots to be substituted without recalibration

High signal-to-noise output

- Increases accuracy of data transmission
- Permits greater distances between sensor and measuring equipment

Linear change in resistance per degree change in temperature

- Makes it easy to interpret the signal
- Allows for less complex instrumentation
- No cold junction compensation required like a thermocouple

High accuracy

- Provides RTDs with either Class A $\pm 0.15^{\circ}\text{C}$ or Class B $\pm 0.3^{\circ}\text{C}$ nominal at 0°C
- Provides three and four wire constructions available to minimize impact

Wide temperature operating range

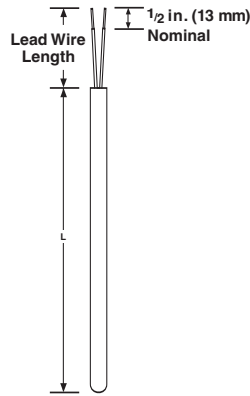
- Operates at temperature ranging from -200 to 650°C (-328 to 1202°F)

 **WATLOW**
Better Thermal Solutions...*Faster*

RIC-RTD-0907

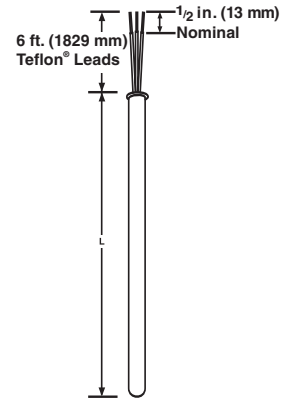
Standard Industrial Insulated Leads – Style RB

Style RB RTDs have standard, insulated leads with an internal heat transfer plate for a quick time response and high accuracy. These RTDs are also epoxy sealed to resist moisture and pull out. There is a standard 260°C (500°F) potting. Style RB RTDs are constructed of 316 stainless steel for a durable, rigid sheath with temperatures from -50 to 260°C (-58 to 500°F). These RTDs are manufactured in diameters from 0.125 to 0.250 inches.



Emergency Use Cut-to-Length – Style RK

Style RK RTDs are manufactured with a cut-to-length feature that combats the need to stock several RTD lengths. The probes can be shortened to a three inch minimum using a tubing cutter. These sensors have dependable readings, three-wire, Class A DIN 0.00385 curve. Style RK RTDs are internally sealed to prevent moisture penetration and are constructed with a durable, rigid 316 stainless steel sheath with temperatures from -50 to 260°C (-58 to 500°F). These RTDs can be sold in an emergency kit of five adjustable RTD sensors.



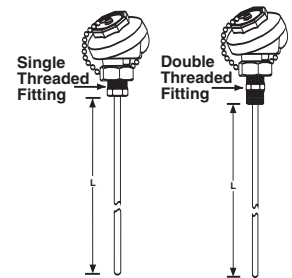
Plug or Jack Termination – Style RC

Style RC RTDs are manufactured with durable connectors with copper pins for plug or jack termination applications. These provide simple connection to extension leads and have a 200°C (400°F) temperature rating. In addition, the RTD has a crimp, compression adapter that assures superior connector attachment with high accuracy and dependable readings. Style RC RTDs are constructed of 316 stainless steel for a durable, rigid sheath with temperatures from -50 to 260°C (-58 to 500°F).



Connection Head – Style RR

Style RR connection heads provide superior dust and moisture resistance and come in single and double threaded fittings. These weatherproof plastic heads resist weak acids, organic solvents, alkalis, sunlight and dust. Complete assembly is available.



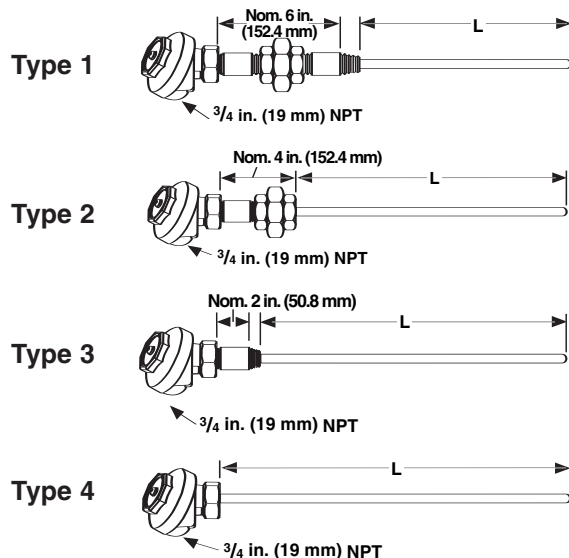
Metal Transitions – Style RF

Style RF RTDs is constructed of flexible, mineral insulation that provides a bendable and highly durable sensor. It is manufactured with stainless steel transitions that are crimped to the sheath and filled with 260°C (500°F) epoxy (brazing is optional). These sensors have a coiled spring for strain relief, which protects lead wire against sharp bends in the transition area. The RF RTD has a -200 to 650°C (-328 to 1200°F) temperature rating with dependable readings and high accuracy. These sensors come in diameters ranging from 0.125 to 0.250 inches.



Thermowells – Style RT

Style RT thermowells and pipe wells protect the sensor and are made of high quality construction. They are constructed with mineral insulation and are available in diameters ranging from 0.125 to 0.250 inches. Style RT is available with spring-loading ensuring positive contact every time. There are a variety of connection head options to meet your specific application requirements. Complete assembly is available.



Ordering Information

Ordering information varies. Please contact Watlow for details.

To be automatically connected to the nearest North American Technical and Sales Office:

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