Fast, Accurate, Repeatable Temperature Measurement

Watlow® thermistors are designed to ensure fast, accurate and repeatable temperature measurement. Thermistors are highly sensitive to small changes in temperature and maintain accurate temperatures over a limited range. These sensors are made with either epoxy-coated or glass-coated constructions and can be used in the most demanding environmental conditions.

**Performance Capabilities**
Epoxy thermistors are suitable for use from -75 to 302°F (-60 to 150°C). Glass-coated thermistors are available for use from -75 to 500°F (-60 to 260°C). High temperature rugged glass coated thermistors rated up to 572°F (300°C) are available for select high volume applications. Please contact the factory for availability. Thermistors have an accuracy of ±1% at 77°F (25°C).

**Features and Benefits**
- Designed to maintain accuracy over the life of the sensor
- Improved process control
- High resistance
- Large signal change compared to RTD’s minimizing the impact of lead wire resistance errors
- Interchangeable
- Maintains good system repeatability
- Small mass and internal heat transfer paste
- Quick time response
- Pointe sensitive
- Able to sense temperature in a very specific location

**Typical Applications**
- Heating, ventilation and air conditioning (HVAC)
- Air conditioning
- Refrigeration and freezer temperature control
- Food preparation
- Deep fryers
- Food storage systems
- Medical
- Blood analysis and dialysis equipment
- Infant incubators
- Industrial electronics
- Fluid temperature measurement
- Liquid level indicators
Standard Industrial Thermistor with Insulated Leads
Style TB

Style TB thermistors are constructed from a durable and rigid 316 stainless steel sheath and have standard insulated leads with an epoxy seal to resist moisture and pull out. Thermistors have a very fast time response and are available in 1000, 2200, 3000, 10,000 and 100,000 ohm elements with temperature ratings from -75° to 302°F (-60 to 150°C) with 1 percent accuracy or from -75 to 500°F (-60 to 260°C) with 15 percent accuracy.

Features and Benefits
Rigid 316 stainless steel sheath
- Ideal for industrial applications
Cold end epoxy seal
- Rated to 260°C (500°F)
Internal heat transfer paste
- Quick time response

Ordering Information
Part Number

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- **Sheath O.D. (in.)**
  - H = 0.188
  - J = 0.250

- **Lead Wire Construction**
  - B = Standard - PFA

- **Fittings**
If requested, enter order code from sensor catalog (Thermistor Fitting Option Section). If none enter “0”

- **Lead Wire Termination**
  - T = Standard leads
  - U = Leads with spade lugs

- **Temperature Rating and Accuracy**
  - A = -75 to 302°F (-60 to 150°C) ±1% accuracy @ 25°C
  - B = -75 to 500°F (-60 to 260°C) ±15% accuracy @ 25°C
  - * Only available with 1,000, 2,200, 3,000 or 10,000Ω
  - **Only available with 100,000Ω

- **Sheath Length “L” (in.)**
Whole inches: 02 to 36

- **Sheath Length “L” (fractional in.)**
  - 0 = 0
  - 4 = 1/2 in.

- **Element/Resistance at 77°F (25°C)**
  - E = 1,000Ω
  - G = 3,000Ω
  - T = 100,000Ω
  - F = 2,200Ω
  - * Compatible with EZ-ZONE controllers

- **Sheath Construction**
  - 0 = 316 SS

- **Lead Wire Length “E” (ft)**
Whole feet: 01 to 99
Speciality Construction Styles

Adjustable Spring Style
Part Number 10 = 6 in.
Part Number 11 = 12 in.

Adjustable spring style thermocouples bend to any angle to fit a wide range of hole depths, eliminating the need to stock numerous styles.

Adjustable Armor Style
Part Number 12

Adjustable armor thermocouples bend to any angle to fit a wide range of hole depths, eliminating the need to stock numerous styles. A stainless steel hose offers additional lead protection in demanding applications.

Cartridge with Flange
Part Number 25

The flanged thermocouple allows rapid assembly and low profile when going through bulkheads.

Open Air
Part Number 50

Aspirated tube design allows air to flow directly over thermistor for fast time response.

Open Air with Flange
Part Number 55

Aspirated tube design allows air to flow directly over thermistor for fast time response with a flange for mounting sensor.

Surface Mount
Part Number 80

Low profile aluminum block for fast accurate surface measurement.