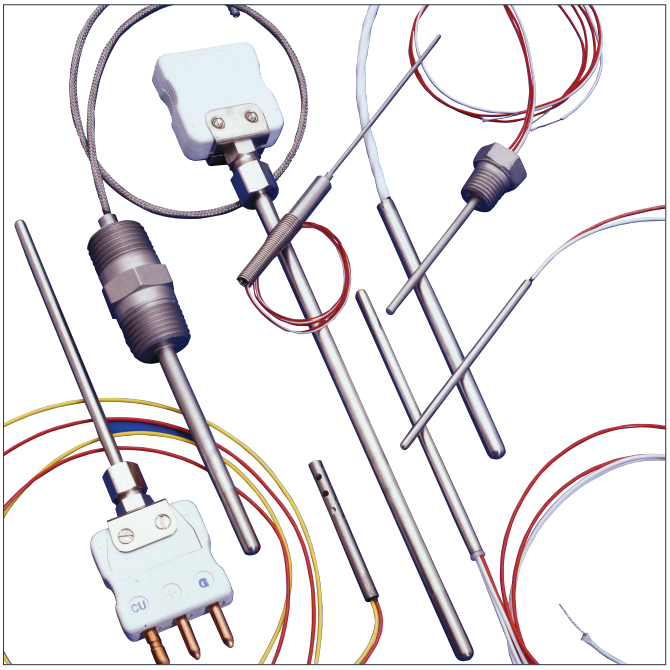
Fast, Accurate, Repeatable Temperature Measurement



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

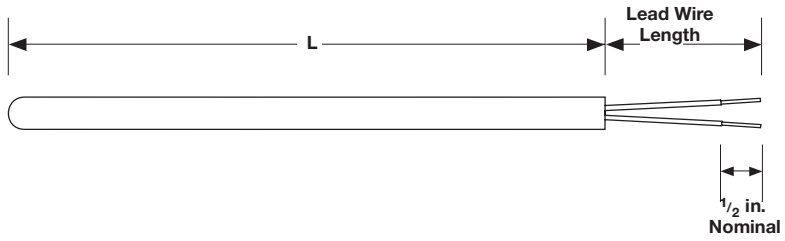
Style TB thermistors are constructed from a durable and rigid 316 stainless steel sheath and have standard insulated leads with an epoxy seal to resist moisture and pull out. Thermistors have a very fast time response and are available in 1000, 2200, 3000, 10,000 and 100,000 ohm elements with temperature 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

①	②	③ Sheath O.D. (in.)	④ Lead Wire Const.	⑤ Fittings	⑥ Lead Wire Term.	⑦ Temp. Rating & Accuracy	⑧ ⑨ Sheath Length "L" (in.)	⑩ Sheath Length "L" (fract. in.)	⑪ Element/ Resistance	⑫ Sheath	⑬ ⑭ Lead Wire Length "E" (ft)	⑮
T	B		B							0		0

③ Sheath O.D. (in.)	
H =	0.188
J =	0.250

④ Lead Wire Construction	
B =	Standard - PFA

⑤ Fittings

If requested, enter order code from sensor catalog (Thermistor Fitting Option Section). If none enter "0"

⑥ Lead Wire Termination	
T =	Standard leads
U =	Leads with spade lugs

⑦ 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

⑧ ⑨ Sheath Length "L" (in.)

Whole inches: 02 to 36

⑩ Sheath Length "L" (fractional in.)	
0 =	0
4 =	1/2 in.

⑪ Element/Resistance at 77°F (25°C)	
E =	1,000Ω
G =	3,000Ω
T =	100,000Ω
F* =	2,200Ω

* Compatible with EZ-ZONE controllers

⑫ Sheath Construction	
0 =	316 SS

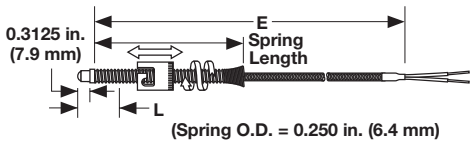
⑬ ⑭ Lead Wire Length "E" (ft)

Whole feet: 01 to 99

Speciality Construction Styles

Adjustable Spring Style

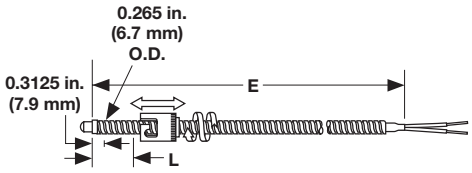
Part Number 10 = 6 in.
Part Number 11 = 12 in.



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

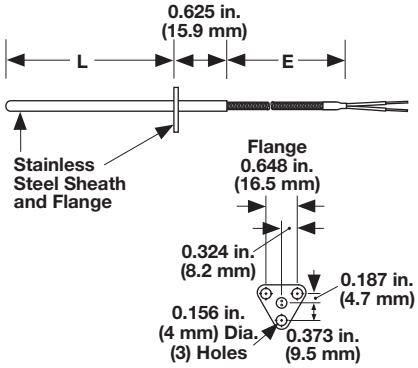
Part Number 12



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

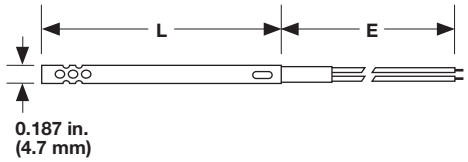
Part Number 25



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

Open Air

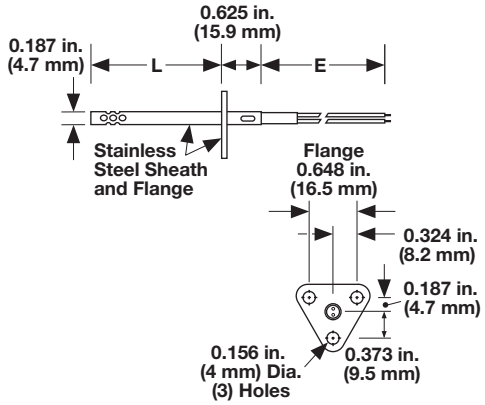
Part Number 50



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

Open Air with Flange

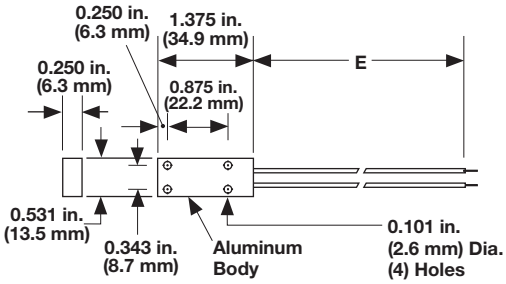
Part Number 55



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.

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