

Base Metal Thermocouples

A Variety of Thermocouple Variations Available to Meet Your Application Needs

Watlow® offers two basic types of base metal thermocouples with protection tubes: bare and ceramic insulated elements. Many variations of each type are available to meet your application needs.

Performance Capabilities

- 2300°F (1260°C) maximum temperature

Features and Benefits

Insulated wire thermocouples

- Suitable for most general purpose applications

Bare and ceramic insulated elements

- Available in ASTM E 230 Types K and J, can be twisted or butt welded
- Choices include straight or angle types, two-or-four-hole insulators and single or dual element

Protected thermocouples

- Supplied complete with head, block and protection tube
- Several styles available



Typical Applications

- Metal processing such as aluminum, zinc, brass (with appropriate protection tube)
- Chemical
- Petrochemical
- Industrial storage tanks

Bare Elements

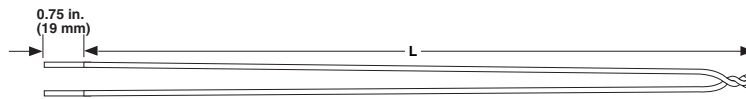
To order, specify: Part number-length

Example: 1402-36 or 1432-BW-24

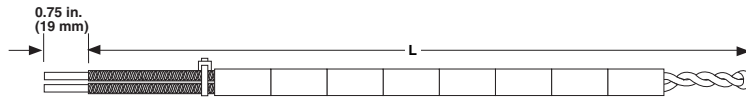
Straight Elements with Two-Hole Insulators

To order, specify: Part number-length

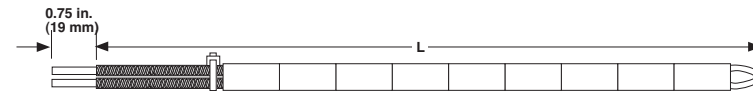
Example: 1409-48 or 1436-BW-18



Bare Thermocouple Element, Twisted and Welded



Thermocouple Element, Twisted and Welded

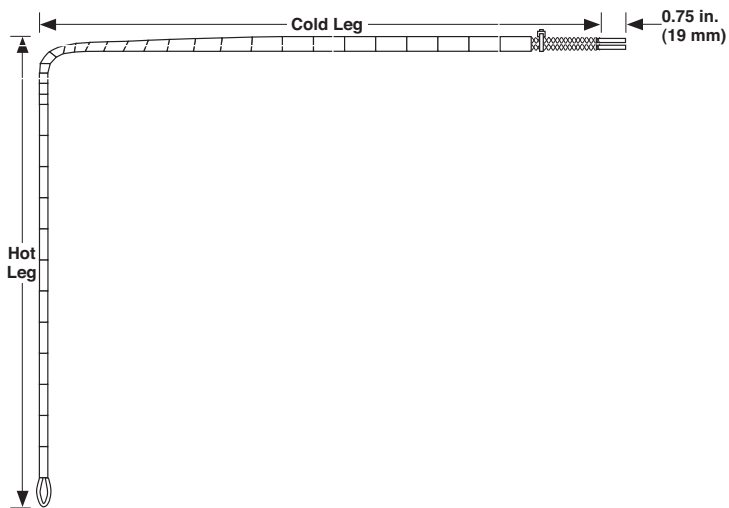


Thermocouple Element, Butt Welded

Angle Type with Two-Hole Insulators

To order, specify: Part number-cold leg length-hot leg length

Example: 1440-BW-12-24



Dual Elements with Four-Hole Insulators

To order, specify: Part number-length

Example: 1442-BW-36



Thermocouple Element, Butt Welded

Immersion Tips

SERV-RITE immersion tips are superior thermocouples for nonferrous molten metals. The hot junction is forged into the 446 stainless steel sheath for maximum sensitivity. Available in Type K calibration only.

To order, specify: Part number-tip length-lance length

Example: 1449-501-T-8-43
1449-M-12-43



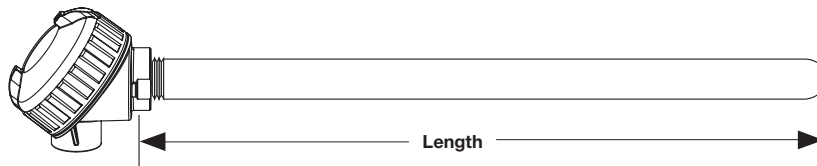
Standard Thermocouple with Protection Tubes

Straight Type

To order, specify: Part number-length

Example: 1409-1308-24

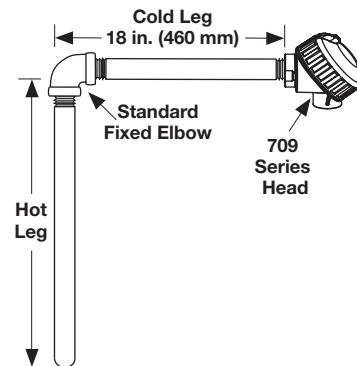
Metal Tube



90 Degree Angle Type

To order, specify: Part number- cold leg length, hot leg length.
Standard cold leg length is 18 inches.

Example: 1414-1395-18-24



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