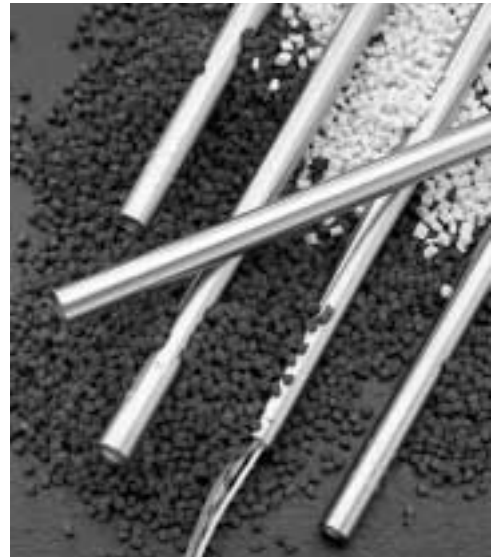


## Proven Performer Packaged In Economical Design



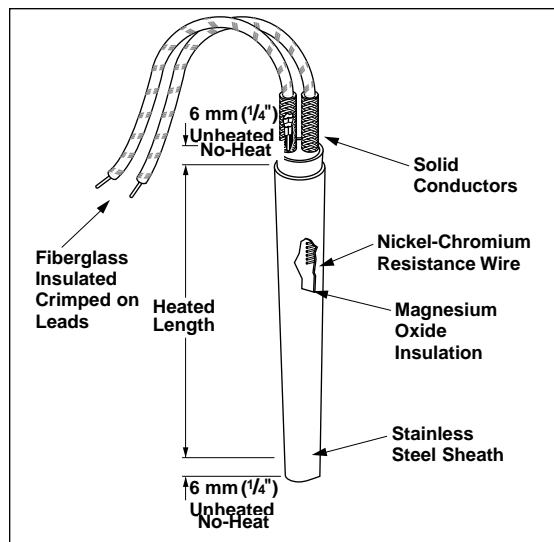
The Watlow EB cartridge heater is a proven performer like the metric FIREROD®. That's because the same quality materials go into its construction; MgO insulation, nickel-chromium resistance wire, silicone-fiberglass insulated lead wires. The only difference is that the EB cartridge is packaged in a more economical design. Instead of having the high watt density capabilities of a metric FIREROD, it's made for medium watt density applications.

### Performance Capabilities

- Part temperatures to 600°C (1100°F)
- Maximum watt density to 30 W/cm<sup>2</sup> (190 W/in<sup>2</sup>)
- Maximum voltage to 480V~(ac)

### Applications

- Plastic injection molds, dies and sealing jaws
- Hot melt systems, labeling
- Industrial and textile manufacturing equipment



### Features and Benefits

#### Magnesium oxide insulation compacted to the proper density

- Results in high dielectric strength and contributes to faster heat-up

#### Nickel-chromium resistance wire precisely wound through the heated length

- Assures even, efficient distribution of heat to the sheath

#### Metallurgically-bonded conductor pins crimped connected to the resistance wires

- Ensures trouble-free electrical continuity

#### Flexible stranded wires

- Insulates the wires to temperatures of 250°C (480°F)

#### Optional lead end with silicone rubber seal

- Protects the leads against moisture and other contaminants

#### VDE component recognition to 230V~(ac)

- According to VDE 0721 1/3.78 and part 2/3.78 Section E in connection with VDE 0720 part 1/11.74



STL-MEB-1001

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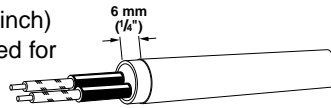
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# M E T R I C   E B   C A R T R I D G E   H E A T E R

## Termination Options

### Crimped-on Lead

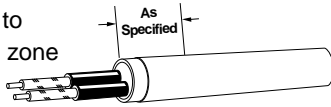
Crimped-on leads with a 6 mm ( $\frac{1}{4}$  inch) unheated section are recommended for applications where the lead wire temperature does not exceed 250°C (480°F).



Unless a longer length is specified, 250 mm (10 inch) leads will be supplied.

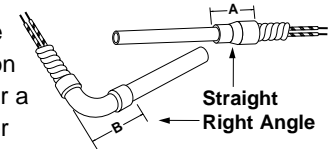
### No-Heat Zone

An unheated section can be used to extend the leads safely into a cool zone in a high temperature application. Leads should be kept below 250°C (480°F) for maximum service life.



### Galvanized Conduit

Flexible galvanized conduit can be installed over the leads for abrasion protection. It is attached with either a straight or 90 degree elbow copper coupler. The copper coupler overlaps the heater sheath by 6 mm ( $\frac{1}{4}$  inch). A no-heat section is required.



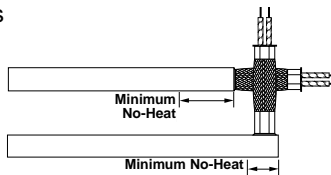
### Stainless Steel Hose

Stainless steel hose also protects leads against abrasion. It is attached with a straight or 90 degree elbow copper coupler. The copper coupler overlaps the heater sheath by 6 mm ( $\frac{1}{4}$  inch).

It can also be swaged-in straight or silver soldered to the heater sheath at a right angle. A no-heat section is required.

### Stainless Steel Braid

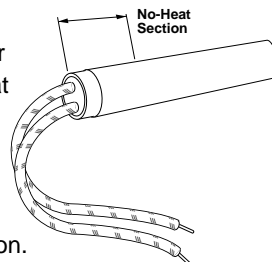
Like stainless steel hose, stainless steel braid also protects against abrasion. Stainless steel braid is swaged-in straight or crimped-on to the heater at a right angle. Metal braid is recommended when excellent flexibility with good physical protection is needed. An unheated section is required.



### Swaged-In Flexible Lead

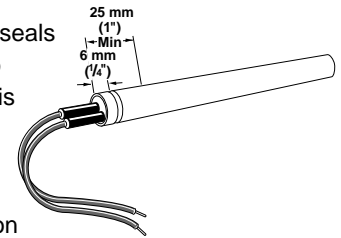
Swaged-in flexible leads, with a silicone-fiberglass insulation, are recommended for applications in which the leads must be bent at the exit point from the heater. Unless longer length is specified, 250 mm (10 inch) leads are supplied.

Heaters 140 mm (5½ inches) or shorter generally have a 6 mm ( $\frac{1}{4}$  inch) no-heat section. Heaters to 250 mm (10 inches) require a 25 mm (one inch) no-heat section. Heaters greater than 250 mm (10 inches) may require more than a 25 mm (one inch) no-heat section.



### Moisture Resistant Seal

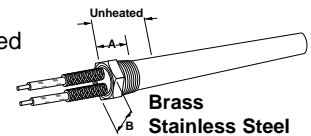
Silicone rubber moisture resistant seals can be provided at the lead end to virtually seal the heater. This seal is rated to 230°C (450°F) continuous operation.



A 25 mm (one inch) no-heat section is required at the lead end. Solid pin leads exit through the seal with crimped-on silicone rubber insulated lead wires and silicone rubber sleeves that extend into the seal. Swaged-in leads are also an option where flexibility at the lead exit is required.

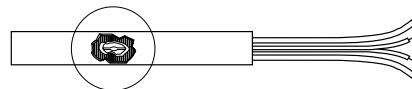
### Threaded Fitting

Either brass or stainless steel threaded fittings for screw-in mounting can be added to units that have moisture resistant seals.



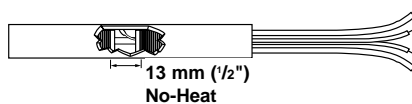
## Internal Thermocouple

### Style A



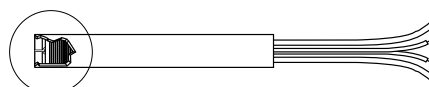
Style A is used to evaluate heat transfer efficiency of an application. The junction is located in the heater core to monitor the internal temperature of the heater.

### Style B



Style B approximates part temperature, and is available in all diameters. The thermocouple junction can be in contact with the inside of the heater sheath, located in the 13 mm ( $\frac{1}{2}$  inch) no-heat section anywhere along the heater length.

### Style C



Style C is useful in applications where material flows past the end of the heater. This junction is embedded in a special end disc. Type C is available only on 6.5 mm (0.25 in.), 8 mm (0.31 in.), 10 mm (0.39 in.), 12.5 mm (0.49 in.) and 16 mm (0.63 in.) diameter units.