Named for its 0.375 in. (9.5 mm) thickness, the rugged Watlow® 375 strip heater is capable of both high temperatures and high watt densities.

Watlow begins construction by accurately placing a coiled, nickel-chromium element wire in the center of the heater. The element wire is then embedded in magnesium oxide (MgO)-based insulation compacted into a solid mass creating excellent heat conductivity and high dielectric strength. The heater is then enclosed in aluminized steel or 430 stainless steel sheathing.

**Performance Capabilities**
- Aluminized steel sheath temperatures up to 1100°F (595°C)
- 430 stainless steel sheath temperatures up to 1200°F (650°C)
- Watt densities up to 100 W/in² (15.5 W/cm²)
- UL® approved up to 240VAC (File No. E52951)
- CSA approved up to 600VAC (File No. LR7392)

**Features and Benefits**
- Nickel-chromium element wire is centered in the heater
  - Assures uniform heat
- Aluminized steel sheath
  - Operates at higher temperatures and resists corrosion better than iron-sheathed heaters
  - Minimizes heat-up time
- Optional 430 stainless steel sheath
  - Meets temperature requirements that reach up to 1200°F (650°C)
- Post terminals, welded to the element wire
  - Produces strong, trouble-free connections
- Rigid 3/8 in. (9.5 mm) thick design
  - Enables the heater to fit into many existing applications
- Over 100 in-stock models in popular sizes and ratings
  - Allows next day shipment
- Available dimensions are 1½ in. (38 mm) wide and 5½ to 48 in. (140 to 1219 mm) long
  - Fits a variety of application needs

**Typical Applications**
- Food warming
- Freeze and moisture protection
- Tank and platen heating
- Packaging
- Dies and mold heating
- Autoclaves
- Ovens
- Telecom
Specifications

Calculating Watt Density

Use the Maximum Allowable Watt Density graphs and formulas to ensure the allowable watt density for the heater does not exceed the specific application requirements. Watt density is calculated for one side of the heater only.

Formulas

\[
\text{Watt Density} = \frac{\text{Wattage}}{\text{Heated Area}}
\]

Heated Area

(Offset Terminals) \(= \) \([\text{Overall Length} (A) \times 1.5 \text{ in.}] - 6 \text{ in}^2\)

(Parallel Terminals) \(= \) \([\text{Overall Length} (A) \times 38 \text{ mm}] - 38.7 \text{ cm}^2\)

(One-on-One Terminals) \(= \) \([\text{Overall Length} (A) \times 1.5 \text{ in.}] - 6 \text{ in}^2\)

Heated Area

Sheath Temperature (Aluminized Steel)

- 70°F (21°C) ambient operating in still air
- Sheath Temperature (SS)

Units 24 in. (610 mm) and longer

Consult Factory
Termination Options

Offset Terminals

Two 10-24 threaded post terminals are offset from each other on the same end.

Parallel Terminals

Two 10-24 threaded post terminals are used; both terminals on one end.

One-on-One Terminals

Two 10-24 threaded post terminals are placed one on each end.

In-Line Terminals

Two 10-24 threaded post terminals are in-line with each other on the same end.
Termination Options (Con’t)

Metallic Terminal Boxes - Variations

Available on in-line terminals only.

Available on offset terminals from stock and manufactured.

Metallic terminal boxes are available from stock on offset terminals. Terminal boxes act as a safety feature by covering the terminals. A conduit may be attached to the box through 7/8 in. (22.2 mm) diameter holes in the ends of the box. To order, specify terminal box.

Ceramic Terminal Covers

Ceramic terminal covers offer a convenient and economic method to insulate post terminals. They are sized for standard length posts with 10-24 screw thread size, supplied as an accessory item and shipped separately. Specify Z-4918 and quantity.

Secondary Insulation Bushings

Insulators are suitable when air heating and/or voltage to ground is a concern. A secondary insulation bushing kit, part number Z5230, contains one set of bushings for one heater. To accommodate bushings, 17/32 x 11/16 inch diameter mounting holes must be specified when ordering the heater.

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