TYPE MF — Mounting Bracket

Tempco’s made-to-order mounting brackets are made from 18 gauge stainless steel for strength and stiffness. It is an economical way to mount the heater in non-presurizing, non-liquid applications. Unless otherwise specified, the bracket will be located 1/2" from the edge of the heater sheath. OEM quantity brackets are manufactured by Tempco on our own high speed precision N/C Turret Press. The standard method of attaching the tubular element to the bracket is staking or crimping. The rectangular mounting bracket shown at right is a popular made-to-order design. Specify all dimensions shown when requesting a quote.

Custom brackets of any size, thickness or material can be supplied to meet your requirements.

Magnesium Oxide (MgO) is used as the insulating material in Tempco tubular heaters because of its excellent thermal conductivity and dielectric strength. However, MgO is hygroscopic and can absorb moisture from the atmosphere. This absorption of moisture may be detected when an Insulation Resistance (IR) test is done with a megohmmeter prior to energizing the heater circuit. In very humid environments, circuits utilizing a GFI (ground fault interrupter) for safety may experience nuisance tripping when energizing the heater.

The Tempco manufacturing process produces a dry element with an IR of several thousand megohms minimum. However, after shipment and depending on humidity levels and storage time, a heater can absorb moisture and show a decrease in IR. In many cases, depending on the supply voltage and the application, the heater can be safely energized and will dry itself out.

If a heater has absorbed moisture, a safe and effective method of drying it out prior to installation is to bake it in an oven at 300°F (149°C) until an acceptable IR reading is obtained. When possible, removing the terminal hardware will expedite this process. If this method is not practical consult factory for other recommendations.

For applications where moisture absorption would be unacceptable Tempco has several optional element end seals to retard absorption of moisture in the MgO. If a true hermetic seal is required, ceramic to metal end seals (Type H) are available. With any of these seals, the maximum recommended termination temperature in the seal area must not be exceeded.

Style SS—Silicone Resin Seal

A brushed-on coating that penetrates the MgO, offering economical moisture protection under humid storage conditions.

- **Maximum Usable Termination Temperature:** 390°F (200°C)
- **UL Rated Maximum Termination Temperature:** 221°F (105°C)
- **Type V2A:** conformal coating
- **Type V2B:** silicone oil

**Style SER—RTV Seal**

RTV (room temperature vulcanizing) silicone rubber adhesive sealant provides a good moisture seal.

- **UL Rated – Maximum Termination Temperature:**
  - **Type R:** 302°F (150°C)
  - **Type R1:** 392°F (200°C)

**Style SEH—Epoxy Resin Seal**

Epoxy resin provides a moisture resisting barrier.

- **UL Rated – Maximum Termination Temperature:**
  - **Type V:** 194°F (90°C)
  - **Type V1:** 266°F (130°C)
  - **Type V4:** 392°F (200°C)