

# Phoenix **Thermal** Supply

## MI BAND LEAD EXIT TYPES:

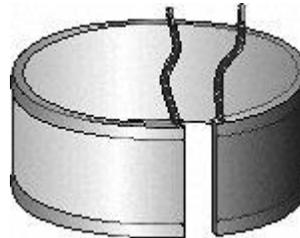
### Type 'T' - Post



### Terminals :

Type 'T' is made in different configurations: 1) with a single stud termination exiting from each side of the gap, 2) both on one side for the gap, both on each half of a two-piece construction, or 3) located opposite the gap. This style of termination allows for high amperage heaters. Installation is easy where wiring stays with the machine and connects directly to the band heater.

### Type 'N' - Flexible Leads Near



### Gap:

Type 'N' is made with 1 lead exiting from each side of the gap, this allows for low profile applications where lead clearance can't be an issue. Standard length is 12" flexible leads, longer is available upon request by the inch.

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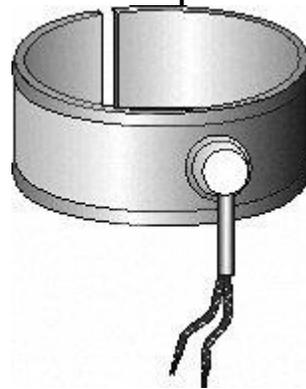
## Type 'C' - Flexible Off the Top



Metal:

Type 'C' is made with 1 lead cap and both leads exiting vertically off the top metal surface of the **heater** body. Standard location of opposite gap (180°) and centered on the width. Lead cap is welded to the top metal. Standard length is 12" flexible fiberglass leads, longer is available upon request ordered by the inch. Also available with flexible stainless steel overbraid or armor flex hose.

## Type 'CL' - Flexible Off the Top

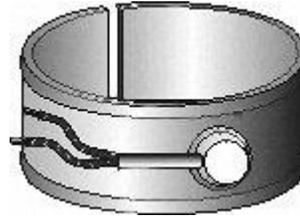


Metal:

Type 'CL' is made with 1 lead cap and both leads exiting through a channel tube "across the width". Standard location of the cap is opposite gap (180°) and centered on the width. Lead cap is welded to the top metal surface of the **heater** body. Standard length is 12" flexible fiberglass leads, longer leads are available upon request ordered by the inch (example: 120" leads). Also available with flexible stainless steel overbraid or armor flex hose.

## Type 'CL90' - Flexible Off the Top

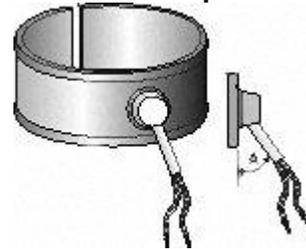
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Metal:

Type 'CL90' is made with 1 lead cap and both leads. Leads exit through a channel tube "turned 90° and exiting inline with the heater". Standard location of the cap is opposite gap (180°) and centered on the width. Lead cap is welded to the top metal surface of the heater body. Standard length is 12" flexible fiberglass leads, longer leads are available upon request and ordered by the inch (example: 120" leads). Also available with flexible stainless steel overbraid or armor flex hose.

## Type 'CL45' - Flexible Off the Top



Metal:

Type 'CL45' is made with 1 lead cap and both leads. Leads exit through a channel tube "across the width". Standard location of the cap is opposite gap (180°) and centered on the width. Lead cap is welded to the top metal surface of the heater body. The tube angle can be specified to turn up 45 degrees allowing clearance and bands to be installed side-by-side. Standard length is 12" flexible fiberglass leads, longer leads are available upon request and ordered by the inch (example: 120" leads). Also available with flexible stainless steel overbraid or armor flex hose.

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## Mineral Insulated Band Heater Leadwire Type:

- 1) Plain Fiberglass TGGT Leadwire: Standard heaters are supplied with 250°C (482°F)



- 2) Fiberglass MGT Leadwire with Mica Tape: Upon request, heaters are supplied with 450°C (842°F)



- 3) Fiberglass Leadwire with Silicone Sleevling: Upon request, heaters are supplied with 200°C (392°F) rated Silicone sleevling. This sleevling is moisture resistant and abrasion resistant.



- 4) Lead protection can be supplied on the above for abrasion resistance.

- 4a) One popular style is Stainless Steel Overbraid.



- 4b) Another popular style is Stainless steel Armor.



\*\*stainless steel braid is VERY flexible and can almost be tied into a tight knot, Armor is not a flexible a braid. Armor is strong and bendable but will break if bent too far. It's bend radius is different with it's diameter. Armor/Hose is comparable to the cord protection on an old phone booth. Some people call it square lock armor.\*\*

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## Mineral Insulated Band **Heater** Ordering Information:

To order Your Mineral Insulated band **heater**, please contact one of our Sales Engineers <mailto:sales@ptsheat.com> You will need to provide the following details: One Piece or Two Piece Construction, Inside Diameter, Width, Wattage, Voltage, Lead Length, Lead Style and protection, If any holes are needed in the sheath and their location. We will help with the proper clamping for your heater construction. Most popular lockup is Welded Barrel Nuts or Strap End Clamping. Standard Lead time is 16 working days ARO. Rush deliveries are available upon request and approval from the factory.

## Applications & Industries:

Medical and Dental Equipment, Packaging, Plastics Processing, Pulp and Paper, Rubber Processing, Semiconductor Manufacturing. AEROSPACE, AUTOMOTIVE, FOOD SERVICE, FUEL CELL, PACKAGING, PLASTICS, RUBBER, COMPOUNDING, THERMOFORMING, BLOW MOLDING, INJECTION MOLDING, EXTRUSION, CHEMICAL, TEXTILE, BOTTLING, PHOTOVOLTAIC, SEMICONDUCTOR, MEDICAL, ANALYTICAL INSTRUMENTATION, OVEN & FURNACE SUPPORT, GLASS PROCESS, INSULATION, ASPHALT, RECYCLING, PELLETIZER, METAL INDUSTRY, & **HEAT** TREATING.

## What is a Mineral Insulated Band **Heater**?

The Mineral Insulated "MI" Band **Heater** is a high-performance **heater**. The band **heater's** performance and name are derived from the mineral insulation (magnesium Oxide)- a material with much higher **thermal** conductivity than mica and hard ceramic insulators used in conventional **heaters**. A thin layer of the "high" thermal conductive MI material is used to electrically insulate the element wire inward toward the part being **heated**. The result is more efficient **heat** transfer, which lowers element wire temperatures and increases band **heater** life. Heater operating temperatures up to 1400°F (760°C), Watt Densities to 100 W/IN<sup>2</sup> (15.5 W/CM<sup>2</sup>) on large diameter barrel bands, and maximum operating voltages from 240V, 220V, 120V, 110V up to 480V on approved designs. The Slim Constuction allows for a reduced number of heaters required in an application. MI Band **heaters** can be designed ranging from 19mm (¾ Inch) up to 915mm (36 Inch) diameter and widths ranging from 19mm (¾ Inch) up to

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150mm (6 Inch). MI Bands can be manufactured in ONE PIECE and TWO PIECE Constructions. Expandable or Non-Expandable designs.



As applications are aggressive and production times speed up, temperatures are required to be higher keeping up with today's processes. Technology has answered this need with the MI Band heater. It produces operating temperature capabilities exceeding that of the standard mica-insulated band and heat up times quicker and more responsive than the classic ceramic band. Let us help you construct the right mineral insulated band for your production.

The Mineral Insulated Band has been designed to outperform any other type of band in every application. We recommend the MI Band for the plastics industry, especially when processing engineering-grade materials and upgrading machinery to today's demanding applications. We have always said that the MI Band heater is the Best Heater we have ever sold!