PMJ
heaters manufacturing

Specification Sheet

Mica Band Heater

High Performance Heater
More Efficient Heat Transfer

Mica Band Heaters are our most widely used band heater because of their versatile design and rugged construction characteristics. Mica Bands have sheath temperature capabilities up to 425°C. Mica Bands are commonly used in Plastics Injection Molding, Extrusion, Blow Molding applications as well as in Commercial Cooking, Dies and Electric Motors.

A thin layer of high thermal conductive mica material electrically insulates the element wire from the inside diameter of the heater sheath. The result is more efficient heat transfer, which lowers element wire temperatures and increases heater life.

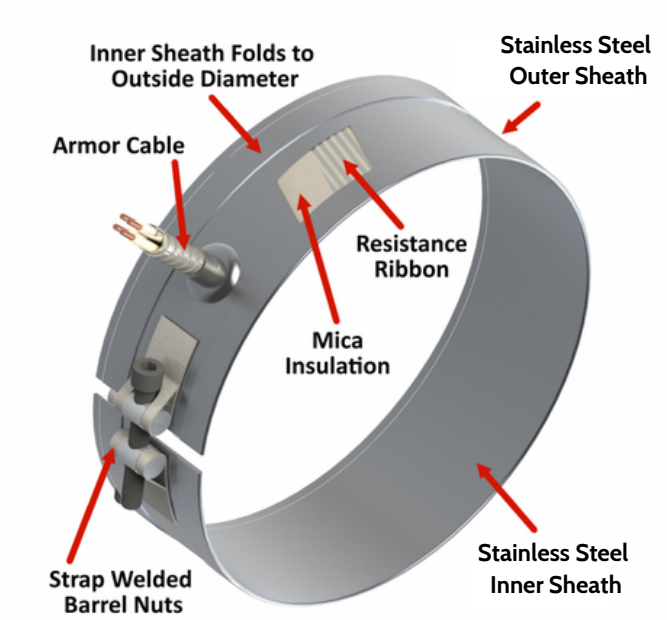


Fig 1. Mica Band Heater Construction

Features

- Top quality mica of various thickness
- Maximum sheath temperature 480°C
- Full width stainless steel strap
- Flexibility to incorporate holes and cutouts
- Available two pieces or expandable designs
- Broad range of construction designs, clamping mechanisms, and electrical terminal types

Benefits

- Energy efficient
- Economical
- Reliable
- Versatile
- Uniform heat distribution

Typical Applications

- Injection moulding machines
- Extruders
- Drum heating
- Blow moulding machines
- External tank and vessel heating
- Other cylinder heating applications

Physical Size Construction Limitations

Minimum Inner Diameter : 20mm
Minimum Width : 20mm
Width Tolerance : ± 1.6mm
Nominal Gap: 10mm (if a larger gap is needed for probes or thermocouples placement, specify when ordering.)

Electrical Rating

Maximum Voltage
- 480 VAC

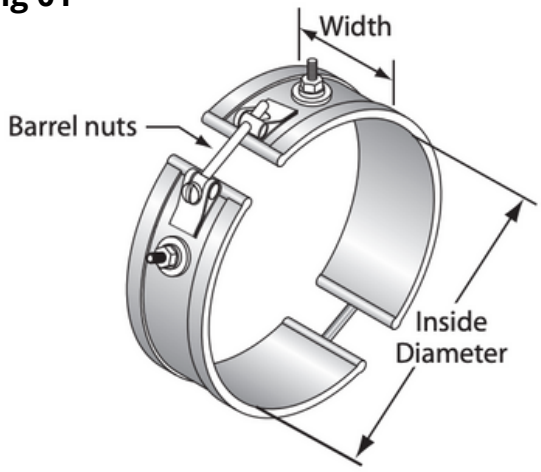
Dual Voltage or 3-Phase
- Available on Request

Maximum Amperage
- Lead Wire Termination - 10 amp
- Screw Termination - 25 amp

Resistance Tolerance
- +10%, -5%

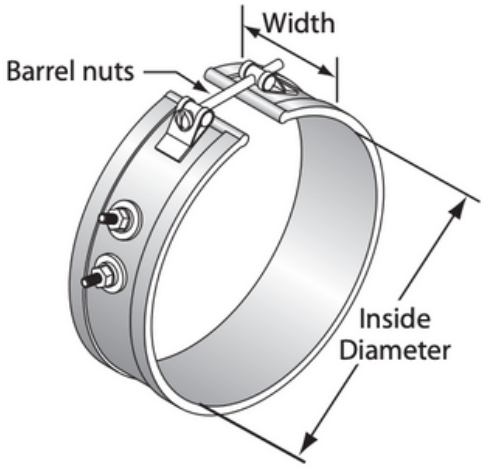
Wattage Tolerance
- +5%, -10%

Fig 01



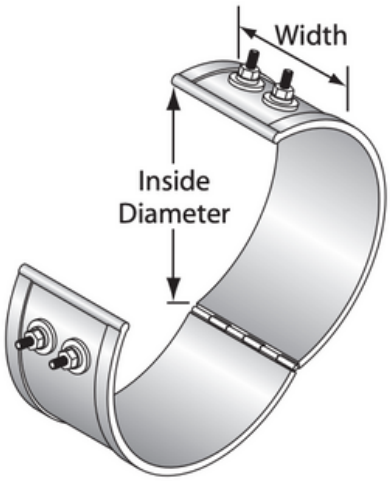
2 Piece Construction- Ease of installation in difficult locations. Recommended for diameters larger than 15". Available with any termination or clamping styles.

Fig 02



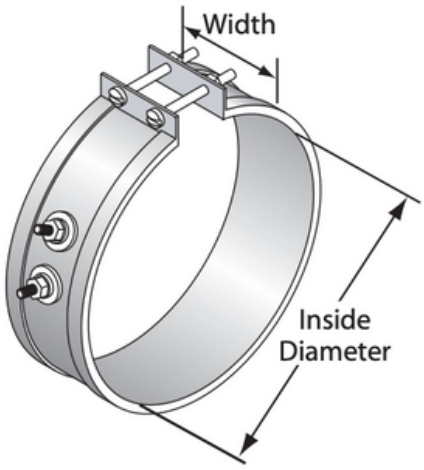
Built-in Strap- Barrel nuts provide secure and strong clamping. Also availble in spring loaded designs for larger diameters

Fig 03



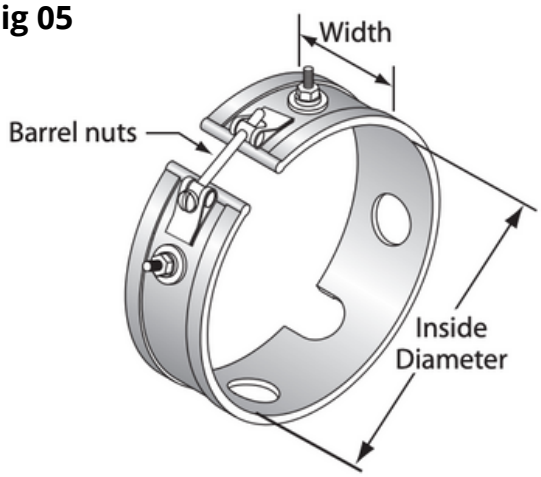
Expandable or Hinged- One piece construction used where heater cannot be slid over the barrel or die. Two sets of terminals required. All terminations available

Fig 04



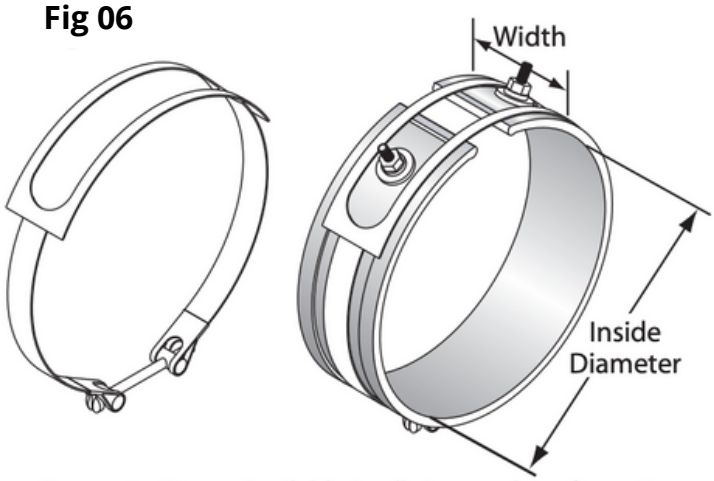
Bent Up Flange- Available with any termination style and is only recommended for narrower designs.

Fig 05



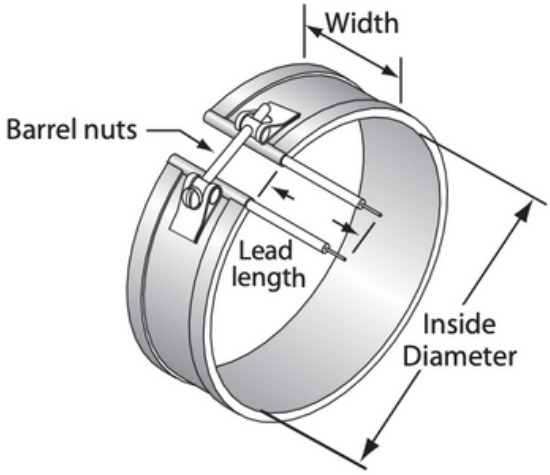
Holes and Cutouts- Allow for installation of thermo-couples and transducers and give clearance for mounting bolts.

Fig 06



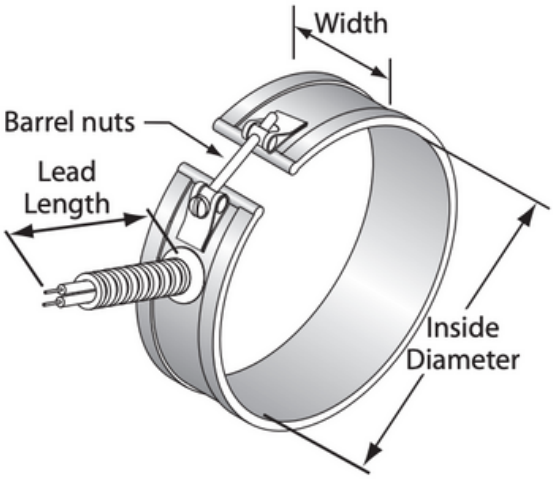
Separate Strap- Available in all sizes and configurations. Built-in straps are recommended wherever possible. Typically used in smaller diameters.

Fig 07



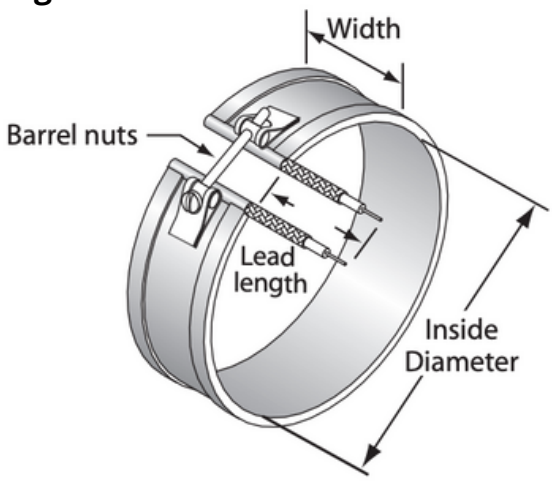
Nozzle Style- Fiberglass leads 12" long is standard

Fig 08



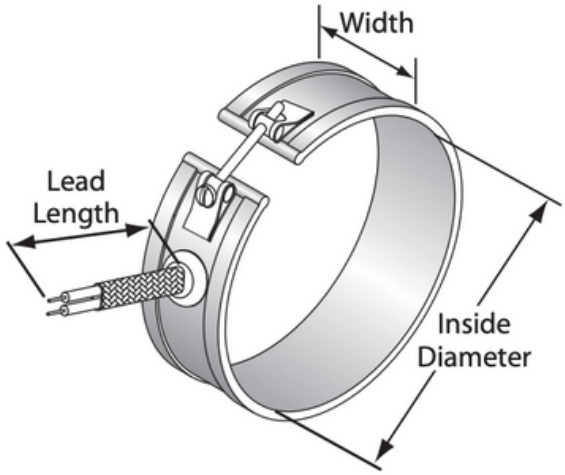
Fiberglass Leads with Armor Cable- Specify location and length of leads at time of order.

Fig 09



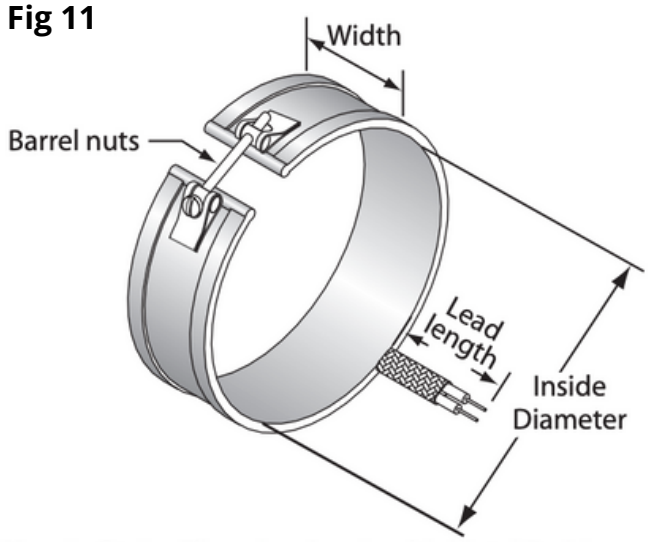
Nozzle Style- Fiberglass leads with metal overbraid 12" long is standard

Fig 10



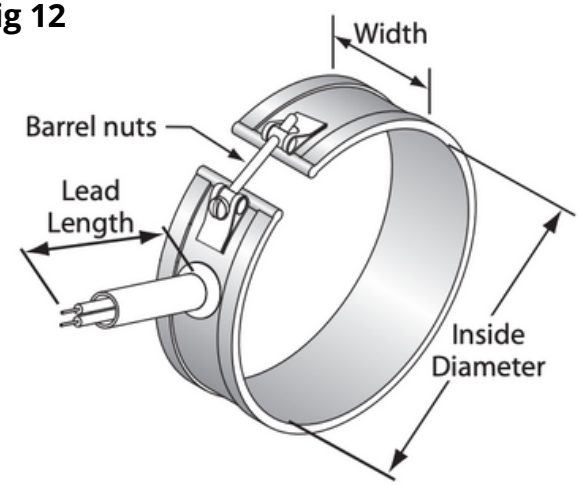
Fiberglass Leads with Metal Braid- Specify location and length of leads at time of order.

Fig 11



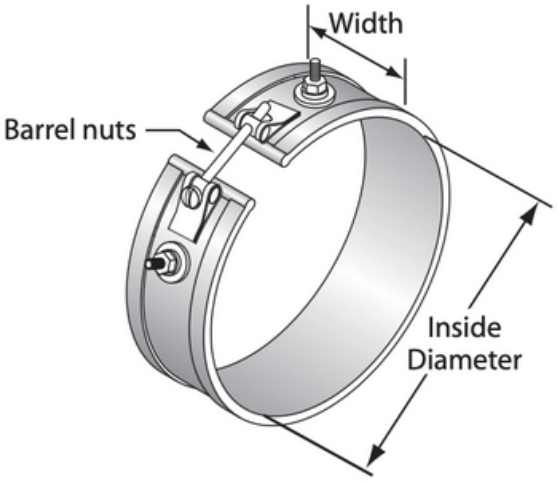
Nozzle Style- Fiberglass Leads with Metal Braid- Exiting from the edge at 180 degrees from the gap

Fig 12



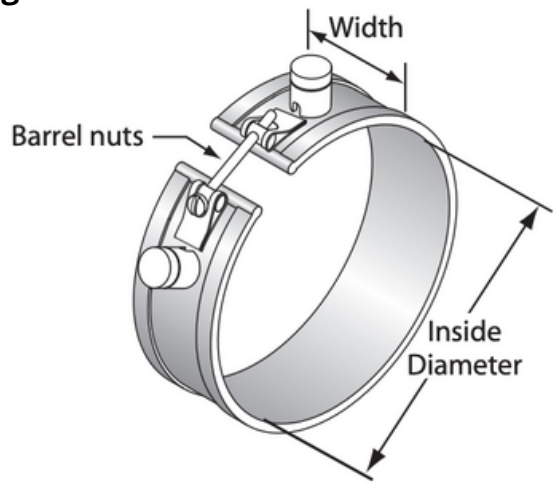
Fiberglass Leads with Protective Sleeve- Specify location and length of leads at time of order.

Fig 13



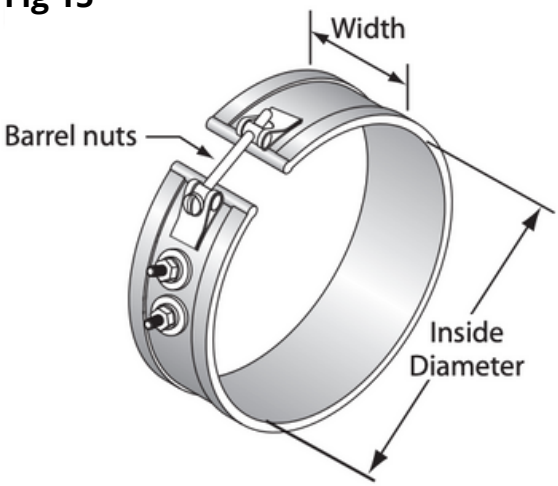
10-32 Threaded Terminals- Minimum width required 7/8"

Fig 14



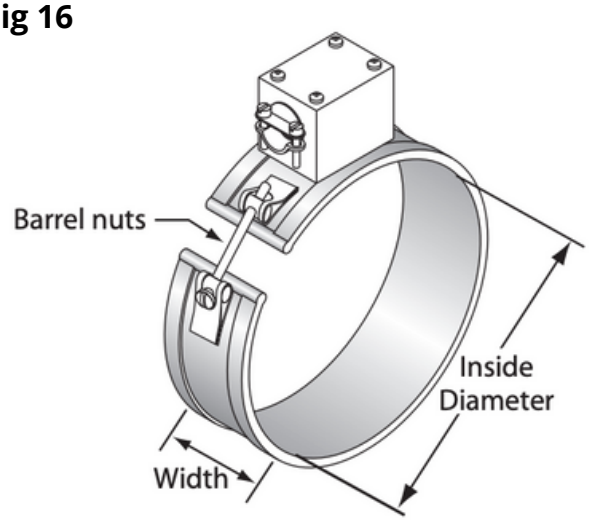
Ceramic Terminal Covers- Available on all threaded terminals. Covers available separately

Fig 15



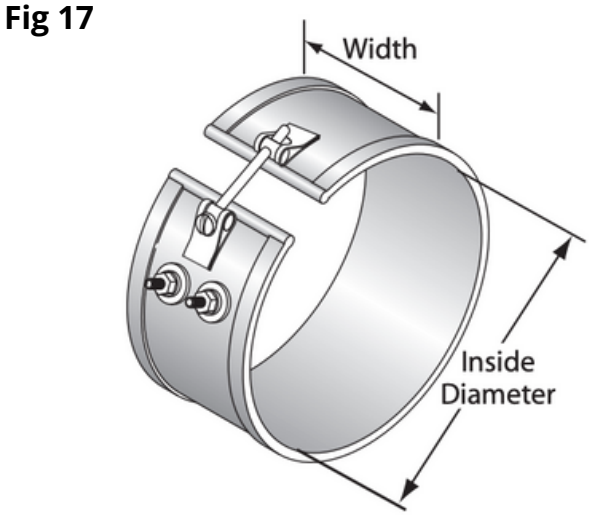
10-32 Threaded Terminals- Minimum width required 7/8"- Specify location at time of order

Fig 16



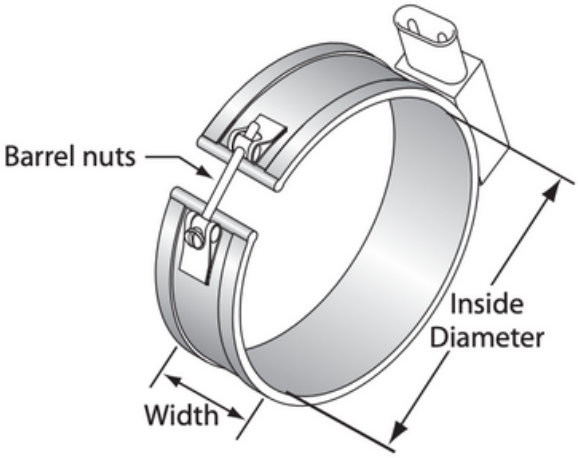
Sheet Metal Terminal Box- Available with T2 and T3 threaded terminals.

Fig 17



10-32 Threaded Terminals- Minimum width required 2.00"-Specify location at time of order

Fig 18



90 Degree European Plug- Also available straight out- Specify location at time of order