

# Mica Band Heater Data Sheet

Mica insulated band heaters are installed on cylinder forms such as barrels, nozzles and dies of injection molding, extrusion machines or plastic process equipment.

Mica band heaters can be constructed in a variety of dimensions, voltage and wattages with different options such as holes, cut-outs and notches. A number of terminals, wire lead options and terminal boxes offer great flexibility for field wiring. With sheath temperature capabilities of up to 800°F, these heaters are ideal for the plastic processing applications.

TriVolt adopts a stringent internal Quality Control System. Every heater is tested for resistance and dielectric. All our electric heaters are compliance certified or have international approvals from CSA, CUL, or CE certified.

## Applications

*Plastic extrusion*  
*Injection molding*  
*Blow-molding*  
*Pressure molding*  
*Structural foam*  
*Food industry*  
*Container pipe and tank heating*  
*Packaging*

## Specifications

- » Sheath temperature: up to 800°F (427°C)
- » For higher sheath temperature refer to our Mica Band HT-950 model
- » Nominal watt density: 20-35 watts/sq. in.
- » Maximum watt density: depends on size of heater and operating temperature
- » Maximum voltage 600VAC
- » Resistance tolerance: +/- 5%
- » Wattage tolerance: +/- 5%

## Construction

- » Exterior material: 304 2b stainless steel
- » Interior material: Nickel Chromium wire and silicone bonded mica
- » Standard gap: 0.375" (if different please specify)
- » Thickness: 0.205" +/- 0.003"
- » Min. diameter: 1" / Max. diameter: 96"
- » Min. width: 1" / Max. width: 6"
- (Consult factory for sizes other than those mentioned above)
- » 1 to 4 piece construction
- » Expandable one-time
- » Fully expandable
- » Partial coverage
- » Reverse band
- » Conical shaped



Expandable



Shroud



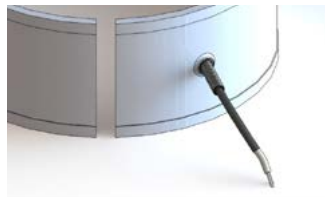
Conical shaped

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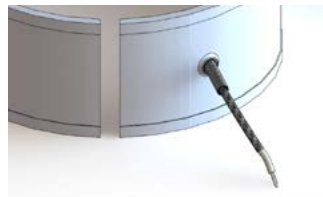
## Electrical Connections

- » Post terminals: 10-32  
(10A per zone)
- » High temperature lead wire, 550°C (1022°F) with protective;
  - » fiberglass sleeve (SL),
  - » stainless steel over braid (SS)
  - » armored cable (AC)
- » Teflon leads
- » Silicone wire
- » Ground post
- » Low profile cap
- » Dual voltage
- » Single or 3-phase

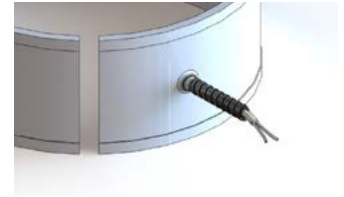
## Types of leads



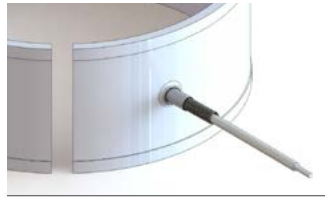
Fiberglass sleeve (SL), single or double conductor



Stainless Steel over braid (SS)



Armored cable (AC)



Teflon leads

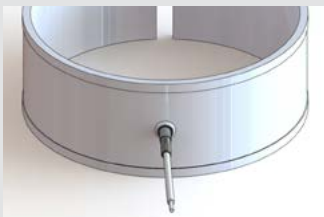


Silicone wire

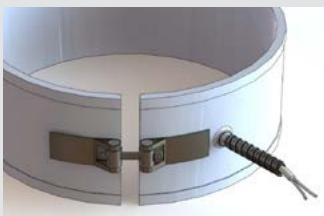
## Lead positions



Exiting from edge of width, nozzle-style



Exiting 180° from gap, center of width

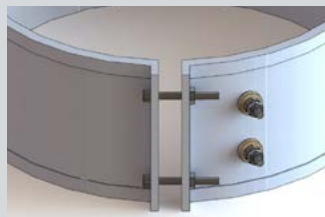


Exiting at right angle to sheath, next to gap, center of width

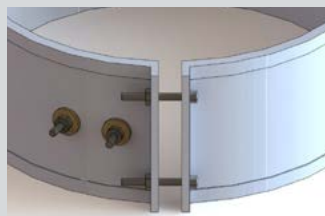
## Post terminations



Post terminals on each side of gap, center of width

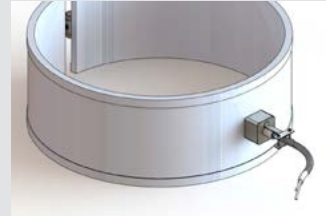


Post terminals vertical position, center of width



Post terminals horizontal position, center of width

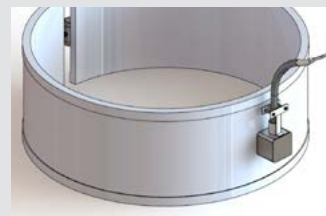
## Lead directions



Exiting straight out, positioned 180° from gap



Exiting 90°, positioned 180° from gap

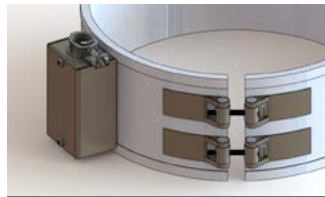


Exiting 270°, positioned 180° from gap

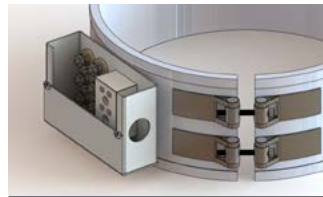
# Mica Band Heater Data Sheet

## Terminal Housing

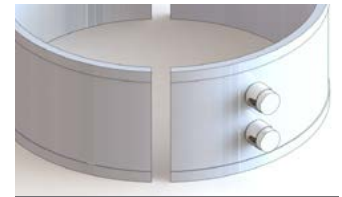
- » Terminal box
- » Terminal block with ceramic block
- » European plug (aluminum block protection)
- » European plug with terminal box
- » Ceramic post covers
- » Stainless steel square cap
- » Brass cap for heaters with different angle lead exits



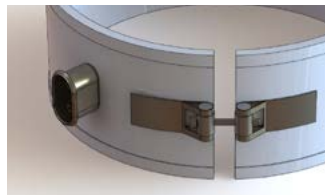
Terminal box (TB)



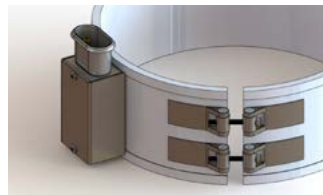
Terminal box with ceramic block



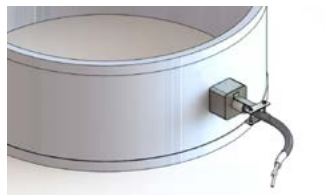
Ceramic post covers



European plug (EP)



European plug with terminal box



Stainless steel square cap



Brass cap

## Holes

- » Mounting holes
- » Notches
- » Square cut-out
- » Adaptors and fittings



Mounting holes



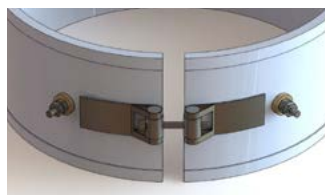
Notches



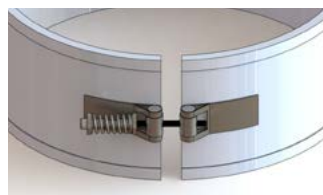
Adaptors and fittings

## Clamping Methods

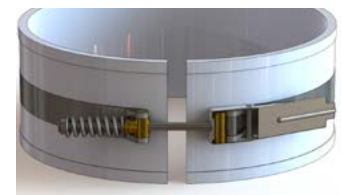
- » Full strap
- » Barrel nut construction
- » Spring-loaded barrel nuts
- » Coaxial wedge lock
- » Hinges
- » Latch and trunnion
- » Flange lock-up (16-gauge stainless steel tab, option of support bar for sturdiness)



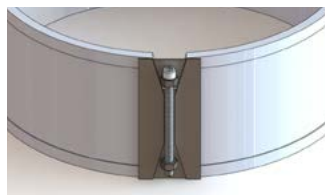
Barrel nut construction



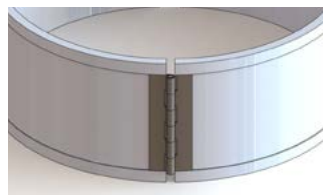
Spring-loaded barrel nuts



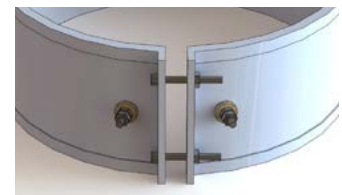
Latch and trunnion



Coaxial wedge lock



Hinges



Flange lock-up

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