

## MEGAFLEX CERAMIC INSULATED BAND HEATERS

MEGAFLEX— ceramic heaters are medium-to-high temperature heaters that have 1200°F as a maximum working temperature. These durable heaters have built-in ceramic fiber jackets that make them energy efficient.

MEGAFLEX heaters are available with different terminal styles, are fully flexible, and can accommodate holes and cutouts.



- **■** Construction overview
- **Clamping mechanisms**
- **Termination styles**
- Special Instructions



# MEGAFLEX CERAMIC INSULATED BAND HEATERS

- Injection molding machines
- Plastic extruders
- Blow-molding machines
- Container, pipe or tank heating
- Other processes applications

Specifications	
Min. Diameter	2"
Min. Width	1"
Thickness with 1/4"	5/8"
Standard Gap	3/8"
Max. Watt Density	45 w/in <sup>2</sup>



### **Construction and features**

- **■** Reduce Power Consumption
- **Conserve Heat**
- High degree of flexibility
- Uniform Heat distribution
- Various Termination Styles
- CSA and CE certified

In a MEGAFLEX heater, nickel-chrome wire is embedded in a flexible outer wall made of special, interlocking ceramic tiles, which are assembled like a brick wall. A ceramic fiber insulating mat and a stainless steel jacket cover this assembly. This construction prevents heat loss and reduces electrical consumption by 20%.

An energized **MEGAFLEX** heater will have a temperature of 350°F-450°F on its outside shell when the inside temperature is maintained at 1200°F. To improve the conservation of energy, different thicknesses of ceramic fiber insulation mats are available.

Heat is transferred from a ceramic heater to the surface of an application through conduction and radiation. This is why a tight grip on the cylinder is not as critical as in other types of heaters. Over-tightening should be avoided, since the pressure on the insulation mat reduces its insulating efficiency.

MEGAFLEX heaters are made by using different combinations of ceramic tiles, which are available only in specific lengths. Consequently, the width of a MEGAFLEX band falls within a certain incremental range.

**MEGAFLEX** ceramic band heaters can be manufactured with different clamping mechanisms, termination styles, holes, and cut-outs.



## MEGAFLEX CERAMIC INSULATED BAND HEATERS

#### **Electrical Terminations**

■ Post Terminals	(B)
■ Terminal Box	(G)
■ Stainless steel braided leads	(E)
■ Armor Leads	(H)
■ European Style straight plug	(K00)
■ Furopean style 90° plug	(K90)



**B Style– Post Terminals**The most commonly used termination style.
Recommended for high amperage applications.



E Style– Stainless Steel Braided Leads Highly flexible. Protects the lead wire from abrasion.



K00 Style– European Connector Ideal for termination style when the power leads are frequently removed from the heater. An easy electrical connection when the heater fails.



**G Style– Terminal Box**A practical way to protect screw terminals from damage and exposure.



H Style– Straight Armor cable Provides protection against abrasion and contamination.



**K90 Style– European connector**Used when there isn't enough clearance above a heater to use K00 style European connector.

### **Selection Tips**

- The current amperage limitation for lead wire exiting directly from a heater is 10 amps.
- For higher than 10 amp applications, lead wires should be combined with a terminal box.
- European plugs are adequate for 16 amps. To have a balanced internal winding, it is recommended to locate the terminals at 180° with respect to the gap.
- Ceramic covers could be added to provide safety to exposed terminals.



## MEGAFLEX CERAMIC INSULATED BAND HEATERS

# **Clamping Styles**



Flange lock-up
The most economical clamping
system, with #10-32 nuts and
screws.



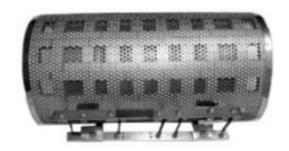
**Latch & Trunion**Available on heaters that are 10" or bigger in dia.



Barrel nuts
Fasteners with 1/4-20 socket head screws are standard on all MEGAF-LEX heaters. This style can accommodate springs which compensate for thermal expansion.

# **Special Construction**





**MEGAFLEX** ceramic heaters can be combined with high velocity fans to form fast responding heat—cool units in accurate heating applications. These heaters are made with a perforated outside stainless steel sheath, and with no insulating jacket.