

**MEGAFLEX**<sup>°</sup> CERAMIC INSULATED 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 cut-outs.



- Construction characteristics
- Termination styles
- Clamping styles
- Special constructions

# **MEGAFLEX** CERAMIC INSULATED HEATERS

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

SPECIFICATIONS	
Min diameter	2″
Min width	1″
Thicknes with 1/4" insulation	5/8″
Standard gap	3/8″
Max watt density	45 w/in²

## **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 fibre 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° - 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 fibre 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. Moreover, overtightening 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 HEATERS

# **Electrical terminations**

Post terminals	<b>(B)</b>
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- (G) Terminal box Stainless steel braided leads
- **(E) (H)**
- Armor cable
- (K00) European style straight plug
- European style 90° plug (K90)



### **G** Style - Terminal box

A practical way to protect screw terminals from damage and exposure.



### **B Style - Post terminals**

The most commonly used termination style. Recommended for high amperage applications.



### E Style - Stainless steel braid

Highly flexible. Protects the lead wire from abrasion.



### K00 Style - European connector Ideal termination style when the power leads are frequently removed from the heater. An easy electrical connection when the heater fails.



### 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 HEATERS

# **Clamping styles**



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



Latch & trunion Available on heaters that are 10" or bigger in diameter. This clamping style provides ease of installation and removal.



### Barrel nuts

Barrel nut fasteners with 1/4-20 socket head screws are standard on all **MEGAFLEX** heaters. This style can accommodate springs which compensate for thermal expansion.

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**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.



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