

OMEGA ***HEATER*** **COMPANY**



Excellence in Design, Manufacturing & Service

***Quality Manufacturing
Since 1970***

**Visit Our Website:
www.omegaheater.com**

CERAMIC HEATER BANDS

Four Styles to Choose From

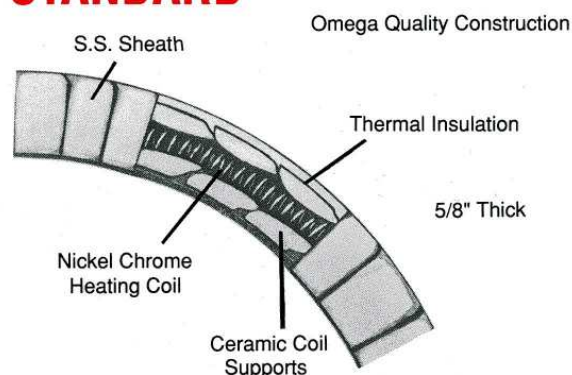
STANDARD —5/8" Thick; 1/4" Thermal Insulation; Long Life; Lower Energy Costs; Hi-Temp —Up to 1400°F; Easy Installation; Efficient in Wide Widths; Fewer Bands Per Installation.
"THE PREFERRED CHOICE OF O.E.M.'s"

INSULATION PLUS® —7/8" Thick; An Additional 1/4" Thermal Insulation in a Separate Channel; Total 1/2" Insulation; Energy Savings Up To 30%; Cooler Ambient Temperatures. "THE ENERGY SAVER"

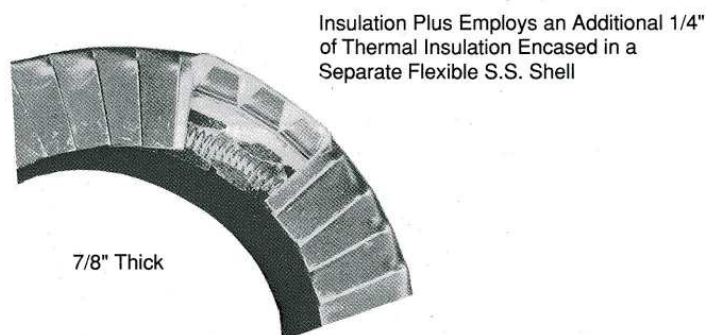
SUPER INSULATION PLUS —1 1/4" Thick; 7/8" Total Insulation Built-In; Eliminate Blankets and Insulated Shrouds or Use (Less Expensive) Uninsulated Shrouds. "MAX. ENERGY SAVINGS, MIN. SHEATH TEMPS"

ULTRA THIN LINE —Maximum 3/8" Thick; Low Mass; Quick Response For Critical High-Temp Molding Operations; Up to 1400°F and 60 Watts/Sq.In. "NEW ULTRA-THIN LINE"

STANDARD

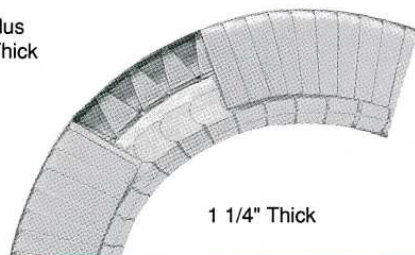


INSULATION PLUS®



SUPER INSULATION PLUS

Same as Insulation Plus Except Total of 7/8" Thick Thermal Insulation



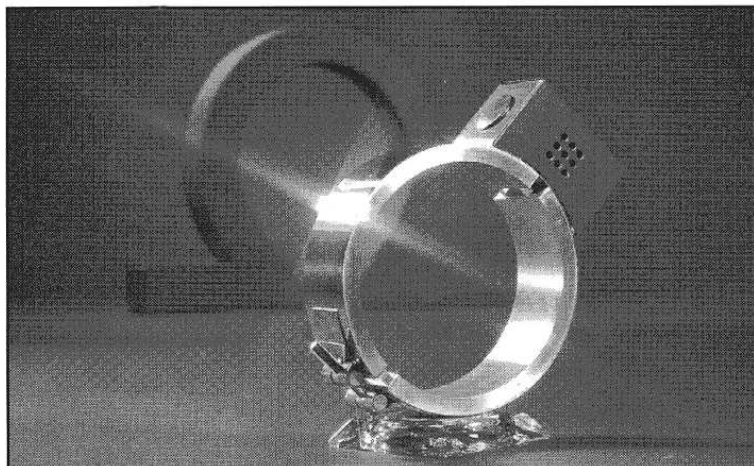
ULTRA-THIN LINE

Also Available for Air-Cooled Operations
Rapid Heat Up and Cool Down

3/8" Max. Thickness






























ULTRALUMINUM BAND & STRIP HEATERS



These new innovative heater bands and strips feature contamination-resistant construction, low thermal mass, high watt density. The use of coils embedded in an aluminum extrusion offers unmatched flexibility of design. The result is a heater with fast response, better heat distribution, and higher watt densities without the usual problems associated with local melting of the aluminum extrusion.

MICA HEATER BANDS

BASIC CONSTRUCTIONS

<div>BASIC CONSTRUCTIONS</div>					
	<div>TYPE 1</div> <div></div> <div>BARREL NUT STRAP LEADS IN METAL BRAID exit through edge on both sides of gap.</div>	<div>TYPE 2</div> <div></div> <div>BARREL NUT STRAP LEADS WITHOUT METAL BRAID exit through edge on both sides of gap.</div>	<div>TYPE 3</div> <div></div> <div>BARREL NUT STRAP LEADS exit through outside surface of heater. Options A, B, D. Option "A" (Armor) is shown.</div>	<div>TYPE 4</div> <div></div> <div>BARREL NUT STRAP LEADS exit through edge, 180 deg. from gap. This construction not recommended for bands under 2" wide. Options B, C. Option "B" (Braid) is shown.</div>	
<div>TYPE 5</div> <div></div> <div>BARREL NUT STRAP LEADS exit through edge, inside gap, one from each side of gap. Suggested for use on small diameter bands where leads are not subjected to strain or plastic drool. Option C only.</div>	<div>TYPE 6</div> <div></div> <div>FLANGE LOCK-UP LEADS exit through edge on both sides of gap. Options B, C. This construction available, but not recommended. Use of Type 1 or 2 is suggested.</div>	<div>TYPE 7</div> <div></div> <div>BARREL NUT STRAP LEADS IN METAL BRAID exit through edge, both leads at same side of gap.</div>	<div>TYPE 8</div> <div></div> <div>BARREL NUT STRAP - ONE PIECE POST TERMINAL at each end of heater.</div>	<div>TYPE 9</div> <div></div> <div>BARREL NUT STRAP - TWO PIECE POST TERMINAL at each end of heater.</div>	<div>TYPE 10</div> <div></div> <div>BARREL NUT STRAP - ONE PIECE POST TERMINALS at same end of heater. This terminal arrangement suggested for bands 3" or more in width.</div>
<div>TYPE 11</div> <div></div> <div>BARREL NUT STRAP - TWO PIECE POST TERMINALS at same end of heater. This terminal arrangement suggested for bands 3" or more in width.</div>	<div>TYPE 12</div> <div></div> <div>BARREL NUT STRAP - EXPANDABLE Options A, B, C, P. Option "P" (Post Terminal) is shown.</div>	<div>TYPE 13</div> <div></div> <div>TYPE 13 BARREL NUT STRAP PARTIAL COVERAGE band with padded clamping straps. Options A, B, C, P. Option "P" (Post Terminal) is shown.</div>	<div>TYPE 14</div> <div></div> <div>FLANGE LOCK-UP - ONE PIECE LEADS exit through outside surface of heater. Options A, B, C. Option "A" (Armor) is shown.</div>	<div>TYPE 15</div> <div></div> <div>FLANGE LOCK-UP - TWO PIECE LEADS exit through outside surface of heater Options A, B, C.</div>	<div>TYPE 16</div> <div></div> <div>TAPERED WEDGE LOCK LEADS exit through edge. Options B, C. Option "C" (Flexible Leads) is shown.</div>
<div>TYPE 17</div> <div></div> <div>FLANGE LOCK-UP - HINGED POST TERMINAL at each end of heater.</div>	<div>TYPE 18</div> <div></div> <div>FLANGE LOCK-UP - HINGED POST TERMINALS at same end of heater. Terminals are normally located near hinge - unless otherwise specified.</div>	<div>TYPE 19</div> <div></div> <div>FLANGE LOCK-UP - HINGED LEADS exit through outside surface of band. Options A, B, C. Leads are normally located near hinge - unless otherwise specified. Option "C" is shown.</div>	<div>TYPE 20</div> <div></div> <div>FLANGED LOCK-UP - ONE PIECE POST TERMINAL at each end of heater.</div>	<div>TYPE 21</div> <div></div> <div>FLANGED LOCK-UP - TWO PIECE POST TERMINAL at each end of heater.</div>	<div>TYPE 22</div> <div></div> <div>FLANGE LOCK-UP - ONE PIECE *POST TERMINALS at same end of heater.</div>
<div>TYPE 23</div> <div></div> <div>FLANGE LOCK-UP - TWO PIECE *POST TERMINALS at same end of heater.</div>	<div>TYPE 24</div> <div></div> <div>EXTENDED FLANGE WITH ELECTRICAL CONNECTIONS - ONE PIECE. Options A, B, C, P.</div>	<div>TYPE 25</div> <div></div> <div>EXTENDED FLANGE WITH ELECTRICAL CONNECTIONS - TWO PIECE. Options A, B, C, P.</div>	<div>TYPE 26</div> <div></div> <div>HEXAGONAL BAND HEATER Lead arrangement shown is suggested.</div>	<div>TYPE "S"</div> <div></div> <div>OMEGA'S PATENTED PREMIUM NOZZLE HEATER • RESISTS PLASTIC DROOL • RUGGED CONSTRUCTION • HIGHER WATT DENSITY</div>	<div>BARREL NUT SIZES</div> <div>Standard Barrel Nuts (3/8" high) are normally supplied on bands 1-1/2" I.D. and over. Low profile Barrel Nuts (7/32" high) are normally supplied on bands under 1-1/2" I.D.</div>

*ON FLANGED BANDS, when post terminals are specified at the same end of band, they will normally be located as follows:
 Bands under 2" wide- Post terminals will be placed tandem, around circumference of band.
 Bands 2" wide and over-Post terminals will be placed across width of band.

OPTIONAL FEATURES

- | | |
|--|--|
| <p>A Flexible armor (BX) installed over flexible leads.</p> <p>B Metal braid installed over flexible leads.</p> <p>C Flexible leads - asbestos and fiberglass insulated nickel or nickel clad conductor. Installed with 2" fiberglass boot.</p> <p>D Low profile band, presized for slip fit by installation of punch lock straps.</p> <p>E Terminal box.</p> <p>F Flexible armor in right angle bracket.</p> <p>G Thermocouple hole.</p> | <p>H Button terminals</p> <p>I Appliance pins.</p> <p>J Twist lock plug installed on leads.</p> <p>K Extra wide gap, specify.</p> <p>L Grounding stud.</p> <p>M Dual voltage, specify.</p> <p>N Stainless steel sheath.</p> <p>O Low profile strap. Specify this coupon only if desired on sizes where not normally supplied.</p> <p>P Post terminals</p> |
|--|--|

WHEN ORDERING PLEASE SPECIFY:

1. QUANTITY
2. INSIDE DIAMETER
3. WIDTH
4. VOLTAGE - on two piece bands we suggest each piece be rated at half the operating voltage. Please specify total voltage.
5. WATTAGE - on two piece bands please specify total wattage.
6. BASIC CONSTRUCTION AND OPTIONS DESIRED - see below
7. SERIAL NUMBER - if known or previously ordered.
8. GAP, if other than factory determined minimum.
9. LEAD LENGTH, if other than standard 12 inches.

STRIP HEATERS

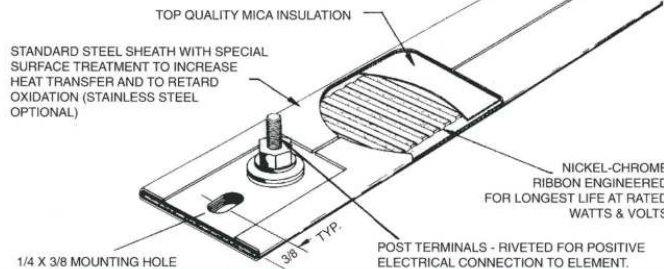


"L" series
(flexible leads)

"P" series
(post terminals)



FOR HOT PLATES, SEALING EQUIPMENT,
HOT STAMPING, DIES AND MOLDS, ETC.



MICA STRIP HEATERS

- **Thin**
- **Light**
- **Fast Response to Temperature and Process Control**
- **Low Cost**

BLACK STAR RADIANT CERAMIC STRIP HEATERS



Exclusive
Heat Resistant
Coating is Inorganic
and Baked to a
Peel Free
Finish.

SOME TYPICAL APPLICATIONS

- Thermoforming
- Air Heating
- Platens
- Molds
- Ovens
- Sealing
- Dies
- Tank Heaters
- Hot Plates

4 SIZES AVAILABLE	1/4" x 1"	5/16" x 1"
	5/16" x 1-1/2"	3/8" x 1-1/2"

FINNED STRIP HEATERS

FINNED STRIP HEATERS (HEATED AREAS)

APPLICATIONS

Air & Gas Heating
Oven & Duct Heating
Load Banks
Space Heaters
Heat Curing
Food Warmers
Shrink Tunnels
Moisture Protection
Ink Drying

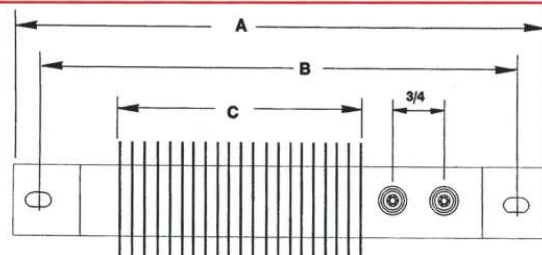
PT-EF

1-1/2 x OVERALL
LENGTH (A)
MINUS 5-5/8"



PT-TF

1-1/2 x OVERALL
LENGTH (A)
MINUS 5-3/4"



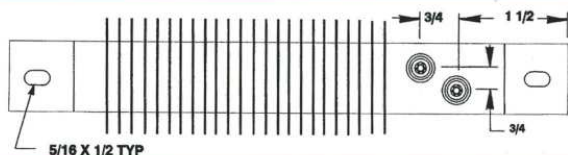
PT-PF

1-1/2 x OVERALL
LENGTH (A)
MINUS 4-5/8"



PT-OF

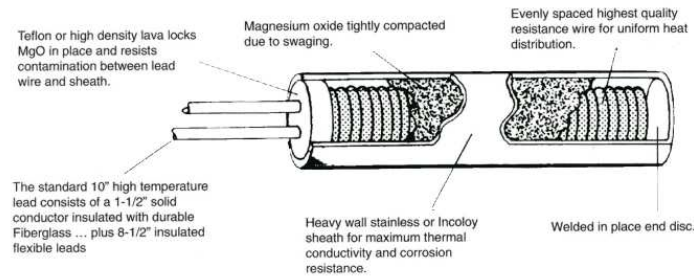
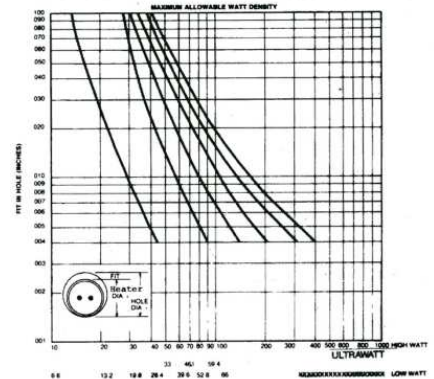
1-1/2 x OVERALL
LENGTH (A)
MINUS 5-1/4"



CARTRIDGE HEATERS

ULTRAWATT SPECIFICATIONS

NOMINAL DIAMETER	1/4	3/8	1/2	5/8	3/4
ACTUAL DIA. $\pm .002$.246	.371	.496	.621	.746
MAXIMUM VOLTS	250	250	277	500	500
MAXIMUM AMPS	4.2	6.3	10.5	22	22
MINIMUM WATTAGE	CONSULT OMEGA				
WATTAGE TOLERANCE	+5% -10%				
LENGTH TOLERANCE	Normal tolerance is $\pm 2\%$ with a minimum of $\pm 3/32$				
CAMBER TOLERANCE	$\pm .018$ per foot of length				
WATT DENSITY	SEE CHART				



- Fast Heating
- Long Reliable Service Life
- Efficient Operation
- Wide Range of Options

High Temperature Ultrawatt Heaters Swaged Construction High Watt Density

- Higher temperature (up to 1400 deg. F.)
- Maximum heat transfer.
- Rugged design resists shock, vibration and gives longer life than standard construction.

OMEGA CARTRIDGE HEATER GUIDE

<p>A STANDARD LEADS Leads 10" standard crimp connected externally. Insulated with fiberglass sleeve.</p>	<p>H NPT PIPE FITTINGS 1/4" Dia. requires 1/8-27 NPT 1/2" Dia. requires 3/8-18 NPT 5/8" Dia. requires 1/2-14 NPT 3/8" Dia. requires 1/4-18 NPT 3/4" Dia. requires 3/4-14 NPT</p>
<p>B ALL FLEXIBLE LEADS Leads 10" standard internally connected.</p>	<p>J NPT PIPE FITTINGS WITH TEFLON SEALS Requires 1" cold end. Cannot be applied to stock. ULTRAWATT only.</p>
<p>C TEFLON SEAL & LEADS Requires 1" cold section on lead end. Available in ULTRAWATT only.</p>	<p>K FLANGE FITTING 1/16" thick x 1/2" dia. with 2 No. 10 mounting holes on 1-1/8" centers.</p>
<p>D FLEXIBLE CONDUIT 12" flexible steel conduit over 14" leads.</p>	<p>L RIGHT ANGLE CONDUIT WITH STD. COPPER ELBOW 12" flexible conduit over 14" leads.</p>
<p>E RIGHT ANGLE CONDUIT 12" flexible steel conduit over 14" leads.</p>	<p>M INTERNAL THERMOCOUPLE Leads 10" std. Thermocouple iron-constantan std. Cannot be applied to stock.</p>
<p>F RIGHT ANGLE LEADS Metal capped end disc requires 5/8" cold end on top. Cannot be applied to stock.</p>	<p>N STRAIGHT CONDUIT WITH STD. COPPER COUPLER 12" flexible conduit over 14" leads.</p>
<p>G CERAMIC BEAD OVER BARE LEADS 6 beads over 6-1/2" leads.</p>	<p>P BRAID PROTECTION LEAD 12" braid over 14" leads.</p>

CAST ALUMINUM AND BRONZE HEATERS

OMEGA ULTRACAST

CAST HEATERS IN ASSORTED
SHAPES AND SIZES.

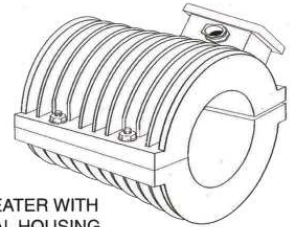
Omega cast in heaters combine top quality tubular heaters and high thermal conductivity non-ferrous alloys.

The heater elements are tested on a 100% basis before and after casting. Modern foundry techniques ensure a dense, porosity free casting.

After casting the heaters are machined to ensure a close contact on the working surface.

Cast in heaters can be supplied with clamping straps or with built in clamping means. Omega can supply heaters with leads in armor, post terminals, terminal housings and a variety of electrical terminations. Standard cooling tube terminations are also available.

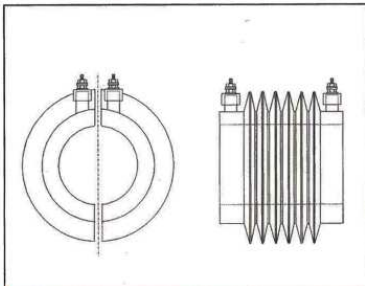
Casting quality is maintained by periodic radiographic testing. Diagnostic radiography services are available if required.



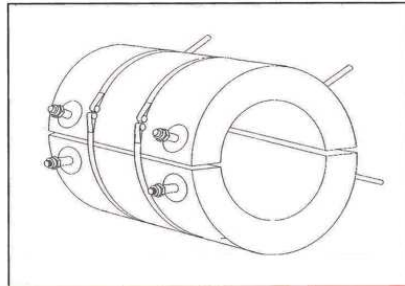
CAST HEATER WITH
TERMINAL HOUSING

- Normal 4-6 Week Delivery
- No Set-Up or Tooling Charges

AIR COOLED



LIQUID COOLED

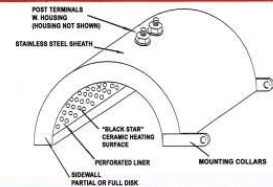


SPECIFICATIONS

- SIZE:** Any practical size and shape
- WATTAGE:** Aluminum - up to 35 watts/sq. in.
Bronze - up to 50 watts/sq. in.
- VOLTS:** 120, 240, 480 Standard
Special voltages to order
- MAX. TEMPERATURE:**
Aluminum- 700 deg. F (375 deg. C)
Bronze - 1000 deg. F (650 deg. C)
- MACHINING TOLERANCE:**
.005" Standard

RADIANT CERAMIC ROLLER HEATERS

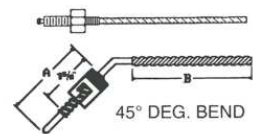
- Designed Specially for Hot Stamping
- Efficient / Long Life Ceramic Heaters
- Maximum Heating / Heat Transfer
- Stock or Custom



TEMPERATURE CONTROLS & THERMOCOUPLES

- Electronic & Microprocessor Based
- Standard or Custom Design Thermocouples

For Complete Data, Ask for Control
or Thermocouple Catalog



PROCESS HEATERS

- Tubular & Finned Tubular
- Immersion (Pipe Thread & Flanged)
- Ceramic Elements
- Silicone Rubber
- Infrared Elements
- Air Heaters
- Space Heaters
- Mold Process Controllers

• **ASK FOR FULL CATALOGS** •

ACCESSORIES

- Glass Sleeving
- Current Rings™
- Current Indicators
- Thermostats
- Ceramic Beads
- Flexible Armor
- Hubbel TWL Plugs
- Lead Wire
- Hi-Temp Wire
- Ring Tongue Connectors
- Electrical Tape
- High Temp. 2500° Paint



OMEGA HEATER COMPANY

2059 9th Avenue, Ronkonkoma, NY 11779 • In NY: 631-588-8820 • Fax: 631-588-8953
E-mail: omega@omegaheater.com • Website: www.omegaheater.com