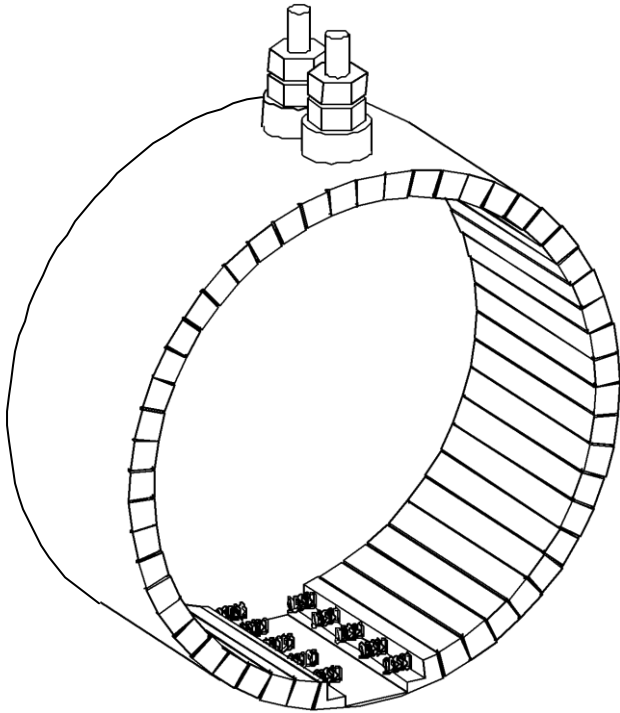


CERAMIC INSULATED BAND HEATERS



Acrolab 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. Ceramic heaters are available with different terminal styles, are fully flexible, and can accommodate holes and cut-outs.

In a ceramic 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 ceramic 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. Ceramic heaters are made by using different combinations of ceramic tiles, which are available only in specific lengths. Consequently, the width of a ceramic band falls within a certain incremental range. Ceramic band heaters can be manufactured with different clamping mechanisms, termination styles, holes and cut-outs.

CERAMIC INSULATED BAND HEATERS

Special Construction

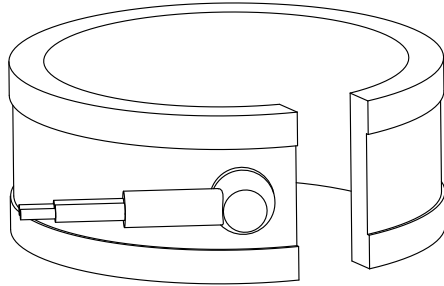
Acrolab ceramic heaters can be combined with high velocity fans to form fast responding heat-cool units in accurate heating applications. These heaters are made with a perforated outside stainless steel sheath, and with no insulating jacket.

Selection Tips

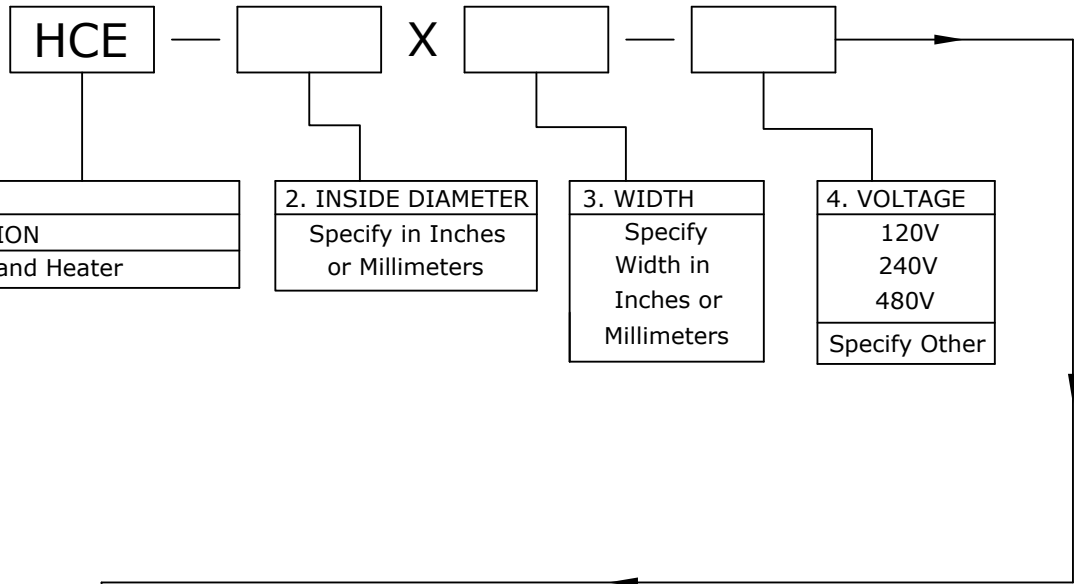
SPECIFICATIONS	
Min Diameter	2"
Min Width	1"
Thickness with 1/4" insulation	5/8"
Standard Gap	3/8"
Max Watt Density	45 W/in ²

- 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.

CERAMIC BAND HEATERS



EXAMPLE: HCE-4.5X4.0-240-1000-72FG-K00-BN-H

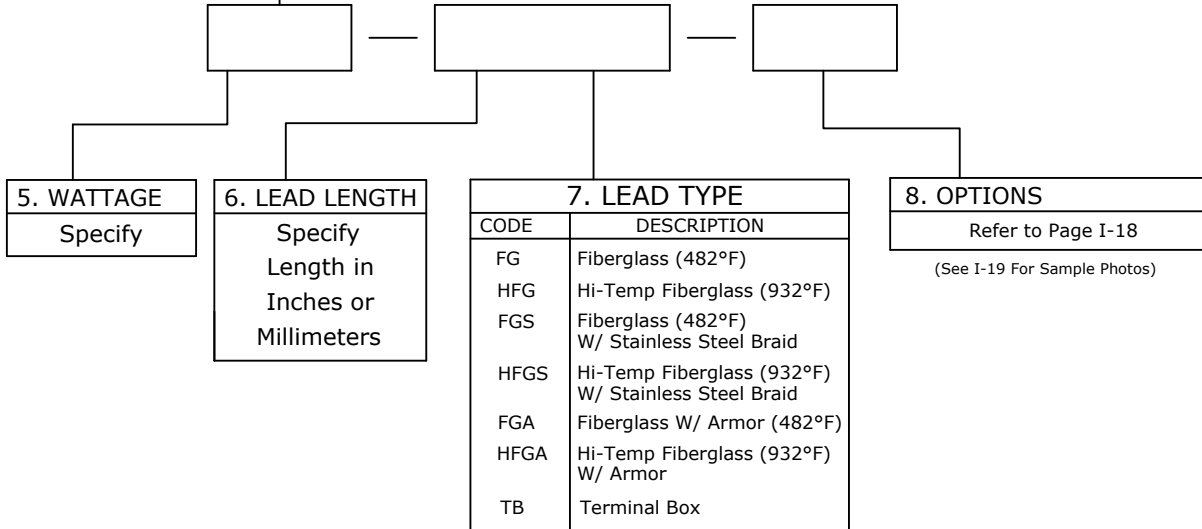


1. STYLE	
CODE	DESCRIPTION
HCE	Ceramic Band Heater

2. INSIDE DIAMETER
Specify in Inches or Millimeters

3. WIDTH
Specify Width in Inches or Millimeters

4. VOLTAGE
120V
240V
480V
Specify Other



5. WATTAGE
Specify

6. LEAD LENGTH
Specify Length in Inches or Millimeters

7. LEAD TYPE	
CODE	DESCRIPTION
FG	Fiberglass (482°F)
HFG	Hi-Temp Fiberglass (932°F)
FGS	Fiberglass (482°F) W/ Stainless Steel Braid
HFGS	Hi-Temp Fiberglass (932°F) W/ Stainless Steel Braid
FGA	Fiberglass W/ Armor (482°F)
HFGA	Hi-Temp Fiberglass (932°F) W/ Armor
TB	Terminal Box

8. OPTIONS
Refer to Page I-18
(See I-19 For Sample Photos)

BAND HEATERS (OPTIONS)

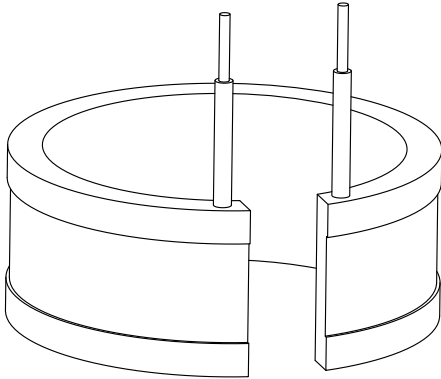
TABLE 8 - CERAMIC BAND HEATER OPTIONS	
CODE	DESCRIPTION
LEADWIRE TERMINATIONS	
E	Leads exit near gap
SCREW TERMINAL TERMINATIONS	
A	Seperate on opposite sides of the gap
AV	Seperate on opposite sides of the gap with ceramic protective covers
B1	Along the width side by side
B1G	Along the width side by side with protective terminal box
B1V	Along the width side by side with ceramic protective covers
B2	Along the length side by side
B2G	Along the length side by side with protective terminal box
B2V	Along the length side by side with ceramic protective covers
PLUG TERMINATIONS	
K00	European Plug vertical with box
K90	European Plug tangential with box

CLAMPING STYLES	
BN	Barrel Nuts
FL	Flange Lock-Up
LT	Latch and Trunion

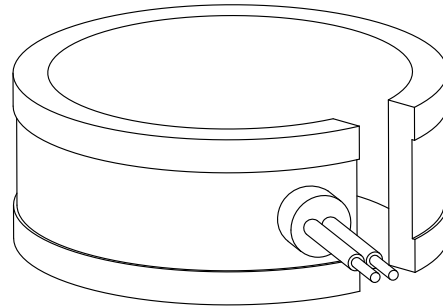
CONSTRUCTION OPTIONS	
2P	2 Piece construction (*note: wattage indicated in box 5 will be total wattage)
H	Hole (indicate inside diameter / location)
TC	Built in Thermocouple (specify calibration)

BAND HEATERS (OPTIONS)

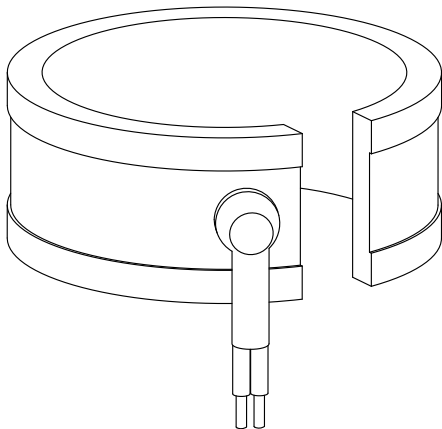
LEADS NEAR GAP
Code: C



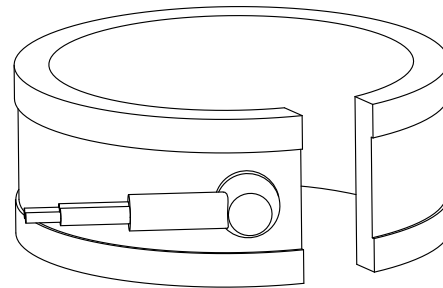
LEADS NEAR GAP (B)
Code: E



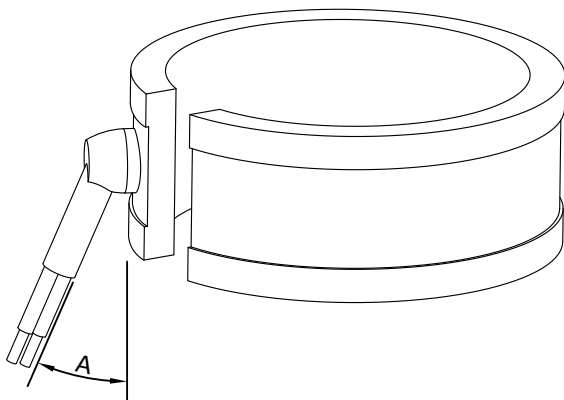
LEADS W/ CAP NEAR GAP
Code: C1



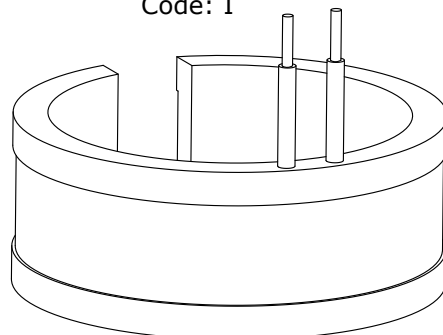
LEADS W/ 90° CAP NEAR GAP
Code: C2



LEADS W/ CAP AT ANGLE
Code: C3

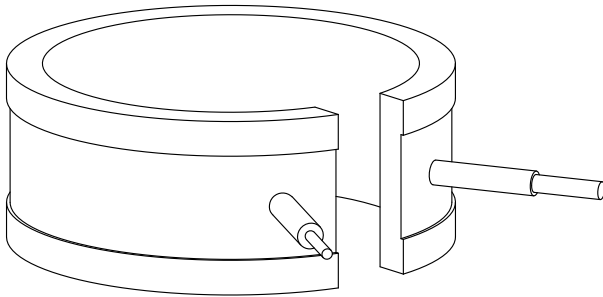


LEADS OPP. GAP
Code: I

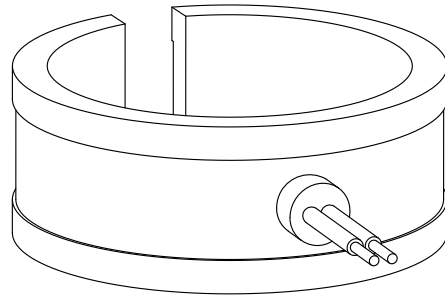


BAND HEATERS (OPTIONS)

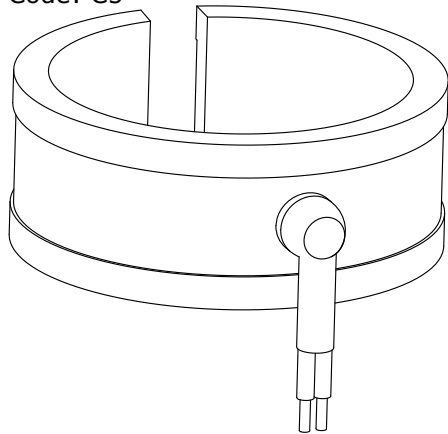
LEADS ON BOTH SIDES OF GAP
Code: F



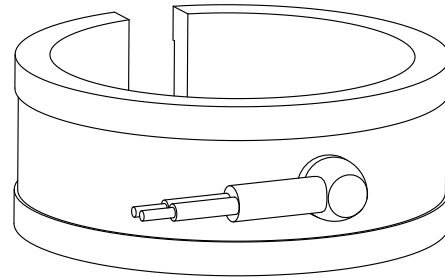
LEADS OPP. GAP
Code: D



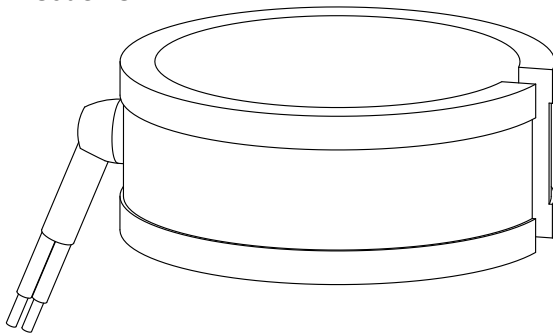
LEADS W/ CAP OPP. GAP
Code: C5



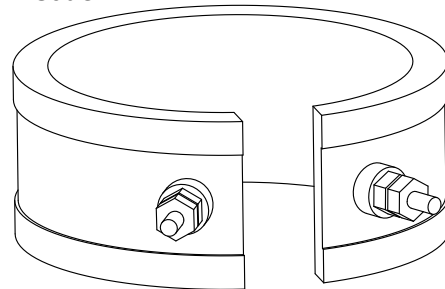
LEADS W/ 90° CAP OPP. GAP
Code: C6



LEADS W/ CAPP OPP. GAP AT ANGLE
Code: C7

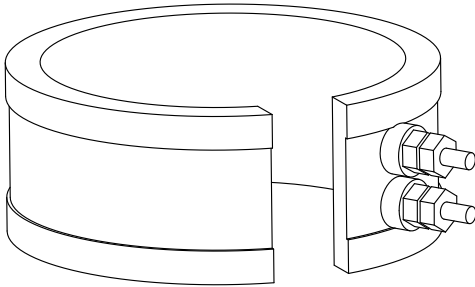


SCREW TERMINALS (A)
Code: A

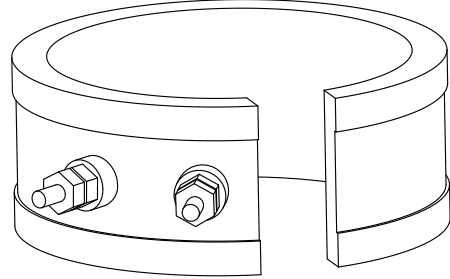


BAND HEATERS (OPTIONS)

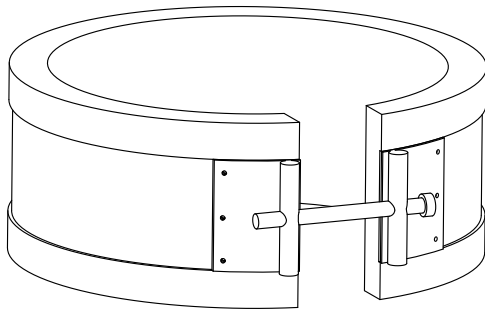
SCREW TERMINALS (C)
Code: B1



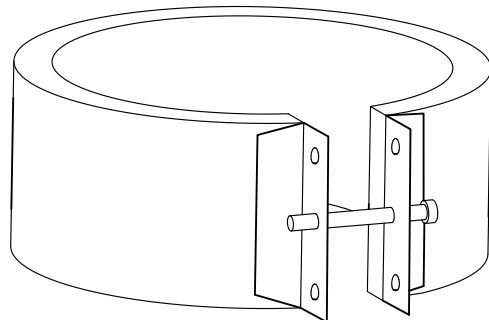
SCREW TERMINALS (B)
Code: B2



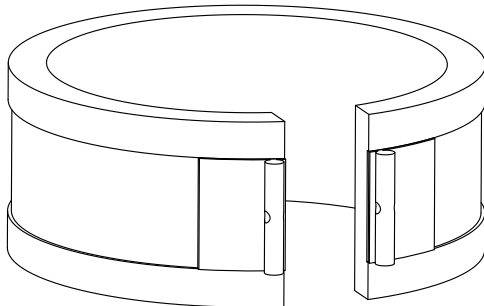
INDEPENDENT STRAP
Code: IS



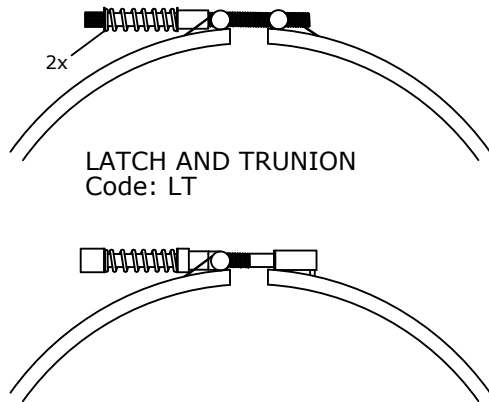
FLANGE
Code: FL



SPOT WELDED STRAPS
Code: SS



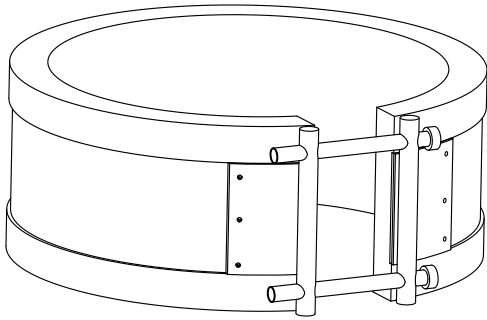
SPRING-LOADED BARREL NUTS
Code: SB



BAND HEATERS (OPTIONS)

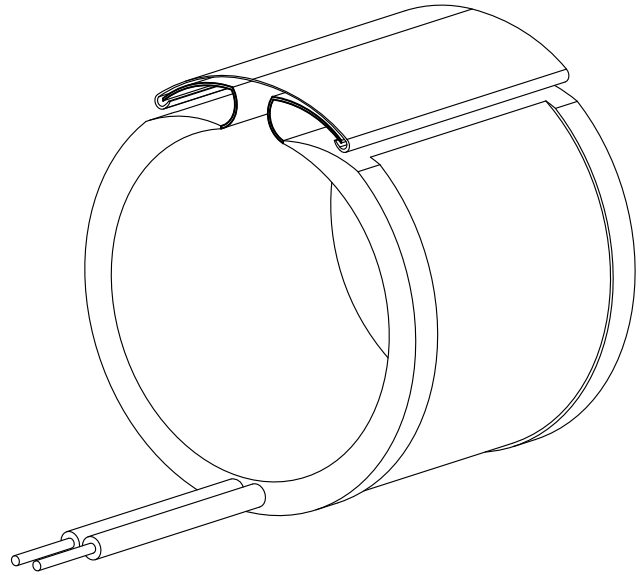
BUILT IN BARREL NUTS

Code: BN



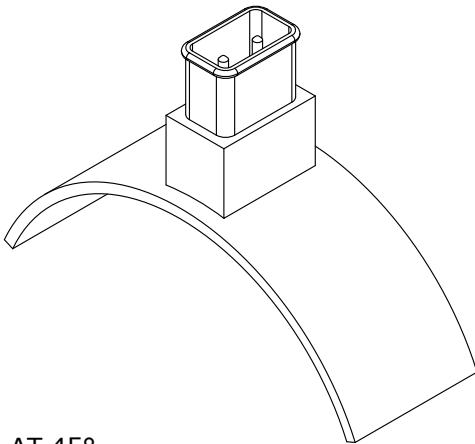
WEDGE-LOCK

Code: WL



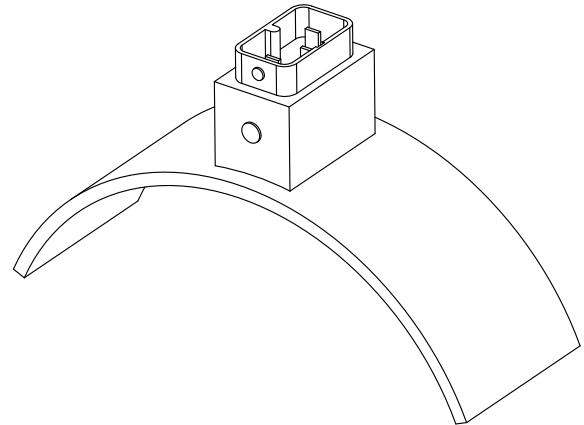
VERTICAL WITH BOX

Code: K00



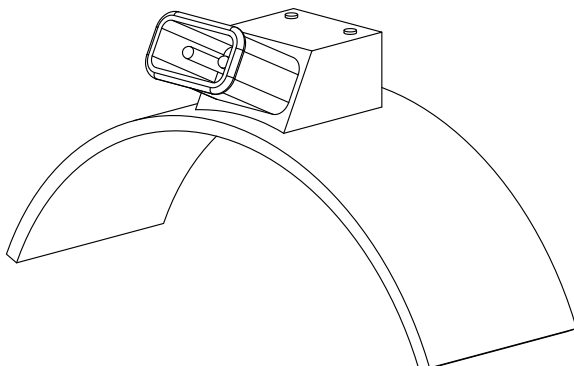
3 PRONG WITH GROUND

Code: K3P



AT 45°

Code: K45



TANGENTIAL WITH BOX

Code: K90

