



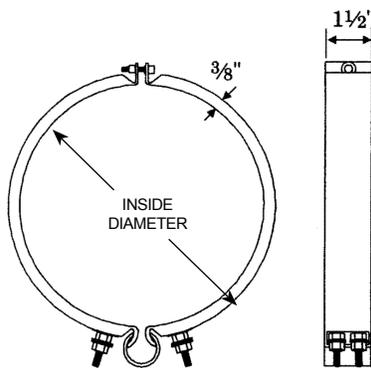
Band Heaters/Cast-In Heaters - BC and MC

Band Heaters - Type BC

Caloritech™ band heaters are aluminized steel strip heaters formed to a semicircle and supplied in pairs. A spring at the terminal end keeps the heater halves in contact with the barrel and compensates for thermal expansion. The other end is fastened by a captive chrome plated allen screw for ease of installation.

Band heaters are used to heat the barrels of plastic injection and extrusion machines, kettles, pipes and other cylinders. Standard heaters are designed for 240V operation and insulated for 600V. Two can be connected to accommodate a 480V supply.

The selection procedure is the same as for aluminized steel strip heaters. Heaters are $1\frac{1}{2} \pm 1/64$ " (38 mm \pm .4 mm) wide and $3/8 \pm 1/64$ " (9.5 mm \pm .4 mm) thick. Standard diameters are from 5" to 20" (127 mm) with outputs from 580 watts to 3 kW.



Inside dia. in (mm)	Watts	Catalog Number
5 (127)	580	BC4502
5 (127)	770	BC4502G100
5.5 (140)	600	BC4552
6.5 (165)	1000	BC4652
7 (178)	580	BC4702
7.5 (191)	900	BC752
8 (203)	800	BC4802G100
8 (203)	1000	BC4802
9 (229)	1100	BC4902G100
9 (229)	1400	BC4902
9.5 (241)	1000	BC4952
10 (254)	1200	BC4102
11 (279)	1480	BC4112
13 (330)	1400	BC4132
20 (508)	3000	BC4202

Aluminized steel. MgO insulated. 240V.
Catalog number covers two heater halves, spring clamp and tightening clamp.

Cast-In Immersion Heaters - Type MC

Application

Caloritech™ cast-in heaters are used for melting soft metals such as solder, tin, lead and babbitt at temperatures up to 510°C (950°F). Standard heaters are cast in iron and are not recommended for babbitt alloys containing more than 4% copper, zinc, aluminum, or any other metal in which iron is soluble. Heaters rated at 30 W/in² of casting area are suitable for applications where the crucible is kept full. Heaters rated at 14 W/in² of casting area should be selected if the crucible is normally emptied and started with fragments of cold material.

Three types of heaters are available:

- Over-the-side (models 1 - 8)
- Through-the-bottom (model 9)
- Through-the-side (model 10)

Molten material must cover the heated portion of the casting during normal operation - de-energize if the molten metal level falls below dimension "H".

Construction

A heavy wall, large diameter element with long cold terminals is formed and braced as necessary. Following casting the element is terminated in a general purpose box.

Standard Specification

- **Element** - steel, large diameter, heavy wall
- **Casting** - iron
- **Terminal box** - general purpose
- **Watt density** - 30 W/in², 14W/in², and 20 W/in² (through-the-bottom only)
- **Rating** - up to 3 kW at 120V and 10 kW at 240V. Two 240V heaters rated 2 kW and above can be connected in series to a 480V supply.
- **Gasket** - through-the-side and through-the-bottom heaters are supplied with a non-asbestos, high temperature gasket.

Special Modifications

- Moisture resistant or horizontal terminal box (used for wide tank walls)
- Element design using a standard casting pattern

Custom Design

Aluminum and iron cast-in heaters for special applications including:

- Non-standard single phase and three phase metal melting heaters
- Heating plates
- Heat storage systems
- Corrosive fluid heaters

BC and MC