

Band Heaters - BC

Band Heaters - BC Series

Calortech™ 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 $1\frac{1}{2} \pm 1/64$ " ($38\text{ mm} \pm .4\text{ mm}$) wide and $3/8 \pm 1/64$ " ($9.5\text{ mm} \pm 0.4\text{ mm}$) thick. Standard diameters are from 5" to 20" (127 mm) with outputs from 580 watts to 3 kW.

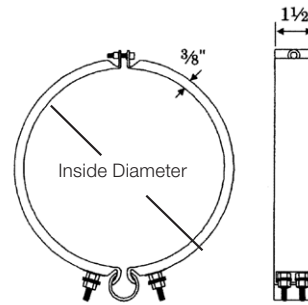


Figure 62

Table 20 – BC Series

Inside diameter		Watts	Catalog Number
in	mm		
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

Note

Catalog numbers cover two heater halves, spring clamp, and tightening clamp.

Tubular Band Heaters - TBH & TBW

TBH and TBW Series tubular band heaters can be clamped to extruder barrels, nozzles, pipes or vessels requiring highly concentrated heating. Heaters can be mounted side-by-side and wrapped with high temperature insulation to improve efficiency.

Some installations may require high temperature wiring or bus bar. If in doubt, check factory.

Two choices of watt densities are listed for some models. To improve service life in high temperature applications greater than 800°F (425°C), select the unit with the lower watt density and consider using multiple heaters.

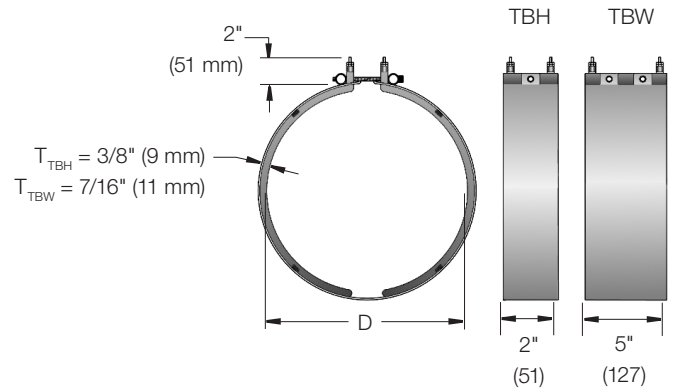


Figure 63

Construction

The band heater consists of two heating elements held in place by a stainless steel band with a threaded swivel type clamping device.

Two standard widths, 2" (51 mm) for TBH and 5" (127 mm) for TBW, are available. The TBW unit has two tension bolts and two double hairpin elements.

Incoloy® elements suitable for up to 600V are used in the larger models.

Terminal housings are available on special order.

Special Features

- Other wattages, diameters and widths are available on special order. Check factory.
- Terminal housings.

To Order Specify

- Quantity
- Voltage
- Special features
- Catalog number
- Wattage

Table 21 – TBH Band Heaters

Used On Std. Pipe Size		Inside Diameter		Diameter Tolerance		Wattage At		Watts/in ² At		Catalog Number	Weight	
in	mm	in	mm	±in	mm	120V, 240V	208V	120V, 240V	208V		lbs	kg
3	7.6	3 1/2	89	1/8	3	400	300	25	19	TBH03-040	1.6	0.7
3	7.6	3 1/2	89			600	450	37	28	TBH03-060	1.6	0.7
4	10.2	4 1/2	114			550	412	24	18	TBH04-055	1.8	0.8
4	10.2	4 1/2	114			700	525	31	23	TBH04-070	1.8	0.8
5	12.7	5 9/16	141			700	525	24	18	TBH05-070	2.0	0.9
5	12.7	5 9/16	141			850	637	29	22	TBH05-085	2.0	0.9
6	15.2	6 5/8	168	1/4	6	850	637	24	18	TBH06-085	2.2	1.0
6	15.2	6 5/8	168			1000	750	28	21	TBH06-100	2.2	1.0
8	20.3	8 5/8	219			1100	825	23	17	TBH08-110	2.4	1.1
8	20.3	8 5/8	219			1350	1012	29	22	TBH08-135	2.4	1.1
10	25.4	10 3/4	273			1450	1087	24	18	TBH10-145	2.5	1.2
10	25.4	10 3/4	273			1700	1275	28	21	TBH10-170	2.5	1.2

Table 22 – TBW Band Heaters

Used On Std. Pipe Size		Inside Diameter		Diameter Tolerance		Watts	Watts/in ²	Std. Voltages	Catalog Number	Weight	
in	mm	in	mm	±in	mm					lbs	kg
6	15.2	6 5/8	168	1/8	3	1500	18	120 208 240 480 600	TBW06-150	4	2
6	15.2	6 5/8	168			TBW06-200	4		2		
8	20.3	8 5/8	219	1/4	6	1500	14		TBW08-150	4	2
8	20.3	8 5/8	219			2500	23		TBW08-250	4	2
10	25.4	10 3/4	273			2000	14		TBW10-200	5	2
10	25.4	10 3/4	273			3000	21		TBW10-300	5	2
12	30.5	12 3/4	324			2500	15		TBW12-250	6	3
12	30.5	12 3/4	324			3500	20		TBW12-350	6	3
14	35.6	14	356			3000	16		TBW14-300	7	3
14	35.6	14	356			4000	21		TBW14-400	7	3
16	40.6	16	406			3500	16		TBW16-350	8	4
16	40.6	16	406			4500	20		TBW16-450	8	4