

MICA-INSULATED BAND HEATERS

MBH Series



MBH-5020800T
shown smaller than
actual size.

MBH-2520600A/120
shown smaller than
actual size.

MBH-3515450/120
shown smaller than
actual size.

MBH-1515175B/120
shown smaller than
actual size.

- ✓ 25 to 292 mm (1 to 11½") ID
- ✓ Up to 482°C (900°F) Barrel Temperature

APPLICATIONS

- ✓ Cylinders, Dies, Drums, and Holding Tanks
- ✓ Injection and Blow Molding Machines
- ✓ Plastic Extruders

Omegalux® MBH Series mica-insulated band heaters are available in 1- or 2-piece construction and a variety of diameters and widths. One-piece band heaters are manufactured with inside diameters from 25 to 89 mm (1 to 3½"). Two-piece band heaters are available in diameters from 102 to 292 mm (4 to 11½"). Electrical connections are made through post terminals or insulated and stainless steel overbraided leads.

Each half of the 2-piece band heaters is rated 120 V and is wired in parallel for 120 V operation or in series for 240 V operation.

Available options include different dimensions and terminals, special wattage or voltage ratings, flexible conduit, and holes or cutouts. Two or more sections can be manufactured to fit larger diameters. Contact Engineering for more information.

When heating objects to higher temperatures, lower-watt-density heaters should be used to prevent overheating and shortened heater life. Watt density is the total wattage of the heater divided by the heated surface area of the heater. Use the table to the right to select the maximum recommended watt density for the application. Lower watt densities can be achieved by operating 240 V heaters on 120 V.

When operating 240 V heaters on 120 V, the wattage and watt density are derated by a factor of 4.

For example, the MBH-1715300A/240 is a 44 mm (1.75") ID one-piece band heater, rated for 300 W and 36 W per square inch at 240 V. When operating this same heater on 120 V, the wattage and watt density are reduced to 75 W and 9 W per square inch.

Maximum Operating Temperature

Operating Temperature* °C (°F)	Maximum Recommended Watts per Square Inch
149 (300)	40
204 (400)	30
260 (500)	21
316 (600)	12
371 (700)	10
427 (800)	10
482 (900)	10

**One Piece
Band Heaters**

MBH-1515175B/120,
terminal style B,
shown larger than
actual size.

MBH-2520600A/120, terminal
style A, shown close
to actual size.



One-Piece Construction

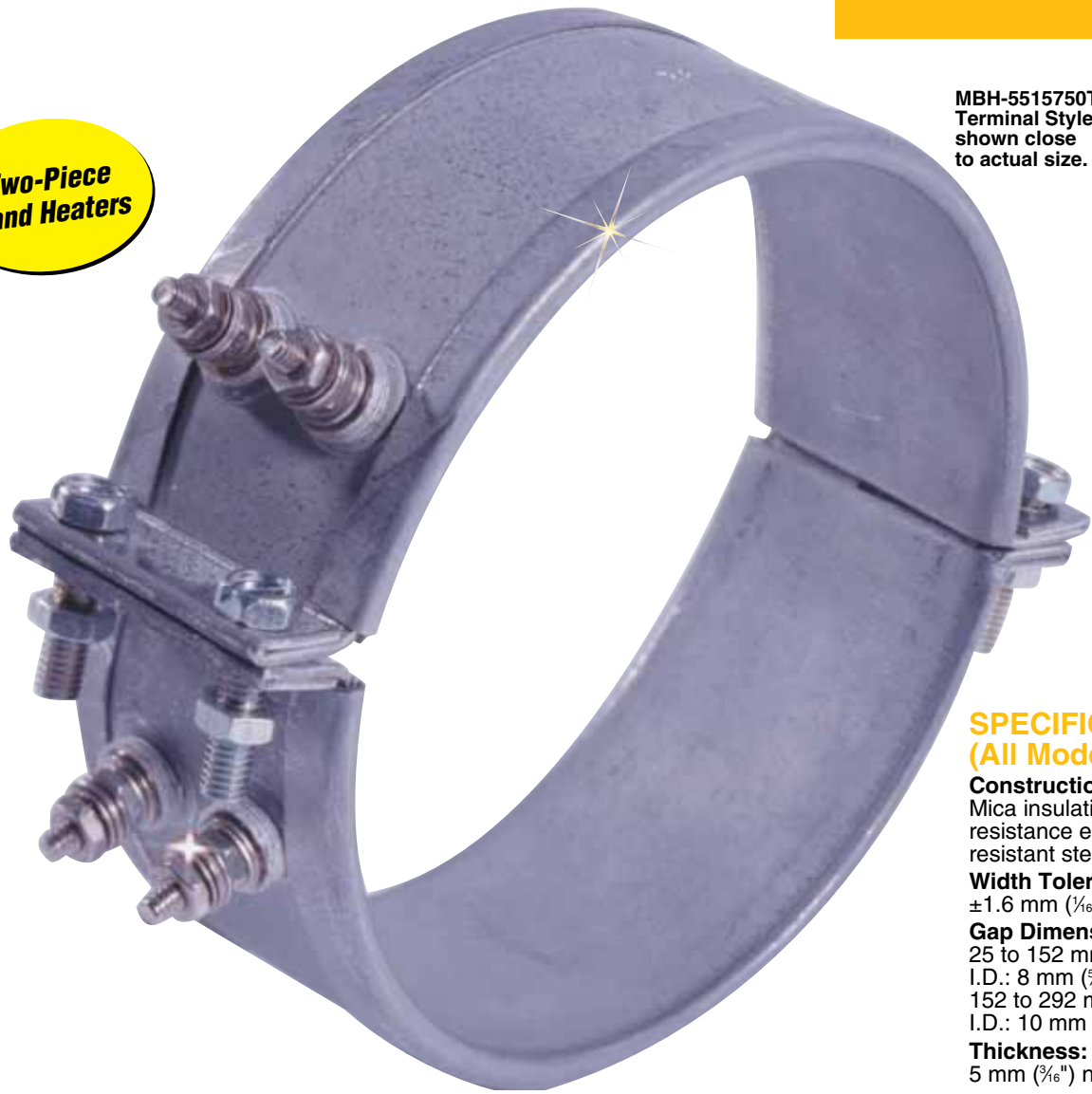
To Order

Model Number	ID mm (in)	Width mm (in)	Watts	W/in ²	Terminal Style	Weight kg (lb)
MBH-101085A/120	25 (1.00)	25 (1.0)	85	27	A	0.11 (0.25)
MBH-101085B/120	25 (1.00)	25 (1.0)	85	27	B	0.11 (0.25)
MBH-1015130A/120	25 (1.00)	38 (1.5)	130	27	A	0.17 (0.37)
MBH-1015130B/120	25 (1.00)	38 (1.5)	130	27	B	0.17 (0.37)
MBH-1210100A/120	32 (1.25)	25 (1.0)	100	25	A	0.17 (0.37)
MBH-1210100B/120	32 (1.25)	25 (1.0)	100	25	B	0.17 (0.37)
MBH-1210150A/120	32 (1.25)	25 (1.0)	150	38	A	0.17 (0.37)
MBH-1210150B/120	32 (1.25)	25 (1.0)	150	38	B	0.17 (0.37)
MBH-1215150A/120	32 (1.25)	38 (1.5)	150	25	A	0.20 (0.43)
MBH-1215150B/120	32 (1.25)	38 (1.5)	150	25	B	0.20 (0.43)
MBH-1215200A/120	32 (1.25)	38 (1.5)	200	34	A	0.20 (0.43)
MBH-1215200B/120	32 (1.25)	38 (1.5)	200	34	B	0.20 (0.43)
MBH-1515175A/*	38 (1.50)	38 (1.5)	175	24	A	0.23 (0.50)
MBH-1515175B/*	38 (1.50)	38 (1.5)	175	24	B	0.23 (0.50)
MBH-1515275A/*	38 (1.50)	38 (1.5)	275	39	A	0.23 (0.50)
MBH-1515275B/*	38 (1.50)	38 (1.5)	275	39	B	0.23 (0.50)
MBH-1715180A/*	44 (1.75)	38 (1.5)	180	22	A	0.25 (0.56)
MBH-1715180B/*	44 (1.75)	38 (1.5)	180	22	B	0.25 (0.56)
MBH-1715300A/*	44 (1.75)	38 (1.5)	300	36	A	0.25 (0.56)
MBH-1715300B/*	44 (1.75)	38 (1.5)	300	36	B	0.25 (0.56)
MBH-2015200A/*	51 (2.00)	38 (1.5)	200	21	A	0.31 (0.68)
MBH-2015200B/*	51 (2.00)	38 (1.5)	200	21	B	0.31 (0.68)
MBH-2015375A/*	51 (2.00)	38 (1.5)	375	40	A	0.31 (0.68)
MBH-2015375B/*	51 (2.00)	38 (1.5)	375	40	B	0.31 (0.68)
MBH-2515300A/*	64 (2.50)	38 (1.5)	300	25	A	0.34 (0.81)
MBH-2515450A/*	64 (2.50)	38 (1.5)	450	38	A	0.34 (0.81)
MBH-2520600A/*	64 (2.50)	51 (2.0)	600	38	A	0.39 (0.87)
MBH-2525750A/*	64 (2.50)	64 (2.5)	750	38	A	0.42 (0.93)
MBH-2530900A/*	64 (2.50)	76 (3.0)	900	38	A	0.48 (1.06)
MBH-3015400/*	76 (3.00)	38 (1.5)	400	28	—	0.25 (0.56)
MBH-3515450/*	89 (3.50)	38 (1.5)	450	27	—	0.31 (0.68)
MBH-3520500/*	89 (3.50)	51 (2.0)	500	23	—	0.39 (0.87)

* Insert "120" or "240" for 120 Vac or 240 Vac operation.

Ordering Example: MBH-1515175B/120, 38 mm (1.5") ID, 38 mm (1.5") width, 175 W, 120 Vac band heater.

**Two-Piece
Band Heaters**



**MBH-5515750T,
Terminal Style T
shown close
to actual size.**

**SPECIFICATIONS
(All Models)**

Construction:
Mica insulation, ribbon
resistance element, rust
resistant steel sheath

Width Tolerance:
±1.6 mm (1/16")

Gap Dimensions:
25 to 152 mm (1 to 6")
I.D.: 8 mm (5/16") nominal;
152 to 292 mm (6 to 11 1/2")
I.D.: 10 mm (3/8") nominal

Thickness:
5 mm (3/16") nominal

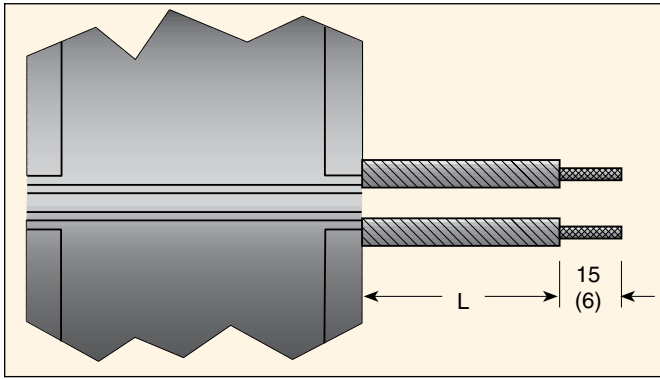
Two Piece Construction**

To Order						
Model Number	I.D. mm (")	Width mm (")	Watt	W/in²	Terminal Style	Weight kg (lb)
MBH-4015550T	102 (4.00)	38 (1.5)	550	30	T	0.23 (0.50)
MBH-4020600T	102 (4.00)	51 (2.0)	600	25	T	0.28 (0.62)
MBH-4515650T	114 (4.50)	38 (1.5)	650	31	T	0.25 (0.56)
MBH-5015750T	127 (5.00)	38 (1.5)	750	31	T	0.31 (0.68)
MBH-5020800T	127 (5.00)	51 (2.0)	800	26	T	0.45 (1.00)
MBH-5515750T	140 (5.50)	38 (1.5)	750	29	T	0.43 (0.95)
MBH-5520900T	140 (5.50)	51 (2.0)	900	26	T	0.45 (1.00)
MBH-6015900T	152 (6.00)	38 (1.5)	900	32	T	0.43 (0.95)
MBH-60201000T	152 (6.00)	51 (2.0)	1000	27	T	0.51 (1.12)
MBH-65151100T	165 (6.50)	38 (1.5)	1100	36	T	0.51 (1.12)
MBH-70151000T	178 (7.00)	38 (1.5)	1000	30	T	0.51 (1.12)
MBH-80151100T	203 (8.00)	38 (1.5)	1100	29	T	0.57 (1.25)
MBH-90151200T	229 (9.00)	38 (1.5)	1200	28	T	0.62 (1.37)
MBH-100151400T	254 (10.00)	38 (1.5)	1400	30	T	0.68 (1.50)
MBH-110201200T	279 (11.00)	51 (2.0)	1200	18	T	0.91 (2.00)
MBH-115151650T	292 (11.50)	38 (1.5)	1650	31	T	0.76 (1.68)

**** Note:** Two piece band heaters can be operated on either 120 or 240 Vac. Each half is rated for 120 V and is wired in parallel for 120 V and in series for 240 V operation.

Dimensions: cm (in)

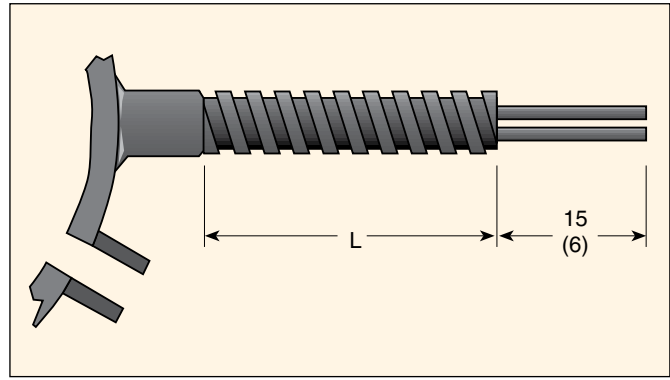
Dimensions for Terminal Styles A, B and T



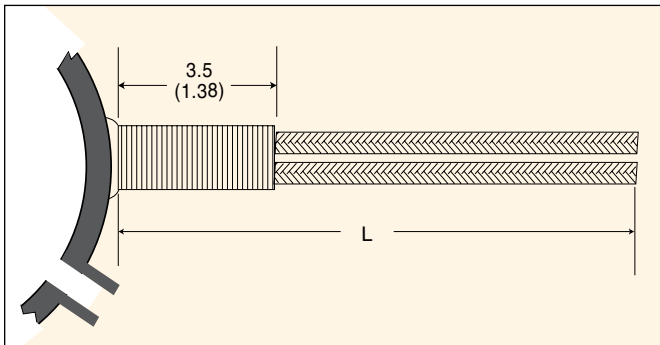
Terminal Style A

L = 30 cm (12") for standard heaters
Longer leads are optional

Flexible Conduit Options for Terminal Style B

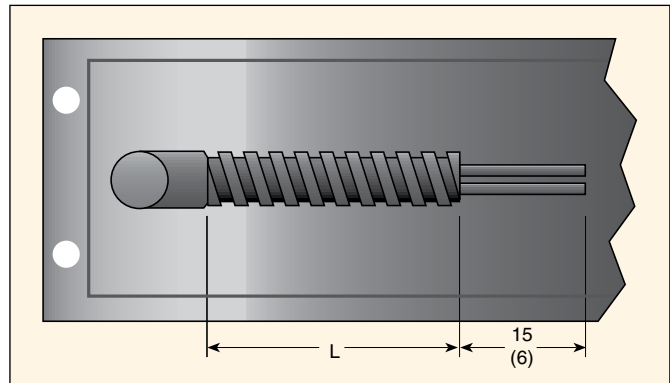


FC1 Flexible conduit for straight leads

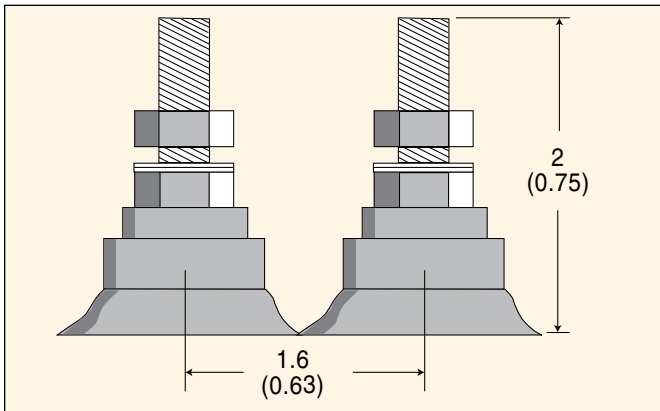


Terminal Style B

L = 30 cm (12") for standard heaters
Longer leads or flexible conduit are optional

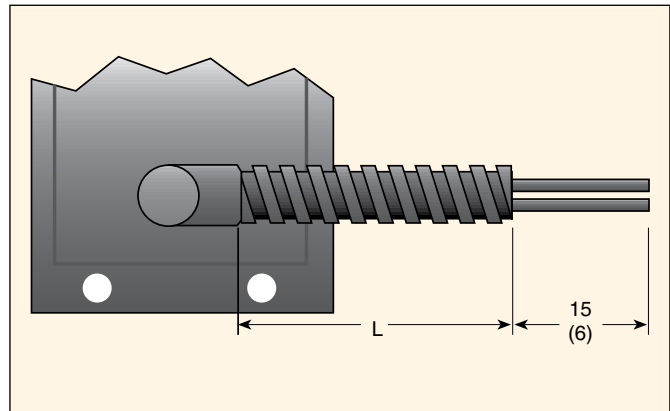


FC2 Flexible conduit for right angle leads in line with heater



Terminal Style T

Note: Heater thickness is approx. 5 mm (3/16")
Total height is approx. 2.5 cm (1")



FC3 Flexible conduit for right angle leads at 90° to heater

H

Terminal Style A Options

Description	Ordering Suffix
Longer "L" Dimension	/*

Terminal Style B Options

Description	Ordering Suffix
Longer "L" Dimension	/*
FC1 Flexible Conduit Option	/FC1/*
FC2 Flexible Conduit Option	/FC2/*
FC3 Flexible Conduit Option	/FC3/*