



# Band Heaters



U.L. Recognized-E56973 C.S.A. Certified – 016386-0-000

## Applications

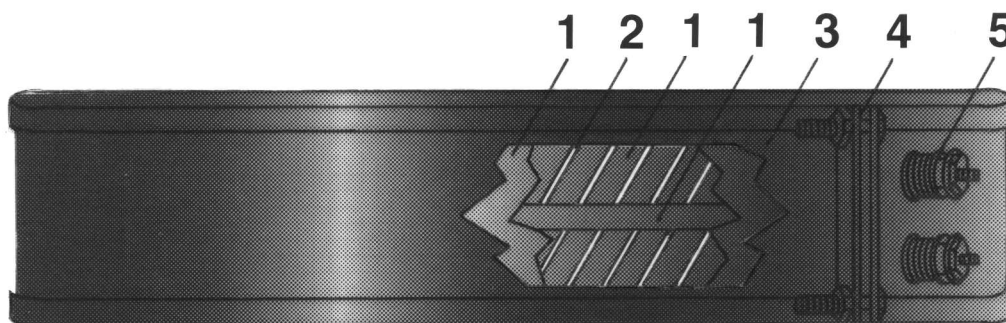
Cylinders, Dies, Drums, Holding Tanks, Injections and Blow Molding Machines, and Plastic Extruders.

## Features

- The Hotwatt Standard Band Heaters are manufactured in one or two piece constructions with maximum inside diameters of 11½" and 22½" respectively. Three or more sections are employed when heaters of larger diameters are needed (as for blown film extrusion dies).
- Holes and cutouts are available. Maximum wattage may be reduced with the addition of holes and cutouts. Drawing required for specific location.
- Made in U.S.A.

## Construction

- 1 Mica insulation.
- 2 Element ribbon.
- 3 Rust resistant steel sheath.
- 4 Radial lock-up tabs.
- 5 Post terminals.



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# Band Heaters

▼ Manufactured Items ▼

## Standard Band Heater

Inside Dia.	1"	1½"	2"	2½"	3"	Width 3½"	4"	4½"	5"	5½"	6"
1"	85	130	185	235							
1½"	140	210	280	350	420	490	560				
2"	175	255	350	470	565	675	765	865	950		
2½"	235	350	470	590	700	825	940	1050	1175	1300	1400
3"	275	405	550	675	800	935	1075	1270	1410	1550	1690
3½"	330	475	660	825	990	1150	1320	1485	1650	1800	1980
4"	375	545	725	910	1100	1275	1450	1640	1825	2010	2200
4½"	420	635	845	1060	1270	1485	1695	1900	2120	2330	2545
5"	450	685	925	1150	1375	1610	1850	2075	2300	2525	2750
5½"	520	775	1035	1295	1555	1815	2070	2330	2590	2850	3100
6"	550	820	1100	1325	1650	1935	2225	2495	2770	3050	3325
6½"	610	920	1225	1530	1835	2140	2450	2755	3060	3365	3675
7"	650	975	1300	1625	1950	2275	2600	2875	3250	3575	3900
7½"	705	1060	1415	1765	2120	2470	2825	3180	3530	3885	4240
8"	750	1125	1500	1860	2225	2585	2950	3325	3700	4075	4450
8½"	800	1200	1600	2000	2400	2800	3200	3600	4000	4400	4800
9"	850	1275	1675	2050	2525	2935	3350	3825	4200	4600	5000
9½"	895	1340	1790	2235	2685	3130	3580	4025	4475	4920	5370
10"	925	1385	1850	2325	2800	3260	3725	4185	4650	5110	5575
10½"	990	1485	1980	2475	2970	3465	3960	4455	4950	5445	5940
11"	1000	1500	2030	2535	3040	3600	4140	4650	5170	5690	6200
11½"	1060	1590	2130	2660	3200	3750	4300	4850	5400	6030	6560

## Sizes

The above chart represents typical sizes available. Other inside diameters and widths, both between those and larger than those listed are available. Metric sizes are also available.

Construction of units with inside diameters over 11½" must be manufactured in accordance with the following table.

Construction	Inside Diameter Range
Two Piece	Over 11½" to 22½"
Three Piece	Over 22½" to 36"
Four Piece	Over 36" to 48"

## Wattage

The above is based on a watt density of 30 watts per square inch of surface.

The watt density may be varied, depending on operating temperature in accordance with the following table.

Operating Temperature	°C	Watts Per Square Inch
300°F	149°C	40
400°F	204°C	30
500°F	260°C	21
600°F	316°C	12
700°F to	371°C	10
900°F Max.	482°C	

To compute wattage: multiply inside Diameter x pi x width x watts per square inch (based on above table).

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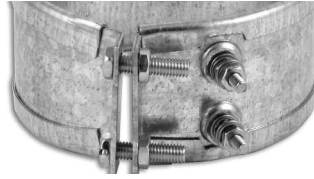
# Band Heaters

▼ IN STOCK ITEMS ▼

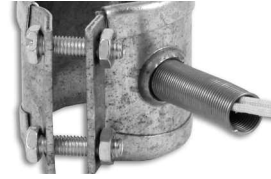
## Termination Type



Termination Type SF16B



Termination Type SF3B



Termination Type SF1A

## One Piece Construction

Dimensions							
I.D.	Width	Cat. No.	Wattage	Voltage	Watts/in <sup>2</sup>	Weight	Termination
1"	1"	MB1-1	85	120	27	.25	SF16B-18/12
1"	1½"	MB1-1.5	130	120	27	.37	SF16B-18/12
1¼"	1"	MB1.2-1	100	120	25	.37	SF16B-18/12
1¼"	1"	MB1.2-1	150	120	38	.37	SF16B-18/12
1¼"	1½"	MB1.2-1.5	150	120	25	.43	SF16B-18/12
1¼"	1½"	MB1.2-1.5	200	120	34	.43	SF16B-18/12
1½"	1½"	MB1.5-1.5	45	120	6	.50	SF16B-18/12
1½"	1½"	MB1.5-1.5	70	120	10	.50	SF16B-18/12
1½"	1½"	MB1.5-1.5	175	120	24	.50	SF16B-18/12
1½"	1½"	MB1.5-1.5	175	240	24	.50	SF16B-18/12
1½"	1½"	MB1.5-1.5	275	120	39	.50	SF16B-18/12
1½"	1½"	MB1.5-1.5	275	240	39	.50	SF16B-18/12
1¾"	1½"	MB1.7-1.5	45	120	5	.56	SF16B-18/12
1¾"	1½"	MB1.7-1.5	75	120	9	.56	SF16B-18/12
1¾"	1½"	MB1.7-1.5	180	120	22	.56	SF16B-18/12
1¾"	1½"	MB1.7-1.5	180	240	22	.56	SF16B-18/12
1¾"	1½"	MB1.7-1.5	300	120	36	.56	SF16B-18/12
1¾"	1½"	MB1.7-1.5	300	240	36	.56	SF16B-18/12
2"	1½"	MB2-1.5	50	120	5	.68	SF16B-18/12
2"	1½"	MB2-1.5	95	120	10	.68	SF16B-18/12
2"	1½"	MB2-1.5	200	120	21	.68	SF16B-18/12
2"	1½"	MB2-1.5	200	240	21	.68	SF16B-18/12
2"	1½"	MB2-1.5	375	120	40	.68	SF16B-18/12
2"	1½"	MB2-1.5	375	240	40	.68	SF16B-18/12
2½"	1½"	MB2.5-1.5	75	120	6	.81	SF16B-18/12
2½"	1½"	MB2.5-1.5	110	120	9	.81	SF16B-18/12
2½"	1½"	MB2.5-1.5	300	120	25	.81	SF16B-18/12
2½"	1½"	MB2.5-1.5	300	240	25	.81	SF16B-18/12
2½"	1½"	MB2.5-1.5	450	120	38	.81	SF16B-18/12
2½"	1½"	MB2.5-1.5	450	240	38	.81	SF16B-18/12
2½"	2"	MB2.5-2	150	120	9	.87	SF16B-18/12
2½"	2"	MB2.5-2	600	120	38	.87	SF16B-18/12
2½"	2"	MB2.5-2	600	240	38	.87	SF16B-18/12
2½"	2½"	MB2.5-2.5	190	120	9	.93	SF16B-18/12
2½"	2½"	MB2.5-2.5	750	120	38	.93	SF16B-18/12
2½"	2½"	MB2.5-2.5	750	240	38	.93	SF16B-18/12
2½"	3"	MB2.5-3	225	120	9	1.06	SF16B-18/12
2½"	3"	MB2.5-3	900	120	38	1.06	SF16B-18/12
2½"	3"	MB2.5-3	900	240	38	1.06	SF16B-18/12
3"	1½"	MB3-1.5	100	120	7	.56	SF3B
3"	1½"	MB3-1.5	400	120	28	.56	SF3B

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# Band Heaters

▼ IN STOCK ITEMS CONTINUED ▼

## One Piece Construction (continued)

Dimensions		Cat. No.	Wattage	Voltage	Watts/in <sup>2</sup>	Weight	Termination
I.D.	Width						
3"	1½"	MB3-1.5	400	240	28	.56	SF3B
3½"	1½"	MB3.5-1.5	115	120	7	.68	SF3B
3½"	1½"	MB3.5-1.5	450	120	27	.68	SF3B
3½"	1½"	MB3.5-1.5	450	240	27	.68	SF3B
3½"	2"	MB3.5-2	125	120	6	.87	SF3B
3½"	2"	MB3.5-2	500	120	23	.87	SF3B
3½"	2"	MB3.5-2	500	240	23	.87	SF3B
1"	1"	MB1-1	85	120	27	.25	SF1A-12
1"	1½"	MB1-1.5	130	120	27	.37	SF1A-12
1¼"	1"	MB1.2-1	100	120	25	.37	SF1A-12
1¼"	1"	MB1.2-1	150	120	38	.37	SF1A-12
1¼"	1½"	MB1.2-1.5	150	120	25	.43	SF1A-12
1¼"	1½"	MB1.2-1.5	200	120	34	.43	SF1A-12
1½"	1½"	MB1.5-1.5	45	120	6	.50	SF1A-12
1½"	1½"	MB1.5-1.5	70	120	10	.50	SF1A-12
1½"	1½"	MB1.5-1.5	175	120	24	.50	SF1A-12
1½"	1½"	MB1.5-1.5	175	240	24	.50	SF1A-12
1½"	1½"	MB1.5-1.5	275	120	39	.50	SF1A-12
1½"	1½"	MB1.5-1.5	275	240	39	.50	SF1A-12
1¾"	1½"	MB1.7-1.5	45	120	5	.56	SF1A-12
1¾"	1½"	MB1.7-1.5	75	120	9	.68	SF1A-12
1¾"	1½"	MB1.7-1.5	180	120	22	.56	SF1A-12
1¾"	1½"	MB1.7-1.5	180	240	22	.56	SF1A-12
1¾"	1½"	MB1.7-1.5	300	120	36	.56	SF1A-12
1¾"	1½"	MB1.7-1.5	300	240	36	.56	SF1A-12
2"	1½"	MB2-1.5	50	120	5	.68	SF1A-12
2"	1½"	MB2-1.5	95	120	10	.68	SF1A-12
2"	1½"	MB2-1.5	200	120	21	.68	SF1A-12
2"	1½"	MB2-1.5	200	240	21	.68	SF1A-12
2"	1½"	MB2-1.5	375	120	40	.68	SF1A-12
2"	1½"	MB2-1.5	375	240	40	.68	SF1A-12

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# Band Heaters

▼ IN STOCK ITEMS CONTINUED ▼

## Two Piece Construction

Each half is manufactured at 120 volts. Units are not designed for use in series on voltage in excess of 240 volts.

Dimensions		Cat. No.	Wattage	Voltage	Watts/in <sup>2</sup>	Weight	Termination
I.D.	Width						Stud Size
4"	1½"	MB4-1.5	550	120	30	.50	SF3B
4"	1½"	MB4-1.5	550	240	30	.50	SF3B
4"	2"	MB4-2	600	120	25	.62	SF3B
4"	2"	MB4-2	600	240	25	.62	SF3B
4½"	1½"	MB4.5-1.5	650	120	31	.56	SF3B
4½"	1½"	MB4.5-1.5	650	240	31	.56	SF3B
5"	1½"	MB5-1.5	750	120	31	.68	SF3B
5"	1½"	MB5-1.5	750	240	31	.68	SF3B
5"	2"	MB5-2	800	120	26	1.00	SF3B
5"	2"	MB5-2	800	240	26	1.00	SF3B
5½"	1½"	MB5.5-1.5	750	120	29	.95	SF3B
5½"	1½"	MB5.5-1.5	750	240	29	.95	SF3B
5½"	2"	MB5.5-2	900	120	26	1.00	SF3B
5½"	2"	MB5.5-2	900	240	26	1.00	SF3B
6"	1½"	MB6-1.5	900	120	32	.95	SF3B
6"	1½"	MB6-1.5	900	240	32	.95	SF3B
6"	2"	MB6-2	1000	120	27	1.12	SF3B
6"	2"	MB6-2	1000	240	27	1.12	SF3B
6½"	1½"	MB6.5-1.5	1100	120	36	1.12	SF3B
6½"	1½"	MB6.5-1.5	1100	240	36	1.12	SF3B
7"	1½"	MB7-1.5	1000	120	30	1.12	SF3B
7"	1½"	MB7-1.5	1000	240	30	1.12	SF3B
8"	1½"	MB8-1.5	1100	120	29	1.25	SF3B
8"	1½"	MB8-1.5	1100	240	29	1.25	SF3B
9"	1½"	MB9-1.5	1200	120	28	1.37	SF3B
9"	1½"	MB9-1.5	1200	240	28	1.37	SF3B
10"	1½"	MB10-1.5	1400	120	30	1.50	SF3B
10"	1½"	MB10-1.5	1400	240	30	1.50	SF3B
11"	2"	MB11-2	1200	120	18	2.00	SF3B
11"	2"	MB11-2	1200	240	18	2.00	SF3B
11½"	1½"	MB11.5-1.5	1650	120	31	1.68	SF3B
11½"	1½"	MB11.5-1.5	1650	240	31	1.68	SF3B

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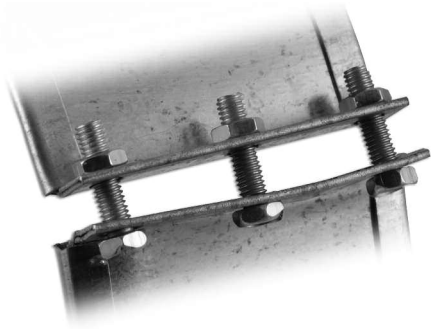
# Band Heaters

## Clamping Options

### Standard Tightening Mechanisms

Standard:

Radial Lock-up Tabs

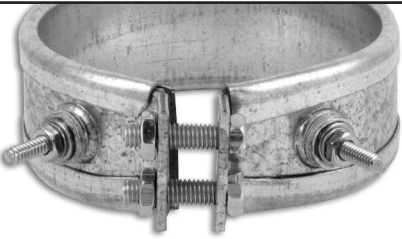










Optional:

Separate Stainless Steel Strap with Barrel Nut—Specify XS88.



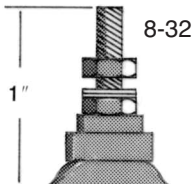
### Post Type Terminal Options

	Terminal Type	Maximum Amperage	Position On Heater	Size Limitations
	SF3A	20	One-Piece Heater 	Min. Width: 1" Min. I.D.: 2"
		40	Two-Piece Heater 	Min. Width: 1" Min. I.D.: 3"
	SF3B	20	One-Piece Heater 	Min. Width: 1½" Min. I.D.: 2"
		40	Two-Piece Heater 	Min. Width: 1½" Min. I.D.: 3"
	SF13A	20	One-Piece Heater 	Min. Width: 2½" Min. I.D.: 2½"
		40	Two-Piece Heater 	Min. Width: 2½" Min. I.D.: 4"

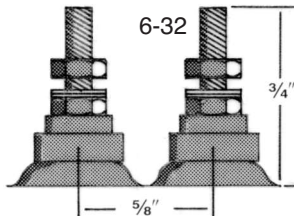
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### Dimensions

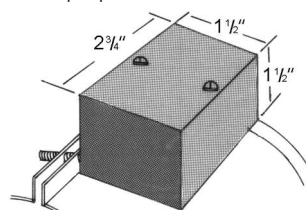
SF3A: Post Terminals



SF3B: Post Terminals



SF-13A: General purpose box. NEMA No. 1




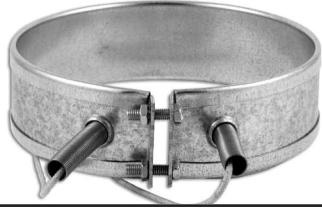
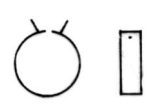











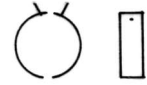








# Band Heaters

## Lead Type Terminal Options

Terminal Type	Maximum Amperage	Position On Heater	Size Limitations
	10	One-Piece Heater 	Min. Width: 1" Min. I.D.: 1"
	20	Two-Piece Heater 	Min. Width: 1" Min. I.D.: 3"
	12	One-Piece Heater 	Min. Width: 1" Min. I.D.: 3"
	10	One-Piece Heater 	Min. Width: 1½" Min. I.D.: 1½"
	20	Two-Piece Heater 	Min. Width: 1½" Min. I.D.: 3"
	8	One-Piece Heater 	Min. Width: 1½" Min. I.D.: 1½"
	16	Two-Piece Heater 	Min. Width: 1½" Min. I.D.: 3"
	8	One-Piece Heater 	Min. Width: 1½" Min. I.D.: 1½"
	16	Two-Piece Heater 	Min. Width: 1½" Min. I.D.: 3"
	10	One-Piece Heater 	Min. Width: 1" Min. I.D.: 1"
	20	Two-Piece Heater 	Min. Width: 1" Min. I.D.: 3"
	10	One-Piece Heater 	Min. Width: 1" Min. I.D.: 1"

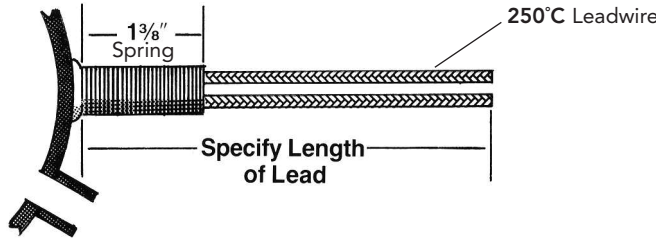
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# Band Heaters

## Special Features

**SF1A:** Flexible leads with spring protector. Standard lead length is 6". Longer lengths are available.

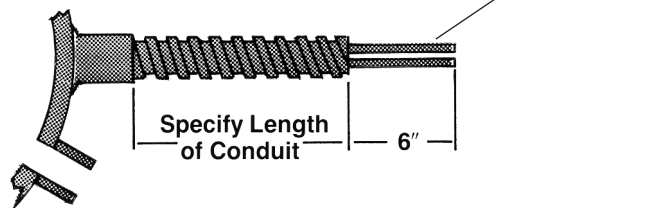


**SF1B:** Constructions (similar to SF-1A above) employs one leadwire on each side of gap. Same spring dimensions apply.

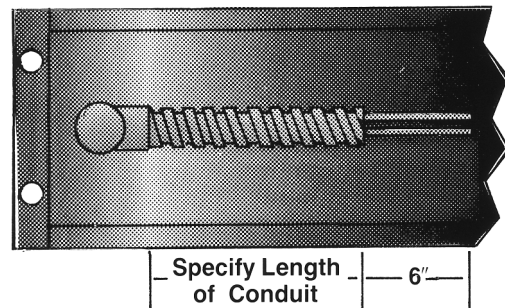
**SF12:** Male dead front armored plug. May be supplied on units with leads and conduit. Ground wire (SF-6) should be specified when using any three prong plug. Specify conduit length and plug required as follows:

<b>SF12-P1:</b> 2 prong/straight blade/2 pole/2wire/ UL&CSA Listed/NEMA 1-15P/125 volts/15 amps.	
<b>SF12-P2:</b> 2 prong/twist lock/2 pole/2 wire/UL Listed/ NEMA L1-15P/125 volts/15 amps.	
<b>SF12-P3:</b> 3 prong/twist lock/2 pole/3 wire/ UL&CSA Listed/NEMA L6-15P/250 volts/15 amps.	
<b>SF12-P4:</b> 3 prong/twist lock/2 pole/3 wire/ UL &CSA Listed/NEMA L6-20/250 volts/20 amps.	
<b>SF12-P5:</b> 3 prong/straight blade/2 pole/3 wire/ UL&CSA Listed/NEMA 5-15P/125 volts/15 amps.	

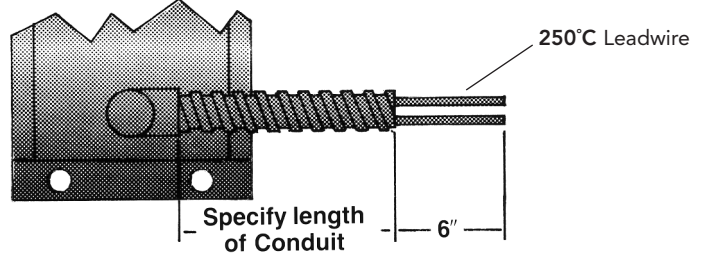
**SF14:** Flexible conduit for straight leads.



**SF15A:** Flexible conduit for right angle leads in line with heater.

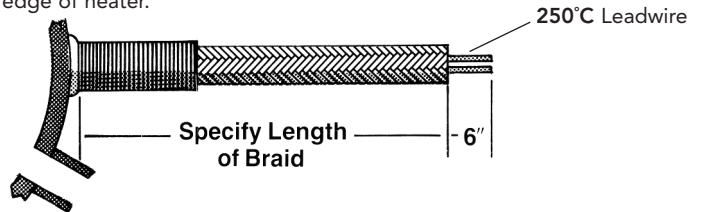


**SF15B:** Flexible conduit for right angle leads, at 90° to heater.



**SF16A:** Stainless steel, flexible braid for straight leads. Specify braid length. Lengths are supplied 6" longer than braid.

**SF16B:** Stainless steel, flexible braid for individual leads out from edge of heater.



**SF29:** Multiple heat; when a single unit with multiple wattages is necessary. Some uses of these units include: quick heat-up with a standby circuit for maintenance of low temperature; providing different wattages when there is a wide variation in thermal loads; and replacing more expensive rheostats or powerstats for wattage control.

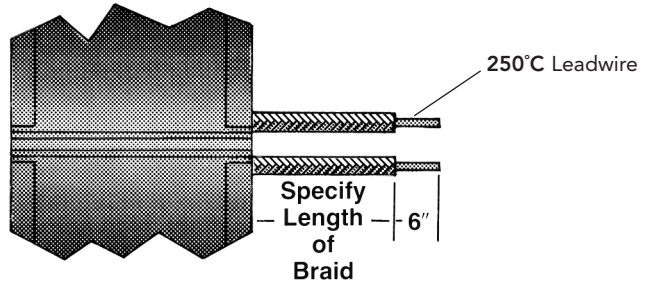
**SF37:** Stainless steel sheath.

**XS79:** 2 piece construction through 1 1/2" I.D.

**XS79-1:** Two piece construction. Over 1 1/2" I.D. to 2 1/2" I.D.

**XS79-2:** Three piece construction. Over 2 1/2" I.D. to 36" I.D.

**XS79-3:** Four piece construction. Over 36" I.D. to 48" I.D.



## Voltage

Standard voltages are either 120V or 240V. Other voltages are available.

## Tolerances

Inside diameters are based upon outside diameter of area being heated

**Width dimensions:** ±1/16"

**Gap dimensions:** 1" to 6 dia. - 5/16" nom.

6" to 11 1/2" dia. - 3/8" nom.

11 1/2" to 23" dia. - 7/8" nom.

Wattage tolerances are held to +5%, -10% at voltage specified.

## How To Order

**Specify:** catalog number prefix "MB" followed by inside diameter, width, wattage, voltage, termination type, and special feature options if required. On multiple piece construction (XS79-1, -2, -3) specify total rating as well as rating per section (i.e. 500W240V total 250W120V per section)

**Example:** MB1.75-4.25/300W120V/SF15A-14/36.

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# Drum Heaters

## Metal Sheathed

### DH-1/55 Gallon High Temperature, Metal Sheathed

▼ IN STOCK ITEMS ▼



Table-55 Gallon

Cat. No.	Wattage	Voltage	I.D.	Width	Temp. Range
DH-1-1-4	2000	115	22½"	5"	200-400°F
DH-1-2-4	3000	230	22½"	5"	200-400°F
DH-1-1-2	2000	115	22½"	5"	60-250°F
DH-1-2-2	3000	230	22½"	5"	60-250°F

### Features

- Fits standard 55 gallon metal drums.
- Lightweight (approx. 14 lbs.) one piece construction.
- Rust resistant steel casing.
- Heavy duty six foot cord and plug on all models with 3 wire plug for grounded operation.
- Quick release spring loaded clamp.
- Conservatively rated for long life.
- Available in 115V or 230V.
- Supplied in two temperature ranges, 200°F-400°F or 60°F-250°F.
- Supplied with three heat switch allowing for three wattage ratings.

### Installation

Place the heater over the drum using the hook and chain to hang the unit from the drum rim. Mount unit at base of drum. Tighten the clamp springs after closing clamp to ensure a tight fit and maximum heat transfer to the contents of the drum. Do not allow cord to contact heater surface. Before energizing the heater, make sure drum contents are above the top edge of the heater. If the material level falls below the heater the unit may not cycle and life will be reduced.

### Connection

115 Volt/2000 Watt and 230 Volt/3000 Watt Drum Heaters are equipped with a SPECIAL 3 wire plug for extra safe operation. For 115V/2000W use a Hubbell single outlet #5361 or equal. For 230V/3000W use a Hubbell single outlet #5661 or equal.

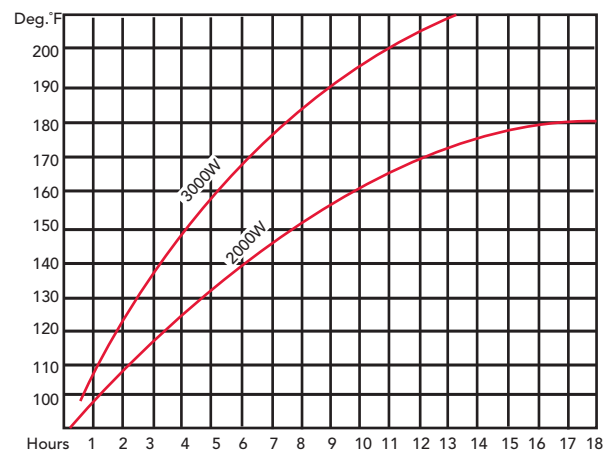
### Operation

When heating a material for the first time, the material temperature should be monitored with a temperature indicating device and the final drum heater control setting recorded for future reference. The material should be mixed to get an accurate temperature since the material near the outside of the drum will heat faster than the material near the center. This initial set-up should be done with the three heat switch set on high. If the material you are heating exhibits excellent heat receptivity you may maintain your desired temperature with the three heat switch set on medium or low, thus reducing power consumption.

- Use on all metal drums only.
- For use indoors only.
- Do not use to heat flammable materials.
- Do not use in hazardous areas.
- Vent container to prevent pressure build-up.

### Time vs. Temperature

Achieved at maximum setting, Covered 55 gallon drum filled with water at 70°F.



DRUM