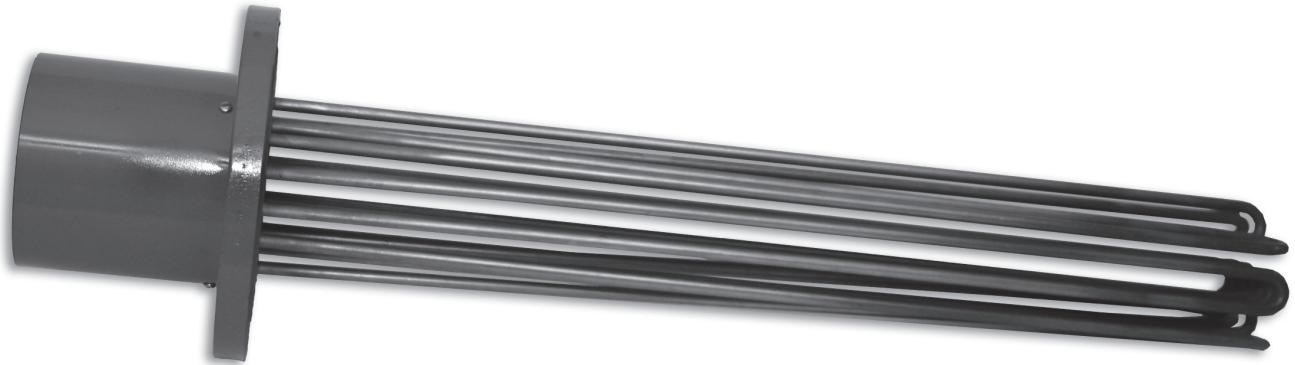




# Tubular Heaters

## Flanged



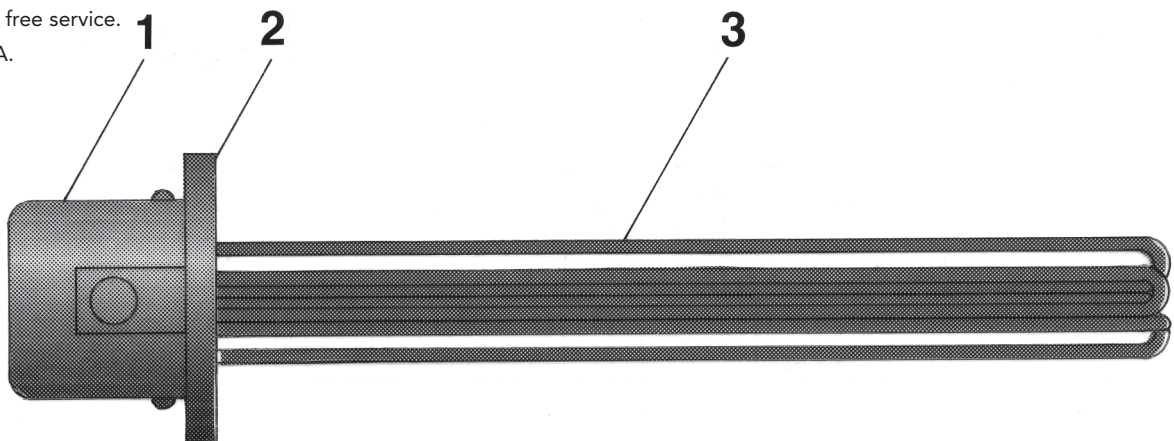
UL and C-UL Recognized-E177353

### Features

- Ratings and sizes other than those listed are available.
- 150# rating ANSI carbon steel flange.
- Steel, stainless steel, copper, or incoloy sheathed elements.
- Optional thermostat and well for temperature control.
- Element supports in multiple element units for proper element spacing as required.
- General purpose terminal housing with conduit openings. Optional terminal housings for special applications.
- 240V and 480V, single or three phase which are factory wired to your requirements.
- Long, trouble free service.
- Made in U.S.A.

### Construction

- 1 Terminal housing, NEMA 1 general purpose for electrical connections.
- 2 Standard pipe flange.
- 3 Tubular heating element.



TUBULAR



# Tubular Heaters

## Flanged

### Flanged Heater Selection Guide

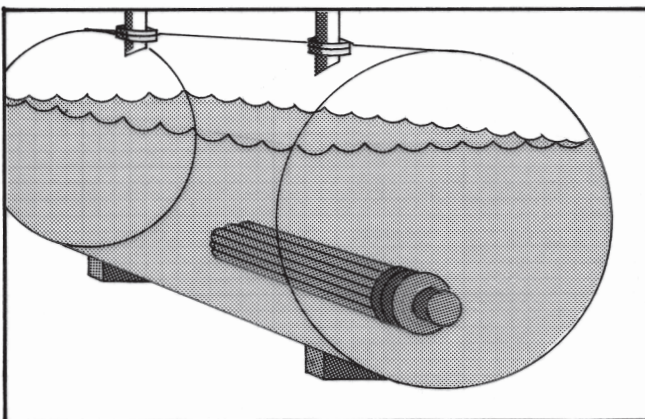
Application	Solution or Application	Alkaline or Acid Content (Est. % by Volume)	Sheath Material	Typical Watt Density (watts/sq. in.)
Water and Very Mild Solutions	Clean Water	pH6 to pH8 Neutral	Copper	45
	Process Water or Very Mild Solutions	pH5 to pH9 2-3%	Incoloy	45
	Mild Solutions	5-6%	Incoloy	45
	Demineralized or Deionized Water	—	Incoloy	45
Oil Heating*	Low Viscosity Oil	—	Steel	23
	Medium Viscosity Oil	—	Steel	15
	High Viscosity Oil	—	Steel	6
Specialty Heaters	Small Tanks	—		
	Process Water	pH5-pH9	Incoloy	45
	Demineralized Water	—	Incoloy	45
	Low Viscosity Oil	—	Incoloy	23
	Pipe Insert	—	Incoloy	12
	Hot Tubs, Spa	Treated	Incoloy	100
Commercial Equipment	Clean Water		Incoloy	30
	Clean Water		Copper	60
Air, Gases, and Steam Heating	Low Temperature	—	Stainless Steel	23
	High Temperature	—	Incoloy	23

\*The oil heaters on following pages are catalogued based on low viscosity oil. For medium and high viscosity oils, watt densities must be reduced in accordance with the above watt densities.

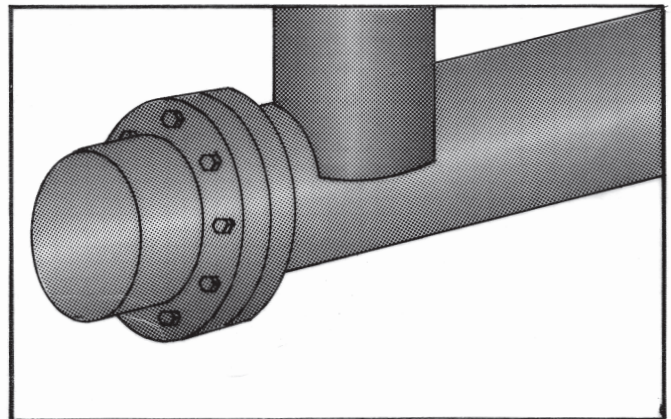
### Installation

The heater is bolted onto a mating flange which is welded to a tank wall or a pipe. Terminal housings to enclose electrical connections are included.

TUBULAR



Oil Tank Heater



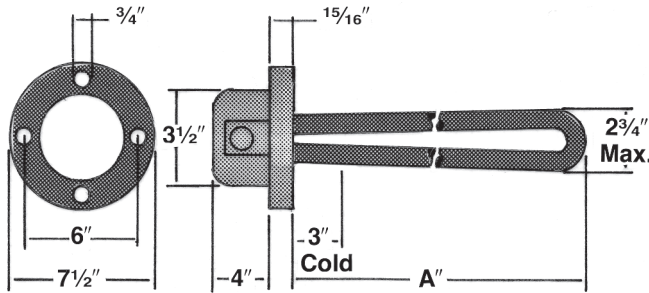
In-Line Fluid or Gas Heater



# Tubular Heaters

## Flanged

### Steel Sheath: 150 lb Steel Flange



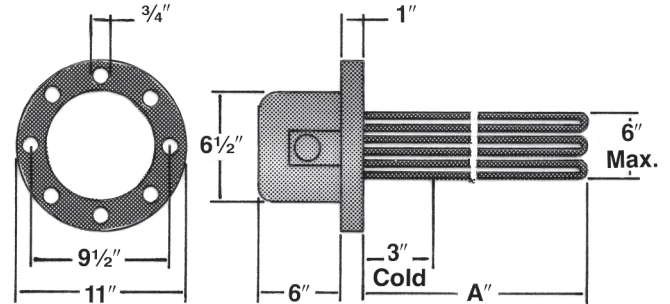
### 3" Flange: Steel Sheath

No. of Elements: 3

Watts/sq. in.: 23

Application: Low Viscosity Oil

Lgth. Inside		Cat. No.	Kilo-watts	Volts	Phase
Tank A					
18 1/8"		BS3-18.06-J	3.0	240	1
18 3/8"		BS3-18.06-J	3.0	240	3
25 3/8"		BS3-25.18-J	4.5	240	1
25 5/8"		BS3-25.18-J	4.5	240	3
33 3/8"		BS3-33.06-J	6.0	240	1
33 5/8"		BS3-33.06-J	6.0	240	3
40 3/8"		BS3-40.56-J	7.5	240	3
48 3/8"		BS3-48.06-J	9.0	240	1
48 5/8"		BS3-48.06-J	9.0	240	3



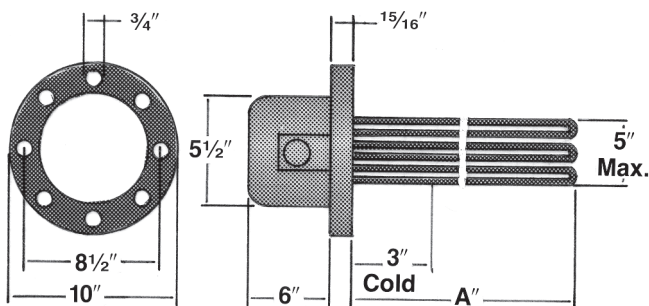
### 6" Flange: Steel Sheath

No. of Elements: 12

Watts/sq. in.: 23

Application: Low Viscosity Oil

Lgth. Inside		Cat. No.	Kilo-watts	Volts	Phase
Tank A					
25 1/2"		BS6-25.12-J	18.0	240	3
33"		BS6-33-J	24.0	240	3
40 1/2"		BS6-40.5-J	30.0	240	3
48"		BS6-48-J	36.0	240	3



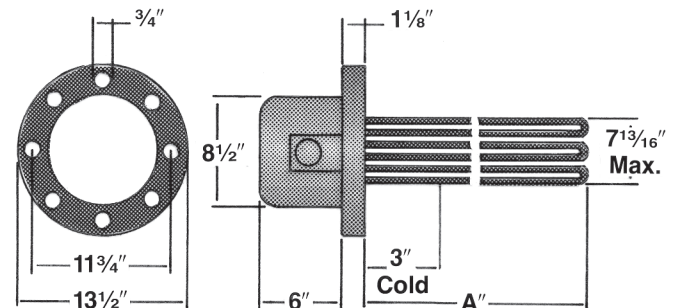
### 5" Flange: Steel Sheath

No. of Elements: 6

Watts/sq. in.: 23

Application: Low Viscosity Oil

Lgth. Inside		Cat. No.	Kilo-watts	Volts	Phase
Tank A					
25 3/8"		BS5-25.18-J	9.0	240	3
33 3/8"		BS5-33.06-J	12.0	240	3
40 3/8"		BS5-40.56-J	15.0	240	3
52 3/8"		BS5-52.06-J	20.0	240	3
65 3/8"		BS5-65.06-J	25.0	240	3
78 3/8"		BS5-78.06-J	30.0	240	3



### 8" Flange: Steel Sheath

No. of Elements: 18

Watts/sq. in.: 23

Application: Low Viscosity Oil

Lgth. Inside		Cat. No.	Kilo-watts	Volts	Phase
Tank A					
32 3/8"		BS8-32.87-J	30.0	240	3
43 1/8"		BS8-43.68-J	40.0	240	3
51 3/8"		BS8-51.87-J	50.0	240	3
61 3/8"		BS8-61.37-J	60.0	240	3
61 3/8"		BS8-61.37-J	60.0	480	3
69 3/8"		BS8-69.87-J	70.0	240	3
69 3/8"		BS8-69.87-J	70.0	480	3
78 3/8"		BS8-78.87-J	80.0	240	3
78 3/8"		BS8-78.87-J	80.0	480	3

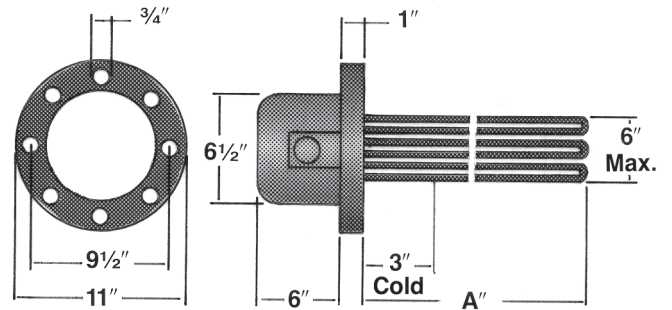
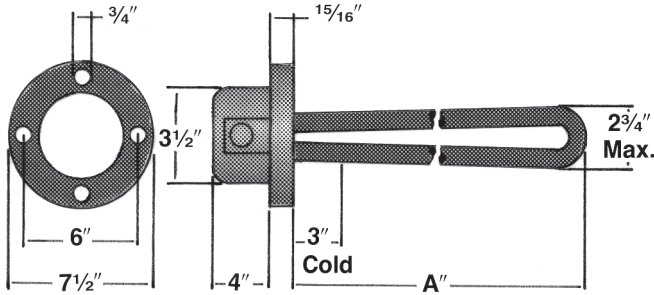
TUBULAR



# Tubular Heaters

## Flanged

### Stainless Steel Sheath: 150 lb Steel Flange



### 3" Flange: Stainless Steel Sheath

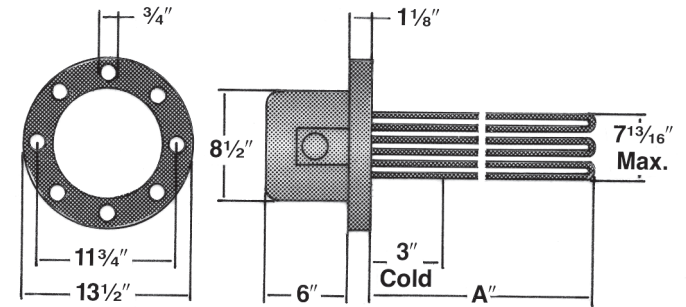
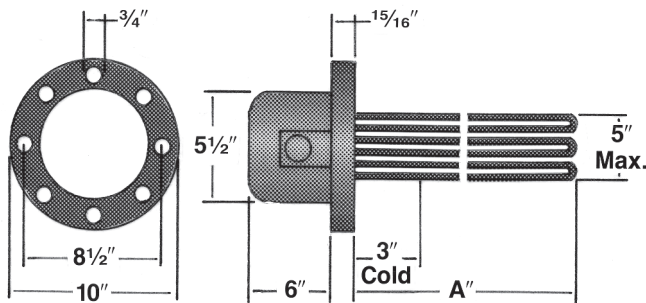
No. of Elements: 3  
Watts/sq. in.: 45  
Application: Process Water and Very Mild Solution

Lgth. Inside		Kilo-watts	Volts	Phase
Tank A	Cat. No.			
18 1/8"	BT3-18.06-J	6.0	240	1
18 1/8"	BT3-18.06-J	6.0	240	3
25 3/8"	BT3-25.18-J	9.0	240	1
25 3/8"	BT3-25.18-J	9.0	240	3
33 3/8"	BT3-33.06-J	12.0	240	1
33 3/8"	BT3-33.06-J	12.0	240	3
40 3/8"	BT3-40.56-J	15.0	240	1
40 3/8"	BT3-40.56-J	15.0	240	3
48 3/8"	BT3-48.06-J	18.0	240	1
48 3/8"	BT3-48.06-J	18.0	240	3

### 6" Flange: Stainless Steel Sheath

No. of Elements: 12  
Watts/sq. in.: 45  
Application: Process Water and Very Mild Solution

Lgth. Inside		Kilo-watts	Volts	Phase
Tank A	Cat. No.			
25 1/2"	BT6-25.12-J	36.0	240	3
33"	BT6-33-J	48.0	240	3
40 1/2"	BT6-40.5-J	60.0	240	3
48"	BT6-48-J	72.0	240	3



### 5" Flange: Stainless Steel Sheath

No. of Elements: 6  
Watts/sq. in.: 45  
Application: Process Water and Very Mild Solution

Lgth. Inside		Kilo-watts	Volts	Phase
Tank A	Cat. No.			
18 1/8"	BT5-18.06-J	12.0	240	3
19 1/8"	BT5-19.81-J	15.0	240	3
25 3/8"	BT5-25.18-J	18.0	240	3
33 3/8"	BT5-33.06-J	24.0	240	3
40 3/8"	BT5-40.56-J	30.0	240	3
52 1/8"	BT5-52.06-J	40.0	240	3
65 1/8"	BT5-65.06-J	50.0	240	3
78 1/8"	BT5-78.06-J	60.0	240	3

### 8" Flange: Stainless Steel Sheath

No. of Elements: 18  
Watts/sq. in.: 45  
Application: Process Water or Very Mild Solution

Lgth. Inside		Kilo-watts	Volts	Phase
Tank A	Cat. No.			
27 1/8"	BT8-27.87-J	50.0	240	3
36 1/8"	BT8-36.87-J	75.0	240	3
43 1/8"	BT8-43.68-J	100.0	240	3
51 1/8"	BT8-51.87-J	120.0	240	3
61 3/8"	BT8-61.37-J	150.0	240	3
69 1/8"	BT8-69.87-J	175.0	240	3
78 1/8"	BT8-78.87-J	200.0	240	3

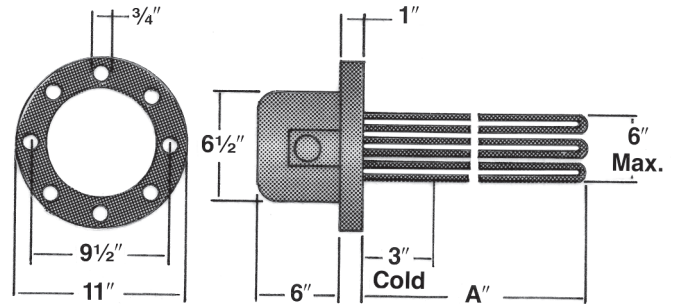
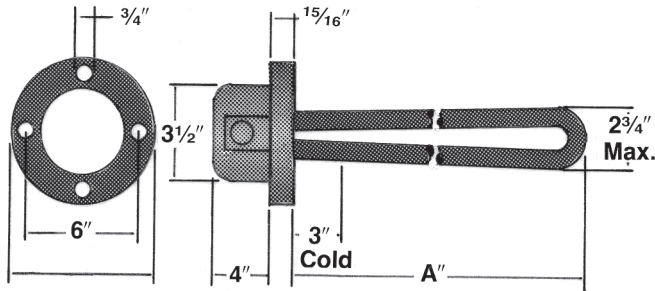
TUBULAR



# Tubular Heaters

## Flanged

### Copper Sheath: 150 lb Steel Flange



### 3" Flange: Copper Sheath

No. of Elements: 3

Watts/sq. in.: 45

Application: Water

Lgth. Inside				
Tank A	Cat. No.	Kilo-watts	Volts	Phase
18 1/8"	BC3-18.06-J	6.0	240	1
18 1/2"	BC3-18.06-J	6.0	240	3
25 1/8"	BC3-25.18-J	9.0	240	1
25 1/2"	BC3-25.18-J	9.0	240	3
33 1/8"	BC3-33.06-J	12.0	240	1
33 1/2"	BC3-33.06-J	12.0	240	3
40 1/8"	BC3-40.56-J	15.0	240	1
40 1/2"	BC3-40.56-J	15.0	240	3
48 1/8"	BC3-48.06-J	18.0	240	1
48 1/2"	BC3-48.06-J	18.0	240	3

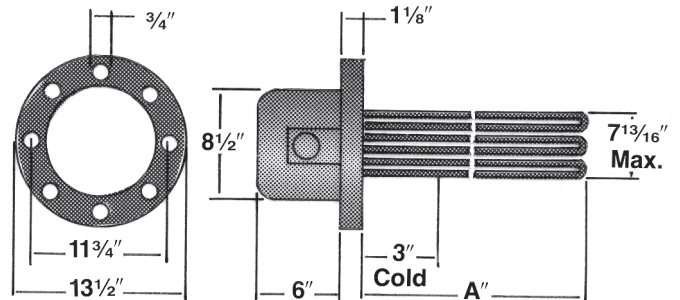
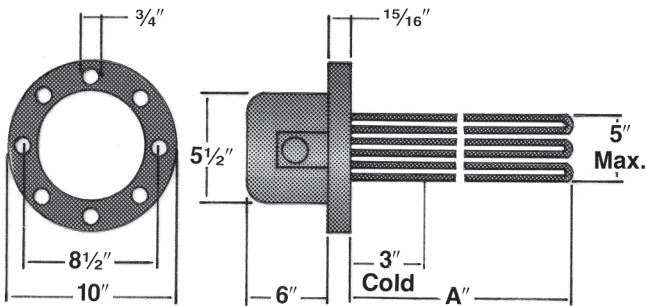
### 6" Flange: Copper Sheath

No. of Elements: 12

Watts/sq. in.: 45

Application: Water

Lgth. Inside				
Tank A	Cat. No.	Kilo-watts	Volts	Phase
25 1/2"	BC6-25.12-J	36.0	240	3
33"	BC6-33-J	48.0	240	3
40 1/2"	BC6-40.5-J	60.0	240	3
48"	BC6-48-J	72.0	240	3



### 5" Flange: Copper Sheath

No. of Elements: 6

Watts/sq. in.: 45

Application: Water

Lgth. Inside				
Tank A	Cat. No.	Kilo-watts	Volts	Phase
18 1/8"	BC5-18.06-J	12.0	240	3
19 13/16"	BC5-19.81-J	15.0	240	3
25 1/8"	BC5-25.18-J	18.0	240	3
33 1/8"	BC5-33.06-J	24.0	240	3
40 1/8"	BC5-40.56-J	30.0	240	3
52 1/8"	BC5-52.06-J	40.0	240	3
65 1/8"	BC5-65.06-J	50.0	480	3
78 1/8"	BC5-78.06-J	60.0	480	3

### 8" Flange: Copper Sheath

No. of Elements: 18

Watts/sq. in.: 45

Application: Water

Lgth. Inside				
Tank A	Cat. No.	Kilo-watts	Volts	Phase
27 1/8"	BC8-27.87-J	50.0	240	3
36 1/8"	BC8-36.87-J	75.0	240	3
43 13/16"	BC8-43.68-J	100.0	240	3
51 1/8"	BC8-51.87-J	120.0	240	3
61 1/8"	BC8-61.37-J	150.0	240	3
69 1/8"	BC8-69.87-J	175.0	240	3
78 1/8"	BC8-78.87-J	200.0	240	3

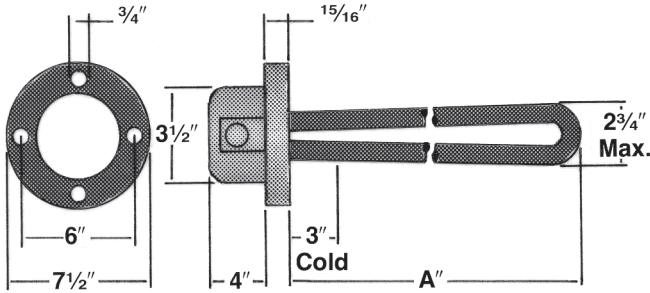
TUBULAR



# Tubular Heaters

## Flanged

### Incoloy Sheath: 150 lb Steel Flange



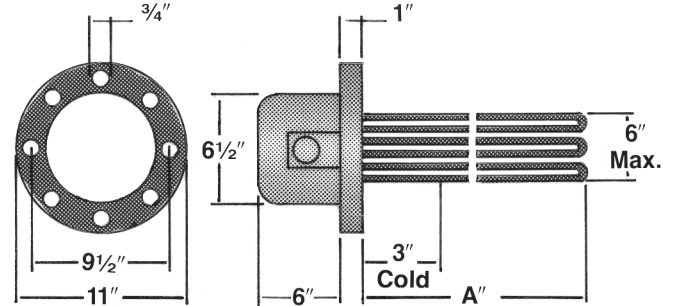
### 3" Flange: Incoloy Sheath

No. of Elements: 3

Watts/sq. in.: 45

Application: Mild Solution

Lgth. Inside		Kilo-watts	Volts	Phase
Tank A	Cat. No.			
18 <sup>1</sup> / <sub>16</sub> "	BA3-18.06-J	6.0	240	1
18 <sup>3</sup> / <sub>16</sub> "	BA3-18.06-J	6.0	240	3
25 <sup>3</sup> / <sub>16</sub> "	BA3-25.18-J	9.0	240	1
25 <sup>5</sup> / <sub>16</sub> "	BA3-25.18-J	9.0	240	3
33 <sup>3</sup> / <sub>16</sub> "	BA3-33.06-J	12.0	240	1
33 <sup>5</sup> / <sub>16</sub> "	BA3-33.06-J	12.0	240	3
40 <sup>3</sup> / <sub>16</sub> "	BA3-40.56-J	15.0	240	1
40 <sup>5</sup> / <sub>16</sub> "	BA3-40.56-J	15.0	240	3
48 <sup>3</sup> / <sub>16</sub> "	BA3-48.06-J	18.0	240	1
48 <sup>5</sup> / <sub>16</sub> "	BA3-48.06-J	18.0	240	3



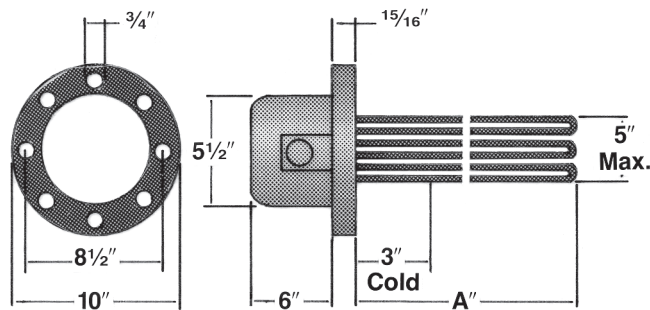
### 6" Flange: Incoloy Sheath

No. of Elements: 12

Watts/sq. in.: 45

Application: Mild Solution

Lgth. Inside		Kilo-watts	Volts	Phase
Tank A	Cat. No.			
25 <sup>1</sup> / <sub>2</sub> "	BA6-25.12-J	36.0	240	3
33"	BA6-33-J	48.0	240	3
40 <sup>1</sup> / <sub>2</sub> "	BA6-40.5-J	60.0	240	3
48"	BA6-48-J	72.0	240	3



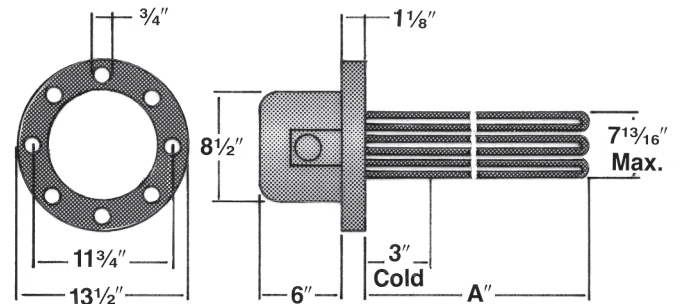
### 5" Flange: Incoloy Sheath

No. of Elements: 6

Watts/sq. in.: 45

Application: Mild Solution

Lgth. Inside		Kilo-watts	Volts	Phase
Tank A	Cat. No.			
18 <sup>1</sup> / <sub>16</sub> "	BA5-18.06-J	12.0	240	3
19 <sup>3</sup> / <sub>16</sub> "	BA5-19.81-J	15.0	240	3
25 <sup>3</sup> / <sub>16</sub> "	BA5-25.18-J	18.0	240	3
33 <sup>3</sup> / <sub>16</sub> "	BA5-33.06-J	24.0	240	3
40 <sup>3</sup> / <sub>16</sub> "	BA5-40.56-J	30.0	240	3
52 <sup>1</sup> / <sub>16</sub> "	BA5-52.06-J	40.0	240	3
65 <sup>1</sup> / <sub>16</sub> "	BA5-65.06-J	50.0	240	3
78 <sup>1</sup> / <sub>16</sub> "	BA5-78.06-J	60.0	240	3



### 8" Flange: Incoloy Sheath

No. of Elements: 18

Watts/sq. in.: 45

Application: Mild Solution

Lgth. Inside		Kilo-watts	Volts	Phase
Tank A	Cat. No.			
27 <sup>7</sup> / <sub>8</sub> "	BA8-27.87-J	50.0	240	3
36 <sup>1</sup> / <sub>8</sub> "	BA8-36.87-J	75.0	240	3
43 <sup>11</sup> / <sub>16</sub> "	BA8-43.68-J	100.0	240	3
51 <sup>1</sup> / <sub>8</sub> "	BA8-51.87-J	120.0	240	3
61 <sup>1</sup> / <sub>8</sub> "	BA8-61.37-J	150.0	240	3
69 <sup>7</sup> / <sub>8</sub> "	BA8-69.87-J	175.0	240	3
78 <sup>1</sup> / <sub>8</sub> "	BA8-78.87-J	200.0	240	3

## Dimensions

Flanged and enclosed dimensions shown in preceding tables may vary.

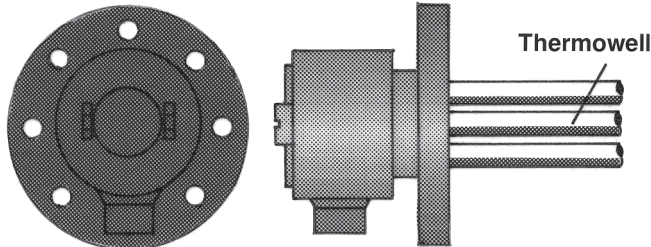


# Tubular Heaters

## Flanged

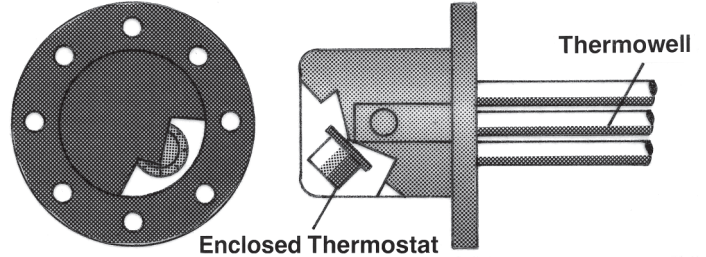
### Special Features

**SF-13B:** Moisture tight/Explosion resistant terminal enclosure.



Available on:  
3", 5", 6", 8" flanged. Enclosure sizes vary with element sizes.

**XS-55:** Thermostat control. Integral bulb and capillary control with thermowell. Two temperature ranges available. Specify XS-55 (0°-100°F) or XS-55 (60°-250°F).



Available on:  
3", 5", 6", 8" flanged. Enclosure sizes vary with element size.

### How To Order

**Specify:** catalog number, wattage, voltage, and special features, if any. Other sizes are available. Consult factory.

**Example:** BS3-18.06-J/1000W120V

▼ IN STOCK ITEMS ▼

### Drum Heaters

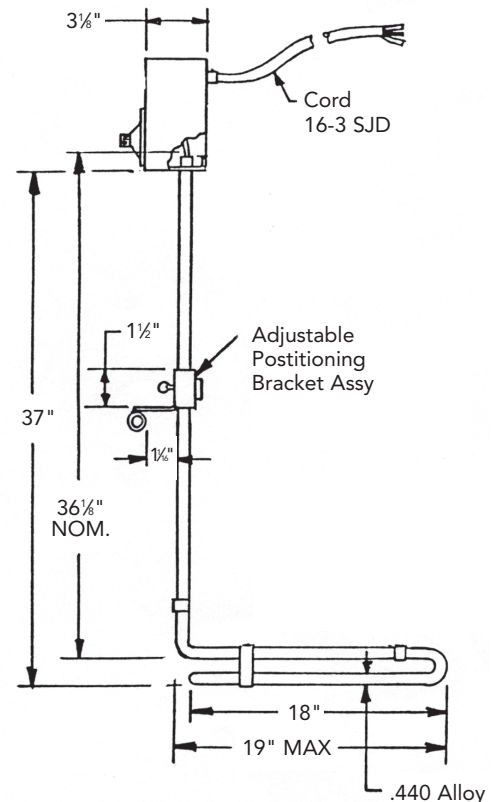
#### Direct Immersion



### Features

- Designed for direct immersion thru 2" bung opening in 55 gallon drums.
- Incoloy sheath for long life in most materials.
- 60-250°F integral thermostat.
- Manual reset thermostat protects against overheating.
- Adjustable mounting bracket.
- Low watt density (1000w - 120v - 8w watts per square inch)
- High watt density (4000w - 240v - 32 watts per square inch) for heating water and water based solutions.

Cat. No.	Watts	Volts
DT-1-1-2	1000w	120v
DT-1-2-2	4000w	240v



TUBULAR