

## Flanged Heaters - Type IF

Rated 45 watts/sq.in.

### APPLICATIONS

#### 90 Watts Per Square Inch

For heating clean water only in commercial and/or residential applications. Element life is sacrificed in favor of a low initial heater cost.

#### 60 and 45 Watts Per Square Inch

Industrial water heating - many aqueous solutions which are compatible with steel and Incoloy.

#### 23 and 20 Watts Per Square Inch

For heat transfer oil, cleaners, high temperature air and gas heating.

#### 15 and 12 Watts Per Square Inch

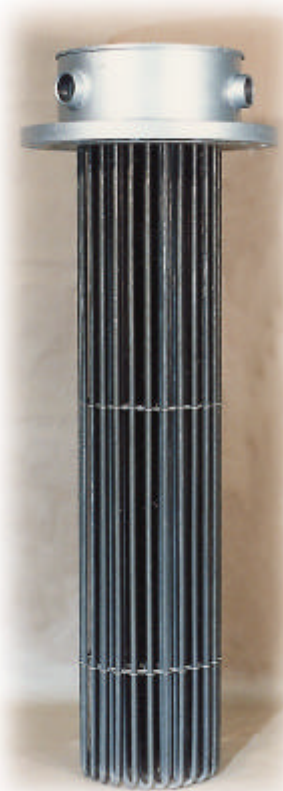
For lubricating oils, medium viscosity oils, high temperature air and gas heating.

#### 8 and 6 Watts Per Square Inch

For #5 and #6 fuel oil heating, viscous materials, raw crude oil, residual oils, high temperature air and gas heating.

#### 4 and 2 Watts Per Square Inch

For asphalt and other hard-to-heat substances, extra high temperature air and gas.



### STANDARD FEATURES

#### Heating Elements

- Incoloy 800 Sheath Material
- Heavy Wall (.035 in.)
- Large diameter (.475 in.)
- Sealed Terminals

#### Spacers

- High Temp Alloy Material
- Rugged Design
- "Evenflow" Configuration

#### Construction

- Welded Heating Elements
- Welded Terminal Housing
- Welded Spacers

#### Installation

- Flying Leadwires Provided
- Only Standard Materials Needed in Field

#### Service

- Wiring Modifiable in Field
- Assembly Repairable at Factory

### SPECIAL FEATURES

- ER Explosion Resistant Terminal Enclosure
- LT Moisture Resistant Terminal Enclosure
- J(K) Sheath Sensing Thermocouple attached to one element for overheat protection.
- S Stainless Steel Flange - Type 304
- SS Stainless Steel Flange - Type 316
- SpHtr Space Heater Mounted in Terminal Enclosure
- OSTHsg Offset (Spaced Away) Terminal Housing
- XX Special Feature not Listed Above
- 3(?)-(P/N) 300(?)# ANSI Flange

# Flanged Heaters

## Type IF

**Gaumer Drawing No. IF-200  
(Dimension Flange Heater Detail)**

Flange Size	Pressur Class	Flange Dimensions (inches)			Hole Size	No. of Holes	Min. Hole Diam.	Housing Height (inches)			X - No and Size Conduit Connection		
		C Thick	D Diam:	E Diam:				F	G	H	J GP:	J ER:	J LT:
2-1/2	150	7/8	5-1/2	7	3/4	4	2-1/4	2-5/8	5-1/2	2-5/8	1@1	2@1-1/4	1@1
2-1/2	300	1	5-7/8	7-1/2	7/8	8	2-1/4	2-5/8	5-1/2	2-5/8	1@1	2@1-1/4	1@1
3	150	0-15/16	6	7-1/2	3/4	4	2-3/4	2-5/8	5-1/2	2-5/8	1@1	2@1-1/4	1@1
3	300	1-1/8	6-5/8	8-1/4	7/8	8	2-3/4	2-5/8	5-1/2	2-5/8	1@1	2@1-1/4	1@1
4	150	0-15/16	7-1/2	9	3/4	8	3-13/16	5-1/2	6-1/2	5-1/2	4@1-1/2	2@1-1/2	4@1-1/2
4	300	1-1/4	7-7/8	10	7/8	8	3-13/16	5-1/2	6-1/2	5-1/2	4@1-1/2	2@1-1/2	4@1-1/2
5	150	0-15/16	8-1/2	10	7/8	8	4-13/16	5-1/2	6-1/2	5-1/2	4@1-1/2	2@1-1/2	4@1-1/2
5	300	1-3/8	9-1/4	11	7/8	8	4-13/16	5-1/2	6-1/2	5-1/2	4@1-1/2	2@1-1/2	4@1-1/2
6	150	1	9-1/2	11	7/8	8	5-3/4	5-1/2	8	5-1/2	4@1-1/2	4@1-1/2	4@1-1/2
6	300	1-7/16	10-5/8	12-1/2	7/8	12	5-3/4	5-1/2	8	5-1/2	4@1-1/2	4@1-1/2	4@1-1/2
8	150	1-1/8	11-3/4	13-1/2	7/8	8	7-13/16	5-1/2	9	5-1/2	4@1-1/2	4@1-1/2	4@1-1/2
8	300	1-5/8	13	15	1	12	7-13/16	5-1/2	9	5-1/2	4@1-1/2	4@1-1/2	4@1-1/2
10	150	1-3/16	14-1/4	16	1	12	9-5/8	7	11	7	4@2	4@2	4@2
10	300	1-7/8	15-1/4	17-1/2	1-1/8	16	9-5/8	7	11	7	4@2	4@2	4@2
12	150	1-1/4	17	19	1	12	11-5/8	7	11	7	4@2	4@2	4@2
12	300	2	17-3/4	20-1/2	1-1/4	16	11-5/8	7	11	7	4@2	4@2	4@2
14	150	1-3/8	18-3/4	21	1-1/8	12	12-1/2	7	11	7	4@2	4@2	4@2
14	300	2-1/8	20-1/4	23	1-1/4	20	12-1/2	7	11	7	4@2	4@2	4@2
16	150	1-7/16	21-1/4	23-1/2	1-1/8	16	14-1/2	9	13	9	4@2	4@2	4@2
16	300	2-1/4	22-1/2	25-1/2	1-3/8	20	14-1/2	9	13	9	4@2	4@2	4@2
18	150	1-9/16	22-3/4	25	1-1/4	16	16-3/8	9	13	9	4@2	4@2	4@2
18	300	2-3/8	24-3/4	28	1-3/8	24	16-3/8	9	13	9	4@2	4@2	4@2
20	150	1-11/16	25	27-1/2	1-1/4	20	18-5/16	9	13	9	4@2	4@2	4@2
20	300	2-1/2	27	30-1/2	1-3/8	24	18-5/16	9	13	9	4@2	4@2	4@2
24	150	1-7/8	29-1/2	32	1-3/8	20	22-1/8	11	15	11	6@2	6@2	6@2
24	300	2-3/4	32	36	1-5/8	24	22-1/8	11	15	11	6@2	6@2	6@2

