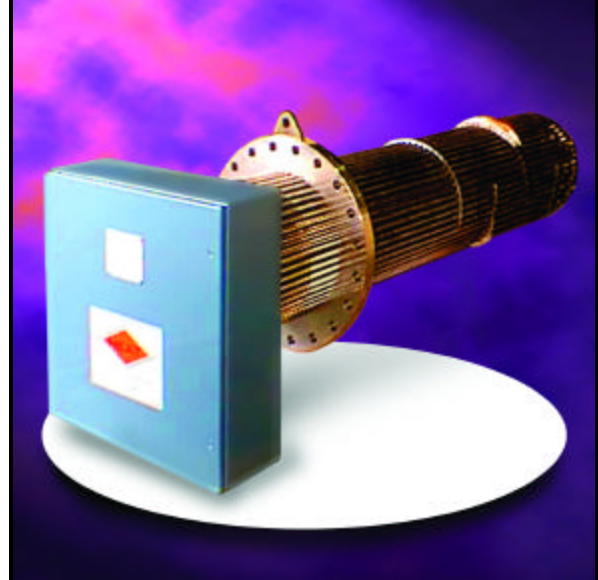


FLANGED IMMERSION HEATERS

FH SERIES

SPECIFICATIONS

- Stock designs to 480 kW
- 5", 6", 8", 10", 12", 14" flange sizes
- 150 lb or 300 lb ANSI flanged
- 208 volt through 575 volt, 3 phase
- 5 to 40 watts per square inch
- NEMA 12/4, 4X or 7 terminal housing



DESCRIPTION

Flanged immersion heaters consist of a number of "U" bend tubular heating elements welded into a standard ANSI pipe flange. Elements are supported with TEMA style baffles. A thermowell is installed through the center of the flange for the over temperature sensor. A NEMA rated enclosure is installed to protect the heater element terminations and pre-bussed circuitry. Standard enclosures allow the customer to locate conduit knock-outs as required for field wiring. Flanged heaters are easily installed by direct mounting to a tank, pipe or vessel through a mating flanged nozzle. Each heater is shipped with a spiral wound mounting gasket.

FEATURES

- Stainless steel sheathed elements
- Nickel Plated Copper Bussing
- Baffles provide increased heat transfer and structural support to elements
- Thermowell for high limit sensor
- 48 amps maximum per circuit
- ASME code stamp available
- Moisture seal on each element
- Long life - 2 year warranty

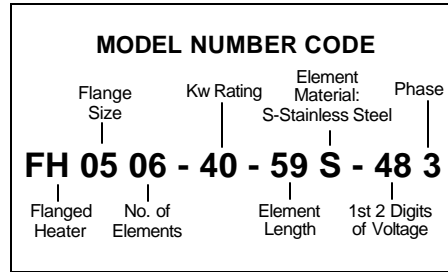
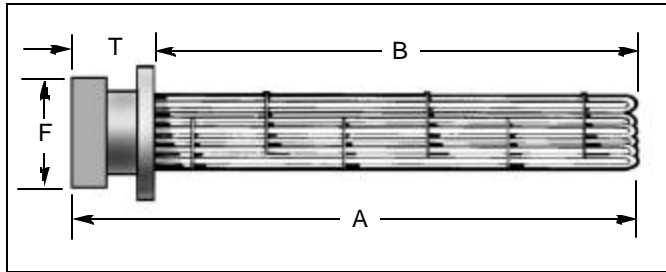


HEAT EXCHANGE AND TRANSFER, INC.

500 Superior Street • Carnegie, PA 15106
Phone 412-276-3388 • Fax 412-276-3397
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FH SERIES

STANDARD MODEL SPECIFICATIONS



**CALL 412-276-3388 FOR APPLICATION ASSISTANCE.
THIS IS NOT A SELECTION GUIDE.**

All flanged heaters are built to order. Each heater application must be reviewed by a HEAT, Inc. sales engineer for proper selection of heater. The model numbers shown within the Model Specification Charts on pages 2 & 3 are available from stock

components. Standard models are based on 150 lb. carbon steel flanged construction with NEMA 4/12 terminal housing. Many options are available including custom designs. Refer to page 4 for a list of the most common options.

FH STANDARD MODELS								
Win ²	KW	VOLT	A INCHES	B INCHES	F INCHES	T INCHES	WT LBS	MODEL NUMBER
5" 150 LB. 6 ELEMENTS								
22	6	480	28	19	10	9	37	FH0506-6.0-20S-483
17	9	240/480	46	37	10	9	46	FH0506-9.0-38S-XXX*
10	10	240/480	66	57	10	9	61	FH0506-10-58S-XXX*
22	12	480	43	34	10	9	46	FH0506-12-35S-483
22	18	480	58	49	10	9	55	FH0506-18-50S-483
20	20	480	67	58	10	9	61	FH0506-20-59S-483
38	20	480	46	37	10	9	46	FH0506-20-38S-483
42	40	480	66	57	10	9	61	FH0506-40-58S-483
5" 150 LB. 9 ELEMENTS								
22	9	480	28	19	10	9	40	FH0509-9.0-20S-483
17	13.5	240	46	37	10	9	49	FH0509-13.5-38S-243
10	15	240	66	57	10	9	64	FH0509-15-58S-243
22	18	480	43	34	10	9	49	FH0509-18-35S-483
22	27	480	58	49	10	9	58	FH0509-27-50S-483
20	30	480	67	58	10	9	64	FH0509-30-59S-483
38	30	480	46	37	10	9	49	FH0509-30-38S-483
42	60	480	66	57	10	9	64	FH0506-60-58S-483
5" 150 LB. 12 ELEMENTS								
17	18	240/480	46	37	10	9	54	FH0512-18-38S-XXX*
38	40	480	46	37	10	9	54	FH0512-40-38S-483
6" 150 LB. 12 ELEMENTS								
22	12	480	28	19	11	9	51	FH0612-12-20S-483
10	20	240/480	66	57	11	9	83	FH0612-20-58S-XXX*
22	24	480	43	34	11	9	64	FH0612-24-35S-483
22	36	480	58	49	11	9	76	FH0612-36-50S-483
20	40	480	67	58	11	9	83	FH0612-40-59S-483
42	80	480	66	57	11	9	83	FH0612-80-58S-483
6" 150 LB. 18 ELEMENTS								
17	27	240/480	46	37	11	9	74	FH0618-27-38S-XXX*
38	60	480	46	37	11	9	74	FH0618-60-38S-483
6" 150 LB. 24 ELEMENTS								
17	36	240/480	46	37	11	9	85	FH0624-36-38S-XXX*
38	80	480	46	37	11	9	85	FH0624-80-38S-483
8" 150 LB. 15 ELEMENTS								
10	25	240	66	57	13.5	9	124	FH0815-25-58S-243
22	30	480	43	34	13.5	9	99	FH0815-30-35S-483
22	45	480	58	49	13.5	9	115	FH0815-45-50S-483
20	50	480	67	58	13.5	9	124	FH0815-50-59S-483
42	100	480	66	57	13.5	9	124	FH0815-100-58S-483

FH SERIES

STANDARD MODEL SPECIFICATIONS

W/in ²	KW	VOLT	A INCHES	B INCHES	F INCHES	T INCHES	WT LBS	MODEL NUMBER
8" 150 LB. 18 ELEMENTS								
22	18	480	28	19	13.5	9	86	FH0818-18-20S-483
10	30	240/480	66	57	13.5	9	134	FH0818-30-58S-XXX*
22	36	480	43	34	13.5	9	105	FH0818-36-35S-483
22	54	480	58	49	13.5	9	123	FH0818-54-50S-483
20	60	480	67	58	13.5	9	134	FH0818-60-59S-483
42	120	480	66	57	13.5	9	134	FH0818-120-58S-483
8" 150 LB. 24 ELEMENTS								
22	24	480	28	19	13.5	9	93	FH0824-24-20S-483
10	40	240/480	66	57	13.5	9	154	FH0824-40-58S-XXX*
22	48	480	43	34	13.5	9	117	FH0824-48-35S-483
22	72	480	58	49	13.5	9	140	FH0824-72-50S-483
20	80	480	67	58	13.5	9	154	FH0824-80-59S-483
42	160	480	66	57	13.5	9	154	FH0824-160-58S-483
8" 150 LB. 27 ELEMENTS								
22	27	480	28	19	13.5	9	96	FH0827-27-20S-483
10	45	240	66	57	13.5	9	157	FH0827-45-58S-243
22	54	480	43	34	13.5	9	120	FH0827-54-35S-483
22	81	480	58	49	13.5	9	143	FH0827-81-50S-483
20	90	480	67	58	13.5	9	157	FH0827-90-59S-483
42	180	480	66	57	13.5	9	157	FH0827-180-58S-483
10" 150 LB. 30 ELEMENTS								
22	30	480	28	19	16	9	123	FH1030-30-20S-483
10	50	240/480	66	57	16	9	203	FH1030-50-58S-XXX*
22	60	480	43	34	16	9	154	FH1030-60-35S-483
22	90	480	58	49	16	9	184	FH1030-90-50S-483
20	100	480	67	58	16	9	203	FH1030-100-59S-483
42	200	480	66	57	16	9	203	FH1030-200-58S-483
10" 150 LB. 36 ELEMENTS								
22	36	480	28	19	16	9	130	FH1036-36-20S-483
10	60	240/480	66	57	16	9	223	FH1036-60-58S-XXX*
20	72	480	43	34	16	9	166	FH1036-72-35S-483
22	108	480	58	49	16	9	201	FH1036-108-50S-483
20	120	480	67	58	16	9	223	FH1036-120-59S-483
42	240	480	66	57	16	9	223	FH1036-240-58S-483
12" 150 LB. 42 ELEMENTS								
10	70	240/480	66	57	19	9	292	FH1242-70-58S-XXX*
22	84	480	43	34	19	9	222	FH1242-84-35S-483
22	126	480	58	49	19	9	266	FH1242-126-50S-483
20	140	480	67	58	19	9	292	FH1242-140-59S-483
42	280	480	66	57	19	9	292	FH1242-280-58S-483
12" 150 LB. 45 ELEMENTS								
10	75	240	66	57	19	9	302	FH1245-75-58S-243
22	90	480	43	34	19	9	228	FH1245-90-35S-483
22	135	480	58	49	19	9	275	FH1245-135-50S-483
20	150	480	67	58	19	9	302	FH1245-150-59S-483
42	300	480	66	57	19	9	302	FH1245-300-58S-483
12" 150 LB. 48 ELEMENTS								
10	80	240/480	66	57	19	9	312	FH1248-80-58S-XXX*
22	96	480	43	34	19	9	234	FH1248-96-35S-483
22	144	480	58	49	19	9	283	FH1248-144-50S-483
20	160	480	67	58	19	9	312	FH1248-160-59S-483
42	320	480	66	57	19	9	312	FH1248-320-58S-483
12" 150 LB. 54 ELEMENTS								
10	90	240/480	66	57	19	9	332	FH1254-90-58S-XXX*
22	108	480	43	34	19	9	246	FH1254-108-35S-483
22	162	480	58	49	19	9	300	FH1254-162-50S-483
20	180	480	67	58	19	9	332	FH1254-180-59S-483
42	360	480	66	57	19	9	332	FH1254-360-58S-483
14" 150 LB. 60 ELEMENTS								
10	100	240/480	66	57	21	9	382	FH1460-100-58S-XXX*
22	120	480	43	34	21	9	284	FH1460-120-35S-483
22	180	480	58	49	21	9	345	FH1460-180-50S-483
20	200	480	67	58	21	9	382	FH1460-200-59S-483
42	400	480	66	57	21	9	382	FH1460-400-58S-483
14" 150 LB. 66 ELEMENTS								
10	110	240/480	66	57	21	9	402	FH1466-110-58S-XXX*
22	132	480	43	34	21	9	296	FH1466-132-35S-483
22	198	480	58	49	21	9	362	FH1466-198-50S-483
20	220	480	67	58	21	9	402	FH1466-220-59S-483
42	440	480	66	57	21	9	402	FH1466-440-58S-483
14" 150 LB. 72 ELEMENTS								
10	120	240/480	66	57	21	9	422	FH1472-120-58S-XXX*
22	144	480	43	34	21	9	308	FH1472-144-35S-483
22	216	480	58	49	21	9	379	FH1472-216-50S-483
20	240	480	67	58	21	9	422	FH1472-240-59S-483
42	480	480	66	57	21	9	422	FH1472-480-58S-483

* XXX is the voltage and phase code. 240V, 3 phase is 243 & 480V, 3 phase is 483.

FH SERIES

APPLICATIONS

All flanged heaters are built to order. Please consult the factory for sizing, recommended watt densities and sheath material selection on each application. Typical applications for flanged heaters are as follows:

WATER HEATING

Process water, weak corrosive solutions, demineralized, deionized, or pure water, hot water storage tanks, rinse tanks, or freeze protection on cooling towers or fire sprinkler systems. Designs normally require stainless steel heater elements and watt densities from 20 to 45 watts per square inch.

AIR, STEAM AND GAS HEATING

Plant air, nitrogen or other gaseous mixtures for drying, regeneration, steam superheating, or inert gas blanketing. Designs normally require stainless steel or Incoloy sheathed heating elements and watt densities from 10 to 20 watts per square inch.

LIGHT OILS AND CHEMICALS

Light weight oils, low temperature heat transfer fluids, degreasing solvents, molten salts, and a wide range of non-corrosive chemicals. Designs normally require stainless steel or Incoloy sheathed heating elements and watt densities from 12 to 22 watts per square inch.

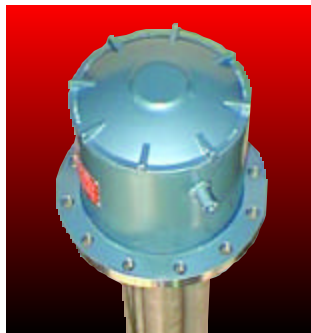
HEAVY OILS AND THERMAL FLUIDS

Heavy oils such as fuel oil, asphalt, hydraulic oil, lube oil, and high temperature heat transfer fluids. Designs normally require stainless steel heater elements and watt densities from 5 to 15 watts per square inch.

OPTIONS AVAILABLE



NEMA 4/12 Housing



NEMA 7 Housing



4X Extended Housing

- **Terminal Housing** - NEMA 4X, 7, and high temperature extended
- **Temperature Sensor** - High limit thermocouple or RTD
- **High Pressure Design** - Available with 300, 400 and 600 lb flanges
- **Construction Materials** - Available in various stainless steel materials
- **ASME Stamp** - Heaters available with ASME stamp



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Represented by: