

3" 150 LBS. SS FLANGE 3 STAINLESS STEEL ELEMENTS				
WATTS	VOLTS	OVERALL LENGTH In./mm	MODEL NUMBER	SHIP WGT. Lbs./kg
3000	240	9	3FLS3209-**	14
	480	(229)	3FLS3409-**	(6.4)
4500	240	13	3FLS4.5213-**	15
	480	(330)	3FLS4.5413-**	(6.8)
6000	240	19	3FLS6219-**	16
	480	(483)	3FLS6419-**	(7.3)
9000	240	26	3FLS9226-**	17
	480	(660)	3FLS9426-**	(7.7)
12000	240	33	3FLS12233-**	18
	480	(838)	3FLS12433-**	(8.2)
15000	240	41	3FLS15241-**	20
	480	(1041)	3FLS15441-**	(9.1)
18000	240	49	3FLS18249-**	21
	480	(1245)	3FLS18449-**	(9.5)

5" 150 LBS. SS FLANGE 6 STAINLESS STEEL ELEMENTS				
WATTS	VOLTS	OVERALL LENGTH In./mm	MODEL NUMBER	SHIP WGT. Lbs./kg
6000	240	9	5FLS6209-**	25
	480	(229)	5FLS6409-**	(11.3)
9000	240	13	5FLS9213-**	28
	480	(330)	5FLS9413-**	(12.7)
12000	240	19	5FLS12219-**	30
	480	(483)	5FLS12419-**	(13.6)
18000	240	26	5FLS18226-**	33
	480	(660)	5FLS18426-**	(15)
24000	240	33	5FLS24233-**	37
	480	(838)	5FLS24433-**	(16.8)
30000	240	41	5FLS30241-**	40
	480	(1041)	5FLS30441-**	(18.1)
36000	240	49	5FLS36249-**	43
	480	(1245)	5FLS36449-**	(19.5)

6" 150 LBS. SS FLANGE 12 STAINLESS STEEL ELEMENTS				
WATTS	VOLTS	OVERALL LENGTH In./mm	MODEL NUMBER	SHIP WGT. Lbs./kg
12000	240	9	6FLS12209-**	48
	480	(229)	6FLS12409-**	(21.8)
18000	240	13	6FLS18213-**	54
	480	(330)	6FLS18413-**	(24.5)
24000	240	19	6FLS24219-**	60
	480	(483)	6FLS24419-**	(27.2)
36000	240	26	6FLS36226-**	67
	480	(660)	6FLS36426-**	(30.4)
48000	240	33	6FLS48233-**	76
	480	(838)	6FLS48433-**	(34.5)
60000	240	41	6FLS60241-**	84
	480	(1041)	6FLS60441-**	(38.1)
72000	240	49	6FLS72249-**	111
	480	(1245)	6FLS72449-**	(50.3)

FL Series Heater Features and Benefits

SUPERIOR CHEMICAL RESISTANCE:

- ◆ For use in most aqueous alkaline solutions, and plating and phosphate tanks. Check solution recommendation chart with your chemical supplier for proper sheath material selection.

RUGGED CONSTRUCTION:

- ◆ Heavy wall metal sheaths available in:
316 stainless steel
Carbon steel
Incoloy
Titanium

OUTSTANDING PERFORMANCE:

- ◆ Watt densities up to 40 watts per square inch (6.2 w/cm²) ensure long service life.

CORROSION RESISTANT HEAD:

- ◆ Vapor resistant, painted metal enclosures.

SAFETY FEATURES:

- ◆ Grounded construction.
- ◆ Thermal protectors built in. Replaceable PI protector standard for solutions up to 180°F (82°C).
- ◆ Non-floating construction.

CERTIFICATIONS: CE

SIZES: 3,000 watts to 72,000 watts

- ◆ 150 lbs. ASA flanges from 3-inch through 6-inch sizes.

VOLTAGES: 240 to 600 volts.

OPTIONS AVAILABLE (consult factory):

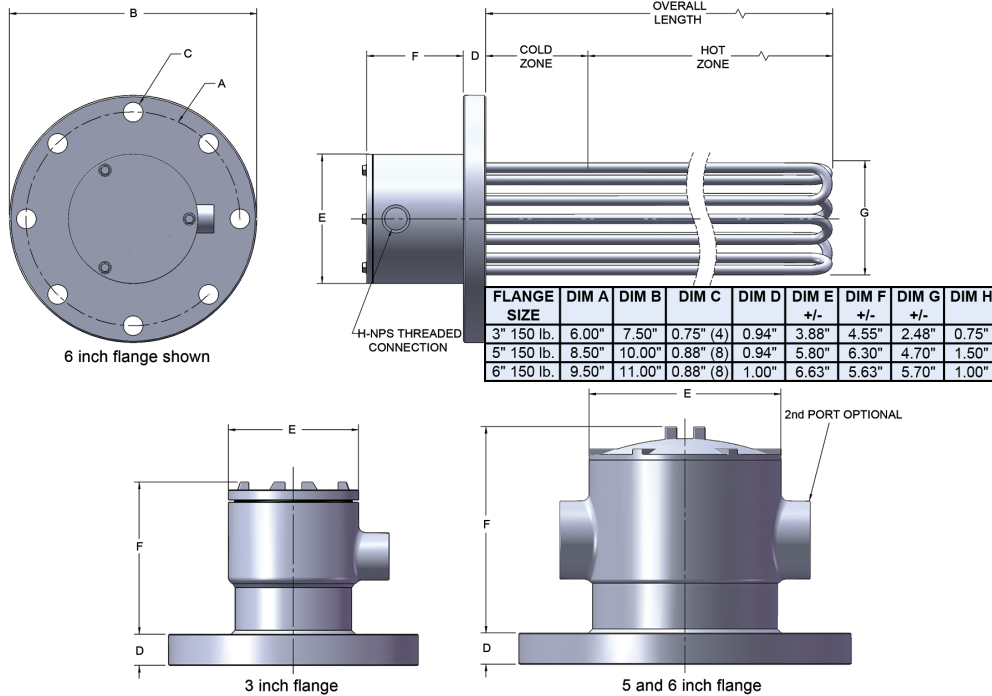
- ◆ Replaceable thermal protectors:
P4: for solutions up to 230°F(110°C)
P5: for solutions up to 300°F(149°C)

Resettable thermal protectors:

- P2: for solutions up to 180°F(82°C)
- P6: for solutions up to 230°F(110°C)
- P7: for solutions up to 300°F(149°C)
- ◆ Special configurations and lengths.
- ◆ Additional thermowells.
- ◆ Explosion resistant enclosures.
- ◆ Integral thermostats.
- ◆ Metric flanges.
- ◆ 300# ASA flanges.
- ◆ Lower watt densities for highly viscous solutions.
- ◆ Temperature and level controls sized to match the heater.
- ◆ 3-inch and 5-inch fluoropolymer (PTFE) flanged heaters.

NOTE: Gasket and bolts not provided. Intended for horizontal installation only.

DIMENSIONS



FLANGE HEATER ORDERING INFORMATION

Flange	Series	Wattage	Voltage	Length (in.)	Options	Type of Protector
Size 3 = 3" 5 = 5" 6 = 6"	FLS = 316 stainless steel FLT = titanium FLI = incoloy FLP = steel	3,000 through 72,000	2 = 240 3 = 380 4 = 480 5 = 415 6 = 600	consult front page for standard lengths (custom lengths available)	no designator = three phase power (standard) -1 = single phase power -M2 = explosion/moisture resistant housing -W = thermowell -T = integral thermostat	Replaceable Protector P1 (std) for solutions up to 180°F P4 for solutions up to 230°F P5 for solutions up to 300°F Resettable Protector (additional control components required) P2 for solutions up to 180°F P6 for solutions up to 230°F P7 for solutions up to 300°F

ORDERING EXAMPLE:

3FLS6219-P1-M2

3" flange heater, 316 stainless steel, 6 kW, 240 volts, 19" length, P1 protector, explosion/moisture resistant housing.

**PROCESS
TECHNOLOGY**