

### Circulation Tank Assembly Maximum Immersed Element Length

Standard circulation heaters shown in the tables on pages 11-51 through 11-69 have element immersion lengths determined by the element wattage and element watt density. The screw plug or flange heater containing the elements is matched to a standard circulation heater tank assembly to assure proper heat transfer and heated material flow. When designing a system with a heater not

shown on these pages the table below can be used to select a tank size based on the calculated immersion length. If a standard tank size is not suitable for your installation, Tempco will design and manufacture a custom tank and heater assembly to satisfy the requirements of your application.

Nominal Pipe Size	Dimension Drawing Number	Maximum Immersed Element length	
		in	mm
1 1/4" NPT	1.1	18.0	457
	1.2	26.0	660
2 1/2" NPT	2.1	25.5	648
	2.2	35.5	902
	2.3	48.0	1219
3" Flange	3.1	28.0	711
	3.2	38.0	965
	3.3	50.5	1283
4" Flange	4.1	26.5	673
	4.2	37.0	940
	4.3	58.0	1473
	4.4	79.0	2007
5" Flange	5.1	36.0	914
	5.2	43.0	1092
	5.3	54.5	1384
	5.4	68.0	1727
	5.5	85.0	2159
6" Flange	6.1	26.5	673
	6.2	37.0	940
	6.3	58.0	1473
	6.4	79.0	2007

Nominal Pipe Size	Dimension Drawing Number	Maximum Immersed Element length	
		in	mm
8" Flange	8.1	32.5	826
	8.2	40.5	1029
	8.3	47.5	1207
	8.4	55.0	1397
	8.5	64.5	1638
	8.6	73.5	1867
	8.7	83.5	2121
10" Flange	10.1	60.0	1524
	10.2	67.0	1702
	10.3	73.0	1854
	10.4	82.0	2083
	10.5	90.0	2286
12" Flange	12.1	59.0	1499
	12.2	66.5	1689
	12.3	74.0	1880
	12.4	81.5	2070
	12.5	89.0	2261
14" Flange	14.1	58.0	1473
	14.2	65.5	1664
	14.3	73.0	1854
	14.4	80.5	2045
	14.5	88.0	2235

### Standard (Non-Stock) Circulation Heaters

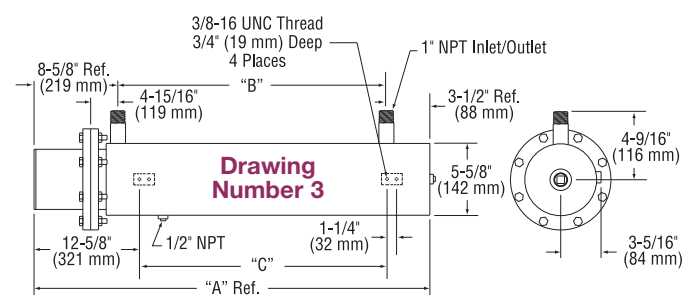
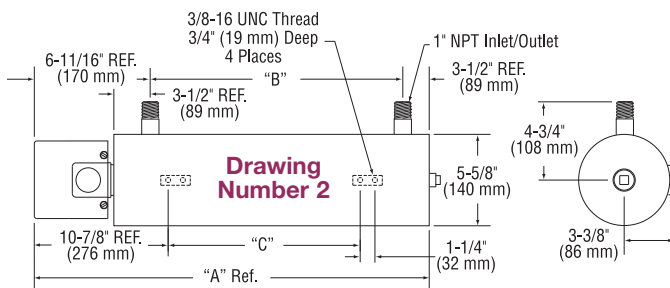
**8 watts/in<sup>2</sup> (1.3 watts/cm<sup>2</sup>) — Typical Applications: Fuel Oils (Bunker C and Number 6)**

- \* Steel Screw Plug and Steel 150-lb Flanged Heater Sizes
- \* Steel Sheath Heating Elements
- \* Steel Tank
- \* NEMA 1 Terminal Housing

**NOTE:** 3-Phase only. Cannot be rewired for single phase.

Nominal Pipe Size	Dimensional Drawing Number	KW	Part Number					Approximate Net Weight	
			120V	240V-1Ph (C*)	240V-3Ph (C*)	480V-1Ph (C*)	480V-3Ph (C*)	lbs	kgs
2 1/2" NPT	2.2	2	—	—	CHF01100 (1)	—	CHF01101 (1)	37	17
3 elements	2.3	3	—	—	CHF01102 (1)	—	CHF01103 (1)	46	21
3" — 150lb	3.2	2	—	—	CHF01104 (1)	—	CHF01105 (1)	62	28
3 elements	3.3	3	—	—	CHF01106 (1)	—	CHF01107 (1)	76	34

(C\*) = Number of Branch Circuits per heater



### Dimensional Drawing Number

Drawing Number	"A"		"B"		"C"	
	in	mm	in	mm	in	mm
2.2	42-11/16	1084	32-1/2	826	26-1/2	673
2.3	55-3/16	1402	45	1143	39	991
3.2	44-5/8	1133	32-1/2	826	26-1/2	673
3.3	57-1/8	1451	45	1143	39	991

### Ordering Information

See Page 11-69.

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