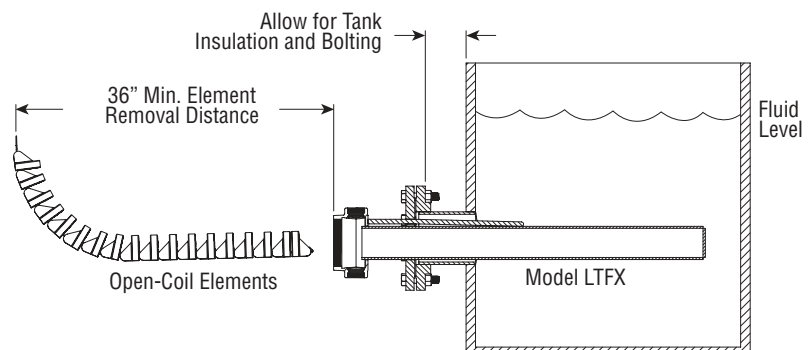
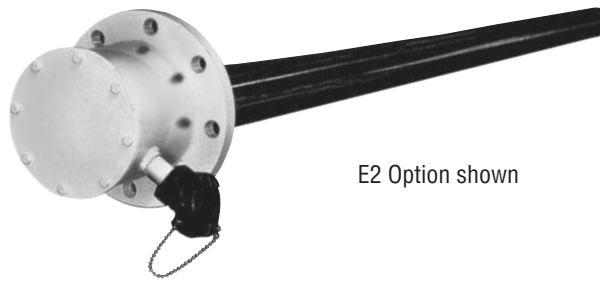


## LTFX Large Tank Flange Heater

- Carbon or Stainless Steel Construction
- 4" to 14" 150# Flange Size
- Moisture Resistant (IP66) or Explosion / Moisture Resistant Terminal Housing
- Third Party Certified
- 4 - 240 kW Unit Ratings
- 5' - 25' Immersion Lengths
- 9 - 12 W/in<sup>2</sup> (Pipe Surface)
- 480V Three Phase (600V Available)
- Standard Type J Thermocouple for Over-Temperature Protection
- Matching Control Panels Available (Pre-Mounting Option Available)
- ASME Design and Certification Available
- Custom Flange Sizes, kW Rating, or Voltages Available



### Description

Chromalox LTFX style units allow tank heating elements to be changed without draining the tank. This is ideal for large capacity tanks that must remain filled for continuous operation and storage.

### Applications

LTFX units provide low watt density heating over a large surface area, while providing precise temperature control for such materials as fire water storage, asphalt, diesel, lube oils, ethanol, bio-diesel, glycerin, animal fats, vegetable oils, fuel oils, or similar types of liquids.

**Note:** Horizontal mount only.

### Advantages

- **No Tank Draining Required** - Open-coil (OCE) style heating elements can be inspected or changed without draining the tank. This reduces costs and production downtime.
- **Quick & Easy Installation** - Standard ANSI flange provides a straightforward mating connection and requires no special modifications.
- **Third Party Certifications** - Moisture Resistant Housings are CSA Certified. Explosion / Moisture Resistant Housings carry both CSA and ATEX approvals for hazardous locations (see table for specific listings).
- **Minimal Spacing Required** - Open-coil (OCE) style elements can be bent to a vertical plane during removal, with as little as 36" of clearance between tanks, walls or other obstructions. This allows more efficient use of factory floor space.

### Clean, Pollution Free Electric Heat -

Unlike gas or steam heat, LTFX units have no open flames, no additional plumbing connection, quiet operation, and better operating efficiencies. In addition, electric heat can be precisely controlled with Chromalox control panels.

• **Matching Control Panel** - Each unit can be matched with a corresponding control panel to ensure seamless operation. Control panels can be provided separately or installed directly on the LTFX unit.

• **Provided Overtemperature Sensor** - Each unit comes equipped with a type J thermocouple for overtemperature sensing on the pipe wall.

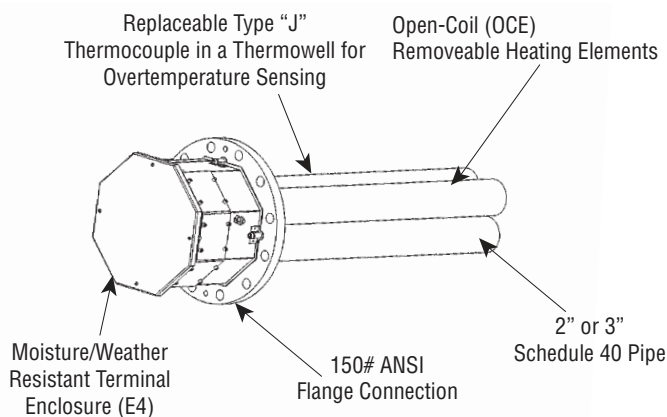
### Options

- **Universal Support Stand** - Support stand helps to ensure ease of installation and minimize on-site fabrication. (Shipped separately)
- Alternate Voltage and kW Ratings
- Larger ANSI style flanges available (up to 36", 300#)
- Optional pre-assembly with Chromalox control panel
- Lower watt densities for highly viscous material
- Customized immersion lengths and/or flanges for custom sized tanks are available

LARGE TANK

## LTFX

### Large Tank Flange Heater (cont'd.)



#### Model Specifications – E4 Moisture Resistant Housing

Heater Model	kW	Volts	Phase	Circuits	Immersion Length (In.)	ANSI Flange Size	Number of Tubes	Nominal Tube Diameter	Watt Density (Outside)	Matching Control Panel	
										PCN	Model
LTFX-125-004E4	4	480	3	1	60	4" - 150#	1	2"	10	328858	4468-30211
LTFX-128-008E4	8	480	3	1	96	4" - 150#	1	2"	12	328858	4468-30211
LTFX-1212-012E4	12	480	3	1	144	4" - 150#	1	2"	12	328858	4468-30211
LTFX-2212-024E4	24	480	3	1	144	6" - 150#	2	2"	12	328858	4468-30211
LTFX-3212-036E4	36	480	3	1	144	6" - 150#	3	2"	12	328890	4468-60211
LTFX-2325-060E4	60	480	3	1	300	8" - 150#	2	3"	9	329920	4468-90211
LTFX-3325-090E4	90	480	3	3	300	10" - 150#	3	3"	9	n/a	4432-348-51100
LTFX-4325-120E4	120	480	3	2	300	10" - 150#	4	3"	9	n/a	4432-280-51100
LTFX-6325-180E4	180	480	3	3	300	12" - 150#	6	3"	9	n/a	4432-380-51100
LTFX-8325-240E4	240	480	3	4	300	14" - 150#	8	3"	9	n/a	4432-480-51100

**Note** — The above heater and panel units are sold and shipped separately. Horizontal mount only.

#### Model Specifications – E2 Explosion/Moisture Resistant Housing

Heater Model	kW	Volts	Phase	Circuits	Immersion Length (In.)	ANSI Flange Size	Number of Tubes	Nominal Tube Diameter	Watt Density (Outside)	Matching Control Panel	
										PCN	Model
LTFX-125-004E2	4	480	3	1	66	4" - 150#	1	2"	9	<b>Note:</b> Explosion Resistant Control Panels are available. However, installing the control panel outside the hazardous location may offer significant cost savings. Please refer to section 'H' of the catalog for available panel options.	
LTFX-128-008E2	8	480	3	1	96	4" - 150#	1	2"	12		
LTFX-1212-012E2	12	480	3	1	144	4" - 150#	1	2"	12		
LTFX-3210-024E2	24	480	3	1	120	8" - 150#	3	2"	9		
LTFX-3215-036E2	36	480	3	1	180	8" - 150#	3	2"	9		
LTFX-3225-060E2	60	480	3	1	300	8" - 150#	3	2"	9		
LTFX-4225-090E2	90	480	3	2	300	10" - 150#	4	2"	10		
LTFX-8215-120E2	120	480	3	2	180	12" - 150#	8	2"	12		
LTFX-9220-180E2	180	480	3	3	240	14" - 150#	9	2"	11		

**Note** — The above heater and panel units are sold and shipped separately. Horizontal mount only.

#### Optional Accessories

PCN	Description
308355	12" - Type "J" T/C for customer install
308064	12" - RTD for customer install
308670	Thermowell for T/C or RTD
327783	Type J Extension wire, 100 ft.
308873	Type J Extension wire, 200 ft.
327791	Type J Extension wire, 500 ft.
308881	Type J Extension wire, 1000 ft.
308144	RTD Extension wire, 50 ft.
308152	RTD Extension wire, 200 ft.
308160	RTD Extension wire, 1000 ft.
073139-031	Universal Support Stand (Stainless Steel)
073139-032	Universal Support Stand (Carbon Steel)

**Note** — Chromalox adjustable support stand helps to ensure ease of installation and minimal on-site fabrication.

## LTFX

### Large Tank Flange Heater *(cont'd.)*

#### Ordering Information

To Order— Complete model number using the matrix provided.

Model	Large Tank Heating Systems															
LTFX	Large Tank Flange Heater															
	<b>Code</b>	<b>Tube and Flange Material</b>														
	(Blank)	Carbon Steel														
	SS	304 Stainless Steel														
	M	Other Material														
	<b>Code</b>	<b>Control Panel Mounting</b>														
	(Blank)	Panel Provided Separately														
	P	Control Panel Mounted on Unit														
	<b>Code</b>	<b>Number of Heating Tubes</b>														
	3	Number of Heating Tubes in ANSI Flange														
	<b>Code</b>	<b>Tube Diameter</b>														
	2	2" NPS														
	3	3" NPS														
	<b>Code</b>	<b>Length (nearest Ft.)</b>														
	25	Heating Tube Immersion Length														
	<b>Code</b>	<b>Kilowatt Rating of Unit (three digits)</b>														
	090	kW														
	<b>Code</b>	<b>Terminal Housing Style (Refer to Certification Table for Third Party Listings)</b>														
	E4	Moisture Resistant														
	E2	Explosion/Moisture Resistant														
	<b>Code</b>	<b>Non-Standard Feature</b>														
	(Blank)	Catalog PCN Item														
	XX	Custom Feature														
	<b>Code</b>	<b>Voltage</b>														
	208	208	415	415												
	240	240	480	480												
	380	380	575	575												
	<b>Code</b>	<b>Number of Circuits</b>														
	1	One	3	Three												
	2	Two	4	Four												
	<b>Code</b>	<b>Phase</b>														
	1P	Single														
	3P	Three														
	<b>Code</b>	<b>Kilowatts</b>														
	90	kW														
LTFX	-	-	-	3	3	25	-	090	E4	-	480V	3	-	3P	90	Typical Model Number

LARGE TANK

**Note —**





Shaded sections of the model build table are not a finite list. Items such as Number of Tubes, Length, Wattage, and Voltage should be adjusted to match design.

## LTFX

### Large Tank Flange Heater (*cont'd.*)



#### Certifications

##### E4 Moisture Resistant Enclosure Certifications

	North America Designation(s)	Canadian Designation(s)	European Designation(s)	International Designation(s)
Rating	NEMA 4	NEMA 4	IP66	IP66
Agency(s)	 		 Manufacturers declaration	Manufacturers declaration



##### E2 Moisture Resistant/Explosion Proof Enclosure Certifications

	North America Designation(s)	Canadian Designation(s)	European Designation(s)	International Designation(s)
Rating	Explosion Resistant	Explosion Resistant	Explosion Resistant	Explosion Resistant
Agency(s)	CSAus	CSA	ATEX	IECEX
Ratings*	Class I, Div. 1 Groups B, C & D	Class I, Div. 1 Groups B, C & D	  Ex d IIB+H2 Gb T1 to T6	Ex d IIB+H2 Gb T1 to T6
	Class II, Div. 1 Groups E, F & G	Class II, Div. 1 Groups E, F & G	IP66	IP66
	Class I Zone 1 AEx d IIB + H2 Gb T1 to T6	Class I Zone 1 Ex d IIB + H2 Gb T1 to T6		
-50°C < Ta < +60°C				



\*Note: Temps over T3 (200°C) require stand-offs for third-party listing. Refer to IECEX and ATEX certificates for stand-off dimensions.