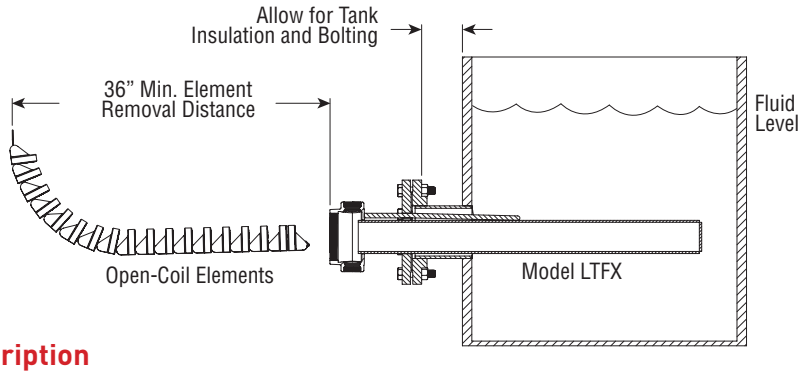
LTFX

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^2 (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

Patented





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.

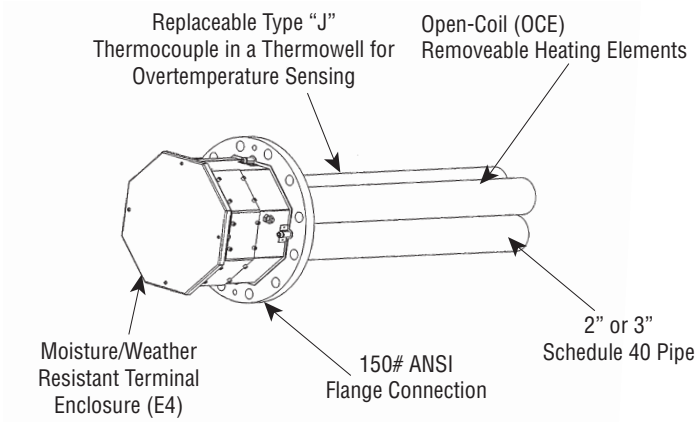
Advantages

- **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

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)
LTFX-125-004E4	4	480	3	1	60	4" - 150#	1	2"	10
LTFX-128-008E4	8	480	3	1	96	4" - 150#	1	2"	12
LTFX-1212-012E4	12	480	3	1	144	4" - 150#	1	2"	12
LTFX-2212-024E4	24	480	3	1	144	6" - 150#	2	2"	12
LTFX-3212-036E4	36	480	3	1	144	6" - 150#	3	2"	12
LTFX-2325-060E4	60	480	3	1	300	8" - 150#	2	3"	9
LTFX-3325-090E4	90	480	3	3	300	10" - 150#	3	3"	9
LTFX-4325-120E4	120	480	3	2	300	10" - 150#	4	3"	9
LTFX-6325-180E4	180	480	3	3	300	12" - 150#	6	3"	9
LTFX-8325-240E4	240	480	3	4	300	14" - 150#	8	3"	9

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)
LTFX-125-004E2	4	480	3	1	66	4" - 150#	1	2"	9
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
616024	Type J T/C Kit, includes a thermowell, and 50 ft of thermocouple wire
616016	RTD Kit, includes a thermowell, and 200 ft of RTD wire
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.

Power Control Assembly Pairings

Model Description	Part Number	Power Control Type
SPCA-C1-75E4X 480V3PH	484111-005	On/Off
SPCA-S1-75E4V 480V3PH	484111-006	Proportional

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

Code	Tube and Flange Material
(Blank)	Carbon Steel
SS	304 Stainless Steel
M	Other Material

Code	Control Panel Mounting
(Blank)	Panel Provided Separately
P	Control Panel Mounted on Unit

Code	Number of Heating Tubes
3	Number of Heating Tubes in ANSI Flange

Code	Tube Diameter
2	2" NPS
3	3" NPS

Code	Length (nearest Ft.)
25	Heating Tube Immersion Length

Code	Kilowatt Rating of Unit (three digits)
090	kW

Code	Terminal Housing Style (Refer to Certfication Table for Third Party Listings)
E4	Moisture Resistant
E2	Explosion/Moisture Resistant

Code	Non-Standard Feature
(Blank)	Catalog PCN Item
XX	Custom Feature

Code	Voltage	Code	Voltage
208	208	415	415
240	240	480	480
380	380	575	575

Code	Number of Circuits	Code	Number of Circuits
1	One	3	Three
2	Two	4	Four

Code	Phase
1P	Single
3P	Three

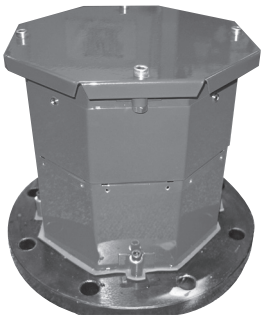
Code	Kilowatts
90	kW

LTFX	_	_	-	3	3	25	-	090	E4	_	480V	3	-	3P	90	Typical Model Number

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)	C SP US, UL	SP	CE 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	CE 0359 Ex II 2 G 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.