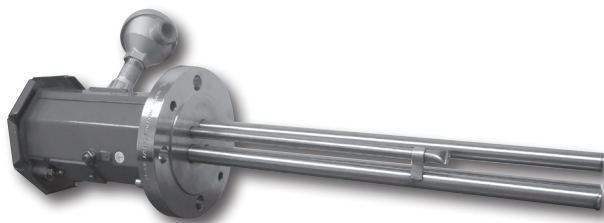
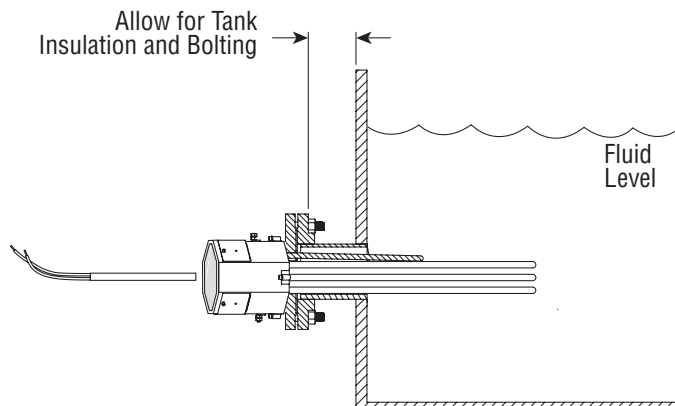




## STFX Small Tank Flange Heater



- 304 Stainless Steel Element Sheath
- Carbon Steel Flange Construction
- 3" to 12" 150# Flange Size
- Moisture Resistant Terminal Housing (NEMA 4/IP66)
- Third Party Certified
- 1 - 25 kW Unit Ratings
- 240 V, 480 V, or 600 V, Three Phase, Single Circuit
- 24" (610 mm) Immersion Lengths
- 5, 10, 20, or 40 w/in<sup>2</sup> (1, 1.6, 3.5 & 6.2 w/cm<sup>2</sup>) Pipe Surface
- Standard Over-Temperature Protection - Type J Thermocouple
- ASME Design and Certification Available



### Description

Chromalox STFX style units allow heating elements to be changed without draining the tank. This is ideal for smaller, critical system storage units that need to remain filled for continuous operation and storage.

### Applications

STFX units provide replaceable-element design in a compact setting, while providing precise temperature control. Units comply with API-614 and can be used for such materials as lube oil, fire water storage, water solutions, asphalt, water/glycol, diesel, acidic solutions, ethanol, bio-diesel (B-100), glycerin, animal fats, vegetable oils, fuel oils or similar types of liquids.

### Advantages

- **No Tank Draining Required** - Replaceable style heating elements can be inspected or changed without draining the tank. This reduces costs and production downtime.
- **Quick & Easy Installation** - A standard ANSI flange provides a straightforward mating connection with no special modifications required.
- **Stocked Replacement Elements** - Standardized heater cores allow for multiple heater element replaceability with a minimum number of parts.
- **Third-Party Certifications** - Terminal housings are CSA approved.

- **Easy Element Maintenance** - Replaceable-style elements can be easily changed by one person with no special tooling required.

- **Clean, Pollution-Free Electric Heat** - Unlike gas or steam heat, STFX units have no open flames, no additional plumbing connection, quiet operation, and better efficiencies. In addition, they can be precisely controlled and operation is simple.

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

### Options

- 304 or 316 Stainless Steel Flange
- 316 or INCOLOY 800 Element Sheath
- Alternate Voltage and kW Ratings
- Explosion/Moisture Resistant Terminal Housing
- Optional direct mounting of Chromalox controls
- Customized immersion lengths for unique sized tanks.
- Alternate materials for corrosive applications

SMALL TANK

## STFX

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

Steel Flange, 304 Stainless Steel applications

Model Specifications - 40 w/in<sup>2</sup> (6.2 w/cm<sup>2</sup>) Applications

Heater Model	Volts	kW	Immersion Length In. (mm)	Circuits	Phase	ANSI Flange Size	Number of Heater Tubes	Heater Part Number	Replacement Element Part Number
STFXS-01-002P-E4	480	2.0	24 (610)	1	1	3" - 150#	1	306608-001	306675-001
STFXS-03-006P-E4	480	6.0	24 (610)	1	3	3" - 150#	3	306608-002	306675-001
STFXS-06-012P-E4	480	12.0	24 (610)	1	3	4" - 150#	6	306608-003	306675-001
STFXS-09-018P-E4	480	18.0	24 (610)	1	3	5" - 150#	9	306608-004	306675-001
STFXS-12-024P-E4	480	24.0	24 (610)	1	3	6" - 150#	12	306608-005	306675-001
STFXS-01-001P6-E4	600	1.6	24 (610)	1	1	3" - 150#	1	306608-006	306675-002
STFXS-03-004P7-E4	600	4.7	24 (610)	1	3	3" - 150#	3	306608-007	306675-002
STFXS-06-009P4-E4	600	9.4	24 (610)	1	3	4" - 150#	6	306608-008	306675-002
STFXS-09-014P-E4	600	14.0	24 (610)	1	3	5" - 150#	9	306608-009	306675-002
STFXS-12-018P7-E4	600	18.7	24 (610)	1	3	6" - 150#	12	306608-010	306675-002

Model Specifications - 20 w/in<sup>2</sup> (3.1 w/cm<sup>2</sup>) Applications

Heater Model	Volts	kW	Immersion Length In. (mm)	Circuits	Phase	ANSI Flange Size	Number of Heater Tubes	Heater Part Number	Replacement Element Part Number
STFXS-03-003P-E4	480	3.0	24 (610)	1	3	3" - 150#	3	306608-011	306675-002
STFXS-06-006P-E4	480	6.0	24 (610)	1	3	4" - 150#	6	306608-012	306675-002
STFXS-09-009P-E4	480	9.0	24 (610)	1	3	5" - 150#	9	306608-013	306675-002
STFXS-12-012P-E4	480	12.0	24 (610)	1	3	6" - 150#	12	306608-014	306675-002
STFXS-24-024P-E4	480	24.0	24 (610)	1	3	8" - 150#	24	306608-015	306675-002
STFXS-03-003P2-E4	600	3.2	24 (610)	1	3	3" - 150#	3	306608-016	306675-001
STFXS-06-006P3-E4	600	6.3	24 (610)	1	3	4" - 150#	6	306608-017	306675-001
STFXS-09-009P4-E4	600	9.4	24 (610)	1	3	5" - 150#	9	306608-018	306675-001
STFXS-12-012P5-E4	600	12.5	24 (610)	1	3	6" - 150#	12	306608-019	306675-001
STFXS-24-025P-E4	600	25.0	24 (610)	1	3	8" - 150#	24	306608-020	306675-001

Application Recommended w/in<sup>2</sup>

Oil	w/in <sup>2</sup> (w/cm <sup>2</sup> )	Water
-----	40 (6.2)	Water or Water/Glycol Mix
Light Weight	20 (3.1)	Mildly Corrosive
Medium Weight	10 (1.6)	Severely Corrosive
Heavy Weight	5 (1)	-----

**Note:** To maximize heater life, the unit selection requires critical engineering judgement by the plant engineer in the selection of proper heater materials and watt density.

## STFX Small Tank Flange Heater *(cont'd.)*

Steel Flange, 304 Stainless Steel applications

### Model Specifications - 10 w/in<sup>2</sup> (1.6 w/cm<sup>2</sup>) Applications

Heater Model	Volts	kW	Immersion Length In. (mm)	Circuits	Phase	ANSI Flange Size	Number of Heater Tubes	Heater Part Number	Replacement Element Part Number
STFXS-03-001P5-E4	240	1.5	24 (610)	1	3	3" - 150#	3	306608-021	306675-001
STFXS-06-003P-E4	240	3.0	24 (610)	1	3	4" - 150#	6	306608-022	306675-001
STFXS-12-006P-E4	240	6.0	24 (610)	1	3	6" - 150#	12	306608-023	306675-001
STFXS-24-012P-E4	240	12.0	24 (610)	1	3	8" - 150#	24	306608-024	306675-001
STFXS-36-018P-E4	240	18.0	24 (610)	1	3	10" - 150#	36	306608-025	306675-001
STFXS-48-024P-E4	240	24.0	24 (610)	1	3	12" - 150#	48	306608-026	306675-001
STFXS-03-001P6-E4	600	1.6	24 (610)	1	3	3" - 150#	3	306608-027	306675-002
STFXS-06-003P2-E4	600	3.2	24 (610)	1	3	4" - 150#	6	306608-028	306675-002
STFXS-12-006P3-E4	600	6.3	24 (610)	1	3	6" - 150#	12	306608-029	306675-002
STFXS-24-012P5-E4	600	12.5	24 (610)	1	3	8" - 150#	24	306608-030	306675-002
STFXS-36-018P8-E4	600	18.8	24 (610)	1	3	10" - 150#	36	306608-031	306675-002
STFXS-48-025P1-E4	600	25.1	24 (610)	1	3	12" - 150#	48	306608-032	306675-002

### Model Specifications - 5 w/in<sup>2</sup> (1 w/cm<sup>2</sup>) Applications

Heater Model	Volts	kW	Immersion Length In. (mm)	Circuits	Phase	ANSI Flange Size	Number of Heater Tubes	Heater Part Number	Replacement Element Part Number
STFXS-03-000P8-E4	240	0.75	24 (610)	1	3	3" - 150#	3	306608-033	306675-002
STFXS-06-001P5-E4	240	1.5	24 (610)	1	3	4" - 150#	6	306608-034	306675-002
STFXS-12-003P-E4	240	3.0	24 (610)	1	3	6" - 150#	12	306608-035	306675-002
STFXS-24-006P-E4	240	6.0	24 (610)	1	3	8" - 150#	24	306608-036	306675-002
STFXS-36-009P-E4	240	9.0	24 (610)	1	3	10" - 150#	36	306608-037	306675-002
STFXS-48-012P-E4	240	12.0	24 (610)	1	3	12" - 150#	48	306608-038	306675-002
STFXS-06-001P6-E4	600	1.6	24 (610)	1	3	4" - 150#	6	306608-039	306675-001
STFXS-12-003P2-E4	600	3.2	24 (610)	1	3	6" - 150#	12	306608-040	306675-001
STFXS-24-006P3-E4	600	6.3	24 (610)	1	3	8" - 150#	24	306608-041	306675-001
STFXS-36-009P4-E4	600	9.4	24 (610)	1	3	10" - 150#	36	306608-042	306675-001
STFXS-48-012P5-E4	600	12.5	24 (610)	1	3	12" - 150#	48	306608-043	306675-001

### Application Recommended w/in<sup>2</sup> (w/cm<sup>2</sup>)

Oil	w/in <sup>2</sup> (w/cm <sup>2</sup> )	Water
-----	40 (6.2)	Water or Water/Glycol Mix
Light Weight	20 (3.1)	Mildly Corrosive
Medium Weight	10 (1.6)	Severely Corrosive
Heavy Weight	5 (1)	-----

**Note:** To maximize heater life, the unit selection requires critical engineering judgement by the plant engineer in the selection of proper heater materials and watt density.

SMALL TANK

## STFX

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

#### Ordering Information

To Order— Complete model number using the matrix provided.

<b>Model</b>	<b>Small Tank Heating Systems</b>									
<b>STFX</b>	Small Tank Flange Heater									
<b>Code</b>	<b>Thermowell Material</b>									
S	304 Stainless Steel									
I	Incoloy 800									
X	Other Material									
<b>Code</b>	<b>Flange Material</b>									
(Blank)	Carbon Steel									
S	304 Stainless Steel									
X	Other Material									
<b>Code</b>	<b>Number of Thermowells</b>									
01	One	05	Five							
02	Two	06	Six							
03	Three	07	Seven							
04	Four	08	Eight							
<b>Code</b>	<b>Wattage</b>									
004P5	4.5 kW (use actual kilowatt in three digits)									
<b>Code</b>	<b>Terminal Housing Style</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 V	240	240 V	380	380 V					
415	415 V	480	480 V	600	600 V					
<b>Code</b>	<b>Number of circuits</b>									
1	One	3	Three							
2	Two	4	Four							
<b>Code</b>	<b>Phase</b>									
1P	Single Phase									
3P	Three Phase									
<b>Code</b>	<b>Kilowatts</b>									
4.5	kW									
<b>STFX</b>	<b>S</b>	<b>S</b>	<b>-03</b>	<b>-004P5</b>	<b>-E4</b>	<b>480V</b>	<b>1</b>	<b>-3P</b>	<b>4.5kW</b>	<b>Typical Model Number</b>

**Example of Final Model Description:** STFXSS-03-004P5-E4 480V 1-3P 4.5kW

**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.