

### HXFL SERIES, LOW PROFILE L-SHAPED FLUOROPOLYMER (PTFE) HEATERS

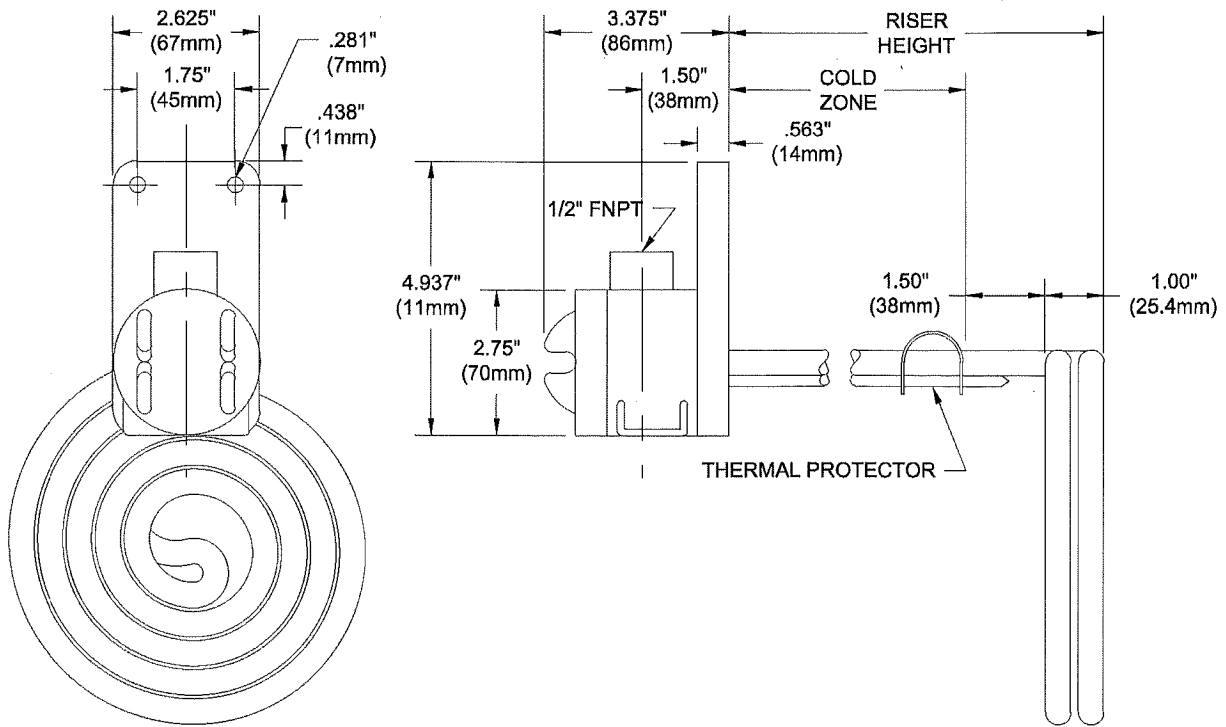
WATTS	VOLTS (See Pg.1)	HORIZ. LENGTH	STD. VERT. LENGTH*	DIA. In./(mm)	MAX. COLD ZONE (In./mm)	MODEL NUMBER	SHIP WGT. Lbs./(kg)
		In./(mm)	In./(mm)				
500	120	5	12	5	36	HXFL.5105-R <sup>***</sup>	6
	240	(125)	(305)	(125)	(915)	HXFL.5205-R <sup>***</sup>	(2.5)
1000	120	6	12	6	36	HXFL1106-R <sup>***</sup>	7
	240	(155)	(305)	(155)	(915)	HXFL1206-R <sup>***</sup>	(3.5)
2000	120	8	18	8	35	HXFL2108-R <sup>***</sup>	8
	240	(205)	(460)	(205)	(890)	HXFL2208-R <sup>***</sup>	(4)
3000	480					HXFL2408-R <sup>***</sup>	
	240	9	18	9	35	HXFL3209-R <sup>***</sup>	13
4000	480	(230)	(460)	(230)	(890)	HXFL3409-R <sup>***</sup>	(6)
	240	11	18	11	35	HXFL4211-R <sup>***</sup>	15
5000	480	(280)	(460)	(280)	(890)	HXFL4411-R <sup>***</sup>	(7)
	240	12	18	12	31	HXFL5212-R <sup>***</sup>	18
6000	480	(305)	(460)	(305)	(790)	HXFL5412-R <sup>***</sup>	(8)
	240	13	18	13	25	HXFL6213-R <sup>***</sup>	22
	480	(330)	(460)	(330)	(635)	HXFL6413-R <sup>***</sup>	(10)

Single phase only. Guards recommended. This configuration is not recommended for electroless chemistry, phosphoric acid, or applications prone to sludge development.

## Product Features and Benefits:

- ◆ **SUPERIOR CHEMICAL RESISTANCE:** Inert to most aqueous acid, alkaline, anodizing and pickling solutions up to 212°F (100°C).
- ◆ **RUGGED CONSTRUCTION:** Heavy wall fluoropolymer (PTFE) covered stainless steel element reduces permeation and eliminates the need for gas purge systems. Guaranteed 100% pinhole free.
- ◆ **OUTSTANDING PERFORMANCE:** Low watt density design (10 watts/square inch, 1.5w/cm<sup>2</sup>) for long service life.
- ◆ **EVEN HEATING:** Flat, low profile bottom design for even heating and varying liquid levels. (This configuration not recommended for electroless chemistry).
- ◆ **CORROSION RESISTANT HEAD:** Vapor tight, flame retardant polypropylene terminal enclosure with 3-foot (.9m) flexible PVC liquid tight conduit.
- ◆ **SAFETY FEATURES:**
  - Grounded internal metal element.
  - Thermal protector built in. Replaceable PTL-I fuse standard for solutions up to 190°F (88°C).
  - Non-floating construction.
- ◆ **CERTIFICATIONS:** UL, CSA, and CE.
- ◆ **SIZES:** 500 watts to 6,000 watts.
- ◆ **VOLTAGES:** 120, 240 or 480 volts. 208, 380, 415, 600 and other voltages available. Single phase only.
- ◆ **OPTIONS AVAILABLE (consult factory):**
  - Replaceable thermal protectors:
    - PTL-IM: for solutions from 190°F (88°C) to 220°F (104°C).
  - Resettable thermal protectors:
    - PTL-II: bi-metal switch for solutions up to 190°F (88°C).
    - PTL-III: type-J thermocouple for solutions from 190°F (88°C) to 210°F (99°C).
    - PIII: type-J thermocouple for solutions from 210°F (99°C) to 250°F (121°C).
  - Longer vertical lengths (cold zones).
  - Polypropylene guards: recommended for applications up to 180°F (82°C).
  - Fluoropolymer (PTFE) guards: recommended for chromic acid or solutions over 180°F (82°C).
  - Special configurations.
  - Longer wire and conduit lengths.
  - Flexible continuous fluoropolymer leads (PIII protector only).
  - Lower watt densities for highly viscous solutions and technical acids.
  - Temperature and level controls sized to match the heater.

## DIMENSIONS



## LOW PROFILE L-SHAPED FLUOROPOLYMER (PTFE) HEATER

Series	Wattage	Voltage	Diameter	Options	Vertical Length	Guard Option	Type of Fuse	Wire and Conduit Length																
	.5 = 500 1 = 1000 2 = 2000 3 = 3000 4 = 4000 5 = 5000 6 = 6000	1 = 120 2 = 240 4 = 480 -208- = 208 -277- = 277 -380- = 380 -415- = 415 -600- = 600	05 = .5kW 06 = 1kW 08 = 2W 09 = 3kW 11 = 4kW 12 = 5kW 13 = 6kW		-R12 = .5kW -R12 = 1kW -R18 = 2kW -R18 = 3kW -R18 = 4kW -R18 = 5kW -R18 = 6kW specify custom lengths, not to exceed tank length			no designator = 36" length standard specify variations from standard Ex: -X84 = 84"																
	HXFL = PTFE sheathed HSFL = 304 stainless steel						<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;">Replaceable Fuse</th> </tr> <tr> <td>-PTL-I (std)</td> <td>for solutions up to 190°F</td> </tr> <tr> <td>-PTL-IM</td> <td>for 190° - 220°F solutions</td> </tr> <tr> <th colspan="2" style="text-align: center;">Resettable Fuse</th> </tr> <tr> <td colspan="2" style="text-align: center;">(additional control components required)</td> </tr> <tr> <td>-PTL-II</td> <td>for solutions up to 190°F</td> </tr> <tr> <td>-PTL-III</td> <td>for 190° - 210°F solutions</td> </tr> <tr> <td>-PIII</td> <td>for 210° - 250°F solutions</td> </tr> </table>	Replaceable Fuse		-PTL-I (std)	for solutions up to 190°F	-PTL-IM	for 190° - 220°F solutions	Resettable Fuse		(additional control components required)		-PTL-II	for solutions up to 190°F	-PTL-III	for 190° - 210°F solutions	-PIII	for 210° - 250°F solutions	
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	X = any special configuration not called out in the part number (specify in clear text)							C = complete with guard																

### ORDERING EXAMPLE:

HXFL5412-R18-PTL-I-X50

Flat L-Shaped fluoropolymer heater, 5000 watts, 480 volt, single phase, 12" diameter hot zone, 18" vertical length, PTL-I thermal fuse, 50" wire and conduit

### FLOW FACTOR

24050 COMMERCE PARK RD  
CLEVELAND, OHIO 44122  
866-360-9830  
www.flowfactor.com