

HX SERIES, SPIRAL FLUOROPOLYMER (PTFE) HEATERS						
WATTS	VOLTS	HOT ZONE In./(mm)	OVERALL LENGTH In./(mm)	MAX. COLD ZONE In./(mm)	MODEL NUMBER	SHIP WGT. Lbs./(kg)
500	120	5	11	41	HX.5111- <sup>**</sup>	6
	240	(127)	(279)	(1041)	HX.5211- <sup>**</sup>	(2.7)
1000	120	7	11	41	HX1111- <sup>**</sup>	7
	240	(178)	(279)	(1041)	HX1211- <sup>**</sup>	(3.2)
2000	120	12	17	40	HX2117- <sup>**</sup>	8
	240	(305)	(432)	(1016)	HX2217- <sup>**</sup>	(3.6)
	480				HX2417- <sup>**</sup>	
3000	240	16	23	40	HX3223- <sup>**</sup>	13
	480	(406)	(584)	(1016)	HX3423- <sup>**</sup>	(5.9)
4000	240	20	29	40	HX4229- <sup>**</sup>	15
	480	(508)	(737)	(1016)	HX4429- <sup>**</sup>	(6.8)
5000	240	25	35	36	HX5235- <sup>**</sup>	18
	480	(635)	(889)	(914)	HX5435- <sup>**</sup>	(8.2)
6000	240	29	40	30	HX6240- <sup>**</sup>	21
	480	(737)	(1016)	(762)	HX6440- <sup>**</sup>	(9.5)
8000	240	37	47	32	2HX8247- <sup>**</sup>	25
	480	(940)	(1194)	(813)	2HX8447- <sup>**</sup>	(11.3)
9000	240	44	54	35	2HX9254- <sup>**</sup>	28
	480	(1118)	(1372)	(889)	2HX9454- <sup>**</sup>	(12.7)

**SINGLE PHASE ONLY.** Guards recommended.

## HX Series, Spiral Heater 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. Guaranteed 100% pinhole free.

### OUTSTANDING PERFORMANCE:

- ◆ Low watt density design (10 watts/square inch (1.5w/cm<sup>2</sup>) uses minimal space and ensure long service life.

### CORROSION RESISTANT HEAD:

- ◆ Vapor resistant, flame retardant polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit.

### SAFETY FEATURES:

- ◆ Grounded internal metal element.
- ◆ Thermal protector built in. Replaceable P1 protector standard for solutions up to 180°F(82°C).
- ◆ Non-floating construction.

**CERTIFICATIONS:** cULus listed and CE compliant (except 600 volts).

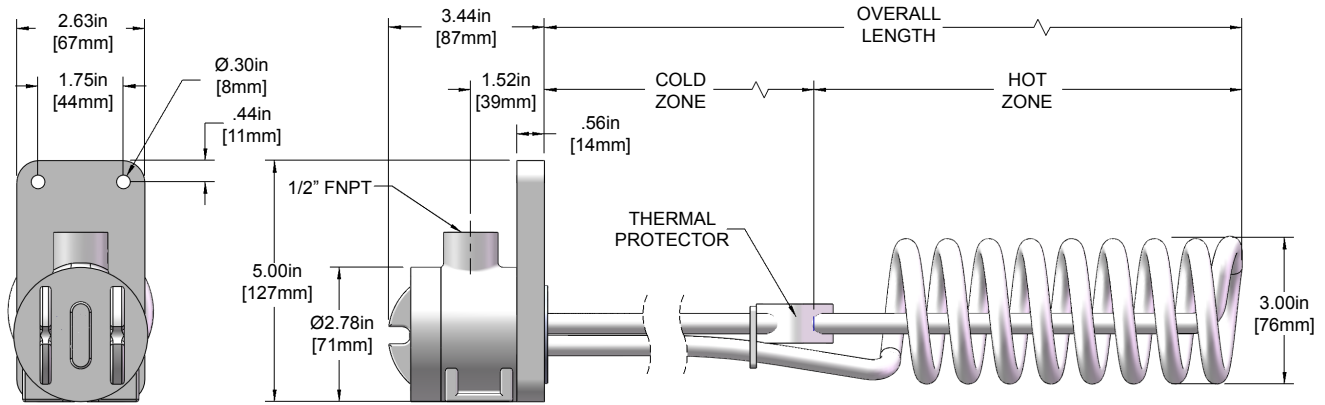
**SIZES:** 500 watts to 9,000 watts.

**VOLTAGES:** 120 to 600 volts. (600 volts on 4500 watts or lower only)

### OPTIONS AVAILABLE (consult factory):

- ◆ Resettable thermal protectors:
  - P2: For solutions up to 180°F(82°C)
  - P8: Type-J thermocouple for solutions up to 210°F(99°C).
  - P3: Type-J thermocouple for solutions up to 250°F(121°C).
- ◆ Polypropylene guards: Recommended for applications up to 180°F(82°C) (sold separately).
- ◆ Fluoropolymer (PTFE) guards: Recommended for chromic acid and solutions over 180°F(82°C) (sold separately).
- ◆ Special configurations and lengths.
- ◆ Longer wire and conduit lengths.
- ◆ Flexible continuous fluoropolymer leads (P3 protector only).
- ◆ Lower watt densities for highly viscous solutions and technical acids.
- ◆ Temperature and level controls sized to match the heater. (sold separately)
- ◆ Patented purge feature promotes a longer heater life.

## DIMENSIONS



## SPIRAL OVER THE SIDE FLUOROPOLYMER (PTFE) HEATER ORDERING INFORMATION

Series	Wattage	Voltage	Overall Length	Type of Protector	Wire and Conduit Length															
	.5 = 500 1 = 1000 2 = 2000 3 = 3000 4 = 4000 5 = 5000 6 = 6000 8 = 8000 9 = 9000	1 = 120 2 = 240 3 = 380 4 = 480 5 = 415 6 = 600 7 = 400 8 = 208 9 = 220 0 = 200	11 = .5kW 11 = 1kW 17 = 2kW 23 = 3kW 29 = 4kW 35 = 5kW 40 = 6kW 47 = 8kW 54 = 9kW Specify custom lengths, not to exceed tank depth.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;">Replaceable Protector</th> </tr> <tr> <td style="text-align: center;">P1</td> <td style="text-align: center;">For solutions up to 190°F</td> </tr> <tr> <th colspan="2" style="text-align: center;">Resettable Protector</th> </tr> <tr> <td colspan="2" style="text-align: center;">(additional control components required)</td> </tr> <tr> <td style="text-align: center;">P2</td> <td style="text-align: center;">For solutions up to 190°F</td> </tr> <tr> <td style="text-align: center;">P8</td> <td style="text-align: center;">For solutions up to 210°F</td> </tr> <tr> <td style="text-align: center;">P3</td> <td style="text-align: center;">For solutions up to 250°F</td> </tr> </table>	Replaceable Protector		P1	For solutions up to 190°F	Resettable Protector		(additional control components required)		P2	For solutions up to 190°F	P8	For solutions up to 210°F	P3	For solutions up to 250°F	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">36" length standard (no designator). Specify variations from standard Ex: -X84 = 84"</td> </tr> </table>	36" length standard (no designator). Specify variations from standard Ex: -X84 = 84"
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### ORDERING EXAMPLE:

HX5435-P1-X60

Spiral over the side fluoropolymer heater, 5000 watts, 480 volt, single phase, 35" overall length, P1 thermal protector, 60" wire and conduit.

