

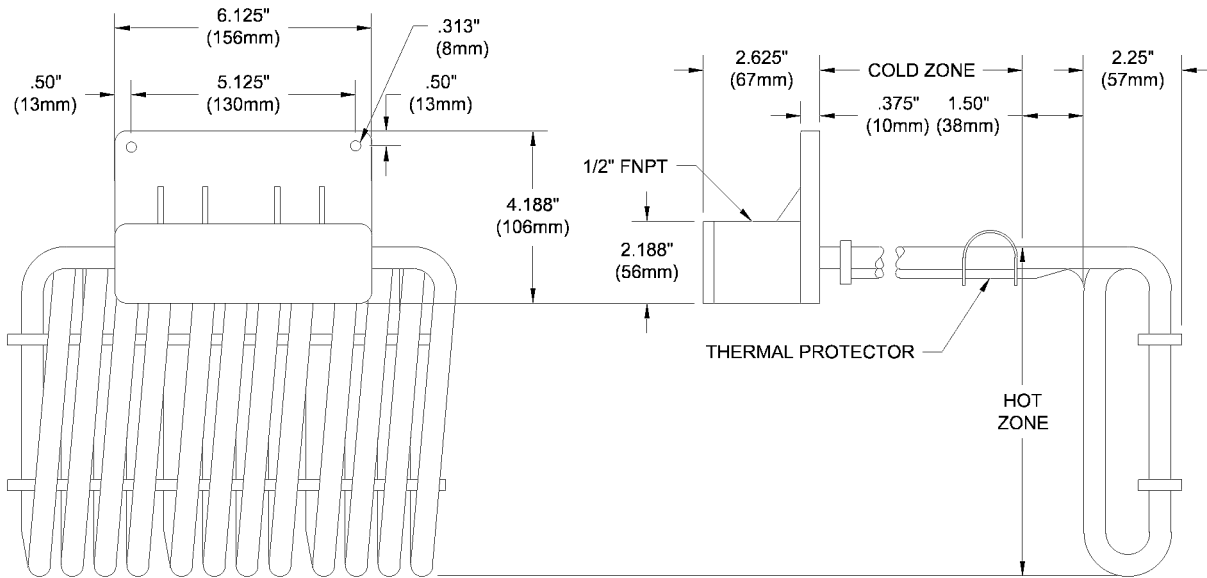
| 3HXOL SERIES, MULTI ELEMENT L-SHAPED FLUOROPOLYMER (PTFE) HEATERS | | | | | | | |
|---|-------|-------------------|------------------|---------------------|-----------------------|----------------------|---------------------------|
| WATTS | VOLTS | WIDTH In./(mm) | HOT | STD. VERT. | MAX. | MODEL NUMBER | SHIP WGT. Lbs./(kg) |
| | | | ZONE In./(mm) | LENGTH* In./(mm) | COLD ZONE In./(mm) | | |
| 3000 | 240 | 7 | 13 | 18 | 36 | 3HXOL3207-13-R*-** | 20 |
| | 480 | (180) | (330) | (460) | (915) | 3HXOL3407-13-R*-** | (9.5) |
| 4500 | 240 | 9 | 10 | 18 | 35 | 3HXOL4.5209-10-R*-** | 21 |
| | 480 | (230) | (255) | (460) | (890) | 3HXOL4.5409-10-R*-** | (9.5) |
| 6000 | 240 | 10 | 19 | 18 | 35 | 3HXOL6210-19-R*-** | 22 |
| | 480 | (255) | (485) | (460) | (890) | 3HXOL6410-19-R*-** | (10) |
| 9000 | 240 | 10 | 23 | 18 | 35 | 3HXOL9210-23-R*-** | 36 |
| | 480 | (255) | (585) | (460) | (890) | 3HXOL9410-23-R*-** | (16.5) |
| 12000 | 240 | 10 | 30 | 18 | 35 | 3HXOL12210-30-R*-** | 42 |
| | 480 | (255) | (760) | (460) | (890) | 3HXOL12410-30-R*-** | (19.5) |
| 15000 | 240 | 10 | 36 | 18 | 31 | 3HXOL15210-36-R*-** | 48 |
| | 480 | (255) | (915) | (460) | (790) | 3HXOL15410-36-R*-** | (22) |
| 18000 | 240 | 10 | 42 | 18 | 25 | 3HXOL18210-42-R*-** | 54 |
| | 480 | (255) | (1070) | (460) | (635) | 3HXOL18410-42-R*-** | (24.5) |
| 24000 | 240 | 14 | 40 | 18 | 28 | 6HXOL24214-40-R*-** | 58 |
| | 480 | (355) | (1015) | (460) | (710) | 6HXOL24414-40-R*-** | (26.5) |
| 27000 | 240 | 14 | 45 | 18 | 30 | 6HXOL27214-45-R*-** | 64 |
| | 480 | (355) | (1145) | (460) | (760) | 6HXOL27414-45-R*-** | (29) |

Three phase standard.

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/cm²) for long service life.
- ◆ **EVEN HEATING:** Bottom design for even heating and varying liquid levels.
- ◆ **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 (3-18 kW), and CE.
- ◆ **SIZES:** 3,000 watts to 27,000 watts.
- ◆ **VOLTAGES:** 120, 240 or 480 volts. 208, 380, 415, 600 and other voltages available. Three phase standard, single phase available.
- ◆ **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.
 - Lower watt densities for highly viscous solutions and technical acids.
 - Temperature and level controls sized to match the heater.
 - Single phase power.

DIMENSIONS (up to 18 kW)



MULTI ELEMENT L-SHAPED FLUOROPOLYMER (PTFE) HEATER

| Series | Wattage | Voltage | Width | Options | Horizontal Length | Vertical Length | Guard Option | Type of Fuse | Wire and Conduit Length | | | | | | | | | | | | | | | | |
|--|--|---|---|---|---|-----------------|--------------|---|-------------------------|--|--------------|---------------------------|---------|----------------------------|-----------------|--|--|--|---------|---------------------------|----------|----------------------------|-------|----------------------------|--|
| | 3 = 3000 4.5 = 4500 6 = 6000 9 = 9000 12 = 12000 15 = 15000 18 = 18000 24 = 24000 27 = 27000 | 1 = 120 2 = 240 4 = 480 -208 = 208 -277 = 277 -380 = 380 -415 = 415 -600 = 600 | 07 = 3kW 09 = 4kW 10 = 6kW 10 = 9kW 10 = 12kW 10 = 15kW 10 = 18kW 12 = 24kW 12 = 27kW | 3HXOL = 3 element PTFE sheathed 6HXOL = 6 element PTFE sheathed 3HSOL = 3 element 304 stainless steel 6HSOL = 6 element 304 stainless steel X = any special configuration not called out in the part number (specify in clear text) C = complete with guard no designator = three phase power (standard) -1 = single phase power | -13 = 3kW -10 = 4kW -19 = 6kW -23 = 9kW -30 = 12kW -36 = 15kW -42 = 18kW -40 = 24kW -45 = 27kW -R18 = 3kW -R18 = 4kW -R18 = 6kW -R18 = 9kW -R18 = 12kW -R18 = 15kW -R18 = 18kW -R18 = 24kW -R18 = 27kW | | | no designator = 36" length standard specify variations from standard Ex: -X84 = 84" | | | | | | | | | | | | | | | | | |
| | | | | | | | | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Replaceable Fuse</th> </tr> </thead> <tbody> <tr> <td style="width: 50%;">-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> </tbody> </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 | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | |

ORDERING EXAMPLE:

3HXOL6210-19-R18-PTL-I-X50

Multi element fluoropolymer L-Shaped heater, 6000 watts, 240 volt, three phase, 10" wide, 19" hot zone, 18" vertical length, PTL-I thermal fuse, 50" wire and conduit

**PROCESS
TECHNOLOGY**