

HEATERS

| 5 | | | |
|-----------|-----------|----|--------|
| Thermal | | | |
| Protector | Co Zor | | |
| | | | verall |
| | | Le | ength |
| | Ho Zor | | |
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| C L Y L | JUS | | |

| 3HX SERIES, THREE ELEMENT | | | | | | | | |
|------------------------------|-------|----------|----------|---------------|-----------|--|--|--|
| FLUOROPOLYMER (PTFE) HEATERS | | | | | | | | |
| | | НОТ | OVERALL | MODEL | SHIP | | | |
| WATTS | VOLTS | ZONE | LENGTH | NUMBER | WGT. | | | |
| | | In./(mm) | In./(mm) | | Lbs./(kg) | | | |
| 1000 | 120 | 10 | 17 | 3HX1117-1** | 10 | | | |
| | 240 | (254) | (432) | 3HX1217-** | (4.5) | | | |
| 1500 | 120 | 16 | 23 | 3HX1.5123-1** | 11 | | | |
| | 240 | (406) | (584) | 3HX1.5223-** | (5) | | | |
| | 480 | | | 3HX1.5423-** | | | | |
| 2000 | 120 | 22 | 29 | 3HX2129-1** | 12 | | | |
| | 240 | (559) | (737) | 3HX2229-** | (5.4) | | | |
| | 480 | | | 3HX2429-** | | | | |
| 3000 | 240 | 29 | 35 | 3HX3235-** | 14 | | | |
| | 480 | (737) | (889) | 3HX3435-** | (6.4) | | | |
| 4000 | 240 | 39 | 47 | 3HX4247-** | 17 | | | |
| | 480 | (991) | (1194) | 3HX4447-** | (7.7) | | | |
| 5000 | 240 | 48 | 59 | 3HX5259-** | 20 | | | |
| | 480 | (1219) | (1499) | 3HX5459-** | (9.1) | | | |
| 6000 | 240 | 56 | 68 | 3HX6268-** | 23 | | | |
| | 480 | (1422) | (1727) | 3HX6468-** | (10.4) | | | |

Three phases standard.

3HX Series 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 and reduces the need for gas purge systems. Guaranteed 100% pinhole free.

OUTSTANDING PERFORMANCE:

Low watt density design (10 watts/square inch (1.5w/ cm²) 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: 1,000 watts to 6,000 watts.

VOLTAGES: 120 to 600 volts.

OPTIONS AVAILABLE (consult factory):

Resettable thermal protectors:

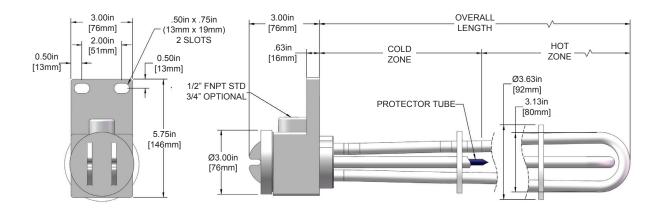
P2: For solutions up to 180°F(82°C)

P8: Type-J thermocouple for solutions up to 210°É(99°C).

P3: Type-J thermocouple for solutions up to 250°É(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)

DIMENSIONS



THREE ELEMENT FLUOROPOLYMER (PTFE) HEATER ORDERING INFORMATION

| | | | Overall | | Type of | Wire and | |
|--------|---------------------------|---------|------------|-------------|-----------|-------------------------------------|--|
| Series | Wattage | Voltage | Length | Options | Protector | r Conduit Length | |
| | | | | | | | |
| | 1 = 1000 | 1 = 120 | 17 = 1kW | -1 = single | | 36" length standard | |
| | 1.5 = 1500 | 2 = 240 | 23 = 1.5kW | phase power | | (no designator) | |
| | 2 = 2000 | 3 = 380 | 29 = 2kW | | | specify variations from standard | |
| | 3 = 3000 | 4 = 480 | 35 = 3kW | | | Ex: -X84 = 84" | |
| | 4 = 4000 | 5 = 415 | 47 = 4kW | | | | |
| | 5 = 5000 | 6 = 600 | 59 = 5kW | | | Replaceable Fuse | |
| | 6 = 6000 | 7 = 400 | 68 = 6kW | | -P1 (std) | -P1 (std) for solutions up to 190°F | |
| | | 8 = 208 | | | | Resettable Fuse | |
| | | 9 = 220 | | | (addit | tional control components required) | |
| | | 0 = 200 | | | -P2 | for solutions up to 190°F | |
| | | | • | | -P8 | for solutions up to 210°F | |
| | 3HX = PTFE | | | | -P3 | for solutions up to 250°F | |
| | 3HS = 304 stainless steel | | | | | | |

ORDERING EXAMPLE:

3HX1.5223-P1-X50 Three element fluoropolymer heater, 1500 watts, 240 volt, three phase, 23" overall length, P1 thermal protector, 50" wire and conduit.



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