



Ultrapure In-Line PVDF/PFA Fluid Heaters

PVDF/PFA ultrapure in-line fluid heaters are ideal for heating deionized water, acids, and less aggressive process chemistries used in semiconductor, solar, MEMS manufacturing, and other industries. These heaters are used for recirculation and point-of-use fluid heating applications. Their small footprints allow them to easily integrate into current systems. Available in 1-30 kW and various voltages.

Features & Benefits

- Ultrapure design with PVDF/PFA wetted surfaces
- Fast response with low watt density
- No nitrogen purge required, reducing operating costs
- Compact design of 10-30-in heights, 4-6-in diameters
- Flexible designs with many options, safety features, voltages, and power outputs

Safety Features

- Liquid level sensor
- Ground wire options
- Over-temperature thermocouple
- Process thermocouple

Options

- Thermal cutoff
- Thermocouples
- Fiber-optic liquid level sensor
- RTD sensors
- Pressure relief valve



Models

| Model | LH1 | LH7 |
|------------------|----------------------------|----------------------------|
| Wetted Material | PVDF/PFA | PVDF/PFA |
| Housing Material | Pipe | Pipe |
| Max Temp | 95°C | 95°C |
| Pressure | 60 psi at 95°C | 60 psi at 95°C |
| Power* | 1-15 kW | 1-30 kW |
| Accuracy | ± 0.1° C | ± 0.1° C |
| Voltages** | 200-480 VAC, 1 and 3-phase | 200-480 VAC, 1 and 3-phase |
| Flow | 0.5-32 gpm (1.9-122 L/min) | 0.5-32 gpm (1.9-122 L/min) |
| Benefits | Variable height | Higher flow, kW |

* Dependent on voltage.
** Dependent on wattage.

Ultrapure Heating Element

PFA in-line fluid heaters feature the Heateflex® heating coil. This heating element offers excellent power output in a compact package. It has a low watt density, which extends the heater life by spreading out the wattage. The heating element is coated in PFA materials, which eliminates the need for nitrogen purge, and reduces operating costs.



Heateflex® heating element



Controls available for complete turnkey systems.

