



Vesper™ VE Series Heat Exchanger

The Vesper™ VE Series Heat Exchanger provides a variety of solutions for indirect heating or cooling of fluids used in ultra-pure manufacturing processes.

The VE is designed to provide easy installation and integration into your current system. The compact design allows for maximum surface area in the smallest possible footprint to effectively enhance heat transfer. Models are available in PVDF/PFA or All-PFA materials. The PFA wetted process flow path provides compatibility to meet strict temperature and purity requirements.

BENEFITS

Ultra-Pure Design

- All-PFA process wetted surfaces

Compact Design

- Maximum surface area with a small footprint
- Range from 10" to 30" in height and 2" to 6" in diameter

Flexible Solutions

- Ideal for heating or cooling of fluids indirectly
- Designed to meet temperature and purity requirements

Easy Installation

- Fast start-up
- Retrofits into current system



VEB Model



VED Model

FEATURES

Wetted Surface

- Process: PFA
- Shell: PVDF/PFA or All-PFA

Exchanger Style

- PFA Tubing

Temperature

- Process: 180°C (356°F)
- Shell: 95°C (203°F)

Surface Area

- 650 in² to 1,850 in²

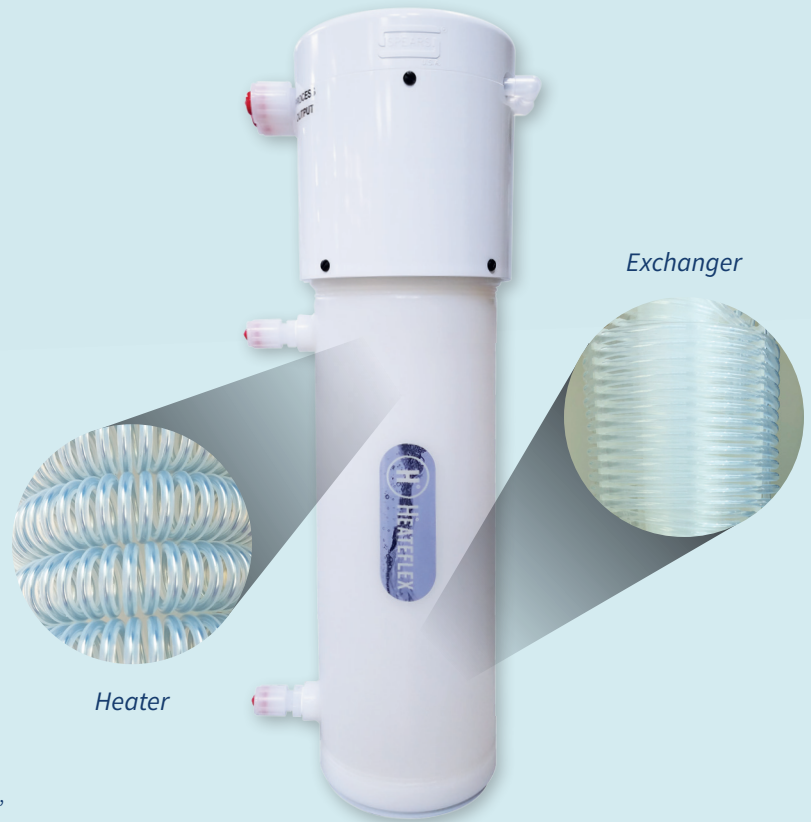
Controls and other options available upon request



Vesper™ VH Series Heater & Exchanger

The Vesper™ VH Series Heater & Exchanger is an **ALL-IN-ONE** solution designed with a reduced footprint, ideal when heating and cooling is required.

The VH combines the large surface area and compact design of the VE Series Heat Exchanger with the fast temperature response and low watt density design of the Heateflex® In-Line Heater. Whether your application requires temperature stability, or you need a solution for your exothermic reaction, the VH series will meet your temperature requirements.



Vesper™ VH Series All-In-One
Heater & Exchanger

BENEFITS

Ultra-Pure Design

- All-PFA wetted surfaces or PVDF/PFA

Compact Design

- Heater and exchanger integrated into single housing requiring less space and smaller footprint
- Patented heating element technology maximizes power in a compact all-in-one design

Flexible Solutions

- Various options, voltages, and power outputs available
- Designed to meet temperature and purity requirements

Temperature Stability

- Low watt density
- Fast temperature response

FEATURES

Wetted Surface

- PVDF/PFA or All-PFA

Power

- 2.0kW to 5.0kW (Dependent on voltage & model)
- 200VAC to 480VAC, 1-ph (Dependent on wattage)

Temperature

- Process: 180°C (365°F)
- Shell: 95°C (203°F)

Surface Area

- 1,000 in²

Safety Interlocks

- Thermocouples
- Ground Wire
- Liquid Level Sensor

Controls and other options available upon request