

CRES Heaters

All CRES heaters provide the most compact and powerful solution for heating moving fluids and gases, including Water, DI Water, Nitrogen, Air, Glycol and the widest variety of chemical solutions. All CRES heating elements are electrically isolated and ultra low watt density (between 5-30 watts/ square inch) so contaminants in the flow stream will not affect the life of the heater. Also, ultra low watt densities ensure durable and clean operation of process fluids. Other High Watt Density elements introduce harmful scale, ions and oxide flake into the media.

The New Standard in Electric Heating

Infinity Fluids Corporation (Sales) 346 Franklin Street Worcester, MA 01694 ph: 888.565.8137 fax: 508.347.3674 sales@infinityfluids.com www.infinityfluids.com **CRES MF Compact In-Line Electric Heater:** Ultra durable, clean and responsive power at a fraction of the cost.

CRES Ultra Response Electric Heater

Compact, rapid heating of liquids, steam and gases for the most demanding applications

Infinity has developed and patented the most efficient and rapid response heater for all precision control processes with negligible pressure drop. Applications that demand precise temperature control and the fastest thermal response from an extremely tight footprint can now be attained with this new technology. The **CRES Ultra Response Heat Exchanger** provides the fastest thermal response and power within the tightest envelope, when compared with all other conventional and non conventional heaters on the market. From 12 Volts to 600 Volts, from 50 watts to 500,000 watts, Infinity CRES heaters are the solution to all of your challenging applications.

CRES-ILB-24-0060-K shown



Our most economical heater available provides ease of use for new design, replacement or retrofit. If you have a new process or application, please contact one of our sales representatives to discuss your requirements. Our engineering staff has decades of experience and can design a single heater or a full turnkey process or system.

CRES Heaters:

- All SS construction
- Fastest response available
- Ultra compact
- Easy to install and service
- Inexpensive option compared to larger heaters
- Many sizes and configurations in stock



Worcester, MA ph: 888.565.8137 www.infinityfluids.com

Ohm's Law Wheel



This patented product was developed around the CRES electric heater design and placed into a flow housing designed specifically to accommodate your process pressure and temperature requirements. A wide range of special fittings and connectors can be used to facilitate new designs or retrofit existing applications.

The CRES heater operating in the fluid stream provides incredibly fast response time and far greater utility efficiency. Many different designs and configurations are available to suit your processes needs. If your process requires the most precise temperature control and fastest response, let the **Ultra Response Heat Exchanger** provide the advantage to your system. Integrated sensors are available as standard equipment on most CRES Heater arrangements.

BENEFITS AND FEATURES

- Fastest response of any electric heaters available
- Ultra compact size and weight
- Significantly reduce the size of your equipment with our new technology, while decreasing the overall weight of your system.
- Allows low and high flows to quickly be heated with the greatest accuracy available.
- Low flow housing volume, ensures ultra efficient and responsive control.
- Use on all liquids, gases and vapors including steam and instant steam generation.



PID Temperature Controller

We provide fully functional, turn key control systems which come standard with micro processor based PID temperature controller, solid state power control, control transformer and control contactor, fused and wired for the individual heater. Power disconnects are provided with all of our 480 volt control systems.

The systems provide +/-1 degree control capability with stable flow. The controllers can accommodate all types of thermocouple sensors or RTD's. Temperature controllers can be tuned for every individual process giving you the most stable and uniform control for any process.

We will match your heater with the correct control system at your request. We are not only the leader in Electric Heating technology we are experts in process heat and control.



Worcester, MA ph: 888.565.8137 www.infinityfluids.com

SPECIFICATIONS

- Compact heaters up to 16kW
- Process temperatures to 600° C (1200° F)
- Low and high operating pressures
- Optional finishes, electro-polished, passivated and bright annealed
- Standard 1" NPT inlet and exit. Many other and styles available upon request
- Standard type k t/c or 100 Ω Plat RTD 3 wire

APPLICATIONS

- All applications where circulation clean heaters or fast, compact, hi power electric heat is required
- Semiconductor, Pharma, Lab, Food Service: Water, DI Water, N2
- Fuel cell gas and liquid heating
- Printing, cleaning, pharmaceutical, bio-tech, sterilization and plastics industries
- Purification
- Humidity generation
- Metal, poly and ceramic parts cleaning





CRES-Ultra Response heaters are the fastest, cleanest and safest heater for all of your fluid/gas heating requirments.



Worcester, MA ph: 888.565.8137 www.infinityfluids.com





Power Requirement for Water : kW = GPM x (Tout - Tin) x 0.16

Standard Heaters in Stock

Model No.	A(in.)	B(dia in.)	C(FNPT)	Voltage	Wattage
CRES-ILA-24-1	12	1.9	1/4	120/240	250/1000
CRES-ILA-24-2	12	1.9	1/4	120/240	500/1000
CRES-ILA-24-4	16	3.0	1/2	120/240	1000/4000
CRES-ILA-24-6	16	3.0	1/2	240	6000
CRES-ILA-24-8	16	3.0	1/2	240	8000
CRES-ILA-48-8	16	3.0	1/2	480	8000
CRES-ILA-48-10	16	3.0	1/2	480	10000
CRES-ILB-24-1	12	1.9	1/4	120/240	250/1000
CRES-ILB-24-2	12	1.9	1/4	120/240	500/1000
CRES-ILB-24-4	16	3.0	1/2	120/240	1000/4000
CRES-ILB-24-6	16	3.0	1/2	240	6000
CRES-ILB-24-8	16	3.0	1/2	240	8000
CRES-ILB-48-8	16	3.0	1/2	480	8000
CRES-ILB-48-10	16	3.0	1/2	480	10000

*Add -XP to end of Part Number for Explosion Proof.

*Voltages from 12 V- 600 V available and wattages from 50-10,000 in the IL version, see CRES MF brochure for higher wattages.

*Add -N4 to end of Part Number for Nema 4X construction. * Please specify if other inlet and outlet sizes are required, (i.e. compression, VCR or flange connections).

*Modified sizes/materials of construction (diamaters, lengths/Teflon, Incoloy) can be made upon request with little impact on cost.



Worcester, MA ph: 888.565.8137 www.infinityfluids.com