

Mid-High Flow Air/Nitrogen Heaters

Powerful & On-Demand Ultra Low Watt Density Keeps your Gas Pure and your Process Safe

CRES-MF Heaters – Threaded/Compression/VCR/etc. 

Infinity has developed and patented the Lowest Watt Density, rapid response, efficient and rapid response heater for all precision control processes with negligible pressure drops across it. Heaters are electrically isolated, NOT open coil nickel resistance wire in Media Stream.

Benefits of Low Watt Density include:

- Media Integrity Maintenance- there are no concerns of degrading or scorching your media with incredibly Hot Surfaces.
- Element Longevity- Lower the Watt Density means that your heater does not work as Hot/Hard as high Watt density elements, Hi Watt Density Elements >60WSI.
- Operator and Process safety- Low Watt Density Elements ensure brief periods of No-Flow or uncontrolled process conditions do not turn into serious process/personnel events.
- Speed of Response- The incredibly high surface area contact ensures immediate response similar to what you would see with open coil elements or incredibly High Watt Density units.

FEATURES AND BENEFITS:

Compact and Light Weight

- Small, high powered heaters with safe heating surface areas
- Compact with incredibly low watt density
- Replace large standard heaters with CRES a fraction of the size

Ultra Low Watt Density (8 to 32 watts/sq in)

- Will not shed contaminants into process (+60 watts/sq in)
- Ultra fast On-Demand response heaters
- Clean for all critical and not critical pharma/bio/semi applications

Standards

- Fully stainless steel construction 304L-316L
- Low to High pressure 150 standard, 10kpsi custom
- Electric enclosure NEMA₄ standard, Exp proof available

Contact Infinity: 508.434.1600

Infinity Thermal Corp | 306 Sturbridge Rd | Charlton MA 01507 | www.InfinityThermal.com | Sales@InfinityThermal.com

TECHS AND SPECS:

- Housing 304L SS construction Pharma/Semi Grade
- Element 316L SS construction Pharma/Semi Grade
- Wattage/Surface Area = Watts per square inch (WSI)
10 kw heater = 8 WSI 32 kw heater = 32 WSI
- Units will not burn out with short periods of no flow
- Units rated to 150 psig standard, custom to 10,000 psig+
- Size from 24" -40" long | Weight from 12 lbs -32 lbs
- Standard Wattages 10,000 watts - 300,000 watts
- All units come standard with TC measuring MEDIA temp

CRES-MF Heaters

All standard fittings/flanges available



MF-Units come with optional full drain capabilities



PROCESS CONTROLS

(Available for all heaters)

Turn key control systems come with micro processor based Process/PID temperature control solid state power controls, tuned and ready for operation direct from factory.

Power disconnects are provided with all of our 480 volt control systems. The systems provide +/- 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.

SPECIFICATIONS

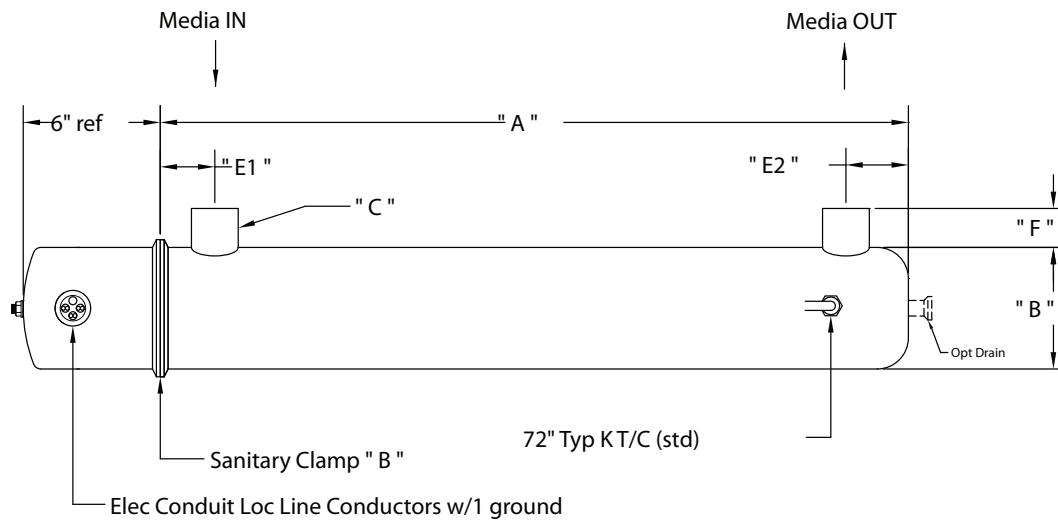
- Compact heaters up to 10kW - kW 600kW
- Process temperatures to 600° C (1200° F)
- Low and high operating pressures - Std 150psig
- Optional finishes, electro-polished, passivated and bright annealed
- All standard fittings, sensors and certifications
- Standard type k t/c or 100 Ω Plat RTD 3 wire

APPLICATIONS

- Where compact, hi power, SAFE electric heat is required
- Semiconductor, Pharma, Lab, Food Service: Water, DI Water, N₂
- Fuel cell gas and liquid heating
- Printing, cleaning, bio-tech, sterilization and plastics industries
- Purification
- Humidity generation
- Metal, poly and ceramic parts cleaning

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STOCK MODELS: (all standard v voltages available and any custom wattages)

Model	Watts	Volts	Phase	Dim "A"	Dim "B"	Fitting "C"	"E1"	"E2"	Watt Dens	Weight
CRES-MF-208-0100-K-3P	10,000	208	3	24 in	4 in	1" fnpt	1.625 in	2.875 in	8 wsi	12 lbs
CRES-MF-48-0150-K-3P	15,000	480	3	24"	4"	1"	1.625"	2.875"	12	13
CRES-MF-208-0200-K-3P	20,000	208	3	24"	4"	1"	1.625"	2.875"	16	14
CRES-MF-48-0200-K-3P	20,000	480	3	24"	4"	1"	1.625"	2.875"	16	14
CRES-ILB-208-0240-K-3P	24,000	208	3	24"	4"	1.25"	1.875"	2.5"	18	16
CRES-ILB-48-0240-K-3P	24,000	480	3	24"	4"	1.25"	1.875"	2.5"	20	16
CRES-ILB-48-0300-K-3P	30,000	480	3	40"	4"	1.5"	2"	2.625"	16	32
CRES-ILB-48-0360-K-3P	36,000	480	3	40"	4"	1.5"	2"	2.625"	19	32
CRES-ILB-48-0440-K-3P	44,000	480	3	40"	4"	1.5"	2"	2.625"	22	32
CRES-ILB-48-0600-K-3P	60,000	480	3	40"	4"	1.5"	2"	2.625"	30	34
CRES-ILB-48-0720-K-3P	72,000	480	3	40"	4"	1.5"	2"	2.625"	32	34

- All standard voltages available including low voltage apps from 12 volts to 600 volts
- Custom in/out configurations available, with all standard industry fittings available
- Watt densities available to meet DI Water quality requirements for any power levels <22wsi



INFINITY FULL LINE OF PRODUCTS

STANDARD INLINE HEATER PRODUCTS

CLEAN WATER / AIR HEATERS



STANDARD CLEAN INLINE HEATER ECONOMICAL/CLEAN/POWERFUL
Clean Air/N₂ gas heaters. Cryo 1200 deg F (ULTRA LOW WATT DENSITY)
Clean Water/DI/CIP heaters. 32 212 deg F
For all non critical Pharma, Semiconductor, Industrial, Food applications.

SANITARY WATER / AIR HEATERS



SANITARY CLEAN INLINE HEATERS ECONOMICAL/PURE/COMPACT
Critical Air/N₂ gas heaters. Cryo 1200 deg F (ULTRA LOW WATT DENSITY)
Critical Clean Water/DI/CIP heaters. 32 212 deg F
For all Direct Contact Pharma, Semiconductor, Industrial, Food applications.
Where media purity and maintenance is crucial. Ultra low watt densities ensure the safety of your media, your process and personnel.

ULTRA PURE WATER / AIR HEATER



ULTRA PURE INLINE HEATERS ECONOMICAL/ULTRA PURE/RELIABLE
Clean Air/N₂ gas heaters. Cryo 1200 deg F (ULTRA LOW WATT DENSITY)
Clean Water/DI/CIP heaters. 32 212 deg F
For all Direct Contact Pharma, Semiconductor, Industrial, Food applications.
Where media purity and maintenance is crucial. Ultra low watt densities ensure the safety of your media, your process and personnel.

FULL TEMPERATURE / PROCESS CONTROLS



ECONOMICAL CONTROL UNITS AVAILABLE AS STANDARD WITH EACH UNIT OR STAND ALONE PRODUCT.
Solid state power controls PID Temperature Control
Fully wired and Tuned from Factory, Available in Standards from NEMA4 to EXPLOSION PROOF CLxDIVx.

EXCLUSIVE INLINE PRODUCTS

CLEAN STAINLESS STEAM GENERATOR

ECONOMICAL/COMPACT/PURE

Clean steam generator Atm 150psi (+600 psi)
Replace standard conventional stainless boilers for the price of comparable carbon steel units.
From Food to Medical Processing.



ULTRA PURE STAINLESS STEAM GENERATOR

ECONOMICAL/ULTRA PURE/COMPACT

Clean steam generator Atm 150psi (+600 psi)
Replace standard conventional stainless boilers for the price of comparable carbon steel units.
From Food to Medical Processing.



HIGH PRESSURE AND EXPLOSION PROOF (XP, ATEX)

ECONOMICAL/ULTRA PURE/COMPACT

Clean steam generator Atm 150psi (+600 psi)
Replace standard conventional stainless boilers for the price of comparable carbon steel units.
From Military to Mining Semi Conductor.

EMERGENCY SHOWER/ EYE WASH

ECONOMICAL FULLY ISOLATED HEATER ELEMENTS NOT EXPOSED FILAMENT/WIRE IN WATER STREAM.

Tepid water heaters from 10kw
300Kw all stainless steel construction, low watt density Construction.



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Request a Quote:

