

Safe Heating for Volatile, Viscous or Mildly Corrosive Liquids

Watlow's CAST-X SERIES 1000 circulation heaters consist of a helically coiled tube cast into an aluminum body with tubular elements. The aluminum body blankets the tubular elements and acts as the heat transfer media between the elements and the coiled tube circulating the heated fluid.

This innovative and cost-effective cast construction provides multiple advantages compared to traditional circulation heaters. The CAST-X SERIES 1000 circulation heater's aluminum mass maintains heat accurately and consistently, resulting in an optimum level of temperature control. The aluminum body also efficiently conducts heat away from the tubular elements, prolonging heater life.

The reliable construction of Watlow's CAST-X SERIES 1000 circulation heaters allows fluid to circulate through a coiled tube instead of in direct contact with tubular elements. This feature eliminates hot spots caused by poor flow conditions that typically result from contact between tubular elements and the heated fluid. In addition, because the unit can run dry with the thermostat without damage, there is less chance of overall heater failure and fluid leakage.

The robust, rugged design of Watlow's CAST-X SERIES 1000 circulation heaters also delivers problem-free operation in a more compact size than traditional heat exchangers.

The CAST-X SERIES 1000 circulation heater is appropriate for numerous applications and may be customized to meet specific customer needs. For additional sizes or options, please contact Watlow's facility in Batavia, Illinois.



Features and Benefits

Fluid path constructed independent from heater sheath

- Allows sensitive materials to be heated safely and effectively
- Assures safety because heater failure will not cause leaks or significant damage
- Provides cost effective material compatibility due to minimal material usage and non-welded construction

Operates to 1500 psi with appropriate fittings

- Allows economic, high pressure operation

Integrated thermostat and enclosure

- Permits ease of installation and use
- Eliminates additional parts and wiring

Over-temperature snap action switch

- Offers cost effective, over-temperature protection

Self draining construction

- Saves time and money
- Reduces material degradation caused by trapped material



Better Thermal Solutions...Faster

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Applications

- Solvent heating
- Glycol heating for heat transfer systems
- Analytical instrumentation
- Steam generation
- Paint heating
- Food and beverage heating
- General industrial applications

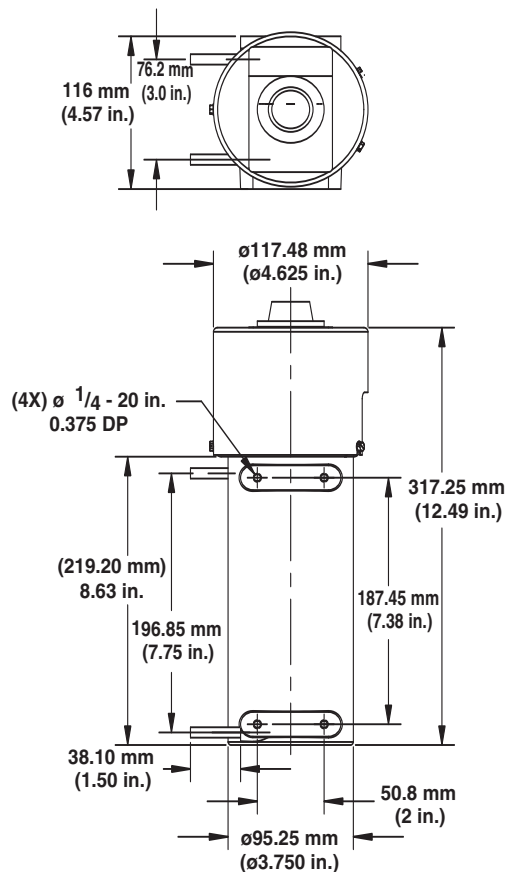
Specifications

- 120, 240 or 480V, 3kW maximum single phase
- Process temperatures to 121°C (250°F)
- (4) ¼ - 20 inch 0.375 inch deep mounting holes
- 7.94 mm (5/16 in.) O.D. inlet/outlet, 304 SS wetted surface
- NEMA 1 sheet metal enclosure
- Optional insulated body, process thermocouples and snap action high-limit thermostats

Non Standard Options

- NEMA 7 enclosures
- 316 SS tubing
- Passivated or electropolished wetted surfaces
- Custom fittings and sensors

Dimensions



Ordering Information

To order, complete the model number on the right with the information below.

B X 8 L 4 M - - 0 0

Base Description

7.94 mm (5/16 in.) O.D. inlet/outlet, 304 SS wetted surface, NEMA 1 housing

Heater Wattage

200A = 240V, 3000W, 1 phase
 200B = 480V, 3000W, 1 phase
 200C = 120V, 750W, 1 phase
 200D = 240V, 750W, 1 phase

Enclosures and Thermostats

S2 = NEMA 1 housing with -1 to 121°C (30 to 250°F) single pole thermostat
 W0 = NEMA 4 housing, no thermostat
 W2 = NEMA 4 housing with -1 to 121°C (30 to 250°F) single pole thermostat
 WJ = NEMA 4 housing with Type J process T/C in t-well
 WK = NEMA 4 housing with Type K process T/C in t-well
 SJ = NEMA 1 housing with Type J process T/C in t-well
 SK = NEMA 1 housing with Type K process T/C in t-well

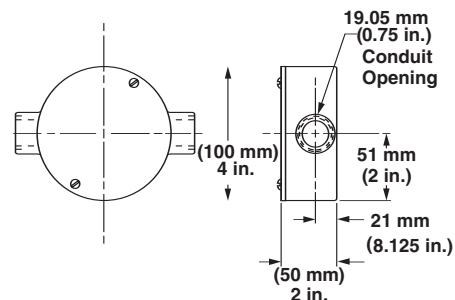
High Limit

1 = Snap action high limit set at 127°C (260°F)

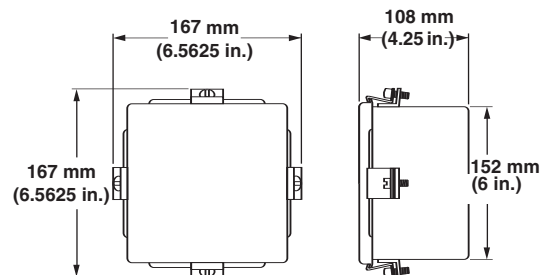
Accessories

Compression fitting - 274-55-6-4
 Insulation jacket - 307-0-2-1

NEMA 4 Housing Without Thermostat



NEMA 4 Housing With Single Pole Thermostat



Your Authorized Watlow Distributor Is: