



CAST-X 1000 Circulation Heater

SAFE HEATING FOR VOLATILE, VISCOUS OR MILDLY CORROSIVE MATERIALS

This innovative and cost-effective cast construction provides multiple advantages compared to traditional circulation heaters. The CAST-X 1000 circulation heater's aluminum mass maintains heat accurately and consistently, resulting in an optimum level of temperature control with process temperatures up to 250°F (121°C). The aluminum body also efficiently conducts heat away from the tubular elements, prolonging life. The CAST-X 1000 operates up to 2100 psi allowing economic high pressure operation.

The CAST-X 1000 circulation heater from Cast Aluminum Solutions consists 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 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 the CAST-X 1000 circulation heater allows fluid to circulate through a coiled tube instead of in direct contact with tubular elements. This feature eliminates hot spots that typically result from contact between tubular elements and the heated fluid. The robust, rugged design of the CAST-X 1000 circulation heater delivers problem-free operation in a more compact size than traditional heat exchangers. The CAST-X 1000 circulation heater is appropriate for numerous applications and may be customized to meet specific customer needs.

APPLICATIONS

- Solvent Heating**
- Glycol Heating for Heat Transfer Systems**
- Analytical Instrumentation**
- Steam Generation**
- Paint Heating**
- Food and Beverage Heating**
- General Industrial Applications**

FEATURES AND BENEFITS

Fluid path constructed independent from heater sheath

- Allows sensitive materials to be heated safely and effectively
- Ensures 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 2100 psi with appropriate fittings

- Allows economic, high pressure operation
- Integrated thermostat and enclosure

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



CAST-X 1000 Circulation Heater

SAFE HEATING FOR VOLATILE, VISCOUS OR MILDLY CORROSIVE LIQUIDS

SPECIFICATIONS

120, 240 or 480V, 3kW max.
single-phase

Process temperatures to
250°F (121°C)

(4) 1/4 - 20, 3/8 in. (10 mm)
deep mounting holes

5/16 in. (7.94 mm) O.D. inlet/
outlet, 316 SS wetted surface

NEMA 1 sheet metal
enclosure

Optional insulated body,
process thermocouples
and snap action high-limit
thermostats

Max working fluid pressure-
2100 psi (145 Bar)

NON STANDARD OPTIONS

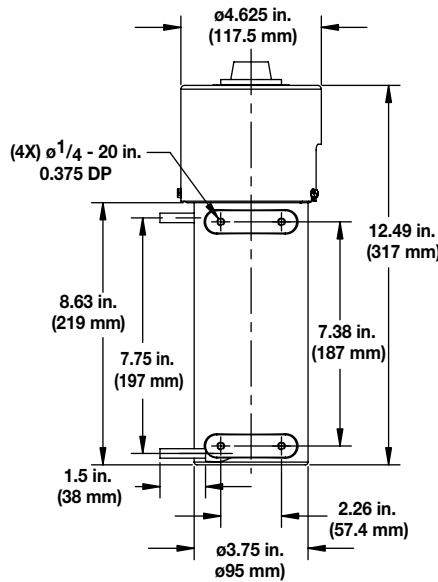
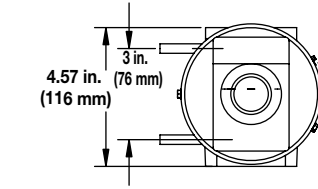
NEMA 7 enclosures

Passivated or electropolished
wetted surfaces

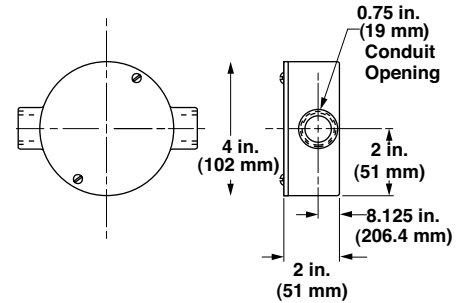
Custom fittings and sensor



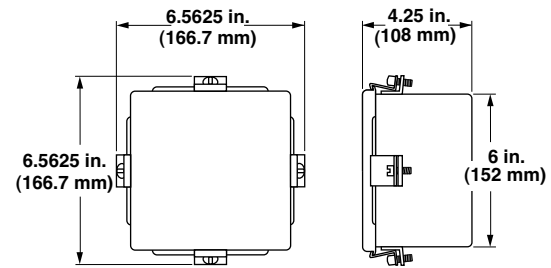
DIMENSIONS



NEMA 4 HOUSING WITHOUT THERMOSTAT



NEMA 4 HOUSING WITH SINGLE POLE THERMOSTAT



ORDERING INFORMATION

To order, complete the number code with the information below.

Cast-X 1000: 5/16 in. (7.94 mm) O.D. inlet/outlet, 304 SS wetted surface, NEMA 1 housing

Heater Wattage:

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

Enclosures and Thermostats:

S2 = NEMA 1 housing with 30 to 250°F (-1 to 121°C) single pole thermostat
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
W0 = NEMA 4 housing, no thermostat
W2 = NEMA 4 housing with 30 to 250°F (-1 to 121°C) 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

High Limit:

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

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Accessories:

Compression fitting 274-55-6-4

Insulation jacket 307-0-2-1



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