

Circulation Heaters

Standard Construction

Heatrex is known in the electric heating industry as a provider of custom designed, quality equipment. The standard circulation heater offering is described here.

The standard circulation heater construction includes an Heatrex Pipe or Pipe Flange Immersion Heater mounted in a thermally insulated pressure vessel with inlet and outlet nozzles.

A factory installed and pre-wired thermostat provides automatic process temperature control. Six heater mounting options are available to meet your specific installation requirements.

Immersion Heater

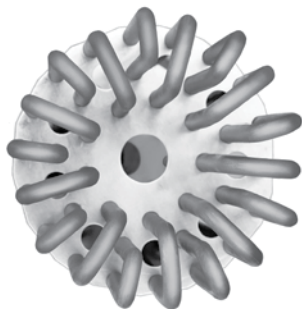
Designed and built by Heatrex, all pipe and pipe flange immersion heaters include these standard features.



Industrial Grade tubular elements are manufactured by Heatrex. The .475" diameter design provides extra electrical insulation for better dielectric strength.

Element Spacers, made from material similar to the element sheath, maintain a uniform distance between elements. This prevents hot spots that can reduce heater life and burn temperature sensitive materials flowing through the circulation heater. Spacers are perforated to allow for maximum flow and are installed in a manner to allow the heating element to expand and contract freely.

Element Bends are repressed 360° at the U-bend area to improve dielectric insulation integrity and to prevent potential hot spots.



Moisture-Resistant Epoxy Terminal Seals are standard for all circulation heater designs with maximum process temperatures of 250° F.

Permanent Bus Bars are provided to prevent field failures due to loose electrical connection. Pressure connectors are attached to the bus bars for field wiring of heavy gauge wire. Copper bus bars are standard. Stainless steel bus bars are required for high temperature applications.



Thermostat

An Heatrex Type DA thermostat is factory-mounted and prewired to give automatic process temperature control. The standard range is 60-250° F. Its liquid-filled sensing bulb has an inherent sensitivity of $\pm 5^\circ$ F; however, the actual process temperature differential depends on a number of application factors.

The Type DA thermostat comes complete with integral On/Off switch, pilot light and external adjusting knob. Both two and three-pole models are available. Heaters provided with pilot duty thermostats require field wiring to a magnetic contactor. See Table IV on page 10.

