Flanged Immersion Heaters

Optional Terminal Housing Standoff Construction

Terminal Housing Standoff
The electrical housing is separated from the flange by an air gap (six-inch standard) to lower the ambient temperature of the electrical wiring. This option is used on flanged immersion heaters where the flange temperature exceeds 482°F (250°C).

Optional Flanged Heater Features

Flow Control Baffles
For flange heaters used in circulation tanks, to aid heat transfer by forcing the liquid or gas back and forth across the elements. Baffles can be custom designed and positioned for your application.

Temperature Control

Thermostats
Thermostats are an optional feature for flanged immersion heaters. This type of control operates by expansion and contraction of a liquid in response to temperature change. Liquid contained within the sensing bulb and capillary flexes a diaphragm, causing the opening and closing of a snap action switch. For heating applications the contacts are normally closed, and open on temperature rise.

Thermocouples
Type J or Type K thermocouples can be supplied for process temperature or over-temperature control. Type J is reliable and accurate for temperatures up to 1000°F (537.8°C). Type K should be used for higher temperatures.

Installation Warnings and Recommendations

1. Do not use the thermostat as a power switch. Use some other means of disconnecting power to the heater for servicing.
2. A thermostat is not a fail-safe device. Use an approved high temperature limit control and/or pressure limit control for safe operation.
3. Avoid kinking or bending the capillary tube too sharply as this will alter the calibration and/or render the thermostat inoperable.
4. Excess capillary tube should be coiled neatly in junction box.
5. The capillary tube must never touch the thermostat contacts as this will create an electrical short capable of harming personnel and/or equipment.