



## Technical Letters

# Installation and Maintenance: Mica Drum Heaters & Silicone Rubber Drum Heaters

### INSTALLATION

Since heat has the tendency to move upwards in liquids, drum heaters should be installed close to the bottom of a vertical drum. Horizontal vessels should have their drum heaters installed such that the terminal box is positioned on the side. This will protect the box from overheating and maintain accessibility to the controls. The HDX model has a quick disconnect latch and trunion fastener, while the GCX model has spring loaded handles that have to be stretched to slide the heater to its proper position on the drum. The Silicone Rubber Heater is very flexible and will easily adhere to the drum surface. However, when a Mica Insulated Heater is used, it is recommended to tap gently on both its rims to ensure tightness and good heat transfer.

### TEMPERATURE CONTROL

Mica Insulated Heaters come with temperature controllers. When the pilot lamp is on, the heater is active. HDX models have bulb and capillary thermostats (250° F). GCX models have snap action bimetal temperature controllers (220° F). After an initial trial these controllers have to be set in proportion to the maximum settings and required temperature. Silicone Rubber Heaters come with B-200 bimetal thermostats (400° F).

### ELECTRICAL RATING

Mica Insulated Heaters and Silicone Rubber Heaters are made for 120V or 240V power supplies. Appropriate power cords and plugs are supplied for each voltage and wattage. The power supply should be rated to handle the amperage drawn by the heater. Different liquids absorb heat at different rates so the wattage of a Mica Insulated Heater should be selected accordingly.

### MAINTENANCE

Since the Mica Insulated Heater is not a sealed product, it should be used indoors and kept away from moisture and contamination. The Silicone Rubber Heater is moisture and chemical proof, but not waterproof. Silicone Rubber Heaters should always be used indoors since water can leak into their thermostat box. In general, Mica Insulated Heaters and Silicone Rubber Heaters are maintenance free. A periodic check to ensure that they are securely fastened to the drum is recommended. The power cord is rated to withstand 220° F and should never come in contact with the heater.

### WARNING

Mica Insulated Heaters and Silicone Rubber Heaters should not be used on pressure tight containers, containers with explosive materials, or in explosive environments.



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