

## PRODUCT DATA SHEET

# Hotfoil Silicone Rubber Heaters

## HSRX - Hazardous Areas

*Suitable for applications up to 400°F*

FM Approvals

Class I, Division 2,  
Groups B, C, D  
Class II, Division 1 & 2,  
Groups E & F  
Class III, Division 1 & 2  
Ordinary Areas

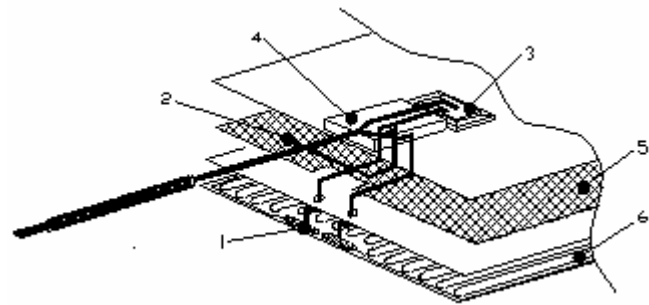
### Introduction

Hotfoil Silicone Rubber Heaters are the ultimate choice for a variety of uses. Produced in standard sizes, they offer the user a medium watt density heater with unmatched flexibility.

Conforming to the National Electric Code 427.23, clients are assured of the heater's integrity. The thin profile ensures minimal thermal inertia with quick response time.

### Construction Details

- 1) Heater Termination Points
- 2) Grounding Termination Point
- 3) Thermal Cut-Out Switch
- 4) Termination Molding & Conduit Connection
- 5) Grounding Mesh
- 6) Heater Element



### Applications

Silicone Rubber insulated heaters are used for heating of tanks, vessels, cones, etc. The heat and pressure cured laminate comprises silicone rubber sheets, fiberglass mesh for unmatched strength and nichrome heating elements.

### Construction

Nichrome (80/20 nickel chrome) heating elements have proven themselves for decades as the most stable metal for elements. Exacting compounds of quality metals assure clients of 100% repeatability of specific ohmic values.

Sheets of cured and uncured silicone rubber are heat and pressure laminated together to produce a homogeneous flexible heater. Exacting proportions of rubber ensure an even heater thickness. The sheets are fiberglass cloth reinforced for strength and durability.

A metal mesh is laminated into the heater construction covering it in its entirety. This assures full compliance with the National Electric Code article 427.23.

Cold leads exit the heater by way of a pre-molded termination block molded onto the heater. The leads are 6'-0" long, flexible, silicone rubber sheathed in a flexible metal conduit.

## Hotfoil HSRX Heaters - Hazardous Areas

These are generally the same as HSR heaters but have some slight differences due to the application. All heaters have a built-in thermostat to limit the operating temperature and act as an override if the primary controller ceases to function. The watt rating is below that of the HSR avoiding the chance of overshoot. HSRX have one circuit for 120volts and all have flexible metal conduit over the leads for protection.

### Standard Sizes \*

Reference	Size	Watts	Volts
HSRX-30	30" x 14"	350	120
HSRX-36	36" x 12"	300	120
HSRX-48	48" x 12"	400	120
HSRX-60	60" x 12"	500	120

\* Other sizes, loadings and watt densities are available on request.

All heating systems must be correctly temperature controlled. The controls and all electrical components must be approved for the area as classified. All wiring must follow Federal, State and Local codes and be fully compliant with the NEC as it relates to the project. If in doubt, please contact us.

### Product Data

Maximum Exposure Temperature .....	400°F **
Minimum Installation Temperature .....	-60°F
Thickness (Average) .....	0.115"
DC Resistance Tolerance .....	+/- 10%
Power Density .....	Up to 0.83w/sq. inch
Color .....	Brick Red
Leads .....	6'-0" long, 16AWG, 3 conductor silicone rubber sheathed in flexible conduit.

\*\* Note the heaters can be supplied with PSA (Pressure Sensitive Adhesive) if required. In these circumstances, the exposure temperature is limited to 230°F to avoid losing the adhesive properties of the PSA.

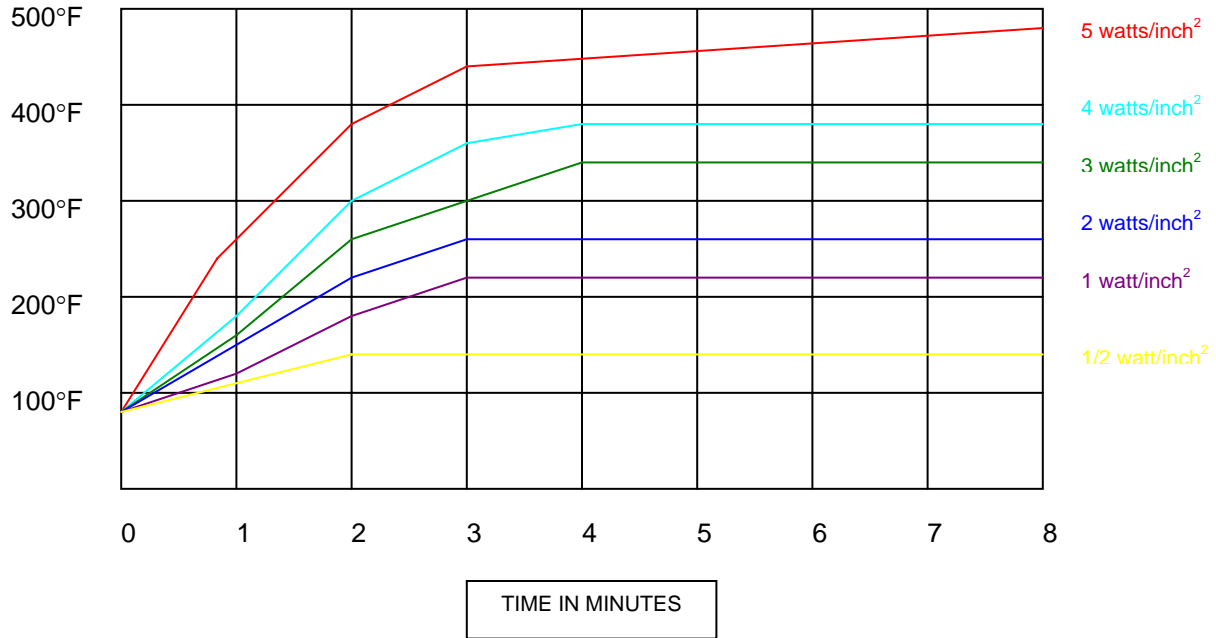
### Applications

- Tank Heating
- Tanker Heating
- Pipe Heating
- Pre-Heating & Curing
- Control Boxes
- Anti-Condensation Heaters
- Comfort Heaters

**hotfoil®**

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**Surface temperature of a silicone heater suspended in still air at 70°F.**



The above graph shows the rapid rise in temperature of various watt densities with no heat sink and the heater having no form of control.

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