

# Silicone Rubber Heaters Installation Manual

Silicone Rubber Heaters have wire-wound or etched foil heating elements protected by fiberglass-reinforced silicone rubber vulcanized and compressed at high temperature and pressure. They are thin, bendable and shaped to fit almost any equipment. Heat can be applied to the most complex shapes, geometries, curves and pipes conceivable without sacrificing efficiency or dependability.

## Technical Parameters:

- 1 ) Maximum temperature resistance of insulator: 250°C
- 2 ) Maximum operation temperature: 200°C
- 3 ) Insulation Resistance:  $\geq 500 \text{ M}\Omega/\text{DC } 1000\text{V}$
- 4 ) Breakdown Voltage:  $\geq \text{AC}1500\text{v}/5\text{S}$
- 5 ) Capacity Tolerance:  $\pm 5\%$
- 6 ) Temperature range:  $-60^\circ\text{C}$ — $250^\circ\text{C}$  continuous heating; Heating element: Available with either etched foil or wire-wound elements:
- 7 ) Dimension: Maximum  $1.2\text{m} \times \text{Xm}$  Minimum  $15\text{mm} \times 15\text{mm}$ ; Thickness 1.5mm (Thinnest 0.8mm, Thickest 4.5mm) Lead wire Length: Standard 130mm.

## INSTALLATION:

- 1 ) with backing PSA (Pressure Sensitive Adhesive or called self adhesive, self stick adhesive) as 3M PSA
- 2 ) with vulcanization or curing and compression at high temperature and pressure
- 3 ) with spring and hole or eyelet
- 4 ) with clamps

## BENEFITS:

- 1 ) Heating evenly, accurate and adjustable
- 2 ) various shapes, holes, cutouts, profiled watt densities and multiple voltages
- 3 ) Put heat exactly where it is required
- 4 ) High dielectric strength, flexibility, bendable and cost effectiveness.
- 5 ) Resistance to temperature extremes, moisture, weathering, radiation, fungus and chemical attack
- 6 ) Heat can be applied to the most complex shapes, geometries, curves and pipes conceivable without sacrificing efficiency or dependability.
- 7 ) Easily bonded and/or mechanically mounted, even onto the curving surface.

## APPLICATION:

- 1) Thermal developing in graphic imaging or heating transfer printing equipment;
- 2) Prevent condensation in motors or instrument cabinets;
- 3) Freeze or condensation prevention in housings containing electronic equipment, for examples: liquid battery, traffic signal boxes, automatic teller machines, temperature control panels, gas or liquid control valve housings
- 4) Composite bonding processes
- 5) Semiconductor process heating

- 6) Food service equipment
- 7) Airplane engine heaters and aerospace industry
- 8) Drums and other vessels and viscosity control and asphalt storage
- 9) Medical equipment such as blood analyzers, medical respirators, test tube heaters, etc.
- 10) Curing of plastic laminates
- 11) Computer peripherals such as laser printers, duplicating machines

Notes: Voltage,wattage,size and shape can be customized.(as cone,ellipse shape etc.)

**Installation methods by pictures show:**



Silicone rubber pad heaters with back 3M PSA  
(Pressure Sensitive Adhesive for adhering fixing)



Silicone flexible heating blanket strap with  
eyelet holes or hooks and springs for fixing



Silicone rubber panel heaters with aluminum pad  
By high temperature curing or compression



silicon mat heater with clamps installation