PTFE Thermofoil™ Heaters

Flexible, immersible, chemical resistant

Overview

Featuring etched-foil elements sandwiched between rugged layers of FDA-approved PTFE*, these heaters stand up to environments that would destroy conventional metal-clad heating elements. Use them in acid baths, medical equipment, commercial appliances—anywhere you need the benefits of clean, non-stick, chemically-inert PTFE.

The flat foil element design provides more area for heat transfer. That means the heaters run cooler for the same amount of wattage, resulting in gentler warming without hot spots and longer heater life. At the same time, warmup is faster because the flexible heater makes intimate contact with the heated materials.

• Unaffected by acids and bases

• Sealed construction allows direct immersion in liquids

• Uniform heating to 150°C (302°F)

• Thin, flexible etched-foil construction

• Available in round, rectangular, and irregular shapes

Application notes

Chemicals: Heaters are suitable for most acids, bases, etchants, solvents, and cleaning solutions—almost all industrial chemicals except fluorine and strong fluorinating agents.

Fluid immersion: Install vertically so gases cannot collect beneath the heater or Minco can design the pattern to allow holes for air and fluid passage.

Mounting to surfaces: Heaters can be clamped in place.

Temperature sensors: Minco can furnish PTFE-clad RTD's or thermocouples in probe-style or flat, flexible configurations. Contact Minco for details.

* The DuPont tradename for PTFE is Teflon

Specifications

Temperature range: -200 to 150°C (-328 to 302°F)

Maximum size: 10"×40" (254 mm × 1016 mm)

Leadwires: PTFE insulated

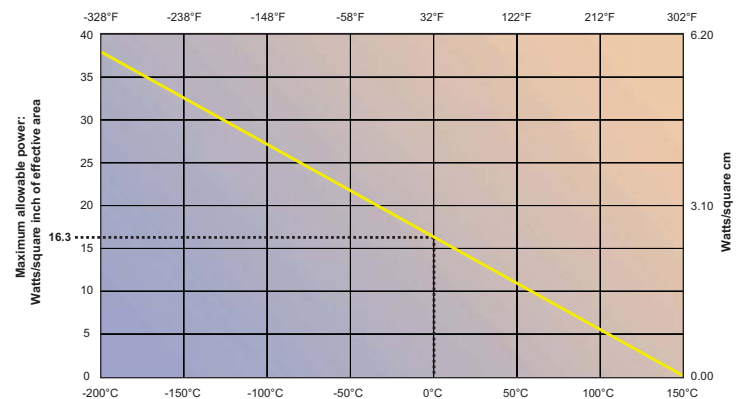**Heater thickness:**
Over element: 0.060" (1.52 mm) MAX.
Over leadwire terminations: 0.150" (3.8 mm) REF.

Dielectric strength: 1000 VRMS at 60 Hz for 1 minute

Weight: 8 oz. per square foot (0.24 g/cm^2)

PTFE Heaters
Maximum Watt Density

Note: Chart based upon heater immersed in water with heat transfer equal from both sides

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