

High-Temperature Heaters

**EXTENDED
CAPABILITY**

Extended Capabilities For High-Temperature (HT) FIREROD® Heaters

The Watlow HT FIREROD® heater is especially designed for high temperature platen applications up to 1800°F (980°C). The HT FIREROD utilizes the same industry leading design principals used on all of Watlow's FIREROD products. Taking the cartridge heater one step further enables the HT FIREROD to withstand application temperatures up to 400°F (204°C) higher than standard cartridge heaters.

There are certain differences in the HT FIREROD design which are important in high temperature applications:

- HT FIRERODS are specially constructed with an end seal that is virtually airtight to reduce the effects of resistance wire oxidation
- The high temperature sheath is treated to improve its emissivity for better heat transfer

Performance Capabilities

- Platen temperatures to 1800°F (980°C)
- Maximum watt density to 100 W/in² (15.5 W/cm²)
- Maximum voltage 277VAC to ground
- Length tolerance: +0, -4 percent standard diameters; +0, -8 percent for special diameter

Made-to-Order Availability

Nominal Diameter in.	Actual Diameter in.	Max. Amperes
½	0.496 ± 0.004	10
⅝	0.580 ± 0.004	23
¾	0.621 ± 0.004	23
¾	0.710 ± 0.004	46
	0.746 ± 0.004	46
1	0.960 ± 0.004	46
	0.996 ± 0.006	46

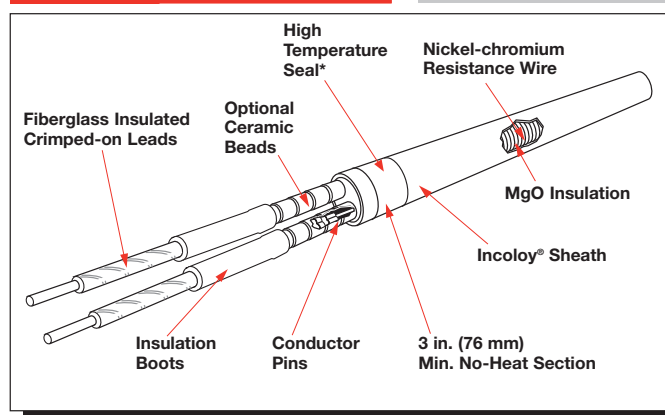
Contact your Watlow representative, for special diameter requests.

Features and Benefits

High temperature seal

- Reduces exposure to the atmosphere which minimizes oxidation of the winding wires, resulting in longer life of the element

Note: First 2 in. (51 mm) must be outside the platen in free air.



* First 2 in. (51 mm) at lead end must be kept below 1000°F (538°C)

Incoloy® sheath

- Transfers heat more efficiently

High emissivity sheath

- Provides better heat transfer and longer life

Typical Applications

- Thermo plastic
- Super plastic forming of titanium aircraft parts
- Diffusion bonding to laminate and shape titanium

For detailed product and ordering information, see the full High-Temperature FIREROD product section located on pages 31 through 32.