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 1600°F (871°C). The HT FIREROD heater utilizes the same industry leading design principles used on all Watlow FIREROD products. Advancing the FIREROD heater enables it to withstand application temperatures up to 400°F (204°C) higher than standard cartridge heaters.

HT FIREROD design features, which are important in high temperature applications, include:

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

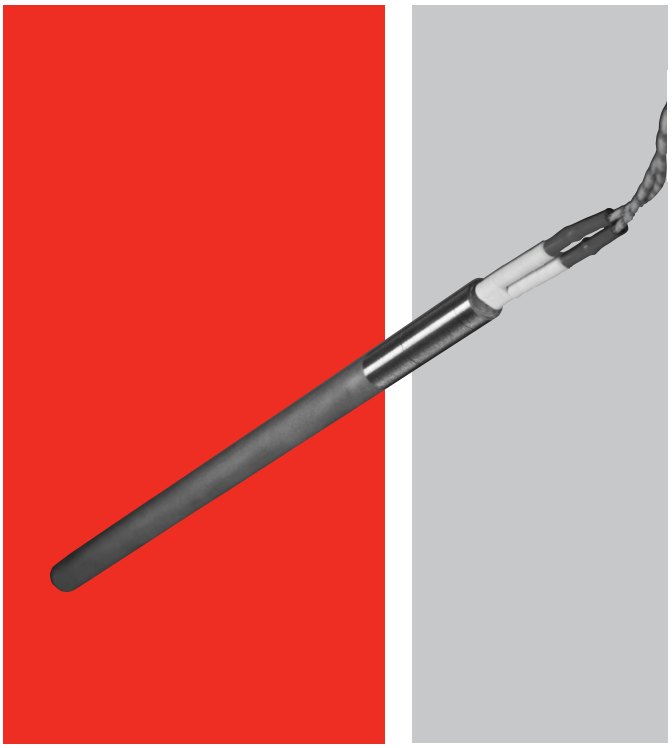
Performance Capabilities

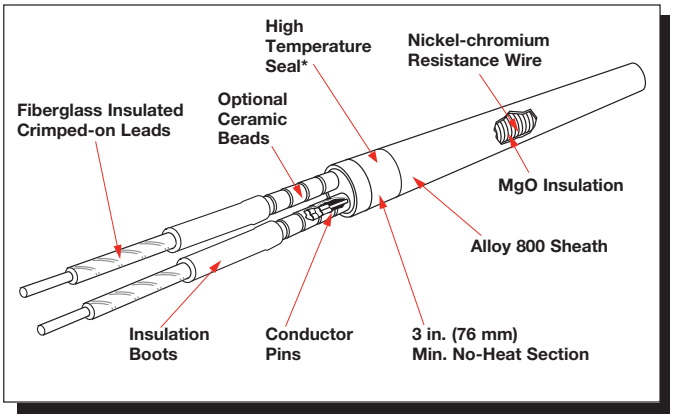
- Platen temperatures up to 1600°F (871°C)
- Maximum watt density up to 100 W/in² (15.5 W/cm²)
- Maximum voltage up to 277VAC ground
- Length tolerance of +0, -4 percent standard diameters; +0, -8 percent for special diameter

Made-to-Order Availability

Nominal Diameter in.	Actual Diameter in.	Max. Amperes
1/2	0.496 ± 0.004	10
5/8	0.580 ± 0.004	23
	0.621 ± 0.004	23
3/4	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.





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

Features and Benefits

High-temperature seal

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

  Note: The first 2 in. (51 mm) must be outside of the platen in free air and less than 1000°F (538°C).

Alloy 800 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

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Applications and Technical Data

Options

- Thermocouples
- Independently controllable heat zones
- Distributed wattage
- Flanges
- Post terminals
- Conduit NEMA boxes
- Bent FIREROD

To consider the HT FIREROD for your application, use the recommended *Maximum Watt Density graph* shown.