

# hotrod® Cartridge Heaters

## hotrod® HHP Ø 1/8" (3.1 mm)

High Power Cartridge Heater

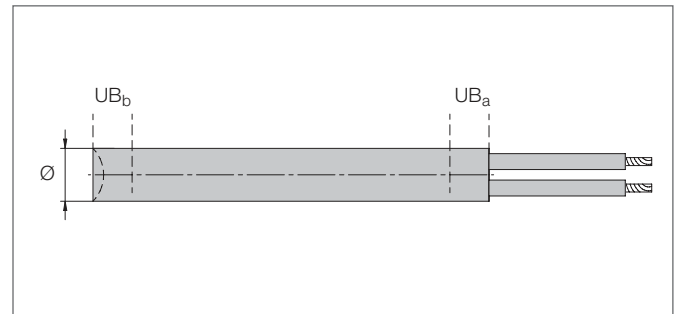
### Key Technical Features

Sheath material	Stainless steel 1.4541
Heating conductor material	NiCr 8020
Max. sheath temperature	750 °C / 1380 °F
Wattage tolerance*	± 10 %
High voltage test*	800 V AC at > 24 V operation voltage, 500 V at ≤ 24 V operation voltage
Insulation resistance*	≥ 5 MΩ at 500 V DC
Leakage current*	≤ 0.5 mA at 253 V AC
Max. sheath surface load	30 W/cm <sup>2</sup> / 190 W/inch <sup>2</sup>

\* tested at environmental temperature



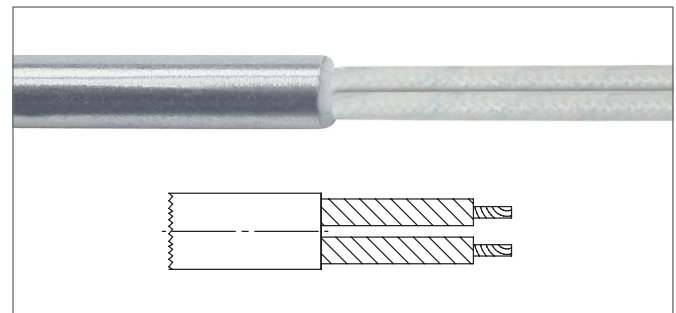
Diameter tolerance	± 0.05 mm / 1.97 mils
Min. Length	25.4 mm / 1 inch
Max. Length	150 mm / 5.91 inch
Length tolerance	≤ 76.2 mm: ± 2.4 mm / 0.09 inch > 76.2 mm: ± 3 %
UB <sub>a</sub> Length	8 mm / 0.31 inch
UB <sub>b</sub> Length	6 mm / 0.24 inch
Max. voltage	250 V
Max. current	2.0 A



UB = Length of the unheated zone

Connection option**	Mounted internally high temperature resistant glass silk insulated Ni-leads, wire cross-section 0.095 mm <sup>2</sup> , max. Temp. 600 °C / 1112 °F
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\*\* additional connection options available upon request



Connection with leads mounted internally

### Options

- Power distribution

### Application fields

- Packaging machines
- Gas analyzers
- Mass spectrometry
- Ink jet printers
- Solid-state relays (SSR)

$$W/cm^2 = \frac{\text{Wattage} \times 1.1}{\text{Circumference} \times \text{heated length [cm]}}$$

Formula for calculating the surface load (W/cm<sup>2</sup>)

$$W/inch^2 = \frac{\text{Wattage} \times 1.1}{\text{Circumference} \times \text{heated length [inch]}}$$

Formula for calculating the surface load (W/inch<sup>2</sup>)

\*\*\* Dimensions on request \*\*\*