

Cartridge Heater Data Sheet

Overview

HeaterStock provides cartridge heaters in a variety of different sizes and wattages. All of our cartridge heaters are built with a swaged construction, which allows for higher watt densities and greater heat transfer rates. The internal heating elements consist of high-grade nichrome resistance wire which is wrapped around a ceramic core and then packed with magnesium oxide (MgO) filler. Swaged cartridge heaters are able to operate at higher temperatures and watt densities when compared with non-swaged heaters.

All of HeaterStock's catalog parts are capable of being operated at temperatures up to 315°C (600°F) along the heated area (not near the lead wire exit end).

Each heater features a ½" unheated section for the lead wire connection. It is recommended that this end of the heater be exposed to ambient air in order to prevent damage from overheating. Please see individual product drawings for more detail.

Features

- Stainless steel sheath
- Stranded lead wire with PTFE insulation
- Epoxy sealed end
- Ceramic & MgO filled core
- High quality nichrome resistance wire
- Uniform heat distribution
- Corrosion resistant

Tolerances

Part Tolerances	
Diameter Tolerance	+0.000" / -0.004"
Length Tolerance	±0.01"
Resistance Tolerance	+10% / -5%
Wattage Tolerance	+5% / -10%

Catalog

Part Number	Diameter Hole (in)	Length (in)	Rated Voltage	Wattage	Watt Density (W/in ²) *
CH101	0.25	2	120	59	50
CH102	0.25	4	120	137	50
CH103	0.25	6	120	216	50
CH104	0.375	4	120	206	50
CH105	0.375	6	120	324	50
CH106	0.375	10	120	560	50
CH107	0.50	4	120	275	50
CH108	0.50	6	120	432	50
CH109	0.50	10	120	746	50

* Watt density is calculated based on a 1/2" unheated length at the lead wire connection side

Warnings

WARNING: Do not operate the heaters at voltages exceeding the rated voltage.

WARNING: Do not operate the heaters at temperatures exceeding the rated maximum operating temperature.