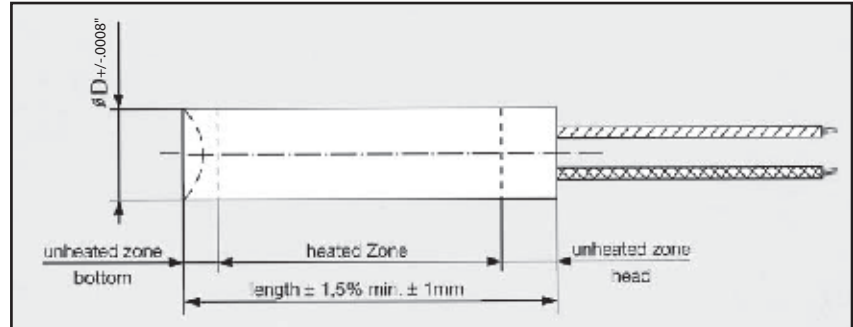
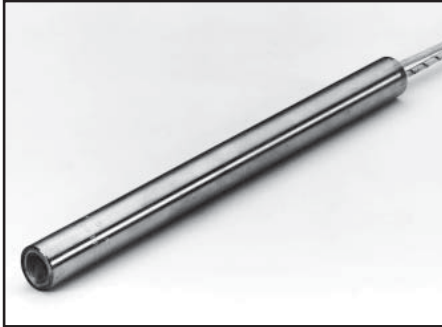


## Cartridge Heaters



## CH - HSCO HIGH WATT DENSITY CARTRIDGE HEATER



### DIAMETERS AVAILABLE

IMPERIAL	1/8"	1/4"	3/8"	5/16"	1/2"	5/8"	11/16"	3/4"	1"
METRIC	6.5	8	9.5	10	12	12.5	15	16	
	18	19	20	25					

\*Special diameter available, consult factory

#### Standard details:

Diameter

Length

Gas tight welded tip

Stock heaters available

Lead Connection Option: Crimped leads or swaged leads

Lead and type of connection leads, 10" fiberglass (standard)  
Imperial diameters 1/8" up to 1";

Metric diameters 6.5mm to 25.1mm (see table above)

Minimum length of 1 1/2", maximum length to 105"

Maximum wattage depends on heater's size and application

Standard delivery for non-stock items is 10 to 15 working days

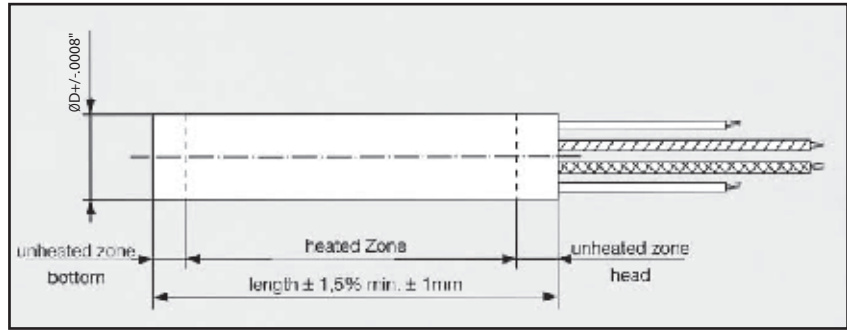
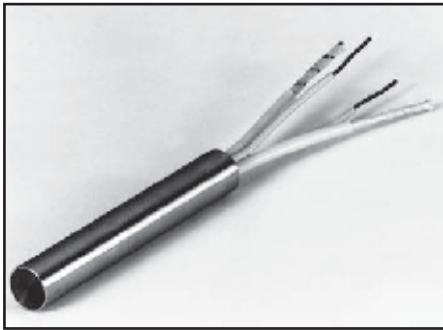
#### Order Details (Example)

Diameter: 1/2"  
Length: 6"  
Voltage: 240  
Wattage: 800  
Lead Connection: Swaged  
Lead Type: Fiberglass  
Lead Protection: Braided Metal Sleaving

#### Options:

1. Lead connection option and lead protection
2. Lead length and type (not applicable for some stock types)
3. Different voltage and wattage
4. Specialized wattage distribution
5. Diameter and length other than stock range
6. Heater tip flat bottom
7. With built-in thermocouple
8. Restriction of diameter tolerance

# HIGH-WATT DENSITY CARTRIDGE HEATER With Thermocouple



## DIAMETERS AVAILABLE

IMPERIAL	1/4"	3/8"	5/16"	1/2"	5/8"	11/16"	3/4"	1"
METRIC	6.5	8	9.5	10	12	12.5	15	16
	18	19	20	25				

\*Special diameter available, consult factory

### Standard details

Thermocouple Type J (HJ – FeCuNi to 1382° F operating temperature)

Thermocouple Type K (HK – NiCrNi to 2282° F operating temperature)

Thermocouple ungrounded/grounded

Thermocouple location disc end or center

Flat bottom

Swaged or crimped leads

### Order Detail (Example)

Type: HJ  
 Thermocouple: Type J  
 Diameter: 10mm  
 Length: 80mm  
 Wattage: 250 watt  
 Voltage: 230 volt  
 Lead Connection: Swaged  
 Lead Length: 40" Fiberglass  
 Lead Option: Optional

### Options:

1. Lead types and protection
2. Lead exit styles (right angle block, right angle elbow, and right angle exit)
3. RTD 100 Ohm optional (PT100) – consult factory for availability

## CARTRIDGE HEATER TERMINATIONS

Below are listed the most common types of terminations and fixings for our cartridge heaters. We can also supply special terminations/fixings based upon specific requirements.

### Type T1 - Standard termination

The cartridge heater is sealed with heat resistant ceramic paste.



### Type T2 - Ceramic disc

The ceramic disc protrudes from the end approximately 3-6mm depending upon the Cartridge Heaters diameter. This helps prevent short circuits between the heater and supply leads.



### Type T3 - Terminal block

A ceramic terminal block is used to terminate the heater to simplify the changing of the leads.



### Type T4 - Screw thread termination

A threaded termination with nuts to enable fast connection, especially when connecting cartridge heaters in series.



### Type T5 - Uni pole termination

The cartridge heater has a cable termination at each end.



### Type T6 - Uni pole screw thread

The cartridge heater is terminated at each end with a screw thread and nut.



## CARTRIDGE HEATER TERMINATIONS

### Type T7a - Flange

A round flange for simple fixing of the cartridge heater. Ideal for use with machines that have a lot of vibration movement.



### Type T7b - End plate

End plate for simple fixing of the cartridge heater. Ideal for use with machines that have a lot of vibration movement.



### Type T8 - Threaded nipple

The cartridge heater is fitted with a threaded nipple. Ideal for heating of liquids. This solution is pressure resistant and can be supplied complete with seals and gaskets.



### Type T9a - Reinforced angle

Fully watertight and reinforced cartridge heater which is terminated in an angled block. This solution prevents damage and simplifies the removal of the heater.



## CARTRIDGE HEATER TERMINATIONS

### Type **T9b** - Angled termination

Flexible leads are terminated at a 90° angle and are sealed with heat resistant ceramic paste.



### Type **T9c** - Angled protected termination

The cartridge heater is terminated at 90° and is protected by a metal tube.



### Type **T9d** - Elbow termination

Termination with a 90° elbow.

