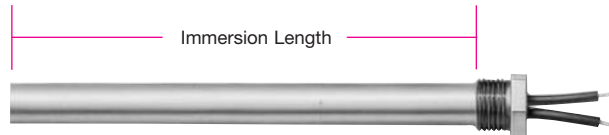


### Standard Size Stock Type CM 1/2" & 3/4" NPT Screw Plug Hi-Density Cartridge Immersion Heaters

**Hi-Density Cartridge Immersion Heaters** are designed for heating water and other liquids. The high watt density capability of this heater permits greater heat dissipation in a given area than would a tubular immersion heater.

However, it is important to note that allowable watt density depends on the material being heated. For water heating, watt densities of several hundred watts per square inch are possible; oil heating may be limited to 5 to 20 watts per square inch.



#### Design Features

- \* Passivated Incoloy® Sheath
- \* 10" long Teflon® Insulated Lead Wires
- \* Brass Fitting
- \* Epoxy Seal at Lead End  
266°F (130°C) Standard  
UL Rating 194°F (90°C)



**Note:** See pages 2-50 & 2-51 for other fitting options

Diameter	Heater Immersion Length		Watts	Watt Density		Part Number		
	in	mm		W/in <sup>2</sup>	W/cm <sup>2</sup>	120V	240V	480V
5/8" Incoloy® Sheath	1½	38.1	100	41	6	HDL00001	—	—
	1½	38.1	400	163	25	—	HDL00002	—
	3½	88.9	250	39	6	HDL00003	HDL00004	—
	3½	88.9	1000	157	24	—	HDL00005	HDL00006
1/2 NPT Fitting	7⅞	200.0	500	33	5	HDL00007	HDL00008	—
	7⅞	200.0	2000	134	21	—	HDL00009	HDL00010
	12	304.8	750	33	5	HDL00011	HDL00012	—
	12	304.8	3000	130	20	—	HDL00013	HDL00014
3/4" Incoloy® Sheath	4¼	108.0	500	53	8	HDL00015	HDL00016	—
	4¼	108.0	750	80	12	HDL00017	HDL00018	—
	4¼	108.0	1000	106	16	HDL00019	HDL00020	—
	4⅝	117.5	300	29	5	HDL00021	HDL00022	—
	4⅝	117.5	1200	116	18	—	HDL00023	HDL00024
	4⅝	120.7	375	35	5	HDL00025	HDL00026	—
	4⅝	120.7	1500	141	22	—	HDL00027	HDL00028
	5¼	146.1	500	39	6	HDL00029	HDL00030	—
	5¼	146.1	2000	154	24	—	HDL00031	HDL00032
	6¼	158.8	500	35	5	HDL00033	HDL00034	—
	6¼	158.8	2000	141	22	—	HDL00035	HDL00036
	6¼	165.1	625	42	7	HDL00037	HDL00038	—
3/4 NPT Fitting	6½	165.1	2500	170	26	—	HDL00039	HDL00040
	7¼	184.2	750	45	7	HDL00041	HDL00042	—
	7¼	184.2	3000	182	28	—	HDL00043	HDL00044
	9	228.6	1000	49	8	HDL00045	HDL00046	—
	9	228.6	4000	194	30	—	HDL00047	HDL00048
	10½	266.7	750	31	5	HDL00049	HDL00050	—
	10½	266.7	3000	124	19	—	HDL00051	HDL00052
	10¾	273.1	1250	51	8	HDL00053	HDL00054	—
	10¾	273.1	5000	202	31	—	HDL00055	HDL00056
	12½	317.5	1500	52	8	—	HDL00057	—
12½	317.5	6000	208	32	—	—	HDL00058	
13⅝	346.1	1000	32	5	HDL00059	HDL00060	—	
13⅝	346.1	4000	127	20	—	HDL00061	HDL00062	
16	406.4	2000	54	8	—	HDL00063	—	
16	406.4	8000	216	33	—	—	HDL00064	
19¼	489.0	2500	56	9	—	HDL00065	—	
19¼	489.0	10000	223	35	—	—	HDL00066	

#### Ordering Information

##### Stock Heaters

Part Numbers listed above are for 1/2" and 3/4" NPT Brass Screw Plug Cartridge Immersion Heaters with Type CM termination and 10" long leads. **Standard lead time is 72 hours.**

##### Custom Engineered/Manufactured Heaters

Because an electric heater can be very application specific, for sizes and ratings not listed, **TEMPCO** will design and manufacture a Cartridge Immersion Heater to meet your requirements. **Standard lead time is 3 weeks.**

**Please Specify** the following:

- Screw Plug NPT Size
- Screw Plug material (Brass or SS)
- Sheath material (Incoloy®, 321 SS)
- Element Watt Density
- Immersion Length
- Heated Length
- Wattage
- Voltage
- Termination types
- Lead Length

**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).