

Standard Cartridge Heater Configuration Chart

Diameter	Diameter Tolerances		Maximum Heater Length	Construction		Sheath Material Options 300 SS Series : Temps to 842°F 316L SS : Temps to 1292°F 321 SS : Temps to 1472°F Incoloy 800 : Temps to 1500°F	Stainless NPT Size
	Standard Swage to Size Tolerance	Premium Centerless Grind Tolerance		High Watt Density	Medium Watt Density		
0.125"***	0.1240" - 0.1200"	0.1240" - 0.1201"	4.0"	●		300 SS Series	
0.250"	0.248" - 0.244"	0.2488" - 0.2472"	60.0"	●	●	300 SS Series	1/8"
0.3125"	0.3105" - 0.3066"	0.3114" - 0.3098"	70.0"	●	●	300 SS Series	1/4"
0.375"	0.373" - 0.369"	0.3732" - 0.3717"	80.0"	●	●	300 SS Series / Incoloy 800	1/4"
0.500"	0.498" - 0.494"	0.4972" - 0.4957"	100.0"	●	●	300 SS Series / Incoloy 800	3/8"
0.625"	0.623" - 0.619"	0.6232" - 0.6217"	100.0"	●	●	321 SS / Incoloy 800	1/2"
0.6785"		0.6866" - 0.6850"	100.0"	●	●	321 SS / Incoloy 800	1/2"
0.750"	0.748" - 0.744"	0.7492" - 0.7476"	100.0"	●	●	321 SS	3/4"
1.000"		0.9984" - 0.9969"	100.0"	●		316L SS	1"
1.250"		1.2484" - 1.2468"	100.0"		●	316L SS	
6.2mm		6.18mm - 6.14mm	1525mm	●	●	300 SS Series	
6.5mm		6.48mm - 6.44mm	1525mm	●	●	300 SS Series	1/8"
7.0mm*		6.98mm - 6.94mm	1525mm	●	●	300 SS Series	
8.0mm*		7.98mm - 7.94mm	1178mm	●	●	300 SS Series	1/4"
9.0mm*		8.98mm - 8.94mm	1800mm	●	●	300 SS Series / Incoloy 800	
9.5mm*		9.48mm - 9.44mm	2030mm	●	●	300 SS Series / Incoloy 800	1/4"
10.0mm		9.98mm - 9.94mm	2540mm	●	●	300 SS Series	1/4"
11.0mm*		10.98mm - 10.94mm	2540mm	●	●	300 SS Series / Incoloy 800	
12.0mm*		11.98mm - 11.94mm	2540mm	●	●	300 SS Series / Incoloy 800	
12.5mm		12.48mm - 12.44mm	2540mm	●	●	300 SS Series / Incoloy 800	3/8"
13.0mm*		12.98mm - 12.94mm	2540mm	●	●	300 SS Series / Incoloy 800	
14.0mm*		13.98mm - 13.94mm	2540mm	●	●	300 SS Series / Incoloy 800	
15.0mm*		14.98mm - 14.94mm	2540mm	●	●	321 SS / Incoloy 800	
16.0mm		15.98mm - 15.94mm	2540mm	●	●	321 SS / Incoloy 800	1/2"
17.5mm*		17.48mm - 17.44mm	2540mm	●	●	321 SS	
18.0mm*		17.98mm - 17.94mm	2540mm	●	●	321 SS	
19.0mm*		18.98mm - 18.94mm	2540mm	●	●	321 SS	3/4"
20.0mm		19.98mm - 19.94mm	2540mm	●	●	321 SS	3/4"
22.0mm*		21.98mm - 21.94mm	2540mm	●	●	321 SS	

*Non-standard metric diameters with special construction

** Teflon Plug & Leads Only, Thermocouples Unavailable

		Temp. Rating		Movement	Moisture
Potting Options	Ceramic	1000 °F	538 °C	Good	Not Recommended
	Silicone - Standard	500 °F	260 °C	Excellent	Excellent
	Silicone - High Temp.	650 °F	343 °C	Excellent	Excellent
	Epoxy	600 °F	315 °C	Very Good	Very Good
	Teflon® Plug	450 °F	232 °C	Very Good	Not Recommended
Lead Options	Fiberglass (Standard)	482 °F	250 °C	Good	Not Recommended
	Teflon®	500 °F	260 °C	Excellent	Excellent
	Silicone	356 °F	180 °C	Excellent	Excellent
	Silicone Cable	356 °F	180 °C	Excellent	Excellent
	High Temp. Fiberglass	932 °F	500 °C	Not Recommended	Not Recommended

This chart is representative of standard cartridge heater configurations.
Please call Nexthermal at (269) 964-0271 for additional options, special configurations, and assemblies.