

**nextThermal**<sup>®</sup>  
smart heat management

**Coil Heater Solutions**



## who is Nexthermal?



Nexthermal is a new name for a company that has focused passion and energy toward the creation of electric heating elements, systems and engineering services since 1986.

Nexthermal solves heating application challenges and creates dramatic process capability improvements for our customers.

Our customers' requirements, product development plans and competitive position in the marketplace drive our smart heat management innovation. Ingenuity, collaboration and a sense of urgency converts concepts to products and capabilities.

*If heat is vital to your process...  
add **Nexthermal** to your team!*

As you engage **Nexthermal** our goal is that you conclude we are:

- **Approachable** — Sincerely committed to help you.
- **Dynamic** — Responding with a sense of urgency.
- **Knowledgeable** — Your heat management expert.
- **International** — American roots with a global reach.



# Standard Coil Heater Configuration Chart

Coil Heater Type	Profile		Minimum Inside Diameter		Voltage	Maximum Ratings			Straight Heated Length		Thermo-couple		Sheath Material	
						Watt Density (per sq. inch)					Inbuilt*		SS321	Nickel
	Without Pressed on Sheath	With Pressed on Sheath	Pressed in Brass	J		K								
Micro Mini	0.039x.067	1.0x1.7	0.236	6.00	240	38.7	52	80	112.2	2850			●	●
Mini Flat	0.051x.090	1.3x2.3	0.236	6.00	240	38.7	52	80	112.2	2850			●	●
Mini Round	ø0.055	ø1.4	0.236	6.00	240	38.7	52	80	112.2	2850			●	●
Mini Round	ø0.070	ø1.8	0.236	6.00	240	38.7	52	80	112.2	2850			●	●
Square	0.118x.118	3.0x3.0	0.472	12.00	240	38.7	52	80	86.6	2200	●	●	●	
Flat	0.071x.126	1.8x3.2	0.472	12.00	240	38.7	52	80	86.6	2200			●	
Flat	0.087x.165	2.2x4.2	0.472	12.00	240	38.7	52	80	86.6	2200	●	●	●	
Flat	0.098x.134	2.5x3.4	0.472	12.00	240	38.7	52	80	86.6	2200	●	●	●	
Round	ø0.118	ø3.0	0.472	12.00	240	38.7	52	80	86.6	2200	●	●	●	
Round	ø0.125	ø3.18	0.472	12.00	240	38.7	52	80	86.6	2200	●	●	●	
Round	ø0.157	ø4.0	0.472	12.00	240	38.7	52	80	86.6	2200	●	●	●	
Maxi	0.181x.338	4.6x8.6	0.80	20.00	480	87	97	95	86.6	2200	●	●	●	

\*Externally wound thermocouples are available for all Nexthermal coil heaters.

Coil ID	Tolerance ID with Pressed on Sheath(mm)	Coil ID (mm)	Mini, Standard & Maxi ID Tolerance	
Mini	+0.05 to +0.10	6.5-12	<30mm Long	≥30mm Long
Standard	+0.05 to +0.10	13-30	-0.05 to -0.2	-0.1 to -0.3
Maxi	+0.05 to +0.15	31-50	-0.1 to -0.3	-0.2 to -0.4
Clamping strap recommended above 2".		over 50mm - specified on your drawing		

Lead Options	Temp. Rating		Movement	Moisture
	°F	°C		
Teflon® (Standard)	500	260	Excellent	Excellent
High Temp. Fiberglass (Not Available on Minis)	932	500	Not Recommended	Not Recommended

Standard wattage tolerance for Nexthermal coil heaters is ± 10%. Premium wattage tolerance is ± 5%. Standardized heaters may be designed with tighter than published wattage tolerances. Consult Nexthermal Engineering. Hotlock and Axial Clamp heaters are available with ± 2% wattage tolerance.

Additional Options			Coil Heater Assemblies			Lead Protection		
Pressed on Sheaths		ID/OD Tube	Mini Coil Heaters		All Coil Heaters	Fiberglass Sleeve	Braided Metal Sleeve	Armor Cable
With Tab	Without Tab		Hotlock	Axial Clamp				
								

Teflon® is a registered trademark of the E. I. du Pont de Nemours & Company.



**Industrial Heat Sources**

PO Box 770327  
1414 Riverside Drive, Suite 204  
Lakewood, Ohio, 44107  
Tel: 844-862-7880  
Fax: 216-862-7979  
Email: [info@ihshotair.com](mailto:info@ihshotair.com)  
Website: [www.ihshotair.com](http://www.ihshotair.com)

## Coil Heater Profiles



### Mini Coil Heaters

Nexthermal offers a range of mini coil heaters, flat and round for when space is constrained. We can wind in thermocouples and support a bending radius of 3mm.

### 1.8 x 3.2mm Flat Coil Heater

The power of a Nexthermal coil heater in a smaller size with a bending radius of 6mm.



### 2.2 x 4.2mm Flat Coil Heater

Thin enough to keep net outer diameter to a minimum, wide enough to bring more power to heating surface. Supports internal TC. Bending radius 6mm.

### 2.5 x 3.4mm Coil Heater

Our most popular coil heater and a standard for OEMs. Internal TC option. Bending radius 6mm.



### 3.0mm, 3.18mm and 4.0mm Round Coil Heater

Proven coil heater product excellent for form in groove and 3D heating applications. Internal TC. Minimum bending radius 6mm.

### 3.0mm Square Coil Heater

Structurally sound and increases the surface area in contact with form in groove assemblies and applications.



### 4.6 x 8.6mm Maxi Coil Heater

Highly durable heater used in large format injection molding and diecast applications. Minimum bending radius 10mm.

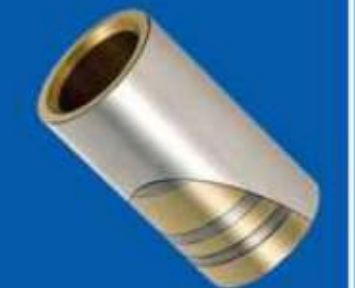
## Coil Heater Based Assemblies



Hotlock



Axial Clamp Heater



Pressed in Brass Heater