



Low-Density Cartridge Heater Specifications

Standard Specifications and Tolerances of Low Density Cartridge Heaters.
If tighter tolerances are required consult Tempco.

PERFORMANCE RATINGS

Maximum Temperature: 1200°F (650°C)

Maximum Watt Density: 20-45 W/in² (3.1-7.0 W/cm²) depending on heater size and operating temperature.

DIMENSIONAL SPECIFICATIONS

Nominal Diameter	3/16	1/4	3/8	1/2	5/8	3/4	7/8	15/16	1	1-1/4
Actual Diameter– in.	.185	.247	.372	.496	.621	.745	.870	.933	.995	1.250
Actual Diameter–(mm)	(4.70)	(6.27)	(9.45)	(12.60)	(15.77)	(18.92)	(22.10)	(23.70)	(25.27)	(31.75)
Diameter Tolerance	±.002 (.051 mm)					±.003 (.076 mm)				±.005 (.127 mm)
Length Tolerance	±1/16 (1.59 mm) up to 6" (152.4 mm) long; ±1/8" (3.18 mm) over 6" long									
Camber Tolerance Heaters up to 8" (203 mm) long	0.005" (0.127 mm)									
Camber Tolerance Heaters over 8" (203 mm) long	0.010" (0.254 mm) per foot of length (0.010 x (length in feet) ²)									

ELECTRICAL SPECIFICATIONS

Nominal Diameter	3/16	1/4	3/8	1/2	5/8	3/4	7/8	15/16	1	1-1/4
Maximum Voltage	240	240	240	240	480*	480*	480*	480*	480*	480*
Maximum Amperage	1.5	3.5	6	8	10	15	15	15	25	30
Maximum Wattage	Consult Tempco									
Wattage Tolerance	Plus 5%, Minus 10%									
Resistance Tolerance	Plus 10%, Minus 5%									

*480V when applicable. Consult Tempco.

Standard (Non-Stock) Low-Density Cartridge Heaters

3/16" Diameter Actual .185" (4.70 mm)

Sheath Length	Watt Density		Part Number			
	in	mm	120V	240V		
1	25.4	15	34	5.3	LDC00001	—
1½	38.1	20	30	4.7	LDC00002	—
2	50.8	30	31	4.9	LDC00003	—
2½	63.5	40	32	5.0	LDC00004	—
3	76.2	45	29	4.5	LDC00005	—
4	101.6	65	31	4.7	LDC00006	—
5	127.0	80	29	4.6	LDC00007	—
6	152.4	100	30	4.7	LDC00008	—
7	177.8	125	32	5.0	LDC00009	—
8	203.2	150	33	5.2	LDC00010	—
10	254.0	170	30	4.7	LDC00011	—

1/4" Diameter Actual .247" (6.27 mm)

Sheath Length	Watt Density		Part Number			
	in	mm	120V	240V		
1	25.4	20	34	5.3	LDC00012	—
1½	38.1	20	23	3.5	LDC00014	—
2	50.8	32	27	4.2	LDC00015	—
2	50.8	40	34	5.3	LDC00016	—
2	50.8	50	42	6.6	LDC00017	—
2½	63.5	30	19	3.0	LDC00018	—
3	76.2	32	16	2.5	LDC00019	—
3	76.2	50	25	3.9	LDC00020	—
3½	88.9	80	34	5.3	LDC00021	—
4	101.6	100	36	5.6	LDC00022	LDC00023
5	127.0	125	35	5.5	LDC00024	—
6	152.4	150	35	5.4	LDC00025	LDC00026
7	177.8	100	20	3.0	LDC00027	LDC00028
8	203.2	200	34	5.3	LDC00029	LDC00030
10	254.0	250	34	5.2	LDC00031	LDC00032



Note: Part Numbers above are for Low Density Cartridge Heaters terminated with Type F flexible leads, 10" long. See pages 2-39 through 2-57 for other terminations.

Low-Density Cartridge Heaters are made-to-order only. **Standard lead time is 3 weeks.**

Custom Engineered/Manufactured Low-Density Cartridge Heaters

Refer to ordering information on page 2-38.

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