

An Economical and Reliable Cartridge Heater, Used in Applications Requiring Lower Operating Temperatures and Watt Densities

LDC Series



Typical Applications

- Heat Sealing Equipment
- Laminating Equipment
- Packaging Equipment
- Labeling Machines
- Molds and Dies
- Food Processing
- Refrigeration
- Shoe Machinery
- Glue Guns
- Wax Pots
- Heating Liquids
- Heating Gases

Low-density cartridge heaters are an excellent, cost effective choice without compromising quality for Original Equipment Manufacturers (OEMs) consuming large quantities of cartridge heaters for their equipment.

Standard Specifications and Tolerances

Performance Ratings

Maximum Temperature: 650°C (1200°F)

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

Dimensional Specifications

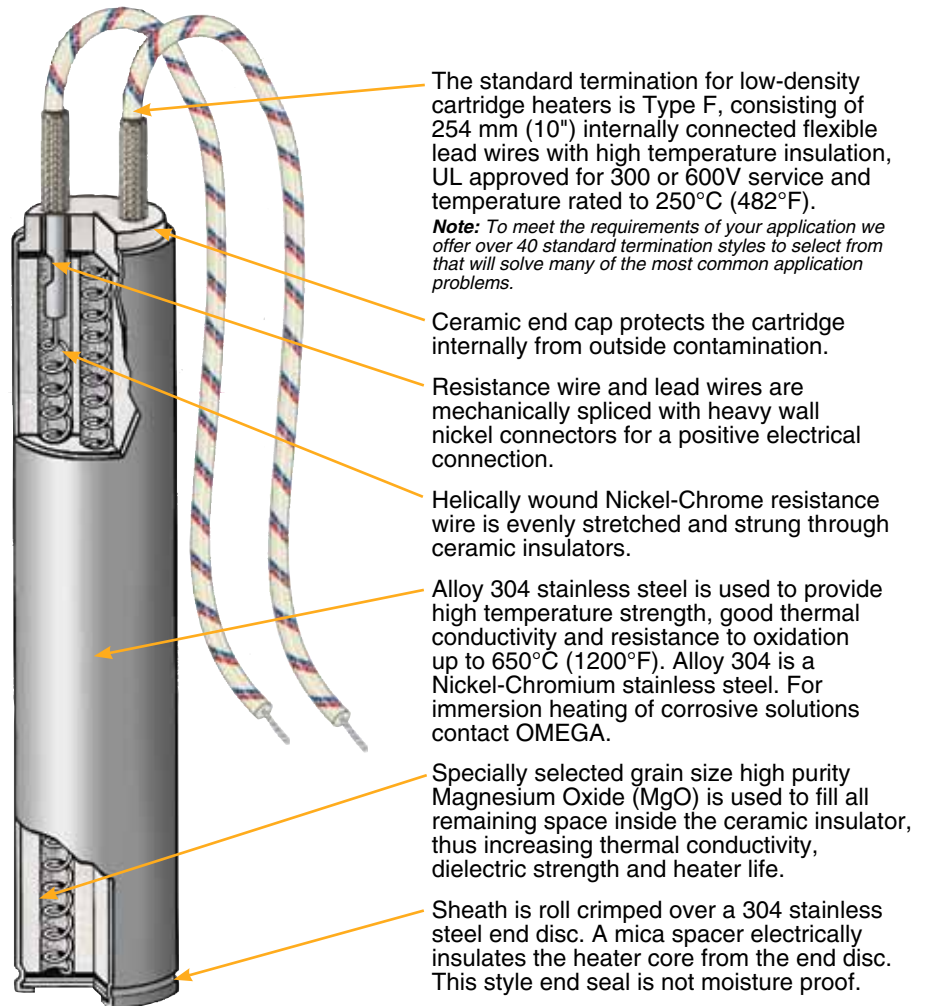
Nominal Diameter	3/16	1/4	3/8	1/2	5/8	3/4	7/8	15/16	1	1 1/4
Actual Diameter inch	0.185	0.247	0.372	0.496	0.621	0.745	0.870	0.933	0.995	1.250
Actual Diameter mm	4.70	6.27	9.45	12.60	15.77	18.92	22.10	23.70	25.27	31.75
Diameter Tolerance	0.051 mm (±0.002")									0.127 mm (±0.005")
Length Tolerance	1.59 mm (±1/16") up to 152 mm (6") long; 3.18 mm (±1/8") over 152 mm (6") long									
Camber Tolerance	0.254 mm (0.010") per foot of length									

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	Contact OMEGA									
Wattage Tolerance	Plus 5%, minus 10%									
Resistance Tolerance	Plus 10%, minus 5%									

* Low density cartridge heaters are UL recognized and CSA certified in many design variations under UL File Number E65652 and CSA File Number 043099. If you require UL and/or CSA Agency Approval, please specify when ordering.

**480V when applicable. Contact OMEGA.





Low Density Cartridge Heaters

5/8" Diameter, Actual 15.77 mm (0.621")

To Order Visit omega.com/lcd5 for Pricing and Details

Model No.		Sheath Length		Watts	Watt Density	
120V	240V	mm	inch		Watt/cm ²	Watt/in ²
LDC00163	LDC00164	38.1	1½	100	7.9	51
LDC00165	LDC00166	50.8	2	100	5.3	34
LDC00167	LDC00168	63.5	2½	80	3.2	20
LDC00169	LDC00170	63.5	2½	150	5.9	38
LDC00171	LDC00172	76.2	3	175	5.5	36
LDC00173	LDC00174	88.9	3½	190	5.0	32
LDC00175	LDC00176	101.6	4	200	4.5	29
LDC00177	LDC00178	114.3	4½	240	4.7	31
LDC00179	LDC00180	114.3	4½	275	5.4	35
LDC00181	LDC00182	127.0	5	200	3.5	23
LDC00183	LDC00184	127.0	5	250	4.4	28
LDC00185	LDC00186	127.0	5	375	6.6	42
LDC00187	LDC00188	139.7	5½	200	3.2	20
LDC00189	LDC00190	139.7	5½	285	4.5	29
LDC00191	—	139.7	5½	510	8.1	52
LDC00192	LDC00193	149.2	5¾	350	5.1	33
LDC00194	LDC00195	152.4	6	200	2.9	19
LDC00196	LDC00197	152.4	6	300	4.3	28
LDC00198	LDC00199	152.4	6	350	5.0	32
LDC00200	LDC00201	165.1	6½	350	4.6	30
LDC00202	LDC00203	177.8	7	375	4.6	29
LDC00204	LDC00205	203.2	8	400	4.2	27
LDC00206	LDC00207	215.9	8½	425	4.2	27
LDC00208	LDC00209	228.6	9	450	4.2	27
LDC00210	LDC00211	241.3	9½	475	4.2	27
LDC00212	LDC00213	254.0	10	500	4.2	27
LDC00214	LDC00215	279.4	11	550	4.1	27
LDC00216	LDC00217	304.8	12	250	1.7	11
LDC00218	LDC00219	304.8	12	500	3.4	22
LDC00220	LDC00221	304.8	12	600	4.1	27
LDC00222	LDC00223	304.8	12	700	4.8	31
LDC00224	LDC00225	314.3	12¾	450	3.0	19
LDC00226	LDC00227	355.6	14	700	4.1	26
LDC00228	LDC00229	381.0	15	750	4.1	26
LDC00230	LDC00231	406.4	16	800	4.1	26
LDC00232	LDC00233	431.8	17	1000	4.8	31
LDC00234	LDC00235	457.2	18	725	3.3	21
LDC00236	LDC00237	457.2	18	800	3.6	23
LDC00238	LDC00239	508.0	20	900	3.6	24
—	LDC00240	533.4	21	1000	3.9	25
—	LDC00241	558.8	22	2000	7.3	47
—	LDC00242	609.6	24	2000	6.7	43
LDC00243	—	635.0	25	768	2.5	16
—	LDC00244	635.0	25	1100	3.5	23
LDC00245	LDC00246	635.0	25	1500	4.8	31
LDC00247	—	685.8	27	1200	3.6	23
—	LDC00248	711.2	28	2000	5.7	37
—	LDC00249	762.0	30	2000	5.4	35



5/8" Diameter, Actual 15.77 mm (0.621"), continued

Model No.		Sheath Length		Watts	Watt Density	
120V	240V	mm	inch		Watt/cm ²	Watt/in ²
—	LDC00250	787.4	31	2000	5.2	33
—	LDC00251	863.6	34	2000	4.7	30
—	LDC00252	914.4	36	2000	4.4	29
—	LDC00253	965.2	38	2000	4.2	27
LDC00254	—	979.5	38 ^{9/16}	1200	2.5	16

Note: Model numbers above are for low density cartridge heaters terminated with Type F flexible leads, 254 mm (10") long.

Ordering Example: LDC00241, 2000 W, 240 Vac, cartridge heater.

Order by model number from the standard sizes and ratings list on the preceding pages. Note that model numbers shown are for heaters with Type F Termination [254 mm (10") leads].

Custom Engineered/Manufactured Heaters

Because an electric heater can be very application specific, for sizes and ratings not listed, OMEGA will design and manufacture a low-density cartridge heater to meet your requirements.

Please Specify the Following:

- Diameter
- Length
- Wattage
- Voltage
- Termination Types
- Lead Length
- Cable/Braid Length
- Special Features
- Application Type
- Operating Temperature