



AerOcoax[®] AerObiax[®] ELECTRIC HEATING CABLE



AerOcoax[®]

SHEATH DIAMETER		CONTINUITY RESISTANCE		INSUL. SPACING	NORMAL LENGTH		SHEATH MATL.	PART NUMBER
Inch ±0.005	mm ±0.13	Ohms/ft ±10%	Ohms/mtr ±10%	Inch ±15%	Feet See Note 1	Meter	See Note 2	
0.040	1.0	16.3	53.5	0.009	500	152	B	IHN040B- 16.3
.063	1.6	1.6	5.2	.011	1000	304	B	IHN063B- 1.6
.063	1.6	6.5	21.3	.014	200	61	B	IHN063B- 6.5
.080	2.0	3.9	12.8	.023	150	46	B	IHN080B- 3.9
.093	2.4	3.0	9.8	.023	700	213	B	IHN093B- 3.0
.093	2.4	1.5	4.9	.023	800	244	B	IHN093B- 1.5
.125	3.2	0.24	0.79	.018	900	274	B	IHN125B- 0.24
.125	3.2	0.40	1.3	.024	900	274	B	IHN125B- 0.40
.125	3.2	0.80	2.6	.030	900	274	B	IHN125B- 0.80
.125	3.2	1.6	5.2	.034	400	122	B	IHN125B- 1.6
.180	4.6	0.18	0.59	.033	400	122	B	IHN180B- 0.18
.180	4.6	0.73	2.4	.048	400	122	B	IHN180B- 0.73
.188	4.8	0.70	2.3	.051	800	244	B	IHN188B- 0.70
.250	6.4	0.35	1.1	.070	200	61	B	IHN250B- 0.35



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0.040	1.0	30.0	98.4	0.004	500	152	B	2HN040B- 30.0
.063	1.6	13.0	42.6	.007	200	61	B	2HN063B- 13.0
.093	2.4	6.0	19.7	.011	400	122	B	2HN093B- 6.0
.125	3.2	3.2	10.5	.016	900	274	B	2HN125B- 3.2
.188	4.8	1.4	4.6	.024	400	122	B	2HN190B- 1.4
.250	6.4	0.70	2.3	.031	200	61	B	2HN250B- 0.70

Note:

1. Lengths shown are normal manufactured length. However, due to cutting for specific ordered quantities, the lengths supplied will be between 15 feet (4 meters) and NORMAL LENGTH.
2. Sheath material is Inconel 600 (Symbol B).

GENERAL NOTES

This cable is made by a multiple pass drawing operation. When shipped, the ends are sealed to prevent moisture absorption by the MgO insulation. Once the seal is broken, the MgO will absorb moisture from the atmosphere and rapid loss of insulation resistance and dielectric strength can occur. Destructive arcing between the wire and sheath can occur if the wet cable is energized. Unsealed cable can be dried by a 24 hour oven bakeout at 250° F or higher or by self-heating at low voltage.

In general, there is very little temperature difference between the sheath and wires. With the cable sheath operating at temperatures less than 1000° F, ARI recommends not exceeding 150 watts/in (area measured at the sheath surface), when ends are properly terminated.

As temperature increases above 1000° F, the maximum watt density should be decreased.

Heater life in any specific application is difficult to predict. However, life generally decreases as temperature and/or the number of thermal cycles increases.

Maximum recommended operating temperature is 1800° F.

SPECIFICATIONS

Sheath:	Inconel* 600
Insulation:	Magnesia, compacted. Minimum content of MgO is 99.4%
Wire:	Nickel-Chrome-Iron with resistivity of 620 OHMS/CMF @20° C (68° F)
Tolerances:	Sheath Diameter — ± 0.005 inches (± 0.13 mm) Continuity resistance — $\pm 10\%$ of nominal
Insulation Resistance:	1000 megohm — ft. @ 500 VDC @ 20° C (68° F) 100 megohm — ft. @ 500 VDC @ 317° C (600° F)
Dielectric Strength:	100 volts/.001 inch of insulation thickness — Straight cable 50 volts/.001 inch of insulation thickness — 5D radius bend. Cable ends must be coated to prevent arcing

*Registered Trademark of International Nickel Corp.

HOW TO ORDER:

1. Specify "Part Number" and total quantity.
2. Best pricing is to accept material in random lengths. Random lengths will be 40 ft. or longer except 10% or less of the total quantity ordered can be as short as 15 feet.
3. All items shown are normally stocked.

See Bulletin 5.2 for finished heaters made from AerObiax electric heater cable.

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