

### 311-KAP-010 to 311-KAP-180: cables from 0.1mm ø to 1.8mm ø

Polyimide Lack (Kapton) insulated copper wires. All versions are single stranded wires, they are ideal for coil winding applications and non-flexing applications.



	311-KAP-010	311-KAP-012	311-KAP-014	311-KAP-025	311-KAP-040	311-KAP-060	311-KAP-100	311-KAP-102	311-KAP-130	311-KAP-170	311-KAP-180
Conductor	Massive copper conductor, single strand										
Diameter conductor (mm)	0,1	0,12	0,14	0,25	0,4	0,64	1,0	1,02	1,3	1,7	1,8
AWG	38	36	35	30	26	22	18	18	16	14	13
Aera (mm <sup>2</sup> )	0,01	0,01	0,02	0,05	0,13	0,31	0,79	0,79	1,33	2,2	2,6
Resistivity @20°C (Ω/km)	2270	1580	1160	360	138	58	23	23	13,8	8	6,8
Insulation	Polyimide = Kapton® PTFE free										
Total diameter (mm)	0,13	0,16	0,18	0,3	0,4	0,71	1,1	1,1	1,4	1,85	2,0
Voltage rating in vacuum (KV DC) @ 20°C	2	2	2	2	3	4	10	4	5	12	4
Disruptive discharge voltage (KV DC) in air @ 20°C	2,1	2,5	2,7	4,1	4,6	5,1	8,3	5,7	6	8,6	5,6
Max. temperature (°C)	300										
Radiation resistance	1000 Mrad = 10 MGy										
Weight, approx. (g/m)	0,2	0,5	0,2	0,5	1,2	2,9	7	7	12	20	23
Vacuum level	Typ. 10 <sup>-12</sup> mbar is achievable										
Halogen free	Yes										
Typical current ratings @ 20°C (A)	0,1	0,15	0,2	1	2	5	10	10	13	17	20

The maximum current is dependant on the installation, above values are typical calculated values for single wires, not covered. It is temperature dependant and will be about 50% @ 280°C

311-KAP-100 and 311-KAP-170 are high voltage versions, who can be used in vacuum at room temperature up to 10/12 KV DC.

The minimal nominal bend radius is 7.5x the diameter of the cable. For single bends it can be reduced to 5x the diameter. These cables are not recommended for continuous bends.

The wires are according NEMA MW 16-C, Max allowed number of imperfections per 30m: High voltage versions <=3, other versions <=5

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