BriskHeat® Resistance Wire

Product Highlights

- ✔ **Same Wire We Use to Manufacture our High Quality Heating Element**
- ✔ **Multi-Stranded Construction Provides Greater Flexibility Than Solid Strand Wires**
- ✔ **Flexible up to a 1/16” (1.6mm) Radius**
- ✔ **Three Types of Resistance Wires to Solve Multiple OEM Heating Applications**

RWK Polyimide Film Insulated Resistance Wire:

Specifications:

- 482°F (250°C) Continuous Exposure Temperature
- Insulation type: 1 mil polyimide film with 50% overlap
- Insulation thickness: 2 mil
- Dielectric strength: Over 2000 volts
- Suitable for use on conductive surfaces
- 500ft (152m) or 1000ft (305m) spools
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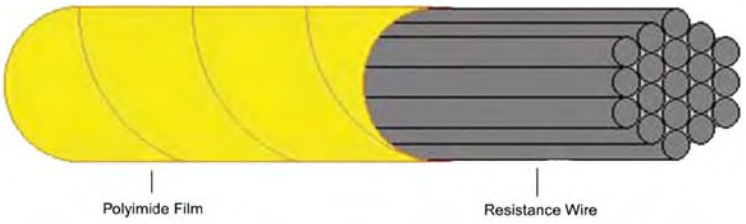
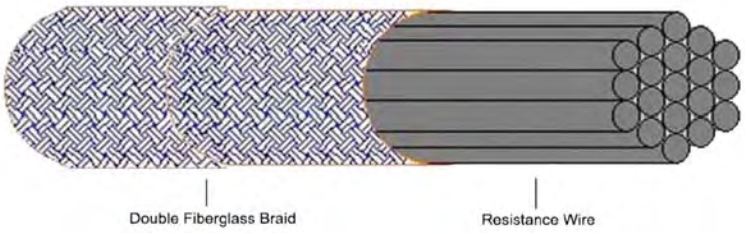


RWF Fiberglass Insulated Resistance Wire:

Specifications:

- 1100°F (593°C) continuous exposure temperature
- Insulation type: Two layers of 8 mil diameter strands of fiberglass yarn
- Dielectric strength: Over 2000 volts
- Not suitable for conductive surfaces
- Optional TEFLON® coating provides anti-fraying and abrasion resistance
- 500ft (152m) or 1000ft (305m) spools



RWG Grounded Resistance Wire:

Specifications:

- 482°F (250°C) continuous exposure temperature
- Patented grounded braid through entire length of heating element
- Insulation type: 1 mil polyimide film with 50% overlap
- Insulation thickness: 2 mil
- Two layers of 8 mil diameter fiberglass braided over polyimide film
- Dielectric strength: Over 2000 volts
- Suitable for use on conductive surfaces
- Optional TEFLON® coating provides anti-fraying and abrasion resistance
- 500ft (152m) or 1000ft (305m) spools
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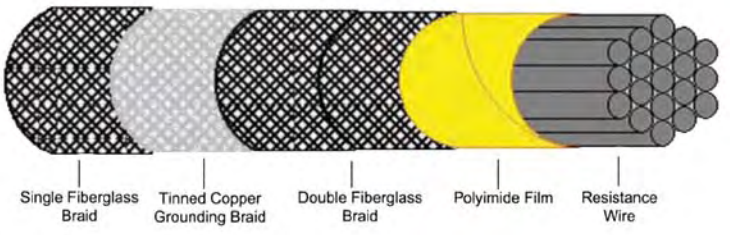

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BriskHeat® Resistance Wire Ordering Information

Ordering Information

When specifying resistance wire, it is important to consider all aspects of the application and of the wire. For example, if the application is on a conductive surface, wire type RWF should not be chosen. Also, if the application requires constant temperatures of 350°F (176°C), then alloy J should not be chosen. Call your local distributor or BriskHeat® direct for application assistance.

Part Number Guide

RWG 18 C - 4.899 T A

Resistance Wire Type:
RWK- (Polyimide Film Insulated), RWF- (Fiberglass Insulated), RWG- (Grounded)

Number of Strands:
(see below tables)

Alloy Type:
(see below tables)

Resistance per Foot:
(see below tables)

Optional Coating:
T- (TEFLON®) [RWF and RWG only], Blank- (None)

Spool Size:
A- (500ft), B- (1000ft)

Alloy Specifications

Alloy Type	Gauge/ Strand	Max Exposure Temperature	Ohms/FT/ Strand	Composition
A	43	1650°F (899°C)	172.50	71.75% Fe, 22% Cr, 5.75% Al, 0.5% Cu
B	41	1650°F (899°C)	115.31	71.75% Fe, 22% Cr, 5.75% Al, 0.5% Cu
C	40	1650°F (899°C)	88.18	71.75% Fe, 22% Cr, 5.75% Al, 0.5% Cu
D	40	1650°F (899°C)	70.24	60% Ni, 15% Cr, 25% Fe
E	39	1650°F (899°C)	55.10	60% Ni, 15% Cr, 25% Fe
F	37	1650°F (899°C)	33.33	60% Ni, 15% Cr, 25% Fe
G	37	450°F (232°C)	14.52	55% Cu, 45% Ni
H	37	1000°F (538°C)	8.88	78% Cu, 22% Ni
I	37	797°F (425°C)	4.44	88% Cu, 12% Ni
J	36	300°F (149°C)	0.48	90% Cu (core), 10% Ni (cladding)

Resistance Per Foot

Number of Strands	Alloy Type									
	A	B	C	D	E	F	G	H	I	J
5	34.500	23.062	17.636	14.048	11.020	6.666	2.904	1.776	0.888	0.096
6	28.750	19.218	14.697	11.707	9.183	5.555	2.420	1.480	0.740	0.080
7	24.643	16.473	12.597	10.034	7.871	4.761	2.074	1.269	0.634	0.069
8	21.563	14.414	11.023	8.780	6.888	4.166	1.815	1.110	0.555	0.060
9	19.166	12.812	9.798	7.804	6.122	3.703	1.613	0.987	0.493	0.053
10	17.250	11.531	8.818	7.024	5.510	3.333	1.452	0.888	0.444	0.048
11	15.682	10.483	8.016	6.385	5.009	3.030	1.320	0.807	0.404	0.044
12	14.375	9.609	7.348	5.853	4.592	2.778	1.210	0.740	0.370	0.040
13	13.269	8.870	6.783	5.403	4.238	2.564	1.117	0.683	0.342	0.037
14	12.321	8.236	6.299	5.017	3.936	2.381	1.037	0.634	0.317	0.034
15	11.500	7.687	5.879	4.683	3.673	2.222	0.968	0.592	0.296	0.032
16	10.781	7.207	5.511	4.390	3.444	2.083	0.908	0.555	0.278	0.030
17	10.147	6.783	5.187	4.132	3.241	1.961	0.854	0.522	0.261	0.028
18	9.583	6.406	4.899	3.902	3.061	1.852	0.807	0.493	0.247	0.027
19	9.079	6.069	4.641	3.697	2.900	1.754	0.764	0.467	0.234	0.025
20	8.625	5.766	4.409	3.512	2.755	1.667	0.726	0.444	0.222	0.024
21	8.214	5.491	4.199	3.345	2.624	1.587	0.691	0.423	0.211	0.023
22	7.841	5.241	4.008	3.193	2.505	1.515	0.660	0.404	0.202	0.022
23	7.500	5.013	3.834	3.054	2.396	1.449	0.631	0.386	0.193	0.021
24	7.186	4.805	3.674	2.927	2.296	1.389	0.605	0.370	0.185	0.020
25	6.900	4.612	3.527	2.810	2.204	1.333	0.581	0.355	0.178	0.019
26	6.635	4.435	3.392	2.702	2.119	1.282	0.558	0.342	0.171	0.018
27	6.389	4.271	3.266	2.601	2.041	1.234	0.538	0.329	0.164	0.018
28	6.161	4.118	3.149	2.509	1.968	1.190	0.519	0.317	0.159	0.017
29	5.948	3.976	3.041	2.422	1.900	1.149	0.501	0.306	0.153	0.017
30	5.750	3.844	2.939	2.341	1.837	1.111	0.484	0.296	0.148	0.016

NOTE: Resistance tolerance is +/- 8%

Resistance wire should not be used to produce greater than 15 watts per inch (25 mm).