



Magnet Wire / Winding Wire  
Nominal Bare Wire Diameters — Whole AWG Size

Whole AWG Size	Diameter Inches	Diameter mm	Weight Lbs./1,000ft	Resistance at 20°C Ohms/1,000ft
1/0	0.3249	8.252	319.5	0.0982
2/0	0.3648	9.266	402.8	0.0779
1	0.2893	7.348	253.3	0.1239
2	0.2576	6.543	200.9	0.1563
3	0.2294	5.827	159.3	0.1971
4	0.2043	5.189	126.3	0.2485
5	0.1819	4.620	100.1	0.3134
6	0.1620	4.115	79.43	0.3952
7	0.1443	3.665	63.03	0.4981
8	0.1285	3.264	49.98	0.6281
9	0.1144	2.906	39.61	0.7924
10	0.1019	2.588	31.43	0.999
11	0.0907	2.304	24.90	1.261
12	0.0808	2.052	19.76	1.589
13	0.0720	1.829	15.69	2.001
14	0.0641	1.628	12.44	2.524
15	0.0571	1.450	9.869	3.181
16	0.0508	1.290	7.811	4.019
17	0.0453	1.151	6.211	5.054
18	0.0403	1.024	4.916	6.386
19	0.0359	0.912	3.901	8.047
20	0.0320	0.813	3.099	10.13
21	0.0285	0.724	2.459	12.77
22	0.0253	0.643	1.937	16.20

[essexwire.com](http://essexwire.com)

260.461.4000 | [magnetwire@spsx.com](mailto:magnetwire@spsx.com)



Magnet Wire / Winding Wire  
Nominal Bare Wire Diameters – Whole AWG Size

Whole AWG Size	Diameter Inches	Diameter mm	Weight Lbs./1,000ft	Resistance at 20°C Ohms/1,000ft
23	0.0226	0.574	1.546	20.31
24	0.0201	0.511	1.223	25.67
25	0.0179	0.455	0.9698	32.37
26	0.0159	0.404	0.7652	41.02
27	0.0142	0.361	0.6103	51.43
28	0.0126	0.320	0.4805	65.33
29	0.0113	0.287	0.3865	81.22
30	0.0100	0.254	0.3027	103.7
31	0.0089	0.226	0.2398	130.9
32	0.0080	0.203	0.1937	162.0
33	0.0071	0.180	0.1526	205.7
34	0.0063	0.160	0.1201	261.3
35	0.0056	0.142	0.09492	330.7
36	0.0050	0.127	0.07567	414.8
37	0.0045	0.114	0.06129	512.1
38	0.0040	0.102	0.04843	648.2
39	0.0035	0.089	0.03708	846.6
40	0.0031	0.079	0.02909	1079
41	0.0028	0.071	0.02373	1323
42	0.0025	0.064	0.01892	1659
43	0.0022	0.056	0.01465	2143
44	0.0020	0.051	0.01211	2593
45	0.00176	0.045	0.009376	3348
46	0.00157	0.040	0.007461	4207

[essexwire.com](http://essexwire.com)

260.461.4000 | [magnetwire@spsx.com](mailto:magnetwire@spsx.com)



Magnet Wire / Winding Wire  
Nominal Bare Wire Diameters – Half AWG Size

Half AWG Size	Diameter Inches	Diameter mm	Weight Lbs./1,000ft	Resistance at 20°C Ohms/1,000ft
1.5	0.2730	6.934	225.6	0.1392
2.5	0.2431	6.175	178.9	0.1755
3.5	0.2165	5.499	141.9	0.2213
4.5	0.1928	4.897	112.5	0.2790
5.5	0.1717	4.361	89.23	0.3518
6.5	0.1529	3.884	70.76	0.4436
7.5	0.1362	3.459	56.15	0.5591
8.5	0.1213	3.081	44.54	0.7049
9.5	0.1080	2.743	35.30	0.8891
10.5	0.0962	2.443	28.01	1.121
11.5	0.0856	2.174	22.18	1.415
12.5	0.0763	1.938	17.62	1.781
13.5	0.0679	1.725	13.95	2.249
14.5	0.0605	1.537	11.079	2.833
15.5	0.0539	1.369	8.793	3.570
16.5	0.0480	1.219	6.974	4.501
17.5	0.0427	1.085	5.519	5.688
18.5	0.0380	0.965	4.371	7.182
19.5	0.0339	0.861	3.478	9.024
20.5	0.0302	0.767	2.761	11.37

[essexwire.com](http://essexwire.com)

260.461.4000 | [magnetwire@spsx.com](mailto:magnetwire@spsx.com)



Magnet Wire / Winding Wire  
Nominal Bare Wire Diameters – Half AWG Size

Half AWG Size	Diameter Inches	Diameter mm	Weight Lbs./1,000ft	Resistance at 20°C Ohms/1,000ft
21.5	0.0269	0.683	2.190	14.33
22.5	0.0239	0.607	1.729	18.16
23.5	0.0213	0.541	1.373	22.86
24.5	0.0190	0.483	1.0927	28.73
25.5	0.0169	0.429	0.8645	36.31
26.5	0.0150	0.381	0.6810	46.09
27.5	0.0134	0.340	0.5435	57.76
28.5	0.0119	0.302	0.4286	73.24
29.5	0.0106	0.269	0.3401	92.30
30.5	0.0095	0.241	0.2732	114.9
31.5	0.0084	0.213	0.2136	147.0
32.5	0.0075	0.191	0.1703	184.4
33.5	0.0067	0.170	0.1359	231.0
34.5	0.0059	0.150	0.1054	297.9
35.5	0.0053	0.135	0.08502	369.2
36.5	0.0047	0.119	0.06686	469.5
37.5	0.0042	0.107	0.05339	587.9
38.5	0.0037	0.094	0.04144	757.6
39.5	0.0033	0.084	0.03296	952.3

[essexwire.com](http://essexwire.com)

260.461.4000 | [magnetwire@spsx.com](mailto:magnetwire@spsx.com)