WIRE SIZE		CLASS →	SMITH ALLOY 214R			SMITH ALLOY 235D			SMITH ALLOY 255A			SMITH ALLOY 60			SMITH ALLOY 80		
SWG	Diameter (MM)	Surface area Cm^2/m	Resistance Ohms/M	Cm^2/ohm	Weight Gram/M	Resistance Ohms/M	Cm^2/ohm	Weight Gram/M	Resistance Ohms/M	Cm^2/ohm	Weight Gram/M	Resistance Ohms/M	Cm^2/ohm	Weight Gram/M	Resistance Ohms/M	Cm^2/ohm	Weight Gram/M
7	4.470	140.4	0.078	1792.2	115.3	0.086	1632.9	113.8	0.090	1552.4	111.4	0.071	1968.2	128.7	0.069	2022.3	131.1
8	4.064	127.7	0.095	1346.5	95.34	0.104	1226.8	94.05	0.109	1166.3	92.10	0.086	1478.7	106.4	0.084	1519.4	108.3
9	3.658	114.9	0.117	981.6	77.22	0.128	894.3	76.18	0.135	850.2	74.60	0.107	1078.0	86.16	0.104	1107.7	87.73
10	3.251	102.1	0.148	689.4	61.01	0.163	628.1	60.19	0.171	597.2	58.94	0.135	757.1	68.08	0.131	777.9	69.32
11	2.946	92.56	0.180	513.1	50.11	0.198	467.5	49.43	0.208	444.5	48.41	0.164	563.5	55.91	0.160	579.0	56.93
12	2.642	82.99	0.224	369.8	40.28	0.246	336.9	39.73	0.259	320.3	38.91	0.204	406.1	44.94	0.199	417.3	45.76
13	2.337	73.41	0.287	256.0	31.52	0.315	233.2	31.09	0.331	221.7	30.45	0.261	281.1	35.17	0.254	282.9	35.81
14	2.032	63.84	0.379	168.3	23.83	0.416	153.3	23.51	0.438	145.8	23.02	0.345	184.8	26.59	0.336	189.9	27.08
15	1.829	57.45	0.468	122.7	19.30	0.514	111.8	19.04	0.541	106.3	18.65	0.426	134.7	21.54	0.415	138.5	21.93
16	1.626	51.07	0.593	86.17	15.25	0.650	78.51	15.05	0.684	74.64	14.74	0.540	94.64	17.02	0.525	97.24	17.33
17	1.422	44.69	0.774	57.73	11.67	0.850	52.60	11.52	0.894	50.01	11.28	0.705	63.40	13.03	0.686	65.14	13.27
18	1.219	38.30	1.054	36.35	8.581	1.156	33.12	8.464	1.216	31.49	8.289	0.959	39.93	9.573	0.934	41.02	9.748
19	1.016	31.92	1.517	21.04	5.959	1.665	19.17	5.878	1.751	18.22	5.756	1.381	23.10	6.648	1.344	23.74	6.770
20	0.914	28.73	1.873	15.34	4.827	2.056	13.97	4.761	2.162	13.29	4.663	1.706	16.84	5.385	1.660	17.31	5.483
21	0.813	25.53	2.371	10.77	3.814	2.602	9.814	3.762	2.737	9.330	3.684	2.159	11.83	4.255	2.101	12.16	4.333
22	0.711	22.34	3.096	7.216	2.920	3.398	6.575	2.880	3.574	6.251	2.821	2.819	7.925	3.258	2.744	8.143	3.317
23	0.610	19.15	4.214	4.544	2.145	4.625	4.140	2.116	4.865	3.936	2.072	3.837	4.991	2.393	3.735	5.128	2.437
24	0.559	17.56	5.015	3.500	1.803	5.505	3.189	1.778	5.790	3.032	1.741	4.567	3.844	2.011	4.444	3.950	2.048
25	0.508	15.96	6.069	2.630	1.490	6.661	2.396	1.469	7.006	2.278	1.439	5.526	2.888	1.662	5.378	2.968	1.692
26	0.457	14.36	7.492	1.917	1.207	8.223	1.747	1.190	8.649	1.661	1.166	6.822	2.105	1.346	6.639	2.163	1.371
27	0.417	13.09	9.025	1.450	1.002	9.906	1.321	0.988	10.42	1.256	0.968	8.218	1.592	1.118	7.998	1.636	1.138
28	0.376	11.81	11.08	1.066	0.816	12.16	0.971	0.805	12.79	0.923	0.788	10.09	1.170	0.910	9.821	1.203	0.927
29	0.345	10.85	13.12	0.827	0.689	14.40	0.753	0.679	15.15	0.716	0.665	11.95	0.908	0.769	11.63	0.933	0.783
30	0.315	9.895	15.79	0.627	0.573	17.33	0.571	0.565	18.23	0.543	0.553	14.37	0.688	0.639	13.99	0.707	0.651
31	0.295	9.256	18.04	0.513	0.501	19.80	0.468	0.494	20.83	0.444	0.484	16.42	0.564	0.559	15.99	0.579	0.569
32	0.274	8.618	20.81	0.414	0.434	22.84	0.377	0.428	24.03	0.359	0.420	18.95	0.455	0.485	18.44	0.467	0.494
33	0.254	7.980	24.27	0.329	0.372	26.64	0.300	0.367	28.02	0.285	0.360	22.10	0.361	0.416	21.51	0.371	0.423
34	0.234	7.341	28.68	0.256	0.315	31.48	0.233	0.311	33.11	0.222	0.305	26.11	0.281	0.352	25.42	0.289	0.358
35	0.213	6.703	34.40	0.195	0.263	37.76	0.178	0.259	39.72	0.169	0.254	31.32	0.214	0.293	30.49	0.220	0.299
36	0.193	6.065	42.03	0.144	0.215	46.13	0.131	0.212	48.52	0.125	0.208	38.26	0.158	0.240	37.24	0.163	0.244
37	0.173	5.426	52.50	0.103	0.172	57.62	0.094	0.170	60.61	0.090	0.166	47.80	0.114	0.192	46.52	0.117	0.196
38	0.152	4.788	67.43	0.071	0.134	74.01	0.065	0.132	77.84	0.062	0.130	61.39	0.078	0.150	59.75	0.080	0.152
39	0.132	4.149	89.77	0.046	0.101	98.53	0.042	0.099	103.6	0.040	0.097	81.74	0.051	0.112	79.55	0.052	0.114
40	0.122	3.830	105.36	0.036	0.086	115.6	0.033	0.085	121.6	0.031	0.083	95.93	0.040	0.096	93.37	0.041	0.097
41	0.112	3.511	125.38	0.028	0.072	137.6	0.026	0.071	144.8	0.024	0.070	114.1	0.031	0.080	111.1	0.032	0.082
42	0.102	3.192	151.71	0.021	0.060	166.5	0.019	0.059	175.1	0.018	0.058	138.1	0.023	0.066	134.4	0.024	0.068