

AWG SIZE	MM size	BARE DIAMETER INCHES			BARE DIAMETER MM.			CROSS-SECT'L AREA		ALUMINUM ALLOY 8176			ALUMINUM ALLOY 1350			COPPER @ 100% conductivity			COPPER @ 101% conductivity			MM size	AWG SIZE
		Min.	Nom.	Max.	Min.	Nom.	Max.	From Nominal Sq Mil	Circ Mil	OHMS PER 1000 FT. @ 20 C			OHMS PER 1000 FT. @ 20 C			OHMS PER 1000 FT. @ 20 C			OHMS PER 1000 FT. @ 20 C				
										MIN BARE	NOM BARE	MAX BARE	MIN BARE	NOM BARE	MAX BARE	MIN BARE	NOM BARE	MAX BARE	MIN BARE	NOM BARE	MAX BARE		
1		0.2864	0.2893	0.2922	7.275	7.348	7.422	65733.5	83695.2	0.2062	0.2021	0.1981	0.2046	0.2005	0.1966	0.1264	0.1239	0.1215	0.1252	0.1227	0.1203		1
1 1/2		0.2707	0.2734	0.2761	6.876	6.944	7.013	58706.6	74748.2	0.2308	0.2263	0.2219	0.2290	0.2245	0.2201	0.1415	0.1387	0.1360	0.1401	0.1374	0.1347		1 1/2
2		0.2550	0.2576	0.2602	6.477	6.543	6.609	52117.3	66358.3	0.2601	0.2549	0.2498	0.2581	0.2529	0.2479	0.1595	0.1563	0.1532	0.1579	0.1547	0.1517		2
2 1/2		0.2411	0.2435	0.2460	6.124	6.185	6.248	46568.0	59292.7	0.2910	0.2852	0.2795	0.2887	0.2830	0.2773	0.1784	0.1749	0.1714	0.1767	0.1732	0.1697		2 1/2
3		0.2271	0.2294	0.2317	5.768	5.827	5.885	41331.1	52624.8	0.3279	0.3214	0.3150	0.3254	0.3189	0.3126	0.2011	0.1971	0.1932	0.1991	0.1951	0.1913		3
3 1/2		0.2147	0.2169	0.2190	5.453	5.509	5.563	36949.5	47046.0	0.3669	0.3595	0.3526	0.3641	0.3567	0.3499	0.2250	0.2204	0.2162	0.2228	0.2183	0.2141		3 1/2
4		0.2023	0.2043	0.2063	5.138	5.189	5.240	32781.3	41738.8	0.4133	0.4052	0.3974	0.4101	0.4021	0.3943	0.2534	0.2485	0.2437	0.2509	0.2460	0.2413		4
4 1/2		0.1909	0.1928	0.1950	4.849	4.897	4.953	29194.7	37172.1	0.4641	0.4550	0.4448	0.4605	0.4515	0.4413	0.2846	0.2790	0.2727	0.2818	0.2762	0.2700		4 1/2
5		0.1801	0.1819	0.1837	4.575	4.620	4.666	25986.9	33087.9	0.5214	0.5112	0.5012	0.5174	0.5072	0.4973	0.3197	0.3134	0.3073	0.3166	0.3103	0.3043		5
5 1/2		0.1700	0.1717	0.1737	4.318	4.361	4.412	23154.2	29481.1	0.5852	0.5737	0.5606	0.5807	0.5692	0.5562	0.3589	0.3518	0.3437	0.3553	0.3483	0.3403		5 1/2
6		0.1604	0.1620	0.1636	4.074	4.115	4.155	20612.0	26244.2	0.6574	0.6444	0.6319	0.6523	0.6395	0.6270	0.4031	0.3952	0.3875	0.3991	0.3913	0.3837		6
6 1/2		0.1514	0.1529	0.1547	3.846	3.884	3.929	18361.4	23378.6	0.7378	0.7234	0.7067	0.7321	0.7178	0.7012	0.4524	0.4436	0.4333	0.4480	0.4392	0.4291		6 1/2
7		0.1429	0.1443	0.1457	3.630	3.665	3.701	16353.9	20822.7	0.8282	0.8122	0.7967	0.8218	0.8059	0.7905	0.5079	0.4981	0.4885	0.5029	0.4931	0.4837		7
7 1/2		0.1348	0.1362	0.1378	3.424	3.459	3.500	14569.5	18550.6	0.9308	0.9117	0.8907	0.9235	0.9047	0.8838	0.5707	0.5591	0.5462	0.5651	0.5535	0.5408		7 1/2
8		0.1272	0.1285	0.1298	3.231	3.264	3.297	12968.7	16512.4	1.0453	1.0243	1.0038	1.0372	1.0163	0.9961	0.6410	0.6281	0.6156	0.6347	0.6219	0.6095		8
8 1/2		0.1201	0.1213	0.1225	3.051	3.081	3.112	11556.1	14713.8	1.1725	1.1495	1.1271	1.1635	1.1406	1.1183	0.7190	0.7048	0.6911	0.7119	0.6979	0.6843		8 1/2
9		0.1133	0.1144	0.1155	2.878	2.906	2.934	10278.8	13087.5	1.3175	1.2923	1.2678	1.3073	1.2823	1.2580	0.8079	0.7924	0.7774	0.7999	0.7846	0.7697		9
9 1/2		0.1069	0.1080	0.1090	2.715	2.743	2.769	9160.9	11664.1	1.4800	1.4500	1.4235	1.4685	1.4388	1.4125	0.9075	0.8891	0.8729	0.8986	0.8804	0.8643		9 1/2
10		0.1009	0.1019	0.1024	2.563	2.588	2.601	8155.3	10383.7	1.6612	1.6288	1.6129	1.6484	1.6162	1.6004	1.0187	0.9988	0.9890	1.0086	0.9889	0.9793		10
10 1/2		0.0952	0.0962	0.0967	2.418	2.443	2.456	7268.4	9254.5	1.866	1.828	1.809	1.852	1.813	1.795	1.144	1.121	1.109	1.133	1.110	1.098		10 1/2
11		0.0898	0.0907	0.0912	2.281	2.304	2.316	6461.1	8226.6	2.097	2.056	2.033	2.081	2.040	2.018	1.286	1.261	1.247	1.273	1.248	1.235		11
11 1/2		0.0847	0.0856	0.0860	2.151	2.174	2.184	5754.9	7327.4	2.357	2.308	2.287	2.339	2.290	2.269	1.446	1.415	1.402	1.431	1.401	1.388		11 1/2
12	2.05	0.0800	0.0808	0.0812	2.032	2.052	2.062	5127.6	6528.7	2.643	2.591	2.565	2.622	2.570	2.545	1.620	1.589	1.573	1.604	1.573	1.557	2.05	12
12 1/2	1.94	0.0755	0.0763	0.0767	1.918	1.938	1.948	4572.3	5821.7	2.967	2.905	2.875	2.944	2.883	2.853	1.819	1.781	1.763	1.801	1.764	1.746	1.94	12 1/2
13	1.83	0.0713	0.0720	0.0724	1.811	1.829	1.839	4071.5	5184.0	3.327	3.263	3.227	3.301	3.237	3.202	2.040	2.001	1.979	2.020	1.981	1.959	1.83	13
13 1/2	1.73	0.0672	0.0679	0.0682	1.707	1.725	1.732	3621.0	4610.4	3.745	3.668	3.636	3.716	3.640	3.608	2.297	2.249	2.230	2.274	2.227	2.208	1.73	13 1/2
14	1.63	0.0635	0.0641	0.0644	1.613	1.628	1.636	3227.1	4108.8	4.194	4.116	4.078	4.162	4.084	4.046	2.572	2.524	2.501	2.547	2.499	2.476	1.63	14
14-1/2	1.54	0.0599	0.0605	0.0608	1.521	1.537	1.544	2874.8	3660.3	4.714	4.621	4.575	4.677	4.585	4.540	2.890	2.833	2.805	2.862	2.805	2.778	1.54	14 1/2
15	1.45	0.0565	0.0571	0.0574	1.435	1.450	1.458	2560.7	3260.4	5.298	5.187	5.133	5.257	5.147	5.094	3.249	3.181	3.148	3.217	3.149	3.117	1.45	15
15-1/2	1.37	0.0534	0.0539	0.0542	1.356	1.369	1.377	2281.7	2905.2	5.931	5.822	5.757	5.885	5.776	5.713	3.637	3.570	3.530	3.601	3.535	3.496	1.37	15 1/2
16	1.29	0.0503	0.0508	0.0511	1.278	1.290	1.298	2026.8	2580.7	6.685	6.554	6.477	6.633	6.503	6.427	4.099	4.019	3.972	4.059	3.979	3.933	1.29	16
16-1/2	1.22	0.0475	0.0480	0.0482	1.207	1.219	1.224	1809.6	2304.0	7.496	7.341	7.280	7.438	7.284	7.223	4.597	4.501	4.464	4.551	4.457	4.420	1.22	16 1/2
17	1.15	0.0448	0.0453	0.0455	1.138	1.151	1.156	1611.7	2052.1	8.427	8.242	8.169	8.361	8.178	8.106	5.167	5.054	5.009	5.116	5.004	4.960	1.15	17
17-1/2	1.09	0.0423	0.0427	0.0429	1.074	1.085	1.090	1432.0	1823.3	9.452	9.276	9.190	9.379	9.204	9.119	5.796	5.688	5.635	5.739	5.632	5.580	1.09	17 1/2
18	1.02	0.0399	0.0403	0.0405	1.013	1.024	1.029	1275.6	1624.1	10.624	10.414	10.311	10.541	10.333	10.231	6.514	6.386	6.323	6.450	6.323	6.260	1.02	18
18-1/2	0.97	0.0376	0.0380	0.0382	0.955	0.965	0.970	1134.1	1444.0	11.963	11.713	11.590	11.870	11.622	11.500	7.336	7.182	7.107	7.263	7.111	7.037	0.97	18 1/2
19	0.91	0.0355	0.0359	0.0361	0.902	0.912	0.917	1012.2	1288.8	13.420	13.123	12.978	13.316	13.021	12.877	8.229	8.047	7.958	8.148	7.968	7.879	0.91	19
19-1/2	0.86	0.0336	0.0339	0.0341	0.853	0.861	0.866	902.6	1149.2	14.981	14.717	14.545	14.865	14.603	14.432	9.186	9.024	8.919	9.096	8.935	8.831	0.86	19 1/2
20	0.81	0.0317	0.0320	0.0322	0.805	0.813	0.818	804.2	1024.0	16.831	16.516	16.312	16.700	16.389	16.186	10.320	10.128	10.002	10.219	10.028	9.904	0.81	20
20-1/2	0.77	0.0299	0.0302	0.0304	0.759	0.767	0.772	716.3	912.0	18.92	18.54	18.30	18.77	18.40	18.16	11.60	11.37	11.22	11.49	11.26	11.11	0.77	20 1/2
21	0.72	0.0282	0.0285	0.0288	0.716	0.724	0.732	637.9	812.3	21.27	20.82	20.39	21.10	20.66	20.23	13.04	12.77	12.50	12.91	12.64	12.38	0.72	21
21-1/2	0.68	0.0266	0.0269	0.0272	0.676	0.683	0.693	568.3	723.6	23.90	23.37	22.86	23.72	23.19	22.68	14.66	14.33	14.02	14.51	14.19	13.88	0.68	21 1/2
22	0.64	0.0250	0.0253	0.0256	0.635	0.643	0.650	502.7	640.1	27.06	26.42	25.81	26.85	26.22	25.61	16.59	16.20	15.82	16.43	16.04	15.67	0.64	22
22-1/2	0.61	0.0237	0.0239	0.0242	0.602	0.607	0.615	448.6	571.2	30.11	29.61	28.88	29.88	29.38	28.66	18.46	18.16	17.71	18.28	17.98	17.53	0.61	22 1/2

AWG SIZE	MM size	BARE DIAMETER			BARE DIAMETER			CROSS-SECT'L AREA		ALUMINUM ALLOY 8176			ALUMINUM ALLOY 1350			COPPER @ 100% conductivity			COPPER @ 101% conductivity			MM size	AWG SIZE
		INCHES	Min.	Nom.	Max.	Min.	MM. Nom.	Max.	From Nominal	Sq Mil	Circ Mil	OHMS PER 1000 FT. @ 20 C	MIN BARE	NOM BARE	MAX BARE	OHMS PER 1000 FT. @ 20 C	MIN BARE	NOM BARE	MAX BARE	OHMS PER 1000 FT. @ 20 C	MIN BARE		
23	0.57	0.0224	0.0226	0.0228	0.569	0.574	0.579	401.1	510.8	33.71	33.11	32.53	33.45	32.86	32.28	20.67	20.30	19.95	20.47	20.10	19.75	0.57	23
23-1/2	0.54	0.0211	0.0213	0.0215	0.536	0.541	0.546	356.3	453.7	37.99	37.28	36.59	37.69	36.99	36.30	23.29	22.86	22.44	23.06	22.63	22.21	0.54	23 1/2
24	0.51	0.0199	0.0201	0.0203	0.505	0.511	0.516	317.3	404.0	42.71	41.86	41.04	42.38	41.54	40.72	26.19	25.67	25.17	25.93	25.42	24.92	0.51	24
24-1/2	0.48	0.0188	0.0190	0.0192	0.478	0.483	0.488	283.5	361.0	47.85	46.85	45.88	47.48	46.49	45.52	29.34	28.73	28.13	29.05	28.44	27.86	0.48	24 1/2
25	0.45	0.0177	0.0179	0.0181	0.450	0.455	0.460	251.6	320.4	53.98	52.79	51.62	53.57	52.38	51.23	33.10	32.37	31.66	32.78	32.05	31.34	0.45	25
25-1/2	0.43	0.0167	0.0169	0.0171	0.424	0.429	0.434	224.3	285.6	60.64	59.22	57.84	60.17	58.76	57.39	37.19	36.31	35.47	36.82	35.95	35.12	0.43	25 1/2
26	0.40	0.0157	0.0159	0.0161	0.399	0.404	0.409	198.6	252.8	68.61	66.90	65.25	68.08	66.38	64.74	42.07	41.02	40.01	41.66	40.62	39.61	0.40	26
26-1/2	0.38	0.0149	0.0150	0.0151	3.776	0.381	0.384	176.7	225.0	76.18	75.17	74.18	75.59	74.59	73.60	46.71	46.09	45.48	46.25	45.64	45.04	0.38	26 1/2
27	0.36	0.0141	0.0142	0.0143	0.358	0.361	0.363	158.4	201.6	85.07	83.88	82.71	84.41	83.23	82.07	52.16	51.43	50.72	51.65	50.93	50.22	0.36	27
27-1/2	0.34	0.0133	0.0134	0.0135	0.338	0.340	0.343	141.0	179.6	95.61	94.19	92.80	94.87	93.46	92.08	58.63	57.76	56.90	58.05	57.19	56.34	0.34	27 1/2
28	0.32	0.0125	0.0126	0.0127	0.318	0.320	0.323	124.7	158.8	108.24	106.53	104.86	107.40	105.71	104.05	66.37	65.32	64.30	65.72	64.68	63.67	0.32	28
28-1/2	0.30	0.0118	0.0119	0.0120	0.300	0.302	0.305	111.2	141.6	121.47	119.43	117.45	120.52	118.51	116.54	74.48	73.24	72.02	73.75	72.51	71.31	0.30	28 1/2
29	0.29	0.0112	0.0113	0.0114	0.284	0.287	0.290	100.3	127.7	134.83	132.45	130.14	133.78	131.43	129.13	82.68	81.22	79.80	81.86	80.42	79.01	0.29	29
29-1/2	0.27	0.0105	0.0106	0.0107	0.267	0.269	0.272	88.2	112.4	153.40	150.52	147.72	152.22	149.36	146.58	94.07	92.30	90.58	93.14	91.39	89.69	0.27	29 1/2
30	0.254	0.0099	0.0100	0.0101	0.251	0.254	0.257	78.5	100.0	172.56	169.13	165.80	171.23	167.82	164.51	105.81	103.71	101.67	104.77	102.69	100.66	0.254	30
30-1/2	0.241	0.0094	0.0095	0.0096	0.239	0.241	0.244	70.9	90.3							117.4	114.9	112.5	116.2	113.8	111.4	0.241	30 1/2
31	0.226	0.0088	0.0089	0.0090	0.224	0.226	0.229	62.2	79.2							133.9	130.9	128.0	132.6	129.6	126.8	0.226	31
31-1/2		0.0083	0.0084	0.0085	0.211	0.213	0.216	55.4	70.6							150.5	147.0	143.5	149.1	145.5	142.1		31 1/2
32	0.203	0.0079	0.0080	0.0081	0.201	0.203	0.206	50.3	64.0							166.2	162.0	158.1	164.5	160.4	156.5	0.203	32
32-1/2		0.0074	0.0075	0.0076	0.188	0.191	0.193	44.2	56.3							189.4	184.4	179.6	187.5	182.6	177.8		32 1/2
33	0.180	0.0070	0.0071	0.0072	0.178	0.180	0.183	39.6	50.4							211.7	205.7	200.1	209.6	203.7	198.1	0.180	33
33-1/2		0.0066	0.0067	0.0068	0.168	0.170	0.173	35.3	44.9							238.1	231.0	224.3	235.7	228.8	222.1		33 1/2
34	0.160	0.0062	0.0063	0.0064	0.157	0.160	0.163	31.2	39.7							269.8	261.3	253.2	267.1	258.7	250.7	0.160	34
34-1/2		0.0058	0.0059	0.0060	0.147	0.150	0.152	27.3	34.8							308.3	297.9	288.1	305.2	295.0	285.2		34 1/2
35	0.142	0.0055	0.0056	0.0057	0.140	0.142	0.145	24.6	31.4							342.8	330.7	319.2	339.5	327.4	316.1	0.142	35
35-1/2		0.0052	0.0053	0.0054	0.132	0.135	0.137	22.1	28.1							383.5	369.2	355.7	379.8	365.6	352.1		35 1/2
36	0.127	0.0049	0.0050	0.0051	0.124	0.127	0.130	19.6	25.0							431.9	414.8	398.7	427.7	410.7	394.8	0.127	36
36-1/2		0.0046	0.0047	0.0048	0.117	0.119	0.122	17.3	22.1							490.1	469.5	450.1	485.3	464.9	445.7		36 1/2
37	0.114	0.0044	0.0045	0.0046	0.112	0.114	0.117	15.9	20.3							535.7	512.1	490.1	530.4	507.1	485.3	0.114	37
37-1/2		0.0041	0.0042	0.0043	0.104	0.107	0.109	13.9	17.6							616.9	587.9	560.9	610.9	582.1	555.4		37 1/2
38	0.102	0.0039	0.0040	0.0041	0.099	0.102	0.104	12.6	16.0							681.8	648.2	616.9	675.1	641.8	610.9	0.102	38
38-1/2		0.0036	0.0037	0.0038	0.091	0.094	0.097	10.8	13.7							800.2	757.6	718.2	792.3	750.1	711.1		38 1/2
39	0.090	0.0034	0.0035	0.0036	0.086	0.089	0.091	9.6	12.3							897.1	846.6	800.2	888.3	838.3	792.3	0.090	39
39-1/2		0.0032	0.0033	0.0034	0.081	0.084	0.086	8.6	10.9							1012.8	952.3	897.1	1002.8	942.9	888.3		39 1/2
40	0.079	0.0030	0.0031	0.0032	0.076	0.079	0.081	7.5	9.6							1152.3	1079.2	1012.8	1141.0	1068.5	1002.8	0.079	40
40-1/2		0.0029	0.0030	0.0031	0.074	0.076	0.079	7.1	9.0							1233	1152	1079	1221	1141	1069		40 1/2
41	0.071	0.0027	0.0028	0.0029	0.069	0.071	0.074	6.2	7.8							1423	1323	1233	1409	1310	1221	0.071	41
41-1/2		0.0025	0.0026	0.0027	0.064	0.066	0.069	5.3	6.8							1659	1534	1423	1643	1519	1409		41 1/2
42	0.064	0.0024	0.0025	0.0026	0.061	0.064	0.066	4.9	6.3							1801	1659	1534	1783	1643	1519	0.064	42
42-1/2		0.0023	0.0024	0.0025	0.058	0.061	0.064	4.5	5.8							1960	1801	1659	1941	1783	1643		42 1/2
43	0.056	0.0021	0.0022	0.0023	0.053	0.056	0.058	3.8	4.8							2352	2143	1960	2328	2122	1941	0.056	43
43-1/2		0.0020	0.0021	0.0021	0.051	0.053	0.053	3.5	4.4							2593	2352	2352	2567	2328	2328		43 1/2
44	0.051	0.0019	0.0020	0.0020	0.048	0.051	0.051	3.1	4.0							2873	2593	2593	2844	2567	2567	0.051	44
44-1/2		0.0018	0.0019	0.0019	0.046	0.048	0.048	2.8	3.6							3201	2873	2873	3169	2844	2844		44 1/2

AWG SIZE	MM size	BARE DIAMETER INCHES			BARE DIAMETER MM.			CROSS-SECT'L AREA		ALUMINUM ALLOY 8176			ALUMINUM ALLOY 1350			COPPER @ 100% conductivity			COPPER @ 101% conductivity			MM size	AWG SIZE
		Min.	Nom.	Max.	Min.	Nom.	Max.	From Nominal Diameter	Sq Mil	Circ Mil	OHMS PER 1000 FT. @ 20 C			OHMS PER 1000 FT. @ 20 C			OHMS PER 1000 FT. @ 20 C			OHMS PER 1000 FT. @ 20 C			
										MIN BARE	NOM BARE	MAX BARE	MIN BARE	NOM BARE	MAX BARE	MIN BARE	NOM BARE	MAX BARE	MIN BARE	NOM BARE	MAX BARE		
45	0.0447	0.00169	0.00176	0.00176	0.043	0.045	0.045	2.4	3.1							3631	3348	3348	3595	3315	3315	0.0447	45
45-1/2		0.00160	0.00166	0.00166	0.041	0.042	0.042	2.2	2.8							4051	3764	3764	4011	3726	3726		45 1/2
46	0.0399	0.00151	0.00157	0.00157	0.038	0.040	0.040	1.9	2.5							4548	4207	4207	4504	4166	4166	0.0399	46