

Electric Wire Structure Guide

Wire Number Table

Gauge	Diameter		Section Area			Weight kg/km				
	mmG	AWG	SWG	mm	mil	mm ²	in ²	CM	Copper	Aluminum
—	6/0	—	14.73	580.1	170.5	0.2643	336.500	1,516	460.4	—
—	5/0	—	13.12	500.0	135.2	0.2096	266.900	1,202	365.0	—
—	—	—	7/0	12.70	516.6	126.7	0.1964	250.000	1,126	342.1
—	12	—	—	12.00	472.4	113.1	0.1753	223.200	1,005	305.4
—	—	—	6/0	11.79	464.0	109.1	0.1691	215.300	969.9	294.6
—	4/0	—	11.68	460.0	107.2	0.1662	211.600	953.0	289.4	—
—	—	—	5/0	10.97	432.0	94.59	0.1466	186.600	840.9	255.4
—	3/0	—	10.40	409.6	85.04	0.1318	167.800	756.0	229.6	—
—	—	—	4/0	10.16	400.0	81.10	0.1257	160.000	721.0	219.0
—	10	—	—	10.00	393.7	78.54	0.1217	155.000	688.2	212.1
—	—	—	3/0	9.449	372.0	70.13	0.1087	138.400	623.5	189.4
—	2/0	—	9.266	364.8	67.43	0.1045	133.100	599.5	182.1	—
—	9	—	9.000	354.3	63.62	0.09861	125.600	565.6	171.8	—
—	—	—	2/0	8.839	348.0	61.37	0.09512	121.100	545.6	165.7
—	0	—	8.252	324.9	53.49	0.08291	105.600	475.5	144.4	—
—	—	—	0	8.230	324.0	53.20	0.08245	105.000	472.9	143.6
—	8	—	8.000	315.0	50.27	0.07791	99.210	446.9	135.7	—
—	—	—	1	7.620	300.0	45.61	0.07069	90.000	405.5	123.1
—	1	—	7.348	289.3	42.41	0.06573	83.690	377.0	114.5	—
—	—	—	2	7.010	276.0	38.60	0.05983	76.180	343.2	104.2
—	7	—	7.000	275.6	38.48	0.05964	75.940	342.1	103.9	—
—	2	—	6.543	257.6	33.63	0.05212	66.360	299.0	90.80	—
—	6.5	—	6.500	255.9	33.18	0.05143	65.480	295.0	89.59	—
—	—	—	3	6.401	252.0	32.18	0.04988	63.500	286.1	86.89
—	6	—	6.000	236.2	28.27	0.04382	55.790	251.3	76.33	—
—	—	—	4	5.893	232.0	27.27	0.04227	53.820	242.4	73.63
—	3	—	5.827	229.4	26.67	0.04133	52.620	237.1	72.01	—
—	5.5	—	5.500	216.5	23.76	0.03683	46.890	211.2	64.15	—
—	—	—	5	5.385	212.0	22.78	0.03530	44.940	202.5	61.51
—	4	—	5.189	204.3	21.15	0.03278	41.740	188.0	57.11	—
—	5	—	5.000	196.9	19.64	0.03041	38.760	174.6	53.03	—
—	—	—	6	4.877	192.0	18.68	0.02895	36.860	166.1	50.44
—	5	—	4.620	181.9	16.77	0.02599	33.090	149.0	45.25	—
—	4.5	—	4.500	177.2	15.90	0.02464	31.380	141.4	42.93	—
—	—	—	7	4.470	176.0	15.70	0.02433	30.980	139.6	42.39
—	6	—	4.115	162.0	13.30	0.02061	26.240	118.2	36.91	—
—	—	—	8	4.064	160.0	12.97	0.02011	25.600	115.3	35.02
—	4	—	4.000	157.5	12.57	0.01948	24.810	111.7	33.94	—
—	7	—	3.665	144.3	10.55	0.01635	20.820	93.79	28.49	—
—	—	—	9	3.658	144.0	10.51	0.01629	20.740	93.43	28.38
—	3.5	—	3.500	137.8	9.621	0.01491	18.900	85.53	25.98	—
—	8	—	3.264	128.5	8.368	0.01297	16.510	74.39	22.59	—
—	—	—	10	3.251	128.0	8.304	0.01287	16.380	73.82	22.42
—	3.2	—	3.200	126.0	8.042	0.01246	15.870	71.49	21.71	—
—	—	—	11	2.946	116.0	6.820	0.01057	13.460	60.63	18.41
—	9	—	2.906	114.4	6.633	0.01028	13.090	58.97	17.91	—
—	2.9	—	2.900	114.2	6.605	0.01024	13.040	58.72	17.83	—
—	—	—	12	2.642	104.0	5.481	0.008495	10.820	48.73	14.80
—	2.6	—	2.600	102.4	5.309	0.008228	10.480	47.20	14.33	—
—	—	—	10	2.588	101.9	5.262	0.008155	10.380	46.78	14.21
—	—	—	13	2.337	92.0	4.289	0.00648	8.464	38.13	11.58
—	11	—	2.304	90.7	4.169	0.00641	8.226	37.06	11.26	—
—	2.3	—	2.300	90.6	4.155	0.006400	8.200	36.94	11.22	—
—	12	—	2.052	80.8	3.309	0.005128	6.529	29.42	8.934	—
—	—	—	14	2.032	80.0	3.243	0.005027	6.400	28.83	8.756
—	2.0	—	2.000	78.7	3.142	0.004870	6.201	27.93	8.483	—
—	13	15	1.829	72.0	2.627	0.004072	5.184	23.35	7.093	—
—	1.8	—	1.800	70.9	2.545	0.003945	5.023	22.63	6.872	—
—	—	—	14	1.628	64.1	2.082	0.003227	4.109	18.51	5.621
—	—	—	16	1.626	64.0	2.076	0.003217	4.096	18.46	5.605
—	1.6	—	1.600	63.0	2.011	0.003117	3.969	17.88	5.430	—
—	15	—	1.450	57.1	1.652	0.002561	3.260	14.69	4.460	—
—	—	—	17	1.422	56.0	1.589	0.002463	3.136	14.13	4.290
—	1.4	—	1.400	55.1	1.539	0.002385	3.037	13.68	4.155	—
—	16	—	1.290	50.8	1.308	0.002027	2.581	11.63	3.532	—

Gauge	Diameter		Section Area			Weight kg/km				
	mmG	AWG	SWG	mm	mil	mm ²	in ²	CM	Copper	Aluminum
—	—	18	1.219	48.0	1.168	0.001910	2.304	10.38	3.154	—
—	1.2	—	1.200	47.2	1.131	0.001753	2.232	10.05	3.064	—
—	—	17	—	1.151	45.3	1.040	0.001612	2.052	9.246	2.808
—	—	18	—	1.024	40.3	0.8233	0.001276	1.624	7.319	2.223
—	—	19	—	1.016	40.0	0.8110	0.001257	1.600	7.210	2.190
—	1.0	—	1.000	39.4	0.7854	0.001217	1.550	6.982	2.121	—
—	—	20	0.9144	36.0	0.6568	0.001018	1.296	5.839	1.773	—
—	—	19	—	0.9119	35.9	0.6529	0.001012	1.289	5.804	1.763
—	0.9	—	0.8000	35.4	0.6362	0.0009861	1.256	5.656	1.718	—
—	—	20	21	0.8128	32.0	0.5189	0.0008042	1.024	4.613	1.401
—	0.8	—	0.8000	34.5	0.5027	0.0007791	992.1	4.469	1.357	—
—	—	21	—	0.7239	28.5	0.4116	0.0006379	812.3	3.659	1.111
—	—	22	—	0.7112	28.0	0.3973	0.0006158	784.0	3.532	1.073
—	0.7	—	0.7000	27.6	0.3848	0.0005964	759.4	3.421	1.039	—
—	0.65	—	0.6500	25.6	0.3318	0.0005143	654.8	2.950	0.8959	—
—	—	22	—	0.6426	25.3	0.3243	0.0005027	640.1	2.883	0.8756
—	—	23	—	0.6096	24.0	0.2919	0.0004524	576.0	2.595	0.7881
—	0.60	—	0.6000	23.6	0.2827	0.0004282	557.9	2.513	0.7633	—
—	—	23	—	0.5740	22.6	0.2589	0.0004012	510.8	2.302	0.6990
—	—	24	—	0.5588	22.0	0.2452	0.0003801	484.0	2.180	0.6620
—	0.55	—	0.5500	21.7	0.2376	0.0003683	468.9	2.112	0.6416	—
—	—	24	—	0.5105	20.1	0.2047	0.0003173	404.0	1.820	0.5527
—	—	25	—	0.5080	20.0	0.2027	0.0003142	400.0	1.802	0.5473
—	0.50	—	0.5000	19.7	0.1964	0.0003044	387.6	1.746	0.5303	—
—	—	26	—	0.4572	18.0	0.1642	0.0002545	324.0	1.460	0.4433
—	—	25	—	0.4547	17.9	0.1624	0.0002517	320.4	1.444	0.4385
—	0.45	—	0.4500	17.7	0.1590	0.0002464	313.8	1.414	0.4293	—
—	—	27	—	0.4166	16.4	0.1363	0.0002112	269.0	1.212	0.3680
—	—	26	—	0.4039	15.9	0.1281	0.0001986	252.8	1.139	0.3459
—	0.40	—	0.4000	15.7	0.1257	0.0001948	248.1	1.117	0.3394	—
—	—	28	—	0.3759	14.8	0.1110	0.0001720	219.0	0.9688	0.2997
—	—	27	—	0.3607	14.2	0.1022	0.0001584	201.6	0.9086	0.2759
—	0.35	—	0.3500	13.8	0.09621	0.0001491	189.9	0.8553	0.2598	—
—	—	29	—	0.3454	13.6	0.09375	0.0001453	185.0	0.8334	0.2531
—	—	28	—	0.3200	12.6	0.08046	0.0001247	158.8	0.7153	0.2172
—	0.32	—	0.3200	12.6	0.08042	0.0001246	158.7	0.7149	0.2171	—
—	—	30	—	0.3150	12.4	0.07794	0.0001208	153.8	0.6929	0.2104
—	—	31	—	0.2946	11.6	0.06620	0.0001057	134.6	0.6063	0.1841
—	0.29	—	0.2900	11.4	0.06605	0.0001024	130.4	0.5872	0.1783	—
—	—	29	—	0.2870	11.3	0.06471	0.0001003	127.7	0.5753	0.1747
—	—	32	—	0.2743	10.8	0.05911	0.00009161	116.6	0.5255	0.1596
—	0.26	—	0.2600	10.2	0.05309	0.00008228	104.8	0.4720	0.1433	—
—	—	30	33	0.2540	10.0	0.05067	0.00007854	100.0	0.4505	0.1368
—	—	34	—	0.2337	9.2	0.04289	0.00006648	84.64	0.3813	0.1158
—	0.23	—	0.2300	9.1	0.04155	0.00006440	82.00	0.3694	0.1122	—
—	—	31	—	0.2261	8.9	0.04014	0.00006221	79.21	0.3568	0.1084
—	—	35	—	0.2134	8.4	0.03576	0.00005542	70.56	0.3179	0.09655
—	—	32	—	0.2032	8.0	0.03243	0.00005027	64.00	0.2883	0.08756
—	0.20	—	0.2000	7.9	0.03142	0.00004870	62.01	0.2793	0.08483</	