HM Wire International, Inc.

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Bare Copper Wire Table Weight and Resistance

To be used as a guideline only.

AWG	Diameter (inches)	Diameter (mm)	Weight		Resistance @ 20*C	
			Pounds / 1000		OHMS	
			ft.	Feet / lb.	/ 1000 ft.	OHMS / Ib.
4/0	0.4600	11.684	640.5	1.561	0.04901	0.00007652
3/0	0.4100	10.404	507.9	1.968	0.06180	0.0001217
2/0	0.3650	9.266	402.8	2.482	0.07793	0.0001217
1/0	0.3250	8.253	319.5	3.13	0.09827	0.003076
1	0.2890	7.348	253.3	3.948	0.1239	0.0004891
2	0.2580	6.543	200.9	4.978	0.1563	0.0007780
3	0.2290	5.827	189.3	6.277	0.1903	0.0007780
4	0.2040	5.189	126.4	7.918	0.2485	0.001237
5						
	0.1820	4.62	100.2 79.44	9.980	0.3134	0.003128
6	0.1620	4.115	-	12.59	0.3952	0.004975
7	0.1440	3.665	63.03	15.87	0.4981	0.007903
8	0.1280	3.264	49.98	20.01	0.6281	0.012567
9	0.1140	2.906	39.62	25.24	0.7925	0.020003
10	0.1020	2.588	31.43	31.82	0.9987	0.031775
11	0.0910	2.305	24.90	40.16	1.261	0.05064
12	0.0810	2.053	19.76	50.61	1.588	0.08036
13	0.0720	1.828	15.69	63.73	2.001	0.12753
14	0.0640	1.628	12.44	80.39	2.524	0.20289
15	0.0570	1.45	9.87	101.32	3.181	0.32229
16	0.0510	1.291	7.812	128	4.018	0.5143
17	0.0450	1.15	6.213	161	5.054	0.8135
18	0.0400	1.024	4.914	203.5	6.386	1.2996
19	0.0360	0.912	3.900	256.4	8.046	2.0631
20	0.0320	0.812	3.099	322.7	10.128	3.2682
21	0.0285	0.723	2.459	406.7	12.77	5.193
22	0.0253	0.644	1.937	516.3	16.20	8.363
23	0.0226	0.573	1.546	646.8	20.30	13.131
24	0.0201	0.511	1.223	817.7	25.67	20.989
25	0.0179	0.455	0.970	1031	32.37	33.371
26	0.0179	0.404	0.7650	1307	41.02	53.62
27	0.0139	0.361	0.6101	1639	51.44	84.31
28		0.320				135.89
	0.0126		0.4806	2081	65.31	
29	0.0113	0.287	0.3866	2587	81.21	210.06
30	0.0100	0.254	0.3025	3306	103.71	342.84
31	0.0089	0.226	0.2398	4170	133.9	545.9
32	0.0080	0.203	0.1937	5163	162.0	836.3
33	0.0071	0.18	0.1526	6553	205.7	1348.1
34	0.0063	0.160	0.1201	8326	261.3	2175.7
35	0.0056	0.142	0.0949	10537	330.7	3484.7
36	0.0050	0.127	0.07569	13212	414.8	5480
37	0.0045	0.114	0.06128	16319	512	8357
38	0.0040	0.102	0.04844	20644	648	13381
39	0.0035	0.089	0.03708	26969	847	22832
40	0.0031	0.079	0.02910	34364	1079	37086
41	0.0028	0.071	0.02374	42123	1323	55729
42	0.0025	0.064	0.01892	52854	1659	87658
43	0.0022	0.056	0.01465	68259	2143	146280
44	0.0020	0.051	0.01210	82645	2593	214298
45	0.00176	0.0447	0.00939	106500	3348	356562
46	0.00157	0.0399	0.00744	134400	4207	565421
47	0.00140	0.0356	0.00591	169200	5291	895237
48	0.00140	0.0315	0.00469	213400	6745	1439383
49	0.00124	0.0282	0.00409	269700	8417	2270065
50	0.00099	0.0251	0.00371	339700	10580	3594026
	used as a guide		0.00234	333100	10300	3334020