



SOLID COPPER WIRE

ANNEALED UNCOATED

WIRE SIZE AWG	APPROXIMATE DIAMETER IN INCHES	CROSS SECTIONAL AREA			MAXIMUM BREAKING STRENGTH LBS.	*MAX. d-c RESISTANCE @ 20C OHMS/M FT.
		CIRCULAR MILS	SQUARE INCHES	APPROX. LBS./M FT		
34	0.0063	39.7	0.0000312	0.120		261.
32	0.0080	64.	0.0000503	0.194		162.
30	0.0100	100.	0.0000785	0.303		104.
29	0.0113	128.	0.000100	0.387		81.2
28	0.0126	159.	0.000125	0.481		65.3
27	0.0142	202.	0.000158	0.610		51.4
26	0.0159	253.	0.000199	0.765		41.0
25	0.0179	320.	0.000252	0.970		32.4
24	0.0201	404.	0.000317	1.22		25.7
23	0.0226	511.	0.000401	1.55	15.4	20.3
22	0.0253	640.	0.000503	1.94	19.4	16.2
21	0.0285	812.	0.000638	2.46	24.6	12.8
20	0.0320	1,020.	0.000804	3.10	31.0	10.1
18	0.0403	1,620.	0.00128	4.92	49.1	6.39
16	0.0508	2,580.	0.00203	7.81	73.0	4.02
14	0.0641	4,110.	0.00323	12.4	124.0	2.52
12	0.0808	6,530.	0.00513	19.8	197.0	1.59
10	0.1019	10,380.	0.008155	31.43	314.0	.9988
9	0.1144	13,090.	0.01028	39.62	380.3	.7925
8	0.1285	16,510.	0.01297	49.98	479.8	.6281
7	0.1443	20,820.	0.01635	63.03	605.1	.4981
6	0.1620	26,240.	0.02061	79.44	762.6	.3952
5	0.1819	33,090.	0.02599	100.2	961.5	.3134
4	0.2043	41,740.	0.03278	126.3	1213.0	.2485
3	0.2294	52,620.	0.04133	159.3	1529.0	.1971
2	0.2575	66,360.	0.05212	200.9	1928.0	.1563

By using the table listed below, you can ascertain the size of any stranded conductor by determining the size of the individual strand and the number of these strands in the conductor.

VARIOUS STRANDING COMBINATIONS

Size Cir. Mils or AWG	Approx. Overall Diameter Inches	NUMBER OF INDIVIDUAL WIRE STRANDS														
		3	7	12	19	37	61	91	127	169	217	49 (7x7)	133 (19x7)	259 (37x7)	427 (61x7)	703 (37x19)
16	.058	.0293	.0192	.0147	.0117	.0084	.0065	.0053	.0045	.0039	.0035	.0073	.0044			
14	.073	.0370	.0242	.0185	.0147	.0105	.0082	.0067	.0057	.0049	.0044	.0092	.0056			
12	.092	.0467	.0305	.0233	.0185	.0133	.0103	.0085	.0072	.0062	.0055	.0155	.0070	.0050		
10	.115	.0589	.0385	.0294	.0234	.0167	.0131	.0107	.0090	.0078	.0069	.0146	.0088	.0063		
8	.146	.0742	.0486	.0371	.0295	.0211	.0165	.0135	.0114	.0099	.0087	.0184	.0111	.0080	.0062	
6	.184	.0935	.0612	.0468	.0372	.0266	.0207	.0170	.0144	.0125	.0110	.0231	.0140	.0101	.0078	.0061
5	.206	.1050	.0688	.0525	.0417	.0299	.0233	.0191	.0161	.0140	.0124	.0260	.0158	.0113	.0088	.0069
4	.232	.1180	.0772	.0590	.0469	.0336	.0262	.0214	.0181	.0157	.0139	.0292	.0177	.0127	.0099	.0077
3	.260	.1325	.0867	.0662	.0526	.0377	.0294	.0241	.0204	.0176	.0156	.0328	.0199	.0143	.0111	.0087
2	.292	.1487	.0974	.0744	.0591	.0424	.0330	.0270	.0229	.0198	.0175	.0368	.0223	.0160	.0125	.0097
1	.328	.1670	.1093	.0835	.0664	.0476	.0370	.0303	.0257	.0223	.0196	.0413	.0251	.0180	.0140	.0109
0	.368	.1875	.1228	.0938	.0745	.0534	.0416	.0341	.0288	.0250	.0220	.0464	.0282	.0202	.0157	.0123
00	.414	.2106	.1379	.1053	.0837	.0600	.0467	.0382	.0323	.0281	.0248	.0521	.0316	.0227	.0177	.0138
000	.464	.2365	.1548	.1183	.0940	.0673	.0525	.0429	.0364	.0315	.0278	.0585	.0355	.0255	.0198	.0154
0000	.522	.2656	.1739	.1328	.1055	.0756	.0589	.0482	.0408	.0354	.0312	.0657	.0399	.0286	.0223	.0173
250,000	.574	.1890	.1443	.1147	.0822	.0640	.0524	.0444	.0385	.0339	.0314	.0434	.0311	.0242	.0189	.0149
300,000	.629	.2070	.1581	.1257	.0900	.0701	.0574	.0486	.0421	.0372	.0340	.0475	.0340	.0265	.0207	.0154
350,000	.679	.2236	.1708	.1357	.0973	.0757	.0620	.0525	.0455	.0402	.0365	.0513	.0368	.0286	.0223	.0169
400,000	.726	.2390	.1826	.1451	.1040	.0810	.0663	.0561	.0487	.0429	.0394	.0548	.0393	.0306	.0239	.0184
450,000	.772	.2533	.1936	.1539	.1103	.0859	.0703	.0595	.0516	.0455	.0415	.0598	.0422	.0325	.0253	.0194
500,000	.813	.2673	.2041	.1622	.1162	.0905	.0741	.0627	.0544	.0480	.0430	.0613	.0439	.0342	.0267	.0204
600,000	.891	.2928	.2236	.1777	.1275	.0992	.0812	.0687	.0596	.0526	.0472	.0672	.0481	.0375	.0292	.0221
700,000	.964	.3162	.2415	.1919	.1375	.1071	.0877	.0742	.0644	.0568	.0515	.0725	.0520	.0405	.0316	.0240
750,000	.998	.3275	.2500	.1987	.1424	.1109	.0908	.0768	.0666	.0588	.0533	.0751	.0538	.0419	.0327	.0251
800,000	1.031	.3381	.2582	.2052	.1470	.1145	.0938	.0794	.0688	.0608	.0551	.0776	.0556	.0433	.0337	.0259
900,000	1.094	.3586	.2739	.2176	.1560	.1215	.0994	.0842	.0730	.0644	.0585	.0823	.0589	.0459	.0358	.0271
1,000,000	1.152	.3780	.2887	.2294	.1644	.1280	.1048	.0887	.0769	.0679	.0619	.0867	.0621	.0484	.0371	.0281
1,250,000	1.288	.4226	.3227	.2565	.1838	.1431	.1172	.0992	.0860	.0759	.0699	.0969	.0719	.0541	.0419	.0321
1,500,000	1.411	.4629	.3535	.2810	.2013	.1568	.1284	.1087	.0942	.0831	.0769	.1062	.0799	.0609	.0469	.0351
1,750,000	1.526	.5000	.3819	.3035	.2175	.1694	.1387	.1174	.1018	.0898	.0829	.1147	.0869	.0669	.0519	.0391
2,000,000	1.630	.5345	.4082	.3244	.2325	.1811	.1482	.1255	.1088	.0960	.0881	.1226	.0929	.0719	.0549	.0411