

Bare Copper

Bare Copper Conductor. Solid and Stranded.



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

Bare copper, solid or stranded. Tinned copper available upon request.

Available in tempers hard, medium-hard, or soft.

Stranded conductors are concentrically stranded in hard and medium-hard tempers and are Combination Unilay stranded in the soft-drawn temper.

APPLICATIONS AND FEATURES:

Solid and stranded copper are suitable for grounding and distribution applications. Stranded conductors offer greater flexibility (classes B, C and D). Compact stranded copper offers smaller conductor OD.

SPECIFICATIONS:

- ASTM B1 Hard-Drawn Copper
- ASTM B2 Medium-Hard Drawn Copper Wire
- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
- ASTM B496 Compact Round Concentric-lay-standard copper



Solid, Stranded Bare Copper

AWG	Cmils	Solid Diam	Class B Strands	Class B Diam	Class C Strands	Class C Diam	Class D Strands	Class D Diam	Copper Weight	Copper Resistance dc
		inches		inches		inches		inches	Lbs/1000 ft.	Ohms/1000ft @ 20C
2000	2000000	1.414	127	1.583	169	1.632	217	1.632	6175	0.00529
1750	1750000	1.323	127	1.480	169	1.527	217	1.526	5403	0.00604
1500	1500000	1.245	91	1.370	127	1.413	169	1.413	4631	0.00705
1250	1250000	1.118	91	1.250	127	1.289	169	1.290	3859	0.00846
1000	1000000	1.00	61	1.117	91	1.152	127	1.153	3088	0.0106
900	900000	0.9487	61	1.060	91	1.093	127	1.094	2779	0.0118
800	800000	0.8944	61	1.000	91	1.031	127	1.032	2470	0.0132
750	750000	0.866	61	0.986	91	0.998	127	0.998	2316	0.0141
700	700000	0.8367	61	0.935	91	0.964	127	0.964	2161	0.0151
650	650000	0.8062	61	0.901	91	0.929	127	0.929	2007	0.0163
600	600000	0.7746	61	0.866	91	0.893	127	0.893	1853	0.0176
550	550000	0.7416	61	0.829	91	0.854	127	0.855	1698	0.0192
500	500000	0.7071	37	0.789	61	0.814	91	0.815	1544	0.0212
450	450000	0.6708	37	0.749	61	0.773	91	0.773	1389	0.0235
400	400000	0.6325	37	0.706	61	0.729	91	0.729	1235	0.0264
350	350000	0.5916	37	0.661	61	0.681	91	0.682	1081	0.0302
300	300000	0.5477	37	0.611	61	0.630	91	0.631	926.3	0.0353
250	250000	0.500	37	0.558	61	0.576	91	0.576	771.9	0.0423
4/0	211600	0.460	19	0.512	37	0.529	61	0.530	653.1	0.0500
3/0	167800	0.4096	19	0.456	37	0.471	61	0.471	518.1	0.063
2/0	133100	0.3648	19	0.405	37	0.420	61	0.420	410.9	0.0795
1/0	105600	0.3249	19	0.362	37	0.373	61	0.374	325.8	0.100
1	83690	0.2893	19	0.322	37	0.333	61	0.333	258.4	0.126
2	66360	0.2576	7	0.283	19	0.295	37	0.296	204.9	0.159
3	52620	0.2294	7	0.252	19	0.263	37	0.263	162.5	0.201
4	41740	0.2043	7	0.225	19	0.234	37	0.235	128.9	0.253
6	26240	0.162	7	0.178	19	0.186	37	0.186	81.05	0.403
8	16510	0.1285	7	0.142	19	0.147	37	0.147	50.97	0.640
9	13090	0.114	7	0.126	19	0.131	37	0.131	40.42	0.809
10	10380	0.1019	7	0.113	19	0.117	37	0.116	32.06	1.02
12	6530	0.0808	7	0.089	19	0.0925	37	0.093	20.16	1.63
14	4110	0.0641	7	0.071	19	0.0735	37	0.073	12.68	2.58
16	2580	0.051	7	0.0576	19	0.0585	-----	-----	7.974	4.1
18	1620	0.040	7	0.0456	19	0.0460	-----	-----	5.015	6.54
20	1020	0.032	7	0.0363	19	0.0365	-----	-----	3.154	10.3



Compact Bare Copper

AWG	Cmils	Class B Strands	Class B Diam inches	Copper Weight Lbs/1000 ft.	Copper Resistance dc Ohms/1000ft @ 20C
1000	1000000	61	1.06	3086	0.0106
900	900000	61	0.999	2780	0.0118
800	800000	61	0.938	2469	0.0132
750	750000	61	0.908	2316	0.0141
700	700000	61	0.877	2160	0.0151
650	650000	61	0.845	2006	0.0163
600	600000	61	0.813	1850	0.0176
550	550000	61	0.775	1700	0.0192
500	500000	37	0.736	1542	0.0212
450	450000	37	0.7	1390	0.0235
400	400000	37	0.659	1236	0.0264
350	350000	37	0.616	1080	0.0302
300	300000	37	0.57	925	0.0353
250	250000	37	0.52	772	0.0423
4/0	211600	19	0.475	653	0.05
3/0	167800	19	0.423	518	0.063
2/0	133100	19	0.376	411	0.0795
1/0	105600	19	0.336	326	0.1
1	83690	19	0.299	259	0.126
2	66350	7	0.268	205	0.159
4	41740	7	0.213	129	0.253
6	26240	7	0.169	80.9	0.403
8	16510	7	0.134	51	0.641

