

American Wire Gauge Sizes

The table below shows various data for copper and aluminum stranded conductors.

AMERICAN WIRE GAUGE (AWG) SIZES							
AWG/kcmil	Stranding ²	Diameter		Copper DC Resistance @ 20°C		Aluminum DC Resistance @ 20°C	
		in	mm	(Ω/kft)	(Ω/km)	(Ω/kft)	(Ω/km)
1,000	61	1.117	28.372	0.0106	0.0348	0.0173	0.0568
750	61	0.968	24.587	0.0141	0.0462	0.0231	0.0758
600	61	0.866	21.996	0.0177	0.0581	0.0289	0.0948
500	37	0.789	20.041	0.0212	0.0695	0.0035	0.1140
400	37	0.706	17.932	0.0264	0.0866	0.0434	0.1420
350	37	0.661	16.789	0.0302	0.0991	0.0495	0.1620
300	37	0.611	15.519	0.0353	0.1160	0.0578	0.1870
250	19	0.558	14.173	0.0423	0.1390	0.0694	0.2280
0000 (4/0)	19	0.512	13.005	0.0500	0.1640	0.0820	0.2690
000 (3/0)	19	0.456	11.582	0.0630	0.2070	0.1030	0.3380
00 (2/0)	19	0.405	10.287	0.7950	0.2610	0.1300	0.4270
0 (1/0)	19	0.362	9.195	0.1000	0.3280	0.1640	0.5380
1	7	0.322	8.179	0.1270	0.5220	0.2070	0.6790
2	7	0.283	7.188	0.1590	0.6590	0.2610	0.8560
4	7	0.225	5.715	0.2530	1.0500	0.4160	1.3600
6	19	0.178	4.521	0.4030	1.3200	0.6610	2.1700
8 ¹	7	0.142	3.607	0.6400	2.1000	1.0500	3.4400
10	7	0.126	3.200	1.0200	3.3500	1.6700	5.4800
12	7	0.113	2.870	1.6300	5.3500	2.6700	8.7600
14	7	0.071	1.803	2.5800	8.4600	4.2200	13.8000
16	7	0.0576	1.463	4.1000	13.4000	6.7100	22.0000
18	7	0.0456	1.158	6.5400	21.4000	10.7000	35.1000
20	7	0.0363	0.922	10.3000	33.8000	16.9000	55.4000
22	7	0.0288	0.732	16.4000	53.8000	-	-
24	-	0.0228	0.579	26.1000	85.6000	-	-
25	-	0.0179	0.455	106.2000	32.3700	-	-
26	-	0.0159	0.405	133.9000	40.8100	-	-
27	-	0.0142	0.361	168.9000	51.4700	-	-
28	-	0.0126	0.321	212.9000	64.9000	-	-

¹8AWG, Combination Unilay-Stranded, Per ASTM B787

²24AWG through 1000kcmil, Reverse Concentric Compressed Class B, ASTM B8