

COPPER CONDUCTOR AND STRANDING DATA

CONCENTRIC STRAND

ROPE LAY

Approx. O.D.	Pounds /1000 ft	Circular Mils	Size AWG /CM	CONCENTRIC STRAND					ROPE LAY			
				Class AA	Class A	Class B	Class C	Class D	CONCENTRIC STRAND		BUNCH STRAND	
									Class G	Class H	Class K 30 AWG (0.010")	Class M 34 AWG (0.0063")
0.0050	0.0757	25.00	36									
0.0056	0.0954	31.52	35									
0.0063	0.1203	39.75	34									
0.0071	0.1517	50.13	33									
0.0080	0.1913	63.21	32									
0.0089	0.2413	79.70	31									
0.0100	0.3042	100.5	30									
0.0113	0.3836	126.7	29									
0.0126	0.4837	159.8	28									
0.0142	0.6100	201.5	27									
0.0159	0.7692	254.1	26									
0.0179	0.9699	320.4	25									
0.0201	1.2230	404.0	24									
0.0226	1.5420	509.5	23									
0.0254	1.9450	642.4	22									
0.0285	2.4520	810.1	21									
0.0363	3.1540	1,020	20			7	19				10	26
0.0456	5.0150	1,620	18			7	19				16	41
0.0576	7.9740	2,580	16			7	19				26	65
0.0726	12.680	4,110	14			7	19	37	49		41	104
0.0915	20.160	6,530	12			7	19	37	49		65	168
0.1160	32.060	10,380	10			7	19	37	49		104	259
0.1600	40.420	13,090	9			7	19	37	49	133		
0.1460	51.000	16,510	8			7	19	37	49	133	168	420
0.1840	80.900	26,240	6			7	19	37	49	133	266	665
0.2320	129.00	41,740	4	3	7	7	19	37	49	133	420	1064
0.2600	162.00	52,620	3	3	7	7	19	37	49	133	532	1323
0.2990	205.00	66,630	2	3	7	7	19	37	49	133	665	1666
0.3320	259.00	83,690	1	3	7	19	37	61	133	259	836	2107
0.3730	326.00	105,600	1/0	7	7	19	37	61	133	259	1064	2646
0.4190	411.00	133,100	2/0	7	7	19	37	61	133	259	1323	3325
0.4700	518.00	167,800	3/0	7	7	19	37	61	133	259	1666	4256
0.5280	653.00	211,600	4/0	7	7	19	37	61	133	259	2107	5320
0.5750	772.00	250,000	250,000	12	19	37	61	91	259	427	2499	6384
0.6300	925.00	300,000	300,000	12	19	37	61	91	259	427	2989	7581
0.6810	1080.0	350,000	350,000	12	19	37	61	91	259	427	3458	8806
0.7280	1236.0	400,000	400,000	19	19	37	61	91	259	427	3990	10,101
0.8130	1542.0	500,000	500,000	19	37	37	61	91	259	427	5054	12,691
0.8930	1850.0	600,000	600,000	37	37	61	91	127	427	703	5985	14,945
0.9980	2316.0	750,000	750,000	37	61	61	91	127	427	703	7581	18,788
1.1520	3086.0	1,000,000	1,000,000	37	61	61	91	127	427	703	10,101	25,193

COPPER CONDUCTOR AND STRANDING DATA

DIMENSIONS AND WEIGHTS OF SOLID COPPER WIRE				
Size AWG	Approx. Diameter	Circular Mils	Square Inches	Approx. Lbs./Mft
34	0.0063	39.7	0.0000312	0.120
32	0.0080	64.0	0.0000503	0.194
30	0.0100	100	0.0000785	0.303
29	0.0113	128	0.000100	0.387
28	0.0126	159	0.000125	0.481
27	0.0142	202	0.000158	0.610
26	0.0159	253	0.000199	0.765
25	0.0179	320	0.000252	0.970
24	0.0201	404	0.000317	1.22
23	0.0226	511	0.000401	1.55
22	0.0253	640	0.000503	1.94
21	0.0285	812	0.000638	2.46
20	0.0320	1020	0.000804	3.08
18	0.0403	1620	0.00128	4.90
16	0.0508	2580	0.00203	7.80
14	0.0641	4110	0.00323	12.4
12	0.0808	6530	0.00513	19.8
10	0.1019	10,380	0.00815	31.40
9	0.1144	13,090	0.01028	39.60
8	0.1300	16,510	0.01297	49.90
7	0.1443	20,820	0.01635	63.00
6	0.1620	26,240	0.02061	79.30
5	0.1819	33,090	0.02599	100.0
4	0.2043	41,740	0.03278	126.0
3	0.2294	52,620	0.04133	159.0
2	0.2576	66,360	0.05212	200.0

STRANDING-CLASS CONSTRUCTION AND USES

CONCENTRIC-LAY CONDUCTORS

Class B - Power cables

Class C - Power cables where more flexible stranding from Class B is desired

Class D - Power cables where more flexible stranding is desired

ROPE-LAY AND BUNCH-STRANDED CONDUCTORS

Class G - All cables for portable use

Class H - All cables where extreme flexibility is required, e.g. take-up reels

Class I - Apparatus cable and motor leads

Class K - Cords and cables 30 AWG copper wires - Stationary service

Class M - Cords and cables 34 AWG copper wires - Constant service

Note: Class G and H shall have concentric-lay stranded members and Class I, K and M have bunched stranded members.