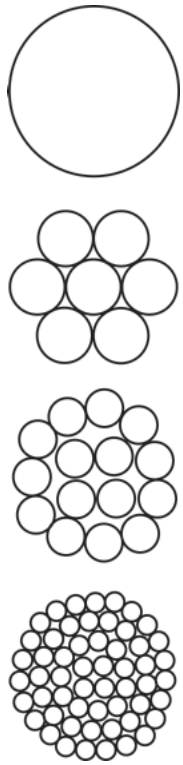
European Cable Stranding

European conductor stranding acc. to IEC 60228, VDE 0295

cross section mm²	IEC 60228 class 5/DIN VDE 0295		IEC 60228 class 6/DIN VDE 0295	
	No. of wires	max wire-ø mm	No. of wires	max wire-ø mm
0.14*			≈ 18 x 0.11	
0.25*	≈ 14 x 0.16		≈ 32 x 0.11	
0.34*	≈ 7 x 0.26		≈ 42 x 0.11	
0.50	≈ 15/17 x 0.21		≈ 28 x 0.16	
0.75	≈ 23 x 0.21		≈ 42 x 0.16	
1.00	≈ 30 x 0.21		≈ 56 x 0.16	
1.50	≈ 27-29 x 0.26		≈ 84 x 0.16	
2.50	≈ 46 x 0.26		≈ 140 x 0.16	
4.00	≈ 52 x 0.31		≈ 224 x 0.16	
6.00	≈ 78 x 0.31		≈ 186 x 0.21	
10.00	≈ 77 x 0.41		≈ 320 x 0.21	
16.00	≈ 122 x 0.41		≈ 504 x 0.21	
25.00	≈ 190 x 0.41		≈ 760 x 0.21	
35.00	≈ 272 x 0.41		≈ 1083 x 0.21	
50.00	≈ 400 x 0.41		≈ 703 x 0.31	
70.00	≈ 543 x 0.41		≈ 988 x 0.31	
95.00	≈ 484 x 0.51		≈ 1340 x 0.31	
120.00	≈ 589 x 0.51		≈ 1680 x 0.31	
150.00	≈ 740 x 0.51		≈ 2122 x 0.31	
185.00	≈ 902 x 0.51		≈ 1472 x 0.41	
240.00	≈ 1220 x 0.51		≈ 1910 x 0.41	
300.00	≈ 1525 x 0.51			



* with reference to IEC 60228

Comparison of European and American conductor sizes

Nominal cross section of copper conductors											
mm²	AWG/ MCM	mm²	AWG/ MCM	mm²	AWG/ MCM	mm²	AWG/ MCM	mm²	AWG/ MCM	mm²	AWG/ MCM
0.08	28	0.50	20	2.50	14	16.00	6	70.00	2/0	185.00	350
0.14	26	0.75	19	4.00	12	25.00	4	95.00	3/0	240.00	450
0.25	24	1.00	18	6.00	10	35.00	2	120.00	4/0	300.00	550
0.34	22	1.50	16	10.00	8	50.00	1	150.00	250		

American Cable Stranding

AWG = actual cross section in mm² and conductor resistance

AWG is shown below with its exact equivalent value in mm² and diameter (mm).
The table on the previous page shows commercially used equivalent values, which are approximations.

AWG number	cross section mm²	Ø mm	conductor resistance Ω/km
1000 MCM	507	29.3	0.036
900	456	27.8	0.040
750	380	25.4	0.048
600	304	22.7	0.061
550	279	21.7	0.066
500	253	20.7	0.070
450	228	19.6	0.080
400	203	18.5	0.090
350	177	17.3	0.100
300	152	16.3	0.120
250	127	14.5	0.140
4/0	107.2	11.68	0.180
3/0	85.0	10.40	0.230
2/0	67.4	9.27	0.290
0	53.4	8.25	0.370
1	42.4	7.35	0.470
2	33.6	6.54	0.570
3	26.7	5.83	0.710
4	21.2	5.19	0.910
5	16.8	4.62	1.120
6	13.3	4.11	1.440
7	10.6	3.67	1.780
8	8.34	3.26	2.360
9	6.62	2.91	2.770
10	5.26	2.59	3.640
11	4.15	2.30	4.440
12	3.31	2.05	5.410
13	2.63	1.83	7.020

4/0 is also known as 0000, 1 mil = inch = 0.0254 mm
Shown in MCM (circular mills) for bigger cross sections

AWG number	cross section mm²	Ø mm	conductor resistance Ω/km
14	2.08	1.63	8.79
15	1.65	1.45	11.2
16	1.31	1.29	14.7
17	1.04	1.15	17.8
18	0.8230	1.0240	23.0
19	0.6530	0.9120	28.3
20	0.5190	0.8120	34.5
21	0.4120	0.7230	44.0
22	0.3240	0.6440	54.8
23	0.2590	0.5730	70.1
24	0.2050	0.5110	89.2
25	0.1630	0.4550	111.0
26	0.1280	0.4050	146.0
27	0.1020	0.3610	176.0
28	0.0804	0.3210	232.0
29	0.0646	0.2860	282.0
30	0.0503	0.2550	350.0
31	0.0400	0.2270	446.0
32	0.0320	0.2020	578.0
33	0.0252	0.1800	710.0
34	0.0200	0.1600	899.0
35	0.0161	0.1430	1125.0
36	0.0123	0.1270	1426.0
37	0.0100	0.1130	1800.0
38	0.00795	0.1010	2255.0
39	0.00632	0.0897	2860.0

1 CM = 1 Circ. mil = 0.0005067 mm²
1 MCM = 1000 Circ. mils = 0.5067 mm²