



Cu wire dimensions according to QQ-W 343

AWG sizes are also often used to describe the structure of stranded wires. In this case, the total cross-section is specified without taking into account the distances between individual cores. In the case of round cores, the distances take up approximately 10% of the total cross-section. For this reason, an approximately 5% larger cross-section must be selected for stranded wires than for wire.

Conductor wire table for soft annealed copper wires [T °C]

AWG Size	Wire diameter [mm]	Cross section [mm ²]	Resistance [Ω/km]	Weight [kg/km]
40	0,0787	0,00487	3543	0,0433
39	0,0889	0,00621	2779	0,0552
38	0,102	0,00813	2126	0,0720
37	0,114	0,0103	1680	0,0912
36	0,127	0,0126	1362	0,113
35	0,142	0,0159	1086	0,141
34	0,160	0,0201	856,3	0,178
33	0,180	0,0255	675,9	0,228
32	0,203	0,0325	531,5	0,289
31	0,226	0,0401	429,8	0,357
30	0,254	0,0506	341,2	0,451
29	0,287	0,0645	266,4	0,576
28	0,320	0,0807	214,2	0,716
27	0,361	0,102	168,6	0,908
26	0,404	0,128	134,5	1,138
25	0,455	0,163	106,3	1,443
24	0,511	0,205	84,32	1,815
23	0,574	0,259	66,60	2,307
22	0,643	0,325	53,15	2,887
21	0,724	0,412	41,99	3,661
20	0,813	0,519	33,14	4,613
19	0,912	0,652	26,41	5,804
18	1,024	0,826	20,96	7,321
17	1,151	1,039	16,57	9,241
16	1,290	1,309	13,19	11,62
15	1,450	1,652	10,43	14,69
14	1,628	2,084	8,268	18,45
13	1,829	2,626	6,562	23,36
12	2,052	3,309	5,217	29,46

AWG Size	Wire diameter [mm]	Cross section [mm²]	Resistance [Ω/km]	Weight [kg/km]
11	2,304	4,168	4,134	37,05
10	2,588	5,262	3,277	46,77
9	2,906	6,633	2,600	58,96
8	3,264	8,368	2,061	74,38
7	3,665	10,55	1,634	93,80
6	4,115	13,30	1,297	11,82
5	4,620	16,77	1,028	149,0
4	5,189	21,15	0,8152	188,0
3	5,827	26,67	0,6466	237,1
2	6,543	33,62	0,5128	298,9
1	7,348	42,41	0,4065	377,0
0	8,252	53,49	0,3223	475,5
00	9,266	67,43	0,2557	599,5
000	10,40	85,01	0,2028	755,8
0000	11,68	107,2	0,1608	953,2