AWG / Metric Conversion Chart

The below document contains a conversion table for AWG to metric. The US uses a system called AWG for cable sizing while EMEA and LAM used the metric system. mm ². The metric system indicates the cross-sectional area of the cable while AWG, American Wire Gauge indicates the number of wires of this size can fit into a a hole of 1 inch.

Note: In the Metric System, the larger the number the larger the cable and in the American System (AWG) the larger the number the smaller the cable

In cases where we have to use a different cable, we will not have an exact conversion so in such cases we should always pick the next larger available equivalent.

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This is a conversion table for AWG to metric. The first column is the AWG size, the second gives the exact CSA in metric while the third gives the nearest available equivalent in metric. The last column indicates whether the AWG is larger or smaller than the nearest available equivalent metric size.

AWG Size.	Exact Metric Equivelent	Nearest Metric Equivelent	Larger or Smaller than Metric Size
16	1.31 sq.mm	1.5 sq.mm	Smaller
15	1.65 sq.mm	1.5 sq.mm	Larger
14	2.08 sq.mm	2.5 sq.mm	Smaller
13	2.62 sq.mm	2.5sq.mm	Larger
12	3.31 sq.mm	4 sq.mm	Smaller
11	4.17sq.mm	4 sq.mm	Larger
10	5.26 sq.mm	6 sq.mm	Smaller
9	6.63 sq.mm	6 sq.mm	Larger
8	8.37sq.mm	10 sq.mm	Smaller
7	10.55sq.mm	10 sq.mm	Larger
6	13.30 sq.mm	16 sq.mm	Smaller
5	16.77 sq.mm	16 sq.mm	Larger
4	21.15 sq.mm	25 sq.mm	Smaller
3	26.67 sq.mm	25 sq.mm	Larger
2	33.63 sq.mm	35 sq.mm	Smaller
1	42.41 sq.mm	50 sq.mm	Smaller

AWG Ratings (for those who do not understand Imperial units)

Please note: The diameters and cross-section areas indicated below are the effective figures as were the conductor a solid rod. Resistances indicated are according to the International Annealed Copper Standard (IACS) at 20 °C. = 68 °F. For most Oxygen Free Copper (OFC) types of the resistances indicated are accurate to a few percent.

Furthermore: Some Rules of thumb helping you to learn AWG resistance and diameter by heart