

METRIC/AWG WIRE SIZE EQUIVALENTS

This table gives closest equivalent size cross references between metric and American wire sizes. In Europe, wire and cable sizes are expressed in cross sectional area in mm², and also as the number of strands of wires of a diameter expressed in mm. For example, 7/0.2 means 7 strands of wire each 0.2mm diameter. This example has a cross sectional area of 0.22mm². In America, the commonest system is the AWG numbering scheme, where the numbers are applied not only to individual strands but also to equivalent size bunches of smaller strands. For example, 24 AWG could be made of 1 strand of 24 AWG wire (1/24) or 7 strands of 32 AWG wire (7/32).

As standard metric wire sizes commonly used in manufacture do not generally correspond exactly to American wire sizes, some stranding configurations do not have equivalents in practice. For the same reason, some approximations have to be adopted if an equivalents table is not to become too complicated. Consequently, the table below provides a cross reference of closest equivalents of the wires most commonly found in the audio industry. cap

Cross sectional area mm ²	Cross sectional area AWG reference	Metric stranding	AWG stranding	AWG stranding expressed in inches	Approx. conductor resistance (ohms/km)
0.032	32	1/0.2, 7/0.08	1/32, 7/40, 19/44	1/0.008", 7/0.003"	578.00
0.050	30	1/0.25, 7/0.1	1/30, 7/38, 19/42	1/0.01", 7/0.004"	350.00
0.081	28	1/0.315, 7/0.125	1/28, 7/36, 19/40	1/0.013", 7/0.005"	232.00
0.128	26	1/0.4, 7/0.15, 18/0.1	1/26, 7/34, 19/38	1/0.016", 7/0.006"	146.0
0.163	25	14/0.12			110.0
0.22	24	1/0.5, 7/0.2, 30/0.1	1/24, 7/32	1/0.02", 7/0.008", 19/0.005"	76.4
0.25	23	1/0.6, 14/0.15, 32/0.1			70.1
0.32	22	7/0.25, 19/0.15, 30/0.12	1/22, 7/30	1/0.025", 7/0.01", 19/0.006"	54.8
0.41	21	13/0.2, 55/0.1	14/36	14/0.008"	44.0
0.52	20	16/0.2, 44/0.12	1/20, 7/28, 19/32	1/0.032", 7/0.013", 19/0.008"	34.5
0.75	18	19/0.25, 24/0.2, 96/0.1	1/18, 19/30, 33/32	1/0.04", 19/0.01", 33/0.008"	23.0
1.32	16	19/0.3	7/24, 19/29	7/0.02", 19/0.011"	14.7
2.08	14	28/0.3	19/27, 73/32	19/0.014", 70/0.008"	8.8
2.50	13	50/0.25, 140/0.15	35/28	35/0.013"	6.8
4.00	11	56/0.3, 512/0.1			4.5