

Technical information

American Wire Gauge and VDE Wire Gauge (in mm²)

American Wire Gauge (AWG)

Since various areas of the industry are also using wires according to the American Wire Gauge (AWG) the following comparison chart is included to allow a cross reference between AWG and metric wire sizes (mm²).

AWG	Wire construction (mm)	Wire dia (mm)	Wire gauge (mm ²)
30	1x0.25	0.25	0.05
	7x0.10	0.36	0.06
28	1x0.32	0.32	0.08
	7x0.13	0.38	0.09
26	1x0.40	0.40	0.13
	7x0.16	0.48	0.14
	19x0.10	0.51	0.15
24	1x0.51	0.51	0.21
	7x0.20	0.61	0.22
	19x0.13	0.64	0.25
22	1x0.64	0.64	0.33
	7x0.25	0.76	0.34
	19x0.16	0.81	0.38
20	1x0.81	0.81	0.52
	7x0.32	0.97	0.56
	19x0.20	1.02	0.60
18	1x1.02	1.02	0.82
	19x0.25	1.27	0.93
16	19x0.29	1.44	1.25
14	19x0.36	1.80	1.93
12	19x0.46	2.29	3.16
10	37x0.40	3.10	4.65

Wire Gauge (VDE 0259)

Composition and dimensions of commonly used copper wires based on VDE 0259

Wire gauge (mm ²)	Wire construction (mm)	Wire dia. (mm)
0.09	12x0.10	0.5
0.14	18x0.10	0.5
0.25	14x0.16	0.7
	32x0.10	0.7
0.34	19x0.16	0.8
	42x0.10	0.9
0.5	7x0.30	1.0
	16x0.21	1.1
	28x0.16	1.1
0.7	7x0.37	1.2
	24x0.21	1.2
	42x0.16	1.3
1.0	7x0.43	1.4
	32x0.21	1.4
	56x0.16	1.5
1.5	7x0.52	1.6
	30x0.26	1.7
	84x0.16	1.8
2.5	7x0.67	2.2
	50x0.26	2.3
	140x0.16	2.3
4.0	7x0.85	2.7
	56x0.31	2.8
	224x0.16	2.9

It has to be noted that wires of the same AWG number but with different composition have slightly different mm²!

