

Wire Ampacity Chart

NEC Table 310.16 (2023). Copper and aluminum.

Copper 60°C: TW, UF. 75°C: RHW, THHW, THW, THWN, XHHW, USE, ZW.
Copper 90°C: TBS, SA, SIS, FEP, FEPB, MI, RHH, RHW-2, THHN, THHW, THW-2, THWN-2, USE-2, XHH, XHHW, XHHW-2, ZW-2.
Aluminum 60°C: TW, UF. 75°C: RHW, THHW, THW, THWN, XHHW, USE.
Aluminum 90°C: TBS, SA, SIS, THHN, THHW, THW-2, THWN-2, RHH, RHW-2, USE-2, XHH, XHHW, XHHW-2, ZW-2.

Size	Cu 60°C TW, UF	Cu 75°C RHW...	Cu 90°C THHN...	Al 60°C TW, UF	Al 75°C RHW...	Al 90°C THHN...	Max 240.4(D)
18 AWG	-	-	14	-	-	-	7A
16 AWG	-	-	18	-	-	-	10A
14 AWG	15	20	25	-	-	-	15A
12 AWG	20	25	30	15	20	25	20A/15A
10 AWG	30	35	40	25	30	35	30A/25A
8 AWG	40	50	55	35	40	45	—
6 AWG	55	65	75	40	50	55	—
4 AWG	70	85	95	55	65	75	—
3 AWG	85	100	115	65	75	85	—
2 AWG	95	115	130	75	90	100	—
1 AWG	110	130	145	85	100	115	—
1/0 AWG	125	150	170	100	120	135	—
2/0 AWG	145	175	195	115	135	150	—
3/0 AWG	165	200	225	130	155	175	—
4/0 AWG	195	230	260	150	180	205	—
250 kcmil	215	255	290	170	205	230	—
300 kcmil	240	285	320	195	230	260	—
350 kcmil	260	310	350	210	250	280	—
400 kcmil	280	335	380	225	270	305	—
500 kcmil	320	380	430	260	310	350	—
600 kcmil	350	420	475	285	340	385	—
700 kcmil	385	460	520	315	375	425	—
750 kcmil	400	475	535	320	385	435	—
800 kcmil	410	490	555	330	395	445	—
900 kcmil	435	520	585	355	425	480	—
1000 kcmil	455	545	615	375	445	500	—
1250 kcmil	495	590	665	405	485	545	—
1500 kcmil	525	625	705	435	520	585	—
1750 kcmil	545	650	735	455	545	615	—
2000 kcmil	555	665	750	470	560	630	—

NEC 2023 Table 310.16. 30°C (86°F). Not more than three current-carrying conductors.
Max is the NEC 240.4(D) limit. — means not listed. Two values are copper/aluminum. See 240.4.
Reference only. Not a substitute for NFPA 70. wireampacitychart.com

Correction factors and 240.4(D) limits

Ambient temperature correction, NEC Table 310.15(B)(1)

Ambient °C	Ambient °F	60°C	75°C	90°C
10 or less	50 or less	1.29	1.20	1.15
11-15	51-59	1.22	1.15	1.12
16-20	60-68	1.15	1.11	1.08
21-25	69-77	1.08	1.05	1.04
26-30	78-86	1.00	1.00	1.00
31-35	87-95	0.91	0.94	0.96
36-40	96-104	0.82	0.88	0.91
41-45	105-113	0.71	0.82	0.87
46-50	114-122	0.58	0.75	0.82
51-55	123-131	0.41	0.67	0.76
56-60	132-140	-	0.58	0.71
61-65	141-149	-	0.47	0.65
66-70	150-158	-	0.33	0.58
71-75	159-167	-	-	0.50
76-80	168-176	-	-	0.41
81-85	177-185	-	-	0.29

More than three current-carrying conductors, NEC Table 310.15(C)(1)

Conductors	Percent of Table 310.16
4-6	80%
7-9	70%
10-20	50%
21-30	45%
31-40	40%
41 and above	35%

Small-conductor overcurrent limits, NEC 240.4(D)

Conductor	Max
10 AWG copper	30A
12 AWG copper	20A
14 AWG copper	15A
16 AWG copper	10A
18 AWG copper	7A
10 AWG aluminum	25A
12 AWG aluminum	15A

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