

ABYC Ampacity Rating Table at 30°C

Wire Size		Temperature Rating of Conductor Insulation						Reference Data		
US	Metric	75°C		90°C		105°C			Ohms	Ohms
AWG	mm ²		EngRm		EngRm		EngRm	mm dia	/1000ft	/1000m
	0.75	9.5	7	19	15.5	19	16	0.98	7.29	23.92
18	0.82	10	8	20	16	20	17	1.02	6.67	21.88
	1.0	13	10	21	17	21	18	1.13	5.47	17.94
16	1.3	15	11	25	21	25	21	1.29	4.17	13.70
	1.5	16	12	24	20	29	24	1.38	3.65	11.96
14	2.1	20	15	30	25	35	30	1.63	2.63	8.63
	2.5	21	16	34	28	38	32	1.78	2.19	7.18
12	3.3	25	19	40	33	45	38	2.05	1.65	5.42
	4.0	34	25	46	38	51	43	2.26	1.37	4.49
10	5.3	40	30	55	45	60	51	2.59	1.04	3.41
	6.0	53	40	57	47	65	55	2.76	0.91	2.99
8	8.4	65	49	70	57	80	68	3.27	0.65	2.14
	10.0	79	60	84	69	100	85	3.6	0.55	1.79
6	13.3	95	71	100	82	120	102	4.1	0.41	1.35
	16.0	105	79	113	93	134	114	4.5	0.34	1.12
4	21	125	94	135	111	160	136	5.2	0.26	0.85
	25	141	106	150	123	175	148	5.6	0.22	0.72
3	27	145	109	155	127	180	153	5.8	0.21	0.67
2	34	170	128	180	148	210	179	6.5	0.16	0.53
	35	173	130	186	153	217	185	6.7	0.16	0.51
1	42	195	146	210	172	245	208	7.3	0.13	0.42
	50	220	165	235	193	273	232	8.0	0.109	0.36
0	54	230	173	245	201	285	242	8.3	0.102	0.34
00	68	265	199	285	234	330	281	9.3	0.081	0.27
	70	274	206	292	239	341	289	9.4	0.078	0.26
000	85	310	233	330	271	385	327	10.4	0.064	0.21
	95	334	251	357	293	413	351	11.0	0.058	0.19
0000	107	360	270	385	316	445	378	11.7	0.051	0.17
	120	387	290	414	339	478	406	12.4	0.046	0.15
	150	445	333	476	390	550	467	13.8	0.036	0.12

Data based on E-11 Table VI-A
(Single Conductors in Free Air)

Data based on E-11 Table VI-B
(Up to three conductors in a sheath, conduit or bundle)

- For bundles of 4 to 6 conductors multiply by 0.857
- For bundles of 7 to 24 conductors multiply by 0.714
- For bundles of 25 or more, conductors multiply by 0.571

SAE conductors are smaller than equivalent AWG by 5% to 12% with current capacity typically less by 7%. ISO Ratings for metric wire are slightly less than these values derived from ABYC VI-A ratings.

Wires counted in bundles need not include:

1. Wires carrying intermittent currents no more than rating per VI-A and for less than one minute per mm of diameter, and not repeating more often than a delay of 5 times active duration.
2. Wires carrying load currents at less than 50% of the wire rating per table VI-B.