

All Aluminum Stranded Conductors (AAC)

AAC هادی هوایی



Code Name	Area		Equivalent Copper Area		Stranding and wire diameter	Approx. Overall Diameter	Weight	Rated Strength	Maximum DC Resistance at 20 °C	
	Aluminum		AWG or MCM	mm ²	Aluminum					
	AWG or MCM	mm ²			mm	mm	Kg / Km	kN	Ω / Km	
1	Peachbell	6	13.28	8	8.1	7/1.554	4.66	36.6	2.485	2.164
2	Rose	4	21.14	6	12.9	7/1.961	5.88	58.3	3.958	1.359
3	Iris	2	33.65	4	20.5	7/2.474	7.42	92.8	5.976	0.8539
4	Pansy	1	42.36	3	25.8	7/2.776	8.32	116.8	7.118	0.6783
5	Poppy	1/0	53.48	2	32.6	7/3.119	9.35	147.4	8.729	0.5373
6	Aster	2/0	67.47	1	41.2	7/3.503	10.51	186.0	11.01	0.4259
7	Pholx	3/0	84.98	1/0	51.8	7/3.932	11.79	234.3	13.46	0.3381
8	Oxlip	4/0	107.2	2/0	65.4	7/4.417	13.25	295.7	19.99	0.2679
9	Valerian	250	126.2	157	77.2	19/2.913	14.56	349.0	20.61	0.2269
10	Sneezewort	250	126.7	157	77.3	7/4.801	14.40	349.3	20.07	0.2268
11	Laurel	266.8	135.2	168	82.5	19/3.010	15.05	373	21.38	0.2125
12	Daisy	266.8	135.3	3/0	82.5	7/4.961	14.88	373.3	21.43	0.2124
13	Peony	300.0	152.1	189	92.8	19/3.193	15.96	419.0	24.05	0.1889
14	Tulip	336.0	170.6	4/0	104.0	19/3.381	16.90	470.3	26.97	0.1685
15	Daffodil	350.0	177.3	220	108.0	19/3.447	17.23	488.8	28.03	0.1621
16	Canna	397.5	201.6	250	123.0	19/3.675	18.37	555.8	31.86	0.1426
17	Goldentuft	450	228.0	280	139.1	19/3.909	19.54	628.6	34.99	0.1260
18	Syringa	477	241.5	300	147.3	37/2.883	20.18	665.8	38.47	0.1190
19	Cosmos	477	241.5	300	147.3	19/4.023	20.11	665.8	37.06	0.1190
20	Hyacinth	500	253.1	315	154.4	37/2.951	20.65	697.8	40.30	0.1135

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	Aluminum				Aluminum					
	AWG or MCM	mm ²	AWG or MCM	mm ²	mm	mm	Kg / Km	kN	Ω / Km	
1	Zinnia	500	253.3	315	155	19/4.120	20.60	698.3	38.87	0.1134
2	Dahia	556.5	281.8	350	171.9	19/4.346	21.73	776.9	43.25	0.1020
3	Mistletoe	556.5	281.8	350	171.9	37/3.114	21.79	776.9	43.59	0.1020
4	Meadowsweet	600	303.7	380	185.3	37/3.233	22.63	837.3	46.99	0.0946
5	Orchid	636	322.2	400	196.5	37/3.330	23.31	888.3	49.85	0.0892
6	Heuchera	650	329.6	410	201.1	37/3.368	23.57	908.7	51.00	0.0872
7	Flag	700	354.5	450	216.2	61/2.720	24.48	977.4	57.42	0.0811
8	Verbena	700	354.6	450	216.3	37/3.493	24.45	977.6	54.85	0.08150
9	Nasturtium	715.5	362.6	450	221.2	61/2.751	24.76	999.7	58.74	0.07925
10	Violet	175.5	362.7	450	221.2	37/3.533	24.73	1000	56.11	0.07922
11	Cattail	750	380.2	472	231.9	61/2.817	25.35	1048	59.88	0.07558
12	Petunia	750	380.4	472	232.0	37/3.617	25.32	1049	58.81	0.07558
13	Lilac	795	403.2	500	246.0	61/2.901	26.11	1111	63.50	0.07127
14	Arbutus	795	402.9	500	245.8	37/3.724	26.07	1111	62.35	0.07130
15	Snapdragon	900	456.3	560	278.3	61/3.086	27.77	1258	69.81	0.06298
16	Cockscomb	900	456.2	560	278.3	37/3.962	27.73	1257	68.49	0.06299
17	Goldenrod	954	483.9	600	295.2	61/3.178	28.60	1334	74.03	0.05939
18	Magnolia	954	483.6	600	295.0	37/4.079	28.55	1333	72.60	0.05943
19	Camellia	1000	506.4	620	308.9	61/3.251	29.26	1396	77.47	0.05675
20	Hawhweed	1000	506.9	620	309.2	37/4.176	29.23	1397	76.09	0.05670
21	Larkspur	1033.5	523.9	650	319.6	61/3.307	29.76	1444	80.16	0.05484

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	Aluminum				Aluminum					
	AWG or MCM	mm ²	AWG or MCM	mm ²	mm	mm	Kg / Km	kN	Ω / Km	
1	Blubell	1033.5	523.4	650	319.3	37/4.244	29.71	1443	78.59	0.05490
2	Marigold	1113	564.3	700	344.2	61/3.432	30.89	1556	86.34	0.05092
3	Hawthorn	1192.5	604.1	750	368.5	61/3.551	31.96	1665	92.43	0.04957
4	Narcissus	1272	644.6	800	393.2	61/3.668	33.01	1777	98.62	0.04458
5	Carnation	1431	725.3	900	442.4	61/3.891	35.02	1999	107.71	0.03962
6	Gladiolus	1510.5	765.8	950	467.1	61/3.998	35.98	2111	113.72	0.03752
7	Coreopsis	1590	805.4	1000	491.3	61/4.100	36.90	2220	119.60	0.03568
8	Jessamine	1750	887.1	1100	541.1	61/4.303	38.72	2445	131.73	0.03239
9	Cowslip	2000	1013	1230	617.9	91/3.764	41.40	2820	148.70	0.02838
10	Sagebrush	2250	1193	1370	694.8	91/3.993	43.92	3171	167.34	0.02522
11	Lupine	2500	1266	1530	772.3	91/4.209	46.30	3524	185.94	0.02269
12	Bitterroot	2750	1393	1680	849.8	91/4.415	48.56	3878	204.58	0.02063
13	Trillium	3000	1520	1830	927.2	127/3.904	50.75	4273	223.25	0.01890
14	Bluebonnet	3500	-	2120	1081.5	127/4.216	54.81	4984	260.36	0.01621

All Aluminum Stranded Conductors (AAC)

Code Name	Actual Area	Equivalent Copper Area	Stranding and wire diameter	Overall Diameter	Weight	Rated Strength	Maximum DC Resistance at 20 °C
	mm ²	mm ²	mm	mm	Kg / Km	kN	Ω / Km
1 LEO	34.36	21.0	7/2.50	7.50	94.3	5.71	0.833
2 LEONIDS	41.58	25.4	7/2.75	8.25	113	6.72	0.689
3 LIBRA	49.48	30.2	7/3.00	9.00	135	7.98	0.579
4 MARS	77.28	47.1	7/3.75	11.3	211	11.80	0.370
5 MERCURY	111.3	67.9	7/4.50	13.5	304	16.9	0.258
6 MOON	124.0	75.6	7/4.75	14.3	339	18.9	0.232
7 NEPTUNE	157.6	96.1	19/3.25	16.3	433	24.7	0.183
8 ORION	182.8	111.5	19/3.50	17.5	503	28.7	0.157
9 PLUTO	209.8	128.0	19/3.75	18.8	576	31.9	0.137
10 TAURUS	336.7	205.4	19/4.75	23.8	924	51.3	0.0857
11 SATURN	261.6	159.6	37/3.00	21.0	721	42.2	0.110
12 SIRIUS	307.0	187.3	37/3.25	22.8	845	48.2	0.094
13 TRITON	408.5	249.2	37/3.75	26.3	1120	62.2	0.0706
14 URANUS	506.1	308.7	61/3.25	29.3	1400	75.2	0.0572
15 URSULA	586.9	358.0	61/3.25	31.5	1620	87.3	0.0493
16 VENUS	673.4	410.8	61/3.75	33.8	1860	97.2	0.0429

All Aluminum Stranded Conductors (AAC)

Code Name	Nominal Aluminum Area	Equivalent Copper Area	Stranding and wire diameter	Overall Diameter	Total Area	Weight	Rated Strength	Maximum DC Resistance at 20 °C	
	mm ²	mm ²	mm	mm	mm ²	Kg / Km	kN	Ω / Km	
1	Midge	22	14.2	7/2.06	6.2	23.3	64	3.99	1.277
2	Aphis	25	16.1	3/3.35	7.2	26.4	73	4.12	1.081
3	Gnat	25	16.1	7/2.21	6.6	26.8	73	4.59	1.0662
4	Weevil	30	19.4	3/3.66	7.9	31.6	86	4.86	0.9082
5	Mosquito	35	22.6	7/2.59	7.8	36.9	101	6.03	0.7763
6	Ladybird	40	25.8	7/2.79	8.4	42.8	117	6.99	0.6687
7	Ant	50	32.3	7/3.10	9.3	52.8	145	8.28	0.5419
8	Fly	60	38.7	7/3.40	10.2	63.6	174	9.90	0.4505
9	Bluebottle	70	45.2	7/3.66	11.0	73.7	202	11.33	0.3887
10	Earwig	75	48.4	7/3.78	11.4	78.5	215	11.94	0.3645
11	Grasshopper	80	51.6	7/3.91	11.7	84.1	230	12.78	0.3405
12	Clegg	90	58.1	7/4.17	12.5	95.6	262	14.53	0.2994
13	Wasp	100	64.5	7/4.39	13.2	106.0	290	16.00	0.2700
14	Beetle	100	64.5	19/2.67	13.4	106.4	293	17.38	0.2703
15	Bee	125	80.6	7/4.90	14.7	132.0	361	19.94	0.2167
16	Cricket	150	96.8	7/5.36	16.1	157.9	432	23.80	0.1812
17	Hornet	150	96.8	19/3.25	16.3	157.6	434	25.70	0.1825
18	Caterpillar	175	113.0	19/3.53	17.7	186.0	512	28.62	0.1547
19	Chafer	200	129.0	19/3.78	18.9	213.2	587	32.40	0.1349
20	Spider	225	145.0	19/3.99	20.0	237.6	652	36.11	0.1211
21	Cockroach	250	161.0	19/4.22	21.1	265.7	731	40.40	0.10830
22	Butterfly	300	194.0	19/4.65	23.3	322.7	888	48.75	0.08912
23	Moth	350	226.0	19/5.00	25.0	373.2	1027	56.35	0.07709
24	Drone	350	226.0	37/3.58	25.1	372.5	1029	57.32	0.07738
25	Locust	400	258.0	19/5.36	26.8	428.5	1179	64.76	0.06710
26	Centipede	400	258.0	37/3.78	26.5	415.2	1145	63.10	0.06944
27	Maybug	450	290.0	37/4.09	28.6	486.0	1340	73.89	0.05929
28	Scorpion	500	323.0	37/4.27	29.9	530.0	1460	80.03	0.05442
29	Cicada	600	387.0	37/4.65	32.6	628.6	1733	94.91	0.04587
30	Tarantula	750	484.0	37/5.23	36.6	794.8	2191	120.07	0.03628

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Code	Name	Total Area		Equivalent Copper Area		Stranding and wire diameter	Approx. Overall Diameter	Weight	Rated Strength	Maximum DC Resistance at 20 °C
		AWG or MCM	mm ²	AWG or MCM	mm ²	mm	mm	Kg / Km	kN	Ω / Km
1	Dahila	556.5	281.86	350.0	171.9	19/4.3.096	21.73	775	46.51	0.1021
2	-	550.0	278.54	345	169.9	37/3.096	21.67	768	47.35	0.1035
3	Meadowsweet	600.0	303.74	377	185.3	37/3.233	22.63	838	51.64	0.09495
4	Orchid	636.0	322.24	400	196.6	37/3.330	23.31	888	54.78	0.08950
5	Heuchera	650.0	329.24	408	200.8	37/3.366	23.56	908	55.97	0.08760
6	Verbena	700.0	354.56	440	216.3	37/3.493	24.45	978	60.28	0.08134
7	VIOLET	715.5	362.72	450	221.3	37/3.533	24.73	1001	61.66	0.07951
8	PETUNIA	750.0	380.18	472	231.9	37/3.617	25.32	1049	64.63	0.07586
9	ARBUTUS	795.0	403.00	500	245.8	37/3.724	26.07	1112	68.51	0.07156
10	-	800.0	405.17	502	247.2	37/3.734	26.14	1118	68.88	0.07118
11	ANEMONE	874.5	442.91	550	270.2	37/3.904	27.33	1223	73.08	0.06512
12	COCKSCOMB	900.0	456.91	565	278.7	37/3.962	27.73	1259	75.27	0.06322
13	MANGNALIA	954.0	483.50	300	294.9	37/4.079	28.55	1325	79.78	0.05965
14	HAWKWEED	1000.0	506.77	628	309.1	37/4.176	29.23	1399	83.62	0.05691
15	BLUEBELL	1033.5	523.41	650	319.3	37/4.244	29.71	1445	86.36	0.05510
16	-	1100.0	557.42	690	340.0	61/3.411	30.70	1541	94.76	0.05182
17	MARIGOLD	1113.0	564.31	700	344.2	61/3.432	30.89	1560	95.93	0.05118
18	HAWTHORN	1192.5	604.12	750	368.5	61/3.551	31.96	1670	102.70	0.04781
19	-	1200.0	608.55	754	371.2	61/3.564	32.08	1682	103.45	0.04746
20	NARCISSUS	1272.0	644.58	800	393.2	64/3.668	33.01	1782	109.58	0.04481
21	-	1300.0	658.71	816	401.8	61/3.708	33.37	1821	111.98	0.04385
22	COLUMBINE	1351.5	684.54	850	417.6	61/3.780	34.02	1892	112.95	0.04219
23	-	1400.0	709.40	880	432.7	61/3.848	34.63	1961	117.05	0.04071
24	CARNATION	1431.0	725.34	900	442.5	61/3.891	35.02	2005	119.68	0.03982
25	-	1500.0	760.05	942	463.6	61/3.983	35.85	2101	125.41	0.03800
26	GLADIOLUS	1510.5	765.78	950	467.1	61/3.998	35.98	2117	126.35	0.03772
27	COREOPSIS	1590.0	803.78	1000	490.3	61/4.096	36.86	2222	132.62	0.03593
28	-	1600.0	811.26	1005	494.9	61/4.115	37.04	2243	133.86	0.03560
29	-	1700.0	860.88	1068	525.1	61/4.239	38.15	2380	142.05	0.03355
30	-	1800.0	911.40	1131	556.0	91/3.571	39.28	2522	154.94	0.03172

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	mm ²	mm	mm	Kg / Km	kN	Ω / Km
1	27.8	7x2.25	6.75	77	4.854	1.03
2	34.4	7x2.50	7.50	95	5.649	0.833
3	43.1	7x2.80	8.40	118	7.110	0.665
4	54.6	7x3.15	9.45	150	8.463	0.526
5	75.6	19x2.25	11.25	209	11.964	0.382
6	93.3	19x2.50	12.50	258	14.808	0.309
7	117	19x2.80	14	324	18.044	0.247
8	148	19x3.15	15.75	410	22.261	0.195
9	188	19x3.55	17.75	520	28.243	0.153
10	228	37x2.80	19.60	633	34.421	0.127
11	238	37x2.86	20.02	650	35.598	0.122
12	288	37x3.15	22.05	799	42.266	0.100
13	366	37x3.55	24.85	1016	53.642	0.0792
14	475	61x3.15	28.35	1324	67.274	0.0612
15	604	61x3.55	31.95	1680	85.514	0.0481
16	710	91x3.15	34.65	1950	100.224	0.0410

All Aluminum Alloy Conductors (AAC)



	Area		Equivalent Copper Area	Stranding and wire Diameter	Overall Diameter	Weight	Rated Strength	Maximum DC Resistance at 20 °C
	Nominal	Actual						
	mm ²	mm ²						
1	16	15.89	10	7/1.7	5.1	43	2.84	1.8017
2	25	24.25	15	7/2.1	6.3	66	4.17	1.1806
3	35	34.36	21	7/2.5	7.5	94	5.78	0.8332
4	50	49.48	30	7/3.0	9.0	135	7.94	0.5786
5	50	48.36	29	19/1.8	9.0	133	8.45	0.5948
6	70	65.82	40	19/2.10	10.5	181	11.32	0.4370
7	95	93.27	57	19/2.50	12.5	256	15.68	0.3084
8	120	117.00	71	19/2.80	14.0	322	18.78	0.2459
9	150	147.10	90	37/2.25	15.75	406	25.30	0.1960
10	185	181.60	111	37/2.50	17.50	500	30.54	0.1588
11	240	242.5	148	61/2.25	20.25	670	39.51	0.1192
12	300	299.4	183	61/2.50	22.50	827	47.70	0.09651
13	400	400.1	244	61/2.89	26.01	1104	60.86	0.07222
14	500	499.8	305	61/3.23	29.07	1379	74.67	0.05782
15	625	626.2	385	91/2.96	32.56	1732	95.25	0.04625
16	800	802.1	489	91/3.35	36.85	2218	118.39	0.03611
17	1000	999.7	610	91/3.74	41.14	2767	145.76	0.02897

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	mm ²	mm ²	mm	mm	Kg / Km	kN	Ω / Km	
1	10	10	6.1	7/1.35	4.05	27.4	1.95	2.8633
2	16	16	9.8	7/1.71	5.13	43.8	3.04	1.7896
3	25	25	15.3	7/2.13	6.39	68.4	4.50	1.1453
4	40	40	24.4	7/2.70	8.10	109.4	6.80	0.7158
5	63	63	38.4	7/3.39	10.17	172.3	10.39	0.4545
6	100	100	61.0	19/2.59	12.95	274.8	17.00	0.2877
7	125	125	76.3	19/2.89	14.45	343.6	21.25	0.2302
8	160	160	97.6	19/3.27	16.35	439.8	26.40	0.1798
9	200	200	122.0	19/3.66	18.30	549.7	32.00	0.1439
10	250	250	152.5	19/4.09	20.45	687.1	40.00	0.1151
11	315	315	192.2	37/3.29	23.03	867.9	51.97	0.0916
12	400	400	244.0	37/3.71	25.97	1102.0	64.00	0.7210
13	450	450	274.5	37/3.94	27.58	1239.8	72.00	0.0641
14	500	500	305.0	37/4.15	29.05	1377.6	80.00	0.0577
15	560	560	341.6	37/4.39	30.73	1542.9	89.60	0.0515
16	630	630	384.3	61/3.63	32.67	1738.3	100.80	0.0458
17	710	710	433.1	61/3.85	34.65	1959.1	113.60	0.0407
18	800	800	488.0	61/4.09	36.81	2207.4	128.00	0.0361
19	900	900	549.0	61/4.33	38.97	2483.3	144.00	0.0321
20	1000	1000	610.0	61/4.57	41.13	2759.2	160.00	0.0289
21	1120	1120	683.2	91/3.96	43.56	3093.5	179.20	0.0258
22	1250	1250	762.5	91/4.18	45.93	3452.6	200.00	0.0231
23	1400	1400	854.0	91/4.43	48.73	3866.9	224.00	0.0207
24	1500	1500	915.0	91/4.58	50.38	4143.1	240.00	0.0193