

CONDUCTOR DATA SHEET

ALL ALUMINIUM ALLOY CONDUCTOR (AAAC)

American Sizes

Code Name	Total Area		1350 Grade Equivalent (Approx)	Stranding	Conductor Nominal diameter	Nominal Weight	Rated Strength	Maximum DC resistance at 20 °C
	AWG or MCM	mm ²	AWG or MCM	N° / mm	mm	kg/km	kN	Ω /km
Akron	30.58	15.52	6	7 x 1.68	5.04	43	4.92	2.1588
Alton	48.69	24.71	4	7 x 2.12	6.36	68	7.83	1.3557
Ames	77.47	39.19	2	7 x 2.67	8.01	108	12.42	0.8547
Azusa	123.3	62.44	1.0	7 x 3.37	10.11	171	18.88	0.5365
Anaheim	155.4	78.55	2/0	7 x 3.78	11.34	216	23.75	0.4264
Amherst	195.7	99.30	3/0	7 x 4.25	12.75	272	30.03	0.3373
Alliance	246.9	125.10	4/0	7 x 4.77	14.31	343	37.83	0.2678
Butte	312.8	158.60	266.8	19 x 3.26	16.30	435	46.46	0.2112
Canton	394.5	199.90	336.4	19 x 3.66	18.30	548	58.56	0.1676
Cairo	465.4	236.40	397.5	19 x 3.98	19.90	649	69.25	0.1417
Darien	559.5	283.57	477.0	19 x 4.36	21.80	778	83.10	0.1181
Elgin	652.6	331.00	556.5	19 x 4.71	23.55	908	96.98	0.1012
Flint	740.8	374.50	636.0	37 x 3.59	25.13	1028	107.36	0.0894
Greeley	927.2	469.60	795.0	37 x 4.02	28.14	1289	134.62	0.0713

CONDUCTOR DATA SHEET

ALL ALUMINIUM ALLOY CONDUCTOR (AAAC)

ASTM Spec

Total Area		Equivalent Copper Area		Stranding	Conductor Overall diameter	Weight	Rated Strength	Maximum DC resistance at 20 °C
AWG or MCM	mm ²	AWG or MCM	mm ²	N° / mm	mm	kg/km	kN	Ω /km
6	13.28	9	7	7 / 1.554	4.66	36	4.206	2.5230
4	21.14	7	11	7 / 1.961	5.88	58	6.698	1.5844
2	33.65	5	18	7 / 2.474	7.42	92	10.66	0.9955
0	53.48	3	28	7 / 3.119	9.36	147	16.94	0.6263
2/0	67.46	2	35	7 / 3.503	10.51	185	20.40	0.4965
3/0	85.0	1	45	7 / 3.932	11.80	233	25.70	0.3941
4/0	107.3	1/0	56	7 / 4.417	13.25	294	32.44	0.3123
250	126.6	133	66	19 / 2.913	14.57	347	38.86	0.2645
300	152.1	159	80	19 / 3.193	15.97	417	46.69	0.2202
350	177.3	186	93	19 / 3.447	17.24	486	51.94	0.1889
400	202.7	212	106	19 / 3.686	18.43	556	59.39	0.1652
450	228.0	239	120	19 / 3.909	19.55	626	66.80	0.1469
500	253.3	265	133	19 / 4.12	20.60	695	74.20	0.1322
550	278.5	292	146	37 / 3.096	21.67	764	83.65	0.1203
600	303.7	318	159	37 / 3.233	22.63	833	91.21	0.1103
650	329.2	345	173	37 / 3.366	23.56	903	94.38	0.1017
700	354.6	371	186	37 / 3.493	24.45	973	101.63	0.09448
750	380.2	398	200	37 / 3.617	25.32	1043	108.98	0.08811
800	405.2	425	213	37 / 3.734	26.14	1112	116.14	0.08268
900	456.2	478	240	37 / 3.962	27.73	1252	130.76	0.07343
1000	506.8	531	266	37 / 4.176	29.23	1390	145.27	0.06610

CONDUCTOR DATA SHEET

ALL ALUMINIUM ALLOY CONDUCTOR (AAAC)

Australian Spec

Code Name	Area Actual	Equivalent Copper Area	Stranding	Overall Diameter	Weight	Rated Strength	Maximum DC Resistance at 20°C
	mm ²	mm ²	N° / mm	mm	kg/km	kN	Ω /km
Diamond	34.36	18.0	7/2.50	7.50	94.3	9.64	0.967
Dolomite	41.58	21.8	7/2.75	8.25	113	11.6	0.799
Emerald	49.48	26.0	7/3.00	9.00	135	13.9	0.671
Garnet	77.28	40.6	7/3.75	11.3	211	21.7	0.430
Jade	111.3	58.4	7/4.50	13.5	304	31.2	0.298
Jasper	124.0	65.1	7/4.75	14.3	339	34.8	0.268
Opal	157.6	82.7	19/3.25	16.3	433	44.2	0.212
Patronite	182.8	96.0	19/3.50	17.5	503	51.3	0.183
Pearl	209.8	110.1	19/3.75	18.8	576	58.8	0.159
Rutile	336.7	176.8	19/4.75	23.8	924	94.4	0.0991
Ruby	261.6	137.3	37/3.00	21.0	721	73.5	0.128
Ruthenium	307.0	161.2	37/3.25	22.8	845	86.1	0.109
Sapphire	408.5	214.5	37/3.75	26.3	1120	115	0.0819
Spinel	506.1	265.7	61/3.25	29.3	1400	135	0.0662
Tantalum	586.9	308.1	61/3.50	31.5	1620	156	0.0572
Topaz	673.4	353.5	61/3.75	33.8	1860	179	0.0498

CONDUCTOR DATA SHEET

ALL ALUMINIUM ALLOY CONDUCTOR (AAAC)

Australian Spec

Code Name	Area Actual	Equivalent Copper Area	Stranding	Overall Diameter	Weight	Rated Strength	Maximum DC Resistance at 20°C
	mm ²	mm ²	N° / mm	mm	kg/km	kN	Ω /km
Chlorine	34.36	20.3	7/2.50	7.50	94.3	8.18	0.864
Chromium	41.58	24.5	7/2.75	8.25	113	9.91	0.713
Fluorine	49.48	29.2	7/3.00	9.0	135	11.8	0.599
Helium	77.28	45.6	7/3.75	11.3	211	17.6	0.383
Hydrogen	111.3	65.7	7/4.50	13.5	304	24.3	0.266
Iodine	124.0	73.2	7/4.75	14.3	339	27.1	0.239
Krypton	157.6	93.0	19/3.25	16.3	433	37.4	0.189
Lutetium	182.8	107.9	19/3.50	17.5	503	41.7	0.163
Neon	209.8	123.8	19/3.75	18.8	576	47.8	0.142
Oxygen	336.7	198.7	19/4.75	23.8	924	73.6	0.0884
Nitrogen	261.6	154.3	37/3.00	21.0	721	62.2	0.114
Nobelium	307.0	181.1	37/3.25	22.8	845	72.8	0.0973
Phosphorous	408.5	241.0	37/3.75	26.3	1120	93.1	0.0731
Selenium	506.1	298.6	61/3.25	29.3	1400	114	0.0592
Silicon	586.9	346.3	61/3.50	31.5	1620	127	0.0511
Sulfur	673.4	397.3	61/3.75	33.8	1860	145	0.0444

CONDUCTOR DATA SHEET

ALL ALUMINIUM ALLOY CONDUCTOR (AAAC)

British Spec

Code Name	Nominal Aluminum Area	Equivalent Copper Area	Stranding	Overall Diameter	Total Area	Weight	Rated Strength	Maximum DC Resistance at 20°C
	mm ²	mm ²	N° / mm	mm	mm ²	kg/km	kN	Ω /km
-	10	6.24	7/1.47	4.41	11.88	32	3.33	2.771
Box	15	9.88	7/1.85	5.55	18.82	51	5.27	1.750
Acacia	20	12.50	7/2.08	6.24	23.79	65	6.67	1.384
Almond	25	15.80	7/2.34	7.02	30.10	82	8.44	1.094
Cedar	30	18.60	7/2.54	7.62	35.47	97	9.94	0.9281
-	35	22.1	7/2.77	8.31	42.18	115	11.82	0.7804
Fir	40	25.1	7/2.95	8.85	47.84	131	13.40	0.6880
Hazel	50	31.4	7/3.30	9.90	59.87	164	16.80	0.5498
Pine	60	37.6	7/3.61	10.83	71.65	196	20.08	0.4595
-	70	44.1	7/3.91	11.73	84.05	230	23.56	0.3917
Willow	75	47.1	7/4.04	12.12	89.73	245	25.15	0.3669
-	80	50.7	7/4.19	12.57	96.52	264	27.05	0.3411
-	90	57.2	7/4.45	13.35	108.9	298	30.51	0.3024
Oak	100	62.4	7/4.65	13.95	118.9	325	33.30	0.2769
-	100	62.3	19/2.82	14.1	118.7	326	33.26	0.2788
Mulberry	125	79.2	19/3.18	15.9	150.9	415	42.29	0.2192
Ash	150	94.9	19/3.48	17.4	180.7	497	50.65	0.1830
Elm	175	111.0	19/3.76	18.8	211.0	580	59.10	0.1568
Poplar	200	126.0	37/2.87	20.09	239.4	659	67.08	0.1385
-	225	142.0	37/3.05	21.35	270.3	744	75.76	0.1226
Sycamore	250	159.0	37/3.23	22.61	303.2	835	84.97	0.1094
Upas	300	190.0	37/3.53	24.71	362.1	997	101.5	0.09155
-	350	221.0	37/3.81	26.67	421.8	1162	118.2	0.0786
Yew	400	251.0	37/4.06	28.42	479.0	1319	134.2	0.0692

CONDUCTOR DATA SHEET

ALL ALUMINIUM ALLOY CONDUCTOR (AAAC)

Canadian Size

Area		Equivalent Copper Area		Total Area		Stranding	Conductor Overall diameter	Weight	Rated Strength	Maximum DC resistance at 20 °C
AWG or MCM	mm ²	AWG or MCM	mm ²	MCM	mm ²	N° / mm	mm	kg/km	kN	Ω /km
8	8.3	10	5.1	19	9.5	7/1.32	3.96	26	2.92	3.440
7	10.5	9	6.4	24	12.0	7/1.48	4.44	33	3.67	2.737
6	13.2	8	8.0	30	15.2	7/1.66	4.98	41	4.62	2.175
5	16.8	7	10.6	38	19.1	7/1.86	5.58	52	5.80	1.733
4	20.9	6	12.7	48	24.1	7/2.09	6.27	66	7.32	1.372
3	26.4	5	16.1	60	30.4	7/2.35	7.05	83	9.26	1.085
2	33.3	4	20.3	76	38.3	7/2.64	7.92	105	11.69	0.8601
1	41.9	3	25.5	95	48.3	7/2.96	8.88	132	14.69	0.6842
1/0	53.0	2	32.3	120	61.0	7/3.33	9.99	166	18.59	0.5406
2/0	66.8	1	40.8	152	76.8	7/3.74	11.22	210	23.45	0.4286
3/0	84.3	1/0	51.4	192	97.0	7/4.20	12.60	265	29.58	0.3398
4/0	106.4	2/0	64.9	241	122.5	7/4.72	14.16	334	37.36	0.2691
4/0	106.1	2/0	64.7	241	122.1	19/2.86	14.30	335	37.23	0.2713
266.8	133.6	3/0	81.5	304	153.8	19/3.21	16.05	421	46.90	0.2154
300	150.8	189	92.0	342	173.5	19/3.41	17.05	475	52.92	0.1908
336	169.0	4/0	103.1	384	194.4	19/3.61	18.05	533	59.31	0.1703
397.5	199.2	250	121.5	453	229.3	19/3.92	19.60	629	69.94	0.1444
477	239.7	300	146.2	544	275.9	19/4.30	21.50	756	84.16	0.1200
500	250.5	315	152.8	570	288.3	37/3.15	22.05	791	87.95	0.1151
556.5	280.0	350	170.8	635	322.2	37/3.33	23.31	885	98.28	0.1030
636	320.0	400	195.2	725	368.3	37/3.56	24.92	1012	112.33	0.0901
715.5	358.9	450	218.9	816	413.0	37/3.77	26.39	1134	125.97	0.0804
750	376.2	472	229.5	856	433.0	37/3.86	27.02	1188	132.06	0.0767
795	399.9	500	244.0	907	460.3	37/3.98	27.86	1264	140.40	0.0721
814.5	436.9	550	266.5	997	502.9	37/4.16	29.12	1380	153.38	0.0660

CONDUCTOR DATA SHEET

ALL ALUMINIUM ALLOY CONDUCTOR (AAAC)

DIN Spec.

Area		Equivalent Copper Area	Stranding	Overall Diameter	Weight	Rated Strength	Maximum DC Resistance at 20°C
Nominal	Actual						
mm ²	mm ²	mm ²	N° / mm	mm	kg/km	kN	Ω /km
16	15.89	8	7/1.7	5.1	43	4.44	2.090
25	24.25	13	7/2.1	6.3	66	6.77	1.369
35	34.36	18	7/2.5	7.5	94	9.60	0.9665
50	49.48	26	7/3.0	9.0	135	13.82	0.6711
50	48.36	25	19/1.8	9.0	133	13.50	0.6902
70	65.82	35	19/2.1	10.5	181	18.38	0.5071
95	93.27	49	19/2.5	12.5	256	26.05	0.3578
120	117.0	61	19/2.8	14.0	322	32.68	0.2852
150	147.1	77	37/2.25	15.75	406	41.09	0.2273
185	181.6	95	37/2.5	17.50	500	50.73	0.1842
240	242.5	127	61/2.25	20.25	670	67.74	0.1382
300	299.4	157	61/2.5	22.50	827	83.63	0.1119
400	400.1	210	61/2.89	26.01	1104	111.76	0.08377
500	499.8	262	61/3.23	29.07	1379	139.60	0.06706
625	626.2	329	91/2.96	32.56	1732	174.90	0.05365
800	802.1	421	91/3.35	36.85	2218	224.02	0.04188
1000	999.7	525	91/3.74	41.14	2767	279.22	0.03360

CONDUCTOR DATA SHEET

ALL ALUMINIUM ALLOY CONDUCTOR (AAAC)

French Sizes

Code Name		Equivalent Copper Area	Stranding	Overall Diameter	Total Area	Weight	Rated Strength	Maximum DC Resistance at 20°C
		mm ²	N° / mm	mm	mm ²	kg/km	daN	Ω /km
ASTER	22	11.84	7/2.0	6.0	21.99	60	715	1.50
ASTER	34.4	18.0	7/2.5	7.5	34.36	94	1115	0.958
ASTER	54.6	28.6	7/3.15	9.45	54.55	149	1775	0.603
ASTER	75.5	41.3	19/2.25	11.25	75.54	208	2455	0.438
ASTER	117.0	63.9	19/2.8	14.0	117.0	322	3800	0.283
ASTER	148	80.9	19/3.15	15.75	148.1	407	4810	0.224
ASTER	181.6	99.2	37/2.5	17.5	181.6	500	5900	0.183
ASTER	228	124.5	37/2.8	19.6	227.8	627	7405	0.146
ASTER	288	157.6	37/3.15	22.05	288.3	794	9370	0.115
ASTER	366	200.1	37/3.55	27.85	366.2	1009	11535	0.0905
ASTER	570	311.6	61/3.45	31.05	570.2	1574	18530	0.0583
ASTER	851	464.8	91/3.45	37.95	850.7	2354	27650	0.0391
ASTER	1144	624.9	91/4.0	44.0	1143.5	3164	36020	0.0292
ASTER	1600	872.1	127/4.0	52.0	1595.9	4425	50270	0.0206

CONDUCTOR DATA SHEET

ALL ALUMINIUM ALLOY CONDUCTOR (AAAC)

IEC Spec

Code Name	Area Actual	Equivalent Copper Area	Stranding	Overall Diameter	Weight	Rated Strength	Maximum DC Resistance at 20°C
	mm ²	mm ²	N° / mm	mm	kg/km	kN	Ω /km
16	18.6	9.8	7/1.84	5.52	50.8	6.04	1.7896
25	29.0	15.2	7/2.30	6.90	79.5	9.44	1.1453
40	46.5	24.4	7/2.91	8.73	127.1	15.10	0.7158
63	73.2	38.4	7/3.65	10.95	200.2	23.06	0.4545
100	116	61	19/2.79	14.0	319.3	37.76	0.2877
125	145	76	19/3.12	15.6	399.2	47.20	0.2302
160	186	98	19/3.53	17.7	511.0	58.56	0.1798
200	232	122	19/3.95	19.8	638.7	73.20	0.1439
250	290	152	19/4.41	22.1	798.4	91.50	0.1151
315	366	192	37/3.55	24.9	1008.4	115.29	0.0916
400	465	244	37/4.00	28.0	1280.5	146.40	0.0721
450	523	275	37/4.24	29.7	1440.5	164.70	0.0641
500	581	305	37/4.47	31.3	1600.6	183.00	0.0577
560	651	342	61/3.69	33.2	1795.3	204.96	0.0516
630	732	384	61/3.91	35.2	2019.8	230.58	0.0458
710	825	433	61/4.15	37.4	2276.2	259.86	0.0407
800	930	488	61/4.40	39.6	2564.8	292.80	0.0361
900	1046	549	91/3.83	42.1	2888.3	329.40	0.0321
1000	1162	610	91/4.03	44.3	3209.3	366.00	0.0289
1120	1301	683	91/4.27	47.0	3594.5	409.92	0.0258

CONDUCTOR DATA SHEET

ALL ALUMINIUM ALLOY CONDUCTOR (AAAC)

IEC Spec

Code Name	Area Actual	Equivalent Copper Area	Stranding	Overall Diameter	Weight	Rated Strength	Maximum DC Resistance at 20°C
	mm ²	mm ²	N° / mm	mm	kg/km	kN	Ω /km
16	18.4	9.8	7/1.83	5.49	50.4	5.43	1.7896
25	28.8	15.3	7/2.9	6.87	78.7	8.49	1.1453
40	46.0	24.4	7/2.89	8.67	125.9	13.58	0.7158
63	72.5	38.4	7/3.63	10.9	198.3	21.39	0.4545
100	115	61	19/2.78	13.9	316.3	33.95	0.2877
125	144	76	19/3.10	15.5	395.4	42.44	0.2302
160	184	98	19/3.51	17.6	506.1	54.32	0.1798
200	230	122	19/3.93	19.7	632.7	67.91	0.1439
250	288	153	19/4.39	22.0	790.8	84.88	0.1151
315	363	192	37/3.53	24.7	998.9	106.95	0.0916
400	460	244	37/3.98	27.9	1268.4	135.81	0.0721
450	518	275	37/4.22	29.5	1426.9	152.79	0.0641
500	575	305	37/4.45	31.2	1585.5	169.76	0.0577
560	645	342	61/3.67	33.0	1778.4	190.14	0.0516
630	725	384	61/3.89	35.0	2000.7	213.90	0.0458
710	817	433	61/4.13	37.2	2254.8	241.07	0.0407
800	921	488	61/4.38	39.4	2540.6	271.62	0.0361
900	1036	549	91/3.81	41.9	2861.1	305.58	0.0321
1000	1151	610	91/4.01	44.1	3179.0	339.53	0.0289
1120	1289	683	91/4.25	46.8	3560.5	380.27	0.0258
1250	1439	763	91/4.49	49.4	3973.7	424.41	0.0231

CONDUCTOR DATA SHEET

ALL ALUMINIUM ALLOY CONDUCTOR (AAAC)

Swedish Spec

Area		Equivalent Copper Area	Stranding	Overall Diameter	Weight	Rated Strength	Maximum DC Resistance at 20°C
Nominal	Actual						
mm ²	mm ²	mm ²	N° / mm	mm	kg/km	kN	Ω /km
31	31.1	17.7	7/2.38	7.14	85	9.31	0.974
62	62.4	35.6	7/3.37	10.11	170	17.20	0.486
99	99.3	56.6	7/4.25	12.75	271	25.30	0.305
157	158.6	90.4	19/3.26	16.30	436	43.70	0.193
241	241.2	137.5	19/4.02	20.10	663	61.60	0.127
329	330.0	188.1	37/3.37	23.59	910	90.70	0.0928
454	454.5	259.1	61/3.08	27.72	1260	125.00	0.0675
593	593.6	338.4	61/3.52	31.68	1640	157.00	0.0517
774	774.2	441.3	61/4.02	36.18	2140	197.00	0.0396
910	910.7	519.1	61/4.36	39.24	2520	232.00	0.0337

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Swedish Spec

Area		Equivalent Copper Area	Stranding	Overall Diameter	Weight	Rated Strength	Maximum DC Resistance at 20°C
Nominal	Actual						
mm ²	mm ²	mm ²	N° / mm	mm	kg/km	kN	Ω /km
31	31.1	18.3	7/2.38	7.14	85	7.77	0.943
62	62.4	36.8	7/3.37	10.11	170	15.60	0.470
99	99.3	58.6	7/4.25	12.75	271	22.80	0.296
157	158.6	93.5	19/3.26	16.30	436	39.70	0.186
241	241.2	142.3	19/4.02	20.10	663	55.50	0.123
329	330.0	194.7	37/3.37	23.59	910	82.50	0.0899
454	454.5	268.2	61/3.08	27.72	1260	113.00	0.0654
593	593.6	350.2	61/3.52	31.68	1640	143.00	0.0501
774	774.2	456.8	61/4.02	36.18	2140	178.00	0.0384
910	910.7	537.3	61/4.36	39.24	2520	209.00	0.0326