ALL ALUMINIUM CONDUCTORS (AAC)

AS PER ASTM B231-78

Cord word	Conductor size CM or AWG	Stranding Nos. / mm	Sectional area mm^2	Overall diameter mm	Weight kg/km	Ultimate strength kg	Calculated DC resistance at 20°C Ohm/km
Bluebonnet	3,500,000	127/4.216	1,773	54.81	4,983	26,700	0.01653
Trillium	3,000,000	127/3.904	1,520	50.75	4,274	22,800	0.01927
Bitterroot	2,750,000	91/4.415	1,393	48.57	3,879	20,900	0.02083
Lupine	2,500,000	91/4.209	1,266	46.30	3,525	19,000	0.02292
Sagebrush	2,250,000	91/3.993	1,139	43.92	3,173	17,100	0.02547
Cowslip	2,000,000	91/3.764	1,013	41.40	2,819	15,600	0.02866
Jessamine	1,750,000	61/4.303	886.9	38.73	2,446	13,500	0.03239
Coreopsis	1,590,000	61/4.100	805.2	36.90	2,221	12,200	0.03568
Gladiolus	1,510,500	61/3.998	765.6	35.98	2,111	11,600	0.03752
Carnation	1,431,000	61/3.891	725.3	35.02	2,000	11,000	0.03961
Columbine	1,315,500	61/3.780	684.4	34.02	1,887	10,600	0.04197
Narcissus	1,272,000	61/3.668	644.8	33.01	1,777	9,900	0.04458
Hawthorn	1,192,500	61/3.551	604.1	31.96	1,665	9,550	0.04757
Marigold	1,113,000	61/3.432	564.3	30.89	1,556	8,950	0.05092
Bluebeli	1,033,500	37/4.244	523.6	29.71	1,443	8,050	0.05489
Larkspur	1,033,500	61/3.307	523.9	29.76	1,445	8,290	0.05485
Hawkweed	1,000,000	37/4.176	506.9	29.23	1,397	7,780	0.05671
Camellia	1,000,000	61/3.251	506.4	29.26	1,396	8,020	0.05675
Magnolia	954,000	37/4.097	483.6	28.55	1,333	7,410	0.05944
Goldenrod	954,000	61/3.178	483.9	28.60	1,334	7,630	0.05939
Cockscomb	900,000	37/3.962	456.2	27.73	1,257	7,000	0.06299
Sanpdragon	900,000	61/3.086	456.3	27.77	1,258	7,190	0.06297
Arbutus	795,000	37/3.724	402.9	26.07	1,111	6,330	0.07129
Lilac	795,000	61/2.901	403.2	26.11	1,112	6,480	0.07127
Petunia	750,000	37/3.617	380.4	25.32	1,048	5,960	0.07559
Cattail	750,000	61/2.817	380.2	25.35	1,048	6,150	0.07558
Violet	715,500	37/3.533	362.7	24.73	1,000	5,790	0.07923
Nasturtium	715,500	61/2.751	362.6	24.76	999.9	5,980	0.07926
Verbena	700,000	37/3.493	354.6	24.45	977.5	5,660	0.08105
Flag	700,000	61/2.720	354.5	24.48	977.5	5,820	0.08106
Heuchera	650,000	37/3.368	329.6	23.58	908.8	5,290	0.08717
Orchid	636,000	37/3.330	322.2	23.31	888.4	5,150	0.08918
Meadowsweet	600,000	37/3.233	303.7	22.63	837.5	4,850	0.09461
Dahlia	556,500	19/4.346	281.8	21.73	777.1	4,420	0.1019
Mistletoe	556,500	37/3.114	281.8	21.80	777.1	4,510	0.1020
Zinnia	500,000	19/4.120	253.3	20.60	698.5	3,980	0.1134
Hyacinth	500,000	37/2.951	253.1	20.66	697.8	4,140	0.1136
Cosmos	477,000	19/4.023	241.5	20.12	665.9	3,780	0.1190
Syringa	477,000	37/2.883	241.5	20.18	666.1	3,940	0.1190
Goldentuft	450,000	19/3.909	228.0	19.55	628.7	3,570	0.1260
Canna	397,500	19/3.675	201.6	18.38	555.6	3,230	0.1426
Daffodil	350,000	19/3.447	177.3	17.24	488.8	2,900	0.1621
Tulip	336,400	19/3.381	170.6	16.91	470.4	2,790	0.1685
Peony	300,000	19/3.193	152.1	15.97	419.4	2,490	0.1889
Daisy	266,800	7/4.961	135.3	14.88	373.1	2,190	0.2123
Laurel	266,800	19/3.010	135.2	15.05	372.7	2,260	0.2125
Sneezewort	250,000	7/4.801	126.7	14.40	349.4	2,050	0.2267
Valerian	250,000	19/2.913	126.6	14.57	349.0	2,100	0.2269
Oxlip	(4/0)	7/4.417	107.2	13.25	295.7	1,740	0.2680
Phlox	(3/0)	7/3.932	84.98	11.80	234.3	1,380	0.3381
Aster	(2/0)	7/3.503	67.47	10.51	186.0	1,140	0.4259
Poppy	(1/0)	7/3.119	53.48	9.357	147.4	900	0.5372
Pansy	(1)	7/2.776	42.36	8.328	116.8	746	0.6783
Iris	(2)	7/2.474	33.65	7.422	92.75	614	0.8539
Rose	(4)	7/1.961	21.14	5.883	58.29	400	1.359
Peachbell	(6)	7/1.554	13.28	4.662	36.61	255	2.164

ALL ALUMINIUM CONDUCTORS (AAC)
AS PER BS 215 : Part 1 : 1970

Nominal aluminium area (1) mm^2	Stranding and wire diameter (2) mm	Sectional area (3) mm^2	Approxi-mate overall diameter (4) mm	Approxi-mate mass per km (5) kg	Calculated D. C. resistance at 20° C per km (6) Ohm	Calculated breaking load (7) kN
22	7/2.06	23.33	6.18	64	1.227	3.99
50	7/3.10	52.83	9.30	145	0.541 9	8.28
60	7/3.40	63.55	10.20	174	0.450 5	9.90
100	7/4.39	106.0	13.17	290	0.270 2	16.00
150	19/3.25	157.6	16.25	434	0.182 5	25.70
200	19/3.78	213.2	18.90	587	0.134 9	32.40
250	19/4.22	265.7	21.10	731	0.108 3	40.40
300	19/4.65	322.7	23.25	888	0.089 16	48.75
400	37/3.78	415.2	26.46	1145	0.069 44	63.10

ALL ALUMINIUM CONDUCTORS (AAC)
AS PER IS 398 : Part 1 : 1996

Nominal aluminium area (1) mm^2	Stranding and wire diameter (2) mm	Sectional area (3) mm^2	Approxi-mate overall diameter (4) mm	Approxi-mate mass per km (5) kg	Calculated D. C. resistance at 20° C per km (6) Ohm	Calculated breaking load (7) kN
25	7/2.21	26.85	6.63	74	1.096	4.52
50	7/3.10	52.83	9.30	145	0.552 5	8.25
100	7/4.39	106.0	13.17	290	0.275 2	15.96
150	19/3.18	150.9	15.90	415	0.194 2	23.28
240	19/3.99	237.6	19.95	654	0.123 5	35.74
300	19/4.65	322.7	23.25	888	0.091 07	48.74

ALL ALUMINIUM CONDUCTORS (AAC)
AS PER DIN 48201 Blatt 5 - 1965

Conductor size mm^2	Standing No. / mm	Calculated sectional area mm^2	Overall diameter mm	Ultimate strength kP	Weight kg/km	Calculated electrical resistance at 20° C Ohm/km
16	7/1.7	15.89	5.1	290	44	1.798
25	7/2.1	24.25	6.3	425	67	1.177
35	7/2.5	34.36	7.5	585	94	0.831
50	7/3	49.48	9.0	810	135	0.577
50	19/1.8	48.36	9.0	860	133	0.596
70	19/2.1	65.82	10.5	1,150	181	0.438
95	19/2.5	93.27	12.5	1,595	256	0.309
120	19/2.8	117.0	14.0	1,910	322	0.246
150	37/2.25	147.1	15.7	2,570	406	0.197
185	37/2.5	181.6	17.5	3,105	501	0.160
240	61/2.25	242.5	20.2	4,015	670	0.120
300	61/2.5	299.4	22.5	4,850	827	0.0969
400	61/2.89	400.1	26.0	6,190	1,105	0.0730
500	61/3.23	499.8	29.1	7,600	1,381	0.0580
625	91/2.96	626.2	32.6	9,690	1,733	0.0462
800	91/3.35	802.1	36.8	12,055	2,219	0.0361
1,000	91/3.74	999.7	41.1	14,845	2,766	0.0290