

AAC -ASTM B231 All Aluminum Conductor Specification for Concentric-Lay-Stranded
Aluminum 1350-H19 Conductors

Code Word	Size	Stranding Cross Section Area		Single Wire Dia.		Nominal Conductor Diameter		Nominal Weight	
	AWG or kcmil	Sq.In.	mm ²	Inch	mm	inch	mm	lbs/1000 f	kg/km
Peachbell	6	0.0206	13.3	0.0612	1.55	0.184	4.67	25.15	36.42
Rose	4	0.0328	21.2	0.0772	1.96	0.232	5.89	40.04	57.99
Iris	2	0.0522	33.7	0.0974	2.47	0.292	7.42	63.73	92.29
Pansy	1	0.0657	42.4	0.1093	2.78	0.328	8.33	80.21	116.16
Poppy	1/0	0.0829	53.5	0.1228	3.12	0.368	9.35	101.21	146.57
Aster	2/0	0.1045	67.4	0.1379	3.5	0.414	10.52	127.58	184.76
Phlox	3/0	0.1317	85	0.1548	3.93	0.464	11.79	160.79	232.85
Oxlip	4/0	0.1662	107.2	0.1739	4.42	0.522	13.26	202.91	293.85
Sneezewort	250	0.1964	126.7	0.189	4.8	0.567	14.4	239.78	347.25
Valerian	250	0.1963	126.6	0.1147	2.91	0.574	14.58	239.66	347.07
Daisy	266.8	0.2095	135.2	0.1952	4.96	0.586	14.88	255.77	370.41
Laurel	266.8	0.2095	135.2	0.1185	3.01	0.593	15.06	255.77	370.41
Peony	300	0.2358	152.1	0.1257	3.19	0.629	15.98	287.88	416.91
Tulip	336.4	0.2644	170.6	0.1331	3.38	0.666	16.92	322.8	467.48
Daffodil	350	0.2748	177.3	0.1357	3.45	0.679	17.25	335.49	485.86
Canna	397.5	0.3124	201.5	0.1447	3.68	0.724	18.39	381.4	552.34
Goldentuft	450	0.3534	228	0.1539	3.91	0.769	19.53	431.45	624.83
Cosmos	477	0.3744	241.5	0.1584	4.02	0.792	20.12	457.09	661.96
Syringa	477	0.3744	241.5	0.1135	2.88	0.795	20.19	457.09	661.96
Zinnia	500	0.3926	253.3	0.1622	4.12	0.811	20.6	479.31	694.14
Dahlia	556.5	0.4369	281.9	0.1711	4.35	0.856	21.74	533.4	772.47
Mistletoe	556.5	0.4368	281.8	0.1226	3.11	0.858	21.79	533.28	772.29
Meadowswee	600	0.4709	303.8	0.1273	3.23	0.891	22.63	574.91	832.58
Orchid	636	0.4995	322.3	0.1311	3.33	0.918	23.32	609.82	883.15
Heuchera	650	0.5102	329.2	0.1325	3.37	0.928	23.57	622.89	902.06
Verbena	700	0.5494	354.5	0.1375	3.49	0.963	24.46	670.74	971.37
Violet	715.5	0.5623	362.8	0.1391	3.53	0.974	24.74	686.49	994.18
Nasturtium	715.5	0.5619	362.5	0.1083	2.75	0.975	24.77	686.01	993.47
Petunia	750	0.5893	380.2	0.1424	3.62	0.997	25.32	719.46	1041.92
Arbutus	795	0.6245	402.9	0.1466	3.72	1.026	26.06	762.43	1104.15
Lilac	795	0.6248	403.1	0.1142	2.9	1.028	26.11	762.8	1104.68
Cockscomb	900	0.7072	456.3	0.156	3.96	1.092	27.74	863.4	1250.37

AAC-ASTM B231

Continued Specification Table of AAC Conductor ASTM B231

Code Word	Size	Stranding Cross Section Area		Wire No.	Single Wire Dia.		Nominal Conductor Diameter	
	AWG or kcmil	Sq.in.	mm ²		Inch	mm	inch	mm
Magnolia	954	0.7495	483.5	37	0.1606	4.08	1.124	28.55
Goldenrod	954	0.7498	483.7	61	0.1251	3.18	1.126	28.6
Hawkweed	1000	0.7854	506.7	37	0.1644	4.18	1.151	29.24
Bluebell	1033.5	0.8114	523.5	37	0.1671	4.24	1.17	29.72
Larkspur	1033.5	0.8122	524	61	0.1302	3.31	1.172	29.77
Marigold	1113	0.8744	564.1	61	0.1351	3.43	1.216	30.89
Hawthorn	1192.5	0.9363	604.1	61	0.1398	3.55	1.258	31.95
Narcissus	1272	0.999	644.5	61	0.1444	3.67	1.3	33.02
Columbine	1351.5	1.061	684.5	61	0.1488	3.78	1.34	34.04
Carnation	1431	1.124	725.2	61	0.1532	3.89	1.379	35.03
Coreopsis	1590	1.248	805.2	61	0.1614	4.1	1.454	36.93
Jessamine	1750	1.375	887.1	61	0.1694	4.3	1.525	38.74
Cowslip	2000	1.57	1012.9	91	0.1482	3.76	1.63	41.4
Lupine	2500	1.962	1265.8	91	0.1657	4.21	1.823	46.3
Trillium	3000	2.356	1520	127	0.1537	3.9	1.998	50.75
Bluebonnet	3500	2.749	1773.5	127	0.166	4.22	2.158	54.81

AAC-BS 215-1

All Aluminum Conductor (Specification for aluminium conductors for overhead power transmission. Aluminium stranded conductors)

Code Name	Area		Stranding and wire diameter	Approx. overall diameter	Weight	Nominal breaking load	Nom.DC Resistance at 20 deg.
	Nominal mm ²	Actual mm ²	mm	mm	kg/km	kN	ohm/km
Midge	22	23.33	7/2.06	6.2	64	3.99	1.227
Aphis	25	26.4	3/3.35	7.2	73	4.11	1.081
Gnat	25	26.8	7/2.21	6.6	73	4.59	1.066
Weevil	30	31.6	3/3.66	7.9	86	4.86	0.9082
Mosquito	35	37	7/2.59	7.8	101	6.03	0.7762
Ladybird	40	42.8	7/2.79	8.4	117	6.87	0.6689
Ant	50	52.83	7/3.10	9.3	145	8.28	0.5419
Fly	60	63.55	7/3.40	10.2	174	9.9	0.4505
Bluebottle	70	73.7	7/3.66	11	202	11.34	0.3881
Earwing	75	78.5	7/3.78	11.4	215	11.94	0.3644
Grasshopper	80	84.1	7/3.91	11.7	230	12.78	0.3406
Clegg	90	95.6	7/4.17	12.5	262	14.53	0.2995
Wasp	100	106	7/4.39	13.2	290	16	0.2702
Beetle	100	106.6	19/2.67	13.4	293	17.42	0.2704
Bee	125	132	7/4.90	14.7	361	19.94	0.2169
Cricket	150	157.9	7/5.36	16.1	432	23.85	0.1813
Hornet	150	157.6	19/3.25	16.3	434	27.7	0.1825
Caterpillar	175	186	19/3.53	17.7	512	28.63	0.1547
Chafer	200	213.2	19/3.78	18.9	587	32.4	0.1349
Spider	225	236.9	19/3.99	20	652	36.01	0.1211
Cockroach	250	265.7	19/4.22	21.1	731	40.4	0.1083
Butterfly	300	322.7	19/4.65	23.3	888	48.7	0.08916
Moth	350	373.2	19/5.00	25	1027	56.37	0.07711
Drone	350	373.3	37/3.58	25.1	1029	57.45	0.07741
Locust	400	428.5	19/5.36	26.8	1179	64.73	0.0671
Centipede	400	415.2	37/3.78	26.5	1145	63.1	0.06944
Maybug	450	486.9	37/4.09	28.6	1342	74.01	0.05931
Scorpion	500	529.5	37/4.27	29.9	1460	79.98	0.05441
Cicada	600	628.6	37/4.65	32.6	1733	94.95	0.04588
Tarantula	750	794.8	37/5.23	36.6	2191	120.1	0.03627

IEC 61089 All Aluminum Conductor Round wire concentric lay overhead electrical stranded conductors

Size (mm)	Area		Stranding and wire diameter	Approx. overall diameter	Weight	Nominal breaking load	Nom.DC Resistance at 20 deg.
	Nominal mm ²	Actual mm ²	mm	mm	kg/km	kN	ohm/km
10	10	7	1.35	4.05	27.4	1.95	2.8633
16	16	7	1.71	5.12	43.8	3.04	1.7896
25	25	7	2.13	6.40	68.4	4.50	1.1453
40	40	7	2.7	8.09	109.4	6.80	0.7158
63	63	7	3.39	10.20	172.3	10.39	0.4545
100	100	19	2.89	12.90	274.8	17.00	0.2877
125	125	19	3.27	14.50	343.6	21.25	0.2302
160	160	19	3.66	16.40	439.8	26.40	0.1798
200	200	19	4.09	18.30	549.7	32.00	0.1439
250	250	19	3.29	20.50	687.1	40.00	0.1151
315	315	37	3.71	23.00	867.9	51.97	0.0916
400	400	37	3.94	26.00	1102	64.00	0.0721
450	450	37	4.15	27.50	1239.8	72.00	0.0641
500	500	37	4.39	29.00	1377.9	80.00	0.0577
560	560	37	3.63	30.70	1542.9	89.60	0.0515
630	630	61	3.85	32.60	1738.3	100.80	0.0458
710	710	61	4.09	34.60	1959.1	113.60	0.0407
800	800	61	4.33	36.80	2207.4	128.00	0.0361
900	900	61	4.57	39.00	2483.3	144.00	0.0321
1000	1000	61	3.96	41.10	2759.2	160.00	0.0289
1120	1120	91	4.18	43.50	3093.5	179.20	0.0258
1250	1250	91	4.18	46.00	3452.6	200.00	0.0231
1400	1400	91	4.43	48.70	3866.9	224.00	0.0207
1500	1500	91	4.58	50.40	4143.1	240.00	0.0193

AAC-DIN 68201 Aluminum stranded conductor DINEN 50182 Conductors for overhead lines

Size (mm)	Calculated Area	Stranding and wire diameter	Overall diameter	Linear mass	Rated strength	Max.DC resistance at 20°C
	mm ²	mm	mm	kg/km	daN	Ohm/km
16	15.89	7/1.70	5.1	44	290	1.8018
25	24.25	7/2.10	6.3	67	425	1.1808
35	34.36	7/2.50	7.5	94	585	0.8332
50	49.48	7/3.00	9	135	810	0.5786
50	48.36	19/1.80	9	133	860	0.595
70	65.82	19/2.10	10.5	181	1150	0.4371
95	93.27	19/2.50	12.5	256	1595	0.3084
120	117	19/2.80	14	322	1910	0.2469
150	147.1	37/2.25	15.2	406	2570	0.196
185	181.6	37/2.50	17.5	501	3105	0.1587
240	242.54	61/2.25	20.2	670	4015	0.1191
300	299.43	61/2.50	22.5	827	4850	0.0965
400	400.14	61/2.89	26	1105	6190	0.07221
500	499.83	61/3.23	29.1	1381	7600	0.05781
625	626.2	91/2.96	32.6	1733	9690	0.04625
800	802.1	91/3.35	36.8	2219	12055	0.03611
1000	999.71	91/3.74	41.1	2766	14845	0.02897

AAC-AS 1531-1991

Code Name	Stranding and wire diameter	Overall diameter	Calculated Area	Linear mass	Rated strength	Max.DC resistance at 20°C
AAC / 1350	mm	mm	mm ²	kg/km	kN	Ohm/km
Leo	7/2.50	7.5	34.4	94.3	5.71	0.833
Leonids	7/2.75	8.3	41.6	113	6.72	0.689
Libra	7/3.00	9.0	49.5	135	7.98	0.579
Mars	7/3.75	11.3	77.3	211	11.8	0.37
Mercury	7/4.50	13.5	111.3	304	16.9	0.258
Moon	7/4.75	14.3	124.0	339	18.9	0.232
Neptune	19/3.25	16.3	157.6	433	24.7	0.183
Orion	19/3.50	17.5	182.8	503	28.7	0.157
Pluto	19/3.75	18.8	209.8	576	31.9	0.137
Saturn	37/3.00	21.0	261.6	721	42.2	0.110
Sirius	37/3.25	22.8	307.0	845	48.2	0.094
Taurus	19/4.75	23.8	336.7	924	51.3	0.0857
Triton	37/3.75	26.3	408.5	1120	62.2	0.0706
Uranus	61/3.25	29.3	506.1	1400	75.2	0.0572
Ursula	61/3.50	31.5	586.9	1620	87.3	0.0493
Venus	61/3.75	33.8	673.4	1860	97.2	0.0429

