

Application

This wire is suitable for use in all practical spans on wood poles, transmission towers, and other structures. Applications range from long, extra high voltage (EHV) transmission lines to sub-service spans at distribution or utilization voltages on private premises. ACSR (aluminum conductor steel reinforced) has a long service record because of its economy, dependability, and strength to weight ratio. The combined light weight and high conductivity of aluminum with strength of the steel core enables higher tensions, less sag, and longer spans than any alternative.

Construction

A solid or concentric stranded central steel core is surrounded by one or more layers of concentric stranded aluminum alloy 1350. The wire is protected from corrosion with a zinc coating.

Standards:

ASTM B 232/B 232M CSA C49; BS 215-2 BS EN 50182; DIN 48204; IEC 61089 A1/S1A A1/S2A A1/S3A; JIS C 3110; GOST 839-80; NF C 34120; JIS C 3110;

ACSR/GZ AS/NZS 3607

ACSR/AC AS 3607

ACSR/AW – ALUMINUM CONDUCTOR STEEL REINFORCED/AW CORE

High Strength ACSR/AW-Aluminum Conductor Steel Reinforced/AW Core

ASTM B 232/B 232M CSA C49

Code	KCMIL AWG	OR Stranding		Stranding		O.D. mm	Total Section Area mm ²	Weight Kg/Km	Breaking Load KN	Electrical Resistance @ 20o Ω/Km	Current Rating* A
		AL mm ²	Steel mm ²	AL No.xmm	Steel No.xmm						
Wren	8	8.37	1.39	6/1.33	1/1.33	3.99	9.76	33.8	3.29	3.430	48
Warbler	7	10.55	1.77	6/1.50	1/1.50	4.50	12.32	42.8	4.14	2.720	60
Turkey	6	13.3	2.22	6/1.68	1/1.68	5.04	15.52	53.6	5.19	2.1499	76
Thrush	5	16.77	2.8	6/1.89	1/1.89	5.67	19.57	67.9	6.56	1.711	80
Swan	4	21.18	3.53	6/2.12	1/2.12	6.36	24.71	85.3	7.83	1.3501	101
Swallow	3	26.66	4.45	6/2.38	1/2.38	7.14	31.11	107.9	10.0	1.076	129
Swanate	4	21.12	5.35	7/1.96	1/2.61	6.53	26.47	99.6	9.79	1.3539	102
Sparrow	2	33.59	5.6	6/2.67	1/2.67	8.01	39.19	135.7	11.92	0.8512	135
Sparate	2	33.54	8.55	7/2.47	1/3.30	8.24	42.09	158.7	15.08	0.8525	135
Robin	1	42.41	7.07	6/3.00	1/3.00	9	49.48	171.1	14.86	0.6742	156
Raven	1/0	53.52	8.92	6/3.37	1/3.37	10.11	62.44	216.1	18.33	0.5343	180
Quail	2/0	67.33	11.22	6/3.78	1/3.78	11.34	78.55	272	22.46	0.4247	207
Pigeon	3/0	85.12	14.19	6/4.25	1/4.25	12.75	99.31	343	28.02	0.3359	239
Penguin	4/0	107.22	17.87	6/4.77	1/4.77	14.31	125.09	432.7	35.36	0.2667	275
Partridge	266.8	134.87	21.99	26/2.57	7/2.00	16.28	156.86	545.9	47.15	0.2141	316
Owl	266.8	135.2	17.6	6/5.36	7/1.79	16.09	152.8	509.0	42.3	0.2123	314
Waxwing	266.8	134.98	7.5	18/3.09	1/3.09	15.45	142.48	430.2	29.8	0.2129	313
Piper	300	152.0	35.5	30/2.54	7/2.54	17.78	187.5	698	67.8	0.1898	341
Ostrich	300	152.19	24.71	26/2.73	7/2.12	17.28	176.9	613.4	53.38	0.1897	341
Phoebe	300	152.0	8.5	18/3.28	1/3.28	16.40	160.5	485	35.2	0.1895	322
Merlin	336.4	170.22	9.46	18/3.47	1/3.47	17.35	179.68	542.8	37.36	0.1688	361
Linnet	336.4	170.55	27.83	26/2.89	7/2.25	18.31	198.38	687.5	59.16	0.1693	365
Oriole	336.4	170.5	39.78	30/2.69	7/2.69	18.83	210.28	783.3	72.06	0.1698	367
Chickadee	397.5	200.93	11.16	18/3.77	1/3.77	18.85	212.09	641.3	43.15	0.143	400
Brant	397.5	201.56	26.13	24/3.27	7/2.18	19.62	227.69	761	61.83	0.1433	403

Ibis	397.5	201.34	32.73	26/3.14	7/2.44	19.88	234.07	812.4	68.05	0.1434	404
Lark	397.5	200.9	46.88	30/2.92	7/2.92	20.44	247.78	925.2	84.07	0.1441	406
Pelican	477	242.31	13.46	18/4.14	1/4.14	20.7	255.77	769.7	51.15	0.1186	448
Flicker	477	241.58	31.4	24/3.58	7/2.39	21.49	272.98	913.5	72.06	0.1195	450
Hawk	477	241.65	39.19	26/3.44	7/2.67	21.77	280.84	975.1	81.84	0.1195	451
Hen	477	241.27	56.3	30/3.20	7/3.20	22.4	297.57	1110.6	98.3	0.12	453
Toucan	477	241.7	23.8	22/3.74	7/2.08	21.2	265.5	854	68.9	0.1193	421
Heron	500	253.4	59.1	30/3.28	7/3.28	22.96	312.5	1163	108	0.1139	441
Osprey	556.5	282.47	15.69	18/4.47	1/4.47	22.35	298.16	897.7	59.6	0.1017	492
Sapsucker	556.5	282.0	27.6	22/4.04	7/2.24	22.88	309.6	995	78.8	0.1023	494
Parakeet	556.5	282.31	36.6	24/3.87	7/2.58	23.22	318.91	1065.6	83.18	0.1023	495
Dove	556.5	282.59	45.92	26/3.72	7/2.89	23.55	328.51	1138.6	94.3	0.1022	497
Eagle	556.5	282.07	65.82	30/3.46	7/3.46	24.22	347.89	1295.6	114.76	0.1026	499
Peacock	605	306.13	39.78	24/4.03	7/2.69	24.19	345.91	1158.9	90.74	0.0943	520
Squab	605	305.83	49.81	26/3.87	7/3.01	24.51	355.64	1237	101.41	0.0944	521
Wood Duck	605	307.06	71.65	30/3.61	7/3.61	25.27	378.71	1408.4	121.43	0.0943	525
DUCK	605	306.6	39.7	54/2.69	7/2.69	24.21	346.3	1160	101	0.09435	524
Teal	605	307.06	69.62	30/3.61	19/2.16	25.24	376.68	1396.6	124.54	0.0943	525
Egret	636	322.3	73.5	30/3.70	19/2.22	25.9	395.8	1469	141	0.08955	532
Goose	636	322.3	41.8	54/2.76	7/2.76	24.84	364.1	1220	104	0.08975	532
Goldfinch	636	322.3	31.6	22/4.32	7/2.40	24.48	353.9	1138	89.3	0.08949	532
Kingbird	636	323.01	17.95	18/4.78	1/4.78	23.9	340.96	1026.6	68.05	0.089	533
Swift	636	323.02	8.97	36/3.38	1/3.38	23.66	331.99	956.5	60.05	0.089	532
Rook	636	323.07	41.88	24/4.14	7/2.76	24.84	364.95	1217.5	95.19	0.0894	537
Grosbeak	636	321.84	52.49	26/3.97	7/3.09	25.15	374.33	1300.8	104.97	0.0897	537
Scoter	636	322.56	75.26	30/3.70	7/3.70	25.9	397.82	1480.7	127.66	0.0897	541
Egret	636	322.56	73.54	30/3.70	19/2.22	25.9	396.1	1469	130.77	0.0897	541
Flamingo	666.6	337.27	43.72	24/4.23	7/2.82	25.38	380.99	1276.6	99.64	0.0856	551
Gannet	666.6	338.26	54.9	26/4.07	7/3.16	25.76	393.16	1363.3	110.31	0.0854	553
Gull	666.6	337.8	43.7	54/2.82	7/2.82	25.38	337.8	1278	109	0.08563	536
-	666.6	337.8	17.4	42/3.20	7/1.78	24.54	337.8	10	7077.8	0.08552	536
Stilt	715.5	363.27	46.88	24/4.39	7/2.92	26.32	410.15	1370.4	107.2	0.0795	576
Starling	715.5	361.93	59.15	26/4.21	7/3.28	26.68	421.08	1463.7	118.32	0.0798	577
Redwing	715.5	362.06	82.41	30/3.92	19/2.35	27.43	444.47	1650.6	143.23	0.0799	580
Crow	715.5	362.6	46.8	54/2.92	7/2.92	26.28	362.6	1370	117	0.07978	548
-	715.5	362.6	18.6	42/3.32	7/1.84	25.44	409.4	1148	83.6	0.07968	548
Coot	795	401.86	11.16	36/3.77	1/3.77	26.39	413.02	1195.8	73.39	0.0715	607
Tern	795	403.77	27.83	45/3.38	7/2.25	27.03	431.6	1331.8	94.3	0.0715	610
Condor	795	402.33	52.15	54/3.08	7/3.08	27.72	454.48	1520.7	118.32	0.0718	612
Cuckoo	795	402.33	52.15	24/4.62	7/3.08	27.72	454.48	1522.2	117.43	0.0718	612
Drake	795	402.56	65.44	26/4.44	7/3.45	28.11	468	1626.4	131.66	0.0717	615
Macaw	795	402.8	20.70	42/3.49	7/1.94	26.76	423.5	1276	92.5	0.07171	617
Mallard	795	403.84	91.78	26/4.44	7/3.45	28.96	495.62	1836	159.24	0.0717	619
Crane	874.5	443.1	57.4	54/3.23	7/3.23	29.07	443.1	1676	138	0.06527	638
-	874.5	443.1	22.9	42/3.67	7/2.04	28.14	466.0	1404	102	0.06519	638

Ruddy	900	455.5	31.67	45/3.59	7/2.40	28.74	487.17	1507.3	104.53	0.0634	656
-	900	456.0	23.6	42/3.72	7/2.07	28.53	479.6	1554	105	0.06334	659
Canary	900	456.28	59.15	54/3.28	7/3.28	29.52	515.43	1723.1	134.33	0.0633	660
Catbird	954	484.61	13.46	36/4.14	1/4.14	28.98	498.07	1434.4	86.74	0.0593	679
Rail	954	483.84	33.54	45/3.70	7/2.47	29.61	517.38	1598.1	110.76	0.0597	680
Cardinal	954	484.53	62.81	54/3.38	7/3.38	30.42	547.34	1825.9	142.34	0.0596	685
Phoenix	954	483.4	24.9	42/3.83	7/2.13	29.37	508.3	1532	109	0.05976	683
Cardinal	954	484.53	62.81	54/3.38	7/3.38	30.42	547.34	1825.9	142.34	0.0596	685
Tanager		522.79	14.52	36/4.30	1/4.30	30.1	537.31	1553.5	93.85	0.055	710
Orotlan		523.87	36.31	45/3.85	7/2.57	30.81	560.18	1730.5	118.32	0.0551	713
Snowbird	1033.5	523.7	26.8	42/3.98	7/2.21	30.51	550.5	1658	118	0.05516	718
Curlew	1033.5	522.51	67.73	54/3.51	7/3.51	31.59	590.24	1977.6	153.9	0.0553	716
Bluejay		565.49	38.9	45/4.00	7/2.66	31.98	604.39	1866	127.66	0.0511	745
Beaumont	1113	564.0	128.8	42/4.13	7/2.29	31.65	692.8	1785	126	0.05122	747
Finch	1113	565.03	71.57	54/3.65	19/2.19	32.85	636.6	2127.8	164.58	0.0514	748
Bunting		605.76	41.88	45/4.14	7/2.76	33.12	647.64	1996.9	136.55	0.0477	776
-	1192.5	604.3	31.1	42/4.28	7/2.38	32.82	635.4	1915	135	0.04781	779
Grackle	1192.5	602.79	76.89	54/3.77	19/2.27	33.97	679.68	2278.1	176.59	0.0481	777
Skylark		646.02	17.95	36/4.78	1/4.78	33.46	663.97	1913.6	115.65	0.0445	804
Bittern		644.4	44.66	45/4.27	7/2.85	34.17	689.06	2130.8	145.89	0.0448	805
Pheasant	1272	645.08	81.71	54/3.90	19/2.34	35.1	726.79	2431.4	183.26	0.045	808
Scissortail	1272	644.5	33.3	42/4.42	7/2.46	33.90	677.8	2043	144	0.04482	786
Dipper		684.24	47.2	45/4.40	7/2.93	35.19	731.44	2263.2	154.79	0.0422	834
Martin	1351.5	685.39	86.67	54/4.02	19/2.41	36.17	772.06	2581.7	194.82	0.0423	838
-	1351.5	684.8	35.2	42/4.56	7/2.53	34.95	720.0	2169	153	0.04218	814
Bobolink		725.27	50.14	45/4.53	7/3.02	36.24	775.41	2397.2	164.13	0.0398	862
Plover	1431	726.92	91.78	54/4.14	19/2.48	37.24	818.7	2734.9	206.39	0.0399	866
-	1431	725.1	37.5	42/4.69	7/2.61	35.97	762.6	2298	162	0.03984	843
Nuthatch	1510.5	764.2	52.83	45/4.65	7/3.10	37.2	817.03	2529.6	171.25	0.0378	888
Parrot	1510.5	766.06	97.03	54/4.25	19/2.55	38.25	863.09	2883.7	217.51	0.0379	892
-	1510.5	765.4	39.5	42/4.82	7/2.68	36.96	804.9	2425	171	0.03774	868
Lapwing	1590	807.53	55.6	45/4.78	7/3.18	38.22	863.13	2663.5	180.14	0.0358	916
Falcon	1590	806.23	102.43	54/4.36	19/2.62	39.26	908.66	3038.5	229.52	0.036	919
-	1590	805.7	70.8	48/4.62	7/3.59	38.49	876.5	2783	211	0.03586	871
-	1590	805.7	34.6	72/3.77	7/2.51	37.69	840.3	2501	172	0.03590	871
Chukar		903.18	73.54	34/3.70	19/2.22	40.7	976.72	3083.1	217.51	0.0321	976
Bluebird		1092.84	88.84	34/4.07	19/2.44	44.76	1181.68	3731.9	256.65	0.0266	1083
Kiwi		1099.76	47.52	72/4.41	7/2.94	44.1	1147.28	3423.9	215.28	0.0264	1083
Thrasher		1171.42	63.94	76/4.43	19/2.07	45.79	1235.36	3754.2	243.75	0.0248	1122
High Strength Stranding											
Grouse**		40.54	14.12	8/2.54	1/4.24	9.32	54.66	221.4	21.75	0.7089	153
Petrel**		51.61	30.1	12/2.34	7/2.34	11.7	81.71	377.7	42.08	0.5595	181
Minorca**		56.11	32.73	12/2.44	7/2.44	12.2	88.84	411.1	45.81	0.5146	191
Leghorn**		68.2	39.78	12/2.69	7/2.69	13.45	107.98	499.2	55.16	0.4234	215
Guinea**		80.36	46.88	12/2.92	7/2.92	14.6	127.24	589.7	64.94	0.3593	238

Dotterel**	89.41	52.15	12/3.08	7/3.08	15.4	141.56	656.1	70.28	0.323	254
Dorking**	96.51	56.3	12/3.20	7/3.20	16	152.81	707.8	75.62	0.2992	267
Cochin**	107.04	62.44	12/3.37	7/3.37	16.85	169.48	783.9	84.07	0.2698	284
Brahma*&**	102.79	91.78	12/3.37	7/3.37	18.12	194.57	1003.8	114.76	0.2809	283

BS 215-2 BS EN 50182

Code Name	Area				Stranding		Approx. Overall Diameter	Weight			Nominal Breaking Load	D.C. Resistance at 20°C	Standard Length
	Nominal Alum.	Alum.	Steel	Total	Alum.	Steel		Alum.	Steel	Total			
	mm ²	mm ²	mm ²	mm ²	mm	mm	mm	kg/km	kg/km	kg/km	kN	ohm/km	m±5%
Mole	10	10.62	1.77	12.39	6/1.50	1/1.50	4.50	29	14	43	4.14	2.076	3000
Squirrel	20	20.94	3.49	24.43	6/2.11	1/2.11	6.33	58	27	85	7.88	1.368	3000
Gopher	25	26.25	4.37	30.62	6/2.36	1/2.36	7.08	72	34	106	9.61	1.093	2500
Weasel	30	31.61	5.27	36.88	6/2.59	1/2.59	7.77	87	41	128	11.45	0.9077	2000
Fox	35	36.66	6.11	42.77	6/2.79	1/2.79	8.37	101	48	149	13.20	0.7822	2000
Ferret	40	42.41	7.07	49.48	6/3.00	1/3.00	9.00	117	55	172	15.20	0.6766	2500
Rabbit	50	52.88	8.82	61.70	6/3.35	1/3.35	10.05	145	69	214	18.35	0.5426	2000
Mink	60	63.18	10.53	73.71	6/3.66	1/3.66	10.98	173	82	255	21.80	0.4545	3000
Skunk	60	63.27	36.93	100.30	12/2.59	7/2.59	12.95	175	290	465	53.00	0.4567	2500
Beaver	70	74.82	12.47	87.29	6/3.99	1/3.99	11.97	205	97	302	25.70	0.3825	2500
Horse	70	73.37	42.80	116.17	12/2.79	7/2.79	13.95	203	335	538	61.20	0.3936	2000
Raccoon	75	79.20	13.20	92.40	6/4.10	1/4.10	12.30	217	103	320	27.20	0.3622	2500
Otter	80	83.88	13.98	97.86	6/4.22	1/4.22	12.66	230	109	339	28.80	0.3419	2500
Cat	90	95.40	15.90	111.30	6/4.50	1/4.50	13.50	262	124	386	32.70	0.3007	2000
Hare	100	105.0	17.50	122.50	6/4.72	1/4.72	14.16	288	137	425	36.00	0.2733	2000
Dog	100	105.0	13.50	118.5	6/4.72	7/1.57	14.15	288	106	394	32.70	0.2733	2000
Hyena	100	105.8	20.44	126.2	7/4.39	7/1.93	14.57	290	160	450	40.90	0.2712	2000
Leopard	125	131.3	16.80	148.1	6/5.28	7/1.75	15.81	360	132	492	40.70	0.2184	2000
Coyote	125	132.1	20.10	152.2	26/2.54	7/1.91	15.89	365	157	522	46.40	0.2187	2000
Cougar	125	130.3	7.25	137.5	18/3.05	1/3.05	15.25	362	57	419	29.80	0.2189	2000
Tiger	125	131.1	30.60	161.7	30/2.36	7/2.36	16.52	362	240	602	58.00	0.2202	2500
Wolf	150	158.0	36.90	194.9	30/2.59	7/2.59	18.13	437	289	726	69.20	0.1828	2000
Dingo	150	158.7	8.80	167.5	18/3.35	1/3.35	16.75	437	69	506	35.70	0.1815	3000
Lynx	175	183.4	42.80	226.2	30/2.79	7/2.79	19.53	507	335	842	79.80	0.1576	2000
Caracal	175	184.2	10.30	194.5	18/3.61	1/3.61	18.05	507	80	587	41.10	0.1563	2500
Panther	200	212.0	49.50	261.5	30/3.00	7/3.00	21.00	586	388	974	92.25	0.1363	2500
Lion	225	238.5	55.60	294.2	30/3.18	7/3.18	22.26	659	436	1095	109.60	0.1212	2000
Bear	250	264.0	61.60	325.6	30/3.35	7/3.35	23.45	730	483	1213	111.10	0.1093	2000
Goat	300	324.3	75.70	400.0	30/3.71	7/3.71	25.97	896	593	1489	135.70	0.08910	3000
Sheep	350	374.1	87.30	461.4	30/3.99	7/3.99	27.93	1034	684	1718	155.90	0.07704	2500
Antelope	350	373.1	48.40	421.5	54/2.97	7/2.97	26.73	1032	379	1411	118.20	0.07727	2500
Bison	350	381.8	49.50	431.3	54/3.00	7/3.00	27.00	1056	388	1444	120.90	0.07573	3000
Jaguar	200	210.6	11.70	222.3	18/3.86	1/3.86	19.30	580	91	671	46.55	0.13670	2000
Deer	400	429.3	100.20	529.5	30/4.27	7/4.27	29.89	1186	785	1971	178.50	0.06726	2500
Zebra	400	428.9	55.60	484.5	54/3.18	7/3.18	28.62	1186	435	1621	131.90	0.06740	2000
Elk	450	477.0	111.30	588.3	30/4.50	7/4.50	31.50	1318	872	2190	198.20	0.06056	2000

Camel	450	475.2	61.60	536.8	54/3.35	7/3.35	30.15	1314	483	1797	145.70	0.06073	2500
Moose	500	528.7	68.50	597.2	54/3.53	7/3.53	31.77	1462	537	1999	161.10	0.05470	2000

DIN 48204

Area				Stranding and wire		Overall Diameter	Linear mass			Nominal breaking load	Maximum resistance at 20 °C
Nominal	Actual			diameter			Al	St	Total		
Al/St	Al	St	Total	Al	St	mm	kg/km	kg/km	kg/km	daN	ohm/km
mm2	mm2	mm2	mm2	mm	mm	mm	kg/km	kg/km	kg/km	daN	ohm/km
16/2.5	15.3	2.5	17.8	6/1.80	1/1.80	5.4	42	20	62	595	1.8780
25/4.0	23.8	4.0	27.8	6/2.25	1/2.25	6.8	65	32	97	920	1.2002
36/6.0	34.3	5.7	40.0	6/2.70	1/2.70	8.1	94	46	140	1265	0.8352
44/32.0	44.0	31.7	75.7	14/2.00	7/2.40	11.2	122	250	372	4500	0.6573
50/8.0	48.3	8.0	56.3	6/3.20	1/3.20	9.6	132	64	196	1710	0.5946
50/30	51.2	29.8	81.0	12/2.33	7/2.33	11.7	141	237	378	4380	0.5643
70/12	69.9	11.4	81.3	26/1.85	7/1.44	11.7	193	91	284	2680	0.4130
95/15	94.4	15.3	109.7	26/2.15	7/1.67	13.6	260	123	383	3575	0.3058
95/55	96.5	56.3	152.8	12/3.20	7/3.20	16.0	266	446	712	7935	0.2992
105/75	105.7	75.5	181.5	14/3.10	9/2.25	17.5	292	599	891	10845	0.2735
120/20	121.06	19.8	141.4	26/2.44	7/1.90	15.5	336	158	494	4565	0.2374
120/70	122.0	71.3	193.3	12/3.6	7/3.60	18.0	337	564	901	10000	0.2364
125/30	127.9	29.8	157.7	30/2.33	7/2.33	16.3	353	238	591	5760	0.2259
150/25	148.9	24.2	173.1	26/2.70	7/2.10	17.1	411	194	605	5525	0.1939
170/40	171.8	40.1	211.9	30/2.70	7/2.70	18.9	475	319	794	7675	0.1682
185/30	183.8	29.8	213.6	26/3.00	7/2.33	19.0	507	239	746	6620	0.1571
210/35	209.1	34.1	243.2	26/3.20	7/2.49	20.3	577	273	850	7490	0.1380
210/50	212.1	49.5	261.6	30/3.00	7/3.00	21.0	587	394	981	9390	0.1362
230/30	230.9	29.8	260.7	24/3.50	7/2.33	21.0	638	239	877	7310	0.1249
240/40	243.0	39.5	282.5	26/3.45	7/2.68	21.9	671	316	987	8640	0.1188
265/35	263.7	34.1	297.8	24/3.74	7/2.49	22.4	728	274	1002	8305	0.1094
300/50	304.3	49.5	353.7	26/3.86	7/3.00	24.5	840	396	1236	10700	0.09487
305/40	304.6	39.5	344.1	54/2.68	7/2.68	24.1	843	317	1160	9940	0.0949
340/30	339.3	29.8	369.1	48/3.00	7/2.33	25.0	938	242	1180	9290	0.08509
380/50	382.0	49.5	431.5	54/3.00	7/3.00	27.0	1056	397	1453	12310	0.08509
385/35	386.0	34.1	420.1	48/3.20	7/2.49	26.7	1067	277	1344	10480	0.07573
435/55	434.03	59.3	490.6	54/3.20	7/3.20	28.8	1203	450	1653	13645	0.07478
450/40	448.7	39.5	488.2	48/3.45	7/2.68	28.7	1241	320	1561	12075	0.06656
490/65	490.3	63.6	553.9	54/3.40	7/3.40	30.6	1356	510	1866	15310	0.06434
495/35	494.1	34.1	528.2	45/3.74	7/2.49	29.9	1363	283	1646	12180	0.05846
510/45	510.2	45.3	555.5	48/3.68	7/2.87	30.7	1413	365	1778	13665	0.05655
550/70	550.0	71.3	621.3	54/3.60	7/3.60	32.4	1520	572	2092	17060	0.05259
560/50	561.7	49.5	611.2	48/3.86	7/3.00	32.2	1553	401	1954	14895	0.0514
570/40	565.5	39.5	610.3	45/4.00	7/2.68	32.2	1563	325	1888	13900	0.05108
650/45	698.8	45.3	653.49	45/4.30	7/2.87	34.4	1791	372	2163	15552	0.0442
680/85	678.8	86.0	764.8	54/4.00	18/2.40	36.0	1866	702	2570	21040	0.0426
1045/45	1045.58	45.3	1090.9	72/4.30	7/2.87	43.0	2879	370	3249	21787	0.0277

IEC 61089 Characteristics of A1/S1A Conductors

Code Number	Steel Ratio %	Areas			No. of Wires		Wire Dia.		Diameter		Linear Mass kg/km	Rated Strength kN	C. Resistance at 20°C ohm/km
		Alum. mm2	Steel mm2	Total mm2	Alum.	Steel	Alum. mm	Steel mm	Core mm	Cond mm			
16	17	16	2.67	18.7	6	1	1.84	1.84	1.84	5.53	64.6	6.08	1.7934
25	17	25	4.17	29.2	6	1	2.30	2.30	2.30	6.91	100.9	9.13	1.1478
40	17	40	6.67	46.7	6	1	2.91	2.91	2.91	8.74	161.5	14.40	0.7174
63	17	63	10.5	73.5	6	1	3.66	3.66	3.66	11.0	254.4	21.63	0.4555
100	17	100	16.7	117	6	1	4.61	4.61	4.61	13.8	403.8	34.33	0.2869
125	6	125	6.94	132	18	1	2.97	2.97	2.97	14.9	397.9	29.17	0.2304
125	16	125	20.4	145	26	7	2.47	1.92	5.77	15.7	503.9	45.69	0.2310
160	6	160	8.89	169	18	1	3.36	3.36	3.36	16.8	509.3	36.18	0.1800
160	16	160	26.1	186	26	7	2.80	2.18	6.53	17.7	644.9	57.69	0.1805
200	6	200	11.1	211	18	1	3.76	3.76	3.76	18.8	636.7	44.22	0.1440
200	16	200	32.6	233	26	7	3.13	2.43	7.30	19.8	806.2	70.13	0.1444
250	10	250	24.6	275	22	7	3.80	2.11	6.34	21.6	880.6	68.72	0.1154
250	16	250	40.7	291	26	7	3.50	2.72	8.16	22.2	1007.7	87.67	0.1155
315	7	315	21.8	337	45	7	2.99	1.99	5.97	23.9	1039.6	79.03	0.0917
315	16	315	51.3	366	26	7	3.93	3.05	9.16	24.9	1269.7	106.83	0.0917
400	7	400	27.7	428	45	7	3.36	2.24	6.73	26.9	1320.1	98.36	0.0722
400	13	400	51.9	452	54	7	3.07	3.07	9.21	27.6	1510.3	123.04	0.0723
450	7	450	31.1	481	45	7	3.57	2.38	7.14	28.5	1485.2	107.47	0.0642
450	13	450	58.3	508	54	7	3.26	3.26	9.77	29.3	1699.1	138.42	0.0643
500	7	500	34.6	535	45	7	3.76	2.51	7.52	30.1	1650.2	119.41	0.0578
500	13	500	64.8	565	54	7	3.43	3.43	10.3	30.9	1887.9	153.80	0.0578
560	7	560	38.7	599	45	7	3.98	2.65	7.96	31.8	1848.2	133.74	0.0516
560	13	560	70.9	631	54	19	3.63	2.18	10.9	32.7	2103.4	172.59	0.0516
630	7	630	43.6	674	45	7	4.22	2.81	8.44	33.8	2079.2	150.45	0.0459
630	13	630	79.8	710	54	19	3.85	2.31	11.6	34.7	2366.3	191.77	0.0459
710	7	710	49.1	759	45	7	4.48	2.99	8.96	35.9	2343.2	169.56	0.0407
710	13	710	89.9	800	54	19	4.09	2.45	12.3	36.8	2666.8	216.12	0.0407
800	4	800	34.6	835	72	7	3.76	2.51	7.52	37.6	2480.2	167.41	0.0361
800	8	800	66.7	867	84	7	3.48	3.48	10.4	38.3	2732.7	205.33	0.0362
800	13	800	101	901	54	19	4.44	2.61	13.0	39.1	3004.9	243.52	0.0362
900	4	900	38.9	939	72	7	3.99	2.66	7.98	39.9	2790.2	188.33	0.0321
900	8	900	75.0	975	84	7	3.69	3.69	11.1	40.6	3074.2	226.50	0.0322
1000	4	1000	43.2	1043	72	7	4.21	2.80	8.41	42.1	3100.3	209.26	0.0289
1120	4	1120	47.3	1167	72	19	4.45	1.78	8.90	44.5	3464.9	234.53	0.0258
1120	8	1120	91.2	1211	84	19	4.12	2.47	12.4	45.3	3811.5	283.17	0.0258
1250	8	1250	102	1352	84	19	4.35	2.61	13.1	47.9	4253.9	316.04	0.0232
1250	4	1250	52.8	1303	72	19	4.70	1.88	9.40	47.0	3867.1	261.75	0.0231

IEC 61089 Characteristics of A1/S1B Conductors

Code Number	Steel Ratio	Areas			No. of Wires		Wire Dia.		Diameter		Linear Mass	Rated Strength	C. Resistance at 20°C
		Alum.	Steel	Total	Alum.	Steel	Alum.	Steel	Core	Cond			

	%	mm ²	mm ²	mm ²			mm	mm	mm	mm	kg/km	kN	ohm/km
16	17	16	2.67	18.7	6	1	1.84	1.84	1.84	5.53	64.6	5.89	1.7934
25	17	25	4.17	29.2	6	1	2.30	2.30	2.30	6.91	100.9	8.83	1.1478
40	17	40	6.67	46.7	6	1	2.91	2.91	2.91	8.74	161.5	13.93	0.7174
63	17	63	10.5	73.5	6	1	3.66	3.66	3.66	11.0	254.4	20.58	0.4555
100	17	100	16.7	117	6	1	4.61	4.61	4.61	13.8	403.8	32.67	0.2869
125	6	125	6.94	132	18	1	2.97	2.97	2.97	14.9	397.9	28.68	0.2304
125	16	125	20.4	145	26	7	2.47	1.92	5.77	15.7	503.9	44.27	0.2310
160	6	160	8.89	169	18	1	3.36	3.36	3.36	16.8	509.3	35.29	0.1800
160	16	160	26.1	186	26	7	2.80	2.18	6.53	17.7	644.9	55.86	0.1805
200	6	200	11.1	211	18	1	3.76	3.76	3.76	18.8	636.7	43.11	0.1440
200	16	200	32.6	233	26	7	3.13	2.43	7.30	19.8	806.2	67.85	0.1444
250	10	250	24.6	275	22	7	3.80	2.11	6.34	21.6	880.6	67.01	0.1154
250	16	250	40.7	291	26	7	3.50	2.72	8.16	22.2	1007.7	84.82	0.1155
315	7	315	21.8	337	45	7	2.99	1.99	5.97	23.9	1039.6	77.51	0.0917
315	16	315	51.3	366	26	7	3.93	3.05	9.16	24.9	1269.7	101.70	0.0917
400	7	400	27.7	428	45	7	3.36	2.24	6.73	26.9	1320.1	96.42	0.0722
400	13	400	51.9	452	54	7	3.07	3.07	9.21	27.6	1510.3	117.85	0.0723
450	7	450	31.1	481	45	7	3.57	2.38	7.14	28.5	1485.2	105.29	0.0642
450	13	450	58.3	508	54	7	3.26	3.26	9.77	29.3	1699.1	132.58	0.0643
500	7	500	34.6	535	45	7	3.76	2.51	7.52	30.1	1650.2	116.99	0.0578
500	13	500	64.8	565	54	7	3.43	3.43	10.3	30.9	1887.9	147.31	0.0578
560	7	560	38.7	599	45	7	3.98	2.65	7.96	31.8	1848.2	131.03	0.0516
560	13	560	70.9	631	54	19	3.63	2.18	10.9	32.7	2103.4	167.63	0.0516
630	7	630	43.6	674	45	7	4.22	2.81	8.44	33.8	2079.2	147.40	0.0459
630	13	630	79.8	710	54	19	3.85	2.31	11.6	34.7	2366.3	186.19	0.0459
710	7	710	49.1	759	45	7	4.48	2.99	8.96	35.9	2343.2	166.12	0.0407
710	13	710	89.9	800	54	19	4.09	2.45	12.3	36.8	2666.8	209.83	0.0407
800	4	800	34.6	835	72	7	3.76	2.51	7.52	37.6	2480.2	164.99	0.0361
800	8	800	66.7	867	84	7	3.48	3.48	10.4	38.3	2732.7	198.67	0.0362
800	13	800	101	901	54	19	4.44	2.61	13.0	39.1	3004.9	236.43	0.0362
900	4	900	38.9	939	72	7	3.99	2.66	7.98	39.9	2790.2	185.61	0.0321
900	8	900	75.0	975	84	7	3.69	3.69	11.1	40.6	3074.2	219.00	0.0322
1000	4	1000	43.2	1043	72	7	4.21	2.80	8.41	42.1	3100.3	206.23	0.0289
1120	4	1120	47.3	1167	72	19	4.45	1.78	8.90	44.5	3464.9	231.22	0.0258
1120	8	1120	91.2	1211	84	19	4.12	2.47	12.4	45.3	3811.5	276.78	0.0258
1250	8	1250	52.8	1303	72	19	4.35	2.61	13.1	47.9	4253.9	258.06	0.0231
1250	4	1250	102	1352	84	19	4.70	1.88	9.40	47.0	3867.1	308.91	0.0232

IEC 61089 Characteristics of A1/S2A Conductors

Code Number	Steel Ratio	Areas			No. of Wires		Wire Dia.		Diameter		Linear Mass	Rated Strength	D.C. Resistance at 20°C
		Alum.	Steel	Total	Alum.	Steel	Alum.	Steel	Core	Cond			
	%	mm ²	mm ²	mm ²			mm	mm	mm	mm	kg/km	kN	ohm/km
16	17	16	2.67	18.7	6	1	1.84	1.84	1.84	5.53	64.6	6.45	1.7934
25	17	25	4.17	29.2	6	1	2.30	2.30	2.30	6.91	100.9	9.71	1.1478
40	17	40	6.67	46.7	6	1	2.91	2.91	2.91	8.74	161.5	15.33	0.7174

63	17	63	10.5	73.5	6	1	3.66	3.66	3.66	11.0	254.4	22.37	0.4555
100	17	100	16.7	117	6	1	4.61	4.61	4.61	13.8	403.8	35.50	0.2869
125	6	125	6.94	132	18	1	2.97	2.97	2.97	14.9	397.9	30.14	0.2304
125	16	125	20.4	145	26	7	2.47	1.92	5.77	15.7	503.9	48.54	0.2310
160	6	160	8.89	169	18	1	3.36	3.36	3.36	16.8	509.3	37.42	0.1800
160	16	160	26.1	186	26	7	2.80	2.18	6.53	17.7	644.9	61.34	0.1805
200	6	200	11.1	211	18	1	3.76	3.76	3.76	18.8	636.7	45.00	0.1440
200	16	200	32.6	233	26	7	3.13	2.43	7.30	19.8	806.2	74.69	0.1444
250	10	250	24.6	275	22	7	3.80	2.11	6.34	21.6	880.6	72.16	0.1154
250	16	250	40.7	291	26	7	3.50	2.72	8.16	22.2	1007.7	93.37	0.1155
315	7	315	21.8	337	45	7	2.99	1.99	5.97	23.9	1039.6	82.08	0.0917
315	16	315	51.3	366	26	7	3.93	3.05	9.16	24.9	1269.7	114.02	0.0917
400	7	400	27.7	428	45	7	3.36	2.24	6.73	26.9	1320.1	102.23	0.0722
400	13	400	51.9	452	54	7	3.07	3.07	9.21	27.6	1510.3	130.30	0.0723
450	7	450	31.1	481	45	7	3.57	2.38	7.14	28.5	1485.2	111.82	0.0642
450	13	450	58.3	508	54	7	3.26	3.26	9.77	29.3	1699.1	146.58	0.0643
500	7	500	34.6	535	45	7	3.76	2.51	7.52	30.1	1650.2	124.25	0.0578
500	13	500	64.8	565	54	7	3.43	3.43	10.3	30.9	1887.9	162.87	0.0578
560	7	560	38.7	599	45	7	3.98	2.65	7.96	31.8	1848.2	139.16	0.0516
560	13	560	70.9	631	54	19	3.63	2.18	10.9	32.7	2103.4	182.52	0.0516
630	7	630	43.6	674	45	7	4.22	2.81	8.44	33.8	2079.2	156.55	0.0459
630	13	630	79.8	710	54	19	3.85	2.31	11.6	34.7	2366.3	202.94	0.0459
710	7	710	49.1	759	45	7	4.48	2.99	8.96	35.9	2343.2	176.43	0.0407
710	13	710	89.9	800	54	19	4.09	2.45	12.3	36.8	2666.8	228.71	0.0407
800	4	800	34.6	835	72	7	3.76	2.51	7.52	37.6	2480.2	172.25	0.0361
800	8	800	66.7	867	84	7	3.48	3.48	10.4	38.3	2732.7	214.67	0.0362
800	13	800	101	901	54	19	4.44	2.61	13.0	39.1	3004.9	257.71	0.0362
900	4	900	38.9	939	72	7	3.99	2.66	7.98	39.9	2790.2	193.78	0.0321
900	8	900	75.0	975	84	7	3.69	3.69	11.1	40.6	3074.2	231.75	0.0322
1000	4	1000	43.2	1043	72	7	4.21	2.80	8.41	42.1	3100.3	215.31	0.0289
1120	4	1120	47.3	1167	72	19	4.45	1.78	8.90	44.5	3464.9	241.15	0.0258
1120	8	1120	91.2	1211	84	19	4.12	2.47	12.4	45.3	3811.5	295.94	0.0258
1250	4	1250	52.8	1303	72	19	4.70	1.88	9.40	47.0	3867.1	269.14	0.0231
1250	8	1250	102	1352	84	19	4.35	2.61	13.1	47.9	4253.9	330.29	0.0232

IEC 61089 Characteristics of A1/S2B Conductors

Code Number	Steel Ratio	Areas			No. of Wires		Wire Dia.		Diameter		Linear Mass	Rated Strength	D.C. Resistance at 20°C
		Alum.	Steel	Total	Alum.	Steel	Alum.	Steel	Core	Cond			
	%	mm ²	mm ²	mm ²			mm	mm	mm	mm	kg/km	kN	ohm/km
16	17	16	2.67	18.7	6	1	1.84	1.84	1.84	5.53	64.6	6.27	1.7934
25	17	25	4.17	29.2	6	1	2.30	2.30	2.30	6.91	100.9	9.42	1.1478
40	17	40	6.67	46.7	6	1	2.91	2.91	2.91	8.74	161.5	14.87	0.7174
63	17	63	10.5	73.5	6	1	3.66	3.66	3.66	11.0	254.4	21.63	0.4555
100	17	100	16.7	117	6	1	4.61	4.61	4.61	13.8	403.8	34.33	0.2869
125	6	125	6.94	132	18	1	2.97	2.97	2.97	14.9	397.9	29.65	0.2304
125	16	125	20.4	145	26	7	2.47	1.92	5.77	15.7	503.9	47.12	0.2310

160	6	160	8.89	169	18	1	3.36	3.36	3.36	16.8	509.3	36.80	0.1800
160	16	160	26.1	186	26	7	2.80	2.18	6.53	17.7	644.9	59.51	0.1805
200	6	200	11.1	211	18	1	3.76	3.76	3.76	18.8	636.7	44.22	0.1440
200	16	200	32.6	233	26	7	3.13	2.43	7.30	19.8	806.2	72.41	0.1444
250	10	250	24.6	275	22	7	3.80	2.11	6.34	21.6	880.6	70.44	0.1154
250	16	250	40.7	291	26	7	3.50	2.72	8.16	22.2	1007.7	90.52	0.1155
315	7	315	21.8	337	45	7	2.99	1.99	5.97	23.9	1039.6	80.55	0.0917
315	16	315	51.3	366	26	7	3.93	3.05	9.16	24.9	1269.7	110.43	0.0917
400	7	400	27.7	428	45	7	3.36	2.24	6.73	26.9	1320.1	100.29	0.0722
400	13	400	51.9	452	54	7	3.07	3.07	9.21	27.6	1510.3	126.67	0.0723
450	7	450	31.1	481	45	7	3.57	2.38	7.14	28.5	1485.2	109.64	0.0642
450	13	450	58.3	508	54	7	3.26	3.26	9.77	29.3	1699.1	142.50	0.0643
500	7	500	34.6	535	45	7	3.76	2.51	7.52	30.1	1650.2	121.83	0.0578
500	13	500	64.8	565	54	7	3.43	3.43	10.3	30.9	1887.9	158.33	0.0578
560	7	560	38.7	599	45	7	3.98	2.65	7.96	31.8	1848.2	136.45	0.0516
560	13	560	70.9	631	54	19	3.63	2.18	10.9	32.7	2103.4	177.56	0.0516
630	7	630	43.6	674	45	7	4.22	2.81	8.44	33.8	2079.2	153.50	0.0459
630	13	630	79.8	710	54	19	3.85	2.31	11.6	34.7	2366.3	197.36	0.0459
710	7	710	49.1	759	45	7	4.48	2.99	8.96	35.9	2343.2	172.99	0.0407
710	13	710	89.9	800	54	19	4.09	2.45	12.3	36.8	2666.8	222.42	0.0407
800	4	800	34.6	835	72	7	3.76	2.51	7.52	37.6	2480.2	169.83	0.0361
800	8	800	66.7	867	84	7	3.48	3.48	10.4	38.3	2732.7	210.00	0.0362
800	13	800	101	901	54	19	4.44	2.61	13.0	39.1	3004.9	250.61	0.0362
900	4	900	38.9	939	72	7	3.99	2.66	7.98	39.9	2790.2	191.06	0.0321
900	8	900	75.0	975	84	7	3.69	3.69	11.1	40.6	3074.2	226.50	0.0322
1000	4	1000	43.2	1043	72	7	4.21	2.80	8.41	42.1	3100.3	212.28	0.0289
1120	4	1120	47.3	1167	72	19	4.45	1.78	8.90	44.5	3464.9	237.84	0.0258
1120	8	1120	91.2	1211	84	19	4.12	2.47	12.4	45.3	3811.5	289.55	0.0258
1250	8	1250	52.8	1303	72	19	4.70	1.88	9.40	47.0	3867.1	265.44	0.0231
1250	4	1250	102	1352	84	19	4.35	2.61	13.1	47.9	4253.9	323.16	0.0232

Type AC GOST 839-80

Nominal Corss-section	Number of Wires	Wire Diameter	Calculated Cross-section	Overall Diameter	D.C. Resistance at 20	Min. Breaking Load	Conductor Weight	Grease Weight
mm ²		mm	mm ²	mm	Ω/km		kg/km	kg/km
10	7	1,35	10,0	4,05	2,8631	1950	27,4	-
16	7	1,70	15,9	5,10	1,8007	3021	43,0	0,5
25	7	2,13	24,9	6,40	1,1498	4500	68,0	0,5
35	7	2,50	34,3	7,50	0,8347	5913	94,0	0,5
40	7	2,70	40,0	8,09	0,7157	6800	109,4	-
50	7	3,00	49,5	9,00	0,5784	8198	135,0	0,5
63	7	3,39	63,0	10,16	0,4544	10390	172,3	-
70	7	3,55	69,3	10,70	0,4131	11288	189,0	1,0
95	7	4,10	92,4	12,30	0,3114	14784	252,0	1,0
100	19	2,59	100,0	12,94	0,2877	17000	274,9	-
120	19	2,80	117,0	14,00	0,2459	19890	321,0	16

125	19	2,89	125,0	14,47	0,2301	21250	343,6	-
150	19	3,15	148,0	15,80	0,1944	24420	406,0	20
160	19	3,27	160,0	16,37	0,1798	26400	439,8	-
185	19	3,50	182,8	17,50	0,1574	29832	502,0	25
200	19	3,66	200,0	18,30	0,1438	32000	549,7	-
240	19	4,00	238,7	20,00	0,1205	38192	655,0	33
250	19	4,09	250,0	20,47	0,1150	40000	687,1	-
300	37	3,15	288,3	22,10	0,1000	47569	794,0	54
315	37	3,29	315,0	23,05	0,0915	51970	867,5	-
350	37	3,45	345,8	24,20	0,0833	57057	952,0	65
400	37	3,66	389,2	25,60	0,0740	63420	1072,0	73
450	37	3,90	449,1	27,30	0,0642	71856	1206,0	84
500	37	4,15	500,4	29,10	0,0576	80000	1378,0	94
550	61	3,37	544,0	30,30	0,0529	89760	1500,0	117
560	37	4,39	560,0	30,73	0,0531	89600	1542,2	-
600	61	3,50	586,8	31,50	0,0491	95632	1618,0	126
630	61	3,63	630,0	32,64	0,0458	100800	1738,4	-
650	61	3,66	641,7	32,90	0,0450	104575	1771,0	138
700	61	3,80	691,7	34,20	0,0417	112725	1902,0	149
710	61	3,85	710,0	34,65	0,0406	113600	1959,2	-
750	61	3,95	747,4	35,60	0,0386	119584	2062,0	161

Type Acp Asx GOST 839-80

Aluminum Core Section	Section/Steel	Number of Aluminum Wires	Aluminum Diameter	Wire	Number of Steel Wires	Steel Diameter	Wire	Calculated Cross-section	Overall Diameter
mm2			mm			mm		mm2	mm
(10/1,8)		6	1,50	1		1,50		10,6/1,77	4,5
(16/2,7)		6	1,85	1		1,85		16/2,69	5,6
(25/4,2)		6	2,30	1		2,30		24,9/4,15	6,9
(35/6,2)		6	2,80	1		2,80		36,9/6,15	8,4
40/6,7		6	2,91	1		2,91		40/6,7	8,74
(50/8,0)		6	3,20	1		3,20		48,2/8,04	9,6
63/10,5		6	3,66	1		3,66		63/10,5	10,97
(70/11)		6	3,80	1		3,80		68/11,3	11,4
(70/72)		18	2,20	19		2,20		68,4/72,2	15,4
(95/16)		6	4,50	1		4,50		95,4/15,9	13,5
(95/141)		24	2,20	37		2,20		91,2/141	19,8
100/16,7		6	4,61	1		4,61		100/16,7	13,82
(120/19)		26	2,40	7		1,85		118/18,8	15,2
(120/27)		30	2,20	7		2,20		114/26,6	15,4
125/6,9		18	2,97	1		2,97		125/6,9	14,67
125/20,4		26	2,47	7		1,92		125/20,4	15,67
(150/19)		24	2,80	7		1,85		148/18,8	16,8
(150/24)		26	2,70	7		2,10		149/24,2	17,1
(150/34)		30	2,50	7		2,50		147/34,3	17,5
160/8,9		18	3,36	1		3,36		160/8,9	16,82

160/26,1	26	2,80	7	2,18	160/26,1	17,73
(185/24)	24	3,15	7	2,10	187/24,2	18,9
(185/29)	26	2,98	7	2,30	181/29	18,8
(185/43)	30	2,80	7	2,80	185/43,1	19,6
(185/128)	54	2,10	37	2,10	187/128	23,1
200/11,1	18	3,76	1	3,76	200/11,1	18,81
200/32,6	26	3,13	7	2,43	200/32,6	19,82
(205/27)	24	3,30	7	2,20	205/26,6	19,8
(240/32)	24	3,60	7	2,40	244/31,7	21,6
(240/39)	26	3,40	7	2,65	236/38,6	21,6
(240/56)	30	3,20	7	3,20	241/56,3	22,4
(300/39)	24	4,00	7	2,65	301/38,6	24,0
(300/48)	26	3,80	7	2,95	295/47,8	24,1
(300/66)	30	3,50	19	2,10	288,5/65,8	24,5
(300/67)	30	3,50	7	3,50	288,5/67,3	24,5
(300/204)	54	2,65	37	2,65	298/204	29,2
315/21,8	45	2,99	7	1,99	315/21,8	23,83
315/51,3	26	3,93	7	3,05	315/51,3	24,87
(330/30)	48	2,98	7	2,30	335/29,1	24,8
(330/43)	54	2,80	7	2,80	332/43,1	25,2
400/27,7	45	3,36	7	2,24	400/27,7	26,91
400/51,9	54	3,07	7	3,07	400/51,9	27,64
(400/18)	42	3,40	7	1,85	381/18,8	26,0
(400/22)	76	2,57	7	2,00	394/22	26,6
(400/51)	54	3,05	7	3,05	394/51,1	27,5
(400/64)	26	4,37	7	3,40	390/63,5	27,7
(400/93)	30	4,15	19	2,50	406/93,2	29,1
450/31,1	45	3,57	7	2,38	450/31,1	28,55
450/58,3	54	3,26	7	3,26	450/58,3	29,32
(450/56)	54	3,20	7	3,20	434/56,3	28,8
500/34,6	45	3,76	7	2,51	500/34,6	30,09
500/64,8	54	3,43	7	3,43	500/64,8	30,90
(500/26)	42	3,90	7	2,20	502/26,6	30,00
(500/27)	76	2,84	7	2,20	481/26,6	29,40
(500/64)	54	3,40	7	3,40	490/63,5	30,60
(500/204)	90	2,65	37	2,65	496/204	34,50
(500/336)	54	3,40	61	2,65	490/336	37,50
(550/71)	54	3,60	7	3,60	549/71,2	32,40
560/38,7	45	3,98	7	2,65	560/38,7	31,84
560/70,9	54	3,63	19	2,18	560/70,9	32,70
(600/72)	54	3,70	19	2,20	580/72,2	33,20
630/43,6	45	4,22	7	2,81	630/43,6	33,79
630/79,8	54	3,85	19	2,31	630/79,8	34,69
(650/79)	96	2,90	19	2,30	634/78,9	34,70
(700/86)	96	3,02	19	2,40	687/85,9	36,20

710/49,1	45	4,48	7	2,99	710/49,1	35,86
710/89,9	54	4,09	19	2,45	710/89,9	36,82
(750/93)	96	3,15	19	2,50	748/93,2	37,70
800/34,6	72	3,76	7	2,51	800/34,6	37,61
800/66,7	84	3,48	7	3,48	800/66,7	38,30
800/101,3	54	4,34	19	2,61	800/101,3	39,09
(800/105)	96	3,30	19	2,65	821/105	39,70
900/38,9	72	3,99	7	2,66	900/38,9	39,89
900/75	84	3,69	7	3,69	900/75	40,63
1000/43,2	72	4,21	7	2,80	1000/43,2	42,05
(1000/56)	76	4,10	7	3,20	1003,2/56,3	42,40
1120/47,3	72	4,45	19	1,78	1120/47,3	44,50
1120/91,2	84	4,12	19	2,47	1120/91,2	45,32
1250/52,8	72	4,70	19	1,88	1250/52,8	47,02
1250/101,8	84	4,35	19	2,61	1250/101,8	47,88

NF C 34120

CODE	SECTION			STRANDING				OVERALL DIAMETER		TENSILE S. STEEL HBAR.	RATED STRENGTH	ELECTRICAL RESISTANCE 20°C.	CONDUCTOR WEIGHT			GREASE WEIGHT	
	mm2			No. x mm		mm			kN	ohms/km	kg/km			g/m			
	Al	Steel	Total	Al	Steel	Core	Total				Al	Steel	Total	Outside layer greased	Outside layer ungreased		
CANNA 37.7	28.27	9.42	37.69	9 x 2.00	3 x 2.00	-	8.3	117.6	1.625	1.02	80	155	75	6	2		
CANNA 59.7	37.7	21.99	59.69	12 x 2.00	7 x 2.00	6	10	117.6	3.27	0.766	103	276	173	7	3		
CANNA 75.5	47.71	27.83	75.54	12 x 2.25	7 x 2.25	6.75	11.25	117.6	4.115	0.605	128	349	220	10	4		
CANNA 116.2	94.25	21.99	116.24	30 x 2.00	7 x 2.00	6	14	117.6	4.315	0.306	258	432	174	13	7		
CROCUS 116.12	94.25	21.99	116.24	30 x 2.00	7 x 2.00	6	14	156.8	4.93	0.306	258	432	174	13	7		
CANNA 147.1	119.28	27.83	147.11	30 x 2.25	7 x 2.25	6.75	15.75	117.6	5.4	0.243	327	547	220	18	10		
CROCUS 147.1	119.28	27.83	147.11	30 x 2.25	7 x 2.25	6.75	15.75	156.8	6.18	0.243	327	547	220	18	10		
CANNA 181.6	147.26	34.36	181.62	30 x 2.50	7 x 2.50	7.5	17.5	117.6	6.49	0.197	403	675	272	22	12		
CROCUS 181.6	147.26	34.36	181.62	30 x 2.50	7 x 2.50	7.5	17.5	156.8	7.42	0.197	403	675	272	22	12		
CANNA 228	184.72	43.1	227.82	30 x 2.80	7 x 2.80	8.4	19.6	117.6	8.05	0.157	506	848	342	26	15		
CROCUS 228	184.72	43.1	227.82	30 x 2.80	7 x 2.80	8.4	19.6	156.8	9.21	0.157	506	848	342	26	15		
CANNA 233.8	54.55	288.35	30 x 7	9.45	22.05	117.6	9.85	0.124	642	1074	432	33	18				

288				3.15	3.15											
CROCUS 288	233.8	54.55	288.35	30 x7	3.15 x3.15	9.45	22.05	156.8	11.38	0.124	642	1074	432	33	18	
CROCUS 297	221.67	75.54	297.21	36 x19	2.80 x2.25	11.25	22.45	156.8	17.72	0.1305	594	624	1218	35	20	
CROCUS 412	325.72	85.95	411.67	32 x19	3.60 x2.40	12	26.4	156.8	17.33	0.0898	676	917	1593	50	25	
CROCUS 612	507.83	104.7	611.76	66 x19	3.13 x2.65	13.25	32.2	156.8	23.15	0.0566	824	1417	2241	70	40	
CROCUS 865	717.33	148.06	865.39	66 x19	3.72 x3.15	15.75	38.1	156.8	31.9	0.0405	1164	2010	3174	100	55	
CROCUS 1185	956.66	227.82	1184.48	54 x37	2.8 x2.80	19.7	44.7	156.8	48.05	0.0303	1796	2682	4478	140	100	

JIS C 3110

Nominal Sectional Area mm ²	Sectional Area			Stranding		Overall Diameter mm	Weight Kg/Km	Breakign Load KN	Electrical Resistance @20c Ω/Km
	AL mm ²	Steel mm ²	Total mm ²	AL No.xmm	Steel No.xmm				
25	24.9	4.2	29.1	6/2.30	1/2.30	6.9	101	8.89	1.15
32	31.9	5.3	37.2	6/2.60	1/2.60	7.8	129	11.17	0.899
58	57.7	9.6	67.3	6/3.50	1/3.50	10.5	233	19.40	0.497
95	95.4	15.9	111.3	6/4.50	1/4.50	13.5	385	31.16	0.301
120	124.7	29.1	153.8	30/2.3	7/2.3	16.1	574	54.29	0.233
160	159.3	37.2	196.5	30/2.6	7/2.6	18.2	733	68.40	0.182
200	198.2	46.2	244.4	30/2.9	7/2.9	20.3	912	84.67	0.147
240	241.2	59.3	300.5	30/3.2	7/3.2	22.4	1110	100.06	0.120
330	326.8	52.8	379.6	26/4.0	7/3.1	25.3	1320	107.31	0.0888
410	413.4	67.3	480.7	26/4.5	7/3.5	28.5	1673	136.32	0.0702
520	519.5	67.3	586.8	54/3.5	7/3.5	31.2	1969	152.88	0.0559
610	612.4	79.4	691.8	54/3.8	7/3.8	34.2	2320	179.83	0.0474
810	814.5	56.3	870.8	45/3.8	7/3.2	38.4	2700	181.10	0.0356

ACSR/GZ – Aluminium conductors, galvanised steel reinforced AS/NZS 3607

Product code	Strand/wire		Cross sectional area			Nominal O.D. mm	Approximate mass kg/km	Calculated minimum load kN	breaking	Calculated final modulus of elasticity GPa	Coefficient of linear expansion /°C x 10 ⁻⁶
	Alum No/mm	Steel No/mm	Alum mm ²	Steel mm ²	Total mm ²						
QUINCE	3/1.75	4/1.75	7.2	9.6	16.8	5.3	96	12.7	136	13.9	
RAISIN	3/2.50	4/2.50	14.7	19.6	34.3	7.5	193	24.4	136	13.9	
SUPER SULTANA	3/3.00	4/3.00	21.2	28.3	49.5	9	280	35	136	13.9	
SULTANA	4/3.00	3/3.00	28.3	21.2	49.5	9	242	28.3	119	15.2	
WALNUT	4/3.75	3/3.75	44.2	33.1	77.3	11.3	379	43.9	119	15.2	
ALMOND	6/2.50	1/2.50	29.2	4.9	34.4	7.5	119	10.5	83	19.3	
APRICOT	6/2.75	1/2.75	35.6	5.9	41.5	8.3	144	12.6	83	19.3	
APPLE	6/3.00	1/3.00	42.4	7.1	49.5	9	171	14.9	83	19.3	
BANANA	6/3.75	1/3.75	66.3	11	77.3	11.3	268	22.8	83	19.3	

CHERRY	6/4.75	7/1.60	106	14.1	120	14.3	404	33.2	80	19.9
GRAPE	30/2.50	7/2.50	147	34.4	182	17.5	677	63.5	88	18.4
LEMON	30/3.00	7/3.00	212	49.5	262	21	973	90.4	88	18.4
LYCHEE	30/3.25	7/3.25	249	58.1	307	22.8	1140	105	88	18.4
LIME	30/3.50	7/3.50	289	67.3	356	24.5	1320	122	88	18.4
MANGO	54/3.00	7/3.00	382	49.5	431	27	1440	119	78	19.9
ORANGE	54/3.25	7/3.25	448	58.1	506	29.3	1690	137	78	19.9
OLIVE	54/3.50	7/3.50	519	67.3	587	31.5	1960	159	78	19.9
PAW PAW	54/3.75	19/2.25	596	75.5	672	33.8	2240	178	77	20
PEACH	54/4.75	19/2.85	957	121	1078	42.8	3600	284	77	20

ACSR/AC – Aluminium conductors, aluminium clad steel reinforced AS 3607

Product code	Strand/wire		Cross sectional area			Nominal O.D. mm	Approximate mass kg/km	Calculated minimum load kN	Calculated breaking modulus of elasticity GPa	Coefficient of linear expansion /°C x 10-6
	Alum No/mm	Steel No/mm	Alum mm2	Steel mm2	Total mm2					
SKATING	3/1.75	4/1.75	7.2	9.6	16.8	5.3	83	12.3	119	15.3
SOCCER	3/2.50	4/2.50	14.7	19.6	34.3	7.5	171	24.9	119	15.3
SWIMMING	4/3.00	3/3.00	28.3	21.2	49.5	9	218	28.9	106	16.5
TENNIS	4/3.75	3/3.75	44.2	33.1	77.3	11.3	340	42.6	106	16.5
ANGLING	6/2.50	1/2.50	29.5	4.9	34.4	7.5	113	10.6	79	20.1
ARCHERY	6/3.00	1/3.00	42.4	7.1	49.5	9	163	15.1	79	20.1
BASEBALL	6/3.75	1/3.75	66.3	11	77.3	11.3	254	22.3	79	20.1
BOWLS	6/4.75	7/1.60	106	14.1	120	14.3	385	32.7	76	20.6
CRICKET	30/2.50	7/2.50	147	34.4	182	17.5	636	64.4	82	19.4
DARTS	30/3.00	7/3.00	212	49.5	262	21	913	91.6	82	19.4
DICE	30/3.25	7/3.25	249	58.1	307	22.8	1070	106	82	19.4
DIVING	30/3.50	7/3.50	289	67.3	356	24.5	1240	122	82	19.4
GOLF	54/3.00	7/3.00	382	49.5	431	27	1380	120	75	20.6
GYMNASTICS	54/3.25	7/3.25	448	58.1	506	29.3	1620	139	75	20.6
HURDLES	54/3.50	7/3.50	519	67.3	587	31.5	1880	159	75	20.6
LACROSSE	54/3.75	19/2.25	596	75.5	672	33.8	2150	180	74	20.7
RUGBY	54/4.75	19/2.85	957	121	1078	42.8	3450	288	74	20.7

ACSR/AW – ALUMINUM CONDUCTOR STEEL REINFORCED/AW CORE

Code Word	Size (AWG or kcmil)	Stranding (Al/Aw)	Diameter (ins.)			Weight Per 1000 ft (lbs.)			Rated Strength (lbs.)	Resistance OHMS/1000ft		Allowable Ampacity+ (Amps)
			Individual Wires		Complete Cable	Al	AW	Total		DC @ 20°C	AC @ 75°C	
			AL	AW								
Swan/AW	4	6/1	.0834	.0834	.250	39	16	55	1780	3917	4770	145
Swanate/AW	4	7/1	.0772	.1029	.257	39	24	63	2280	3814	4642	148
Sparrow/AW	2	6/1	.1052	.1052	.316	62	25	87	2760	2462	2997	194
Sparate/AW	2	7/1	.0974	.1299	.325	62	38	100	3510	2396	2917	198
Robin/AW	1	6/1	.1182	.1182	.355	78	31	109	3450	1950	2373	225
Raven/AW	1/0	6/1	.1327	.1327	.398	99	39	138	4250	1547	1884	260

Quail/AW	2/0	6/1	1490	1490	447	124	50	174	5130	1227	1494	301
Pigeon/AW	3/0	6/1	1672	1672	502	156	63	219	6300	09747	1188	347
Penguin/AW	4/0	6/1	1878	1878	563	197	79	277	7690	07726	09422	402
Waxwing/AW	266.8	18/1	1217	1217	609	250	33	283	6820	06364	07776	451
Partridge/AW	266.8	26/7	1013	0788	642	251	98	349	10800	06169	07541	465
Ostrich/AW	300	26/7	1074	0835	680	283	110	393	12100	05489	06712	500
Merlin/AW	336.4	18/1	1367	1367	684	315	42	357	8540	05044	06175	522
Linnet/AW	336.4	26/7	1138	0885	721	317	123	440	13500	04897	05989	537
Oriole/AW	336.4	30/7	1059	1059	741	318	177	494	16700	04795	05861	547
Chickadee/AW	397.5	18/1	1486	1486	743	373	50	422	9780	04268	05230	580
Brant/AW	397.5	24/7	1287	0858	772	374	116	490	14100	04185	05124	592
Ibis/AW	397.5	26/7	1236	0961	783	374	146	520	15800	04144	05072	597
Lark/AW	397.5	30/7	1151	1151	806	375	209	584	19600	04059	04965	608
Pelican/AW	477	18/1	1628	1628	814	447	59	507	11500	03556	04344	651
Flicker/AW	477	24/7	1410	0940	846	449	139	589	16700	03487	04273	663
Hawk/AW	477	26/7	1355	1054	858	449	175	624	18900	03453	04231	669
Hen/AW	477	30/7	1261	1261	883	450	251	701	23400	03382	04139	682
Osprey/AW	556.5	18/1	1758	1758	879	522	69	591	13200	03050	03749	715
Parakeet/AW	556.5	24/7	1523	1015	914	524	163	687	19300	02989	03667	731
Dove/AW	556.5	26/7	1463	1138	927	524	204	728	21900	02958	03627	737
Eagle/AW	556.5	30/7	1362	1362	953	525	293	818	26800	02899	03551	751
Peacock/AW	605	24/7	1588	1059	953	570	177	746	21000	02749	03377	770
Squab/AW	605	26/7	1525	1186	966	570	222	792	23600	02588	03341	777
Teal/AW	605	30/19	1420	0852	994	571	311	883	28500	02672	03274	791
Kingbird/AW	636	18/1	1880	1880	940	596	79	675	15000	02667	03286	778
Rook/AW	636	24/7	1628	1085	977	599	186	785	22000	02616	03216	794
Grosbeak/AW	636	26/7	1564	1216	990	599	233	832	24800	02588	03179	801
Egret/AW	636	30/19	1456	0874	1.019	601.4	327.5	928.9	29930	—	—	—
Flamingo/AW	666.6	24/7	1667	1111	1.000	628	195	823	23100	02495	03069	818
Gannet/AW	666.6	26/7	1601	1245	1.014	628	245	872	26000	02470	03034	825
Starling/AW	715.5	26/7	1659	1290	1.051	674	263	939	27500	02300	02830	863
Redwing/AW	715.5	30/19	1544	0926	1.081	676	368	1044	33400	02260	02777	878
Tern/AW	795	45/7	1329	0886	1.063	749	124	873	21500	02135	02638	896
Cuckoo/AW	795	24/7	1820	1213	1.092	749	232	981	27500	02093	02582	913
Drake/AW	795	26/7	1749	1360	1.108	749	292	1040	30500	02070	02549	922
Condor/AW	795	54/7	1213	1214	1.093	749	232	981	27800	02091	02578	913
Mallard/AW	795	30/19	1628	0977	1.140	751	409	1160	37100	02033	02500	938
Ruddy/AW	900	45/7	1414	0943	1.131	848	140	988	24000	01886	02330	970
Canary/AW	900	54/7	1291	1291	1.162	848	263	1111	31000	01849	02286	986
Catbird/AW	954	36/1	1628	1628	1.140	938	6.2	955	19460	—	—	—
Rail/AW	954	45/7	1456	0971	1.165	899	149	1047	25400	01779	02210	1003
Cardinal/AW	954	54/7	1329	1329	1.196	899	279	1177	32900	01744	02161	1022
Ortolan/AW	1033.5	45/7	1515	1010	1.212	973	161	1134	27200	01641	02044	1054
Curlew/AW	1033.5	54/7	1383	1383	1.244	973	302	1275	35200	01609	01997	1074
Bluejay/AW	1113	45/7	1573	1049	1.259	1048	173	1222	29300	01606	01905	1103

Finch/AW	1113	54/19	1436	.0862	1.293	1055	319	1374	37500	—	—	—
Bunting/AW	1192.5	45/7	1628	.1085	1.302	1125	186	1311	31300	—	—	—
Bittern/AW	1272	45/7	1681	.1121	1.345	1200	198	1398	33400	—	—	—
Pheasant/AW	1272	54/19	1535	.0921	1.382	1204	364	1568	42400	.01315	.01646	1216
Bobolink/AW	1431	45/7	1783	.1189	1.427	1348	223	1571	37600	.01186	.01503	1283
Lapwing/AW	1590	45/7	1880	.1253	1.504	1498	248	1745	41800	.01069	.01366	1365

High Strength ACSR/AW-Aluminum Conductor Steel Reinforced/AW Core

Code Word	Size (AWG or kcmil)	Stranding (Al/AW)	Diameter (ins.)			Weight Per 1000 ft (lbs.)			Rated Strength (lbs.)	Resistance OHMS/1000ft		Allowable Ampacity+ (Amps)
			Individual Wires		Complete Cable	Al	AW	Total		DC @ 20°C	AC @ 75°C	
			AL	AW								
Grouse/AW	80.0	8/1	1000	1670	367	75.1	62.6	137.7	4,890	.1942	.2357	227
Petrel/AW	101.8	12/7	.0921	.0921	.460	96.0	133.9	229.9	9,910	.1425	.1736	281
Minorca/AW	110.8	12/7	.0961	.0961	.481	104.5	145.8	250.3	10,800	.1326	.1594	297
Leghorn/AW	134.6	12/7	.1059	.1059	.530	127.0	177.0	304.0	13,000	.1078	.1313	335
Guinea/AW	159.0	12/7	.1151	.1151	.576	150.0	209.1	359.1	15,300	.09123	.1112	372
Dotterel/AW	176.9	12/7	.1261	.1261	.631	180.0	251.0	399.5	16,900	.08201	.09988	398
Dorking/AW	190.8	12/7	.1261	.1261	.631	180.0	251.0	431.0	18,300	.07601	.09261	418
Brahma/AW	203.2	16/19	.1127	.0977	.714	191.7	411.0	602.7	21,100	.06570	.07994	464
Cochin/AW	211.3	12/7	.1327	.1327	.664	199.3	278.0	477.3	19800	.06863	.8364	445

+Conductor temperature of 75°C, ambient temperature 25°C, emissivity 0.5, wind 2 ft./sec. in sun.