

# ACSR - ASTM - B Aluminium Conductor Steel Reinforced



Eland Product Group: **A4A**

## APPLICATION

ACSR conductor consists of a solid or stranded steel core surrounded by strands of aluminium. ACSR conductor is available in a range of steel strengths varying from 6% up to 40%. The higher strength ACSR conductors are used for river crossings, overhead earth wires, and installations involving extra long spans. Against any given resistance of conductor, ACSR conductor may be manufactured to have different tensile strengths as per requirement. The principal advantage of these conductors are their high tensile strength and light weight, covering longer spans with less supports. Due to the greater diameter of an ACSR conductor much higher corona limit can be obtained, giving a big advantage on high and extra high voltage overhead lines.

## CABLE STANDARDS

ASTM - B 231 Metric Units, ASTM - B 232, TS IEC 1089, DIN 48201, BS 215, UNE 21.018



The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, construction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed.

## CONSTRUCTION

### Conductor

Hard Drawn Aluminium: BS EN 60889

AL1 and Zinc coated steel wire as per BS EN 50189 with the class and grade in accordance with ST1A, ST5E and ST6C

## DIMENSIONS

### ASTM Sizes - TS IEC 1089

CODE AL mm <sup>2</sup>	CANADA STANDARD		SECTION				CONDUCTORS			
	Type	Section AWG	Al mm <sup>2</sup>	Steel mm <sup>2</sup>	Total mm <sup>2</sup>	Copper equivalent mm <sup>2</sup>	Aluminium		Steel	
							No.	Diameter mm	No.	Diameter mm
17/3	TUHRUS	5	16.83	2.8	19.63	10.6	6	1.89	1	1.89
21/4	SWAN	4	21.18	3.53	24.71	13.3	6	2.12	1	2.12
27/4	SWALLOW	3	26.69	4.45	31.14	16.8	6	2.38	1	2.38
34/6	SPARROW	2	33.59	5.6	39.19	21.1	6	2.67	1	2.67
42/7	ROBIN	1	42.41	7.07	49.48	26.7	6	3	1	3
54/9	RAVEN	1/0	53.52	8.92	62.44	33.7	6	3.37	1	3.37
67/11	QUAIL	2/0	67.33	11.22	78.55	43.3	6	3.78	1	3.78
85/14	PIGEON	3/0	85.12	14.18	99.3	53.5	6	4.25	1	4.25
135/7	WAXWING	266800	134.98	7.5	142.48	84.9	18	3.09	1	3.09
135/22	PARTRIDGE	266800	134.87	21.99	156.86	84.8	26	2.57	7	2

## DIMENSIONS

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CODE AL mm <sup>2</sup>	CANADA STANDARD		SECTION				CONDUCTORS			
	Type	Section AWG	Al mm <sup>2</sup>	Steel mm <sup>2</sup>	Total mm <sup>2</sup>	Copper equivalent mm <sup>2</sup>	Aluminium		Steel	
							No.	Diameter mm	No.	Diameter mm
152/8	PHEOBE	300000	152.09	8.45	160.54	95.6	18	3.28	1	3.28
152/25	OSTRICH	300000	152.19	24.71	176.9	95.7	26	2.73	7	2.12
242/39	HAWK	477000	241.65	39.19	280.84	152	26	3.44	7	2.67
403/65	DRAKE	795000	402.56	65.44	468	253.2	26	4.44	7	3.45
485/63	CARDINAL	954000	484.53	62.81	547.34	304.7	54	3.38	7	3.38
645/82	PHEASANT	127200	645.08	81.71	726.79	405.7	54	3.90	19	2.34

## ASTM - TS IEC 1089

CODE AL mm <sup>2</sup>	DIAMETER		RATED STRENGTH kg	DC RESISTANCE AT 20°C ohm/km	UNIT WEIGHT kg/km			TOTAL WEIGHT		Reel type	PACKING OF REELS	
	Steel core mm	Complete cable mm			AL kg/km	Steel kg/km	Total kg/km	AL %	Steel %		In one reel	
											Lengths m	Net weight kg
17/3	1.89	5.67	665	1.0752	46.2	21.8	68	67.9	32.1	R-100	9600	653
21/4	2.12	6.36	831	1.355	58.1	27.5	85.6	67.9	32.1	R-100	8000	685
27/4	2.38	7.14	1023	1.0742	73.2	34.6	107.8	67.9	32.1	R-100	6400	690
34/6	2.67	8.01	1264	0.8543	92.1	43.6	135.7	67.9	32.1	R-100	4800	652
42/7	3	9	1579	0.6767	116.4	55	171.4	67.9	32.1	R-100	3200	550
54/9	3.37	10.11	1945	0.5362	146.8	69.4	216.2	67.9	32.1	R-100	3200	692
67/11	3.78	11.34	2420	0.4263	184.7	87.3	272	67.9	32.1	R-100	2400	653
85/14	4.25	12.75	3035	0.3366	233.5	110.4	343.9	67.9	32.1	R-100	1600	550
135/7	3.09	15.45	3220	0.2134	371.8	58.3	430.1	86.4	13.6	R-100	1600	688
135/22	6	16.28	5099	0.214	372.2	171.6	543.8	68.5	31.5	R-120	1600	870
152/8	3.28	16.4	3628	0.1891	418.9	65.7	484.6	86.4	13.6	R-120	2500	1212
152/25	6.36	17.28	5736	0.1897	420	192.9	612.9	68.5	31.5	R-120	1600	981
242/39	8.01	21.77	8798	0.1194	666.8	306	972.8	68.5	31.5	R-150	1750	1703
403/65	10.35	28.11	14165	0.0715	1110.9	511	1621.9	68.5	31.5	R-180	1600	2595
485/63	10.14	30.42	15589	0.0597	1339.6	190.2	1829.8	73.2	26.8	R-200	2000	3660
645/82	11.7	35.1	20383	0.0449	1783.8	639.7	2423.5	73.6	26.4	R-200	1600	3878

## ASTM - B 232 Metric Units

CODE	SIZE AWG-MCM	STRANDING No. x mm		SECTION mm <sup>2</sup>		OVERALL DIAMETER mm		CONDUCTOR WEIGHT kg/km			RATED STRENGTH kN	ELECTRICAL RESISTANCE			CURRENT CARRYING CAPACITY (1) Amps
		Al.	Steel	Total	Al.	Total	Core	Total	Al.	Steel		20°C DC	25°C AC	75°C AC	
TURKEY	6	6 x 1.68	1 x 1.68	15.52	13.3	5.04	1.68	53.8	36.5	17.3	5.295	2.1135	2.1496	2.6850	110
SWAN	4	6 x 2.12	1 x 2.12	24.71	21.18	6.36	2.12	85.4	58	27.4	8.28	1.3278	1.3537	1.7172	145
SWANATE	4	7 x 1.96	1 x 2.61	26.47	21.12	6.53	2.61	99.7	58	41.7	10.5	1.1313	1.3387	1.7383	145
SPARROW	2	6 x 2.67	1 x 2.67	39.2	33.6	8.01	2.67	135.9	92.3	43.6	12.68	0.8343	0.8527	1.1081	195
SPARATE	2	7 x 2.47	1 x 3.30	42.09	33.54	5.24	3.3	158.8	92.3	66.51	6.2	0.8251	0.8435	1.1181	195
ROBIN	1	6 x 3.00	1 x 3.00	49.48	42.41	9	3	171.4	116.4	55	15.8	0.6621	0.6768	0.8907	200
RAVEN	1/0	6 x 3.37	1 x 3.37	62.44	53.52	10.11	3.37	216.1	146.7	69.4	19.49	0.5243	0.5370	0.7165	255
QUAIL	2/0	6 x 3.78	1 x 3.78	78.55	67.33	11.34	3.78	272.5	185	87.5	23.63	0.4160	0.4265	0.5803	295
PIGEON	3/0	6 x 4.25	1 x 4.25	99.31	85.12	12.75	4.25	343.5	233.2	110.3	29.46	0.3304	0.3386	0.4705	340

CODE	SIZE AWG-MCM	STRANDING No. x mm		SECTION mm <sup>2</sup>		OVERALL DIAMETER mm		CONDUCTOR WEIGHT kg/km			RATED STRENGTH kN	ELECTRICAL RESISTANCE			CURRENT CARRYING CAPACITY (1) Amps
		Al.	Steel	Total	Al.	Total	Core	Total	Al.	Steel		20°C DC	25°C AC	75°C AC	
PENGUIN	4/0	6 x 4.77	1 x 4.77	125.09	107.22	14.31	4.77	433.2	294.2	139	37.16	0.2618	0.2697	0.3829	390
WAXWING	266.8	18 x 3.09	1 x 3.09	142.5	135	15.45	3.09	431.6	372.9	58.7	30.62	0.2119	0.2169	0.2595	480
PARTRIDGE	266.8	26 x 2.57	7 x 2.00	156.9	134.9	16.28	6	546.1	374.3	171.8	50.28	0.2100	0.2146	0.2569	490
OSTRICH	300	26 x 2.73	7 x 2.12	176.9	152.2	17.28	6.36	614.6	421.3	193.3	56.52	0.1867	0.1909	0.2283	530
MERLIN	336.4	18 x 3.47	1 x 3.47	179.7	170.2	17.35	3.47	543.2	469.7	73.5	38.36	0.1680	0.1719	0.2057	560
LINNET	336.4	26 x 2.89	7 x 2.25	198.4	170.6	18.31	6.75	689	472.2	216.8	62.75	0.1663	0.1669	0.2037	570
ORIOLE	336.4	30 x 2.69	7 x 2.69	210.3	170.5	18.83	8.07	784.3	473.2	311.1	76.98	0.1654	0.1690	0.2024	575
CHICKADEE	397.5	18 x 3.77	1 x 3.77	212.1	200.9	18.85	3.77	642.9	555.5	87.4	44.23	0.1221	0.1457	0.1742	620
BRANT	397.5	24 x 3.27	7 x 2.18	227.7	201.6	19.62	6.54	762	558.1	203.9	64.97	0.1417	0.1450	0.1732	630
IBIS	397.5	26 x 3.14	7 x 2.44	234	201.3	19.88	7.32	814	558.2	255.8	72.53	0.1411	0.1444	0.1726	635
LARK	397.5	30 x 2.92	7 x 2.92	247.8	200.9	20.44	8.76	927.1	555.1	372	90.3	0.1401	0.1434	0.1716	645
PELICAN	477	18 x 4.14	1 x 4.14	255.8	242.3	20.7	4.14	770.9	666.4	104.5	52.51	0.1184	0.1217	0.1453	700
FLICKER	477	26 x 3.58	7 x 2.39	273	241.6	21.19	7.17	915.2	670.1	245.1	76.54	0.1178	0.1207	0.1444	710
HAWK	477	26 x 3.44	7 x 2.67	280.8	241.6	21.77	8.01	977.7	669.7	308	86.77	0.1171	0.1201	0.1437	715
HEN	477	30 x 3.20	7 x 3.20	297.6	241.3	22.40	9.6	1111.7	671	440.7	105.91	0.1165	0.1194	0.1427	725
OSPREY	556.5	18 x 4.47	1 x 4.47	298.2	282.5	22.35	4.47	898.9	777	121.9	60.96	0.1014	0.1043	0.1247	775
PARAKEET	556.5	24 x 3.87	7 x 2.58	318.9	282.3	23.22	7.74	1067	781.6	285.4	88.11	0.1010	0.1037	0.1240	785
DOVE	556.5	26 x 3.72	7 x 2.89	328.5	282.6	23.55	6.67	1140	781.3	358.7	105.57	0.1007	0.1033	0.1237	790
EAGLE	556.5	27 x 3.30	7 x 3.46	347.9	282.1	24.27	1.38	1297.7	983.2	514.5	123.71	0.1001	0.1027	0.1227	800
PEACOCK	605	24 x 4.03	7 x 2.65	345.9	306.1	24.19	8.07	1160.8	849.8	311	96.12	0.09285	0.09547	0.11417	830
SQUAB	605	26 x 3.87	7 x 3.01	355.6	305.8	24.51	9.03	1239.7	849.8	389.9	108.13	0.09252	0.09514	0.11352	835
WOODDUCK	605	30 x 3.61	7 x 3.61	378.8	307.1	25.27	10.83	1410.8	851.2	559.6	128.6	0.03186	0.09449	0.11286	845
TEAL	605	30 x 3.61	19 x 2.16	376.1	307.1	25.24	10.80	1398.9	851.5	547.4	135.5	0.09186	0.09449	0.11286	845
KINGBIRD	636	18 x 4.78	1 x 4.78	340.9	323	23.9	4.78	1026.9	887.4	139.5	69.86	0.08891	0.09219	0.11286	840
ROOK	636	24 x 4.14	7 x 2.76	365	323.1	24.84	8.28	1281.8	892.9	388.9	97.9	0.08825	0.09088	0.10925	855
GROSBEAK	636	26 x 3.97	7 x 3.09	321.8	251.5	9.27	1302.2	892.6	-	409.6	1302.2	0.11214	0.08793	0.10827	860
SCOTER	636	30 x 3.70	7 x 3.70	397.9	322.6	25.9	11.1	1477.8	891.4	586.4	135.27	0.0876	0.0899	0.10794	870
EGRET	636	30 x 3.70	19 x 2.22	396.1	322.6	25.9	11.1	1470.3	895	575.3	140.17	0.0876	0.8990	0.10761	870
SWIFT	636	36 x 3.38	1 x 3.38	332	323	23.66	3.58	958.4	888.4	7	61.41	0.0892	0.9186	0.1093	845
FLAMINGO	666.6	24 x 4.23	7 x 2.82	381	337.3	25.38	8.46	1276.9	935.2	341.7	105.46	0.0843	0.8563	0.1037	880
GANNET	666.6	26 x 4.07	7 x 3.16	393.2	338.3	25.76	9.48	1364.7	936.1	428.6	117.48	0.08399	0.08497	0.10302	885
STILT	715.5	24 x 4.39	7 x 2.92	410.2	363.3	26.32	8.76	1372.1	1004.5	367.6	113.47	0.07841	0.08104	0.09678	920
STARLING	715.5	26 x 4.21	7 x 3.28	421	361.9	26.68	9.84	1465.9	1004.5	461.4	126.37	0.07808	0.08038	0.9613	930
REDWING	715.5	30 x 3.92	19 x 2.35	444.5	362.1	27.43	11.75	1653.4	1007.1	646.3	153.96	0.07776	0.08005	0.09547	940
CUCKOO	795	24 x 4.62	7 x 3.08	454.5	402.3	27.72	9.24	1522.4	1115.2	407.2	124.15	0.07087	0.07316	0.08727	985
DRAKE	795	26 x 4.44	7 x 3.45	468	402.6	28.11	10.35	1628.1	1115.8	512.3	140.17	0.07054	0.07283	0.08694	995
COOT	795	36 x 3.77	1 x 3.77	413.1	401.9	26.39	3.77	1198	1110.2	87.8	74.76	0.07152	0.07415	0.08825	975
TERN	795	45 x 3.38	7 x 2.25	431.6	403.8	27.03	6.75	1333.4	1116.1	217.3	98.34	0.07119	0.07382	0.08793	970
CONDOR	795	54 x 3.08	7 x 3.08	454.5	402.3	27.72	9.24	1513.9	1116.1	407.8	125.48	0.07054	0.07283	0.08694	975
MALLARD	795	30 x 4.14	19 x 2.48	495.6	403.8	28.96	12.4	1837.9	1118.7	719.2	170.87	0.06988	0.07218	0.08596	1005
RUDDY	900	45 x 3.59	7 x 2.40	487.2	455.5	28.74	7.2	1510.5	1263.5	247	108.58	0.06234	0.06463	0.07743	1050
CANARY	900	54 x 3.28	7 x 3.28	515.4	456.3	29.52	9.84	1724.8	1263.5	461.3	141.95	0.06234	0.06463	0.07710	1055
CATBIRD	954	36 x 4.14	1 x 4.14	498.1	484.6	28.98	4.14	1437.6	1333.4	104.2	88.11	0.05971	0.06234	0.07415	1095
RAIL	954	45 x 3.70	7 x 2.47	517.3	483.8	29.61	7.41	1599.8	1339.4	260.4	115.25	0.05938	0.06201	0.07382	1090
CARDINAL	954	54 x 3.38	7 x 3.38	547.3	484.5	30.42	10.14	1829	1339.8	489.2	150.4	0.05906	0.06135	0.07316	1095
TANAGER	1033.5	36 x 4.30	1 x 4.30	537.3	522.8	30.1	4.3	1556.6	1433.5	113.1	95.23	0.05577	0.05873	0.06923	1130
ORTOLAN	1033.5	45 x 3.85	7 x 2.57	560.2	523.9	30.81	7.71	1733.7	1451	282.7	123.26	0.05479	0.05741	0.06824	1150

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		Al.	Steel	Total	Al.	Total	Core	Total	Al.	Steel		20°C DC	25°C AC	75°C AC	
CURLEVV	1033.5	54 x 3.52	7 x 3.52	593.6	525.5	31.68	10.56	1980.8	1451	529	162.86	0.05446	0.05677	0.06759	1150
BLUEJAY	1113	45 x 4.00	7 x 2.66	604.4	565.5	31.98	7.98	1867.7	1562.6	305.1	132.6	0.05085	0.05348	0.06365	1205
FINCH	1113	54 x 3.65	19 x 2.19	636.6	565	32.85	10.95	2129.6	1570	559.6	174	0.05085	0.05315	0.06332	1205
BUNTING	1192.5	45 x 4.14	7 x 2.76	647.7	605.8	33.12	8.28	2000.1	1674.2	325.9	142.4	0.04757	0.0502	0.05938	1255
GRACKLE	1192.5	54 x 3.77	19 x 2.27	679.7	602.8	33.97	11.35	2281.4	1681.7	599.8	186.45	0.04724	0.04954	0.05906	1260
SKYLARK	1272	36 x 4.78	1 x 4.78	664	646	33.46	4.78	1916.8	1776.9	139.9	117.48	0.04462	0.04757	0.05643	1310
BITTERN	1272	45 x 4.27	7 x 2.85	489.1	644.4	34.17	8.55	2134.1	1785.8	384.3	151.74	0.04462	0.04724	0.0561	1310
PHEASANT	1272	54 x 3.90	19 x 2.34	726.8	645.1	35.1	11.7	2423.5	1783.8	639.7	199.96	0.04429	0.04659	0.05545	1310
DIPPERF	1351.5	45 x 4.40	7 x 2.93	731.4	684.2	35.19	8.79	2266.5	1898.5	368	161.08	0.04199	0.04495	0.05282	1360
MARTIN	1351.5	54 x 4.02	19 x 2.41	772.1	685.4	36.17	12.05	2585	1906.4	678.6	206.03	0.04167	0.04396	0.05217	1365
BOBOLINK	1431	45 x 4.53	7 x 3.02	775.4	725.3	36.24	9.06	2400.4	2009.1	391.3	170.43	0.0397	0.04265	0.0502	1410
PLOVER	1431	54 x 4.14	19 x 2.48	818.7	726.9	37.24	12.4	2738.3	2019	719.3	218.48	0.03937	0.04167	0.04954	1415
NUTHATCH	1510.5	45 x 4.65	7 x 3.10	817	764.2	37.2	9.3	2532.9	2120.7	412.2	178.44	0.0374	0.04035	0.04757	1455
PARROT	1510.5	54 x 4.25	19 x 2.55	863.1	766.1	38.25	12.75	2890.1	2131.1	759	230.05	0.0374	0.04003	0.04724	1460
LAPWING	1590	45 x 4.78	7 x 3.18	863.1	807.7	38.22	9.54	2666.8	2232.3	434.5	187.78	0.03576	0.03871	0.0456	1505
FALCON	1590	54 x 4.36	19 x 2.62	908.6	806.2	39.26	13.1	3041.9	2242.7	799.2	242.51	0.03543	0.03806	0.04495	1510
CHUKAR	1780	84 x 3.70	19 x 2.22	976.7	903.2	42.7	11.1	3086.5	2510.6	575.9	226.94	0.03182	0.03477	0.04101	1620
BLUEBIRD	2156	84 x 4.07	19 x 2.44	1181.6	1092.8	44.76	12.2	3737.8	3040.4	697.4	268.32	0.02628	0.02953	0.03445	1815
KIWI	2167	72 x 4.41	7 x 2.94	1147.3	1099.8	44.1	8.82	3427.3	3056.7	370.6	221.6	0.02628	0.02986	0.03478	1795
THRASHER	2312.8	76 x 4.43	19 x 2.07	1235.3	1711.4	45.79	10.35	3760.7	3262.1	498.6	252.3	0.02461	0.02838	0.03281	1875
GROUSE	80	8 x 2.54	1 x 4.24	54.66	40.54	9.32	4.24	221.7	111.8	109.9	23.14	0.6798	0.69590	0.96260	200
PETREL	101.8	12 x 2.34	7 x 2.34	81.71	51.61	11.7	7.02	378.1	142.9	235.2	42.28	0.5217	0.52890	0.78350	250
MINORCA	110.8	12 x 2.44	7 x 2.44	88.84	56.11	12.2	7.32	411.6	155.5	256.1	50.28	0.4793	0.49770	0.74180	265
LEGHORN	134.6	12 x 2.69	7 x 2.69	108	68.2	13.45	8.07	500	189	311	60.52	0.3947	0.40120	0.61810	300
GUINEA	159	12 x 2.92	7 x 2.92	127.23	80.36	14.6	8.76	590.5	223.2	367.3	68.08	0.3340	0.33990	0.53740	330
DOTTEREL	176.9	12 x 3.08	7 x 3.08	141.56	89.41	15.4	9.24	656.9	248.4	408.4	76.98	0.3002	0.30770	0.49150	350
DORKING	190.8	12 x 3.20	12 x 3.20	152.81	96.51	16	9.6	708.8	267.9	440.9	83.21	0.2782	0.28410	0.46160	370
BRAHMA	203.2	16 x 2.86	19 x 2.48	194.57	102.79	18.12	12.4	1007.2	285.3	721.9	126.37	0.2520	0.25590	0.42950	380
COCHIN	211.3	12 x 3.37	7 x 3.37	169.47	107.04	16.85	10.11	785	296.6	488.4	92.11	0.2513	0.25590	0.42490	390

**ASTM B232**

CODE	AWG-MCM	STRANDING Al/Steel	DIAMETER (ins)				WEIGHT PER 1000FT lbs			CONTENT %		RATED STRENGTH lbs	ELECTRICAL RESISTANCE ohms/1000ft		ALLOWABLE AMPACITY Amps
			Individual wires		Steel	Total	Al.	Steel	Total	Al.	Steel		20°C DC	75°C AC	
			Al.	Steel											
TURKEY	6	6/1	0.06610	0.06610	0.06610	0.198	24.5	11.6	36	67.9	32.1	1.19	0.641	0.806	105
SWAN	4	6/1	0.08340	0.08340	0.08340	0.250	39	18.4	57	67.9	32.1	1.86	0.403	0.515	140
SWANATE	4	7/1	0.07720	0.10290	0.10290	0.257	39	28	67	58.13	41.87	2.36	0.399	0.519	140
SPARROW	2	6/1	0.1052	0.1052	0.1052	0.316	62	29.3	91	67.9	32.1	2.85	0.254	0.332	184
SPARATE	2	7/1	0.0974	0.1299	0.1299	0.325	62	44.7	107	58.13	41.87	3.46	0.251	0.332	184
ROBIN	1	6/1	0.1181	0.1182	0.1182	0.355	78.2	37	115	67.9	32.1	3.55	0.201	0.268	212
RAVEN	1/0	6/1	0.1327	0.1327	0.1327	0.398	98.6	46.6	145	67.9	32.1	4.38	0.159	0.217	242
QUAIL	2/0	6/1	0.1489	0.1489	0.1489	0.447	124.3	58.8	183	67.9	32.1	5.31	0.126	0.176	276
PIGEON	3/0	6/1	0.1672	0.1672	0.1672	0.502	156.8	74.1	230	67.9	32.1	6.62	0.100	0.144	315
PENGUIN	4/0	6/1	0.1878	0.1878	0.1878	0.563	197.7	93.4	291	67.9	32.1	8.35	0.0795	0.119	357
WAXWING	266.8	18/1	0.1217	0.1217	0.1217	0.609	250.4	39.3	289	86.45	13.55	6.88	0.0643	0.0787	449
PARTRIDGE	266.8	26/7	0.1013	0.0788	0.2364	0.642	251.7	115.6	366	68.53	31.47	11.3	0.0437	0.0779	475

CODE	AWG-MCM	STRANDING Al/Steel	DIAMETER (ins)				WEIGHT PER 1000FT lbs			CONTENT %		RATED STRENGTH lbs	ELECTRICAL RESISTANCE ohms/1000ft		ALLOWABLE AMPACITY Amps
			Individual wires		Steel	Total	Al.	Steel	Total	Al.	Steel		20°C DC	75°C AC	
			Al.	Steel											
OSTRICH	300	26/7	0.1074	0.0835	0.2505	0.680	283	129.9	412	68.53	31.47	12.7	0.0567	0.0693	492
MERLIN	336.4	18/1	0.1367	0.0961	0.1367	0.684	315.8	49.5	365	86.45	13.55	8.68	0.0510	0.0625	519
LINNET	336.4	26/7	0.1137	0.0884	0.2652	0.720	317.3	145.7	462	68.53	31.47	14.1	0.0505	0.0618	529
ORIOLE	336.4	30/7	0.1059	0.1059	0.3177	0.741	318.1	209	526	60.53	39.65	17.3	0.0502	0.0613	535
CHICKADEE	397.5	18/7	0.1486	0.1486	0.1486	0.743	372.5	58.5	431	86.45	13.55	9.94	0.0432	0.0529	576
BRANT	397.5	24/1	0.1287	0.0858	0.2574	0.772	374.9	137.1	511	73.23	26.77	14.6	0.043	0.0526	584
IBIS	397.5	26/7	0.1236	0.0961	0.2883	0.783	375	172.2	546	68.53	31.47	16.3	0.0428	0.0523	587
LARK	397.5	30/7	0.1151	0.1151	0.3453	0.806	375.9	246.9	622	60.35	39.65	20.3	0.0425	0.0519	594
PELICAN	477	18/7	0.1628	0.1628	0.1628	0.814	447.8	70.2	517	86.45	13.55	11.8	0.036	0.0442	646
FLICKER	477	24/7	0.141	0.0940	0.2820	0.846	450	164.5	614	73.23	26.77	17.2	0.0358	0.0439	655
HAWK	477	26/7	0.1354	0.1053	0.3159	0.858	450	206.8	655	68.53	31.47	19.5	0.0356	0.0436	659
HEN	477	30/7	0.1261	0.1261	0.3783	0.883	451	296.3	746	60.35	39.65	23.8	0.0354	0.0433	666
OSPREY	556.5	18/1	0.1758	0.1758	0.1758	0.879	522	82	603	86.45	13.55	13.7	0.0308	0.0379	711
PARAKEET	556.5	24/7	0.1523	0.1015	0.3045	0.914	525	192	716	73.23	26.77	19.8	0.0307	0.0376	721
DOVE	556.5	26/7	0.1463	0.1138	0.3414	0.927	525	241	765	68.53	31.47	22.6	0.0306	0.0375	726
EAGLE	556.5	30/7	0.1362	0.1362	0.4086	0.953	526	346	871	60.35	39.65	27.8	0.0303	0.0372	734
PEACOCK	605	24/7	0.1588	0.1059	0.3177	0.953	571	208	779	73.23	26.77	21.6	0.0282	0.0346	760
SQUAB	605	26/7	0.1525	0.1186	0.3558	0.966	571	262	831	68.53	31.47	24.3	0.0281	0.0345	765
WOOD DUCK	605.5	30/7	0.142	0.1420	0.4260	0.994	572	376	946	60.35	29.55	28.9	0.0279	0.0342	774
TEAL	605.5	30/19	0.142	0.0852	0.4260	0.994	572	367	939	60.89	39.11	30	0.0279	0.0342	773
KINGBOIRD	636	18/1	0.188	0.1880	0.1880	0.940	597	94	690	86.45	13.55	15.7	0.027	0.0332	773
SWIFT	636	36/1	0.1329	0.1329	0.1329	0.940	597	47	643	92.45	7.2	13.69	0.0271	0.0334	769
ROOK	636	24/7	0.1628	0.1085	0.3255	0.978	600	219	818	73.23	26.77	22	0.0268	0.033	784
GROSBEAK	605.5	26/7	0.1564	0.1216	0.4260	0.990	600	275	874	68.53	31.47	25.2	0.0267	0.0328	789
SCOTER	605.5	30/7	0.1456	0.1456	0.4368	1.019	601	395	995	60.35	39.55	30.4	0.0256	0.0325	798
EGRET	605.5	30/19	0.1456	0.0874	0.4370	1.019	601	387	987	60.89	39.11	31.5	0.0266	0.0326	798
FLAMINGO	666.6	24/7	0.1667	0.1111	0.3333	1.000	629	230	858	73.23	26.77	23.7	0.0256	0.0315	807
GANNET	666.6	26/7	0.1601	0.1245	0.3735	1.014	628	289	916	68.53	31.47	26.4	0.0255	0.0313	812
STILT	715.5	24/7	0.1727	0.1151	0.3453	1.036	675	247	921	73.23	26.77	25.5	0.0239	0.0294	844
STARLING	715.5	26/7	0.1659	0.1290	0.3870	1.051	675	310	984	68.53	31.47	28.4	0.0238	0.0292	849
REDWING	715.5	30/19	0.1544	0.0926	0.4630	1.081	676	435	1109	60.89	39.11	34.6	0.0236	0.029	859
COOT	795	36/1	0.1486	0.1486	0.1486	1.040	747	58	804	92.8	7.2	16.71	0.0217	0.0268	884
CUCKOO	795	24/7	0.182	0.1213	0.3639	1.092	749	247	1023	73.23	26.77	27.9	0.0215	0.0265	901
DRAKE	795	26/7	0.1749	0.1360	0.4080	1.108	750	344	1093	68.53	31.47	31.5	0.0214	0.0263	907
TERN	795	45/7	0.1329	0.0886	0.2658	1.063	750	146	895	83.69	16.31	22.1	0.0216	0.0269	887
CONDOR	795	54/7	0.1213	0.1213	0.3639	1.092	750	274	1022	73.25	26.75	28.2	0.0215	0.0272	889
MALLARD	795	30/19	0.1628	0.0977	0.4885	1.140	752	483	1234	60.89	39.11	38.4	0.0213	0.0261	918
RUDDY	900	45/7	0.1414	0.0943	0.2829	1.131	749	166	1013	83.69	16.31	24.4	0.0191	0.0265	958
CANARY	900	54/7	0.1291	0.1291	0.3873	1.162	849	310	1158	73.25	26.75	31.9	0.019	0.0241	961
RALL	954	45/7	0.1456	0.0971	0.2913	1.165	900	175	1074	83.69	16.31	25.9	0.018	0.0225	993
CARDINAL	954	54/7	0.1329	0.1329	0.3987	1.196	900	329	1227	73.25	26.75	33.8	0.0179	0.0228	996
ORTOLAN	1033.5	45/7	0.1515	0.1010	0.3030	1.212	975	190	1163	83.69	16.31	27.7	0.0167	0.0209	1043
CURLEW	1033.5	54/7	0.1383	0.4149	0.4149	1.246	975	356	1329	73.25	26.75	36.6	0.0165	0.0211	1047
BLUEJAY	1113	45/7	0.1573	0.1049	0.3147	1.259	1050	205	1254	83.69	16.31	29.8	0.0155	0.0194	1092
FINCH	1113	54/19	0.1436	0.0862	0.4310	1.293	1055	376	1430	73.75	26.75	39.1	0.0144	0.0197	1093
BUNTING	1192.5	45/7	0.1628	0.1085	0.3255	1.302	1125	219	1342	83.69	16.31	32	0.0144	0.0181	1139
GRACKLE	1192.5	54/19	0.1486	0.0892	0.4460	1.333	1130	403	1531	73.75	26.25	41.9	0.0144	0.0184	1140

CODE	AWG-MCM	STRANDING AL/Steel	DIAMETER (ins)				WEIGHT PER 1000FT lbs			CONTENT %		RATED STRENGTH lbs	ELECTRICAL RESISTANCE ohms/1000ft		ALLOWABLE AMPACITY Amps
			Individual wires		Steel	Total	Al.	Steel	Total	Al.	Steel		20°C DC	75°C AC	
			Al.	Steel											
BITTERN	1272	45/7	0.1681	0.1121	0.3363	1.345	1200	234	1432	83.69	16.31	34.1	0.0135	0.0171	1184
PHEASANT	1272	54/19	0.1535	0.0921	0.4605	1.382	1206	429	1634	73.75	26.25	34.6	0.0135	0.0173	1187
DIPPER	1351.5	45/7	0.1733	0.1155	0.3465	1.386	1275	247	1521	83.69	16.31	36.2	0.0127	0.0162	1229
MARTIN	1351.5	54/19	0.1582	0.0949	0.4745	1.424	1281	456	1735	73.75	26.25	46.3	0.0127	0.0163	1232
BOBOLINK	1431	45/7	0.1783	0.1189	0.3567	1.427	1350	263	1611	83.69	16.31	38.3	0.0120	0.0153	1272
PLOVER	1431	54/19	0.1628	0.0977	0.4885	1.465	1357	483	1838	73.75	26.25	49.1	0.0120	0.0155	1275
NUTHATCH	1510.5	45/7	0.1832	0.1221	0.3663	1.466	1425	277	1700	83.69	16.31	40	0.0114	0.0146	1313
PARROT	1510.5	54/19	0.1672	0.1003	0.5015	1.505	1432	510	1938	73.75	26.25	51.7	0.0114	0.0147	1318
LAPWING	1590	45/7	0.188	0.1253	0.3759	1.504	1500	292	1790	83.69	16.31	42.2	0.0108	0.0139	1354
FALCON	1590	54/19	0.1716	0.1052	0.5150	1.545	1507	537	2042	73.75	26.25	54.5	0.0108	0.0140	1359
CHUKAR	1780	84/19	0.1456	0.0874	0.4370	1.602	1687	387	2072	81.30	18.70	51	0.0097	0.0125	1453
BLUEBIRD	2156	84/19	0.1602	0.0961	0.4805	1.762	2044	468	2508	81.30	18.70	60.3	0.00801	0.0105	1623
KIWI	2167	72/7	0.1735	0.1157	0.3471	1.735	2054	249	2300	89.20	10.80	49.8	0.00801	0.0106	1607

### High Mechanical Strength

CODE	AWG-MCM	STRANDING AL/Steel	DIAMETER (ins)				WEIGHT PER 1000FT lbs			CONTENT %		RATED STRENGTH lbs	ELECTRICAL RESISTANCE ohms/1000ft		ALLOWABLE AMPACITY (1) Amps
			Individual wires		Steel	Total	Al.	Steel	Total	Al.	Steel		20°C DC	75°C AC	
			Al.	Steel											
GROUSE	80	8/1	0.1000	0.1670	0.1670	0.367	75.1	73.9	149	50.56	49.44	52	0.207	0.294	204
PETREL	101.8	12/7	0.0921	0.0921	0.2763	0.461	158	158	254	37.79	62.21	10.4	0.158	0.250	237
MINORCA	110.8	12/7	0.0961	0.0961	0.2883	0.481	172.1	172.1	276	37.79	62.21	11.3	0.145	0.235	248
LEGHORN	134.6	12/7	0.1059	0.1059	0.3177	0.530	208.9	208.9	336	37.79	62.21	13.6	0.120	0.204	273
GUINEA	159	12/7	0.1151	0.1151	0.3453	0.576	246.8	246.8	396	37.79	62.21	16.0	0.101	0.181	297
DOTTEREL	176.9	12/7	0.1214	0.1254	0.3642	0.607	274.6	274.6	441	37.79	62.21	17.3	0.0911	0.169	312
DORKING	190.8	12/7	0.1261	0.1261	0.3783	0.631	296.3	296.3	476	37.79	62.21	18.7	0.0845	0.160	324
BRAHMA	203.2	16/19	0.1127	0.0977	0.4885	0.714	485	485	675	28.33	71.67	20.7	0.0764	0.155	341
COCHIN	211.3	12/7	0.1327	0.1327	0.3981	0.664	328.2	328.2	527	37.79	62.21	28.4	0.0763	0.150	340

### DIN 48.204

CODE	SECTION mm²			STRANDING No. x mm		OVERALL DIAMETER mm		RATED STRENGTH kN	ELECTRICAL RESISTANCE AT 20°C ohms/km	CONDUCTOR WEIGHT kg/km			CURRENT CARRYING CAPACITY (1) Amps
	Al.	Steel	Total	AL	Steel	Core	Total			Al.	Steel	Total	
16/2.5	15.3	2.55	17.85	6 x 1.80	1 x 1.80	1.8	5.4	5.95	1.8792	42	20	62	90
25/4	23.8	4	27.8	6 x 2.25	1 x 2.25	2.25	6.8	9.2	1.2027	66	31	97	125
35/6	34.3	5.7	40	6 x 2.70	1 x 2.70	2.7	8.1	12.65	0.8353	95	45	140	145
44/32	44	31.7	75.7	14 x 2.00	7 x 2.40	7.2	11.2	45	0.6566	124	248	372	160
50/8	48.3	8	56.3	6 x 3.20	1 x 3.20	3.2	9.6	17.1	0.5946	133	63	196	170
50/30	51.2	29.8	81	12 x 2.33	7 x 2.33	6.99	11.7	43.8	0.5644	143	235	378	170
70/12	69.9	11.4	81.3	26 x 1.85	7 x 1.44	4.32	11.7	26.8	0.4130	194	90	284	290
95/15	94.4	15.3	109.7	26 x 2.15	7 x 1.67	5.01	13.6	35.75	0.3058	262	121	383	350
95/55	96.5	56.3	152.8	12 x 3.20	7 x 3.20	9.6	16	79.35	0.2992	269	443	712	350
105/75	105.7	75.5	181.5	14 x 3.10	19 x 2.25	11.25	17.5	108.45	0.2733	295	596	891	370
120/20	121.6	19.8	141.4	26 x 2.44	7 x 1.90	5.7	15.5	45.65	0.2374	338	156	494	410
120/70	122	71.3	193.3	12 x 3.60	7 x 3.60	10.80	18.00	100.000	0.2364	341	560	901	410



CODE	SECTION mm <sup>2</sup>			STRANDING No. x mm		OVERALL DIAMETER mm		RATED STRENGTH kN	ELECTRICAL RESISTANCE AT 20°C ohms/km	CONDUCTOR WEIGHT kg/km			CURRENT CARRYING CAPACITY (1) Amps
	Al.	Steel	Total	AL	Steel	Core	Total			Al.	Steel	Total	
125/30	127.9	29.8	157.7	30 x 2.33	7 x 2.33	6.99	16.1	57.6	0.2259	356	235	591	425
150/25	148.9	24.2	173.1	26 x 2.70	7 x 2.10	6.31	17.1	55.25	0.1939	414	191	605	470
170/40	171.8	40.1	211.9	30 x 2.70	7 x 2.70	8.1	18.9	76.75	0.1682	479	315	794	520
185/30	183.8	29.8	213.6	26 x 3.00	7 x 2.33	6.99	19	66.2	0.1571	511	235	746	535
210/35	209.1	34.1	243.2	26 x 3.20	7 x 2.49	7.47	20.3	74.9	0.1380	583	267	850	590
210/50	212.1	49.5	261.6	30 x 3.00	7 x 3.00	9	21	93.9	0.1363	593	388	981	610
230/30	230.9	29.8	260.7	24 x 3.50	7 x 2.33	6.99	21	73.1	0.1249	642	235	877	630
240/40	243	39.5	282.5	26 x 3.45	7 x 2.68	8.04	21.9	86.4	0.1188	677	310	987	645
265/35	263.7	34.1	297.8	24 x 3.74	7 x 2.49	7.47	22.4	83.05	0.1117	735	267	1002	680
300/50	304.3	49.5	353.7	26 x 3.86	7 x 3.00	9	24.5	107	0.0949	848	388	1236	740
305/40	304.6	39.5	344.1	54 x 2.68	7 x 2.68	8.04	24.1	99.4	0.0949	850	310	1160	740
340/30	339.3	29.8	369.1	48 x 3.00	7 x 2.33	6.99	25	92.9	0.0853	945	235	1180	790
380/50	382	49.5	431.5	54 x 3.00	7 x 3.00	9	27	123.1	0.0757	1065	388	1453	840
385/35	386	34.1	420.1	48 x 3.20	7 x 2.49	7.47	26.7	104.8	0.0749	1077	267	1344	850
435/55	434.3	56.3	490.6	54 x 3.20	7 x 3.20	9.6	28.8	136.45	0.0666	1210	443	1653	900
450/40	448.7	39.5	488.2	48 x 3.45	7 x 2.68	8.04	28.7	120.75	0.0644	1251	310	1561	920
490/65	490.3	63.6	553.9	54 x 3.40	7 x 3.40	10.2	30.6	153.1	0.0590	1368	498	1866	960
495/35	494.1	34.1	528.2	45 x 3.74	7 x 2.49	7.47	29.9	121.8	0.0585	1381	235	1616	985
510/45	510.2	45.3	555.5	48 x 3.68	7 x 2.87	8.61	30.7	136.65	0.0565	1423	355	1778	995
550/70	550	71.3	621.3	54 x 3.60	7 x 3.60	10.8	32.4	170.6	0.0526	1532	560	2092	1020
560/50	561.7	49.5	611.2	48 x 3.86	7 x 3.00	9.00	32.2	148.95	0.0515	1566	388	1954	1040
570/40	571.2	39.5	610.7	45 x 4.02	7 x 2.68	8.04	32.2	136.2	0.0512	1578	310	1888	1050
650/45	635.5	45.3	698.8	45 x 4.30	7 x 2.87	8.61	34	55.5	0.0458	1816	355	2171	1120
680/85	678.8	86	764.6	54 x 4.00	19 x 2.40	12	36	206.25	0.0426	1890	676	2566	1150
1045/45	1045.6	45.3	1090.9	72 x 4.30	7 x 2.87	8.61	43	217.6	0.0277	2896	355	3251	1580

(1) With following Conditions of conductor:  
 Temperature: 35°C  
 Conductor Temperature: 80°C  
 Wind Velocity: 0.6 m/sea. with Solar Radiation

**BS - 215 Part 2**

CODE	SECTION mm <sup>2</sup>				STRANDING No. x mm		OVERALL DIAMETER mm		RATED STRENGTH kN	ELECTRICAL RESISTANCE AT 20°C. ohms/km	CONDUCTOR WEIGHT kg/km		
	Al.		Steel	Total	AL	Steel	Core	Total			Al.	Steel	Total
	Nominal	Theorical											
GOPHER	25	26.24	4.38	30.62	6 x 2.36	1 x 2.36	2.36	7.08	9.61	1.0930	71	35	106
WEASEL	30	31.61	5.27	36.88	6 x 2.59	1 x 2.59	2.59	7.77	11.45	0.9077	87	41	128
FERRET	40	42.41	7.07	49.48	6 x 3.00	1 x 3.00	3	9	15.2	0.6766	117	55	172
RABBIT	50	52.88	8.82	61.70	6 x 3.35	1 x 3.35	3.35	10.05	18.35	0.5426	145	69	214
HORSE	70	73.37	42.63	116.20	12 x 2.79	7 x 2.79	8.37	13.95	61.2	0.3936	203	335	538
DOG	100	105	13.5	118.50	6 x 4.72	7 x 1.57	4.71	14.15	32.7	0.2733	288	106	394
TIGER	125	131.1	30.6	161.70	30 x 2.36	7 x 2.36	7.08	16.52	58	0.2202	365	237	602
WOLF	150	158.1	36.8	194.90	30 x 2.59	7 x 2.59	7.77	18.13	69.2	0.1828	441	285	726
DINGO	150	158.7	8.8	167.50	18 x 3.35	1 x 3.35	3.35	16.75	35.7	0.1815	437	69	506
LYNX	175	183.4	42.8	226.20	30 x 2.79	7 x 2.79	8.37	19.53	79.8	0.1576	507	335	842
CARACAL	175	184.3	10.2	194.50	18 x 3.61	1 x 3.61	3.61	18.05	41.1	0.1563	507	80	587
PANTHER	200	212.1	49.4	261.50	30 x 3.00	7 x 3.00	9	21	92.25	0.1363	586	388	974
JAGUAR	200	210.6	11.7	222.30	18 x 3.86	1 x 3.86	3.86	19.3	46.55	0.1367	580	91	671
ZEBRA	400	428.9	55.6	484.50	54 x 3.18	7 x 3.18	9.54	28.62	131.9	0.0674	1185	436	1621

**UNE 21.018**

CODE	SECTION mm <sup>2</sup>			STRANDING No. x mm		OVERALL DIAMETER mm		RATED STRENGTH kN	ELECTRICAL RESISTANCE AT 20°C. ohms/km	CONDUCTOR WEIGHT kg/km		
	Al.	Steel	Total	AL	Steel	Core	Total			Al.	Steel	Total
LA-30	26.7	4.4	31.1	6 x 2.38	1 x 2.38	2.38	7.14	9.9	1.0749	73.2	37.4	107.9
LA-56	46.8	7.8	54.6	6 x 3.15	1 x 3.15	3.15	9.45	16.4	0.6136	128.3	60.8	189.1
LA-78	67.4	11.2	78.6	6 x 3.78	1 x 3.78	3.78	11.34	23.1	0.4261	185.0	87.0	272.0
LA-110	94.2	22	116.2	30 x 2.00	7 x 2.00	6	14	43.1	0.3066	260.4	172.3	433.0
LA-145	119.3	27.8	147.1	30 x 2.25	7 x 2.25	6.75	15.75	54.1	0.2422	330.0	218.0	548.0
LA-180	147.3	34.3	181.6	30 x 2.50	7 x 2.50	7.50	17.5	63.9	0.1962	407.0	269.0	676.0
LA-280	241.7	39.4	281.1	26 x 3.44	7 x 2.68	8.04	21.8	84.5	0.1194	667.0	310.0	977.0
LA-380	337.3	43.7	381	54 x 2.82	7 x 2.82	8.46	25.38	106.5	0.0857	932.0	343.0	1275.0
LA-455	402.3	52.2	454.5	54 x 3.08	7 x 3.08	9.24	27.72	124	0.0718	1112.0	409.0	1521.0
LA-545	484.5	62.8	547.3	54 x 3.38	7 x 3.38	10.14	30.42	148.5	0.0596	1340.0	492.0	1832.0
LA-635	565	71.6	636.6	54 x 3.65	19 x 2.19	10.95	32.85	175	0.0511	1562.0	563.0	2125.0
RAIL	483.8	33.5	517.3	45 x 3.70	7 x 2.47	7.41	29.61	115.25	0.0594	1339.0	260.0	1599.0



**NF - C 34120**

CODE	SECTION mm <sup>2</sup>			STRANDING No. x mm		OVERALL DIAMETER mm		TENSILE S. STEEL HBAR.	RATED STRENGTH kN	ELECTRICAL RESISTANCE at 20°C. ohms/km	CONDUCTOR WEIGHT kg/km			GREASE WEIGHT 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	-	8.30	117.60	1.625	1.020	80	155	75	6	2
CANNA 59.7	37.7	21.99	59.69	12 x 2.00	7 x 2.00	6	10	117.60	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	117.60	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	117.60	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	156.80	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	117.60	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	156.80	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	117.60	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	156.80	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	117.60	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	156.80	9.21	0.157	506	848	342	26	15
CANNA 288	233.8	54.55	288.35	30 x 3.15	7 x 3.15	9.45	22.05	117.60	9.85	0.124	642	1074	432	33	18
CROCUS 288	233.8	54.55	288.35	30 x 3.15	7 x 3.15	9.45	22.05	156.80	11.38	0.124	642	1074	432	33	18
CROCUS 297	221.67	75.54	297.21	36 x 2.80	19 x 2.25	11.25	22.45	156.8	17.72	0.1305	594	624	1218	35	20
CROCUS 412	325.72	85.95	411.67	32 x 3.60	19 x 2.40	12	26.4	156.8	17.33	0.0898	676	917	1593	50	25
CROCUS 612	507.83	104.7	611.76	66 x 3.13	19 x 2.65	13.25	32.2	156.8	23.15	0.0566	824	1417	2241	70	40
CROCUS 865	717.33	148.06	865.39	66 x 3.72	19 x 3.15	15.75	38.1	156.8	31.9	0.0405	1164	2010	3174	100	55
CROCUS 1185	956.666	227.82	1184.48	54 x 2.8	37 x 2.80 66 x +3.47	19.7	44.7	156.8	48.05	0.0303	1796	2682	4478	140	100

**Basic Technical Data of Stranded Conductors**

Moduli of Elasticity and Coefficients of Linear Expansion for Constructions of Aluminium Conductors  
Steel-Reinforced to IEC Publ. No. 209

NO. OF WIRES		FINAL MODULUS OF ELASTICITY		COEFFICIENT OF LINEAR EXPANSION	
Al.	St	kg/mm <sup>2</sup>	lb/in <sup>2</sup>	1/C°	1/F°
6	1	81	11.5 x 10 <sup>6</sup>	19.1 x 10 <sup>-6</sup>	10.6 x 10 <sup>-6</sup>
6	7	77	11.0 x 10 <sup>6</sup>	19.8 x 10 <sup>-6</sup>	11.0 x 10 <sup>-6</sup>
12	7	107	15.2 x 10 <sup>6</sup>	15.3 x 10 <sup>-6</sup>	8.5 x 10 <sup>-6</sup>
18	1	67	9.5 x 10 <sup>6</sup>	21.2 x 10 <sup>-6</sup>	11.8 x 10 <sup>-6</sup>
24	7	74	10.5 x 10 <sup>6</sup>	19.6 x 10 <sup>-6</sup>	10.9 x 10 <sup>-6</sup>
26	7	77	10.9 x 10 <sup>6</sup>	18.9 x 10 <sup>-6</sup>	10.5 x 10 <sup>-6</sup>
28	7	79	11.2 x 10 <sup>6</sup>	18.4 x 10 <sup>-6</sup>	10.2 x 10 <sup>-6</sup>
30	7	82	11.6 x 10 <sup>6</sup>	17.8 x 10 <sup>-6</sup>	9.9 x 10 <sup>-6</sup>
30	19	80	11.4 x 10 <sup>6</sup>	18.0 x 10 <sup>-6</sup>	10.0 x 10 <sup>-6</sup>
32	19	82	11.7 x 10 <sup>6</sup>	17.5 x 10 <sup>-6</sup>	9.7 x 10 <sup>-6</sup>
54	7	70	9.9 x 10 <sup>6</sup>	19.3 x 10 <sup>-6</sup>	10.7 x 10 <sup>-6</sup>
54	19	68	9.7 x 10 <sup>6</sup>	19.4 x 10 <sup>-6</sup>	10.8 x 10 <sup>-6</sup>

Density at 20°C

Aluminium: 2.703 kg/dm

Galvanised Steel: 7.80 kg/dm

Temperature Coefficient of 20°C

Aluminium: 0.00403 (°C)

Resistivity at 20°C

Aluminium: Should not exceed 0.028264

Linear Expansivity

Aluminium: 23 x 10 (°C)

Galvanised Steel: 11.5 x 10 (1/°C)

**SPECIFICATIONS**

NO. OF WIRES		FINAL MODULUS OF ELASTICITY		COEFFICIENT OF LINEAR EXPANSION	
Al.	St	N/mm <sup>2</sup>		1°C	
6	1	81		19.1 x 10 <sup>-6</sup>	
6	7	77		19.8 x 10 <sup>-6</sup>	
12	7	107		15.3 x 10 <sup>-6</sup>	
18	1	67		21.2 x 10 <sup>-6</sup>	
24	7	74		19.6 x 10 <sup>-6</sup>	
26	7	77		18.9 x 10 <sup>-6</sup>	
28	7	79		18.4 x 10 <sup>-6</sup>	
30	7	82		17.8 x 10 <sup>-6</sup>	
30	19	80		18.0 x 10 <sup>-6</sup>	
32	19	82		17.5 x 10 <sup>-6</sup>	
54	7	70		19.3 x 10 <sup>-6</sup>	
54	19	68		19.4 x 10 <sup>-6</sup>	