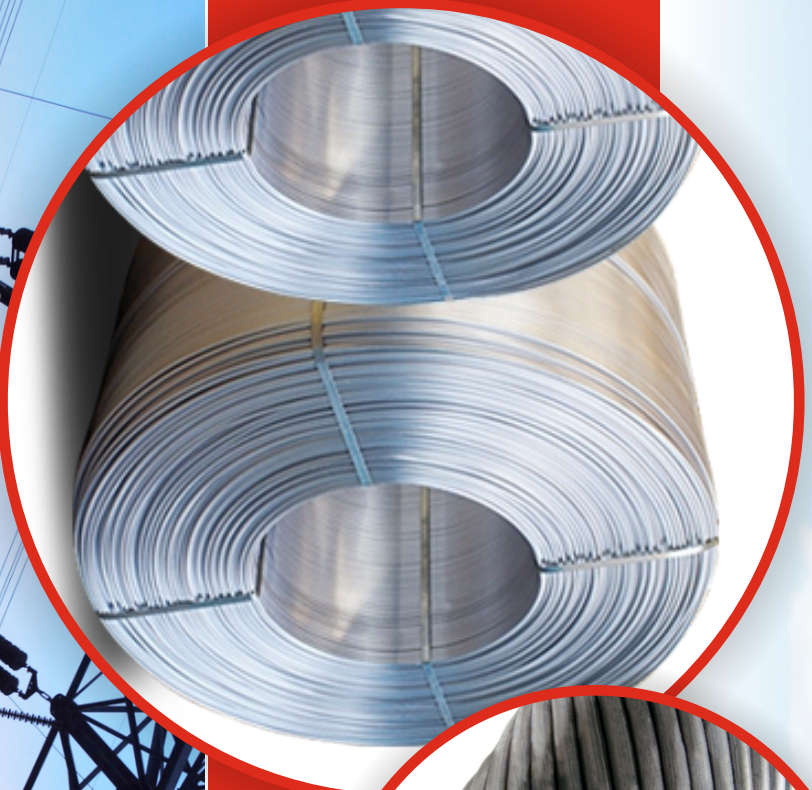


SOMVA™

The Complete Solution

AAC, ACSR, AAAC, AACSR

SPECIFICATIONS



UNIVERSAL METALS (PVT) LIMITED



UNIVERSAL METALS (PVT.) LIMITED

SONA CONDUCTORS & CABLES

We have started our journey with the high grade aluminium ingot delivered to our furnace. During processing, the molten metal is tested and alloying is carried out if alloy rod is to be produced. The melt is channelled from the furnaces onto a rotating casting wheel where it partially cools and solidifies into a continuous bar. The bar is then passed straight into a no twist rolling mill to reduce it to a 9.5 mm or 12 mm rod which is coiled and ready for the wire drawing process. **UNIVERSAL METALS** ensures that the highest quality EC grade and Alloy rod is produced for conductor manufacturing. The finished rod is carefully selected for the correct tensile strength and conductivity.

The aluminium or aluminium alloy rod is drawn to the correct wire size on drawing machines partially submerged in oil to give the wire a first class finish. The last finishing die in the drawing process, rotates to ensure a uniformly round wire. The wire is wound onto a bobbin which is passed to the stranding equipment. Each bobbin in the equipment is controlled by a brake which maintains uniform tension on the wire throughout the stranding process. This produces a more uniform product of higher quality.

UNIVERSAL METALS are proud of our rigorous quality control system. It ensures the highest standards for our products, from the start to the finish of the manufacturing process.

In **UNIVERSAL METALS** having fully equipped laboratory, we spectroanalyze the input molten aluminium to ensure its quality, carry out tensile and elongation and wrap tests and measure conductivity as required by the different international standards and specifications or customer any specially desired requirements. In addition, **UNIVERSAL METALS'** personnel carry out many other tests and checks during each stage of production to ensure that a perfect product is manufactured.

UNIVERSAL METALS' quality management system has been instituted to provide complete satisfaction to its valued clients.

Certification under: ISO 9001:2008 was awarded as a true recognition of what has been in practice.

UNIVERSAL METALS "The Complete Solution" with all types of CONDUCTORS & CABLES.





SONA ALUMINIUM & ALUMINIUM ALLOY CONDUCTORS

————— The Complete Solution —————

Pakistan first company which have capabilities to produce alloy aluminium rod 6201 & 6102.

ALUMINIUM RODS

Overhead Line
Conductors:

Drawn Wire:

Manufacturing Standard:

We manufacture Aluminium and Aluminium alloys rod according to all international standards (ASTM, BS, DIN, IEC, etc.) upon request.

ASTM B 233 &ASTM -B399/B-399M-/ASTM B230 /ASTM B231- B231M/ASTM -B232- B232M/BS EN 573-3-2009/EN 1715-1- 1997



1. ALUMINIUM 1xxx Series EC RODS

Product Code	Chemical Composition %					Diameter mm	Temper	Physical Properties			
	Si	Fe	Cr	Mn	AL			Tensile Mpa		Elongation % at 250 mm length	
-	Max	Max	Max	Max	Min	DI-Tolerance	-	Min	Max	Min	Min
1080A	0.15	0.15	0.01	0.02	99.80	9.5 ±0.5	H11	83	95	25	61.9
	0.15	0.15	0.01	0.02	99.80	9.5 ±0.5	H12	95	110	20	61.5
1350	0.10	0.40	0.01	0.01	99.50	9.5 ±0.5	H11	83	95	25	61.9
	0.10	0.40	0.01	0.01	99.50	9.5 ±0.5	H12	95	110	20	61.5
	0.10	0.40	0.01	0.01	99.50	9.5 ±0.5	H13	100	117	15	61.5
	0.10	0.40	0.01	0.01	99.50	9.5 ±0.5	H14	115	138	5	61.5
1370	0.10	0.25	0.01	0.01	99.70	9.5 ±0.5	H11	80	95	25	61.9
	0.10	0.25	0.01	0.01	99.70	9.5 ±0.5	H12	105	120	15	61.5
	0.10	0.25	0.01	0.01	99.70	9.5 ±0.5	H14	115	130	5	61.5

Product Code	Chemical Composition %					Diameter mm		Physical Properties			
	Si	Fe	Cr	Mn	AL	Mixn	Max	Tensile Mpa		Elongation % at 250 mm length	
	Max	Max	Max	Max	Min	-	-	Average	Individual	Average	Individual
1080A	0.15	0.15	0.01	0.02	99.8	-	-	-	-	-	-
	0.15	0.15	0.01	0.02	99.8	-	-	-	-	-	-
	0.15	0.15	0.01	0.02	99.8	-	-	-	-	-	-
1350	0.10	0.40	0.01	0.01	99.5	0.227	1.25	170	160	-	-
	0.10	0.40	0.01	0.01	99.5	1.26	1.50	200	185	1.4	1.2
	0.10	0.40	0.01	0.01	99.5	1.51	2.00	195	185	1.5	1.3
	0.10	0.40	0.01	0.01	99.5	2.01	2.25	190	180	1.6	1.5
	0.10	0.40	0.01	0.01	99.5	2.23	2.50	185	175	1.6	1.5
	0.10	0.40	0.01	0.01	99.5	2.51	2.75	180	170	1.6	1.5
	0.10	0.40	0.01	0.01	99.5	2.76	3.00	175	165	1.7	1.6
	0.10	0.40	0.01	0.01	99.5	3.01	3.75	170	160	1.9	1.8
1370	0.10	0.40	0.01	0.01	99.5	5.26	6.50	160	155	2.3	2.2
	0.10	0.25	0.01	0.01	99.7	0.227	1.25	170	160		
	0.10	0.25	0.01	0.01	99.7	1.26	1.50	200	185	1.4	1.2
	0.10	0.25	0.01	0.01	99.7	1.51	2.00	195	185	1.5	1.3
	0.10	0.25	0.01	0.01	99.7	2.01	2.25	190	180	1.6	1.5
	0.10	0.25	0.01	0.01	99.7	2.26	2.50	185	175	1.6	1.5
	0.10	0.25	0.01	0.01	99.7	2.51	2.75	180	170	1.6	1.5
	0.10	0.25	0.01	0.01	99.7	2.76	3.00	175	165	1.7	1.6
	0.10	0.25	0.01	0.01	99.7	3.01	3.75	170	160	1.9	1.8
	0.10	0.25	0.01	0.01	99.7	3.76	5.25	165	160	2.1	2.0
	0.10	0.25	0.01	0.01	99.7	5.26	6.50	160	155	2.3	2.2

3. Aluminium Alloy 6xxx Series Rod

Product Code	Chemical Composition %					Diameter mm		Physical Properties		
	Si	Fe	Cu	Mg	AL			Tensile Mpa	Elongation % at 250 mm lngth	
6101	0.30-0.70	0.4 Max	0.5 Max	0.35-0.60	REST	9.5 ±0.5	T1	190	17	49.2
	0.30-0.70	0.4 Max	0.5 Max	0.35-0.60	REST	9.5 ±0.5	T4	150	23	49.2
6201	0.50-0.90	0.5 Max	0.5 Max	0.60-0.90	REST	9.5 ±0.5	T1	205	17	47.8
	0.50-0.90	0.5 Max	0.5 Max	0.60-0.90	REST	9.5 ±0.5	T4	160	21	47.8

Diameter:

Specified diameter (mm)	Tolerance (mm)
9.5	± 0.50
12*	± 0.70

4. Aluminium Alloy 6xxx Series Wire

Product Code	Chemical Composition %					Diameter mm	Type	Physical Properties		
	Si	Fe	Cu	Mg	AL			Tensile Mpa	Elongation % at 250 mm lngth	
6101	0.30-0.70	0.4 Max	0.5 Max	0.35-0.60	REST	1.5 - 5.0	A L 3	295 Min	3.5	53
	0.30-0.70	0.4 Max	0.5 Max	0.35-0.60	REST	1.5 - 5.0	A L 3	295 Min	3.5	53
6201	0.50-0.90	0.5 Max	0.5 Max	0.60-0.90	REST	1.5 - 5.0	A L 3	295 Min	3.5	53
	0.50-0.90	0.5 Max	0.5 Max	0.60-0.90	REST	1.5 - 5.0	A L 3	295 Min	3.5	53

Packing:

Coil Diminution:

Weight of the Coil - 2000 Kg +/-10 % (large coil up to 3200 Kg according to customer's request).

Inner Dia - 500 mm minimum

Outer Dia - 1800 mm (Max.)

Height 1000mm Max.

Wooden Pallet Dimension: Length & width -1600 mm Height -100 mm

Packing material: coil, tied with steel strap and wrapped by cartons in polyethylene bag and then on wooden Pallets, in eye to sky type or eye to wall according to customer's request

ALUMINIUM & ALUMINIUM ALLOY REDRAWS RODS (9.5MM & 12MM) FOR ELECTRICAL PURPOSES

ALLOY DESIGNATION	TENSILE STRENGTH	ELONGATION (IN 250 MM)	CONDUCTIVITY	STANDARD TEMPER
	(Mpa)	(%)	(% IACS)	
1080	85-100	10	61.9	F
1120	130-160	4.0	59.2	F
1350	85-137	4.0	61.5	F
1370	85-137	4.0	61.7	F
5005	120-200	6.0	54.0	F
6101	165-210	10	50.0	T4
6201	180-220	10	49.0	T4
8176	100-140	8	60.0	F
8030	100-140	8	60.0	F
ALUMINIUM & ALUMINIUM ALLOY REDRAW RODS FOR MECHANICAL PURPOSES				
1050	90-120	8.0	-	F
1100	125-150	4.0	-	F
3003	160-200	10.0	-	F
3102	160-200	10.0	-	F
5005	120-200	8.0	-	F
5051	190-220	12.0	-	F
5052	210-250	12.0	-	F
6060	160-200	15.0	-	T4
6061	210-260	12.0	-	T4
6063	170-210	15.0	-	T4
5754	220-260	10.0	-	F
5050	180-210	10.0	-	F

F:As fabricated

T4: Solution heat treated & naturally aged

Aluminium & Aluminium Alloy Wires For Electrical Purposes

ALLOY DESIGNATION	WIRE DIAMETER	TENSILE STRENGTH (MIN)	ELONGATION (IN 250MM) (MIN)	CONDUCTIVITY (MIN)
	(MM)	(Mpa)	(%)	(%IACS)
1050	2.00-3.50	175	1.7	61.0
	3.51-5.00	160	1.9	61.0
1100	2.00-3.50	200	2.0	59.8
	3.51-5.00	180	2.2	59.8
1120	2.00-3.25	250	1.2	59.0
	3.26-4.40	240	1.3	59.0
	4.41-4.75	230	1.4	59.0
1350	2.00-3.50	180	1.7	61.2
	3.51-5.00	160	1.9	61.2
1070	2.00-3.00	180	1.5	61.0
	3.01-4.00	170	1.7	61.0
	4.01-4.50	160	1.9	61.0
5005	2.00-2.50	255	1.6	53.5
	2.51-3.00	250	1.7	53.5
	3.01-3.80	245	1.8	53.5
	3.81-4.10	238	1.9	53.5
6101	2.00-5.00	295	3.5	53.0
6201	2.00-3.25	315	3.0	52.5
	3.26-4.75	305	3.0	52.5

All-Aluminium Stranded Conductors Including Standard Sizes From ASTM Specification BS 231-04

Code Name	Total area		Equivalent copper area		Stranding and wire Diameter	Approx. overall Diameter	Weight	Rated Strength	Maximum dc Resistance at 20°C	Code Name
	AWG/MCM	mm ²	AWG/MCM	mm ²	mm	mm	kg/km	kN	ohm/km	
Peachbell	6	13.28	8	8.1	7/1.554	4.66	36.6	2.485	2.164	Peachbell
Rose	4	21.14	6	12.9	7/1.961	5.88	58.3	3.958	1.359	Rose
Iris	2	33.65	4	20.5	7/2.474	7.42	92.8	5.976	0.8539	Iris
Pansy	1	42.36	3	25.8	7/2.776	8.32	116.8	7.118	0.6783	Pansy
Poppy	1/0	53.48	2	32.6	7/3.119	9.35	147.4	8.729	0.5373	Poppy
Aster	2/0	67.47	1	41.2	7/3.503	10.51	186.0	11.01	0.4259	Aster
Phlox	3/0	84.98	1/0	51.8	7/3.932	11.79	234.3	13.46	0.3381	Phlox
Oxlip	4/0	107.2	2/0	65.4	7/4.417	13.25	295.7	19.99	0.2679	Oxlip
Valerian	250	126.2	157	77.2	19/2.913	14.56	349.0	20.61	0.2269	Valerian
Sneezewort	250	126.7	157	77.3	7/4.801	14.40	349.3	20.07	0.2268	Sneezewort
Laurel	266.8	135.2	168	82.5	19/3.010	15.05	373	21.38	0.2125	Laurel
Daisy	266.8	135.3	3/0	82.5	7/4.961	14.88	373.3	21.43	0.2124	Daisy
Peony	300.0	152.1	189	92.8	19/3.193	15.96	419.0	24.05	0.1889	Peony
Tulip	336.4	170.6	4/0	104.0	19/3.381	16.90	470.3	26.97	0.1685	Tulip
Daffodil	350.0	177.3	220	108.0	19/3.447	17.23	488.8	28.03	0.1621	Daffodil
Canna	397.5	201.6	250	123.0	19/3.675	18.37	555.8	31.86	0.1426	Canna
Goldentuft	450	228.0	280	139.1	19/3.909	19.54	628.6	34.99	0.1260	Goldentuft
Syringa	477	241.5	300	147.3	37/2.883	20.18	665.8	38.47	0.1190	Syringa
Cosmos	477	241.5	300	147.3	19/4.023	20.11	665.8	37.06	0.1190	Cosmos
Hyacinth	500	253.1	315	154.4	37/2.951	20.65	697.8	40.30	0.1135	Hyacinth
Zinnia	500	253.3	315	155	19/4.120	20.60	698.3	38.87	0.1134	Zinnia
Dahlia	556.5	281.8	350	171.9	19/4.346	21.73	776.9	43.25	0.1020	Dahlia
Mistletoe	556.5	281.8	350	171.9	37/3.114	21.79	776.9	43.59	0.1020	Mistletoe
Meadowsweet	600	303.7	380	185.3	37/3.233	22.63	837.3	46.99	0.0946	Meadowsweet
Orchid	636	322.2	400	196.5	37/3.330	23.31	888.3	49.85	0.0892	Orchid
Heuchera	650	329.6	410	201.1	37/3.368	23.57	908.7	51.00	0.0872	Heuchera
Flag	700	354.5	450	216.2	61/2.720	24.48	977.4	57.42	0.0811	Flag

ALL-ALUMINIUM STRANDED CONDUCTORS INCLUDING STANDARD SIZES FROM ASTM SPECIFICATION BS 231-04

Code Name	Total area		Equivalent copper area		Stranding and wire Diameter	Approx. overall Diameter	Weight	Rated Strength	Maximum dc Resistance at 20°C	Code Name
	AWG/MCM	mm ²	AWG/MCM	mm ²	mm	mm	kg/km	kN	ohm/km	
Verbena	700	354.6	450	216.3	37/3.493	24.45	977.6	54.85	0.08150	Verbena
Nasturtium	715.5	362.6	450	221.2	61/2.751	24.76	999.7	58.74	0.07925	Nasturtium
Violet	715.5	362.7	450	221.2	37/3.533	24.73	1000	56.11	0.07922	Violet
Cattail	750	380.2	472	231.9	61/2.817	25.35	1048	59.88	0.07558	Cattail
Petunia	750	380.4	472	232.0	37/3.617	25.32	1049	58.81	0.07558	Petunia
Lilac	795	403.2	500	246.0	61/2.901	26.11	1111	63.50	0.07127	Lilac
Arbutus	795	402.9	500	245.8	37/3.724	26.07	1111	62.35	0.07130	Arbutus
Snapdragon	900	456.3	560	278.3	61/3.086	27.77	1258	69.81	0.06298	Snapdragon
Cockscomb	900	456.2	560	278.3	37/3.962	27.73	1257	68.49	0.06299	Cockscomb
Goldenrod	954	483.9	600	295.2	61/3.178	28.60	1334	74.03	0.05939	Goldenrod
Magnolia	954	483.6	600	295.0	37/4.079	28.55	1333	72.60	0.05943	Magnolia
Camellia	1000	506.4	620	308.9	61/3.251	29.26	1396	77.47	0.05675	Camellia
Hawkweed	1000	506.9	620	309.2	37/4.176	29.23	1397	76.09	0.05670	Hawkweed
Larkspur	1033.5	523.9	650	319.6	61/3.307	29.76	1444	80.16	0.05484	Larkspur
Bluebell	1033.5	523.4	650	319.3	37/4.244	29.71	1443	78.59	0.05490	Bluebell
Marigold	1113	564.3	700	344.2	61/3.432	30.89	1556	86.34	0.05092	Marigold
Hawthorn	1192.5	604.1	750	368.5	61/3.551	31.96	1665	92.43	0.04957	Hawthorn
Narcissus	1272	644.6	800	393.2	61/3.668	33.01	1777	98.62	0.04458	Narcissus
Columbine	1351.5	684.5	850	417.5	61/3.780	34.02	1887	101.66	0.04198	Columbine
Carnation	1431	725.3	900	442.4	61/3.891	35.02	1999	107.71	0.03962	Carnation
Gladiolus	1510.5	765.8	950	467.1	61/3.998	35.98	2111	113.72	0.03752	Gladiolus
Coreopsis	1590	805.4	1000	491.3	61/4.100	36.90	2220	119.60	0.03568	Coreopsis
Jessamine	1750	887.1	1100	541.1	61/4.303	38.72	2445	131.73	0.03239	Jessamine
Cowslip	2000	1013	1230	617.9	91/3.764	41.40	2820	148.70	0.02838	Cowslip
Sagebrush	2250	1139	1370	694.8	91/3.993	43.92	3171	167.34	0.02522	Sagebrush
Lupine	2500	1266	1530	772.3	91/4.209	46.30	3524	185.94	0.02269	Lupine
Bitterroot	2750	1393	1680	849.8	91/4.415	48.56	3878	204.58	0.02063	Bitterroot
Trillium	3000	1520	1830	927.2	127/3.904	50.75	4273	223.25	0.01890	Trillium
Bluebonnet	3500	1773	2120	1081.5	127/4.216	54.81	4984	260.36	0.01621	Bluebonnet

All-Aluminium Stranded Conductors
American Sizes

All-Aluminium Stranded conductors (1350) To As: 1531-1991

Code Name	Area Actual	Equivalent copper area	Stranding and wire Diameter	Overall Diameter	Weight	Rated Strength	Maximum dc Resistance at 20° C
	mm ²	AWG/MCM	mm	mm	kg/km	kN	ohm/km
LEO	34.36	21.0	7/2.50	7.50	94.3	5.71	0.833
LEONIDS	41.58	25.4	7/2.75	8.25	113	6.72	0.689
LIBRA	49.48	30.2	7/3.00	9.00	135	7.98	0.579
MARS	77.28	47.1	7/3.75	11.3	211	11.80	0.370
MERCURY	111.3	67.9	7/4.50	13.5	304	16.9	0.258
MOON	124.0	75.6	7/4.75	14.3	339	18.9	0.232
NEPTUNE	157.6	96.1	19/3.25	16.3	433	24.7	0.183
ORION	182.8	111.5	19/3.50	17.5	503	28.7	0.157
PLUTO	209.8	128.0	19/3.75	18.8	576	31.9	0.137
TAURUS	336.7	205.4	19/4.75	23.8	924	51.3	0.0857
SATURN	261.6	159.6	37/3.00	21.0	721	42.2	0.110
SIRIUS	307.0	187.3	37/3.25	22.8	845	48.2	0.094
TRITON	408.5	249.2	37/3.75	26.3	1120	62.2	0.0706
URANUS	506.1	308.7	61/3.25	29.3	1400	75.2	0.0572
URSULA	586.9	358.0	61/3.50	31.5	1620	87.3	0.0493
VENUS	673.4	410.8	61/3.75	33.8	1860	97.2	0.0429

All-Aluminium Stranded Conductors
Australian Sizes

All-Aluminium Stranded conductors Including Standard Sizes From BS EN: 50182

Code Name	Nominal Aluminium	Equivalent copper area	Stranding and wire Diameter	Approx. overall Diameter	Total area	Weight	Rated Strength	Maximum dc Resistance at 20° C	Code Name
	mm ²	mm ²	mm	mm	mm ²	kg/km	kN	ohm/km	
Midge	22	14.2	7/2.06	6.2	23.3	64	3.99	1.227	Midge
Aphis	25	16.1	3/3.35	7.2	26.4	73	4.12	1.081	Aphis
Gnat	25	16.1	7/2.21	6.6	26.8	73	4.59	1.0662	Gnat
Weevil	30	19.4	3/3.66	7.9	31.6	86	4.86	0.9082	Weevil
Mosquito	35	22.6	7/2.59	7.8	36.9	101	6.03	0.7763	Mosquito
Ladybird	40	25.8	7/2.79	8.4	42.8	117	6.99	0.6687	Ladybird
Ant	50	32.3	7/3.10	9.3	52.8	145	8.28	0.5419	Ant
Fly	60	38.7	7/3.40	10.2	63.6	174	9.90	0.4505	Fly
Bluebottle	70	45.2	7/3.66	11.0	73.7	202	11.33	0.3887	Bluebottle
Earwig	75	48.4	7/3.78	11.4	78.5	215	11.94	0.3645	Earwig
Grasshopper	80	51.6	7/3.91	11.7	84.1	230	12.78	0.3405	Grasshopper
Clegg	90	58.1	7/4.17	12.5	95.6	262	14.53	0.2994	Clegg
Wasp	100	64.5	7/4.39	13.2	106.0	290	16.00	0.2700	Wasp
Beetle	100	64.5	19/2.67	13.4	106.4	293	17.38	0.2703	Beetle
Bee	125	80.6	7/4.90	14.7	132.0	361	19.94	0.2167	Bee
Cricket	150	96.8	7/5.36	16.1	157.9	432	23.80	0.1812	Cricket
Hornet	150	96.8	19/3.25	16.3	157.6	434	25.70	0.1825	Hornet
Caterpillar	175	113.0	19/3.53	17.7	186.0	512	28.62	0.1547	Caterpillar
Chafer	200	129.0	19/3.78	18.9	213.2	587	32.40	0.1349	Chafer
Spider	225	145.0	19/3.99	20.0	237.6	652	36.11	0.1211	Spider
Cockroach	250	161.0	19/4.22	21.1	265.7	731	40.40	0.10830	Cockroach
Butterfly	300	194.0	19/4.65	23.3	322.7	888	48.75	0.08912	Butterfly
Moth	350	226.0	19/5.00	25.0	373.2	1027	56.35	0.07709	Moth
Drone	350	226.0	37/3.58	25.1	372.5	1029	57.32	0.07738	Drone
Locust	400	258.0	19/5.36	26.8	428.5	1179	64.76	0.06710	Locust
Centipede	400	258.0	37/3.78	26.5	415.2	1145	63.10	0.06944	Centipede
Maybug	450	290.0	37/4.09	28.6	486.0	1340	73.89	0.05929	Maybug
Scorpion	500	323.0	37/4.27	29.9	530.0	1460	80.03	0.05442	Scorpion
Cicada	600	387.0	37/4.65	32.6	628.6	1733	94.91	0.04587	Cicada
Tarantula	750	484.0	37/5.23	36.6	794.8	2191	120.07	0.03628	Tarantula

All-Aluminium Stranded conductors Including Standard Sizes From CAN/CSA-C6 1089:03

Code Name	Total area		Equivalent copper area		Stranding and wire Diameter	Approx. overall Diameter	Weight	Rated Strength	Maximum dc Resistance at 20°C	Code Name
	AWG/MCM	mm ²	AWG/MCM	mm ²						
Rose	4	21.14	6	12.9	7/1.961	5.89	58	4.12	1.3544	Rose
Lily	3	26.65	5	16.3	7/2.202	6.61	73	5.06	1.0741	Lily
Iris	2	33.65	4	20.5	7/2.474	7.42	92	6.23	0.8509	Iris
Pansy	1	42.36	3	25.8	7/2.776	8.33	116	7.41	0.6759	Pansy
Poppy	1/0	53.48	2	32.6	7/3.119	9.36	147	9.09	0.5354	Poppy
Aster	2/0	67.46	1	41.2	7/3.503	10.51	184	11.47	0.4244	Aster
Phlox	3/0	85.00	1/0	51.9	7/3.932	11.80	232	14.02	0.3369	Phlox
Oxlip	4/0	107.26	2/0	65.4	7/4.417	13.25	293	17.70	0.2670	Oxlip
Daisy	266.8	135.25	3/0	82.5	7/4.960	14.88	369	22.32	0.2117	Daisy
Valerian	250.0	126.63	157.0	77.2	19/2.913	14.57	348	22.16	0.2272	Valerian
Laurel	266.8	135.20	168.0	82.5	19/3.010	15.05	372	22.98	0.2128	Laurel
Peony	300.0	152.13	188.8	92.8	19/3.193	15.97	418	25.86	0.1891	Peony
Tulip	336.4	170.58	4/0	104.1	19/3.381	16.91	469	29.00	0.1687	Tulip
Daffodil	350.0	177.30	220.0	108.1	19/3.447	17.24	488	30.14	0.1623	Daffodil
Canna	397.5	201.32	250.0	122.8	19/3.673	18.36	554	34.22	0.1429	Canna
-	400.0	202.75	250.0	123.7	19/3.686	18.43	558	34.47	0.1419	-
Goldentuft	450.0	228.02	283.0	139.1	19/3.909	19.55	627	37.62	0.1262	Goldentuft
Cosmos	477.0	241.51	300.0	147.3	19/4.023	20.12	664	39.85	0.1191	Cosmos
Zinnia	500.0	253.30	314.5	154.5	19/4.120	20.60	697	41.79	0.1136	Zinnia
Dahlia	556.5	281.86	350.0	171.9	19/4.346	21.73	775	46.51	0.1021	Dahlia
-	550.0	278.54	345	169.9	37/3.096	21.67	768	47.35	0.1035	-
Meadowsweet	600.0	303.74	377	185.3	37/3.233	22.63	838	51.64	0.09495	Meadowsweet
Orchid	636.0	322.24	400	196.6	37/3.330	23.31	888	54.78	0.08950	Orchid
Heuchera	650.0	329.24	408	200.8	37/3.366	23.56	908	55.97	0.08760	Heuchera
Verbena	700.0	354.56	440	216.3	37/3.493	24.45	978	60.28	0.08134	Verbena

Aluminium & Aluminium Stranded conductors Including Standard Sizes From CAN/CSA-C61089:03

Code Name	Total area		Equivalent copper area		Stranding and wire Diameter	Approx. overall Diameter	Weight	Rated Strength	Maximum dc Resistance at 20°C	Code Name
	AWG/MCM	mm ²	AWG/MCM	mm ²	mm	mm	kg/km	kN	ohm/km	
VIOLET	715.5	362.72	450	221.3	37/3.533	24.73	1001	61.66	0.07951	VIOLET
PETUNIA	750.0	380.18	472	231.9	37/3.617	25.32	1049	64.63	0.07586	PETUNIA
ARBUTUS	795.0	403.00	500	245.8	37/3.724	26.07	1112	68.51	0.07156	ARBUTUS
-	800.0	405.17	502	247.2	37/3.734	26.14	1118	68.88	0.07118	-
ANEMONE	874.5	442.91	550	270.2	37/3.904	27.33	1223	73.08	0.06512	ANEMONE
COCKSCOMB	900.0	456.91	565	278.7	37/3.962	27.73	1259	75.27	0.06322	COCKSCOMB
MANGNALIA	954.0	483.50	600	294.9	37/4.079	28.55	1325	79.78	0.05965	MANGNALIA
HAWKWEED	1000.0	506.77	628	309.1	37/4.176	29.23	1399	83.62	0.05691	HAWKWEED
BLUEBELL	1033.5	523.41	650	319.3	37/4.244	29.71	1445	86.36	0.05510	BLUEBELL
-	1100.0	557.42	690	340.0	61/3.411	30.70	1541	94.76	0.05182	-
MARIGOLD	1113.0	564.31	700	344.2	61/3.432	30.89	1560	95.93	0.05118	MARIGOLD
HAWTHORN	1192.5	604.12	750	368.5	61/3.551	31.96	1670	102.70	0.04781	HAWTHORN
-	1200.0	608.55	754	371.2	61/3.564	32.08	1682	103.45	0.04746	-
NARCISSUS	1272.0	644.58	800	393.2	61/3.668	33.01	1782	109.58	0.04481	NARCISSUS
-	1300.0	658.71	816	401.8	61/3.708	33.37	1821	111.98	0.04385	-
COLUMBINE	1351.5	684.54	850	417.6	61/3.780	34.02	1892	112.95	0.04219	COLUMBINE
-	1400.0	709.40	880	432.7	61/3.848	34.63	1961	117.05	0.04071	-
CARNATION	1431.0	725.34	900	442.5	61/3.891	35.02	2005	119.68	0.03982	CARNATION
-	1500.0	760.05	942	463.6	61/3.983	35.85	2101	125.41	0.03800	-
GLADIOLUS	1510.5	765.78	950	467.1	61/3.998	35.98	2117	126.35	0.03772	GLADIOLUS
COREOPSIS	1590.0	803.78	1000	490.3	61/4.096	36.86	2222	132.62	0.03593	COREOPSIS
-	1600.0	811.26	1005	494.9	61/4.115	37.04	2243	133.86	0.03560	-
-	1700.0	860.88	1068	525.1	61/4.239	38.15	2380	142.05	0.03355	-
-	1800.0	911.40	1131	556.0	91/3.571	39.28	2522	154.94	0.03172	-

Aluminium & Aluminium Stranded Conductors To NFC 34120

Nominal Area	Stranding and wire Diameter	Overall Diameter	Approx. Weight	Rated Strength	Maximum dc Resistance at 20°C
mm ²	mm	mm	mm	mm	ohm/km
27.8	7x2.25	6.75	77	4.854	1.03
34.4	7x2.50	7.50	95	5.649	0.833
43.1	7x2.80	8.40	118	7.110	0.665
54.6	7x3.15	9.45	150	8.463	0.526
75.6	19x2.25	11.25	209	11.964	0.382
93.3	19x2.50	12.50	258	14.808	0.309
117	19x2.80	14	324	18.044	0.247
148	19x3.15	15.75	410	22.261	0.195
188	19x3.55	17.75	520	28.243	0.153
228	37x2.80	19.60	633	34.421	0.127
238	37x2.86	20.02	650	35.598	0.122
288	37x3.15	22.05	799	42.266	0.100
366	37x3.55	24.85	1016	53.642	0.0792
475	61x3.15	28.35	1324	67.274	0.0612
604	61x3.55	31.95	1680	85.514	0.0481
710	91x3.15	34.65	1950	100.224	0.0410

All-Aluminium Stranded Conductors
French Sizes

Aluminium & Aluminium Stranded Conductors To DIN 48201

Area		Equivalent copper area	Stranding and wire Diameter	Overall Diameter	Weight	Calculated Breaking Load	Maximum dc Resistance at 20°C
Nominal	Actual						
mm ²	mm ²	mm ²	mm	mm	kg/km	kN	ohm/km
16	15.89	10	7/1.7	5.1	43	2.84	1.8017
25	24.25	15	7/2.1	6.3	66	4.17	1.1806
35	34.36	21	7/2.5	7.5	94	5.78	0.8332
50	49.48	30	7/3.0	9.0	135	7.94	0.5786
50	48.36	29	19/1.8	9.0	133	8.45	0.5948
70	65.82	40	19/2.10	10.5	181	11.32	0.4370
95	93.27	57	19/2.50	12.5	256	15.68	0.3084
120	117.00	71	19/2.80	14.0	322	18.78	0.2459
150	147.10	90	37/2.25	15.75	406	25.30	0.1960
185	181.60	111	37/2.50	17.50	500	30.54	0.1588
240	242.5	148	61/2.25	20.25	670	39.51	0.1192
300	299.4	183	61/2.50	22.50	827	47.70	0.09651
400	400.1	244	61/2.89	26.01	1104	60.86	0.07222
500	499.8	305	61/3.23	29.07	1379	74.67	0.05782
625	626.2	382	91/2.96	32.56	1732	95.25	0.04625
800	802.1	489	91/3.35	36.85	2218	118.39	0.03611
1000	999.7	610	91/3.74	41.14	2767	145.76	0.02897

Code Name	Area Actual	Equivalent copper area	Stranding and wire Diameter	Overall Diameter	Weight	Rated Strength	Maximum dc Resistance at 20°C
	mm ²	mm ²	mm	mm	kg/km	kN	mm
10	10	6.1	7/1.35	4.05	27.4	1.95	2.8633
16	16	9.8	7/1.71	5.13	43.8	3.04	1.7896
25	25	15.3	7/2.13	6.39	68.4	4.50	1.1453
40	40	24.4	7/2.70	8.10	109.4	6.80	0.7158
63	63	38.4	7/3.39	10.17	172.3	10.39	0.4545
100	100	61.0	19/2.59	12.95	274.8	17.00	0.2877
125	125	76.3	19/2.89	14.45	343.6	21.25	0.2302
160	160	97.6	19/3.27	16.35	439.8	26.40	0.1798
200	200	122.0	19/3.66	18.30	549.7	32.00	0.1439
250	250	152.5	19/4.09	20.45	687.1	40.00	0.1151
315	315	192.2	37/3.29	23.03	867.9	51.97	0.0916
400	400	244.0	37/3.71	25.97	1102.0	64.00	0.0721
450	450	274.5	37/3.94	27.58	1239.8	72.00	0.0641
500	500	305.0	37/4.15	29.05	1377.6	80.00	0.0577
560	560	341.6	37/4.39	30.73	1542.9	89.60	0.0515
630	630	384.3	61/3.63	32.67	1738.3	100.80	0.0458
710	710	433.1	61/3.85	34.65	1959.1	113.60	0.0407
800	800	488.0	61/4.09	36.81	2207.4	128.00	0.0361
900	900	549.0	61/4.33	38.97	2483.3	144.00	0.0321
1000	1000	610.0	61/4.57	41.13	2759.2	160.00	0.0289
1120	1120	683.2	91/3.96	43.56	3093.5	179.20	0.0258
1250	1250	762.5	91/4.18	45.98	3452.6	200.00	0.0231
1400	1400	854.0	91/4.43	48.73	3866.9	224.00	0.0207
1500	1500	915.0	91/4.58	50.38	4143.1	240.00	0.0193

Aluminium Conductors Steel Reinforced including Standard Size From ASTM B 232-01

Code Name	Area				Equivalent copper area		Stranding and wire Diameter		Approx. overall Diameter	Weight			Rated Strength	Maximum dc Resistance at 20° C	Code Name
	Aluminium		Steel	Total			Aluminium	Steel		Aluminium	Steel	Total			
	AWG/MCM	mm ²	mm ²	mm ²	AWG/MCM	mm ²	mm	mm	mm	kg/km	kg/km	kg/km	kN	ohm/km	
TURKEY	6	13.30	2.22	15.52	8	8.39	6/1.68	1/1.68	5.04	36.5	17	54	5.28	2.1499	TURKEY
THRUSH	5	16.83	2.81	19.64	7	10.58	6/1.89	1/1.89	5.67	46.0	22	68	6.68	1.6987	THRUSH
SWAN	4	21.18	3.53	24.71	6	13.29	6/2.12	1/2.12	6.36	58.0	27	85	8.30	1.3501	SWAN
SWANATE	4	21.12	5.35	26.47	6	13.29	7/1.96	1/2.61	6.53	58.0	42	100	10.68	1.3539	SWANATE
SWALLOW	3	26.69	4.45	31.14	5	16.77	6/2.38	1/2.38	7.14	73.0	35	108	10.21	1.0712	SWALLOW
SPARROW	2	33.59	5.60	39.19	4	21.16	6/2.67	1/2.67	8.01	92.0	44	136	12.69	0.8512	SPARROW
SPARATE	2	33.54	8.55	42.09	4	21.16	7/2.47	1/3.30	8.24	92.0	67	159	16.14	0.8525	SPARATE
ROBIN	1	42.41	7.07	49.48	3	26.65	6/3.00	1/3.00	9.00	116	55	171	15.81	0.6742	ROBIN
RAVEN	1/0	53.52	8.92	62.44	2	33.61	6/3.37	1/3.37	10.11	147	69	216	19.35	0.5343	RAVEN
QUAIL	2/0	67.33	11.22	78.55	1	42.39	6/3.78	1/3.78	11.34	185	87	272	23.27	0.4247	QUAIL
PIGEON	3/0	85.12	14.19	99.31	1/0	53.48	6/4.25	1/4.25	12.75	234	110	344	29.42	0.3359	PIGEON
PENGUIN	4/0	107.2	17.87	125.1	2/0	67.42	6/4.77	1/4.77	14.31	294	139	433	36.54	0.2667	PENGUIN
WAXWING	266.8	135.0	7.50	142.5	3/0	85.03	18/3.09	1/3.09	15.45	372	59	431	30.27	0.2118	WAXWING
OWL	266.8	135.4	17.62	153.0	3/0	85.03	6/5.36	7/1.79	16.09	371	138	512	42.95	0.2112	OWL
PARTRIDGE	266.8	134.9	21.99	156.9	3/0	85.03	26/2.57	7/2.00	16.28	373	172	545	50.23	0.2141	PARTRIDGE
OSTRICH	300	152.2	24.71	176.9	189	95.48	26/2.73	7/2.12	17.28	422	193	615	56.55	0.1897	OSTRICH
MERLIN	336.4	170.2	9.46	179.7	4/0	107.23	18/3.47	1/3.47	17.35	469	74	543	38.17	0.1688	MERLIN
LINNET	336.4	170.6	27.83	198.4	4/0	107.23	26/2.89	7/2.25	18.31	473	217	690	62.76	0.1693	LINNET
ORIOLE	336.4	170.5	39.78	210.3	4/0	107.23	30/2.69	7/2.69	18.83	474	311	785	77.43	0.1698	ORIOLE
CHICKADEE	397.7	200.9	11.16	212.1	250	126.45	18/3.77	1/3.77	18.85	555	87	642	43.37	0.1430	CHICKADEE
BRANT	397.5	201.6	26.13	227.7	250	126.45	24/3.27	7/2.18	19.62	558	204	762	64.72	0.1433	BRANT
IBIS	397.5	201.3	32.73	234.0	250	126.45	26/3.14	7/2.44	19.88	558	256	814	72.05	0.1434	IBIS
LARK	397.5	200.9	46.88	247.8	250	126.45	30/2.92	7/2.92	20.44	558	367	925	90.30	0.1441	LARK
PELICAN	477	242.3	13.46	255.8	300	152.26	18/4.14	1/4.14	20.70	668	105	773	52.30	0.1186	PELICAN
FLICKER	477	241.6	31.40	273.0	300	152.26	24/3.58	7/2.39	21.49	669	245	914	76.78	0.1195	FLICKER
HAWK	477	241.6	39.49	281.1	300	152.26	26/3.44	7/2.68	21.80	669	306	975	86.73	0.1195	HAWK
HEN	477	241.3	56.30	297.6	300	152.26	30/3.20	7/3.20	22.40	670	440	1110	105.16	0.1200	HEN

Aluminium Conductors Steel Reinforced
American Sizes

Aluminium Conductors Steel Reinforced including Standard Size From ASTM B 232-01

Code Name	Area				Equivalent copper area		Stranding and wire Diameter		Approx. overall Diameter	Weight			Rated Strength	Maximum dc Resistance at 20°C	Code Name
	Aluminium		Steel	Total			Aluminium	Steel		Aluminium	Steel	Total			
	AWG/MCM	mm ²	mm ²	mm ²	AWG/MCM	mm ²	mm	mm	mm	kg/km	kg/km	kg/km	kN	ohm/km	
OSPREY	556.5	282.5	15.69	298.2	350	172	18/4.47	1/4.47	22.35	779	122	901	60.52	0.1017	OSPREY
PARAKEET	556.5	282.3	36.60	318.9	350	172	24/3.87	7/2.58	23.22	783	286	1069	88.29	0.1023	PARAKEET
DOVE	556.5	282.6	45.92	328.5	350	172	26/3.72	7/2.89	23.55	783	359	1142	101.1	0.1022	DOVE
EAGLE	556.5	282.1	65.82	347.9	350	172	30/3.46	7/3.46	24.21	784	515	1298	122.9	0.1026	EAGLE
PEACOCK	605	306.1	39.78	345.9	381	187	24/4.03	7/2.69	24.20	849	311	1160	95.86	0.09433	PEACOCK
SQUAB	605	305.8	49.81	355.6	381	187	26/3.87	7/3.01	24.51	848	389	1237	109.6	0.09442	SQUAB
WOODDUCK	605	307.1	71.65	378.8	381	187	30/3.61	7/3.61	25.25	853	560	1413	129.0	0.09427	WOODDUCK
TEAL	605	307.1	69.62	376.7	381	187	30/3.61	19/2.16	25.24	853	545	1398	136.1	0.09427	TEAL
KINGBIRD	636	323.0	17.95	341.0	400	197	18/4.78	1/4.78	23.90	891	140	1031	69.72	0.08896	KINGBIRD
ROOK	636	323.1	41.88	365.0	400	197	24/4.14	7/2.76	24.84	896	327	1223	101.0	0.08938	ROOK
GROSBEAK	636	321.8	52.49	374.3	400	197	26/3.97	7/3.09	25.15	892	410	1302	111.9	0.08972	GROSBEAK
SCOTER	636	322.6	75.26	397.9	400	197	30/3.70	7/3.70	25.90	897	588	1485	135.5	0.08974	SCOTER
EGRET	636	322.6	73.54	396.1	400	197	30/3.70	19/2.22	25.90	897	576	1473	140.6	0.08974	EGRET
FLAMINGO	666.6	337.3	43.72	381.0	419	206	24/4.23	7/2.82	25.38	935	342	1277	105.5	0.08562	FLAMINGO
GANNET	666.6	338.3	54.90	393.2	419	201	26/4.07	7/3.16	25.76	938	429	1367	117.3	0.08537	GANNET
CROW	715.5	361.6	46.88	408.5	450	221	54/2.92	7/2.92	26.28	1003	366	1369	115.2	0.07985	CROW
STILT	715.5	363.3	46.88	410.2	450	222	24/4.39	7/2.92	26.32	1007	366	1373	113.3	0.07949	STILT
STARLING	715.5	361.9	59.15	421.1	450	221	26/4.21	7/3.28	26.68	1004	462	1466	125.9	0.07978	STARLING
REDWING	715.5	362.1	82.41	444.5	450	221	30/3.92	19/2.35	27.43	1006	645	1651	153.7	0.07995	REDWING
TERN	795	403.8	27.83	431.6	500	246	45/3.38	7/2.25	27.03	1120	217	1337	97.47	0.07152	TERN
CONDOR	795	402.3	52.15	454.5	500	245	54/3.08	7/3.08	27.72	1116	407	1523	124.3	0.07177	CONDOR
CUCKOO	795	402.3	52.15	454.5	500	245	24/4.62	7/3.08	27.72	1116	407	1523	123.8	0.07177	CUCKOO
DRAKE	795	402.6	65.44	468.0	500	246	26/4.44	7/3.45	28.11	1116	511	1627	139.7	0.07173	DRAKE
MALLARD	795	403.8	91.78	495.6	500	246	30/4.14	19/2.48	28.96	1122	718	1840	171.2	0.07168	MALLARD
CRANE	874.5	442.5	57.36	499.9	550	270	54/3.23	7/3.23	29.07	1221	448	1669	136.7	0.06494	CRANE
RUDDY	900	455.5	31.67	487.2	566	278	45/3.59	7/2.40	28.74	1268	247	1510	109.4	0.06339	RUDDY
CANARY	900	456.3	59.15	515.5	566	278	54/3.28	7/3.28	29.52	1265	462	1727	141.0	0.06329	CANARY
RAIL	954	483.8	33.54	517.3	600	295	45/3.70	7/2.47	29.61	1342	262	1604	116.1	0.05968	RAIL

Aluminium Conductors Steel Reinforced including Standard Size From ASTM B 232-01

Code Name	Area				Equivalent copper area		Stranding and wire Diameter		Approx. overall Diameter	Weight			Rated Strength	Maximum dc Resistance at 20°C	Code Name
	Aluminium		Steel	Total			Aluminium	Steel		Aluminium	Steel	Total			
	AWG/MCM	mm ²	mm ²	mm ²	AWG/MCM	mm ²	mm	mm	mm	kg/km	kg/km	kg/km	kN	ohm/km	
Cardinal	954	484.5	62.81	547.3	600	296	54/3.38	7/3.38	30.42	1343	491	1834	149.7	0.05960	Cardinal
Orlan	1033.5	523.9	36.31	560.2	650	320	45/3.85	7/2.57	30.81	1453	283	1736	123.3	0.05512	Orlan
Curlew	1033.5	525.5	68.1	593.6	650	321	54/3.52	7/3.52	31.68	1457	532	1989	162.4	0.05495	Curlew
Bluejay	1113	565.5	38.9	604.4	700	345	45/4.00	7/2.66	31.98	1568	304	1872	132.7	0.05106	Bluejay
Finch	1113	565.0	71.57	636.6	700	345	54/3.65	19/2.19	32.85	1574	560	2134	174.6	0.05136	Finch
Bunting	1192.5	605.8	41.9	647.7	750	370	45/4.14	7/2.76	33.12	1680	327	2007	142.4	0.04767	Bunting
Grackle	1192.5	602.8	76.9	679.7	750	368	54/3.77	19/2.27	33.97	1680	601	2281	184.2	0.04814	Grackle
Bittern	1272	644.4	44.7	689.1	800	393	45/4.27	7/2.85	34.17	1787	349	2136	151.4	0.04481	Bittern
Pheasant	1272	645.1	81.71	726.8	800	394	54/3.90	19/2.34	35.10	1797	640	2137	194.1	0.04498	Pheasant
Dipper	1351.5	684.2	47.2	731.1	850	417	45/4.40	7/2.92	35.16	1897	366	2263	160.3	0.04220	Dipper
Martin	1351.5	685.4	86.7	772.1	850	418	54/4.02	19/2.41	36.17	1910	678	2588	206.1	0.04234	Martin
Bobolink	1431	725.2	50.1	775.4	900	442	45/4.53	7/3.02	36.24	2011	392	2403	168.6	0.03981	Bobolink
Plover	1431	726.9	91.8	818.7	900	443	54/4.14	19/2.48	37.24	2025	719	2744	218.4	0.03992	Plover
Nuthatch	1510.5	764.2	52.8	817	950	466	45/4.65	7/3.10	37.2	2119	413	2532	177.6	0.03779	Nuthatch
Parrot	1510.5	766.1	97.0	863.1	950	467	54/4.25	19/2.55	38.25	2134	760	2894	230.5	0.03788	Parrot
Lapwing	1590	804.1	55.6	859.8	1000	491	45/4.77	7/3.18	38.16	2230	434	2664	186.9	0.03591	Lapwing
Falcon	1590	806.2	102.4	908.7	1000	492	54/4.36	19/2.62	39.26	2246	802	3048	243.0	0.03599	Falcon
Chuker	1780	903.2	73.5	976.7	1119	551	84/3.70	19/2.22	40.70	2516	576	3092	227.8	0.03213	Chuker
High Strength Strandings															
Grouse	80	40.54	14.12	54.66	50	25	8/2.54	1/4.24	9.32	111	110	221	23.06	0.7089	Grouse
Petrel	101.8	51.61	30.1	81.71	64	32	12/2.34	7/2.34	11.70	143	235	378	46.16	0.5595	Petrel
Miorca	110.8	56.11	32.73	88.84	70	34	12/2.44	7/2.44	12.20	155	256	411	50.19	0.5146	Miorca
Leghorn	134.6	68.20	39.78	108	85	42	12/2.69	7/2.69	13.46	189	311	500	60.67	0.4234	Leghorn
Guinea	159	80.36	46.88	127.2	100	49	12/2.92	7/2.92	14.60	223	367	590	71.1	0.3593	Guinea
Dotterel	176.9	89.41	52.15	141.6	111	55	12/3.08	7/3.08	15.40	248	408	656	76.68	0.3230	Dotterel
Dorking	190.8	96.51	56.30	152.8	120	59	12/3.20	7/3.20	16.00	267	440	707	82.77	0.2992	Dorking
Cochin	211.3	107.0	62.44	169.4	133	65	12/3.37	7/3.37	16.85	296	488	784	91.79	0.2698	Cochin
Brahma	203.2	102.8	91.78	194.6	128	63	16/2.86	19/2.48	18.12	285	718	1003	126.52	0.28090	Brahma

Aluminium Conductors Steel Reinforced including Standard Size From BS EN 50182

Code Name	Nominal Aluminium area	Equivalent copper area	Stranding and wire Diameter		Overall Diameter	Total Area			Weight			Calculated Breaking Load	Maximum dc Resistance at 20°C	Code Name
			Aluminium	Steel		Aluminium	Steel	Total	Aluminium	Steel	Total			
	mm ²	mm ²	mm	mm	mm	kg/km	kg/km	kg/km	kg/km	kg/km	kg/km	kN	ohm/km	
Mole	10	6.5	6/1.50	1/1.50	4.50	10.60	1.77	12.36	29	14	43	4.13	2.706	Mole
Squirrel	20	12.9	6/2.11	1/2.11	6.33	20.98	3.49	24.48	58	27	85	7.90	1.370	Squirrel
Gopher	25	16.1	6/2.36	1/2.36	7.08	26.25	4.37	30.62	72	34	106	9.61	1.093	Gopher
Weasel	30	19.4	6/2.59	1/2.59	7.77	31.61	5.27	36.88	87	41	128	11.44	0.9077	Weasel
Fox	35	22.6	6/2.79	1/2.79	8.37	36.68	6.11	42.79	101	48	149	13.17	0.7822	Fox
Ferret	40	25.8	6/3.00	1/3.00	9.00	42.41	7.07	49.48	117	55	172	15.20	0.6766	Ferret
Rabbit	50	32.3	6/3.35	1/3.35	10.05	52.88	8.81	61.70	145	69	214	18.35	0.5426	Rabbit
Mink	60	38.7	6/3.66	1/3.66	10.98	63.13	10.52	73.65	173	82	255	21.93	0.4545	Mink
Skunk	60	38.7	12/2.59	7/2.59	12.95	63.22	36.88	100.10	175	290	465	52.92	0.4568	Skunk
Beaver	70	45.2	6/3.99	1/3.99	11.97	75.02	12.50	87.52	205	97	302	25.76	0.3825	Beaver
Horse	70	45.2	12/2.79	7/2.79	13.95	73.36	42.80	116.16	203	335	538	61.20	0.3936	Horse
Racoon	75	48.4	6/4.10	1/4.10	12.30	79.21	13.20	92.41	217	103	320	27.20	0.3623	Racoon
Otter	80	51.6	6/4.22	1/4.22	12.66	83.92	13.99	97.91	230	109	339	28.81	0.3419	Otter
Cat	90	58.1	6/4.50	1/4.50	13.50	95.43	15.90	111.30	262	124	386	32.67	0.3006	Cat
Hare	100	64.5	6/4.72	1/4.72	14.16	105.00	17.50	122.50	288	137	425	35.94	0.2733	Hare
Dog	100	64.5	6/4.72	7/1.57	14.15	105.00	13.55	118.60	288	106	394	32.70	0.2733	Dog
Hyena	100	64.5	7/4.39	7/1.93	14.57	106.00	20.48	126.50	290	160	450	41.01	0.2702	Hyena
Leopard	125	80.7	6/5.28	7/1.75	15.81	131.40	16.84	148.50	360	132	492	40.76	0.2185	Leopard
Coyote	125	80.7	26/2.54	7/1.91	15.89	131.70	20.06	151.80	365	157	522	46.33	0.2191	Coyote
Cougar	125	80.7	18/3.05	1/3.05	15.25	131.50	7.31	138.80	362	57	419	30.03	0.2190	Cougar

Aluminium Conductors Steel Reinforced
British Sizes

Aluminium Conductors Steel Reinforced including Standard Size From BS EN 50182

Code Name	Nominal Aluminium area	Equivalent copper area	Stranding and wire Diameter		Overall Diameter	Total Area			Weight			Calculated Breaking Load	Maximum dc Resistance at 20°C	Code Name
			Aluminium	Steel		Aluminium	Steel	Total	Aluminium	Steel	Total			
	mm ²	mm ²	mm	mm	mm	kg/km	kg/km	kg/km	kg/km	kg/km	kg/km	kN	ohm/km	
Tiger	125	80.7	30/2.36	7/2.36	16.52	131.2	30.62	161.8	362	240	602	58.0	0.2202	Tiger
Wolf	150	96.8	30/2.59	7/2.59	18.13	158.1	36.88	194.9	437	289	726	69.2	0.1828	Wolf
Dingo	150	97.9	18/3.35	1/3.35	16.75	158.7	8.81	167.5	437	69	506	35.70	0.1815	Dingo
Lynx	175	113.0	30/2.79	7/2.79	19.53	183.4	42.79	226.2	507	335	842	79.80	0.1576	Lynx
Caracal	175	113.7	18/3.61	1/3.61	18.05	184.2	10.24	194.5	507	81	587	41.10	0.1563	Caracal
Panther	200	129	30/3.00	7/3.00	21.00	212.1	49.48	261.6	586	388	974	92.25	0.1363	Panther
Lion	225	145	30/3.18	7/3.18	22.26	238.3	55.60	293.9	659	436	1095	100.47	0.1212	Lion
Bear	250	161	30/3.35	7/3.35	23.45	264.4	61.70	326.1	730	483	1213	111.23	0.1093	Bear
Goat	300	194	30/3.71	7/3.71	25.97	324.3	75.67	400.0	896	593	1489	135.80	0.0891	Goat
Sheep	350	226	30/3.99	7/3.99	27.93	375.1	87.53	462.6	1034	684	1718	156.30	0.07703	Sheep
Antelope	350	226	54/2.97	7/2.97	26.73	374.1	48.49	422.6	1032	379	1411	118.51	0.07726	Antelope
Bison	350	226	54/3.00	7/3.00	27.00	381.7	49.48	431.2	1056	388	1444	120.92	0.07573	Bison
Jaguar	200	130	18/3.86	1/3.86	19.30	210.6	11.70	222.3	580	91	671	46.55	0.13670	Jaguar
Deer	400	258	30/4.27	7/4.27	29.89	429.6	100.20	529.8	1186	785	1971	178.50	0.06726	Deer
Zebra	400	258	54/3.18	7/3.18	28.62	428.9	55.60	484.5	1186	435	1621	131.90	0.06740	Zebra
Elk	450	290	30/4.50	7/4.50	31.50	477.1	111.30	588.4	1318	872	2190	198.33	0.06056	Eik
Camel	450	290	54/3.35	7/3.35	30.15	475.9	61.70	537.6	1314	483	1797	145.93	0.06073	Camel
Moose	500	323	54/3.53	7/3.53	31.77	528.5	68.51	597.0	1462	537	1999	160.97	0.05470	Moose

Aluminium Conductors Steel Reinforced
British Sizes

Aluminium Conductors Steel Reinforced including Standard Size From BS CAN/CSA-61089:03

Code Name	Area				Equivalent copper area		Stranding and wire Diameter		Approx. overall Diameter	Weight			Rated Strength	Maximum dc Resistance at 20°C	Code Name
	Aluminium		Steel	Total			Aluminium	Steel		Aluminium	Steel	Total			
	AWG/MCM	mm ²	mm ²	mm ²	AWG/MCM	mm ²	mm	mm	mm	kg/km	kg/km	kg/km	kN	ohm/km	
Wren	8	8.34	1.39	9.73	10	5.1	6/1.33	1/1.33	3.99	23	11	34	3.29	3.4416	Wren
Warbler	7	10.60	1.77	12.37	9	6.5	6/1.50	1/1.50	4.50	29	14	43	4.19	2.7057	Warbler
Turkey	6	13.30	2.22	15.52	8	8.1	6/1.68	1/1.68	5.04	37	17	54	5.19	2.1569	Turkey
Thrush	5	16.83	2.81	19.64	7	10.3	6/1.89	1/1.89	5.67	46	22	68	6.56	1.7043	Thrush
Swan	4	21.18	3.53	24.71	6	12.9	6/2.12	1/2.12	6.36	58	27	85	8.15	1.3545	Swan
Swallow	3	26.69	4.45	31.14	5	16.3	6/2.38	1/2.38	7.14	73	35	108	10.0	1.0747	Swallow
Sparrow	2	33.59	5.60	39.19	4	20.5	6/2.67	1/2.67	8.01	92	44	136	12.4	0.8540	Sparrow
Robin	1	42.41	7.07	49.48	3	25.9	6/3.00	1/3.00	9.00	116	55	171	15.5	0.6764	Robin
Raven	1/0	53.52	8.92	62.44	2	32.6	6/3.37	1/3.37	10.11	146	69	215	18.9	0.5360	Raven
Quail	2/0	67.33	11.22	78.55	1	41.1	6/3.78	1/3.78	11.34	185	88	273	23.5	0.4261	Quail
Pigeon	3/0	85.11	14.18	99.29	1/0	51.9	6/4.25	1/4.25	12.75	233	110	343	29.6	0.3370	Pigeon
Penguin	4/0	107.2	17.87	125.1	2/0	65.4	6/4.77	1/4.77	14.31	294	139	433	37.3	0.2676	Penguin
Owl	266.8	135.4	17.60	153.0	3/0	82.6	6/5.36	7/1.79	16.09	371	137	508	41.0	0.2119	Owl
Waxwing	266.8	135.0	7.50	142.5	3/0	82.3	18/3.09	1/3.09	15.45	372	58	430	31.2	0.2134	Waxwing
Partridge	266.8	134.9	22.00	156.9	3/0	82.3	26/2.57	7/2.00	16.28	374	171	545	49.3	0.2141	Partridge
Phoebe	300	152.1	8.46	160.6	189	92.8	18/3.28	1/3.28	16.40	418	65	483	35.2	0.1894	Phoebe
Ostrich	300	152.2	24.1	176.9	189	92.8	26/2.73	7/2.12	17.28	420	193	613	55.6	0.1897	Ostrich
Piper	300	152.0	35.50	187.5	189	92.7	30/2.54	7/2.54	17.78	420	277	697	66.3	0.1899	Piper
Merlin	336.4	170.2	9.45	179.7	4/0	103.8	18/3.47	1/3.47	17.35	469	74	543	39.3	0.1692	Merlin
Linnet	336.4	170.6	27.83	198.4	4/0	104.0	26/2.89	7/2.25	18.31	470	217	687	61.6	0.1693	Linnet
Oriole	336.4	170.5	39.78	210.3	4/0	104.0	30/2.69	7/2.69	18.83	472	311	783	76.0	0.1694	Oriole
Chickadee	397.5	200.9	11.16	212.1	250	122.6	18/3.77	1/3.77	18.85	555	86	641	45.4	0.1433	Chickadee
Ibis	397.5	201.3	32.73	234.0	250	122.8	26/3.14	7/2.44	19.88	557	256	813	70.2	0.1434	Ibis
Lark	397.5	200.9	46.87	247.8	250	122.5	30/2.92	7/2.92	20.44	557	366	923	88.6	0.1437	Lark
Pelican	477	242.3	13.46	255.8	300	147.8	18/4.14	1/4.14	20.70	665	104	769	54.8	0.1189	Pelican
-	477	241.8	23.78	265.6	300	147.4	22/3.74	7/2.08	21.20	667	186	853	67.3	0.1193	-
Hawk	477	241.6	39.19	280.8	300	147.4	26/3.44	7/2.67	21.77	667	308	975	84.2	0.1195	Hawk
Hen	477	241.3	56.29	297.6	300	147.2	30/3.20	7/3.20	22.40	668	440	1108	102.9	0.1197	Hen

Aluminium Conductors Steel Reinforced
Canadian Sizes

Aluminium Conductors Steel Reinforced including Standard Size From BS CAN/CSA-61089:03

Code Name	Area				Equivalent copper area		Stranding and wire Diameter		Approx. overall Diameter	Weight			Rated Strength	Maximum dc Resistance at 20°C	Code Name
	Aluminium		Steel	Total			Aluminium	Steel		Aluminium	Steel	Total			
	AWG/MCM	mm ²	mm ²	mm ²	AWG/MCM	mm ²	mm	mm	mm	kg/km	kg/km	kg/km	kN	ohm/km	
Heron	500	253.5	59.1	312.6	315	155	30/3.28	7/3.28	22.96	700	464	1164	108.16	0.11391	Heron
Sapsucker	556.5	282.0	27.6	309.6	350	172	22/4.04	7/2.24	22.88	778	216	994	78.81	0.1027	Sapsucker
Dove	556.5	282.6	45.9	328.5	350	172	26/3.72	7/2.89	23.55	781	360	1141	100.39	0.10218	Dove
Eagle	556.5	282.1	65.8	347.9	350	172	30/3.46	7/3.46	24.22	779	516	1295	120.35	0.10236	Eagle
Teal	605	306.3	30.1	336.4	381	187	22/4.21	7/2.34	23.86	845	236	1081	84.35	0.09417	Teal
Duck	605	306.9	39.8	346.7	381	187	54/2.69	7/2.69	24.21	849	312	1161	100.54	0.09424	Duck
--	636	322.5	31.7	354.2	400	197	22/4.32	7/2.40	24.48	890	248	1138	89.31	0.08944	--
Grosbeak	636	321.8	52.5	374.3	400	196	26/3.97	7/3.09	25.15	889	411	1300	110.85	0.08972	Grosbeak
Egert	636	322.6	73.5	396.1	400	197	30/3.70	19/2.22	25.90	891	579	1470	140.88	0.08952	Egert
Goose	636	323.1	41.9	365.0	400	197	54/2.76	7/2.76	24.84	894	328	1222	104.28	0.08952	Goose
-	666.6	337.8	17.4	355.2	419	206	42/3.20	7/1.78	24.54	934	137	1071	77.8	0.08554	-
Gull	666.6	337.3	43.7	381.0	419	206	54/2.82	7/2.82	25.38	934	342	1276	108.86	0.08575	Gull
Starling	715.5	361.9	59.2	421.1	450	221	26/4.21	7/3.28	26.68	1000	464	1464	124.78	0.07978	Starling
Redwing	715.5	362.1	82.4	444.5	450	221	30/3.92	19/2.35	27.43	1001	648	1649	153.69	0.07975	Redwing
-	715.5	361.4	18.6	380.0	450	220	42/3.31	7/1.84	25.38	999	146	1145	83.22	0.07995	-
Crow	715.5	361.6	46.9	408.5	450	221	54/2.92	7/2.92	26.28	1001	367	1368	116.72	0.07998	Crow
Drake	795	402.6	65.4	468.0	500	246	26/4.44	7/3.45	28.11	1112	513	1625	138.4	0.07173	Drake
Mallard	795	403.8	91.8	495.6	500	246	30/4.14	19/2.48	28.96	1116	722	1838	171.46	0.07150	Mallard
-	795	404.1	20.7	424.8	500	247	42/3.50	7/1.94	26.82	1117	163	1280	92.9	0.07150	-
Condor	795	402.3	52.2	454.5	500	245	54/3.08	7/3.08	27.72	1114	409	1523	125.77	0.07189	Condor
-	874.5	444.3	22.9	467.2	550	271	42/3.67	7/2.04	28.14	1229	179	1408	102.3	0.06503	-
Crane	874.5	442.5	57.4	499.9	550	270	54/3.23	7/3.23	29.07	1229	499	1674	138.36	0.06537	Crane
-	900	456.5	23.6	480.1	566	279	42/3.72	7/2.07	28.53	1262	185	1447	105.16	0.06330	-
Canary	900	456.3	59.1	515.4	566	278	54/3.28	7/3.28	29.52	1263	464	1727	142.63	0.06339	Canary
-	954	483.9	24.9	508.8	600	295	42/3.83	7/2.13	29.37	1338	195	1533	109.02	0.05977	-
Cardinal	954	484.5	62.8	547.3	600	296	54/3.38	7/3.38	30.42	1341	492	1833	151.46	0.05969	Cardinal
-	1033.5	525.1	26.9	552.0	650	320	42/3.99	7/2.21	30.57	1452	210	1662	118.07	0.05502	-
Curlew	1033.5	522.5	67.7	590.2	650	319	54/3.51	7/3.51	31.59	1446	531	1977	163.33	0.05535	Curlew
-	1113	565.4	29.1	594.5	700	345	42/4.14	7/2.30	31.74	1563	228	1791	126.44	0.05114	-
Finch	1113	565.0	71.6	636.6	700	345	54/3.65	19/2.19	32.85	1564	563	2127	179.79	0.05119	Finch

Aluminium Conductors Steel Reinforced
Canadian Sizes

Aluminium Conductors Steel Reinforced including Standard Size From BS CAN/CSA-61089:03

Code Name	Area				Equivalent copper area		Stranding and wire Diameter		Approx. overall Diameter	Weight			Rated Strength	Maximum dc Resistance at 20°C	Code Name
	Aluminium		Steel	Total			Aluminium	Steel		Aluminium	Steel	Total			
	AWG/MCM	mm ²	mm ²	mm ²	AWG/MCM	mm ²	mm	mm	mm	kg/km	kg/km	kg/km	kN	ohm/km	
-	1192.5	604.4	31.3	635.7	750	369	42/4.28	7/2.38	32.82	1670	243	1913	135.2	0.04778	-
Grackle	1192.5	602.8	76.89	679.7	750	368	54/3.77	19/2.27	33.97	1667	602	2269	189.4	0.04798	Grackle
Scissomil	1272	644.3	33.3	677.6	800	393	42/4.42	7/2.46	33.90	1780	260	2040	144.3	0.04484	Scissomil
Pheasant	1272	645.3	81.7	727.0	800	394	54/3.90	19/2.34	35.10	1784	640	2424	199.6	0.04484	Pheasant
-	1351.5	685.9	35.2	721.1	850	418	42/4.56	7/2.53	34.95	1895	275	2170	153.3	0.04213	-
Martin	1351.5	685.3	86.7	772.0	850	418	54/4.02	19/2.41	36.17	1895	679	2574	211.9	0.04220	Martin
-	1431	725.8	37.5	763.3	900	443	42/4.69	7/2.61	35.97	2005	292	2297	162.4	0.03982	-
Plover	1431	726.8	91.2	818.0	900	443	54/4.14	19/2.48	37.24	2010	719	2729	224.6	0.03979	Plover
-	1510.5	766.5	39.2	805.7	950	468	42/4.82	7/2.67	36.93	2117	306	2423	171.1	0.03770	-
Parrot	1510.5	766.3	97.0	863.3	950	467	54/4.25	19/2.55	38.25	2119	760	2879	237.0	0.03775	Parrot
-	1590	804.5	71.3	875.8	1000	491	48/4.62	7/3.60	38.52	2222	556	2778	211.1	0.03600	-
Falcon	1590	806.2	102.4	908.6	1000	492	54/4.36	19/2.62	39.26	2230	802	3032	249.8	0.03587	Falcon
-	1590	803.5	34.9	838.4	1000	490	72/3.77	7/2.52	37.72	2222	273	2495	172.4	0.03598	-

Extra High Strength Strandings

Bantam	13.10	6.65	8.86	15.51	8.26	4.1	3/1.68	4/1.68	5.04	18.2	69.6	87.8	12.3	4.3139	Bantam
Magpie	20.87	10.59	14.12	24.71	13.13	6.5	3/2.12	4/2.12	6.36	29.0	110.7	139.7	18.5	2.7090	Magpie
Shrike	33.20	16.80	22.39	39.19	20.87	10.2	3/2.67	4/2.67	8.01	46.1	176.5	222.6	28.6	1.7079	Shrike
Snipe	52.825	26.76	35.68	62.44	33.18	16.3	3/3.37	4/3.37	10.11	73.4	280.7	354.1	43.8	1.0721	Snipe
Loon	66.50	33.66	44.89	78.55	41.84	20.6	3/3.78	4/3.78	11.34	92.4	353.4	445.8	56.1	0.8521	Loon
Grouse	80.0	40.54	14.12	54.66	50.31	24.7	8/2.54	1/4.24	9.32	111.2	110.0	221.2	22.8	0.7078	Grouse
Petrel	101.8	51.61	30.10	81.71	64.16	31.5	12/2.34	7/2.34	11.70	142.1	234.8	376.9	43.9	0.5614	Petrel
Minorca	110.8	56.11	32.73	88.84	69.70	34.2	12/2.44	7/2.44	12.20	155.6	255.7	411.3	47.7	0.5163	Minorca
Leghorn	134.6	68.19	39.78	107.97	84.60	41.6	12/2.69	7/2.69	13.45	187.5	311.0	498.5	57.6	0.4248	Leghorn
Guinea	159.0	80.36	46.88	127.24	100.00	49.0	12/2.92	7/2.92	14.60	221.7	366.1	587.8	67.5	0.3605	Guinea
Dotterel	176.6	89.41	52.15	141.56	111.20	54.5	12/3.08	7/3.08	15.40	247.0	407.8	654.8	72.6	0.3240	Dotterel
Dorking	190.8	96.51	56.30	152.81	120.00	58.9	12/3.20	7/3.20	16.00	266.4	439.5	705.9	78.3	0.3002	Dorking
Brahma	203.2	102.8	91.78	194.58	127.80	62.7	16/2.86	19/2.48	18.12	285.7	718.8	1004.5	122.6	0.2818	Brahma
*Auk	203.0	103.1	27.83	130.93	127.70	62.9	8/4.05	7/2.25	14.85	282.7	217.3	500.0	49.6	0.2784	*Auk
Cochin	211.3	107.0	62.44	169.44	132.90	65.3	12/3.37	7/3.37	16.85	294.7	488.1	782.8	86.9	0.2704	Cochin

Aluminium Conductors Steel Reinforced To DIN 48204-1974

Area		Equivalent copper area	Stranding and wire Diameter		Approx. overall Diameter	Weight			Calculated Breaking Load	Maximum dc Resistance at 20°C			
Nominal			Aluminium	Steel		Total	Aluminium	Steel			Total		
Aluminium	Steel											mm ²	mm ²
16	2.5	15.3	2.6	17.9	9.3	6/1.80	1/1.80	5.4	41.8	19.9	61.7	5.81	1.8793
25	4.0	23.8	4.0	27.8	14.5	6/2.25	1/2.25	6.8	65.4	31.0	96.4	9.02	1.2028
35	6.0	34.3	5.7	40.0	20.9	6/2.70	1/2.70	8.1	94.2	44.7	138.9	12.70	0.8353
44	32.0	44.0	31.7	75.7	26.8	14/2.00	7/2.40	11.2	121.4	248.2	369.6	45.46	0.6573
50	8.0	48.3	8.0	56.3	29.5	6/3.20	1/3.20	9.6	132.2	62.7	194.9	17.18	0.5946
50	30	51.2	29.8	81.0	31.2	12/2.33	7/2.33	11.7	141.1	233.9	375.0	44.28	0.5644
70	12	69.9	11.4	81.3	42.6	26/1.85	7/1.44	11.7	192.8	89.4	282.2	26.31	0.4130
95	15	94.4	15.3	109.7	57.6	26/2.15	7/1.67	13.6	260.3	120.1	380.4	35.17	0.3058
95	55	96.5	56.3	152.8	58.9	12/3.20	7/3.20	16.0	266.2	441.1	707.3	80.20	0.2992
105	75	105.7	75.5	181.5	64.5	14/3.10	19/2.25	17.5	291.8	594.0	885.8	106.69	0.2736
120	20	121.6	19.8	141.4	74.2	26/2.44	7/1.90	15.5	335.5	155.5	491.0	44.94	0.2374
120	70	122.0	71.3	193.3	74.4	12/3.60	7/3.60	18.0	337.0	558.0	895.0	98.16	0.2364
125	30	127.9	29.8	157.7	78.0	30/2.33	7/2.33	16.1	353.0	233.9	586.9	57.86	0.2259
150	25	148.9	24.2	173.1	90.8	26/2.70	7/2.10	17.1	410.6	190.0	600.6	54.37	0.1939
170	40	171.8	40.1	211.9	104.8	30/2.70	7/2.7	18.9	474.2	314.0	788.2	77.01	0.1682
185	30	183.8	29.8	213.6	112.1	26/3.00	7/2.33	19	507.0	233.9	740.9	66.28	0.1571

Aluminium Conductors Steel Reinforced
German Sizes

Aluminium Conductors Steel Reinforced To DIN 48204-1974

Area					Equivalent copper area	Stranding and wire Diameter		Approx. overall Diameter	Weight			Calculated Breaking Load	Maximum dc Resistance at 20°C
Nominal		Aluminium	Steel	Total		Aluminium	Steel		Aluminium	Steel	Total		
Aluminium	Steel												
mm ²	mm ²	mm ²	mm ²	mm ²	mm ²	mm	mm	mm	kg/km	kg/km	kg/km	kN	ohm/km
210	35	209.1	34.1	243.2	128	26/3.20	7/2.49	20.3	576.6	267.1	843.7	74.94	0.1380
210	50	212.1	49.5	261.6	129	30/3.00	7/3.00	21.0	585.5	387.7	973.2	92.23	0.1363
230	30	230.9	29.8	260.7	141	24/3.50	7/2.33	21.0	636.5	233.9	870.4	73.09	0.1249
240	40	243.0	39.5	282.5	148	26/3.45	7/2.68	21.8	670.4	309.4	979.8	86.46	0.1188
265	35	263.7	34.1	297.8	161	24/3.74	7/2.49	22.4	726.9	267.1	994.0	82.94	0.1094
300	50	304.3	49.5	353.7	186	26/3.86	7/3.00	24.5	839.0	387.7	1226.7	105.09	0.0949
305	40	304.6	39.5	344.1	186	54/2.68	7/2.68	24.1	841.2	309.4	1150.6	99.30	0.0949
340	30	339.3	29.8	369.1	207	48/3.00	7/2.33	25.0	936.8	233.9	1170.7	92.56	0.0851
380	50	382.0	49.5	431.5	233	54/3.00	7/3.00	27.0	1054.3	387.7	1442.0	120.91	0.0757
385	35	386.0	34.1	420.1	235	48/3.20	7/2.49	26.7	1065.4	267.1	1332.5	194.31	0.0748
435	55	434.3	56.3	490.6	265	54/3.20	7/3.20	28.8	1199.0	441.1	1631.1	136.27	0.0666
450	40	448.7	39.5	488.2	274	48/3.45	7/2.68	28.7	1238.6	309.4	1548.0	120.19	0.0644
490	65	490.3	63.6	553.9	299	54/3.40	7/3.40	30.6	1353.7	498.0	1851.7	152.85	0.0590
550	70	550.0	71.3	621.3	336	54/3.60	7/3.60	32.4	1518.3	558.3	2076.6	167.42	0.0526
560	50	561.7	49.5	611.2	343	48/3.86	7/3.00	32.2	1550.2	387.7	1937.9	146.28	0.0514
680	85	678.6	86.0	764.6	414	54/4.00	19/2.40	36.0	1874.5	675.8	2550.3	209.99	0.0426

Aluminium Conductors Steel Reinforced to NFC 32120:1976

Code Name	Area			Equivalent copper area	Stranding and wire Diameter		Overall Diameter	Weight			Rated Strength	Maximum dc Resistance at 20°C	Code Name
	Aluminium	Steel	Total		Aluminium	Steel		Aluminium	Steel	Total			
	mm ²	mm ²	mm ²		mm	mm		kg/km	kg/km	kg/km			
Canna 37.7	28.27	9.42	37.69	17.2	9/2.0	3/2.0	8.3	78	77	155	1625	1.020	Canna 37.7
Canna 59.7	37.30	21.99	59.29	22.8	12/2.0	7/2.0	10.0	104	172	276	3270	0.766	Canna 59.7
Canna 75.5	47.71	27.83	75.54	29.1	12/2.25	7/2.25	11.25	131	218	349	4115	0.605	Canna 75.5
Canna 93.3	58.9	34.34	93.3	36.0	12/2.5	7/2.5	12.50	162	269	431	4950	0.490	Canna 93
Canna 116.2	94.25	21.99	116.24	57.5	30/2.0	7/2.0	14.0	260	172	432	4315	0.306	Canna 116.2
Canna 147.1	119.28	27.83	147.11	72.8	30/2.25	7/2.25	15.75	329	218	547	5400	0.243	Canna 147.1
Crocus 147.1	119.28	27.83	147.11	72.8	30/2.25	7/2.25	15.75	329	218	547	6180	0.243	Crocus 147.1
Canna 181.6	147.26	34.26	181.62	89.8	30/2.5	7/2.5	17.5	406	269	675	6490	0.197	Canna 181.6
Canna 228	184.72	43.10	227.82	112.7	30/2.8	7/2.8	19.6	512	338	847	8050	0.157	Canna 228
Crocus 228	184.72	43.10	227.82	112.7	30/2.8	7/2.8	19.6	510	338	847	9210	0.157	Crocus 228
Canna 288	233.8	54.55	288.35	142.6	30/3.15	7/3.15	22.05	647	427	1074	9850	0.124	Canna 288
Crocus 288	233.8	54.55	288.35	142.6	30/3.15	7/3.15	22.05	647	427	1074	11380	0.124	Crocus 288
Crocus 297	221.67	75.54	297.21	135.2	36/2.8	19/2.25	22.45	620	598	1218	14720	0.1310	Crocus 297
Crocus 412	325.72	85.95	411.67	198.7	32/3.6	19/2.4	26.4				17330	0.0890	Crocus 412
Crocus 612	507.83	104.79	611.8	309.8	66/4.24	19/2.65	32.03	1404	837	2241	23150	0.0571	Crocus 612
Crocus 865	717.33	148.06	865.4	437.9	66/3.72	19/3.15	38.01	2002	1172	3174	31900	0.0404	Crocus 865
Crocus 1185	956.66	227.82	1185	583.6	54/2.80 66/3.47	37/2.8	44.7	2668	1810	4478	48050	0.0304	Crocus 1185

ACSR/AS Code Word	Conductor Size	Stranding nos./mm		Calculated Sectional area mm ²		Overall Diameter mm		Weight kg/km			Rated Strength kN	Calculated D.C. Resistance at 20°C ohm/km
	CM OR AWG	Aluminium	As Wire	Aluminium	As Wire	ACSR/AS	As Core	Aluminium	As Core	ACSR/AS		
Turkey	6	6/1.679	1/1.679	13.28	2.214	5.037	1.679	36.44	14.59	51.03	5.05	2.0443
Swanate	4	7/1.961	1/2.614	21.15	5.367	6.536	2.614	58.01	35.37	93.38	10.17	1.2497
Swan	4	6/2.118	1/2.118	21.15	3.523	6.354	2.118	58.00	23.22	81.22	7.93	1.285
Sparrow	2	6/2.672	1/2.672	33.63	5.607	8.016	2.672	92.32	36.95	129.3	12.31	0.8073
Sparate	2	7/2.474	1/3.299	33.64	8.548	8.247	3.299	92.29	56.33	148.6	15.59	0.7852
Grouse	80,000	8/2.540	1/4.242	40.54	14.13	9.322	4.242	111.8	93.14	204.9	21.28	0.6358
Robin	1	6/3.000	1/3.000	42.41	7.069	9.000	3.000	116.4	46.58	163	15.31	0.6404
Patrel	0	12/2.339	7/2.339	51.58	30.08	11.70	7.017	142.8	199.2	342	43.98	0.6488
Raven	00	6/3.371	1/3.371	53.51	8.925	10.11	3.371	146.9	58.81	205.7	18.78	0.5072
Minorca	110,800	12/2.441	7/2.441	56.14	32.76	12.21	7.323	155.6	216.8	372.4	47.90	0.4305
Quail	00	6/3.782	1/3.782	67.44	11.23	11.35	3.782	185.0	74.03	259	22.57	0.4030
Leghorn	134,600	12/2.690	7/2.690	68.20	39.78	13.45	8.070	188.9	263.05	452.4	57.84	0.3546
Guinea	159,000	12/2.924	7/2.924	80.57	47.01	14.62	8.772	223.2	311.3	534.5	67.96	0.3003
Pigeon	000	6/4.247	1/4.247	85.03	14.17	12.74	4.247	233.2	93.36	326.6	27.99	0.3196
Dotterel	176,900	12/3.084	7/3.084	89.64	52.29	15.42	9.252	248.3	346.3	594.6	75.17	0.2698
Dorking	190,800	12/3.203	7/3.203	96.68	56.41	16.02	9.609	267.9	373.6	641.5	81.08	0.2500
Brahma	203,200	16/2.863	19/2.482	103.0	91.92	18.14	12.41	285.4	611.9	897.3	120.41	0.2158
Cochin	211,300	12/3.371	7/3.371	107.1	62.48	16.86	10.11	296.7	413.8	710.5	87.77	0.2257
Penguin	0000	6/4.770	1/4.770	107.2	17.87	14.31	4.770	294.1	117.8	411.9	34.85	0.2534
Partridge	266,800	26/2.573	7/2.002	135.2	22.04	16.29	6.006	374.4	145.8	520.2	48.14	0.2031
Waxwing	266,800	18/3.091	1/3.091	135.2	7.504	15.46	3.091	372.3	49.45	421.8	30.04	0.2095
Ostrich	300,000	26/2.728	7/2.121	152.0	24.73	17.27	6.363	421.1	163.6	584.7	54.89	0.1807
Oriole	336,400	30/2.690	7/2.69	170.5	39.78	18.83	8.070	473.5	263.5	737	74.60	0.1579
Linnet	336,400	26/2.888	7/2.245	170.5	27.71	18.28	6.735	472.0	183.3	655.3	59.80	0.1612
Merlin	336,400	18/3.472	1/3.472	170.5	9.468	17.36	3.472	469.8	62.39	532.2	37.60	0.1661
Lark	397,500	30/2.924	7/2.924	201.4	47.01	20.47	8.772	559.5	311.3	870.8	87.21	0.1336
Ibis	397,500	26/3.139	7/2.441	201.4	32.76	19.88	7.323	557.5	216.7	774.2	69.74	0.1365
Brant	397,500	24/3.269	7/2.179	201.4	26.10	19.61	6.537	558.2	172.7	730.9	62.07	0.1378
Chickadee	397,500	18/3.774	1/3.774	201.4	11.19	18.87	3.774	555.2	73.72	628.9	42.74	0.1405
Flicker	477,000	24/3.581	7/2.388	241.7	31.35	21.48	7.164	669.6	207.4	877	74.51	0.1148
Pelican	477,000	18/4.135	1/4.135	241.7	13.43	20.68	4.135	666.5	88.50	755	50.86	0.1171

Aluminium Conductors Aluminium Clad Steel Reinforced Standard Conductors ASTM: B549-04

ACSR/AS Code Word	Conductor Size	Stranding nos./mm		Calculated Sectional area mm ²		Overall Diameter mm		Weight kg/km			Rated Strength kN	Calculated D.C. Resistance at 20°C ohm/km
	CM OR AWG	Aluminium	As Wire	Aluminium	As Wire	ACSR/AS	As Core	Aluminium	As Core	ACSR/AS		
HAWK	477,000	26/3.439	7/2.675	241.7	39.34	21.78	8.025	669.2	260.3	929.5	84.96	0.1137
HEN	477,000	30/3.203	7/3.203	241.7	56.41	22.42	9.609	671.4	373.6	1,045	103.52	0.1114
OSPREY	556,500	18/4.465	1/4.465	282.0	15.66	22.33	4.465	777.0	103.2	880.2	60.19	0.1004
PARAKEET	556,500	24/3.868	7/2.578	282.0	36.54	23.20	7.734	781.3	241.8	1,023	85.58	0.0984
DOVE	556,500	26/3.716	7/2.891	282.0	45.95	23.53	8.673	781.1	304.0	1,085	97.78	0.09736
EAGLE	556,500	30/3.459	7/3.459	282.0	65.78	24.21	10.380	783.0	435.6	1,219	118.58	0.09545
PEACOCK	605,000	24/4.034	7/2.690	306.6	39.78	24.21	8.070	849.9	263.2	1,113	93.17	0.09047
SQUAB	605,000	26/3.874	7/3.012	306.6	49.88	24.53	9.036	849.1	330.0	1,179	104.77	0.08958
WOOD DUCK	605,000	30/3.607	7/3.607	306.6	71.54	25.25	10.820	851.4	473.7	1,325	126.54	0.08777
TEAL	605,000	30/3.607	19/2.164	306.6	69.88	25.25	10.820	851.4	463.3	1,315	126.84	0.08793
KINGBIRD	6.36,000	18/4.775	1/4.775	322.3	17.91	23.88	4.775	888.6	118.0	1,007	68.83	0.08779
ROOK	636,000	24/4.135	7/2.756	322.3	41.76	24.80	8.268	893.0	276.3	1,169	97.80	0.08623
GROSBEAK	636,000	26/3.973	7/3.089	322.3	52.46	25.15	9.267	893.0	347.1	1,240	110.20	0.08518
SCOTER	636,000	30/3.698	7/3.698	322.3	75.18	25.89	11.090	894.8	497.9	1,393	133.01	0.08350
EGRET	636,000	30/3.698	19/2.220	322.3	73.55	25.89	11.100	894.8	487.6	1,382	133.43	0.08365
SWIFT	636,000	36/3.376	1/3.376	322.3	8.951	23.63	3.376	888.6	58.99	947.6	61.02	0.08863
FLAMINGO	666,600	24/4.234	7/2.822	337.8	43.79	25.40	8.466	936.3	289.7	1,226	102.54	0.08213
GANNET	666,600	26/4.067	7/3.162	337.8	54.97	25.75	9.486	935.7	363.7	1,299	115.47	0.08128
STILT	715,500	24/4.387	7/2.924	362.5	47.01	26.32	8.772	1,005	311.0	1,316	110.09	0.0765
STARLING	715,500	26/4.214	7/3.277	362.5	59.04	26.69	9.831	1,005	390.6	1,396	122.07	0.07571
REDWING	715,500	30/3.922	19/2.352	362.5	82.56	27.45	11.760	1,007	547.3	1,554	148.20	0.07438
CUCKOO	795,000	24/4.623	7/3.081	402.8	52.19	27.73	9.243	1,116	345.3	1,461	121.24	0.06889
DRAKE	795,000	26/4.442	7/3.454	402.8	65.59	28.13	10.360	1,116	434.0	1,550	135.62	0.06814
COOT	795,000	36/3.774	1/3.774	402.8	11.19	26.42	3.774	1,110	73.72	1,184	74.01	0.07093
TERN	795,000	45/3.376	7/2.250	402.8	27.83	27.01	6.750	1,116	184.1	1,300	95.91	0.07028
CONDOR	795,000	54/3.081	7/3.081	402.8	52.19	27.73	9.243	1,115	345.0	1,460	122.20	0.06893
MALLARD	795,000	30/4.135	19/2.482	402.8	91.92	28.95	12.410	1,119	609.4	1,728	164.92	0.06690
RUDDY	900,000	45/3.592	7/2.395	456.0	31.54	28.74	7.185	1,263	208.6	1,472	107.06	0.06208
CANARY	900,000	54/3.279	7/3.279	456.0	59.11	29.51	9.837	1,264	390.7	1,655	137.05	0.06086
CATBIRD	954,000	36/4.135	1/4.135	483.4	13.43	28.95	4.135	1,333	88.50	1,422	87.95	0.05908

Aluminium Conductors Aluminium Clad
Steel Reinforced American Sizes

Aluminium Conductors Aluminium Clad Steel Reinforced Standard Conductors ASTM: B549-04

ACSR/AS Code Word	Conductor Size	Stranding nos./mm		Calculated Sectional area mm ²		Overall Diameter mm		Weight kg/km			Rated Strength kN	Calculated D.C. Resistance at 20°C ohm/km
	CM OR AWG	Aluminium	As Wire	Aluminium	As Wire	ACSR/AS	As Core	Aluminium	As Core	ACSR/AS		
RAIL	954,000	45/3.698	7/2.466	483.4	33.43	29.59	7.398	1,339	221.2	1,560	117.59	0.05857
CARDINAL	954,000	54/3.376	7/3.376	483.4	62.66	30.39	10.13	1,339	414.2	1,753	149.39	0.05741
TANGER	1,033,500	36/4.303	1/4.303	523.7	14.54	30.12	4.303	1,443	95.83	1,539	77.84	0.05456
ORTOLAN	1,033,500	45/3.848	7/2.565	523.7	36.17	30.78	7.695	1,450	239.3	1,689	124.77	0.05409
CURLEW	1,033,500	54/3.513	7/3.513	523.7	67.85	31.62	10.54	1,450	448.5	1,899	161.99	0.05302
BLUEJAY	1,113,000	45/3.995	7/2.664	564.0	39.02	31.96	7.992	1,553	258.2	1,821	134.52	0.05019
FINCH	1,113,000	54/3.647	19/2.189	564.0	71.50	32.83	10.95	1,564	474.0	2,038	172.26	0.04924
BUNTING	1,192,500	45/4.135	7/2.756	604.2	41.76	33.07	8.268	1,674	276.3	1,950	144.07	0.04685
GRACKLE	1,192,500	54/3.774	19/2.266	604.2	76.82	33.97	11.33	1,675	508.0	2,183	181.62	0.04598
SKYLARK	1,272,000	36/4.775	1/4.775	644.5	17.91	33.43	4.775	1,787	118.0	1,905	119.89	0.04452
BITTERN	1,272,000	45/4.270	7/2.847	644.5	44.56	34.16	8.541	1,787	294.8	2,082	153.67	0.04393
PHEASNT	1,272,000	54/3.899	19/2.339	644.5	81.64	35.09	11.70	1,788	541.2	2,329	193.69	0.04308
DIPPER	1,351,500	45/4.402	7/2.934	684.8	47.33	35.21	8.802	1,898	313.1	2,211	163.28	0.04134
MARTIN	1,351,500	54/4.018	19/2.410	684.8	86.68	36.16	12.05	1,898	574.6	2,473	205.67	0.04057
BOBOLINK	1,431,000	45/4.529	7/3.020	725.1	50.14	36.23	9.060	2,009	331.8	2,341	172.88	0.03905
PLOVER	1,431,000	54/4.135	19/2.482	725.1	91.92	37.22	12.41	2,011	609.4	2,620	217.99	0.03830
NUTHATCH	1,510,500	45/4.653	7/3.101	765.4	52.87	37.22	9.303	2,120	349.8	2,470	182.41	0.03700
PARROT	1,510,000	54/4.247	19/2.548	765.4	96.88	38.22	12.74	2,121	642.3	2,763	229.83	0.03631
LAPWING	1,590,000	45/4.775	7/3.183	805.7	55.70	38.19	9.549	2,232	368.5	2,601	192.13	0.03513
FALCON	1,590,000	54/4.359	19/2.616	805.7	102.10	39.23	13.08	2,234	677.0	2,911	242.19	0.03464
CHUKAR	1,780,000	84/3.698	19/2.220	901.9	73.55	40.68	11.10	2,512	487.6	3,000	229.73	0.03140
BLUEBIRD	2,156,000	84/4.069	19/2.441	1,092	88.92	44.76	12.21	3,033	589.4	3,633	272.75	0.02594
KIWI	2,167,000	72/4.407	7/2.939	1,098	47.49	44.07	8.817	3,058	313.9	3,372	228.95	0.03447
THRASHER	2,312,000	76/4.430	19/2.068	1,172	63.82	45.78	10.34	3,261	423.8	3,685	257.13	0.02440

Code Name	Cross Section		1350 Grade Equiv. (approx) AWG/MCM	Stranding N. of wires x Diameter	Nominal Conductor Diameter	Nominal Weight	Rated Strength	Maximum dc Resistance at 20°C	Code Name
	AWG/MCM	mm ²							
AKRON	30.58	15.52	6	7x 1.68	5.04	43	4.92	2.1588	AKRON
ALTON	48.69	24.71	4	7x 2.12	6.36	68	7.83	1.3557	ALTON
AMES	77.47	39.19	2	7x 2.67	8.01	108	12.42	0.8547	AMES
AZUSA	123.3	62.44	1.0	7x 3.37	10.11	171	18.88	0.5365	AZUSA
ANAHEIM	155.4	78.55	2/0	7x 3.78	11.34	216	23.75	0.4264	ANAHEIM
AMHERST	195.7	99.30	3/0	7x 4.25	12.75	272	30.03	0.3373	AMHERST
ALLIANCE	246.9	125.10	4/0	7x 4.77	14.31	343	37.83	0.2678	ALLIANCE
BUTTE	312.8	158.60	266.8	19x 3.26	16.30	435	46.46	0.2112	BUTTE
CANTON	394.5	199.90	336.4	19x 3.66	18.30	548	58.56	0.1676	CANTON
CAIRO	465.4	236.40	397.5	19x 3.98	19.90	649	69.25	0.1417	CAIRO
DARIEN	559.5	283.57	477.0	19x 4.36	21.80	778	83.10	0.1181	DARIEN
ELGIN	652.6	331.00	556.5	19x 4.71	23.55	908	96.98	0.1012	ELGIN
FLINT	740.8	374.50	636.0	37x 3.59	25.13	1028	107.36	0.0894	FLINT
GREELEY	927.2	469.60	795.0	37x 4.02	28.14	1289	134.62	0.0713	GREELEY

Total area		Equivalent copper area		Stranding and wire Diameter	Overall Diameter	Weight	Rated Strength	Maximum dc Resistance at 20°C
AWG/MCM	mm ²	AWG/MCM	mm ²	mm	mm	kg/km	kN	ohm/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

Code Name	Area Actual	Equivalent copper area	Stranding and wire Diameter	Overall Diameter	Weight	Nominated Breaking Load	Maximum dc Resistance at 20°C
	mm ²	mm ²	mm	mm	kg/km	kN	ohm/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

All-Aluminium Alloy Conductors (6201) To As: 1531-1991

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
ORAL	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

Code Name	Nominal Aluminum area	Equivalent copper area	Stranding and wire Diameter	Approx. Overall Diameter	Total Area	Weight	Calculated Breaking Load	Maximum dc Resistance at 20°C	Code Name
	mm ²	mm ²	mm	mm	mm ²	kg/km	kN	ohm/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	BOX
ACACIA	20	12.50	7/2.08	6.24	23.79	65	6.67	1.384	ACACIA
ALMOND	25	15.80	7/2.34	7.02	30.10	82	8.44	1.094	ALMOND
CEDAR	30	18.60	7/2.54	7.62	35.47	97	9.94	0.9281	CEDAR
-	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	FIR
HAZEL	50	31.4	7/3.30	9.90	59.87	164	16.80	0.5498	HAZEL
PINE	60	37.6	7/3.61	10.83	71.65	196	20.08	0.4595	PINE
-	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	WILLOW
-	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	OAK
-	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	MULBERRY
ASH	150	94.9	19/3.48	17.4	180.7	497	50.65	0.1830	ASH
ELM	175	111.0	19/3.76	18.8	211.0	580	59.10	0.1568	ELM
POPLAR	200	126.0	37/2.87	20.09	239.4	659	67.08	0.1385	POPLAR
-	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	SYCAMORE
UPAS	300	190.0	37/3.53	24.71	362.1	997	101.5	0.09155	UPAS
-	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	YEW

Area				Total Area		Stranding and wire Diameter	Overall Diameter	Weight	Rated Strength	Maximum dc Resistance at 20°C
Aluminum		Copper Equivalent		MCM	mm ²					
AWG/MCM	mm ²	AWG/MCM	mm ²	MCM	mm ²	mm	mm	kg/km	kN	ohm/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

Area		Equivalent copper area	Stranding and wire Diameter	Overall Diameter	Weight	Rated Strength	Maximum dc Resistance at 20°C
Nominal	Actual						
mm ²	mm ²	MCM	mm	mm	kg/km	kN	ohm/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

Code Name	Equivalent copper area	Stranding and wire Diameter	Approx. overall Diameter	Total area	Weight	Rated Strength	Maximum dc Resistance at 20°C	Code Name
	mm ²						mm	
ASTER 22	11.84	7/2.0	6.0	21.99	60	715	1.50	ASTER 22
ASTER 34.4	18.0	7/2.5	7.5	34.36	94	1115	0.958	ASTER 34.4
ASTER 54.6	28.6	7/3.15	9.45	54.55	149	1775	0.603	ASTER 54.6
ASTER 75.5	41.3	19/2.25	11.25	75.54	208	2455	0.438	ASTER 75.5
ASTER 117.0	63.9	19/2.8	14.0	117.0	322	3800	0.283	ASTER 117.0
ASTER 148	80.9	19/3.15	15.75	148.1	407	4810	0.224	ASTER 148
ASTER 181.6	99.2	37/2.5	17.5	181.6	500	5900	0.183	ASTER 181.6
ASTER 228	124.5	37/2.8	19.6	227.8	627	7405	0.146	ASTER 228
ASTER 288	157.6	37/3.15	22.05	288.3	794	9370	0.115	ASTER 288
ASTER 366	200.1	37/3.55	24.85	366.2	1009	11535	0.0905	ASTER 366
ASTER 570	311.6	61/3.45	31.05	570.2	1574	18530	0.0583	ASTER 570
ASTER 851	464.8	91/3.45	37.95	850.7	2354	27650	0.0391	ASTER 851
ASTER 1144	624.9	91/4.0	44.0	1143.5	3164	36020	0.0292	ASTER 1144
ASTER 1600	872.1	127/4.0	52.0	1595.9	4425	50270	0.0206	ASTER 1600

Code Name	Nominal Aluminium area	Equivalent copper area	Stranding and wire Diameter	Overall Diameter	Weight	Rated Strength	Maximum dc Resistance at 20°C
	mm ²	mm ²	mm	mm	kg/km	kN	ohm/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

All-Aluminium Alloy Conductors
International Standard Sizes

Code Name	Nominal Aluminium area	Equivalent copper area	Stranding and wire Diameter	Overall Diameter	Weight	Rated Strength	Maximum dc Resistance at 20°C
	mm ²	mm ²	mm	mm	kg/km	kN	ohm/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

All-Aluminium Alloy Conductors
International Standard Sizes

Area		Equivalent copper area	Stranding and wire Diameter	Overall Diameter	Weight	Nominal Breaking Load	Maximum dc Resistance at 20°C
Norminal	Actual						
mm ²	mm ²	mm ²	mm	mm	kg/km	kN	ohm/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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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

All-Aluminium Alloy Conductors Alloy Reinforced American Size ACAR To ASTM B 524-99

Conductor Size					Diameter		Weight	Nominal Breaking Load	Maximum dc Resistance at 20°C
kcm	Stranding	Cross-Sectional Area			Individual Wire	Cable			
		1350	6201	Total	1350/6201				
		mm ²	mm ²	mm ²	mm	mm	kg/km	kN	ohm/km
335.0	12/7	113.6	66.3	179.9	3.472	17.36	495.9	37.99	0.1686
465.9	12/7	149.1	87.0	236.1	3.978	19.89	650.8	48.93	0.1286
503.6	12/7	161.2	94.0	255.2	4.135	20.68	703.4	52.94	0.1188
653.1	12/7	209.0	121.9	331.0	4.709	23.55	912.3	68.50	0.0915
739.8	30/7	303.9	70.9	374.9	3.592	25.14	1,033	68.06	0.0787
739.8	18/19	182.4	192.5	374.9	3.592	25.14	1,033	83.62	0.0827
853.7	30/7	350.8	81.8	432.6	3.858	27.01	1,193	77.85	0.0682
853.7	18/19	210.5	222.1	432.6	3.858	27.01	1,193	95.63	0.0715
927.2	30/7	381.0	88.8	469.8	4.021	28.15	1,295	84.51	0.0630
927.2	18/19	228.6	241.2	469.8	4.021	28.15	1,295	104.09	0.0659
1,024.5	30/7	420.9	98.2	519.1	4.227	29.59	1,431	92.97	0.0568
1,024.5	18/19	252.5	266.6	519.1	4.227	29.59	1,431	114.77	0.0597
1,081.0	30/7	443.9	103.9	547.6	4.341	30.39	1,509	98.30	0.0538
1,081.0	18/19	266.5	281.2	547.6	4.341	30.39	1,509	120.99	0.0564
1,109.0	30/7	455.5	106.4	561.8	4.397	30.78	1,549	100.97	0.0535

All-Aluminium Alloy Conductors Alloy Reinforced American Size

Note: All the data set out in this catalogue is given for information purposes and SONA CABLES will not be held responsible for its accuracy

All-Aluminium Alloy Conductors Alloy Reinforced American Size ACAR To ASTM B 524-99

Conductor Size				Diameter		Weight	Nominal Breaking Load	Maximum dc Resistance at 20°C	
kcm	Stranding	Cross-Sectional Area			Individual Wire				Cable
		1350	6201	Total	1350/6201				
		mm ²	mm ²	mm ²	mm	mm	kg/km	kN	ohm/km
1,109.0	18/19	273.6	288.3	562.0	4.397	30.78	1549	124.10	0.0551
1,172.0	30/7	481.6	112.4	594.0	4.521	31.65	1638	106.76	0.0499
1,172.0	18/19	289.0	305.1	594.0	4.521	31.65	1638	131.22	0.0522
1,198.0	30/7	492.0	115.0	607.1	4.569	31.98	1673	108.98	0.0486
1,198.0	18/19	295.4	311.5	607.1	4.569	31.98	1673	134.33	0.0512
1,280.0	30/7	525.8	122.6	648.4	4.724	33.07	1788	116.54	0.0456
1,280.0	18/19	315.5	332.9	648.4	4.724	33.07	1788	143.23	0.0479
1,361.0	24/37	271.4	418.5	689.9	3.795	34.15	1902	158.80	0.0456
1,361.0	42/19	475.0	214.9	689.9	3.795	34.15	1902	134.78	0.0436
1,527.0	24/37	304.4	469.2	773.6	4.018	36.16	2132	177.04	0.0407
1,527.0	42/19	532.6	240.9	773.6	4.018	36.16	2132	149.46	0.0387
1,703.0	24/37	339.6	523.5	863.1	4.244	38.2	2739	197.50	0.0364
1,703.0	42/19	594.2	268.2	863.1	4.244	38.2	2739	166.81	0.0348
1,933.0	24/37	385.3	594.0	979.3	4.521	40.69	2700	224.39	0.0321
1,933.0	42/19	674.2	305.2	979.3	4.521	40.69	2700	189.05	0.0307
2,267.0	24/37	452	697	1,149	4.897	44.07	3198	262.89	0.0277
2,267.0	42/19	791	358	1,149	4.897	44.07	3198	221.96	0.0264
2,338.0	24/37	466	719	1,185	4.973	44.76	3299	271.34	0.0268
2,338.0	42/19	816	369	1,185	4.973	44.76	3299	229.08	0.0256
2,493.0	72/19	999	264	1,263	4.204	46.24	3516	224.19	0.0237
2,493.0	54/37	750	513	1,263	4.204	46.24	3516	256.22	0.0244

All-Aluminium Alloy Conductors Alloy Reinforced American Size

Code	Area			Stranding & wire Diameter		Approx. overall Diameter mm	Mass Per unit Length kg/km	Calculated Breaking # Load kN	DC Resistance at 20° C ohm/km
	Aluminium mm ²	Steel mm ²	Total mm ²	Aluminium mm	Steel mm				
15-AL3/3-STIA	15.3	2.54	17.8	6/1.8	1/1.8	5.4	61.6	7.48	2.160
44-AL3/32-STIA	44	31.7	75.6	14/2.0	7/2.40	11.2	369.1	49.08	0.757
51-AL3/30-STIA	51.2	29.8	81	12/2.33	7/2.33	11.7	374.6	49.12	0.650
94-AL3/15-STIA	94.4	15.3	109.7	26/2.15	7/1.67	13.6	380.3	45.79	0.352
106-AL3/76-STIA	105.7	75.5	181.2	14/3.1	19/2.25	17.5	885	119.56	0.316
128-AL3/30-STIA	127.9	29.8	157.8	30/2.33	7/2.33	16.3	586.6	71.76	0.260
209-AL3/34-STIA	209.1	34.1	243.2	26/3.2	7/2.49	20.3	843.5	100.54	0.159
231-AL3/30-STIA	230.9	29.8	260.8	24/3.50	7/2.33	21	870.1	102.14	0.144
305-AL3/39-STIA	304.6	39.5	344.1	54/2.68	7/2.68	24.1	1150.3	134.88	0.109
339-AL3/30-STIA	339.3	29.8	369.1	48/3.0	7/2.33	25	1170.2	134.12	0.098
449-AL3/39-STIA	448.7	39.5	488.2	48/3.45	7/2.68	28.7	1547.7	177.39	0.074
679-AL3/86-STIA	678.6	86	764.5	54/4.0	19/2.40	36	2547.6	298.17	0.049

Code	Area			Stranding & wire Diameter		Approx. overall Diameter mm	Mass Per unit Length kg/km	Calculated Breaking # Load kN	DC Resistance at 20° C ohm/km
	Aluminium mm ²	Steel mm ²	Total mm ²	Aluminium mm	Steel mm				
96-AL3/86-ST5E	96.4	86	182.4	16/2.77	19/2.40	17.5	941.3	146.2	0.346
96-AL3/102-ST5E	96.3	101.7	198	18/2.61	19/2.61	18.3	1064.4	167.68	0.347
127-AL3/134-ST5E	127.2	134.3	261.5	18/3.0	19/3.0	21	1406.3	221.53	0.263
202-AL3/211-ST5E	202	210.6	412.6	18/3.78	37/2.69	26.5	2216.3	348.08	0.165
703-AL3/89-ST5E	702.5	88.8	791.4	54/4.07	19/2.44	36.6	2636.4	328.96	0.047
886-AL3/112-ST5E	885.8	112	997.8	54/4.57	19/2.74	41.1	3324.1	414.78	0.038
1683-AL3/211-ST5E	1683.3	210.6	1893.9	150/3.78	37/2.69	56.7	6305.5	785.07	0.020

Code	Area			Stranding & wire Diameter		Approx. overall Diameter mm	Mass Per unit Length kg/km	Calculated Breaking # Load kN	DC Resistance at 20° C ohm/km
	Aluminium mm ²	Steel mm ²	Total mm ²	Aluminium mm	Steel mm				
27-AL2/4-STIA	26.7	4.45	31.1	6/2.38	1/2.38	7.14	107.7	13.75	1.247
67-AL2/11-STIA	67.3	11.2	78.6	6/3.78	1/3.78	11.3	271.6	33.55	0.495
119-AL2/28-STIA	119.3	27.8	147.1	30/2.25	7/2.25	15.8	547	71.33	0.282
226-AL2/53-STIA	226.4	52.8	279.3	30/3.1	7/3.1	21.7	1038.4	131.71	.148.3

Code	Area			Stranding & wire Diameter		Approx. overall Diameter mm	Mass Per unit Length kg/km	Calculated Breaking # Load kN	DC Resistance at 20° C ohm/km
	Aluminium mm ²	Steel mm ²	Total mm ²	Aluminium mm	Steel mm				
14-AL3/4-STIA	13.6	2.27	15.9	6/1.7	1/1.7	5.1	54.9	6.67	2.422
60-AL3/10-STIA	59.7	10	59.7	6/3.56	1/3.56	10.7	240.9	28.57	0.552
150-AL3/35-STIA	149.6	34.9	184.5	30/2.52	7/2.52	17.6	686.2	83.94	0.222
282-AL3/66-STIA	282.1	65.8	30/3.46	7/3.46	7/3.46	24.2	1293.5	155.61	0.118
784-AL3/97-STIA	748.1	97	845.2	96/3.15	19/2.55	38	2830.6	331.32	0.045

Code	Area			Stranding & wire Diameter 01		Approx. overall Diameter mm	Mass Per unit Length kg/km	Calculated Breaking # Load kN	DC Resistance at 20° C ohm/km
	Aluminium mm ²	Steel mm ²	Total mm ²	Aluminium mm	Steel mm				
183-AL5/43-STIA	183.4	42.8	226.2	30/2.79	7/2.79	19.5	841.6	102.89	0.174

Code	Area			Stranding & wire Diameter		Approx. overall Diameter mm	Mass Per unit Length kg/km	Calculated Breaking # Load kN	DC Resistance at 20° C ohm/km
	Aluminium mm ²	Steel mm ²	Total mm ²	Aluminium mm	Steel mm				
34-AL3/6-STIA	34.4	5.73	40.1	6/2.70	1/2.70	8.1	138.6	16.66	0.960
48-AL3/8-STIA	48.3	8.04	56.3	6/3.20	1/3.20	9.6	194.7	23.08	0.684
70-AL3/11-STIA	69.9	11.4	81.3	26/1.85	7/1.44	11.7	282	33.96	0.476
97-AL3/34-STIA	96.8	34.4	131.1	36/1.85	7/2.50	14.9	536.2	67.72	0.344
128-AL3/30-STIA	127.9	29.8	157.8	30/2.33	7/2.33	16.3	586.6	71.76	0.260
172-AL3/40-STIA	171.8	40.1	211.8	30/2.70	7/2.7	18.9	787.7	96.36	0.194
243-AL3/39-STIA	243.1	39.5	282.5	26/3.45	7/2.68	21.8	979.4	116.72	0.137
238-AL3/82-STIA	237.8	82.4	320.2	36/2.9	19/2.35	23.4	1304.6	164.09	0.140
341-AL3/109-STIA	341.2	108.8	450	78/2.36	19/2.70	27.7	1796.4	224.67	0.098
679-AL3/86-STIA	678.6	86	764.5	54/4.0	19/2.40	36	2547.6	298.17	0.049
1288-AL3/183-STIA	1288.2	182.8	1471.1	100/4.05	19/3.50	49.9	4997.6	581.12	0.026

Code	Area			Stranding & wire Diameter		Approx. overall Diameter mm	Mass Per unit Length kg/km	Calculated Breaking # Load kN	DC Resistance at 20° C ohm/km
	Aluminium mm ²	Steel mm ²	Total mm ²	Aluminium mm	Steel mm				
119-AL4/28-STI	119.3	27.8	147.1	30/2.25	7/2.25	15.8	547	71.33	0.242
147-AL4/34-STI	147.3	34.4	181.6	30/2.5	7/2.5	17.5	675.3	87.03	0.196
185-AL4/43-STI	184.7	43.1	227.8	30/2.8	7/2.8	19.6	847.1	109.17	0.157
241-AL4/56-STI	241.3	56.3	297.6	30/3.2	7/3.2	22.4	1106.4	140.34	0.120
525-AL4/68-STI	525.5	68.1	593.6	54/3.52	7/3.52	31.7	1984.3	240.46	0.055

Code	Area			Stranding & wire Diameter		Approx. overall Diameter mm	Mass Per unit Length kg/km	Calculated Breaking # Load kN	DC Resistance at 20° C ohm/km
	Aluminium mm ²	Steel mm ²	Total mm ²	Aluminium mm	Steel mm				
106-AL2/25-STIA	105.9	24.7	130.6	30/2.12	7/2.12	14.8	485.6	63.33	0.317

Code	Area			Stranding & wire Diameter		Approx. overall Diameter mm	Mass Per unit Length kg/km	Calculated Breaking # Load kN	DC Resistance at 20° C ohm/km
	Aluminium mm ²	Steel mm ²	Total mm ²	Aluminium mm	Steel mm				
28-AL4/9-ST6C	28.3	9.4	37.7	9/2.0	3/2.0	8.3	151.4	22.86	1.175
48-AL4/28-ST6C	47.7	27.8	75.5	12/2.25	7/2.25	11.3	349.3	55.86	0.698
72-AL4/76-ST6C	71.6	75.5	147.1	18/2.25	19/2.25	15.8	791	132.8	0.468
147-AL4/34-ST6C	147.3	34.4	181.6	30/2.5	7/2.5	17.5	675.3	96.31	0.226
140-AL4/148-ST6C	140.3	148.1	288.3	18/3.15	19/3.15	22.1	1550.4	249.93	0.239
206-AL4/93-ST6C	206.2	93.3	299.4	42/2.5	19/2.5	22.5	1302.8	198.51	0.162
326-AL4/86-ST6C	325.7	86	411.7	32/3.6	19/2.4	26.4	1575.1	223.8	0.103
717-AL4/148-ST6C	717.3	148.1	865.4	66/3.72	19/3.15	38.1	3143.2	430.29	0.047
957-AL4/228-ST6C	956.7	227.8	1184	54/2.8	37/2.8	42	4430.7	632.15	0.035

Aluminium area	Equivalent copper area	Total area of Conductor	Diameter of Steel core	Overall Diameter Conductor	Weight	Maximum dc Resistance at 20°C	Nominal Braking Load
mm ²	mm ²	mm ²	mm	mm	kg/km	ohm/km	Kgf

100 per cent type

21.16	12.90	24.65	2.108	5.766	84.3	1.376	744
26.32	16.13	30.71	2.362	6.452	106.2	1.098	979
31.68	19.35	36.97	2.591	7.061	127.5	0.911	1163
41.94	25.81	48.97	2.997	8.179	170.6	0.680	1550
52.26	32.26	61.10	3.353	9.144	213.8	0.544	1877
63.03	38.71	73.55	3.658	9.982	254.5	0.454	2172

140 per cent type

21.16	12.90	28.19	2.997	6.248	112.6	1.376	1117
26.32	16.13	35.16	3.353	6.985	140.9	1.096	1468
31.68	19.35	42.19	3.658	7.620	169.7	0.911	1744
41.94	25.81	55.94	4.216	8.788	225.7	0.680	2325
52.26	32.26	69.81	4.724	9.820	281.8	0.544	2815

200 per cent type

19.81	12.26	30.32	3.658	6.223	136.9	1.442	1489
26.32	16.13	40.26	4.216	7.163	182.5	1.096	1958
33.87	20.65	51.42	4.724	8.026	225.2	0.856	2325

BRITISH SIZES

Aluminium area		Total area of Conductor	Diameter of Steel core	Overall Diameter Conductor	Weight	Maximum dc Resistance at 20°C	Nominal Breaking Load
AWG	mm ²	mm ²	mm	mm	kg/km	ohm/km	Kgf

100 per cent type

4	21.16	24.71	2.118	5.791	100.7	1.598	832
3	26.65	31.10	2.380	6.553	127.5	1.267	1023
2	33.61	39.23	2.672	7.341	160.2	1.004	1266
1	42.39	49.48	3.002	8.255	202.4	0.7970	1583
1/0	53.48	62.39	3.371	9.246	255.5	0.6315	1941
2/0	67.42	78.65	3.785	10.414	321.9	0.5010	2424

140 per cent type

4	21.16	28.26	3.002	6.172	133.4	1.598	1232
3	26.65	35.55	3.371	6.909	168.2	1.2675	1506
2	33.61	44.84	3.785	7.823	212.3	1.0040	1878
1	42.39	56.58	4.247	8.788	267.9	0.7970	2356
1/0	53.48	71.35	4.770	9.855	337.8	0.6315	2951

200 per cent type

4	21.16	32.39	3.785	6.706	172.1	1.598	1671
3	26.65	40.84	4.247	7.468	216.8	1.267	2102

Aluminium area	Equivalent copper area	Overall Diameter	Weight	Maximum dc Resistance at 20°C	Nominal Breaking Load
mm ²	mm	mm	kg/km	ohm/km	Kgf
23.39	14.19	5.64	63.5	1.227	408
26.84	16.13	6.07	73.4	1.064	468
36.90	22.59	7.14	101.2	0.7741	617
42.90	25.81	7.70	117.1	0.6658	706
52.77	32.26	8.53	144.3	0.5412	846
63.68	38.71	9.37	174.1	0.4487	1010

Aluminium area		Overall Diameter	Weight	Maximum dc Resistance at 20°C	Nominal Breaking Load
AWG	mm ²	mm	kg/km	ohm/km	Kgf
3	26.65	6.05	73.5	1.074	515
2	33.61	6.81	92.7	0.8514	637
1	42.39	7.65	116.8	0.6752	774
1/0	53.48	8.59	147.5	0.5351	939
2/0	67.42	9.65	185.9	0.4245	1184

Aluminium Conductors Steel Reinforced Trapezoidal (ACSR/TW) ASTM B779

Code	Size Kcmil	Sectional area mm ²		Conductor Type	No. of Al. Layers	Stranding		Diameter (mm.)		Weight kg/km			Rated Strength	Resistance Ω/km	
		Alum	Total			Al	Steel N ^o x mm	Conductor	Steel Core	Total	Al	Steel	kN	R _{dc} at 20° C	R _{dc} at 75° C
Finch/TW	1113	564.0	635.5	13	3	38	19 x 2.189	30.10	10.95	2126	1566	560	173.93	0.0505	0.0627
Oxbird/TW	1192.5	604.3	635.4	5	2	30	7 x 2.377	29.64	7.13	1914	1671	243	131.22	0.0472	0.0591
Bunting/TW	1192.5	604.3	646.0	7	3	33	7 x 2.756	30.00	8.27	1998	1673	326	144.12	0.0472	0.0594
Grackel/TW	1192.5	604.3	680.9	13	3	38	19 x 2.266	31.12	11.33	2277	1677	600	186.38	0.0472	0.0587
Scissortail/TW	1272	644.6	677.7	5	3	30	7 x 2.456	30.56	7.37	2042	1783	259	139.67	0.0443	0.0558
Bittern/TW	1272	644.5	689.1	7	3	35	7 x 2.847	30.99	8.54	2132	1783	348	153.91	0.0443	0.0558
Pheasant/TW	1272	644.5	726.2	13	3	39	19 x 2.393	32.11	11.70	2428	1789	640	196.17	0.0443	0.0551
Dipper/TW	1351	684.8	732.1	7	3	35	7 x 2.934	31.90	8.80	2265	1896	369	163.25	0.0417	0.0525
Martin/TW	1351	684.8	771.5	13	3	39	19 x 2.410	33.02	12.05	2580	1902	679	208.18	0.0417	0.0522
Bobolink/TW	1431	724.9	775.3	7	3	36	7 x 3.020	32.79	9.06	2400	2009	391	173.04	0.0394	0.0499
Plover/TW	1431	725.1	817.0	13	3	37	19 x 2.482	33.96	12.41	2732	2013	719	220.63	0.0394	0.0492
Lapwing/TW	1590	805.7	861.4	7	3	36	7 x 3.183	34.49	9.55	2665	2231	434	187.71	0.0359	0.0453
Falcon/TW	1590	805.7	907.8	13	3	42	19 x 2.616	35.76	13.08	3036	2236	799	245.10	0.0354	0.0446
Chukar/TW	1780	902.3	975.5	8	3	37	19 x 2.220	36.70	11.10	3070	2494	576	225.52	0.0315	0.0407
Bluebird/TW	2156	705.4	1181.4	8	4	64	19 x 2.441	40.84	12.20	3742	3046	696	271.79	0.0262	0.0344

Aluminium Conductors Steel Reinforced Trapezoidal (ACSR/TW) ASTM B779

Code	Size Kcmil	Sectional area mm ²		Conductor Type	No. of Al. Layers	Stranding		Diameter (mm.)		Weight kg/km			Rated	Resistance Ω/km	
		Alum	Total			Al	Steel N° x mm	Conductor	Steel Core	Total	Al	Steel	kN	R _{dc} at 20°C	R _{dc} at 75°C
Merlin/TW	336.4	170.5	179.9	6	2	14	1 x 3.472	16.00	3.47	543	469	74	38.08	0.1673	0.2051
Flicker/TW	477	241.7	273.1	13	2	18	7 x 2.388	19.71	7.16	912	667	245	76.51	0.1171	0.1434
Hawk/TW	477	241.7	281.0	16	2	18	7 x 2.675	20.04	8.02	975	668	307	86.30	0.1168	0.1427
Parakeet/TW	556.5	282.0	318.5	13	2	18	7 x 2.578	21.21	7.73	1064	779	285	88.96	0.1004	0.1230
Dove/TW	556.5	282.0	327.9	16	2	20	7 x 2.891	21.64	8.67	1138	779	359	100.53	0.1001	0.1227
Swift/TW	636	322.3	331.2	3	3	27	1 x 3.376	21.59	3.38	961	892	70	60.05	0.0892	0.1099
Rook/TW	636	322.3	364.1	13	2	19	7 x 2.756	22.61	8.27	1214	890	326	101.86	0.0879	0.1079
Grosbeak/TW	636	322.3	374.7	16	2	20	7 x 3.089	23.06	9.27	1300	890	409	112.98	0.0876	0.1073
Tern/TW	795	402.8	430.6	7	2	17	7 x 2.250	24.38	6.75	1327	1110	217	93.41	0.0705	0.0873
Puffin/TW	795	402.8	446.4	10	2	18	7 x 2.814	24.89	8.44	1451	1111	340	115.21	0.0705	0.0866
Condor/TW	795	402.8	455.0	13	2	20	7 x 3.056	25.22	9.24	1519	1112	407	125.44	0.0702	0.0866
Drake/TW	795	402.8	468.5	16	2	20	7 x 3.454	25.65	10.36	1625	1113	512	141.45	0.0699	0.0863
Phoenix/TW	954	483.4	508.1	5	3	30	7 x 2.126	26.52	6.38	1536	1342	194	105.42	0.0594	0.0735
Rail/TW	954	483.4	516.8	7	3	32	7 x 2.466	26.95	7.40	1600	1339	260	115.21	0.0591	0.0735
Cardinal/TW	954	483.4	546.1	13	2	20	7 x 3.376	27.53	10.13	1824	1335	489	149.02	0.0584	0.0725
Snowbird/TW	1033.5	523.7	550.6	5	3	30	7 x 2.212	27.66	6.64	1659	1449	210	114.32	0.0548	0.0682
Ortolan/TW	1033.5	523.7	559.9	7	3	32	7 x 2.565	27.99	7.70	1734	1451	282	125.00	0.0548	0.0679
Curlew/TW	1033.5	523.7	591.5	13	2	20	7 x 3.513	28.68	10.54	1975	1445	530	161.47	0.0541	0.0669
Avocet/TW	1113	564.0	593.0	5	3	30	7 x 2.296	28.68	6.89	1787	1561	226	122.33	0.0509	0.0633
Bluejay/TW	1113	564.0	603.0	7	3	33	7 x 2.664	29.03	7.99	1870	1566	305	134.78	0.0509	0.0633

Aluminium Conductors Steel Reinforced Trapezoidal (ACSR/TW) To American Sizes

Aluminium Conductors Steel Reinforced Trapezoidal (ACSR/TW) ASTM B779

Code	Size Kcmil	Sectional area mm ²		Conductor Type	No. of Al. Layers	Stranding		Diameter (mm.)		Weight kg/km			Rated Strength	Resistance Ω/km	
		Alum	Total			Al	Steel N° x mm	Conductor	Steel Core	Total	Al	Steel	kN	R _{dc} at 20°C	R _{dc} at 75°C
Monongahela/TW	405.1	205.2	216.9	6	2	14	1 x 3.861	17.27	3.86	656	565	91	45.37	0.1388	0.1703
Mohawk/TW	571.7	289.7	327.4	13	2	18	7 x 2.616	21.49	7.85	1093	800	294	92.08	0.0978	0.1198
Calumet/TW	565.3	286.4	333.2	16	2	18	7 x 2.913	21.79	8.73	1064	778	285	101.86	0.0984	0.1207
Mystic/TW	666.6	337.8	381.5	13	2	20	7 x 2.822	23.19	8.46	1274	932	342	106.76	0.0837	0.1030
Oswego/TW	664.8	336.8	391.7	16	2	20	7 x 3.160	23.55	9.48	1359	931	429	118.32	0.0837	0.1027
Nechako/TW	768.9	389.6	401.3	3	3	27	1 x 3.861	23.62	3.86	1163	1072	91	72.95	0.0837	0.0912
Maumee/TW	768.2	389.3	439.9	13	2	20	7 x 3.035	24.82	9.11	1470	1074	395	123.22	0.0728	0.0896
Wabash/TW	762.8	386.6	449.4	16	2	20	7 x 3.381	25.15	10.14	1558	1067	491	135.67	0.0728	0.0899
Kettle/TW	957.2	485.0	518.6	7	3	32	7 x 2.471	26.92	7.41	1606	1343	262	115.65	0.0591	0.0732
Fraser/TW	946.7	479.7	527.0	10	3	35	7 x 2.931	27.36	8.79	1699	1330	369	131.67	0.0591	0.0732
Columbia/TW	966.2	489.6	553.1	13	2	21	7 x 3.399	27.74	10.20	1847	1351	496	151.24	0.0577	0.0715
Suwannee/TW	959.6	486.3	565.3	16	2	22	7 x 3.792	28.14	11.38	1961	1344	618	164.58	0.0581	0.0715
Cheyenne/TW	1168.1	591.9	622.3	5	3	30	7 x 2.352	29.34	7.06	1875	1637	237	128.55	0.0486	0.0607
Genesee/TW	1158	586.8	627.9	7	3	33	7 x 2.738	29.59	8.21	1946	1625	321	140.56	0.0489	0.0610
Hudson/TW	1158.4	587.0	663.3	13	2	26	7 x 3.726	30.38	11.18	2216	1620	595	176.15	0.0482	0.0600
Catawba/TW	1272	644.6	677.7	5	3	30	7 x 2.456	30.56	7.37	2042	1783	259	139.67	0.0443	0.0558
Nelson/TW	1257.1	637.0	681.1	7	3	35	7 x 2.832	30.81	8.50	2108	1764	344	152.13	0.0449	0.0564
Yukon/TW	1233.6	625.1	704.8	13	3	38	19 x 2.311	31.62	11.56	2360	1736	624	190.83	0.0456	0.0568
Truckee/TW	1372.5	695.5	731.2	5	3	30	7 x 2.550	31.70	7.65	2204	1925	279	148.57	0.0413	0.0522
Mackenzie/TW	1359.7	689.0	736.6	7	3	36	7 x 3.960	31.98	8.83	2277	1905	372	164.14	0.0417	0.0522

Aluminium Conductors Steel Reinforced Trapezoidal (ACSR/TW) To American Sizes

Aluminium Conductors Steel Reinforced Trapezoidal (ACSR/TW) ASTM B779

Code	Size Kcmil	Sectional area mm ²		Conductor Type	No. of Al. Layers	Stranding		Diameter (mm.)		Weight kg/km			Rated Strength	Resistance Ω/km	
		Alum	Total			Al	Steel N° x mm	Conductor	Steel Core	Total	Al	Steel	kN	R _{dc} at 20°C	R _{dc} at 75°C
Thames/TW	1334.6	869.7	761.9	13	3	39	19 x 2.398	32.77	11.99	2549	1877	672	205.95	0.0420	0.0525
St.Croix/TW	1467.8	743.8	782.2	5	3	33	7 x 2.644	32.82	7.93	2358	2058	301	159.25	0.0384	0.0489
Miramichi/TW	1455.3	737.4	788.5	7	3	36	7 x 3.048	33.07	9.14	2440	2042	399	174.37	0.0387	0.0492
Merrimack/TW	1433.6	725.8	817.9	13	3	39	19 x 2.484	34.04	12.42	2738	2018	646	221.08	0.0390	0.0492
Platte/TW	1569	795.0	835.9	5	3	33	7 x 2.728	33.88	8.18	2519	2199	320	169.92	0.0361	0.0459
Potomac/TW	1557.4	789.2	843.8	7	3	36	7 x 3.152	34.16	9.46	2611	2184	427	186.38	0.0364	0.0459
RioGrande/TW	1533.3	777.0	875.5	13	3	39	19 x 2.570	35.10	12.85	2928	2156	772	236.65	0.0367	0.0463
Schuykill/TW	1657.4	840.0	898.1	7	3	36	7 x 3.251	35.20	9.75	2780	2326	454	195.72	0.0341	0.0436
Pecos/TW	1622	821.9	930.9	13	3	39	19 x 2.703	36.17	13.51	3135	2281	854	255.77	0.0348	0.0436
PeeDee/TW	1758.6	891.0	952.9	7	3	37	7 x 3.350	36.25	10.05	2949	2467	482	207.73	0.0322	0.0413
James/TW	1730.6	876.8	988.0	13	3	34	19 x 2.731	37.34	13.65	3305	2434	870	264.22	0.0325	0.0413
Athabaska/TW	1949.6	987.9	1056.6	7	3	42	7 x 3.536	38.20	10.61	3272	2735	537	230.86	0.0289	0.0377
Cumberland/TW	1926.9	976.4	1099.9	13	3	42	19 x 2.878	39.24	14.39	3677	2710	967	290.47	0.0292	0.0374
Powder/TW	2153.8	1091.1	1180.0	8	4	64	19 x 2.441	40.69	12.20	3717	3021	696	271.79	0.0262	0.0344
Santee/TW	2627.3	1331.0	1436.6	8	4	64	19 x 2.697	44.75	13.49	4535	3686	850	331.39	0.0217	0.0292

Aluminium Conductors Steel Reinforced Trapezoidal (ACSR/TW) To American Sizes

Aluminium Conductors Steel Supported (ACSS) ASTM B 856

Code	Size Kcmil	Stranding Al/St	Diameter (mm.)				Weight kg/km			Rated Strength		Resistance Ω/km	
			Wire		Steel Core	Complete Cable	Al	Steel	Total	Standard Strength kN	High Strength kN	DC at 20° C	AC at 75° C
			Al	St									
Gannet/ACSS	666.6	26/7	4.07	3.16	9.49	25.76	934	429	1364	96.53	104.09	0.0827	0.1020
Stilt/ACSS	715.5	24/7	4.39	2.92	8.77	26.31	1003	367	1370	86.74	94.75	0.0773	0.0957
Starling/ACSS	715.5	26/7	4.21	3.28	9.83	26.70	1003	461	1464	103.64	112.10	0.0770	0.0953
Redwing/ACSS	715.5	30/19	3.92	2.35	11.77	27.46	1005	647	1652	137.01	151.24	0.0767	0.0947
Cuckoo/ACSS	795	24/7	4.62	3.08	9.25	27.74	1114	408	1522	96.53	103.64	0.0697	0.0863
Drake/ACSS	795	26/7	4.44	3.45	10.36	28.12	1114	512	1626	115.21	124.55	0.0697	0.0857
Macaw/ACSS	795	42/7	3.50	1.94	5.82	26.80	1114	162	1276	52.49	56.05	0.0703	0.0873
Tern/ACSS	795	45/7	3.38	2.25	6.75	27.00	1114	217	1332	63.16	67.61	0.0700	0.0877
Condor/ACSS	795	54/7	3.08	3.08	9.25	27.74	1114	408	1522	96.53	103.64	0.0697	0.0887
Mallard/ACSS	795	30/19	4.14	2.48	12.41	28.93	1117	718	1835	152.57	168.59	0.0690	0.0850
Ruddy/ACSS	900	45/7	3.59	2.40	7.18	28.73	1261	246	1507	70.28	75.62	0.0620	0.0777
Canary/ACSS	900	54/7	3.28	3.28	9.84	29.51	1261	461	1723	109.43	117.43	0.0613	0.0787
Redbird/ACSS	954	24/7	5.06	3.38	10.13	30.38	1337	489	1826	115.65	124.55	0.0580	0.0723
Rail/ACSS	954	45/7	3.70	2.47	7.40	29.59	1337	261	1598	74.29	80.07	0.0583	0.0733
Towhee/ACSS	954	48/7	3.58	2.79	8.36	29.85	1337	333	1670	87.63	94.75	0.0583	0.0727
Cardinal/ACSS	954	54/7	3.38	3.38	10.13	30.38	1337	489	1826	115.65	124.55	0.0580	0.0743
Canvasback/ACSS	954	30/19	4.53	2.72	13.59	31.70	1340	862	2202	182.82	201.95	0.0573	0.0713
Snowbird/ACSS	1033.5	42/7	3.99	2.21	6.64	30.56	1448	210	1659	68.50	73.40	0.0540	0.0680
Ortolan/ACSS	1033.5	45/7	3.85	2.57	7.70	30.78	1448	283	1731	80.51	86.74	0.0540	0.0680
Curlew/ACSS	1033.5	54/7	3.51	3.51	10.54	31.62	1448	530	1978	125.44	134.78	0.0537	0.0687
Bluejay/ACSS	1113	45/7	4.00	2.66	7.99	31.95	1560	304	1864	86.74	93.86	0.0500	0.0633
Finch/ACSS	1113	54/19	3.65	2.19	10.94	32.82	1567	559	2126	135.23	147.68	0.0500	0.0643
Bunting/ACSS	1192.5	45/7	4.14	2.76	8.27	33.07	1671	326	1997	95.19	104.53	0.0467	0.0593

Aluminium Conductors Steel Supported
(ACSS) To American Sizes

Aluminium Conductors Steel Supported (ACSS) ASTM B 856

Code	Size Kcmil	Stranding Al/St	Diameter (mm.)				Weight kg/km			Rated Strength		Resistance Ω/km	
			Wire		Steel Core	Complete Cable	Al	Steel	Total	Standard Strength kN	High Strength kN	DC at 20° C	AC at 75° C
			Al	St									
Partridge/ACSS	266.8	26/7	2.57	2.00	6.00	16.31	374	172	546	39.50	43.28	0.2063	0.2537
Junco/ACSS	266.8	30/7	2.40	2.40	7.19	16.76	375	246	621	52.04	57.83	0.2050	0.2520
Ostrich/ACSS	300	26/7	2.73	2.12	6.37	17.27	421	193	614	44.48	48.49	0.1837	0.2257
Linnet/ACSS	336.4	26/7	2.89	2.25	6.74	18.29	471	217	688	49.82	54.71	0.1637	0.2013
Oriole/ACSS	336.4	30/7	2.69	2.69	8.07	18.82	473	311	783	65.83	72.51	0.1627	0.2000
Brant/ACSS	397.5	24/7	3.27	2.18	6.54	19.61	557	204	761	48.93	53.82	0.1390	0.1713
Ibis/ACSS	397.5	26/7	3.14	2.44	7.33	19.89	557	256	813	57.83	63.16	0.1387	0.1707
Lark/ACSS	397.5	30/7	2.92	2.92	8.77	20.47	558	367	925	77.84	85.85	0.1377	0.1693
Flicker/ACSS	477	24/7	3.58	2.39	7.16	21.49	669	245	913	57.83	63.16	0.1160	0.1430
Hawk/ACSS	477	26/7	3.44	2.67	8.03	21.79	669	307	976	69.39	76.06	0.1153	0.1423
Hen/ACSS	477	30/7	3.20	3.20	9.61	22.43	670	440	1110	93.41	100.97	0.1147	0.1413
Parakeet/ACSS	556.5	24/7	3.87	2.58	7.73	23.22	780	285	1065	67.61	73.84	0.0993	0.1227
Dove/ACSS	556.5	26/7	3.72	2.89	8.67	23.55	780	358	1138	80.96	88.52	0.0990	0.1220
Eagle/ACSS	556.5	30/7	3.46	3.46	10.38	24.21	782	514	1295	108.98	117.88	0.0983	0.1210
Peacock/ACSS	605	24/7	4.03	2.69	8.06	24.21	848	310	1158	73.40	80.51	0.0913	0.1130
Squab/ACSS	605	26/7	3.87	3.01	9.04	24.54	848	390	1238	87.63	94.75	0.0910	0.1123
Wood Duck/ACSS	605	30/7	3.61	3.61	10.82	25.25	850	558	1408	115.65	125.88	0.0903	0.1113
Teal/ACSS	605	30/19	3.61	2.16	10.82	25.25	850	547	1397	118.32	130.33	0.0907	0.1117
Rook/ACSS	636	24/7	4.14	2.76	8.27	24.82	891	326	1217	76.95	84.52	0.0870	0.1073
Grosbeak/ACSS	636	26/7	3.97	3.09	9.27	25.17	891	410	1301	92.08	99.64	0.0867	0.1070
Scoter/ACSS	636	30/7	3.70	3.70	11.09	25.88	894	587	1481	121.88	132.11	0.0860	0.1060
Egret/ACSS	636	30/19	3.70	2.22	11.09	25.88	894	575	1468	124.55	137.45	0.0860	0.1063
Flamingo/ACSS	666.6	24/7	4.23	2.82	8.47	25.40	934	342	1276	80.96	88.52	0.0830	0.1027

Aluminium Conductors Steel Supported
(ACSS) To American Sizes

Aluminium Conductors Steel Supported (ACSS) ASTM B 856

Code	Size Kcmil	Stranding Al/St	Diameter (mm.)				Weight kg/km			Rated Strength		Resistance Ω/km	
			Wire		Steel Core	Complete Cable	Al	Steel	Total	Standard Strength kN	High Strength kN	DC at 20° C	AC at 75° C
			Al	St									
Bittern/ACSS	1272	45/7	4.27	2.85	8.54	34.16	1783	348	2131	99.20	106.76	0.0437	0.0557
Pheasant/ACSS	1272	54/19	3.90	2.34	11.69	35.08	1791	639	2430	151.68	165.92	0.0437	0.0563
Dipper/ACSS	1351	45/7	4.40	2.93	8.80	35.20	1893	369	2263	105.42	113.43	0.0413	0.0527
Martin/ACSS	1351	54/19	4.02	2.41	12.05	36.17	1903	678	2581	161.03	176.15	0.0410	0.0533
Bobolink/ACSS	1431	45/7	4.53	3.02	9.06	36.25	2006	391	2397	111.65	120.10	0.0390	0.0500
Plover/ACSS	1431	54/19	4.14	2.48	12.41	37.21	2015	718	2734	170.81	186.38	0.0390	0.0503
Nuthatch/ACSS	1510	45/7	4.65	3.10	9.31	37.21	2116	413	2529	117.88	125.00	0.0370	0.0477
Parrot/ACSS	1510	54/19	4.25	2.55	12.74	38.23	2127	758	2885	179.71	196.61	0.0367	0.0480
Ratite/ACSS	1590	42/7	4.94	2.75	8.24	37.90	2228	323	2552	104.09	111.21	0.0350	0.0453
Lapwing/ACSS	1590	45/7	4.78	3.18	9.55	38.20	2228	435	2663	124.11	131.67	0.0350	0.0453
Falcon/ACSS	1590	54/19	4.36	2.62	13.08	39.22	2239	798	3038	189.49	207.29	0.0350	0.0457
Chukar/ACSS	1780	84/19	3.70	2.22	11.09	40.67	2507	575	3081	157.47	169.92	0.0313	0.0407
Mockingbird/ACSS	2034.5	72/7	4.27	2.85	8.54	42.70	2865	348	3213	120.99	128.55	0.0277	0.0367
Roadrunner/ACSS	2057	76/19	4.18	1.95	9.75	43.18	2897	444	3341	141.01	150.79	0.0273	0.0360
Bluebird/ACSS	2156	84/19	4.07	2.44	12.21	44.75	3036	696	3732	187.27	202.39	0.0260	0.0343
Kiwi/ACSS	2167	72/7	4.41	2.94	8.81	44.07	3052	370	3422	129.00	137.01	0.0260	0.0347
Thrasher/ACSS	2312	76/19	4.43	2.07	10.34	45.77	3256	499	3755	158.36	169.48	0.0243	0.0327
Joree/ACSS	2515	76/19	4.62	2.16	10.78	47.75	3542	543	4085	172.15	184.16	0.0223	0.0307

Aluminium Conductors Steel Supported
(ACSS) To American Sizes

Aluminium Conductors Steel Supported in AS Core (ACSS/AW) ASTM B 856

Code	Size Kcmil	Stranding Al/St	Diameter (mm.)				Weight kg/km			Rated Strength in kN	Resistance Ω/km	
			Wire		AW Core	Complete	Al	AW	Total		R _{dc} at 20° C	R _{ac} at 75° C
			Al	St								

Aluminium Conductors Steel Supported-Trapezoidal (ACSS/TW) ASTM B 857

Code Word	Size Kcmil	Cross Sectional area mm		Type. No.	Stranding			Diameter (mm.)		Weight kg/km			Rated Breaking Strength (kN)		Resistance Ω/km	
		Alum.	Total		No. of Layers of Alum.	No. of Alum. Wires	No. & Dia. Individual Steel Wire	Complete Cable	Steel Core	Total	Alum.	Steel	Standard Strength	High Strength	R _{dc} at 20° C	R _{ac} at 75° C
Flicker/ACSS/TW	477.0	241.7	273.1	13	2	18	7 x 2.388	19.71	7.16	912	667	245	57.83	63.16	0.1160	0.1423
Hawk/ACSS/TW	477.0	241.7	281.0	16	2	18	7 x 2.675	20.04	8.02	975	668	307	69.39	76.06	0.1153	0.1420
Parakeet/ACSS/TW	556.5	282.0	318.5	13	2	18	7 x 2.578	21.21	7.73	1064	779	285	67.61	73.84	0.0990	0.1220
Dove/ACSS/TW	556.5	282.0	327.9	16	2	20	7 x 2.891	21.64	8.67	1138	779	359	80.96	88.52	0.0987	0.1217
Rook/ACSS/TW	636.0	322.3	364.1	13	2	20	7 x 2.756	22.61	8.27	1214	890	326	76.95	84.52	0.0867	0.1070
Grosbeak/ACSS/TW	636.0	322.3	374.7	16	2	20	7 x 3.089	23.06	9.27	1300	890	409	92.08	99.64	0.0863	0.1067
Tern/ACSS/TW	795.0	402.8	430.6	7	2	17	7 x 2.250	24.38	6.75	1327	1110	217	63.16	67.61	0.0697	0.0867
Puffin/ACSS/TW	795.0	402.8	446.4	10	2	18	7 x 2.814	24.89	8.44	1451	1111	340	84.07	91.63	0.0697	0.0863
Condor/ACSS/TW	795.0	402.8	455.0	13	2	20	7 x 3.081	25.22	9.24	1519	1112	407	96.53	103.64	0.0693	0.0860
Drake/ACSS/TW	795.0	402.8	468.5	16	2	20	7 x 3.454	25.65	10.36	1625	1113	512	115.21	124.55	0.0690	0.0857
Phoenix/ACSS/TW	954.0	483.4	508.1	5	3	30	7 x 2.126	26.52	6.38	1536	1342	194	63.16	67.61	0.0587	0.0730
Rail/ACSS/TW	954.0	483.4	516.8	7	3	32	7 x 2.466	26.95	7.40	1600	1339	260	74.29	80.07	0.0583	0.0730
Cardinal/ACSS/TW	954.0	483.4	546.1	13	2	20	7 x 3.376	27.53	10.13	1824	1335	489	115.65	124.55	0.0577	0.0720
Snowbird/ACSS/TW	1033.5	523.7	550.6	5	3	30	7 x 2.212	27.66	6.64	1659	1449	210	68.50	72.95	0.0540	0.0677
Ortolan/ACSS/TW	1033.5	523.7	559.9	7	3	32	7 x 2.565	27.99	7.70	1734	1451	282	80.51	86.74	0.0540	0.0673
Curlew/ACSS/TW	1033.5	523.7	591.5	13	2	20	7 x 3.513	28.68	10.54	1975	1445	530	125.44	134.78	0.0533	0.0663
Avocet/ACSS/TW	1113.0	564.0	593.0	5	3	30	7 x 2.296	28.68	6.89	1787	1561	226	72.51	77.84	0.0500	0.0630

Aluminium Conductors Steel Supported in
As Core (ACSS/AW) American Sizes

Aluminium Conductors Steel Supported-Trapezoidal (ACSS/TW) ASTM B 857

Code Word	Size Kcmil	Cross Sectional area mm		Type. No.	Stranding			Diameter (mm.)		Weight kg/km			Rated Breaking Strength (kN)		Resistance Ω/km	
		Alum.	Total		No. of Layers of Alum.	No. of Alum. Wires	No. & Dia. Individual Steel Wire	Complete Cable	Steel Core	Total	Alum.	Steel	Standard Strength	High Strength	R _{dc} at 20° C	R _{ac} at 75° C
Bluejay/ACSS/TW	1113.0	564.0	603.0	7	3	33	7 x 2.664	29.03	7.99	1870	1566	305	86.74	93.41	0.0500	0.0630
Finch/ACSS/TW	1113.0	564.0	635.5	13	3	38	19 x 2.189	30.10	10.95	2126	1566	560	135.23	147.68	0.0497	0.0623
Oxbird/ACSS/TW	1192.5	604.3	635.4	5	3	30	7 x 2.377	29.64	7.13	1914	1671	243	77.84	83.18	0.0467	0.0590
Bunting/ACSS/TW	1192.5	604.3	646.0	7	3	33	7 x 2.756	30.00	8.27	1998	1673	326	92.97	100.09	0.0467	0.0590
Grackle/ACSS/TW	1192.5	604.3	680.9	13	3	38	19 x 2.266	31.12	11.33	2277	1677	600	145.01	157.91	0.0467	0.0583
Scissortail/ACSS/TW	1272.0	644.6	677.7	5	3	30	7 x 2.456	30.56	7.37	2042	1783	259	83.18	88.96	0.0440	0.0557
Bittern/ACSS/TW	1272.0	644.5	689.1	7	3	35	7 x 2.847	30.99	8.54	2132	1784	348	99.20	106.76	0.0437	0.0553
Pheasant/ACSS/TW	1272.0	644.5	726.2	13	3	39	19 x 2.339	32.11	11.70	2428	1789	640	151.68	165.92	0.0437	0.0547
Dipper/ACSS/TW	1351.5	684.8	732.1	7	3	35	7 x 2.934	31.90	8.80	2265	1896	369	105.42	113.43	0.0413	0.0523
Martin/ACSS/TW	1351.5	684.8	771.5	13	3	39	19 x 2.410	33.02	12.05	2580	1902	679	161.03	176.15	0.0410	0.0517
Bobolink/ACSS/TW	1431.0	724.9	775.3	7	3	36	7 x 3.020	32.79	9.06	2400	2009	391	111.65	120.10	0.0390	0.0497
Plover/ACSS/TW	1431.0	725.1	817.0	13	3	37	19 x 2.482	33.96	12.41	2732	2013	719	170.81	186.38	0.0387	0.0490
Lapwing/ACSS/TW	1590.0	805.7	861.4	7	3	36	7 x 3.183	34.49	9.55	2665	2231	434	124.11	131.67	0.0350	0.0450
Falcon/ACSS/TW	1590.0	805.7	907.8	13	3	42	19 x 2.616	35.76	13.08	3036	2236	799	189.49	207.29	0.0350	0.0443
Chukar/ACSS/TW	1780.0	902.3	975.5	8	3	37	19 x 2.220	36.70	11.10	3070	2494	576	157.02	169.92	0.0313	0.0403
Bluebird/ACSS/TW	2156.0	705.4	1182.0	8	4	64	19 x 2.441	40.84	12.20	3742	3046	696	187.27	202.39	0.2600	0.0343

Aluminium Conductors Steel Supported in
As Core (ACSS/AW) American Sizes

Aluminium Conductors Steel Supported-Trapezoidal (ACSS/TW) ASTM B 857

Code Word	Size Kcmil	Cross Sectional area mm		Type. No.	Stranding			Diameter (mm.)		Weight kg/km			Rated Breaking Strength (kN)		Resistance Ω /km	
		Alum.	Total		No. of Layers of Alum.	No. of Alum. Wires	No. & Dia. Individual Steel Wire	Complete Cable	Steel Core	Total	Alum.	Steel	Standard Strength	High Strength	R _{dc} at 20° C	R _{ac} at 75° C
Mohawk/ACSS/TW	571.7	289.7	327.4	13	2	18	7 x 2.616	21.49	7.85	1093	800	294	69.39	76.06	0.0963	0.1190
Calumet/ACSS/TW	565.3	286.4	333.2	16	2	20	7 x 2.911	21.84	8.73	1154	790	364	81.85	89.85	0.0973	0.1197
Mystic/ACSS/TW	666.6	337.8	381.5	13	2	20	7 x 2.822	23.19	8.46	1274	932	342	80.96	88.52	0.0827	0.1023
Oswego/ACSS/TW	664.8	336.8	391.7	16	2	20	7 x 3.160	23.55	9.48	1359	931	429	96.53	104.09	0.0827	0.1020
Maumee/ACSS/TW	768.2	389.3	439.9	13	2	20	7 x 3.035	24.82	9.11	1470	1074	395	93.41	102.31	0.0717	0.0887
Wabash/ACSS/TW	762.8	386.6	449.4	16	2	20	7 x 3.381	25.15	10.14	1558	1067	491	110.76	119.21	0.0720	0.0890
Kettle/ACSS/TW	957.2	485.0	518.6	7	3	32	7 x 2.471	26.92	7.41	1606	1343	262	74.73	80.51	0.0583	0.0727
Fraser/ACSS/TW	946.7	479.7	527.0	10	3	35	7 x 2.921	27.36	8.79	1699	1330	369	93.86	101.86	0.0587	0.0733
Columbia/ACSS/TW	966.2	489.6	553.1	13	2	21	7 x 3.399	27.74	10.20	1847	1351	496	117.43	125.88	0.0593	0.0710
Suwannee/ACSS/TW	959.6	486.3	565.3	16	2	22	7 x 3.792	28.14	11.38	1961	1344	618	136.56	147.24	0.0573	0.0710
Cheyenne/ACSS/TW	1168.1	591.9	622.3	5	2	30	7 x 2.352	29.34	7.06	1875	1637	237	76.51	81.40	0.0477	0.0603
Genesee/ACSS/TW	1158.0	586.8	627.9	7	3	33	7 x 2.738	29.59	8.21	1946	1625	321	91.19	98.31	0.0480	0.0607
Hudson/ACSS/TW	1158.4	587.0	663.3	13	3	26	7 x 3.726	30.38	11.18	2216	1620	595	138.34	149.02	0.0477	0.0597
Catawba/ACSS/TW	1272.0	644.6	677.7	5	2	30	7 x 2.456	30.56	7.37	2042	1783	259	83.18	88.96	0.0440	0.0557
Nelson/ACSS/TW	1257.1	637.0	681.1	7	3	35	7 x 2.832	30.81	8.50	2108	1764	344	98.31	105.87	0.0443	0.0560
Yukon/ACSS/TW	1233.6	625.1	704.8	13	3	38	19 x 23.114	31.62	11.56	2360	1736	624	147.68	161.47	0.0450	0.0563
Truckee/ACSS/TW	1372.5	695.5	731.2	5	3	30	7 x 2.550	31.70	7.65	2204	1925	279	89.85	95.64	0.0407	0.0517
Mackenzie/ACSS/TW	1359.7	689.0	736.6	7	3	36	7 x 2.944	31.98	8.83	2277	1905	372	106.31	114.32	0.0410	0.0520

Aluminium Conductors Steel Supported in
As Core (ACSS/AW) American Sizes

Aluminium Conductors Steel Supported-Trapezoidal (ACSS/TW) ASTM B 857

Code Word	Size Kcmil	Cross Sectional area mm		Type. No.	Stranding			Diameter (mm.)		Weight kg/km			Rated Breaking Strength (kN)		Resistance Ω /km	
		Alum.	Total		No. of Layers of Alum.	No. of Alum. Wires	No. & Dia. Individual Steel Wire	Complete Cable	Steel Core	Total	Alum.	Steel	Standard Strength	High Strength	R _{dc} at 20° C	R _{ac} at 75° C
Thames/ACSS/TW	1334.6	676.1	761.9	13	3	39	19 x 2.398	32.77	11.99	2549	1877	672	159.25	173.93	0.0417	0.0523
St.Croix/ACSS/TW	1467.8	743.8	782.2	5	3	33	7 x 2.644	32.82	7.93	2358	2058	301	96.08	102.75	0.0380	0.0487
Miramichi/ACSS/TW	1455.3	737.4	788.4	7	3	36	7 x 3.048	33.07	9.14	2440	2042	399	113.87	120.55	0.0383	0.0487
Merrimack/ACSS/TW	1433.6	725.8	817.9	13	3	39	19 x 2.484	34.04	12.42	2738	2018	646	170.81	186.83	0.0387	0.0490
Platte/ACSS/TW	1569.0	795.0	835.9	5	3	33	7 x 2.728	33.88	8.18	2519	2199	320	102.75	109.43	0.0357	0.0457
Potomac/ACSS/TW	1557.4	789.2	843.8	7	3	36	7 x 3.152	34.16	9.46	2611	2184	427	121.44	129.00	0.0357	0.0460
Rio/ACSS/TW	1533.3	777.0	875.5	13	3	39	19 x 2.570	35.10	12.85	2928	2156	772	183.27	200.17	0.0363	0.0460
Schuykill/ACSS/TW	1657.4	840.0	898.1	7	3	36	7 x 3.251	35.20	9.75	2780	2326	454	129.44	137.45	0.0337	0.0433
Pecos/ACSS/TW	1622.0	821.9	930.9	13	3	39	19 x 2.703	36.17	13.51	3135	2281	854	200.17	219.30	0.0340	0.0433
Pee Dee/ACSS/TW	1758.6	891.0	952.9	7	3	37	7 x 3.350	36.25	10.05	2949	2467	482	137.45	145.90	0.0317	0.0410
James/ACSS/TW	1730.6	876.8	988.0	13	3	34	19 x 2.731	37.34	13.65	3305	2434	870	206.40	225.97	0.0320	0.0410
Athabaska/ACSS/TW	1949.6	987.9	1056.6	7	3	42	7 x 3.536	38.20	10.61	3272	2735	537	152.57	162.36	0.0287	0.0373
Cumberland/ACSS/TW	1926.9	976.4	1099.9	13	3	42	19 x 2.878	39.24	14.39	3677	2710	967	229.53	250.88	0.0357	0.0450
Powder/ACSS/TW	2153.8	1091.1	1180.0	8	4	64	19 x 2.441	40.69	12.20	3717	3021	696	187.27	202.39	0.0260	0.0343
Santee/ACSS/TW	2627.3	1331.0	1436.6	8	4	64	19 x 2.697	44.75	13.49	4535	3686	850	228.19	247.32	0.0213	0.0290

Aluminium Conductors Steel Supported in
As Core (ACSS/AW) American Sizes

Our Certifications



Our Enlistments





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