

# CONDUCTOR REFERENCE GUIDE



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- Unique Preassembly & Kitting Strategy
- Manage Material Logistics & Site Storage Solutions



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# Nominal Cross Sectional Area Guide

Nominal Cross Sectional Area (mm <sup>2</sup> )	Nominal Cross Sectional Area (inch <sup>2</sup> )	Conductor Stranding (metric)	Conductor Stranding (imperial)	Conductor OD	
				mm	inch
0.5	0.00077	1/0.80	1/029	0.80	0.032
1	0.00160	1/1.13	1/044	1.13	0.045
	0.00136	7/0.40		1.12	0.047
1.5	0.00230	1/1.38	1/064	1.38	0.054
	0.00210	7/0.50	3/209	1.50	0.059
2.5	0.00390	7/0.67	3/036	2.01	0.079
4	0.00620	7/0.85	7/036	2.55	0.100
6	0.00930	7/1.04	7/044	3.12	0.123
10	0.01550	7/1.35	7/052	4.05	0.160
16	0.02480	7/1.70	7/064	5.10	0.201
25	0.03900	7/2.14	7/080	6.42	0.253
	0.03880	19/1.35	19/052	6.75	0.266
35	0.05430	19/1.53	19/064	7.65	0.301
50	0.07750	19/1.78	19/072	8.90	0.350
70	0.10850	19/2.14	19/083	10.70	0.421
95	0.14730	37/1.178	37/072	12.46	0.491
	0.14690	19/2.52		12.60	0.496
120	0.18600	37/2.03	37/083	14.21	0.560
150	0.23250	37/2.25	37/093	15.75	0.620
185	0.28680	37/2.52	37/103	17.64	0.695
240	0.37200	61/2.25	61/093	20.25	0.797
300	0.46500	61/2.52	61/103	22.68	0.893
400	0.62000	61/2.85	91/093	25.65	1.010
500	0.77500	61/3.20	91/103	28.80	1.134
630	0.97650	127/2.52		32.76	1.290
800	1.24000	127/2.85	127/103	37.05	1.459
1000	1.55000	127/3.20		41.60	1.638

## ACSR/GZ - Aluminium Conductor/Steel Reinforced (Galvanised)

### Australian Standard - AS1220

Conductor Code Name	Stranding (mm)	OD (mm)	Eq. AL (mm <sup>2</sup> )	Area (mm <sup>2</sup> )	NBL (kN)	Mass (kg/km)
Quince	3/4/1.75	5.25	8.77	16.85	12.70	95.90
Almond	6/1/2.50	7.50	29.00	34.36	10.50	119.00
Raisin	3/4/2.50	7.50	17.90	34.36	24.40	193.00
Apple	6/1/3.00	9.00	41.80	49.48	14.90	171.00
Sultana	4/3/3.00	9.00	31.60	49.48	28.30	242.00
Banana	6/1/3.75	11.30	65.20	77.31	22.80	268.00
Walnut	4/3/3.75	11.30	49.40	77.31	43.90	379.00
Cherry	6/4.75-7/1.60	14.30	105.00	120.40	33.00	404.00
Grape	30/7/2.50	17.50	144.00	181.60	63.70	675.00
Lemon	30/7/3.00	21.00	207.00	261.50	90.10	973.00
Lime	30/7/3.50	24.50	282.00	365.00	121.00	1320.00
Mango	54/7/3.00	27.00	373.00	431.20	118.00	1440.00
Orange	54/7/3.25	29.30	483.00	506.00	137.00	1690.00
Olive	54/7/3.50	31.50	508.00	386.90	159.00	1960.00
Paw-Paw	54/3.75-19/2.25	33.80	583.00	671.70	179.00	2250.00
Peach	54/4.75-19-2.85	42.80	936.00	1085.00	292.00	3660.00

## ACSR/AZ - Aluminium Conductor/Steel Reinforced (Aluminised)

### Australian Standard - AS3607

Conductor Code Name	Stranding (mm)	OD (mm)	NBL (kN)	Mass (kg/km)
Barley	6/1/2.50	7.50	10.20	118.00
Bean	6/1/3.00	9.00	14.50	170.00
Cabbage	6/1/3.75	11.25	22.40	265.00
Carrot	6/4.75-7/1.60	14.30	32.00	399.00
Corn	30/7/2.50	17.50	62.60	675.00
Garlic	30/7/3.00	21.00	87.20	973.00
Millet	30/7/3.50	24.50	116.00	1320.00
Oats	54/7/3.00	27.00	115.00	1440.00
Onion	54/7/3.25	29.25	132.00	1690.00
Parsnip	54/7/3.50	32.50	153.00	1960.00
Potato	54/3.75-19/2.25	33.75	177.00	2250.00
Rice	54/4.75-19-2.85	42.80	277.00	3600.00

## ACSR/AC - Aluminium Conductor/Steel Reinforced (Aluminium Clad)

### Australian Standard - AS1220

Conductor Code Name	Stranding (mm)	OD (mm)	Eq. AL (mm <sup>2</sup> )	Area (mm <sup>2</sup> )	NBL (kN)	Mass (kg/km)
Skating	3/4/1.75	5.25	10.40	16.85	12.30	83.50
Angling	6/1/2.50	7.50	30.70	34.36	10.70	113.00
Soccer	3/4/2.50	7.50	21.20	34.36	24.90	170.00
Archery	6/1/3.00	9.00	44.10	49.48	15.00	163.00
Swimming	4/3/3.00	9.00	35.20	49.48	28.80	217.00
Baseball	6/1/3.75	11.30	68.90	77.31	22.40	255.00
Tennis	4/3/3.75	11.30	54.90	77.31	42.80	339.00
Bowls	6/4.75-7/1.60	14.30	109.00	120.40	32.60	385.00
Cricket	30/7/2.50	17.50	155.00	181.60	64.60	635.00
Darts	30/7/3.00	21.00	244.00	261.50	91.30	913.00
Diving	30/7/3.50	24.50	305.00	365.00	121.00	1240.00
Golf	54/7/3.00	27.00	390.00	431.20	119.00	1380.00
Gymnastics	54/7/3.25	29.30	475.00	506.00	138.00	1620.00
Hurdles	54/7/3.50	31.50	530.00	386.90	159.00	1880.00
Lacrosse	54/3.75-19/2.25	33.80	608.00	671.70	181.00	2150.00
Rugby	54/4.75-19-2.85	42.80	978.00	1085.00	295.00	3500.00

## AAC - All Aluminium Conductor

### Australian Standard - AS1531

Conductor Code Name	Stranding (mm)	OD (mm)	Eq. AL (mm <sup>2</sup> )	Area (mm <sup>2</sup> )	NBL (kN)	Mass (kg/km)
Gemini	7/1.75	5.25	16.60	16.84	3.01	46.10
Jupiter	7/2.75	6.75	27.50	27.83	4.76	75.90
Leo	7/2.50	7.50	33.90	34.36	5.75	94.30
Libra	7/3.00	9.00	48.80	49.48	7.91	135.00
Mars	7/3.75	11.30	76.30	77.31	11.90	212.00
Mercury	7/4.50	13.50	110.00	111.30	16.80	305.00
Moon	7/4.75	14.30	122.00	124.00	18.80	340.00
Neptune	19/3.25	16.30	155.00	157.00	24.70	433.00
Pluto	19/3.75	18.80	206.00	209.80	32.30	578.00
Saturn	37/3.00	21.00	256.00	261.50	41.80	721.00
Taurus	19/4.75	23.80	331.00	336.70	50.90	926.00
Triton	37/3.75	26.30	400.00	408.70	62.90	1130.00
Uranus	61/3.25	29.30	493.00	506.00	75.20	1400.00
Venus	61/3.75	33.80	659.00	673.70	98.30	1860.00
Virgo	91/4.50	49.50	1410.00	1447.00	207.00	1410.00

# AAAC - Aluminium Alloy Conductor

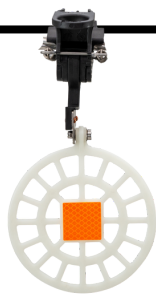
## Australian Standard - AS1531

Conductor Code Name	Stranding (mm)	OD (mm)	Eq. AL (mm <sup>2</sup> )	Area (mm <sup>2</sup> )	NBL (kN)	Mass (kg/km)
Agate	7/1.75	5.25	14.30	16.84	4.71	46.10
Amethyst	7/2.25	6.75	23.70	27.83	7.78	75.90
Diamond	7/2.50	7.50	29.30	34.36	9.64	94.30
Dolomite	7/2.75	8.25	35.30	41.60	11.60	113.00
Emerald	7/3.00	9.00	42.10	49.48	13.90	135.00
Garnet	7/3.75	11.30	65.80	77.31	21.70	211.00
Jade	7/4.50	13.50	94.80	111.30	31.20	304.00
Jasper	7/4.75	14.30	106.00	124.00	34.80	339.00
Opal	19/3.25	16.30	134.00	157.60	44.20	433.00
Patronite	19/3.50	17.50	155.30	183.00	51.30	503.00
Pearl	19/3.75	18.80	178.00	209.80	58.80	576.00
Ruby	37/3.00	21.00	221.00	261.50	73.50	721.00
Ruthenium	37/3.25	22.75	260.60	307.00	86.10	845.00
Rutile	19/4.75	23.80	285.00	336.70	94.40	924.00
Sapphire	37/3.75	26.30	345.00	408.70	115.00	1120.00
Spinel	61/3.25	29.30	426.00	506.00	135.00	1400.00
Tatalum	61/3.50	31.50	498.30	587.00	156.00	1620.00
Topaz	61/3.75	33.80	568.00	673.70	179.00	1860.00
Zircon	91/4.50	49.50	1220.00	1447.00	384.00	4000.00

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# AAAC - All Aluminium Alloy Conductor

## Australian Standard - 1120 Alloy

Conductor Code Name	Stranding (mm)	OD (mm)	Eq. AL (mm <sup>2</sup> )	Area (mm <sup>2</sup> )	NBL (kN)	Mass (kg/km)
Argon	7/1.75	5.25	16.10	16.84	4.00	46.10
Boron	7/2.25	6.75	26.50	27.83	6.61	75.90
Chlorine	7/2.50	7.50	32.80	34.36	8.18	94.30
Chromium	7/2.75	8.25	35.30	41.60	9.90	113.00
Fluorine	7/3.00	9.00	47.20	49.48	11.80	135.00
Helium	7/3.75	11.30	73.70	77.31	17.60	211.00
Hydrogen	7/4.50	13.50	106.00	111.30	24.30	304.00
Iodine	7/4.75	14.30	118.00	124.00	27.10	339.00
Krypton	19/3.25	16.30	150.00	157.60	37.40	433.00
Lutetium	19/3.50	17.50	155.30	183.00	41.70	503.00
Neon	19/3.75	18.80	199.00	209.80	47.80	576.00
Nitrogen	37/3.00	21.00	248.00	261.50	62.20	721.00
Nobelium	37/3.25	22.75	260.60	307.00	72.80	845.00
Oxygen	19/4.75	23.80	320.00	336.70	73.60	924.00
Phosphorous	37/3.75	26.30	387.00	408.70	93.10	1120.00
Selenium	61/3.25	29.30	478.00	506.00	114.00	1400.00
Silicon	61/3.50	31.50	198.30	587.00	127.00	1620.00
Sulphur	61/3.75	33.80	637.00	673.70	145.00	1860.00
Xenon	91/4.50	49.50	1360.00	1447.00	300.00	4000.00



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## SC/GZ - Steel Conductor/Galvanised

### Australian Standard - AS1222

Stranding (mm)	OD (mm)	Eq. AL (mm <sup>2</sup> )	Area (mm <sup>2</sup> )	NBL (kN)	Mass (kg/km)
3/2.00	4.31	1.56	9.43	11.70	75.50
3/2.75	5.93	2.95	17.82	22.20	139.00
7/2.00	6.00	3.62	21.99	27.40	177.00
7/2.75	8.25	6.85	41.58	51.80	326.00
7/3.25	9.75	9.56	58.07	72.30	460.00
7/3.75	11.30	12.70	77.31	96.20	609.00
19/2.00	10.00	9.79	56.96	74.40	483.00
19/2.75	13.80	18.50	112.90	141.00	888.00
19/3.25	16.30	25.80	156.60	196.00	1250.00

## SC/AC - Steel Conductors/Aluminium Clad

### Australian Standard - AS1222

Stranding (mm)	OD (mm)	Eq. AL (mm <sup>2</sup> )	Area (mm <sup>2</sup> )	NBL (kN)	Mass (kg/km)
3/2.75	5.93	5.91	17.82	22.70	118.00
3/3.00	6.47	7.03	21.21	27.00	141.00
3/3.25	7.02	8.26	24.89	31.60	165.00
3/3.75	8.08	11.00	33.13	40.00	220.00
7/2.75	8.25	13.70	41.58	50.10	277.00
7/3.00	9.00	16.30	49.48	59.70	330.00
7/3.25	9.75	19.20	58.07	69.80	387.00
7/3.75	11.30	25.50	77.31	88.30	515.00
7/4.25	12.80	32.80	99.30	106.00	662.00
19/2.75	13.80	37.10	112.90	136.00	755.00
19/3.00	15.00	44.10	134.40	162.00	899.00
19/3.25	16.30	51.80	157.60	189.00	1060.00
19/3.75	18.80	68.90	209.80	240.00	1410.00
19/4.25	21.30	88.60	269.50	289.00	1800.00

# Hard Drawn Copper Conductor

## Australian Standard - AS1746

Stranding (mm)	OD (mm)	Eq. AL (mm <sup>2</sup> )	Area (mm <sup>2</sup> )	NBL (kN)	Mass (kg/km)
7/1.00	3.00	8.68	5.49	2.31	49.30
7/1.25	3.75	13.60	8.59	3.61	76.90
7/1.75	5.25	26.60	16.84	6.89	151.00
7/2.00	6.00	34.70	21.99	9.02	197.00
7/2.75	8.25	65.30	41.58	16.70	375.00
7/3.50	10.50	106.00	67.35	26.60	607.00
19/1.75	8.75	71.70	45.70	18.30	413.00
19/2.00	10.00	93.70	59.69	23.90	538.00
19/2.75	13.80	177.00	112.90	44.50	1020.00
19/3.00	15.00	211.00	134.30	52.80	1210.00
37/1.75	12.30	139.00	89.00	35.60	806.00
37/2.50	17.50	284.00	181.60	72.90	1640.00
37/2.75	19.30	344.00	219.80	86.60	1990.00
37/3.00	21.00	409.00	261.50	103.00	2370.00
61/2.75	24.80	566.00	362.30	143.00	3280.00



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# British Standard Conductor

## All Aluminium Conductor ASC to BS 125

Conductor Code Name	Stranding (mm)	OD (mm)	NBL (kN)	Mass (kg/km)
Midge	7/2.06	6.18	3.90	64.00
Gnat	7/2.21	6.63	4.80	73.00
Aphis	3/3.35	7.20	4.30	73.00
Mosquito	7/2.59	7.77	6.30	101.00
Weevil	3/3.66	7.90	5.10	86.00
Ladybird	7/2.79	8.38	7.20	117.00
Ant	7/3.10	9.30	8.20	145.00
Fly	7/3.40	10.21	9.90	174.00
Bluebottle	7/3.66	10.98	11.70	202.00
Earwig	7/3.78	11.35	12.50	215.00
Grasshopper	7/3.91	11.73	13.30	230.00
Clegg	7/4.17	12.51	14.90	262.00
Wasp	7/4.39	13.18	16.30	290.00
Beetle	19/2.67	13.35	17.70	293.00
Bee	7/4.90	14.70	20.20	361.00
Cricket	7/5.36	16.08	24.00	432.00
Hornet	19/3.25	16.26	25.20	434.00
Caterpillar	19/3.53	17.65	29.30	512.00
Chafer	19/3.78	18.92	62.40	587.00
Spider	19/3.99	19.95	36.60	652.00
Cockroach	19/4.22	21.08	40.40	731.00
Butterfly	19/4.65	23.25	48.70	868.00
Moth	19/5.00	25.00	55.90	1027.00
Drone	37/3.58	25.06	56.20	1029.00
Centipede	37/3.78	26.46	62.05	1145.00
Locust	19/5.36	26.80	63.90	1179.00
Maybug	37/4.09	28.63	71.50	1342.00
Scorpion	37/4.27	29.87	77.20	1460.00
Cicada	37/4.65	32.55	90.40	1733.00
Tarantula	37/5.23	36.61	122.00	2191.00

## British Standard Conductor

### Aluminium Conductor (Galvanised) Steel Reinforced ASCR to BS 125

Conductor Code Name	Stranding (mm)	OD (mm)	NBL (kN)	Mass (kg/km)
Mole	6/1/1.50	4.50	4.20	43.00
Squirrel	6/1/2.11	6.33	7.50	85.00
Gopher	6/1/2.36	7.08	9.60	106.00
Weasel	6/1/2.59	7.77	11.40	128.00
Fox	6/1/2.79	8.37	13.10	148.00
Ferret	6/1/3.00	9.00	15.20	172.00
Rabbit	6/1/3.35	10.05	18.30	214.00
Mink	6/1/3.66	10.98	21.80	255.00
Beaver	6/1/3.99	11.97	25.70	303.00
Raccoon	6/1/4.09	12.27	27.00	319.00
Otter	6/1/4.22	12.66	28.80	339.00
Skunk	12/7/2.59	12.95	52.90	464.00
Cat	6/1/4.50	13.50	32.60	386.00
Horse	12/7/2.79	13.95	25.70	538.00
Hare	6/1/4.72	14.16	35.90	425.00
Dog	6/4.72+7/1.57	14.17	32.70	394.00
Hyena	7/4.39+7/1.93	14.57	41.70	451.00
Cougar	18/1/3.05	15.25	30.40	419.00
Leopard	6/5.28+7/1.75	15.81	40.70	492.00
Coyote	26/2.54+7/1.91	15.88	46.30	521.00
Tiger	30/7/2.36	16.52	58.00	602.00
Dingo	18/1/3.35	16.75	25.70	506.00
Caracal	18/1/3.61	18.05	41.80	587.00
Wolf	30/7/2.59	18.13	69.20	726.00
Jaguar	18/1/3.86	19.30	46.50	671.00
Lynx	30/7/2.79	19.56	79.80	842.00
Panther	30/7/3.00	21.00	92.20	974.00
Lion	30/7/3.18	22.26	100.00	1094.00
Bear	30/7/3.35	23.45	111.00	1214.00
Batang	18/4.78+7/1.68	24.16	69.60	1015.00
Goat	30/7/0.146	25.96	135.00	1489.00
Antelope	54/7/2.97	26.73	118.00	1415.00
Bison	54/7/3.00	27.00	120.00	1443.00
Sheep	30/7/3.99	27.93	156.00	1722.00
Zebra	54/7/3.18	28.62	131.00	1621.00
Deer	30/7/4.27	29.89	178.00	1973.00
Camel	54/7/3.35	30.15	145.00	1799.00
Elk	30/7/4.50	31.50	198.00	2190.00
Moose	54/7/3.53	31.77	161.00	1998.00
Moa	76/3.72+7/2.89	38.40	180.00	2641.00

# New Zealand Conductor

## All Aluminium Conductor AAC

Conductor Code Name	Stranding (mm)	OD (mm)	NBL (kN)	Mass (kg/km)
Namu	7/2.11	6.33	4.10	70.00
Gant	7/2.21	6.63	4.80	73.00
Poko	7/2.36	7.08	5.10	80.00
Ladybird	7/2.80	8.40	6.90	117.00
Kutu	7/3.00	9.00	7.90	140.00
Fly	7/3.40	10.20	9.90	147.00
Rango	7/3.66	10.98	11.70	200.00
Grasshopper	7/3.91	11.73	13.30	230.00
Moka	7/4.09	12.27	-	-
Wasp	7/4.40	13.20	16.00	290.00
Beetle	19/2.66	13.30	17.80	293.00
Weke	7/4.72	14.16	18.50	340.00
Bee	7/4.90	14.70	20.20	361.00
Cricket	7/5.30	15.90	24.10	432.00
Hornet	19/3.25	16.25	25.00	434.00
Weta	19/3.35	16.75	26.20	460.00
Huhu	37/2.52	17.64	30.10	-
Caterpillar	19/3.50	17.50	29.30	512.00
Chafer	19/3.78	18.90	32.40	587.00
Mata	19/3.86	19.30	33.80	610.00
Spider	19/3.40	19.95	36.60	652.00
Cockroach	19/4.21	21.05	40.40	731.00
Butterfly	19/4.64	23.20	48.80	868.00
Centipede	37/3.78	26.46	62.10	1145.00
Cicada	37/4.65	32.55	90.50	1733.00





# REDUCE OUTAGES ON DISTRIBUTION & TRANSMISSION LINES UP TO 400KV

With Summit Power's  
Markers & Warning Flags

**PREVENT COSTLY LINE DAMAGE AND OUTAGES CAUSED BY BIRD  
STRIKES & VEHICLE LINE COLLISIONS!!**



PREVENT COSTLY  
LINE DAMAGE &  
OUTAGES



LOW COST



PERMANENT



DOESN'T FLAP  
IN WIND



DURABLE



HIGHLY VISIBLE



FAST & SIMPLE  
INSTALLATION



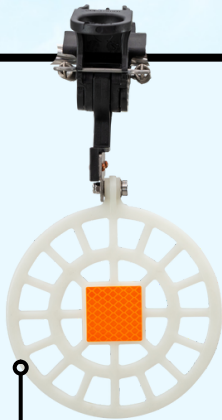
CLAMPS TO SUIT  
ANY SIZE  
CONDUCTOR



LIGHTWEIGHT



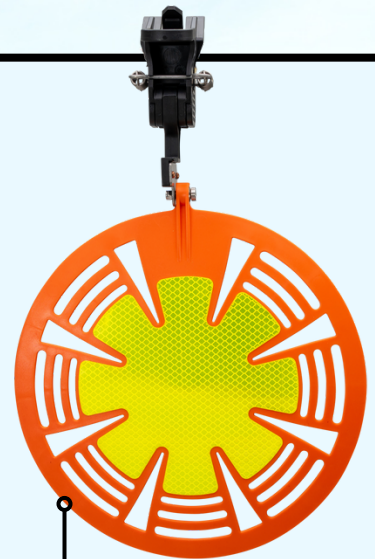
Permanent Firefly  
Swivel Bird Diverter



Permanent Birdmark  
Afterglow



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Marker



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