

PRODUCT CATALOGUE

Overhead/Aerial Cable



Content



Low Voltage Bundled Cable (ABC)



Medium Voltage Bundled Cable (ABC)

Low Voltage Aerial Bundled Cable (ABC)

Standards

- AS/NZS 3560.1
- AS/NZS 3560.2
- AS/NZS 5000.1



Application

The usage of Aerial Bundled Cables in low voltage networks provides important saving in installation costs, while it ensures the same reliability and safety, replaces bare conductors in overhead distribution lines and increased very rapidly all around the world.

AS/NZS 3560.1

- Conductor: Aluminum
- Insulation: XLPE
- Core Identification: Ribs

Structure	Conductor Diameter	Insulation Thickness	Core Diameter	Outer Diameter	Cable Weight	Tensile Strength	Electrical Resistance
No.xmm ²	mm	mm	mm	mm	kg/km	ken	DC.20°C 0/km
2x16	4.8	1.3	7.2	14.40	130	4.4	1.91
2x25	6.1	1.3	8.7	17.40	193	7.0	1.20
2x35	7.2	1.3	9.8	19.60	257	9.8	0.868
2x50	8.1	1.5	11.1	22.20	342	14.0	0.641
2x95	11.4	1.7	14.8	29.60	662	26.6	0.320
3x25	6.1	1.3	8.7	18.79	289	10.5	1.20
3x35	7.2	1.3	9.8	21.17	385	14.7	0.868
3x50	8.1	1.5	11.1	23.98	513	21.0	0.641
4x16	4.8	1.3	7.2	17.42	261	8.8	1.91
4x25	6.1	1.3	8.7	21.05	386	14.0	1.20
4x35	7.2	1.3	9.8	23.72	514	19.6	0.868
4x50	8.1	1.5	11.1	26.86	684	28.0	0.641
4x70	9.8	1.5	12.8	30.98	982	39.2	0.443
4x95	11.4	1.7	14.8	35.82	1324	53.2	0.320
4x120	13	1.7	16.4	39.69	1634	67.2	0.253
4x150	14.4	1.7	17.8	43.08	1994	84.0	0.206

AS/NZS 3560.2

- Conductor: Copper
- Insulation: XLPE
- Core Identification: Ribs

Structure No.xmm ²	Conductor Diameter mm	Insulation Thickness mm	Core Diameter mm	Outer Diameter mm	Cable Weight kg/km	Tensile Strength kN	Electrical Resistance DC.20°C Ω/km
2x6	3.0	1.3	5.6	11.20	136	4.8	3.08
2x10	3.9	1.3	6.5	13.00	220	8.0	1.83
2x16	5.0	1.3	7.6	15.20	333	12.2	1.15
2x25	6.1	1.3	8.7	17.40	499	19.4	0.727
3x6	3.0	1.3	5.6	12.10	204	7.2	3.08
3x10	3.9	1.3	6.5	14.04	330	12.0	1.83
3x16	5.0	1.3	7.6	16.42	500	18.3	1.15
3x25	6.1	1.3	8.7	18.79	748	29.1	0.727
4x6	3.0	1.3	5.6	13.55	272	9.6	3.08
4x10	3.9	1.3	6.5	15.73	440	16.0	1.83
4x16	5.0	1.3	7.6	18.39	666	24.4	1.15
4x25	6.1	1.3	8.7	21.05	997	38.8	0.727

AS/NZS 5000.1

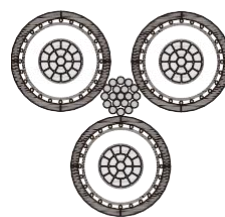
- Conductor: Copper
- Insulation: PVC
- Core Identification: Ribs

Structure No.xmm ²	Conductor Diameter mm	Insulation Thickness mm	Core Diameter mm	Outer Diameter mm	Cable Weight kg/km	Tensile Strength kN	Electrical Resistance DC.20°C Ω/km
1x6	3.0	1.0	5.0	5.0	69	2.4	3.08
1x10	3.9	1.0	5.9	5.9	112	4.0	1.83
1x16	5.0	1.0	7.0	7.0	169	6.1	1.15
1x25	6.1	1.2	8.5	8.5	260	9.7	0.727
1x35	7.2	1.2	9.6	9.6	357	12.7	0.524
1x50	8.1	1.4	10.9	10.9	501	17.3	0.387
1x70	9.9	1.4	12.7	12.7	724	25.0	0.268
Flat Aerial Cable							
2x6	3.0	1.0	5.0	13.0	150	4.8	3.08
2x10	3.9	1.0	5.9	15.5	237	8.0	1.83
2x16	5.0	1.0	7.0	18.5	355	12.2	1.15
2x25	6.1	1.2	8.5	22.2	545	19.4	0.727
3x6	3.0	1.0	5.0	21.8	230	7.2	3.08
3x10	3.9	1.0	5.9	25.5	362	12.0	1.83
3x16	5.0	1.0	7.0	30.0	540	18.3	1.15
Twisted Aerial Cable							
2x6	3.0	1.0	5.0	10.0	139	4.8	3.08
2x10	3.9	1.0	5.9	11.8	223	8.0	1.83
2x16	5.0	1.0	7.0	14.0	338	12.2	1.15
2x25	6.1	1.2	8.5	17.0	520	19.4	0.727
3x6	3.0	1.0	5.0	10.8	208	7.2	3.08
3x10	3.9	1.0	5.9	12.7	335	12.0	1.83
3x16	5.0	1.0	7.0	15.1	507	18.3	1.15
3x25	6.1	1.2	8.5	18.4	780	29.1	0.727
4x6	3.0	1.0	5.0	12.1	277	9.6	3.08
4x10	3.9	1.0	5.9	14.3	447	16.0	1.83
4x16	5.0	1.0	7.0	16.9	676	24.4	1.15
4x25	6.1	1.2	8.5	20.6	1040	38.8	0.727

Medium Voltage Aerial Bundled Cable (ABC)

Standards

- ✓ AS/NZS 3599.1
- ✓ AS/NZS 3599.2



Application

Metallic screened high voltage aerial bundled cable incorporates a metallic screen of copper and a galvanized steel messenger. Non-Metallic screened high voltage aerial bundled cable is provided only with a semi-conductive screen and the fault currents are carried by the high conductivity aluminum alloy (1120) catenary.

AS/NZS 3599.1

- Conductor: Aluminum 1350
- Conductor Screen: Semi-Conductive Compound Insulation: XLPE
- Insulation Screen: Semi-Conductive Compound Metallic Screen: Copper Wire
- Sheath: HDPE
- Support Wire: Galvanized Steel Wires

Size No. xmm ²	Insulation Thickness mm	Metallic Screen No/mm	Sheath Thickness mm	Support Wire No/mm	Outer Diameter mm	Cable Weight kg/km	Electrical Resistance DC.20°C Ω/km
6.35/11(12) kV							
light Duty Screen (2kA1s)							
3x35+ 1	3.4	24/0.85	1.8	7/2.00	53.1	1760	0.868
3x35+ 1	3.4	24/0.85	1.8	19/2.00	57.1	2060	0.868
3x50+ 1	3.4	24/0.85	1.8	19/2.00	59.3	2230	0.641
3x70+ 1	3.4	24/0.85	1.8	19/2.00	62.5	2500	0.443
3x95+ 1	3.4	24/0.85	1.8	19/2.00	66.0	2820	0.320
3x120+ 1	3.4	24/0.85	1.8	19/2.00	58.8	3100	0.253
3x150+1	3.4	24/0.85	1.9	19/2.00	72.0	3440	0.206
3x185+1	3.4	24/0.85	1.9	19/2.00	75.0	3800	0.164
Heavy Duty Screen (8kN1s)							
3x35+ 1	3.4	40/0.85	1.8	7/2.00	53.1	2020	0.868
3x35+ 1	3.4	40/0.85	1.8	19/2.00	57.1	2310	0.868
3x50+ 1	3.4	23/1.35	1.8	19/2.00	61.3	2790	0.641
3x70+ 1	3.4	32/1.35	1.8	19/2.00	64.5	3420	0.443
3x95+ 1	3.4	38/1.35	1.8	19/2.00	68.0	3980	0.320
3x120+ 1	3.4	38/1.35	1.8	19/2.00	70.8	4270	0.253
3x150+ 1	3.4	38/1.35	1.9	19/2.00	74.0	4600	0.206
3x185+1	3.4	38/1.35	1.9	19/2.00	77.0	19/2.00	0.164

12.7/22(24) kV							
light Duty Screen (2kN1s)							
3x35+ 1	5.5	24/0.85	1.8	7/2.00	61.7	2210	0.868
3x35+ 1	5.5	24/0.85	1.8	19/2.00	65.7	2500	0.868
3x50+ 1	5.5	24/0.85	1.8	19/2.00	68.0	2690	0.641
3x70+ 1	5.5	24/0.85	1.9	19/2.00	71.6	3020	0.443
3x95+ 1	5.5	24/0.85	1.9	19/2.00	75.0	3370	0.320
3x120+ 1	5.5	24/0.85	2.0	19/2.00	78.2	3720	0.253
3x150+ 1	5.5	24/0.85	2.0	19/2.00	81.0	4060	0.206
3x185+1	5.5	24/0.85	2.1	19/2.00	84.4	4470	0.164
Heavy Duty Screen (8kN1s)							
3x35+ 1	5.5	40/0.85	1.8	7/2.00	61.7	2460	0.868
3x35+ 1	5.5	40/0.85	1.8	19/2.00	65.7	2760	0.868
3x50+ 1	5.5	23/1.35	1.8	19/2.00	70.0	3250	0.641
3x70+ 1	5.5	32/1.35	1.9	19/2.00	73.6	3940	0.443
3x95+ 1	5.5	38/1.35	1.9	19/2.00	77.0	4530	0.320
3x120+ 1	5.5	38/1.35	2.0	19/2.00	80.2	4880	0.253
3x150+ 1	5.5	38/1.35	2.0	19/2.00	83.0	5220	0.206
3x185+ 1	5.5	38/1.35	2.1	19/2.00	86.4	5640	0.164

AS/NZS 3599.2

- Conductor: Aluminum 1350
- Conductor Screen: Semi-Conductive Compound
- Insulation: XLPE
- Insulation Screen: Semi-Conductive Compound
- Semi-Conductive Layer(Optional): HDPE
- Support Wire: AAAC 1120

Size No. xmm ²	Insulation Thickness mm	Metallic Screen No/mm	Sheath Thickness mm	Support Wire No/mm	Outer Diameter mm	Cable Weight kg/km	Electrical Resistance DC.20°C Ω/km
6.35/11(12) kV							
Cross-Linked Screen Only							
3x35+1	3.4	1.0	-	7/4.75	48.4	1170	0.868
3x50+1	3.4	1.0	-	7/4.75	50.7	1320	0.641
3x70+1	3.4	1.0	-	7/4.75	53.9	1560	0.443
3x95+1	3.4	1.0	-	7/4.75	57.3	1860	0.320
3x120+1	3.4	1.0	-	19/3.50	63.3	2280	0.253
3x150+1	3.4	1.0	-	19/3.50	66.2	2570	0.206
3x185+1	3.4	1.0	-	19/3.50	69.2	2890	0.164
12.7/22(24) kV							
Cross-Linked Screen Only							
3x35+1	5.5	1.0		7/4.75	57.1	1540	0.868
3x50+1	5.5	1.0		7/4.75	59.3	1710	0.641
3x70+1	5.5	1.0		7/4.75	62.5	1990	0.443
3x95+1	5.5	1.0		7/4.75	66	2310	0.32
3x120+1	5.5	1.0		19/3.50	72	2760	0.253
3x150+1	5.5	1.1		19/3.50	75.2	3100	0.206
3x185+1	5.5	1.1		19/3.50	78.2	3460	0.164
6.35/11(12) kV							
Cross-Linked Screen with Semi-Conductive HDPE							
3x35+1	3.4	0.6	1.2	7/4.75	52.0	1320	0.868
3x50+1	3.4	0.6	1.2	7/4.75	54.2	1490	0.641
3x70+1	3.4	0.6	1.2	7/4.75	57.4	1740	0.443
3x95+1	3.4	0.6	1.2	7/4.75	60.9	2050	0.320
3x120+1	3.4	0.6	1.2	19/3.50	66.9	2480	0.253
3x150+1	3.4	0.6	1.2	19/3.50	69.7	2780	0.206
3x185+1	3.4	0.6	1.2	19/3.50	72.7	3120	0.164
12.7/22(24) kV							
Cross-Linked Screen with Semi-Conductive HDPE							
3x35+1	5.5	0.6	1.2	7/4.75	60.6	1730	0.868
3x50+1	5.5	0.6	1.2	7/4.75	62.9	1910	0.641
3x70+1	5.5	0.6	1.2	7/4.75	66.1	2200	0.443
3x95+1	5.5	0.6	1.2	7/4.75	69.5	2530	0.32
3x120+1	5.5	0.6	1.2	19/3.50	75.5	3000	0.253
3x150+1	5.5	0.6	1.2	19/3.50	78.3	3320	0.206

IEC 60502-2: -

- Conductor: Aluminium
- Conductor Screen: Semi-Conductive Compound
- Insulation: XLPE
- Insulation Screen: Semi-Conductive Compound
- Metallic Screen: Copper Wire(Optional)/Copper Tape
- Sheath: PVC/HDPE
- Messenger: Galvanized Steel Wire
- Messenger Sheath(Optional): PVC/HDPE

Structure	Insulation Thickness	Sheath Thickness	Single Core Diameter	Single Core Weight	Electrical Resistance	Messenger	Messenger Sheath
No.xmm ²	mm	mm	mm	kg/km	DC.20°C Q/km	No./mm	Thickness mm
6.35/11(12) kV							
3x1x35+50	3.4	1.6	20.8	514	0.868	7/3.15	1.2
3x1x50+50	3.4	1.7	22.3	585	0.641	7/3.15	1.2
3x1x70+50	3.4	1.7	23.8	681	0.443	7/3.15	1.2
3x1x95+50	3.4	1.8	25.7	805	0.320	7/3.15	1.2
3x1x120+50	3.4	1.8	27.1	913	0.253	7/3.15	1.2
3x1x150+50	3.4	1.9	28.7	1043	0.206	7/3.15	1.2
3x1x185+50	3.4	1.9	30.4	1165	0.164	7/3.15	1.2
3x1x240+50	3.4	2.0	32.9	1382	0.125	7/3.15	1.2
12.7/22(24) kV							
3x1x35+50	5.5	1.8	25.4	720	0.868	7/3.15	1.2
3x1x50+50	5.5	1.8	26.8	850	0.641	7/3.15	1.2
3x1x70+50	5.5	1.9	28.4	980	0.443	7/3.15	1.2
3x1x95+50	5.5	1.9	30.2	1110	0.320	7/3.15	1.2
3x1x120+50	5.5	2.0	31.7	1240	0.253	7/3.15	1.2
3x1x150+50	5.5	2.0	33.4	1380	0.206	7/3.15	1.2
3x1x185+50	5.5	2.1	35.0	1550	0.164	7/3.15	1.2
3x1x240+50	5.5	2.2	37.4	1800	0.125	7/3.15	1.2
19/33(36) kV							
3x1x50+50	8.0	2.0	33.3	1250	0.641	7/3.15	1.2
3x1x70+50	8.0	2.1	34.9	1400	0.443	7/3.15	1.2
3x1x95+50	8.0	2.1	36.7	1550	0.320	7/3.15	1.2
3x1x120+50	8.0	2.2	38.2	1700	0.253	7/3.15	1.2
3x1x150+50	8.0	2.2	39.9	1860	0.206	7/3.15	1.2
3x1x185+50	8.0	2.3	41.5	2050	0.164	7/3.15	1.2
3x1x240+50	8.0	2.3	44.0	2310	0.125	7/3.15	1.2



CONTACT US

iEngineering Australia Pty. Ltd.

Office :- +61 (0)2 83207682

Mobile :- +61 (0) 467 055 252

Email :- dnaiker@iengaust.com.au

Addr :- Building T2A, Warawara
Circuit, Quaker Hills,
NSW 2763.

