

## MV Aerial Bundled Conductor (ABC) Cables

### 6.35/11kV & 12.7/22kV Non Screened ABC –Aerial Bundled Cables to AS/NZS 3599.1(AL/XLPE/HDPE)

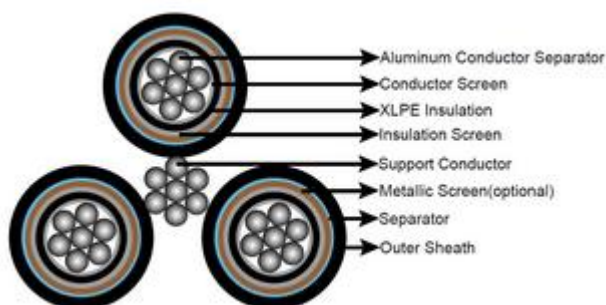
#### Application

Three XLPE insulated cores are bundled around the AAAC/1120 support conductor in a right hand lay.

#### Standard

AS/NZS 3599.1

#### Cable Construction



Phase Conductor	Circular compacted stranded H68 aluminium to BS2627.
Conductor Screen	Extruded semi-conductive layer.
Insulation	XLPE.
Insulation Screen	Extruded semi-conductive layer.
Outer Sheath	HDPE.
Support Conductor	Aluminium alloy conductor (AAAC/1120).
Assembly	Three XLPE insulated cores are bundled around the AAAC/1120 support conductor in a right hand lay.

#### Technical Data

Nominal Cross Section	Continuous Current Rating		
	Still air	1m/s wind	2m/s wind
mm2	A	A	A
35	105	145	165
50	125	170	200
70	150	215	250
95	180	260	300
120	205	300	350
150	230	340	395
185	265	390	450

### AS/NZS 3599 Part 1 6.35/11 kV Al/XIPE /HdPE Non-Screened Cables

Number of Cores x Nominal Cross Section	Phase Conductor				Messenger Suspension Unit	Nominal Sectional Area	Breaking Load
	Diameter of Conductor	Thickness of Insulation	Thickness of Insulation Screen	Thickness of Sheath	Stranding		
No./mm <sup>2</sup>	mm	mm	mm	mm	No./mm	mm <sup>2</sup>	KN
3x35	6.9	3.4	0.8	1.2	7/4.75	52.4	1370
3x50	8.1	3.4	0.8	1.2	7/4.75	54.6	1530
3x70	9.7	3.4	0.8	1.2	7/4.75	57.8	1790
3x95	11.4	3.4	0.8	1.2	7/4.75	61.3	2100
3x120	12.8	3.4	0.8	1.2	19/3.50	67.3	2540
3x150	14.2	3.4	0.8	1.2	19/3.50	70.1	2840
3x185	15.7	3.4	0.8	1.2	19/3.50	73.1	3190

Other cross-sections can be offered upon request.

### AS/NZS 3599 Part 1 6.35/11 kV AL/XLPE /CWS/HDPE Screened Cables

Number of Cores x Nominal Cross Section	Diameter of Conductor	Thickness of Insulation	Thickness of Insulation Screen	Copper Wire Screen Stranding	Thickness of Sheath	Galvanized Steel Wire Stranding	Nominal Sectional Area	Breaking Load
No./mm <sup>2</sup>	mm	mm	mm	No./mm	mm	No./mm	mm <sup>2</sup>	KN
Light Duty Screen								
3x35	6.9	3.4	0.8	25/0.85	1.8	7/2.00	54.1	1820
3x35	6.9	3.4	0.8	25/0.85	1.8	19/2.00	58.1	2130
3x50	8.1	3.4	0.8	25/0.85	1.8	19/2.00	60.4	2300
3x70	9.7	3.4	0.8	25/0.85	1.8	19/2.00	63.6	2570
3x95	11.4	3.4	0.8	25/0.85	1.8	19/2.00	67.0	2900
3x120	12.8	3.4	0.8	25/0.85	1.8	19/2.00	69.8	3190
3x150	14.2	3.4	0.8	25/0.85	1.9	19/2.00	73.0	3530
3x185	15.7	3.4	0.8	25/0.85	1.9	19/2.00	76.0	3890
Heavy Duty Screen								
3x35	6.9	3.4	0.8	40/0.85	1.8	7/2.00	54.1	2050
3x35	6.9	3.4	0.8	40/0.85	1.8	19/2.00	58.1	2360
3x50	8.1	3.4	0.8	23/1.35	1.8	19/2.00	62.4	2820
3x70	9.7	3.4	0.8	32/1.35	1.8	19/2.00	65.6	3440

3x95	11.4	3.4	0.8	39/1.35	1.8	19/2.00	69.0	4030
3x120	12.8	3.4	0.8	39/1.35	1.8	19/2.00	71.8	4320
3x150	14.2	3.4	0.8	39/1.35	1.9	19/2.00	75.0	4670
3x185	15.7	3.4	0.8	39/1.35	1.9	19/2.00	78.0	5020

Other cross-sections can be offered upon request.

### AS/NZS 3599 Part 1 12.7/22 kV AL/XLPE /HDPE Non-Screened Cables

Number of Cores x Nominal Cross Section	Phase Conductor				Messenger Suspension Unit	Nominal Sectional Area	Breaking Load
	Diameter of Conductor	Thickness of Insulation	Thickness of Insulation Screen	Thickness of Sheath	Stranding		
No./mm <sup>2</sup>	mm	mm	mm	mm	No./mm	mm <sup>2</sup>	KN
3x35	6.9	5.5	0.8	1.2	7/4.75	61.0	1780
3x50	8.1	5.5	0.8	1.2	7/4.75	63.3	1970
3x70	9.7	5.5	0.8	1.2	7/4.75	66.5	2260
3x95	11.4	5.5	0.8	1.2	7/4.75	69.9	2600
3x120	12.8	5.5	0.8	1.2	19/3.50	75.9	3070
3x150	14.2	5.5	0.8	1.2	19/3.50	78.7	3390
3x185	15.7	5.5	0.8	1.2	19/3.50	81.7	3760

Other cross-sections can be offered upon request.

### AS/NZS 3599 Part 1 12.7/22 kV AL/XLPE /CWS/HDPE Screened Cables

Number of Cores x Nominal Cross Section	Diameter of Conductor	Thickness of Insulation	Thickness of Insulation Screen	Copper Wire Screen Stranding	Thickness of Sheath	Galvanized Steel Wire Stranding	Nominal Sectional Area	Breaking Load
No./mm <sup>2</sup>	mm	mm	mm	No./mm	mm	No./mm	mm <sup>2</sup>	KN
Light Duty Screen								
3x35	6.9	5.5	0.8	25/0.85	1.8	7/2.00	62.7	2280
3x35	6.9	5.5	0.8	25/0.85	1.8	19/2.00	66.7	2580
3x50	8.1	5.5	0.8	25/0.85	1.8	19/2.00	69.0	2780
3x70	9.7	5.5	0.8	25/0.85	1.9	19/2.00	72.6	3110
3x95	11.4	5.5	0.8	25/0.85	1.9	19/2.00	76.0	3460
3x120	12.8	5.5	0.8	25/0.85	2.0	19/2.00	79.2	3810
3x150	14.2	5.5	1.0	25/0.85	2.0	19/2.00	82.8	4230
3x185	15.7	5.5	1.0	25/0.85	2.1	19/2.00	86.2	4650
Heavy Duty Screen								

3x35	6.9	5.5	0.8	40/0.85	1.8	7/2.00	62.7	2510
3x35	6.9	5.5	0.8	40/0.85	1.8	19/2.00	66.7	2810
3x50	8.1	5.5	0.8	23/1.35	1.8	19/2.00	71.0	3300
3x70	9.7	5.5	0.8	32/1.35	1.9	19/2.00	74.6	3970
3x95	11.4	5.5	0.8	39/1.35	1.9	19/2.00	78.0	4600
3x120	12.8	5.5	0.8	39/1.35	2.0	19/2.00	81.2	4950
3x150	14.2	5.5	1.0	39/1.35	2.0	19/2.00	84.8	5360
3x185	15.7	5.5	1.0	39/1.35	2.1	19/2.00	88.2	5790