

MV Aerial Bundled Conductor (ABC) Cables

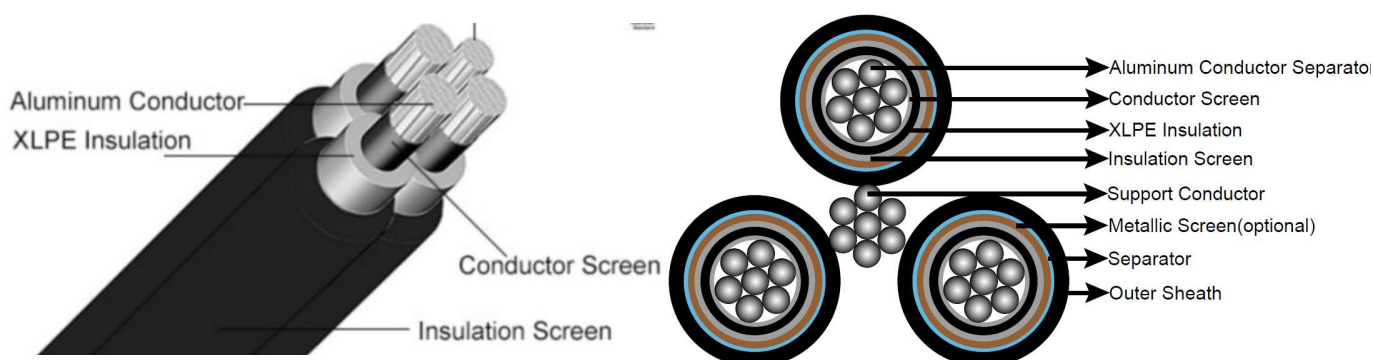
Application

Aerial bundled cables are mainly used for secondary overhead lines on poles or as feeders to residential premises.

Standard

Basic design to IEC 60502 / AS/NZS 3599-1 standards

Construction



Phase Conductor	Circular compacted stranded H68 aluminium to BS2627.
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Conductor Screen	Extruded semi-conductive layer.
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Insulation	XLPE.
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Insulation Screen	Extruded semi-conductive layer.
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metallic Screen(optional)	Copper wire screen or copper tape screen.
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Separator	Semi-conductive swellable tape.
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Outer Sheath	HDPE.
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Support Conductor Galvanized steel wires.

Assembly Three XLPE insulated screened cores are bundled around the galvanized steel wires in a right hand lay.

Construction Parameters

IEC 60502 6.35/11 kV ABC for Overhead Distribution Lines

Number of Cores x Nominal Cross Section	Phase Conductor			Messenger Suspension Unit			Continuous current rating at 300C ambient temp
	Stranding	Nominal Sectional Area	Maximum Conductor Resistance	Stranding	Nominal Sectional Area	Breaking Load	
No.腦 mm ²	No.腦 mm	mm ²	惟/Km	No.腦 mm	mm ²	KN	A
3X50 + 1X25	19/1.78	50	0.641	7/3.0	50	60	116
3X70 + 1X50	19/.14	70	0.443	7/3.15	50	62	210
3X95+ 1X50	19/2.52	95	0.32	7/3.0	50	60	173
3X185+1X120	37/2.52	185	0.164	7/4.67	120	150	259
3X150 +1X50	37/2.25	150	0.206	7/3.15	50	62	365
3X240 +1X50	61/2.25	240	0.125	7/3.15	50	62	500

Other cross-sections can be offered upon request.

IEC 60502 19/33 kV ABC for Overhead Distribution Lines

Number of Cores x Nominal Cross Section	Phase Conductor			Messenger Suspension Unit			Continuous current rating at 300C ambient temp
	Stranding	Nominal Sectional Area	Maximum Conductor Resistance	Stranding	Nominal Sectional Area	Breaking Load	
No.腦 mm ²	No.腦 mm	mm ²	惟/Km	No.腦 mm	mm ²	KN	A

No.腦 mm ²	No.腦 mm	mm ²	惟/Km	No.腦 mm	mm ²	KN	A
3X50 + 1X50	19/1.78	50	0.641	7/3.0	50	60	165
3X150+ 1X50	37/2.25	150	0.206	7/3.0	50	60	315
3X185+1X70	37/2.52	185	0.164	7/3.57	70	91	355
3X70 +1X50 聽	19/2.14	7	0.443	7/3.15	50	62	250
3X150 +1X50	37/2.25	150	0.206	7/3.15	50	62	370

Other cross-sections can be offered upon request.

AS/NZS 3599 Part 1 6.35/11 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.腦 mm ²	mm	mm	mm	mm	No.腦 mm	mm ²	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. 脑 mm ²	mm	mm	mm	No. 脑 mm	mm	No. 脑 mm	mm ²	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. 脑 mm ²	mm	mm	mm	mm	No. 脑 mm	mm ²	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	Diameter of	Thickness of	Thickness of	Copper Wire	Thickness of	Galvanized Steel	Nominal Sectional Area	Breaking Load
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Cores x Nomina l Cross Section	Conducto r	Insulatio n	Insulatio n Screen	Screen Strandin g	Sheath	Wire Stranding	I Area	
No. 股 mm ²	mm	mm	mm	No. 股 mm	mm	No. 股 mm	mm ²	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



QING ZHOU

HENAN QINGZHOU ELECTRICAL CABLE CO., LTD

Technical Data

Nominal Cross Section 聽 mm ²	Continuous Current Rating		
	Still air	1m/s wind	2m/s wind
	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