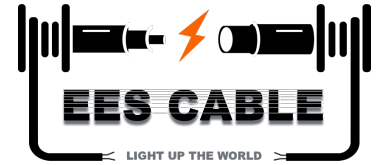
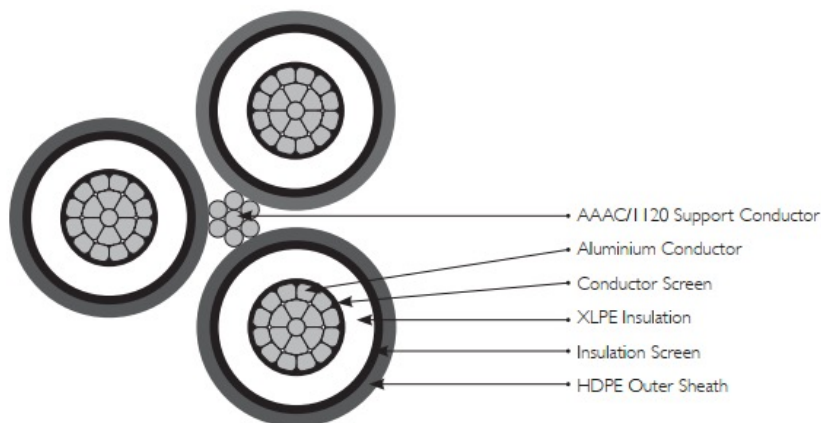


AS/NZS 3599.2

Aerial Bundled Cables Medium Voltage
(ABC MV)



AS/NZS 3599.2



DESCRIPTION

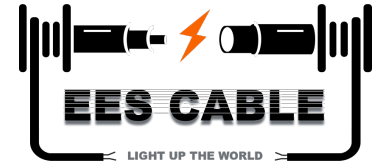
Circular compacted stranded aluminium conductor, XLPE insulated, copper wire screened and HDPE outer sheathed cable. The three XLPE insulated and copper wire screened single core cables are bundled around the AAAC/1120 support conductor in a right hand lay.

CONSTRUCTION

- 1 Conductor Phase conductors are circular compacted stranded H68 aluminium to BS2627.
- 2 Conductor screen Extruded layer of semi-conductive compound.
- 3 Insulation XLPE (cross-linked polyethylene) rated at 90°C.
- 4 Insulation screen Extruded layer of semi-conductive cross-linked compound.
- 5 Outer sheath Extruded layer of semi-conductive HDPE compound colour black. The outer sheath shall be printed with figures 1 ONE, 2 TWO, 3 THREE which corresponding to the three different phases.
- 6 Support conductor The support conductor shall comprise a compacted all aluminium alloy conductor (AAAC/1120).
- 7 Assembly The three XLPE insulated cores shall be bundled around the AAAC/1120 support conductor in a right hand (Z) lay.

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Aerial Bundled Cables Medium Voltage
(ABC MV)



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6.35/11 (12) kV

Phase conductor

Nominal cross-sectional area	mm ²	35	50	70	95	120	150	185
Number of cores		3	3	3	3	3	3	3
Minimum number of wires		6	6	12	15	18	18	30
Nominal diameter of conductor	mm	7.0	8.1	9.7	11.5	12.9	14.3	16.1
Minimum thickness of conductor screen	mm	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Nominal thickness of XLPE insulation	mm	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Nominal thickness of cross-linked screen layer	mm	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Nominal thickness of semi-conductive HDPE layer	mm	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Max. dc resistance at 20°C	ohm/km	0.868	0.641	0.443	0.320	0.253	0.206	0.164
Current rating at Ambient temperature = 40°C Solar radiation = 1000w/m ² Wind speed = 1m/s	A	165	200	245	300	345	390	450

Messenger - AAAC 1120

Stranding	No./mm	7/5.0	7/5.0	7/5.0	7/5.0	19/3.65	19/3.65	19/3.65
Direction of the outermost layer		Right-hand (Z)						
Overall diameter	mm	14.3	14.3	14.3	14.3	17.3	17.3	17.3

Completed cable

Approx. overall diameter	mm	52.2	53.5	56.7	60.2	66.2	69.0	72.4
Approx. weight of cable	kg/km	1470	1580	1850	2180	2640	2960	3380
Packing length	m/drum	500	500	500	500	500	500	250

AS/NZS 3599.2

12.7/22 (24) kV

Phase conductor

Nominal cross-sectional area	mm ²	35	50	70	95	120	150	185
Number of cores		3	3	3	3	3	3	3
Minimum number of wires		6	6	12	15	18	18	30
Nominal diameter of conductor	mm	7.0	8.1	9.7	11.5	12.9	14.3	16.1
Minimum thickness of conductor screen	mm	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Nominal thickness of XLPE insulation	mm	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Nominal thickness of cross-linked screen layer	mm	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Nominal thickness of semi-conductive HDPE layer	mm	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Max. dc resistance at 20°C	ohm/km	0.868	0.641	0.443	0.320	0.253	0.206	0.164
Current rating at Ambient temperature = 40°C Solar radiation = 1000w/m ² Wind speed = 1m/s	A	165	195	245	295	340	385	440

Messenger - AAAC 1120

Stranding	No./mm	7/5.0	7/5.0	7/5.0	7/5.0	19/3.65	19/3.65	19/3.65
Direction of the outermost layer		Right-hand (Z)						
Overall diameter	mm	14.3	14.3	14.3	14.3	17.3	17.3	17.3

Completed cable

Approx. overall diameter	mm	60.6	61.9	65.1	68.6	74.6	77.4	80.8
Approx. weight of cable	kg/km	1890	2000	2300	2670	3160	3500	3950
Packing length	m/drum	500	500	500	500	250	250	250