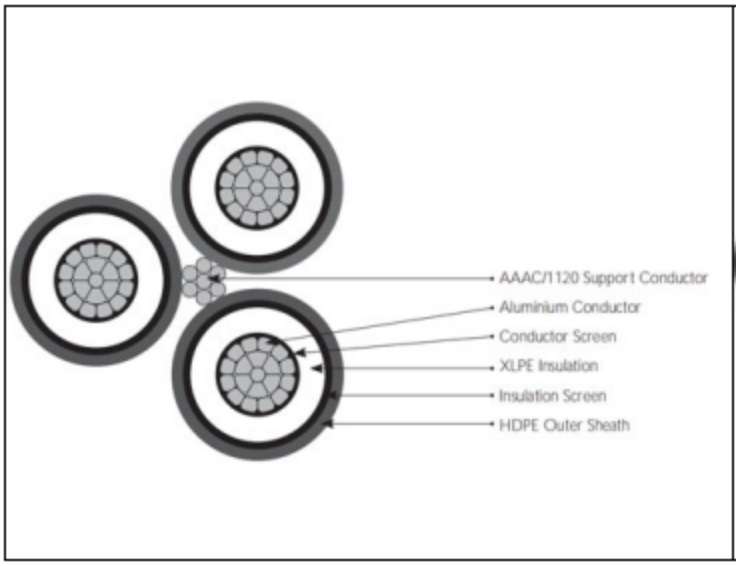
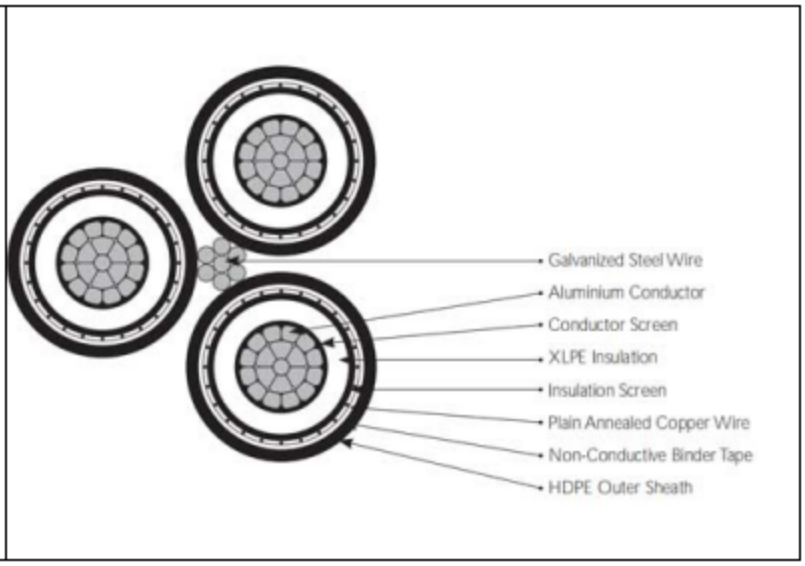
Medium Voltage Aerial Bundled Cables Application

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

6.35/11kV & 12.7/22kV ABC Cable Construction





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

6.35/11kV & 12.7/22kV ABC Cable Non Screened ABC Dimensions

number of cores x nominal cross section	Nominal conductor diameter	Nominal insulation thickness	Nominal insulation screen thickness	Nominal sheath thickness	AAAC/1120 support conductor size	Nominal overall diameter	Weight	Continuous current rating, A		
								Still air	1m/s wind	2m/s wind
mm^2	mm	mm	mm	mm	No/mm	mm	kg/km	A	A	A
6.35/11kV										
3x35	6.9	3.4	0.8	1.2	7/4.75	52.4	1370	110	155	185
3x50	8.1	3.4	0.8	1.2	7/4.75	54.6	1530	130	185	225
3x70	9.7	3.4	0.8	1.2	7/4.75	57.8	1790	160	235	280
3x95	11.4	3.4	0.8	1.2	7/4.75	61.3	2100	195	285	345
3x120	12.8	3.4	0.8	1.2	19/3.50	67.3	2540	230	335	405
3x150	14.2	3.4	0.8	1.2	19/3.50	70.1	2840	255	380	460
3x185	15.7	3.4	0.8	1.2	19/3.50	73.1	3190	295	440	530
12.7/22kV										
3x35	6.9	5.5	0.8	1.2	7/4.75	61.0	1780	110	155	180
3x50	8.1	5.5	0.8	1.2	7/4.75	63.3	1970	130	185	220
3x70	9.7	5.5	0.8	1.2	7/4.75	66.5	2260	160	230	275
3x95	11.4	5.5	0.8	1.2	7/4.75	69.9	2600	195	285	335

Address: Technology Building, Tongbai Road, Zhongyuan District, Zhengzhou, Henan Province, China.
Mob:+86-186 2550 3172 Web: www.uni-fibercable.com E-mail: info@uni-fibercable.com

3x120	12.8	5.5	0.8	1.2	19/3.50	75.9	3070	225	330	395
3x150	14.2	5.5	0.8	1.2	19/3.50	78.7	3390	255	375	450
3x185	15.7	5.5	0.8	1.2	19/3.50	81.7	3760	290	435	520

6.35/11kV Screened ABC –Aerial Bundled Cables to AS/NZS 3599.1(AL/XLPE /CWS/HDPE)

Construction

Phase Conductor	Circular compacted stranded H68 aluminium to BS2627.
Conductor Screen	Extruded semi-conductive layer.
Insulation	XLPE.
Insulation Screen	Extruded semi-conductive layer.
Metallic Screen	Copper wire screen.
Separator	Semi-conductive swellable tape.
Outer Sheath	HDPE.
Support Conductor	Galvanized steel wires.
Assembly	Three XLPE insulated screened cores are bundled around the galvanized steel wires in a right hand lay.

6.35/11kV Screened ABC Dimensions

number of cores x nominal cross section	Nominal conductor diameter	Nominal insulation thickness	Nominal insulation screen thickness	Copper wire screen stranding	Nominal sheath thickness	Galvanized steel wire stranding	Nominal overall diameter	Weight	Continuous current rating, A		
									Still air	1m/s wind	2m/s wind
mm^2	mm	mm	mm	No/mm	mm	No/mm	mm	kg/km	A	A	A
Light duty screen											
3x35	6.9	3.4	0.8	25/0.85	1.8	7/2.00	54.1	1820	99	140	165
3x35	6.9	3.4	0.8	25/0.85	1.8	19/2.00	58.1	2130	100	145	165
3x50	8.1	3.4	0.8	25/0.85	1.8	19/2.00	60.4	2300	120	170	200
3x70	9.7	3.4	0.8	25/0.85	1.8	19/2.00	63.6	2570	150	215	250
3x95	11.4	3.4	0.8	25/0.85	1.8	19/2.00	67.0	2900	180	260	305
3x120	12.8	3.4	0.8	25/0.85	1.8	19/2.00	69.8	3190	205	300	355
3x150	14.2	3.4	0.8	25/0.85	1.9	19/2.00	73.0	3530	235	340	400
3x185	15.7	3.4	0.8	25/0.85	1.9	19/2.00	76.0	3890	265	390	460
Heavy duty screen											
3x35	6.9	3.4	0.8	40/0.85	1.8	7/2.00	54.1	2050	99	140	165
3x35	6.9	3.4	0.8	40/0.85	1.8	19/2.00	58.1	2360	100	145	165
3x50	8.1	3.4	0.8	23/1.35	1.8	19/2.00	62.4	2820	120	175	200
3x70	9.7	3.4	0.8	32/1.35	1.8	19/2.00	65.6	3440	150	215	250
3x95	11.4	3.4	0.8	39/1.35	1.8	19/2.00	69.0	4030	180	260	305
3x120	12.8	3.4	0.8	39/1.35	1.8	19/2.00	71.8	4320	205	300	355
3x150	14.2	3.4	0.8	39/1.35	1.9	19/2.00	75.0	4670	230	340	400
3x185	15.7	3.4	0.8	39/1.35	1.9	19/2.00	78.0	5020	265	390	460

12.7/22kV Screened ABC –Aerial Bundled Cables to AS/NZS 3599.1(AL/XLPE /CWS/HDPE)

Construction

Phase Conductor	Circular compacted stranded H68 aluminium to BS2627.
Conductor Screen	Extruded semi-conductive layer.
Insulation	XLPE.
Insulation Screen	Extruded semi-conductive layer.

Address: Technology Building, Tongbai Road, Zhongyuan District, Zhengzhou, Henan Province, China.
Mob:+86-186 2550 3172 Web: www.uni-fibercable.com E-mail: info@uni-fibercable.com

Metallic Screen	Copper wire screen.
Separator	Semi-conductive swellable tape.
Outer Sheath	HDPE.
Support Conductor	Galvanized steel wires.
Assembly	Three XLPE insulated screened cores are bundled around the galvanized steel wires in a right hand lay.

12.7/22kV Screened ABC Dimensions

number of cores x nominal cross section	Nominal conductor diameter	Nominal insulation thickness	Nominal insulation screen thickness	Copper wire screen stranding	Nominal sheath thickness	Galvanized steel wire stranding	Nominal overall diameter	Weight	Continuous current rating, A		
									Still air	1m/s wind	2m/s wind
mm^2	mm	mm	mm	No/mm	mm	No/mm	mm	kg/km	A	A	A
Light duty screen											
3x35	6.9	5.5	0.8	25/0.85	1.8	7/2.00	62.7	2280	100	140	165
3x35	6.9	5.5	0.8	25/0.85	1.8	19/2.00	66.7	2580	105	145	165
3x50	8.1	5.5	0.8	25/0.85	1.8	19/2.00	69.0	2780	125	170	200
3x70	9.7	5.5	0.8	25/0.85	1.9	19/2.00	72.6	3110	150	215	250
3x95	11.4	5.5	0.8	25/0.85	1.9	19/2.00	76.0	3460	180	260	300
3x120	12.8	5.5	0.8	25/0.85	2.0	19/2.00	79.2	3810	205	300	350
3x150	14.2	5.5	1.0	25/0.85	2.0	19/2.00	82.8	4230	230	340	395
3x185	15.7	5.5	1.0	25/0.85	2.1	19/2.00	86.2	4650	265	390	450
Heavy duty screen											
3x35	6.9	5.5	0.8	40/0.85	1.8	7/2.00	62.7	2510	100	140	165
3x35	6.9	5.5	0.8	40/0.85	1.8	19/2.00	66.7	2810	105	145	165
3x50	8.1	5.5	0.8	23/1.35	1.8	19/2.00	71.0	3300	125	175	200
3x70	9.7	5.5	0.8	32/1.35	1.9	19/2.00	74.6	3970	155	215	250
3x95	11.4	5.5	0.8	39/1.35	1.9	19/2.00	78.0	4600	180	260	305
3x120	12.8	5.5	0.8	39/1.35	2.0	19/2.00	81.2	4950	205	300	350
3x150	14.2	5.5	1.0	39/1.35	2.0	19/2.00	84.8	5360	230	340	395
3x185	15.7	5.5	1.0	39/1.35	2.1	19/2.00	88.2	5790	265	390	450

Address: Technology Building, Tongbai Road, Zhongyuan District, Zhengzhou, Henan Province, China.
Mob:+86-186 2550 3172 Web: www.uni-fibercable.com E-mail: info@uni-fibercable.com