



• Application

SANS 1713 MV Aerial Bundled Cable (ABC) is suited for power grid transformation in urban, forest, and coastal regions, as well as for overhead power transmission. It offers enhanced efficiency, reliability, and cost-effectiveness. These cables are designed to withstand voltage levels of 10kV and below, including variants such as 3.8/6.6kV, 6.35/11kV, 12.7/22kV, and 19/33kV, among others. The ABC conductor used is aluminum and has a circular shape. The insulation material mostly used is XPLE. The material used for inner and outer semiconductor is compound, but the bedding material is semi-conducting. The screen comprises a copper tape or a copper wire. Moreover, the outer sheath is HDPE.

• Performance

Electrical performance: 3.8/6.6kV, 6.35/11kV, 12.7/22kV, 19/33kV
 Chemical performance: chemical, UV&oil resistance
 Mechanical performance: Minimum bending radius: 10 x cable diameter

• Construction

The conductor is aluminum, featuring a circular configuration. XPLE is predominantly employed as the insulation material. The inner and outer semiconductor materials are typically compound, while the bedding material is semi-conductive. The screening is comprised of either copper tape or copper wire. Additionally, the outer sheath is constructed from HDPE.

Conductor: Circular aluminum stranded conductor

Phase Core Identification: Color strip, rib, or numbering

Core: 3 Core

Insulated: XLPE insulated

Screened: Individually screened with copper tape

Sheathed: Flame retardant PVC, or flame retardant PVC sheathed with steel catenary

• Specification

-SANS 1713: Medium-voltage aerial bundled conductors with stranded aluminium conductors insulated with cross-linked polyethylene (XLPE)

• Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.

CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

• Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rheinland and CCS.



• National Green Factory



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China.

We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

● Technical Parameters

6.6kV ABC Cable Specification								
Phase Core								
Conductor Size	mm ² nom	35	50	70	95	120	150	185
Conductor Diameter	mm app.	7.15	8.25	9.95	11.8	13.1	14.8	15.95
Insulation Diameter	mm app.	15.4	16.5	18.2	20.1	21.4	22.7	24.2
Core Sheath Diameter	mm app.	20.5	21.6	23.5	25.5	26.8	28.1	29.9
Catenary (Support Core)								
Conductor Size	mm ² nom	50	50	50	50	70	70	70
Conductor Diameter	mm app.	9	9	9	9	10.8	10.8	10.8
Insulation Diameter	mm app.	11.5	11.5	11.5	11.5	13.3	13.3	13.3
Maximum Tensile Strength and Pulling Force of Catenary	kN	26	26	26	26	37	37	37
Cable								
Cable Diameter	mm app.	44	47	51	55	58	61	65
Cable Weight	kg/m app.	2.05	2.24	2.6	3.01	3.51	3.85	4.33
Gross Weight (500m)	kg app.	915	973	1,079	1,204	1,354	1,454	1,599
Bending Radius	mm min.	636	669	720	776	841	880	926
Current Rating								
In air	Amps	150	185	230	280	325	370	430
Resistance								
D.C. @ 20°C	W/km max	0.868	0.641	0.443	0.32	0.253	0.206	0.164
A.C. @ 90°C	W /km max	1.113	0.822	0.568	0.411	0.325	0.265	0.211
Reactance	W /km	0.136	0.124	0.121	0.114	0.111	0.106	0.103
Impedance	W /km	1.121	0.832	0.581	0.426	0.342	0.284	0.233
Short Circuit Ratings								
Symmetrical	kA (1 sec)	3	4	5.8	8	10.2	12.5	15.7
Earth Fault	kA (1 sec)	1.5	1.6	1.7	1.9	2	2.1	2.3

● Technical Parameters

11kv ABC Cable Specification								
Phase Core								
Conductor Size	mm ² nom	35	50	70	95	120	150	185
Conductor Diameter	mm app.	7.15	8.25	9.95	11.8	13.1	14.8	16.35
Insulation Diameter	mm app.	17.3	18.4	20.1	21.9	23.2	24.5	26.1
Core Sheath Diameter	mm app.	22.5	23.6	25.3	27.4	28.7	30.2	31.7
Catenary (Support Core)								
Conductor Size	mm ² nom	50	50	50	50	70	70	70
Conductor Diameter	mm app.	9	9	9	9	10.8	10.8	10.8
Insulation Diameter	mm app.	11.5	11.5	11.5	11.5	13.3	13.3	13.3
Maximum Tensile Strength and Pulling Force of Catenary	kN	26	26	26	26	37	37	37
Cable								
Cable Diameter	mm app.	49	51	55	59	62	65	69
Cable Weight	kg/m app.	2.31	2.52	2.85	3.28	3.61	3.99	4.43
Gross Weight (500m)	kg app.	993	1,055	1,155	1,285	1,382	1,496	1,628
Bending Radius	mm min.	691	724	775	831	896	935	981
Current Rating								
In air	Amps	150	185	230	280	325	370	430
Resistance								
D.C. @ 20°C	W/km max	0.868	0.641	0.443	0.32	0.253	0.206	0.164
A.C. @ 90°C	W /km max	1.113	0.822	0.568	0.411	0.325	0.265	0.211
Reactance	W /km	0.136	0.124	0.121	0.114	0.111	0.106	0.103
Impedance	W /km	1.121	0.832	0.581	0.426	0.342	0.284	0.233
Short Circuit Ratings								
Symmetrical	kA (1 sec)	3	4	5.8	8	10.2	12.5	15.7
Earth Fault	kA (1 sec)	1.5	1.6	1.7	1.9	2	2.1	2.3

● Technical Parameters

22kV ABC Cable Specification								
Phase Core								
Conductor Size	mm ² nom	35	50	70	95	120	150	185
Conductor Diameter	mm app.	7.15	8.25	9.95	11.8	13.1	14.8	16.35
Insulation Diameter	mm app.	21.6	22.7	24.4	26.2	27.5	29.2	30.8
Core Sheath Diameter	mm app.	27	28.1	30	31.9	33.4	35.1	36.8
Catenary (Support Core)								
Conductor Size	mm ² nom	50	50	50	50	70	70	70
Conductor Diameter	mm app.	9	9	9	9	10.8	10.8	10.8
Insulation Diameter	mm app.	11.5	11.5	11.5	11.5	13.3	13.3	13.3
Maximum Tensile Strength and Pulling Force of Catenary	kN	26	26	26	26	37	37	37
Cable								
Cable Diameter	mm app.	58	61	65	69	72	76	80
Cable Weight	kg/m app.	2.96	3.19	3.61	4.05	4.63	5.06	5.61
Gross Weight (500m)	kg app.	1 188	1 257	1 383	1 514	1 690	1 819	1 984
Bending Radius	mm min.	821	854	905	960	1025	1076	1123
Current Rating								
In air	Amps	150	185	230	280	325	370	430
Resistance								
D.C. @ 20°C	W/km max	0.868	0.641	0.443	0.32	0.253	0.206	0.164
A.C. @ 90°C	W /km max	1.113	0.822	0.568	0.411	0.325	0.265	0.211
Reactance	W /km	0.136	0.124	0.121	0.114	0.111	0.106	0.103
Impedance	W /km	1.121	0.832	0.581	0.426	0.342	0.284	0.233
Short Circuit Ratings								
Symmetrical	kA (1sec)	3	4	5.8	8	10.2	12.5	15.7
Earth Fault	kA (1sec)	1.5	1.6	1.7	1.9	2	2.1	2.3

● Technical Parameters

33kV ABC Cable Specification							
Phase Core							
Conductor Size	mm ² nom	50	70	95	120	150	185
Conductor Diameter	mm app.	8.25	9.95	11.8	13.1	14.8	16.35
Insulation Diameter	mm app.	27.8	29.5	31.4	32.7	34	35.5
Core Sheath Diameter	mm app.	33.7	35.4	37.4	38.7	40.2	41.8
Catenary (Support Core)							
Conductor Size	mm ² nom	50	50	50	70	70	70
Conductor Diameter	mm app.	9	9	9	10.8	10.80	10.8
Insulation Diameter	mm app.	11.5	11.5	11.5	13.3	13.3	13.3
Maximum Tensile Strength and Pulling Force of Catenary	kN	26	26	26	37	37	37
Cable							
Cable Diameter	mm app.	73	76	81	84	87	90
Cable Weight	kg/m app.	4.12	4.53	5.06	5.37	5.82	6.33
Gross Weight (500m)	kg app.	1,535	1,658	1,819	1,910	2,046	2,200
Bending Radius	mm min.	1007	1058	1114	1179	1218	1264
Current Rating							
In air	Amps	185	230	280	325	370	430
Resistance							
D.C. @ 20°C	W/km max	0.641	0.443	0.32	0.253	0.206	0.164
A.C. @ 90°C	W/km max	0.822	0.568	0.411	0.325	0.265	0.211
Reactance	W /km	0.124	0.121	0.114	0.111	0.106	0.103
Impedance	W /km	0.832	0.581	0.426	0.342	0.284	0.233
Short Circuit Ratings							
Symmetrical	kA (1 sec)	4	5.8	8	10.2	12.5	15.7
Earth Fault	kA (1 sec)	1.6	1.7	1.9	2	2.1	2.3