



Overview

The ASTM B231 35kV Aerial Cable AAC (All Aluminum Conductor) with a 3-layer Track-resistant XLPE represents a pinnacle of aerial cable technology, meticulously crafted to meet the rigorous demands of overhead primary and secondary distribution systems. Manufactured to adhere to stringent ASTM standards, this cable boasts a robust construction engineered for exceptional performance and reliability across diverse applications.

Application

Designed for use in overhead primary and secondary distribution systems rated at 35 kV (nominal), this aerial cable is tailored to prevent faults arising from contact or spatial limitations. Its innovative 3-layer Track-resistant XLPE system fortifies its resilience against environmental factors, making it an indispensable asset for ensuring uninterrupted power delivery and safeguarding against system outages, damage, or fires caused by external elements.

Tree Wire: Whether deployed in tree wire power systems or spacer cable configurations, this cable offers unparalleled protection against short-circuits and flashovers, ensuring seamless operation even in challenging environments.

Spacer Cable: Installed with precision in diamond configurations using spacer hardware, this cable system optimizes space utilization while maintaining uniform spacing, making it an ideal choice for narrow rights-of-way or corridors.

Construction

Crafted with precision, this cable features a single AAC conductor and a sophisticated 3-layer Track-resistant XLPE system:

Conductor: Comprising an All Aluminum Conductor (AAC) of 1350-H19 grade, compactly stranded to ensure optimal performance and durability.

Conductor Shield: An extruded semiconducting thermoplastic shield meticulously bonded to the conductor, ensuring efficient power transmission and protection against external factors.

Inner and Outer Covering: The inner layer comprises crosslinked polyethylene (XLPE), offering enhanced insulation properties, while the outer layer consists of Track-resistant XLPE, providing superior resistance to environmental stresses such as tracking and sunlight exposure. All layers are seamlessly bonded together, ensuring long-term performance and reliability.

Specification

These cables are manufactured and tested to meet or exceed the following standards:

- ASTM B230 – Aluminum 1350–H19 Wire for Electrical Purposes
- ASTM B231 – Concentric-Lay-Stranded Aluminum 1350 Conductors
- ASTM B400 – Compact Round Concentric-Lay-Stranded Conductors
- ASTM D1248 – Polyethylene Plastics Extrusion Materials for Wire and Cable
- ICEA S-121-733 – Tree Wire and Messenger Supported Spacer Cable

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

Conductor Size	Conductor Stranding	Conductor Dia.	Conductor Shield Thickness	Covering Thickness Inner Layer	Covering Thickness Outer Layer	Overall Dia.	Conductor Weight	Total Weight	Rated Strength
AWG or kcmil		inch	inch	inch	inch	inch	lb/FT	lb/FT	lb/FT
1/0	7	0.336	0.015	0.175	0.125	0.966	98.9	380	1990
2/0	7	0.376	0.015	0.175	0.125	1.006	124.8	424	2510
3/0	7	0.423	0.015	0.175	0.125	1.053	157.2	476	3040
4/0	7	0.475	0.015	0.175	0.125	1.105	198.4	540	3830
266.8	19	0.537	0.015	0.175	0.125	1.167	250.1	619	4970
336.4	19	0.603	0.015	0.175	0.125	1.233	315.5	712	6150
397.5	19	0.659	0.015	0.175	0.125	1.289	372.9	794	7110
477	19	0.722	0.015	0.175	0.125	1.352	446.8	895	8360
556.5	37	0.780	0.020	0.175	0.125	1.420	521.3	1005	9940
636	37	0.835	0.020	0.175	0.125	1.475	596.1	1104	11400
795	37	0.932	0.020	0.175	0.125	1.572	745.3	1295	13900

NOTES

1. Dimensions and weights are subject to standard manufacturing tolerances and are subject to change without notice.

2. Cables are manufactured, tested and marked to meet or exceed the requirements in ICEA S-121-733 for tree wire and messenger supported spacer cable suitable for installation and use in systems rated 35 kV.