Application

The All Aluminum Alloy Conductor (AAAC) serves as a vital component in overhead power transmission systems, predominantly employed in medium and high transmission lines across varying voltage levels. Its versatility extends to diverse geographical landscapes, including regions with large rivers, heavy ice conditions, and other challenging terrains, where AAAC has become a preferred choice for ensuring reliable power distribution.

Advantages

Excellent corrosion resistance: In comparison to traditional ACSR conductors, AAAC demonstrates superior resistance to corrosion, ensuring prolonged service life and reliability in harsh environmental conditions.
Enhanced strength-to-weight ratio: AAAC outperforms ACSR in terms of strength-to-weight ratio, resulting in improved electrical properties and overall performance, making it an ideal solution for high-demand transmission applications.

Characteristics

The AAAC conductor comprises aluminum alloy wires, meeting stringent standards such as NF C 34-125 and EN50182, belonging to the ASTER family. This ensures adherence to precise electrical and mechanical characteristics, guaranteeing optimal performance and durability in overhead power transmission applications.

Construction

AAAC conductors are meticulously constructed from aluminum alloy wires arranged in a concentric-lay-stranded configuration. This construction method ensures uniformity and reliability, contributing to efficient energy transfer and minimal power loss during transmission.

Specifications

-NF C 34-125 EN50182 Standard Aluminum Alloy Conductors

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 Rhineland 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

Code Name	Calculated Cross Section Area	No./Dia. of Stranding Wires	Nominal Overall Diameter	Nominal Weight	Breaking Load	Max.D.C. Resistance at 20℃
-	mm^2	No./mm	mm	kg/km	kN	Ω/km
ASTER 22	21.99	7/2.0	6	60.2	710	1.5
ASTER 34.4	34.36	7/2.5	7.5	94	1105	0.958
ASTER 54.6	54.55	7/3.15	9.45	149	1155	0.603
ASTER 75.5	75.54	19/2.25	11.25	208	2430	0.438
ASTER 117	116.98	19/2.8	14	322	3765	0.283
ASTER 148	148.01	19/3.15	15.75	407	4765	0.224
ASTER 181.6	181.62	37/2.5	17.5	500	5845	0.183
ASTER 228	227.83	37/2.8	19.6	627	7340	0.146
ASTER 288	288.34	37/3.15	22.05	794	9280	0.115
ASTER 366	366.22	37/3.55	24.85	1009	11785	0.0905
ASTER 570	570.22	61/3.45	31.05	1574	18360	0.0583
ASTER 851	850.66	91/3.45	37.95	2354	27390	0.0391
ASTER 1144	1143.51	91/4.0	44	3164	36260	0.0292
ASTER 1600	1595.93	127/4.0	52	4425	50640	0.0206