



• Application

The All Aluminum Alloy Conductor (AAAC) plays a pivotal role in overhead power transmission systems, predominantly utilized 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 go-to choice for ensuring reliable power distribution.

• Advantages

The bare-core stranded AAAC conductor is meticulously crafted from heat-treated aluminum-magnesium-silicon alloy wires. Notably, two types of alloy wires, designated type A and type B, exhibit distinct mechanical and electrical properties:

Aluminum alloy type B, designated A2 as per IEC 60104

Aluminum alloy type A, designated A3 as per IEC 60104

• Construction

AAAC conductors are engineered from aluminum alloy 6201 wires, featuring a concentrically stranded design with successive layers having an opposite direction of lay. This construction method, with the outermost layer being right-handed, ensures optimal performance and durability in overhead power transmission applications, contributing to reliable electricity distribution across vast distances.

• Specifications

-IEC 61089 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

AAAC (Characteristics of A2 Conductor) IEC 61089							
Nominal Cross Section Area	Calculated Cross Section Area	Number of Wires	Diameter		Weight	Rated Strength	Max.D.C. Resistance at 20℃
			Wire	Cond.			
mm ²	mm ²		mm	mm	kg/km	kN	Ω/km
16	18.4	7	1.83	5.49	50.4	5.43	1.7896
25	28.8	7	2.29	6.86	78.7	8.49	1.1453
40	46	7	2.89	8.68	125.9	13.58	0.7158
63	72.5	7	3.63	10.9	198.3	21.39	0.4545
100	115	19	2.78	13.9	316.3	33.95	0.2877
125	144	19	3.1	15.5	395.4	42.44	0.2302
160	184	19	3.51	17.6	506.1	54.32	0.1798
200	230	19	3.93	19.6	632.7	67.91	0.1439
250	288	19	4.93	22	790.8	84.88	0.1151
315	363	37	3.53	24.7	998.9	106.95	0.0916
400	460	37	3.98	27.9	1268.4	135.81	0.0721
450	518	37	4.22	29.6	1426.9	152.79	0.0641
500	575	37	4.45	31.2	1585.5	169.76	0.0577
560	645	61	3.67	33	1778.4	190.14	0.0516
630	725	61	3.89	35	2000.7	213.9	0.0458
710	817	61	4.13	37.2	2254.8	241.07	0.0407
800	921	61	4.38	39.5	2540.6	271.62	0.0361
900	1036	91	3.81	41.8	2861.1	305.58	0.0321
1000	1151	91	4.01	44.1	3179	339.53	0.0289
1120	1289	91	4.25	46.7	3560.5	380.27	0.0258
1250	1439	91	4.49	49.4	3973.7	424.41	0.0231

● Technical Parameters

AAAC (Characteristics of A3 Conductor) IEC 61089							
Nominal Cross Section Area	Calculated Cross Section Area	Number of Wires	Diameter		Weight	Rated Strength	Max.D.C. Resistance at 20℃
			Wire	Cond.			
mm ²	mm ²		mm	mm	kg/km	kN	Ω/km
16	18.6	7	1.84	5.52	50.8	6.04	1.7896
25	29	7	2.3	6.9	79.5	9.44	1.1453
40	46.5	7	2.91	8.72	127.1	15.1	0.7158
63	73.2	7	3.65	10.9	200.2	23.06	0.4545
100	116	19	2.79	14	319.3	37.76	0.2877
125	145	19	2.12	15.6	399.2	47.2	0.2302
160	186	19	3.53	17.6	511	58.56	0.1798
200	232	19	3.95	19.7	638.7	73.2	0.1439
250	390	19	4.41	23.1	798.4	91.5	0.1151
315	366	37	3.55	24.8	1008.4	115.29	0.0916
400	465	37	4	28	1280.5	146.4	0.0721
450	523	37	4.24	29.7	1440.5	164.7	0.0641
500	581	37	4.47	31.3	1600.6	183	0.0577
560	651	61	3.69	33.2	1795.3	204.96	0.0516
630	732	61	3.91	35.2	2019.8	230.58	0.0458
710	825	61	4.15	37.3	2276.2	259.86	0.0407
800	930	61	4.4	39.6	2564.8	292.8	0.0361
900	1046	91	3.83	42.1	2888.3	320.4	0.0321
1000	1162	91	4.03	44.4	3209.3	366	0.0289
1120	1301	91	4.27	46.9	3954.4	409.92	0.0258