



• Application

The All Aluminum Alloy Conductor (AAAC) serves as a cornerstone in overhead power transmission, finding extensive application in medium and high transmission lines across diverse voltage levels. Its versatility is evident in its widespread usage in power lines traversing challenging terrains such as large rivers, regions prone to heavy ice accumulation, and other unique geographical features, where reliable power distribution is essential for communities and industries.

• Advantages

Superior corrosion resistance: Compared to traditional ACSR conductors, AAAC demonstrates excellent corrosion resistance, ensuring longevity and reliability in harsh environmental conditions.

Enhanced strength-to-weight ratio: AAAC surpasses ACSR in strength-to-weight ratio, resulting in improved electrical properties and overall performance, making it a preferred choice for high-demand transmission applications.

• Construction

The AAAC Conductor comprises aluminum alloy wires, adhering to stringent standards specifying electrical and mechanical characteristics. These standards outline the properties of round wire concentric lay overhead electrical stranded conductors made from combinations of the following aluminum alloy wires:

Aluminum alloy AA6101-T81, designated A2 in accordance with CAN/CSA-C60104.

Aluminum alloy AA6101-T83, designated A4 in accordance with CAN/CSA-C60104.

• Specifications

-CAN/CSA-C49 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 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

Size	Calculated Cross Section Area	Stranding Wires		Nominal Diameter of Conductor	Nominal Weight	Tensile Strength	D.C.Resistance. at 20°C
kcmil or AWG	mm ²	No.	Dia.	mm	kg/km	kN	Ω/km
6	15.30	7	1.67	5.01	41.78	4.667	2.154
4	24.34	7	2.1	6.31	66.46	7.424	1.354
3	30.69	7	2.36	7.09	83.79	9.360	1.074
2	38.70	7	2.65	7.96	105.7	11.80	0.8516
1	48.81	7	2.98	8.94	133.3	14.89	0.6752
1/0	61.59	7	3.35	10.0	168.1	18.78	0.5351
2/0	77.62	7	3.76	11.3	211.9	23.68	0.4246
3/0	97.86	7	4.22	12.7	267.2	29.85	0.3368
4/0	123.4	7	4.74	14.2	336.9	37.64	0.2671
250	145.8	19	3.13	15.6	400.0	44.47	0.2271
267	155.6	7	5.32	16	424.8	47.46	0.2118
267	155.6	19	3.23	16.1	426.9	47.46	0.2128
300	175.0	19	3.42	17.1	480.0	53.36	0.1893
336	196.2	19	3.63	18.1	538.2	59.84	0.1688
350	204.1	19	3.7	18.5	560.0	62.26	0.1622
398	231.8	19	3.94	19.7	636.0	70.71	0.1429
400	233.3	19	3.95	19.8	640.0	71.15	0.1420
450	262.4	19	4.19	21.0	720.0	80.04	0.1262
477	278.2	19	4.32	21.6	763.2	84.85	0.1190
500	291.6	19	4.42	22.1	800.0	88.94	0.1136
550	320.8	37	3.32	23.3	882.1	97.83	0.1035
557	324.5	19	4.66	23.3	890.4	98.99	0.1020
600	349.9	37	3.47	24.3	962.3	106.7	0.09486
636	370.9	37	3.57	25.0	1020	113.1	0.08949
650	379.1	37	3.61	25.3	1042	115.6	0.08757
700	408.2	37	3.75	26.2	1123	124.5	0.08131
716	417.3	37	3.79	26.5	1147	127.3	0.07955
750	437.4	37	3.88	27.2	1203	133.4	0.07589
795	463.6	37	3.99	28.0	1275	141.4	0.07160
800	466.6	37	4.01	28.0	1283	142.3	0.07115
875	510.0	37	4.19	29.3	1403	155.6	0.06509
900	524.9	37	4.25	29.7	1443	160.1	0.06324
927	540.7	37	4.31	30.2	1487	164.9	0.06139

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		No.	Dia.				
kcmil or AWG	mm ²	-	mm	mm	kg/km	kN	Ω/km
954	556.4	37	4.38	30.6	1530	169.7	0.05966
1000	583.2	37	4.48	31.4	1604	177.9	0.05692
1034	602.7	37	4.55	31.9	1657	183.8	0.05507
1100	641.5	61	3.66	32.9	1767	195.7	0.05182
1113	649.1	61	3.68	33.1	1788	198.0	0.05121
1193	695.5	61	3.81	34.3	1915	212.1	0.04780
1200	699.8	61	3.82	34.4	1927	213.4	0.04750
1272	741.8	61	3.93	35.4	2043	226.3	0.04481
1300	758.1	61	3.98	35.8	2088	231.2	0.04385
1352	788.2	61	4.06	36.5	2171	240.4	0.04218
1400	816.5	61	4.13	37.2	2249	249.0	0.04072
1431	834.5	61	4.17	37.6	2298	254.5	0.03983
1511	880.9	61	4.29	38.6	2426	268.7	0.03774
1590	927.3	61	4.40	39.6	2554	282.8	0.03585
1600	933.1	61	4.41	39.7	2570	284.6	0.03563
1700	991.4	61	4.55	40.9	2730	302.4	0.03353
1800	1050	91	3.83	42.2	2894	320.2	0.03170
2000	1166	91	4.04	44.4	3216	355.7	0.02853
2250	1312	91	4.28	47.1	3618	400.2	0.02536
2436	1420	91	4.46	49.0	3916	433.2	0.02343
2500	1458	91	4.52	49.7	4020	444.7	0.02283
2750	1604	91	4.74	52.1	4422	489.2	0.02075
3000	1750	91	4.95	54.4	4824	533.6	0.01902
3008	1754	91	4.95	54.5	4836	535.0	0.01897
3500	2041	91	5.34	58.8	5628	622.6	0.01630
3640	2123	91	5.45	59.9	5853	647.5	0.01568