

SPECIFICATIONS AND STANDARDS

AAAC bare conductors meets or exceeds the following ASTM specifications :

- B-398 Aluminum Alloy, 6201-T81 Wire for Electrical Purposes
- B-399 Concentric -Lay-Stranded 6201-T81 Aluminum Alloy Conductors

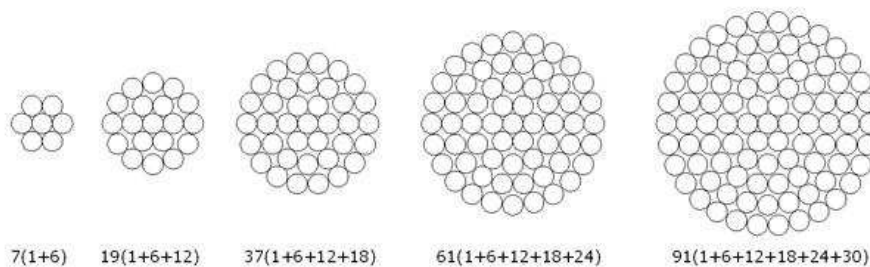


APPLICATIONS

All-Aluminum Alloy Conductors (AAAC) is recommended for use as bare overhead conductor for primary and secondary distribution and in cases where high strength-to-weight ratio is required. It has a good corrosion resistance due to being composed out of aluminum alloy wires only, minimum conductivity of 52% IACS, high breaking strength per weight and normal creep values. AAAC has the highest strength per weight among all bare overhead conductors.

Note:

- Resistance is calculated using ASTM standard increments of stranding and metal conductivity of 52% IACS, AC resistance at 60Hz.
- Current ratings are based on 80 °C conductor temperature, 50 °C ambient, 0.6meter/second wind, 1200watts/sq.meter solar heat radiation, 0.5 coefficients of emissivity and absorption.



This catalogue shows the most common sizes of conductor but other sizes, to any recognized standards or customer specification can also be supplied. AAAC insulated with XLPE or PVC can also be supplied as per customer's requirements.



AAAC conductors manufactured to ASTM B-399.

Code word	Size (kcmil)	Strand -ing	Diameter (ins.)		Weight per 1000 ft. (Lbs)	Rated strengt h (Lbs)	Resistance Ω /1000 ft.		Allowable ampacity + (Amps)	ACSR with equiv.diam		Approx EC cond. with equivalent resistance
			Individual wire	Complete conductor			DC at 20°C	AC at 75°C		Size	Stranding (AL/STL)	
Akron	30.58	7	0.0661	0.198	28.5	1110	.659	.785	107	6	6/1	6
Alton	48.69	7	0.0834	0.250	45.4	1760	.414	.493	143	4	6/1	4
Ames	77.47	7	0.1052	0.316	72.2	2800	.260	.310	191	2	6/1	2
Azusa	123.3	7	0.1327	0.398	115.0	4460	.163	.195	256	1/0	6/1	1/0
Anaheim	155.4	7	0.1490	0.447	144.9	5390	.130	.154	296	2/0	6/1	2/0
Amherst	195.7	7	0.1672	0.502	182.5	6790	.103	.123	342	3/0	6/1	3/0
Alliance	246.9	7	0.1878	0.563	230.2	8560	.0816	.0973	395	4/0	6/1	4/0
Butte	312.8	1	0.1283	0.642	291.7	11000	.0644	.0769	460	266.8	26/7	266.8
Canton	394.5	19	0.1441	0.720	367.9	13300	.0511	.0610	532	336.4	26/7	336.4
Cairo	465.4	1	0.1565	0.783	434.0	15600	.0433	.0518	590	397.5	26/7	397.5
Darien	559.5	19	0.1716	0.858	521.7	18800	.0360	.0431	663	477.0	26/7	477.0
Elgin	652.4	1	0.1853	0.927	608.4	21900	.0309	.0371	729	556.5	26/7	556.5
Flint	740.8	37	0.1415	0.990	690.8	24400	.0272	.0327	790	636.0	26/7	636.0
Greeley	927.2	3	0.1583	1.108	864.6	30500	.0217	.0263	908	795.0	26/7	795.0

+Ampacity based on 75°C conductor temperature, 25°C ambient temperature, 2 ft/sec. wind in sun, emissivity 0.5, 52.5% conductivity.