



# AAAC -- ALUMINUM ALLOY 6201 CONDUCTOR



## APPLICATIONS

Bare AAAC conductors are intended for use as overhead primary or secondary distribution conductor. Since these conductors are manufactured with high strength aluminum, they are designed for longer spans and lower sag as compared to AAC (with 1350 aluminum). Abrasion resistance is also improved as compared to AAC since AAAC uses a harder aluminum alloy. This type of conductor is suitable for installation in saltwater environments due to the improved corrosion resistance. The DC resistance of an AAAC conductor is approximately the same as for an ACSR conductor of the same diameter.

## CONSTRUCTION

Aluminum alloy 6201-T81 high strength wires concentrically stranded.

## STANDARDS

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

- ASTM B398 – Aluminum-Alloy 6201-T81 and 6201-T83 Wire for Electrical Purposes
- ASTM B399 – Concentric-Lay-Stranded Aluminum-Alloy 6201-T81 Conductors

Code Word	Size (kcmil)	Stranding	ACSR of Equivalent Diameter		Wire Diameter (in)	Overall Diameter (in)	Cross-Sectional Area (sq in)	Weight (lb/1000 ft)	Rated Strength (lbf)	DC Resistance @ 20 deg C (ohm/1000ft)	Ampacity (A)
			Size (AWG or kcmil)	Stranding (Al/St)							
Akron	30.58	7	6	6/1	0.0661	0.198	0.0240	28.5	1110	0.659	107
Alton	48.69	7	4	6/1	0.0834	0.250	0.0382	45.4	1760	0.414	143
Ames	77.47	7	2	6/1	0.1052	0.316	0.0608	72.2	2800	0.260	191
Azusa	123.3	7	1/0	6/1	0.1327	0.398	0.0968	114.9	4270	0.163	256
Anaheim	155.4	7	2/0	6/1	0.1490	0.447	0.1221	144.9	5390	0.130	296
Amherst	195.7	7	3/0	6/1	0.1672	0.502	0.1537	182.5	6790	0.103	342
Alliance	246.9	7	4/0	6/1	0.1878	0.563	0.9139	230.2	8560	0.0816	395
Butte	312.8	19	266.8	26/7	0.1283	0.642	0.2456	291.6	10500	0.0644	460
Canton	394.5	19	336.4	26/7	0.1441	0.721	0.3098	367.9	13300	0.0511	533
Cairo	465.4	19	397.5	26/7	0.1565	0.783	0.3655	433.9	15600	0.0433	590
Darien	559.5	19	477	26/7	0.1716	0.858	0.4394	521.7	18800	0.0360	663
Elgin	652.4	19	556.5	26/7	0.1853	0.927	0.5124	608.3	21900	0.0309	729
Flint	740.8	37	636	26/7	0.1415	0.991	0.5818	690.8	24400	0.0272	790
Greeley	927.2	37	795	26/7	0.1583	1.108	0.7282	864.6	30500	0.0217	908

## NOTES

- 1) Dimensions and weights are subject to standard manufacturing tolerances and are subject to change without notice.
- 2) Resistance is calculated using metal conductivity of 52.5% IACS for 6201.
- 3) Ampacities are based on 75°C conductor temperature, 25°C ambient, 2 ft/s wind, full sun, an emissivity of 0.5 and a coefficient of solar absorption of 0.5, at sea level.