

AAAC - All Aluminum Alloy (6201) Conductor

APPLICATION: Bare overhead conductor used for primary and secondary transmission and distribution. Designed utilizing a high-strength aluminum alloy to achieve a high strength-to-weight ratio; better sag characteristics. AAAC has higher resistance to corrosion than ACSR.

CONSTRUCTION: Standard 6201-T81 high strength aluminum conductors, conforming to ASTM specification B399, are concentric-lay- stranded, similar in construction and appearance to 1350 grade aluminum conductors. Conductors of the 6201-T81 alloy have a greater resistance to abrasion than conductors of 1350-H19 grade aluminum.

SPECIFICATIONS: AAAC bare conductor meets or exceeds the following ASTM specifications:

B-398 Aluminum Alloy 6201-T81 and 6201-T83 Wire for Electrical Purposes

B-399 Concentric-Lay-Stranded Aluminum Alloy 6201-T81 Conductors.

Code Word	Conductor Size	No. of Wires	Diameter		Cross Sectional Area	Weight	Rated Breaking Strength	Resistance**		Ampacity*
			Individual Strand	Complete Cable				DC @ 20°C	AC @ 75°C	
	kcmil		inches	inches	Sq. In.	lbs/kft	lbs	Ohms/kft	Ohms/kft	amps
Akron	30.58	7	0.0661	0.1980	0.0240	29	1,110	0.6588	0.7850	107
Alton	48.69	7	0.0834	0.2500	0.0382	45	1,760	0.4139	0.4930	143
Ames	77.47	7	0.1052	0.3160	0.0608	72	2,800	0.2601	0.3100	191
Azusa	123.3	7	0.1327	0.3980	0.0968	115	4,270	0.1635	0.1950	256
Anaheim	155.4	7	0.1490	0.4470	0.1221	145	5,390	0.1297	0.1540	296
Amherst	195.7	7	0.1672	0.5020	0.1537	183	6,790	0.1030	0.1230	342
Alliance	246.9	7	0.1878	0.5630	0.1939	230	8,560	0.0816	0.0973	395
Butte	312.8	19	0.1283	0.6420	0.2456	292	10,500	0.0644	0.0769	460
Canton	394.5	19	0.1441	0.7210	0.3098	368	13,300	0.0511	0.0610	532
Cairo	465.4	19	0.1565	0.7830	0.3655	434	15,600	0.0433	0.0518	590
Darien	559.5	19	0.1716	0.8580	0.4394	522	18,800	0.0360	0.0420	663
Elgin	652.4	19	0.1853	0.9270	0.5124	608	21,900	0.0309	0.0371	729
Flint	740.8	37	0.1414	0.9910	0.5818	691	24,400	0.0272	0.0327	790
Greeley	927.2	37	0.1583	1.1080	0.7282	865	30,500	0.0217	0.0263	908

All values are nominal and subject to correction

* Current ratings are based on 75°C conductor temperature, 25°C ambient, 2ft/s wind, in sun, .05 coefficients of emissivity and absorption.

** Resistance is calculated using ASTM standard increments of stranding and metal conductivity of 52.5% IACS, AC resistance at 60 Hz.