

AAAC-6201 All Aluminum Alloy Conductor



A Viakable Company

CME Wire and Cable offers AAAC concentric-lay-stranded conductors in single and multi-layer conductor designs to optimize the strength and the current carrying capacity for transmission and distribution projects for which AAC conductors do not provide the required strength and ACSR conductors are either not required or suitable.

Construction

AAAC is a homogenous concentric-lay-stranded conductor made from round aluminum 6201-T81 wires. AAAC conductors are available in single and multi-layer constructions. These choices provide the necessary strength and the current carrying capacity for given applications.

Specifications

AAAC conductors are manufactured in accordance with the ASTM specifications B398 and B399.

Features

The high strength to weight ratio provided by the 6201-T81 alloy makes the homogeneous construction of AAAC

conductors a preferred choice for transmission and distribution projects where:

- conductor with more strength than AAC is required;
- conductor with comparable strength than ACSR is preferred; and
- higher corrosion resistance than ACSR is essential.



ALUMINUM CONDUCTOR

Technical Data

AAAC-6201

Code Word	Conductor Size kcmil	Conductor Area in ²	Stranding		Nominal Diameter in	ACSR with Equal Diameter		Physical Properties		
			Number	Diameter in		Size	Stranding	Rated Strength lb	Nominal Mass lb	Approx. AAC Size of Equiv. Resistance AWG/kcmil
Akron	30.58	0.0240	7	0.0661	0.198	6	6/1	1,110	28.5	6
Alton	48.69	0.0382	7	0.0834	0.250	4	6/1	1,760	45.4	4
Ames	77.47	0.0608	7	0.1052	0.316	2	6/1	2,800	72.2	2
Azusa	123.3	0.0968	7	0.1327	0.398	1/0	6/1	4,270	114.9	1/0
Anaheim	155.4	0.1221	7	0.1490	0.447	2/0	6/1	5,390	144.9	2/0
Amherst	195.7	0.1537	7	0.1672	0.502	3/0	6/1	6,790	182.5	3/0
Alliance	246.9	0.1939	7	0.1878	0.563	4/0	6/1	8,560	230.2	4/0
Butte	312.8	0.2456	19	0.1283	0.642	266.8	26/7	10,500	291.6	266.8
Canton	394.5	0.3099	19	0.1441	0.721	336.4	26/7	13,300	367.9	336.4
Cairo	465.4	0.3655	19	0.1565	0.783	397.5	26/7	15,600	433.9	397.5
Darien	559.5	0.4394	19	0.1716	0.858	477	26/7	18,800	521.7	477.0
Elgin	652.4	0.5124	19	0.1853	0.927	556.5	26/7	21,900	608.3	556.5
Flint	740.8	0.5818	37	0.1415	0.991	636	26/7	24,400	690.8	636.0
Greeley	927.2	0.7282	37	0.1583	1.108	795	26/7	30,500	864.6	795.0

The above data are approximate and subject to normal manufacturing tolerances. Other sizes available upon request. Direct current resistance is based on 19.755 Ω-cmil/ft at 20 °C (68 °F), 52.5% IACS with stranding increment of 2 percent.

Technical Data *continued*

AAAC-6201

Code Word	Conductor Size kcmil	Conductor Area in ²	Stranding		Nominal Diameter in	Electrical Properties					
			Number	Diameter in		Resistance			Reactance		
						dc 20°C Ω/kft	ac 25°C Ω/kft	ac 75°C Ω/kft	Capacitive MΩ/kft	Inductive Ω/kft	GMR ft
Akron	30.58	0.0240	7	0.0661	0.198	0.6589	0.6700	0.7840	0.751	0.1180	0.00599
Alton	48.69	0.0382	7	0.0834	0.250	0.4138	0.4200	0.4920	0.715	0.1120	0.00756
Ames	77.47	0.0608	7	0.1052	0.316	0.2600	0.2650	0.3110	0.678	0.1070	0.00954
Azusa	123.30	0.0968	7	0.1327	0.398	0.1635	0.1660	0.1950	0.642	0.1020	0.01200
Anaheim	155.40	0.1221	7	0.1490	0.447	0.1297	0.1320	0.1550	0.624	0.0989	0.01350
Amherst	195.70	0.1537	7	0.1672	0.502	0.1030	0.1050	0.1230	0.606	0.0963	0.01520
Alliance	246.90	0.1939	7	0.1878	0.563	0.0816	0.0831	0.0973	0.588	0.0936	0.01700
Butte	312.80	0.2456	19	0.1283	0.642	0.0644	0.0657	0.0769	0.567	0.0896	0.02020
Canton	394.50	0.3099	19	0.1441	0.721	0.0511	0.0523	0.0610	0.549	0.0870	0.02270
Cairo	465.40	0.3655	19	0.1565	0.783	0.0433	0.0443	0.0517	0.536	0.0851	0.02470
Darien	559.50	0.4394	19	0.1716	0.858	0.0360	0.0369	0.0431	0.522	0.0829	0.02710
Elgin	652.40	0.5124	19	0.1853	0.927	0.0309	0.0318	0.0371	0.751	0.1180	0.02920
Flint	740.80	0.5818	37	0.1415	0.991	0.0272	0.0280	0.0328	0.715	0.1120	0.03170
Greeley	927.20	0.7282	37	0.1583	1.108	0.0217	0.0225	0.0263	0.678	0.1070	0.03540

The above data are approximate and subject to normal manufacturing tolerances. Other sizes available upon request.
 Direct current resistance is based on 19.755 Ω-cmil/ft at 20 °C (68 °F), 52.5% IACS with stranding increment of 2 percent.