



# AAAC-6201

All Aluminum-Alloy Conductor. Bare.

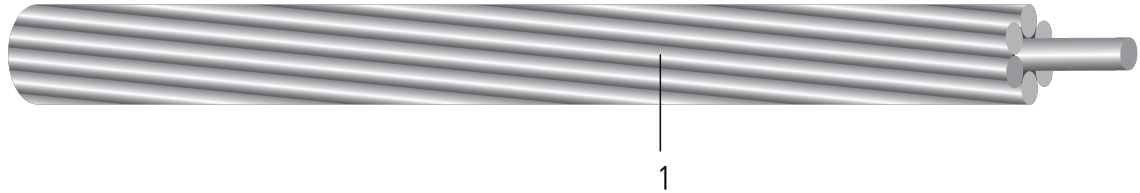


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## CONSTRUCTION:

1. **Conductor:** Aluminum-alloy 6201-T81 wires, concentrically stranded.

## APPLICATIONS AND FEATURES:

Used as bare overhead conductor for primary and secondary distribution. Designed utilizing a high-strength aluminum-alloy to achieve a high strength-to-weight ratio; affords good sag characteristics. Aluminum-alloy gives 6201-T81 gives AAAC higher resistance to corrosion than ACSR.

## SPECIFICATIONS:

- ASTM B398 Standard Specification for Aluminum-Alloy 6201-T81 and 6201-T83 Wire for Electrical Purposes
- ASTM B400 Standard Specification for Compact Round Concentric-Lay-Stranded, Aluminum 1350 Conductors

**Table 1 – Weights and Measurements**

| Stock Number | Code Word | Size           | Stranding | Indiv. Strand Dia | Overall OD | Cross Sectional Area | Overall Weight | ACSR With Equiv. Diam. | ACSR With Equiv. Diam. | Approx. EC Cond. With Equivalent Resistance |
|--------------|-----------|----------------|-----------|-------------------|------------|----------------------|----------------|------------------------|------------------------|---|
|              |           | (AWG or kcmil) |           | inch              | inch       | Sq. inch             | lbs/1,000'     | Size                   | Stranding (AL/STL)     |   |
|              | Akron     | 30.58          | 7         | 0.0661            | 0.198      | 0.024                | 28.5           | 6                      | 6/1                    | 6   |
| 102004       | Alton     | 48.69          | 7         | 0.0834            | 0.25       | 0.0382               | 45.4           | 4                      | 6/1                    | 4   |
| 102012       | Ames      | 77.47          | 7         | 0.1052            | 0.316      | 0.0608               | 72.2           | 2                      | 6/1                    | 2   |
| 102020       | Azusa     | 123.3          | 7         | 0.1327            | 0.398      | 0.0968               | 115            | 1/0                    | 6/1                    | 1/0   |
| 102038       | Anaheim   | 155.4          | 7         | 0.149             | 0.447      | 0.1221               | 144.9          | 2/0                    | 6/1                    | 2/0   |
| 102046       | Amherst   | 195.7          | 7         | 0.1672            | 0.502      | 0.1537               | 182.5          | 3/0                    | 6/1                    | 3/0   |
| 102053       | Alliance  | 246.9          | 7         | 0.1878            | 0.563      | 0.1939               | 230.2          | 4/0                    | 6/1                    | 4/0   |
| 168468       | Butte     | 312.8          | 19        | 0.1283            | 0.642      | 0.2456               | 291.7          | 266.8                  | 26/7                   | 266.8                                       |
| 102061       | Canton    | 394.5          | 19        | 0.1441            | 0.721      | 0.3099               | 367.9          | 3636.4                 | 26/7                   | 336.4                                       |
| 102079       | Cairo     | 465.4          | 19        | 0.1565            | 0.783      | 0.3655               | 434            | 397.5                  | 26/7                   | 397.5                                       |
| 102087       | Darien    | 559.5          | 19        | 0.1716            | 0.858      | 0.4394               | 521.7          | 477                    | 26/7                   | 477   |
| 102095       | Elgin     | 652.4          | 19        | 0.1853            | 0.927      | 0.5124               | 608.4          | 556.5                  | 26/7                   | 556.5                                       |
|              | Flint     | 740.8          | 37        | 0.1415            | 0.991      | 0.5818               | 690.8          | 636                    | 26/7                   | 636   |
|              | Greeley   | 927.2          | 37        | 0.1583            | 1.108      | 0.7282               | 864.6          | 795                    | 26/7                   | 795   |



**Table 2 - Electrical and Engineering Data**

| Stock Number | Code Word | Size           | Rated Strength | DC Resistance @ 20C | AC Resistance @ 75C | Allowable Ampacity+ | ACSR With Equiv. Diam. | ACSR With Equiv. Diam. | Approx. EC Cond. With Equivalent Resistance |
|--------------|-----------|----------------|----------------|---------------------|---------------------|---------------------|------------------------|------------------------|---|
|              |           | (AWG or kcmil) | lbs            | Ohms/1,000'         | Ohms/1,000'         | Amps                | Size                   | Stranding (AL/STL)     |   |
|              | Akron     | 30.58          | 1110           | 0.659               | 0.785               | 107                 | 6                      | 6/1                    | 6   |
| 102004       | Alton     | 48.69          | 1760           | 0.414               | 0.493               | 143                 | 4                      | 6/1                    | 4   |
| 102012       | Ames      | 77.47          | 2800           | 0.26                | 0.31                | 191                 | 2                      | 6/1                    | 2   |
| 102020       | Azusa     | 123.3          | 4280           | 0.163               | 0.195               | 256                 | 1/0                    | 6/1                    | 1/0   |
| 102038       | Anaheim   | 155.4          | 5390           | 0.13                | 0.154               | 296                 | 2/0                    | 6/1                    | 2/0   |
| 102046       | Amherst   | 195.7          | 6790           | 0.103               | 0.123               | 342                 | 3/0                    | 6/1                    | 3/0   |
| 102053       | Alliance  | 246.9          | 8560           | 0.0816              | 0.0973              | 395                 | 4/0                    | 6/1                    | 4/0   |
| 168468       | Butte     | 312.8          | 10500          | 0.0644              | 0.0769              | 460                 | 266.8                  | 26/7                   | 266.8                                       |
| 102061       | Canton    | 394.5          | 13300          | 0.0511              | 0.061               | 532                 | 3636.4                 | 26/7                   | 336.4                                       |
| 102079       | Cairo     | 465.4          | 15600          | 0.0433              | 0.0518              | 590                 | 397.5                  | 26/7                   | 397.5                                       |
| 102087       | Darien    | 559.5          | 18800          | 0.036               | 0.0431              | 663                 | 477                    | 26/7                   | 477   |
| 102095       | Elgin     | 652.4          | 21900          | 0.0309              | 0.0371              | 729                 | 556.5                  | 26/7                   | 556.5                                       |
|              | Flint     | 740.8          | 24400          | 0.0272              | 0.0327              | 790                 | 636                    | 26/7                   | 636   |
|              | Greeley   | 927.2          | 30500          | 0.0217              | 0.0263              | 908                 | 795                    | 26/7                   | 795   |

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