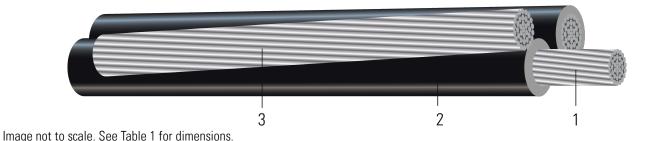


Triplex XLPE Service Drop. AAAC 6201 Alloy Reduced Neutral - Messenger

Aluminum Conductors With Crosslinked Polyethylene Insulation.



CONSTRUCTION:

1. **Conductor:** Conductors are stranded, compressed 1350-H19 aluminum

2. **Insulation:** Cross Linked Polyethylene (XLPE)

3. Messenger: AAAC Neutral

APPLICATIONS AND FEATURES:

Used to supply power, usually from a pole-mounted transformer, to the user's service head where connection to the service entrance cable is made. To be used at voltages of 600 volts phase-to-phase or less and at conductor temperatures 90°C for crosslinked polyethylene (XLP) insulated conductors.

SPECIFICATIONS:

- ASTM B230 Aluminum, 1350-H19 Wire for Electrical Purposes
- ASTM B231 Standard Specification for Concentric-Lay-Stranded Aluminum 1350 Conductors
- ASTM B400 Standard Specification for Compact Round Concentric-Lav-Stranded, Aluminum 1350 Conductors
- ASTM B901 Standard Specification for Compressed Round Stranded Aluminum Conductors Using Single Input Wire Construction. (The number of strands for both phase and neutral may differ)
- ICEA S-76-474 Standard for Neutral-Supported Power Cable Assemblies with Weather-Resistant Extruded Insulation Rated 600V



Table 1 – Weights and Measurements

| Co | | Phase Strand | Dia. Over Phase Conductor | Phase Insul. Thickness | Dia. Over Phase Insulation | Neutral Cond. Size | Neutral Strand | Approx. OD | Approx. Weight |
|-----|-----------|-----------------|------------------------------|---------------------------|-------------------------------|-----------------------|-------------------|---------------|-------------------|
| | AWG/Kcmil | No. | inch | mil | inch | AWG/Kcmil | No. | inch | lb/1000ft |
| Cra | b 4 | 7 | 0.225 | 30 | 0.285 | 6 | 7 | 0.618 | 198 |

All dimensions are nominal and subject to normal manufacturing tolerances

Table 2 – Electrical and Engineering Data

| Code Word | Phase Cond. Size | Neutral Rated Breaking Strength | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | GMR | Allowable Ampacity In Air 90°C |
|--------------|---------------------|------------------------------------|-------------------------|-------------------------|----------------------------|-------|-----------------------------------|
| | AWG/Kcmil | lb | Ω/1000ft | Ω/1000ft | Ω/1000ft | ft | Amp |
| Crab | 4 | 1110 | 0.424 | 0.511 | 0.048 | 0.007 | 100 / 115 |

Notes:

- 1. DC resistances include a 1% length factor for plexing.
- 2. Inductive reactance assumes the neutral is carrying current.
- 3. Phase conductors assumed to be reverse lay stranded, compressed construction.
- 4. Phase spacing assumes cables are touching.
- 5. Resistances shown are for the phase conductor only.
- 6. Sizes of AAAC neutrals are not the AAAC size, but are the size of an ACSR of equal diameter.
- 7. Ampacity based on conductor temperature of 90°; ambient temperature of 40°C; emissivity 0.9; 2 ft./sec. wind in sun.

Neutral Code Word

| Size-Strands | Code Word | OD (inches) | | |
|--------------|-----------|-------------|--|--|
| #6-7 | Akron | 0.198 | | |
| #4-7 | Alton | 0.250 | | |
| #2-7 | Ames | 0.316 | | |
| 1/0-7 | Azusa | 0.398 | | |
| 2/0-7 | Anaheim | 0.447 | | |
| 3/0-7 | Amherst | 0.502 | | |
| 4/0-7 | Alliance | 0.563 | | |

^{1.} The actual number of strands may differ for single input wire per ASTM B901