



# Duplex XLPE Service Drop. AAAC 6201 Alloy Neutral - Messenger

Aluminum Conductors With Crosslinked Polyethylene Insulation.

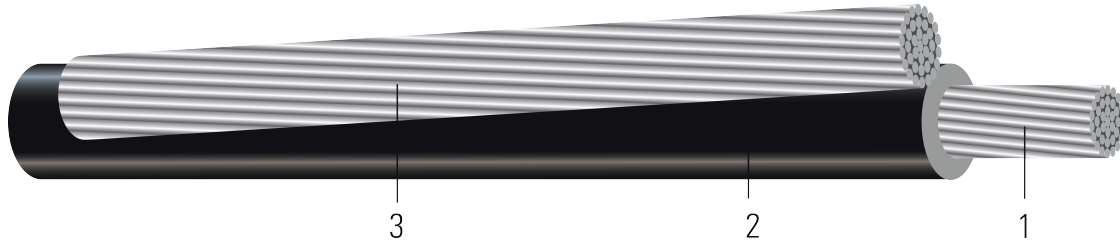


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** Conductors are stranded, compressed 1350-H19 aluminum
2. **Insulation:** Cross Linked Polyethylene (XLPE)
3. **Messenger:** AAAC 6201 Alloy Neutral

## APPLICATIONS AND FEATURES:

Primarily used for 120 volt overhead service applications such as street lighting, outdoor lighting, and temporary service for construction. To be used at voltages of 600 volts phase-to-phase or less and at conductor temperatures not to exceed 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-Lay-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**

Stock Number	Code Word	Phase Cond. Size	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
104703	Whippet	4	7	0.225	30	0.285	4	7	0.564	101

All dimensions are nominal and subject to normal manufacturing tolerances  
1. The actual number of strands may differ for single input wire per ASTM B901

**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
Whippet	4	1760	0.424	0.511	0.048	0.007	100 / 115

- Notes:
- DC resistances include a 1% length factor for plexing.
  - Inductive reactance assumes the neutral is carrying current.
  - Phase conductors assumed to be reverse lay stranded, compressed construction.
  - Phase spacing assumes cables are touching.
  - Resistances shown are for the phase conductor only.
  - Sizes of AAAC neutrals are not the AAAC size, but are the size of an ACSR of equal diameter.
  - 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

