**SPEC 83301** Stock #: 110650

# **Duplex Copper XLPE Service Drop Neutral - Messenger**

Copper Conductors With Crosslinked Polyethylene Insulation.



Image not to scale. See Table 1 for dimensions.

### **CONSTRUCTION:**

1. **Conductor:** Conductors are stranded, compressed copper

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

3. Messenger: Hard Drawn Copper

## **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 B1 Hard-Drawn Copper
- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ICEA S-76-474 Standard for Neutral-Supported Power Cable Assemblies with Weather-Resistant Extruded Insulation Rated 600V







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# **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. Weight
		AWG/Kcmil	No.	inch	mil	inch	AWG/Kcmil	No.	lb/1000ft
110650	Sigma	6	7	0.184	45	0.274	6	7	177

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
Sigma	6	1228	0.4169	0.7969	0.0292	0.0054	110





