

# 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

**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
TBA	Omega	8	1	0.129	45	0.219	8	1	110
TBA	Theta	8	7	0.146	45	0.236	10	1	95
TBA	Iota	8	7	0.146	45	0.236	8	1	113
TBA	Kappa	8	7	0.146	45	0.236	8	7	114
TBA	Lambda	6	7	0.184	45	0.274	8	1	146
TBA	Omicron	6	7	0.184	45	0.274	6	1	175
110650	Sigma	6	7	0.184	45	0.274	6	7	177

All dimensions are nominal and subject to normal manufacturing tolerances



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**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
Omega	8	826	0.65	0.3214	0.0278	0.0086	85
Theta	8	529	0.6629	0.202	0.028	0.0107	85
Iota	8	826	0.6629	0.511	0.0285	0.0068	85
Kappa	8	777	0.6629	0.501	0.0283	0.0066	85
Lambda	6	826	0.4169	0.8128	0.0295	0.0054	110
Omicron	6	1280	0.4169	0.7969	0.0292	0.0053	110
Sigma	6	1228	0.4169	0.7969	0.0292	0.0054	110

