

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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UPDATED: Dec. 11, 2023, 9:29 p.m. UTC REVISION: 1.000.000

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

