

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 AWG/Kcmil	Phase Strand No.	Dia. Over Phase Conductor inch	Phase Insul. Thickness mil	Dia. Over Phase Insulation inch	Neutral Cond. Size AWG/Kcmil	Neutral Strand No.	Approx. OD inch	Approx. Weight lb/1000ft
TBA	Omega	8	Solid	0.128	30	0.188	8	1	0.378	180
TBA	Theta	8	7	0.141	30	0.201			0.404	131
TBA	Iota	8	7	0.141	30	0.201	8	1	0.404	182
TBA	Kappa	8	7	0.141	30	0.201	8	7	0.404	182
110650	Sigma	6	7	0.177	30	0.237	6	7	0.451	176
TBA	Lambda	6	7	0.177	30	0.237	8	1	0.476	251
TBA	Omicron	6	7	0.177	30	0.237	6	1	0.476	281

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
Omega	8	826	0.653	0.786	0.052	0.004	70 / 80
Theta	8		0.653	0.786	0.052	0.004	70 / 80
Iota	8	826	0.653	0.786	0.052	0.004	70 / 80
Kappa	8	777	0.653	0.786	0.052	0.004	70 / 80
Sigma	6	1228	0.411	0.495	0.051	0.005	95 / 105
Lambda	6	826	0.411	0.495	0.051	0.005	95 / 105
Omicron	6	1280	0.411	0.495	0.051	0.005	95 / 105

