



Triplex XLPE Service Drop. ACSR Neutral - Messenger

Aluminum Conductors With Crosslinked Polyethylene Insulation.

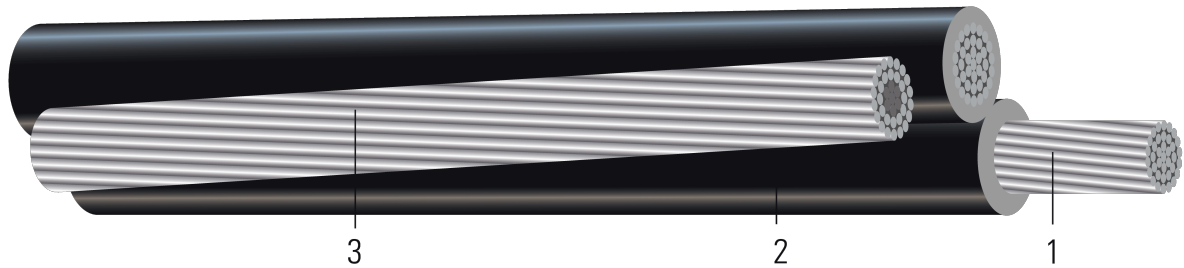


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Conductors are stranded, compressed 1350-H19 aluminum
2. **Insulation:** Cross Linked Polyethylene (XLPE)
3. **Messenger:** ACSR 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
104802	Paludina	6	1	0.162	30	0.222	6	6/1	0.544	108
104810	Voluta	6	7	0.177	30	0.237	6	6/1	0.579	113
TBA	Whelk	4	Solid	0.204	30	0.264	4	6/1	0.264	87
104836	Periwinkle	4	7	0.225	30	0.285	4	6/1	0.679	170
104844	Conch	2	7	0.282	45	0.372	2	6/1	0.806	259
104851	Neritina	1/0	7	0.357	60	0.477	1/0	6/1	1.031	416
TBA	Cenia	1/0	19	0.361	60	0.481	1/0	6/1	0.481	235
104885	Triton	2/0	11	0.405	60	0.525	2/0	6/1	1.112	512
104877	Runcina	2/0	7	0.405	60	0.525	2/0	6/1	1.126	514
104893	Mursia	3/0	17	0.456	60	0.576	3/0	6/1	1.216	632
104901	Zuzara	4/0	18	0.512	60	0.632	4/0	6/1	1.334	385
245845	Limpet	336.4	19	0.646	60	0.766	6	7	1.739	1163

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
Paludina	6	1190	0.411	0.495	0.051	0.005	75 / 85
Voluta	6	1190	0.674	0.812	0.051	0.005	75 / 85
Whelk	4	1860	0.258	0.310	0.048	0.007	100 / 115
Periwinkle	4	1860	0.424	0.511	0.048	0.007	100 / 115
Conch	2	2850	0.266	0.320	0.045	0.008	135 / 150
Neritina	1/0	4380	0.167	0.201	0.044	0.011	180 / 205
Cenia	1/0	4380	0.167	0.201	0.044	0.011	180 / 205
Triton	2/0	5310	0.133	0.159	0.043	0.013	210 / 235
Runcina	2/0	5310	0.133	0.159	0.043	0.013	210 / 235
Mursia	3/0	6620	0.105	0.126	0.042	0.014	240 / 270
Zuzara	4/0	8350	0.084	0.100	0.041	0.016	280 / 315
Limpet	336.4	8680	0.051	0.062	0.041	0.021	395 / 445

Notes:

1. DC resistances include a 1% length factor for plexing.
2. Inductive reactance assumes the neutral is carrying current.
3. Phase conductors assumed to be reverse lay stranded, compressed construction.
4. Phase spacing assumes cables are touching.
5. Resistances shown are for the phase conductor only.
6. 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	Code Word	OD (inches)
#6	Turkey	0.198
#4	Swan	0.250
#2	Sparrow	0.316
1/0	Raven	0.398
2/0	Quail	0.447
3/0	Pigeon	0.502
4/0	Penguin	0.684
336.4	Merlin	0.563

