

Triplex XLPE Service Drop. ACSR Neutral - Messenger

Aluminum Conductors With Crosslinked Polyethylene Insulation.

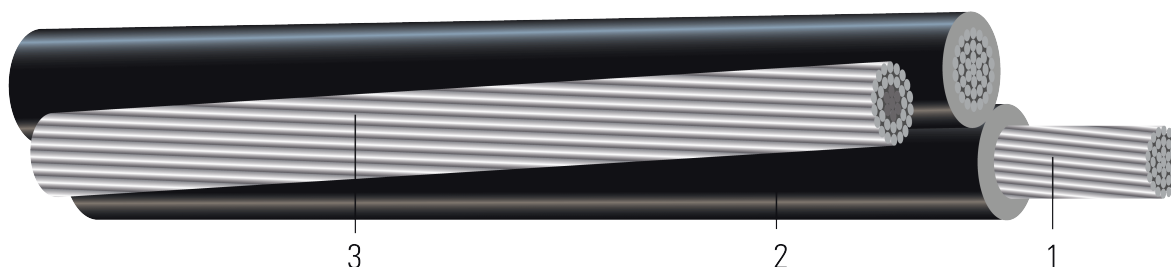


Image not to scale. See Table 1 for dimensions.

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	Approx. OD	Approx. Weight
		AWG/Kcmil	No.	inch	mil	inch	AWG/Kcmil	inch	lb/1000ft
104802	Paludina	6	1	0.162	45	0.252	6	0.544	109
104810	Voluta	6	7	0.178	45	0.268	6	0.579	114
TBA	Whelk	4	1	0.204	45	0.294	4	0.636	164
104836	Periwinkle	4	7	0.225	45	0.315	4	0.68	172
104844	Conch	2	7	0.283	45	0.373	2	0.806	262
TBA	Cenia	1/0	9	0.352	60	0.472	1/0	1.02	414
104851	Neritina	1/0	7	0.357	60	0.477	1/0	1.03	420
104885	Triton	2/0	11	0.395	60	0.515	2/0	1.112	512
104877	Runcina	2/0	7	0.402	60	0.522	2/0	1.128	521
104893	Mursia	3/0	17	0.443	60	0.563	3/0	1.216	635
104901	Zuzara	4/0	18	0.498	60	0.618	4/0	1.335	789
245845	Limpet	336.4	19	0.645	80	0.805	336.4	1.739	1167

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	0.6523	0.8363	0.0318	0.0053	85
Voluta	6	1190	0.6653	0.853	0.0327	0.0054	85
Whelk	4	1860	0.41	0.5258	0.0301	0.0066	115
Periwinkle	4	1860	0.4183	0.5363	0.031	0.0068	115
Conch	2	2850	0.2631	0.3373	0.0296	0.0086	150
Cenia	1/0	4380	0.1653	0.212	0.0299	0.0107	205
Neritina	1/0	4380	0.1653	0.212	0.0299	0.0108	205
Triton	2/0	5310	0.1312	0.1682	0.029	0.0121	235
Runcina	2/0	5310	0.1312	0.1682	0.0293	0.0122	235
Mursia	3/0	6620	0.104	0.1335	0.028	0.0139	275
Zuzara	4/0	8350	0.0825	0.1059	0.0273	0.0157	315
Limpet	336.4	8680	0.0519	0.0667	0.0274	0.0204	420

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

