

Triplex XLPE Service Drop. AAC Neutral - Messenger

Aluminum Conductors With Crosslinked Polyethylene Insulation.

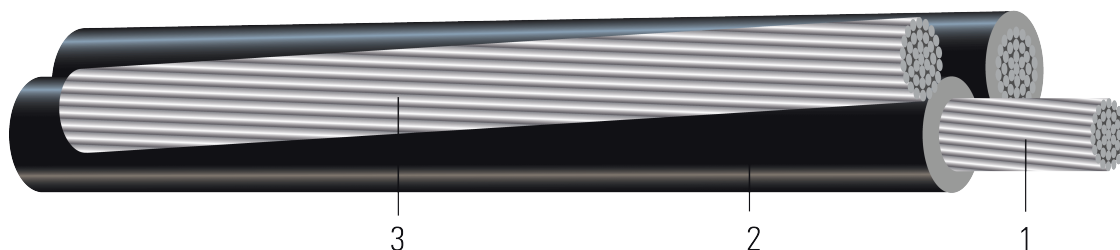


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Conductors are stranded, compressed 1350-H19 aluminum
2. **Insulation:** Cross Linked Polyethylene (XLPE)
3. **Messenger:** AAC Neutral

APPLICATIONS AND FEATURES:

Used to supply power, usually from a pole-mounted transformer, to the user's service head where connection to the service entrance cable is made. To be used at voltages of 600 volts phase-to-phase or less and at conductor temperatures 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 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



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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
TBA	Haiotis	6	1	0.162	45	0.252	6	0.544	97
TBA	Patella	6	7	0.178	45	0.268	6	0.579	103
TBA	Fusus	4	1	0.204	45	0.294	4	0.636	145
104729	Oyster	4	7	0.225	45	0.315	4	0.68	154
104737	Clam	2	7	0.283	45	0.373	2	0.806	233
623542	Mussel	2	7	0.283	45	0.373	4	0.806	224
TBA	Purpura	1/0	9	0.352	60	0.472	1/0	1.02	368
104745	Murex	1/0	7	0.357	60	0.477	1/0	1.03	374
TBA	Trophon	2/0	11	0.395	60	0.515	2/0	1.112	456
104760	Nassa	2/0	7	0.402	60	0.522	2/0	1.128	462
104786	Melita	3/0	17	0.443	60	0.563	3/0	1.216	559
104794	Portunus	4/0	18	0.498	60	0.618	4/0	1.335	696
250407	Nannynose	336.4	19	0.645	80	0.805	336.4	1.740	1114

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
Haiotis	6	563	0.6523	0.8363	0.0318	0.0053	85
Patella	6	563	0.6653	0.853	0.0327	0.0054	85
Fusus	4	881	0.41	0.5258	0.0301	0.0066	115
Oyster	4	881	0.4183	0.5363	0.031	0.0068	115
Clam	2	1350	0.2631	0.3373	0.0296	0.0086	150
Mussel	2	1350	0.2631	0.3373	0.0296	0.0086	150
Purpura	1/0	1990	0.1653	0.212	0.0299	0.0107	205
Murex	1/0	1990	0.1653	0.212	0.0299	0.0108	205
Trophon	2/0	2510	0.1312	0.1682	0.029	0.0121	235
Nassa	2/0	2510	0.1312	0.1682	0.0293	0.0122	235
Melita	3/0	3310	0.104	0.1335	0.028	0.0139	275
Portunus	4/0	4020	0.0825	0.1059	0.0273	0.0157	315
Nannynose	336.4	6146	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. Sizes of AAAC neutrals are not the AAAC size, but are the size of an ACSR of equal diameter.
7. 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-Strands	Code Word	OD (inches)
#6-7	Peachbell	0.184
#4-7	Rose	0.232
#2-7	Iris	0.292
1/0-7	Poppy	0.368
2/0-7	Aster	0.414
3/0-19	Primrose	0.470
4/0-19	Sunflower	0.528
336.4-19	Tulip	0.665

