



Triplex XLPE Service Drop. AAC Neutral - Messenger

Aluminum Conductors With Crosslinked Polyethylene Insulation.

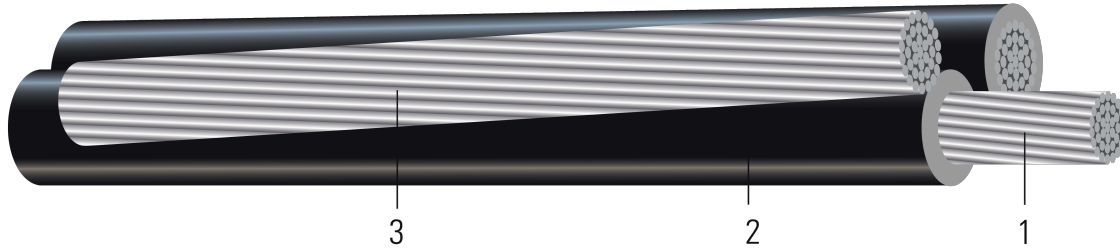


Image not to scale. See Table 1 for dimensions.

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



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
TBA	Haiotis	6	Solid	0.162	30	0.222	6	7	0.482	136
TBA	Patella	6	7	0.177	30	0.237	6	7	0.514	141
TBA	Fusus	4	Solid	0.204	30	0.264	4	7	0.572	204
104729	Oyster	4	7	0.225	30	0.285	4	7	0.679	151
104737	Clam	2	7	0.282	45	0.372	2	7	0.806	230
623542	Mussel	2	7	0.282	45	0.372	4	7	0.806	224
104752	Purpura	1/0	9	0.352	60	0.472	1/0	7	1.020	369
104745	Murex	1/0	7	0.361	60	0.481	1/0	7	1.031	370
104760	Nassa	2/0	7	0.405	60	0.525	2/0	7	1.126	456
TBA	Trophon	2/0	19	0.405	60	0.525	2/0	7	1.136	697
104786	Melita	3/0	17	0.456	60	0.576	3/0	19	1.216	558
104794	Portunus	4/0	18	0.512	60	0.632	4/0	19	1.334	292
250407	Nannynose	336.4	19	0.646	60	0.766	336.4	19	1.739	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	0.411	0.495	0.051	0.005	75 / 85
Patella	6	563	0.674	0.812	0.051	0.005	75 / 85
Fusus	4	881	0.258	0.310	0.048	0.007	100 / 115
Oyster	4	881	0.424	0.511	0.048	0.007	100 / 115
Clam	2	1350	0.266	0.320	0.045	0.008	135 / 150
Mussel	2	1350	0.266	0.320	0.045	0.008	135 / 150
Purpura	1/0	1990	0.167	0.201	0.044	0.011	180 / 205
Murex	1/0	1990	0.167	0.201	0.044	0.011	180 / 205
Nassa	2/0	2510	0.133	0.159	0.043	0.013	210 / 235
Trophon	2/0	2510	0.133	0.159	0.043	0.013	210 / 235
Melita	3/0	3310	0.105	0.126	0.042	0.014	240 / 270
Portunus	4/0	4020	0.084	0.100	0.041	0.016	280 / 315
Nannynose	336.4	6146	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. 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

