



Triplex XLPE Service Drop. AAAC 6201 Alloy 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:** AAAC 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 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
TBA	Minex	6	Solid	0.162	30	0.222	6	7	0.482	136
152645	Hippa	6	7	0.177	30	0.237	6	7	0.579	105
TBA	Prawn	4	Solid	0.204	30	0.264	4	7	0.572	204
105080	Barnacles	4	7	0.225	30	0.285	4	7	0.679	158
105098	Shrimp	2	7	0.282	45	0.372	2	7	0.806	240
105114	Leda	1/0	9	0.361	60	0.481	1/0	7	1.019	385
105106	Gammarus	1/0	7	0.361	60	0.481	1/0	7	1.031	386
105122	Dungenese	2/0	7	0.405	60	0.525	2/0	7	1.126	476
TBA	Cyclops	2/0	19	0.405	60	0.525	2/0	7	1.136	697
TBA	Flustra	3/0	19	0.456	60	0.576	3/0	7	1.246	858
105130	Lepas	4/0	18	0.512	60	0.632	4/0	7	1.334	324

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
Minex	6	1110	0.411	0.495	0.051	0.005	75 / 85
Hippa	6	1110	0.674	0.812	0.051	0.005	75 / 85
Prawn	4	1760	0.258	0.310	0.048	0.007	100 / 115
Barnacles	4	1760	0.424	0.511	0.048	0.007	100 / 115
Shrimp	2	2800	0.266	0.320	0.045	0.008	135 / 150
Leda	1/0	4270	0.167	0.201	0.044	0.011	180 / 205
Gammarus	1/0	4270	0.167	0.201	0.044	0.011	180 / 205
Dungenese	2/0	5390	0.133	0.159	0.043	0.013	210 / 235
Cyclops	2/0	5390	0.133	0.159	0.043	0.013	210 / 235
Flustra	3/0	6790	0.105	0.126	0.042	0.014	240 / 270
Lepas	4/0	8560	0.084	0.100	0.041	0.016	280 / 315

- 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	Akron	0.198
#4-7	Alton	0.250
#2-7	Ames	0.316
1/0-7	Azusa	0.398
2/0-7	Anaheim	0.447
3/0-7	Amherst	0.502
4/0-7	Alliance	0.563

