

Triplex XLPE Service Drop. AAAC 6201 Alloy Reduced Neutral - Messenger

Aluminum Conductors With Crosslinked Polyethylene Insulation.

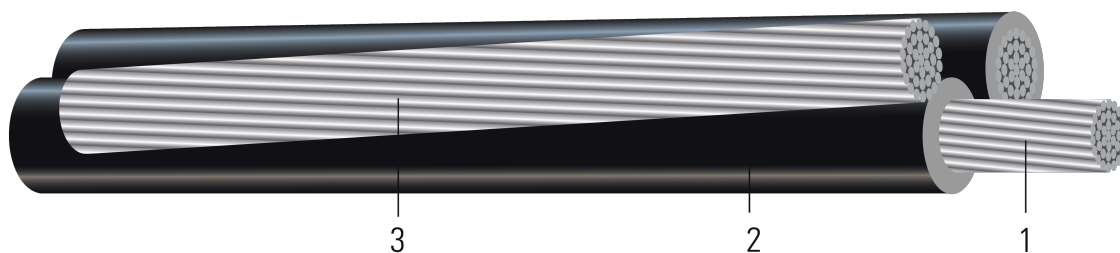


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Conductors are stranded, compressed 1350-H19 aluminum
- Insulation:** Cross Linked Polyethylene (XLPE)
- 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 B399 Standard Specification for Concentric-Lay-Stranded, Aluminum Alloy 6201-T81 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	Artemia	4	1	0.204	45	0.294	6	7	0.636	135
TBA	Crab	4	7	0.225	45	0.315	6	7	0.68	143
105155	Solaster	2	7	0.283	45	0.373	4	7	0.806	216
180521	Sandcrab	1/0	9	0.352	60	0.472	2	7	1.03	347
105163	Echinus	1/0	7	0.357	60	0.477	2	7	1.02	341
TBA	Crayfish	2/0	11	0.395	60	0.515	1	7	1.128	430
TBA	Sipho	2/0	7	0.402	60	0.522	1	7	1.112	420
TBA	Fulgar	3/0	17	0.443	60	0.563	1/0	7	1.216	519
105171	Arca	4/0	18	0.498	60	0.618	2/0	7	1.335	643



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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

Stock Number	Code Word	Phase Cond. Size	Neutral Rated Breaking Strength	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	GMR	Allowable Ampacity In Air 90°C
		AWG/Kcmil	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	ft	Amp
TBA	Artemia	4	1110	0.41	0.5258	0.0301	0.0066	115
TBA	Crab	4	1110	0.4183	0.5363	0.031	0.0068	115
105155	Solaster	2	1760	0.2631	0.3373	0.0296	0.0086	150
180521	Sandcrab	1/0	2800	0.1653	0.212	0.0299	0.0107	205
105163	Echinus	1/0	2800	0.1653	0.212	0.0299	0.0108	205
TBA	Crayfish	2/0	3530	0.1312	0.1682	0.029	0.0121	235
TBA	Sipho	2/0	3530	0.1312	0.1682	0.0293	0.0122	235
TBA	Fulgar	3/0	4270	0.104	0.1335	0.028	0.0139	275
105171	Arca	4/0	5390	0.0825	0.1059	0.0273	0.0157	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

