



# Quadruplex XLPE Service Drop. AAAC 6201 Alloy Neutral - Messenger

Aluminum Conductors With Crosslinked Polyethylene Insulation.

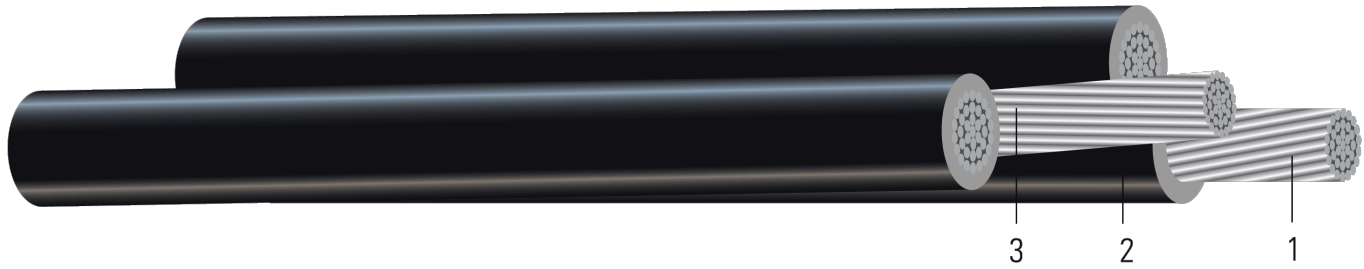


Image not to scale. See Table 1 for dimensions.

## 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	Bay	6	Solid	0.162	30	0.222	6	7	0.539	158
TBA	French-Coach	6	7	0.177	30	0.237	6	7	0.576	162
TBA	German-Coach	4	Solid	0.204	30	0.264	4	7	0.641	237
105353	Arabian	4	7	0.225	30	0.285	4	7	0.759	214
105361	Belgian	2	7	0.282	45	0.372	2	7	0.901	324
105379	Shetland	1/0	9	0.361	60	0.481	1/0	7	1.139	520
105387	Thoroughbred	2/0	11	0.405	60	0.525	2/0	7	1.243	639
272476	Trotter	3/0	17	0.456	60	0.576	3/0	7	1.359	785
105395	Walking	4/0	18	0.512	60	0.632	4/0	7	1.491	372
243261	Exmoor	336.4	19	0.646	80	0.805	4/0	7	1.945	1428

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
Bay	6	1110	0.411	0.495	0.051	0.005	75 / 85
French-Coach	6	1110	0.674	0.812	0.051	0.005	75 / 85
German-Coach	4	1760	0.258	0.310	0.048	0.007	100 / 115
Arabian	4	1760	0.424	0.511	0.048	0.007	100 / 115
Belgian	2	2800	0.266	0.320	0.045	0.008	135 / 150
Shetland	1/0	4270	0.167	0.201	0.044	0.011	180 / 205
Thoroughbred	2/0	5390	0.133	0.159	0.043	0.013	210 / 235
Trotter	3/0	6790	0.105	0.126	0.042	0.014	240 / 270
Walking	4/0	8560	0.084	0.100	0.041	0.016	280 / 315
Exmoor	336.4		0.051	0.062	0.041	0.021	

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