



# Quadruplex XLPE Service Drop. ACSR Neutral - Messenger

Aluminum Conductors With Crosslinked Polyethylene Insulation.

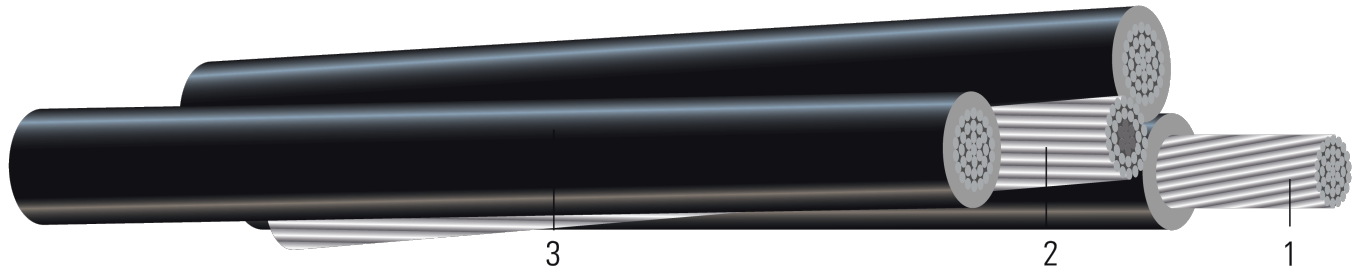


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** Conductors are stranded, compressed 1350-H19 aluminum
2. **Insulation:** Cross Linked Polyethylene (XLPE)
3. **Messenger:** ACSR 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	Morochouca	6	Solid	0.162	30	0.222	6	6/1	0.539	158
105262	Chola	6	7	0.177	30	0.237	6	6/1	0.647	151
TBA	Morgan	4	Solid	0.204	30	0.264	4	6/1	0.641	237
105288	Hackney	4	7	0.225	30	0.285	4	6/1	0.759	226
105296	Palomino	2	7	0.282	45	0.372	2	6/1	0.901	343
105312	Costena	1/0	9	0.361	60	0.481	1/0	6/1	1.139	550
105320	Grullo	2/0	11	0.405	60	0.525	2/0	6/1	1.243	677
105338	Suffolk	3/0	17	0.456	60	0.576	3/0	6/1	1.359	833
105346	Appaloosa	4/0	18	0.512	60	0.632	4/0	6/1	1.491	432
250902^	Bronco	336.4	19	0.646	60	0.766	336.4	18/1	1.944	1562
237669	Gelding	336.4	19	0.646	60	0.766	4/0	6/1	1.944	1488

All dimensions are nominal and subject to normal manufacturing tolerances

^ Phase conductors have 0, 1, or 2 ribs for identification

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
Morochouca	6	1860	0.411	0.495	0.051	0.005	75 / 85
Chola	6	1860	0.674	0.812	0.051	0.005	75 / 85
Morgan	4	1860	0.258	0.310	0.048	0.007	100 / 115
Hackney	4	1860	0.424	0.511	0.048	0.007	100 / 115
Palomino	2	2850	0.266	0.320	0.045	0.008	135 / 150
Costena	1/0	4380	0.167	0.201	0.044	0.011	180 / 205
Grullo	2/0	5310	0.133	0.159	0.043	0.013	210 / 235
Suffolk	3/0	6620	0.105	0.126	0.042	0.014	240 / 270
Appaloosa	4/0	8350	0.084	0.100	0.041	0.016	280 / 315
Bronco	336.4	6146	0.051	0.062	0.041	0.021	316 / 357
Gelding	336.4	8350	0.051	0.062	0.041	0.021	316 / 357

Notes:

- DC resistances include a 1% length factor for plexing.
- Inductive reactance assumes the neutral is carrying current.
- Phase conductors assumed to be reverse lay stranded, compressed construction.
- Phase spacing assumes cables are touching.
- Resistances shown are for the phase conductor only.
- 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	Code Word	OD (inches)
#6	Turkey	0.198
#4	Swan	0.250
#2	Sparrow	0.316
1/0	Raven	0.398
2/0	Quail	0.447
3/0	Pigeon	0.502
4/0	Penguin	0.684
336.4	Merlin	0.563