

Quadruplex XLPE Service Drop. ACSR Neutral - Messenger

Aluminum Conductors With Crosslinked Polyethylene Insulation.

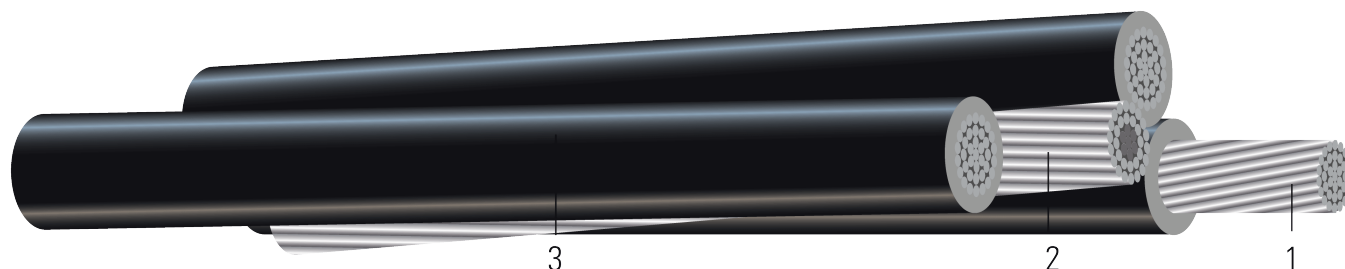


Image not to scale. See Table 1 for dimensions.

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	Approx. OD	Approx. Weight
		AWG/Kcmil	No.	inch	mil	inch	AWG/Kcmil	inch	lb/1000ft
TBA	Morochuca	6	1	0.162	45	0.252	6	0.608	145
105262	Chola	6	7	0.178	45	0.268	6	0.647	153
TBA	Morgan	4	1	0.204	45	0.294	4	0.71	217
105288	Hackney	4	7	0.225	45	0.315	4	0.76	229
105296	Palomino	2	7	0.283	45	0.373	2	0.9	347
105312	Costena	1/0	9	0.352	60	0.472	1/0	1.139	549
105320	Grullo	2/0	11	0.395	60	0.515	2/0	1.243	677
105338	Suffolk	3/0	17	0.443	60	0.563	3/0	1.359	837
105346	Appaloosa	4/0	18	0.498	60	0.618	4/0	1.492	1038
237669	Gelding	336.4	19	0.645	60	0.805	4/0	1.943	1494
250902	Bronco	336.4	19	0.645	80	0.805	336.4	1.945	1561

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	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	GMR	Allowable Ampacity In Air 90°C
	AWG/Kcmil	Ω/1000ft	Ω/1000ft	Ω/1000ft	ft	Amp
Morochuca	6	0.6523	0.8363	0.0357	0.0053	75
Chola	6	0.6653	0.853	0.0365	0.0054	75
Morgan	4	0.41	0.5258	0.034	0.0066	100
Hackney	4	0.4183	0.5363	0.0349	0.0068	100
Palomino	2	0.2631	0.3373	0.0336	0.0086	135
Costena	1/0	0.1653	0.212	0.0338	0.0107	180
Grullo	2/0	0.1312	0.1682	0.0331	0.0121	205
Suffolk	3/0	0.104	0.1335	0.032	0.0139	235
Appaloosa	4/0	0.0825	0.1059	0.0314	0.0157	275
Gelding	336.4	0.0519	0.0667	0.0311	0.0204	370
Bronco	336.4	0.0519	0.0667	0.0314	0.0204	370

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. 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

