**SPEC 83248** Stock #: 250902

# **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







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# **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
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

# **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
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







<sup>1.</sup> The actual number of strands may differ for single input wire per ASTM B901