**SPEC 83231** Stock #: 616220

# NS75 CSA Triplex LLDPE Service Drop. ACSR Neutral - Messenger

Aluminum Conductors With Linear Low Density Polyethylene Insulation.



Image not to scale. See Table 1 for dimensions.

### **CONSTRUCTION:**

1. **Conductor:** Conductors are stranded, compact 1350-H19 aluminum

2. Insulation: Linear Low Density Polyethylene (LLDPE)

3. Messenger: ACSR Neutral

### **APPLICATIONS AND FEATURES:**

Primarily used for 120 volt overhead service applications such as street lighting, outdoor lighting, and temporary service for construction. To be used at voltages of 600 volts phase-to-phase or less and at conductor temperatures not to exceed 75°C for low density polyethylene (LLDPE) insulated conductors.

### SPECIFICATIONS:

- ASTM B230 Aluminum, 1350-H19 Wire for Electrical Purposes
- ASTM B400 Standard Specification for Compact Round Concentric-Lay-Stranded, Aluminum 1350 Conductors
- CSA 22.2 No. 129 Neutral Supported Cable
- 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	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
616220	4/0	7	0.475	60	0.595	4/0	1.285	779

All dimensions are nominal and subject to normal manufacturing tolerances

### **Table 2 – Electrical and Engineering Data**

Phase Cond. Size	Neutral Rated Breaking Strength	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	GMR
AWG/Kcmil	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	ft
4/0	8350	0.082	0.1146	0.0273	0.0157

#### 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 75°; ambient temperature of 40°C; emissivity 0.9; 2 ft./sec. wind in sun.

### **Neutral Code Word**

Size	Code Word	OD (inches)
#6	Bass	0.182
#4	Pike	0.229
#2	Carp	0.290
1/0	Sole	0.365
2/0	Hake	0.410
4/0	Scup	0.517





