Stock #: 103200 **SPEC 83250**

Quadruplex 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, compressed 1350-H19 aluminum

2. Messenger: ACSR Neutral

3. **Insulation:** Linear Low Density Polyethylene (LLDPE)

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 75°C for Linear Low Density Polyethylene (LLDPE) 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







UPDATED: Dec. 11, 2023, 9:29 p.m.UTC REVISION: 1.000.000

SPEC 83250 Stock #: 103200

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 |
| 103200 | Palomino | 2 | 7 | 0.283 | 45 | 0.373 | 2 | 0.901 | 343 |

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 |
| Palomino | 2 | 0.2631 | 0.3373 | 0.0336 | 0.0086 | 105 |

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.

| 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 |





^{1.} The actual number of strands may differ for single input wire per ASTM B901