Duplex XLPE Service Drop. AAC Neutral - Messenger

Aluminum Conductors With Crosslinked Polyethylene Insulation.

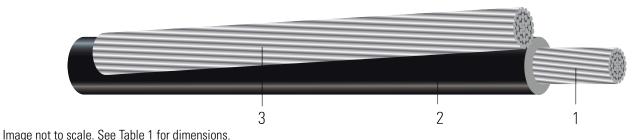


image not to scale. See Table 1 for differis

CONSTRUCTION:

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

2. **Insulation:** Cross Linked Polyethylene (XLPE)

3. Messenger: AAC 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 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 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





SPEC 83204 Stock #: TBA

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 | Dia. Over Neutral Insulation | Approx. Weight |
|-----------------|--------------|---------------------|-----------------|------------------------------|---------------------------|-------------------------------|-----------------------|-------------------|---------------------------------|-------------------|
| | | AWG/ Kcmil | No. | inch | mil | inch | AWG/Kcmil | No. | inch | lb/1000ft |
| TBA | Dachshund | 4 | 1 | 0.204 | 45 | 0.294 | 4 | 7 | 0.232 | 92 |

All dimensions are nominal and subject to normal manufacturing tolerances

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 |
| D | achshund | 4 | 881 | 0.41 | 0.501 | 0.0275 | 0.0066 | 115 |

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-Strands | Code Word | OD (inches) |
|--------------|-----------|-------------|
| #6-7 | Peachbell | 0.184 |
| #4-7 | Rose | 0232 |
| #2-7 | Iris | 0.292 |
| 1/0-7 | Рорру | 0.368 |





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