

## Single 600 Volt USE-2 Aluminum Underground Service Entrance



Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

1. **Conductor:** Conductors are stranded, compressed 1350-H16/H26 (3/4 Hard) aluminum
2. **Insulation:** Cross Linked Polyethylene (XLPE) Type USE-2

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### APPLICATIONS AND FEATURES:

Conductors are stranded, compressed 1350-H16/H26 (3/4 Hard) aluminum, insulated with cross-linked polyethylene UL listed as Type USE-2 . These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions.

### SPECIFICATIONS:

- 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)
- UL 854 Service Entrance Cable
- ICEA S-105-692 Standard For 600 Volt Single Layer Thermoset Insulated Utility Underground Distribution Cables



**Table 1 – Weights and Measurements**

| Stock Number | Code Word | Phase Cond. Size | Phase Strand | Dia. Over Phase Conductor | Phase Insul. Thickness | Approx. OD | Approx. Weight |
|--------------|-----------|------------------|--------------|---------------------------|------------------------|------------|----------------|
|              |           | AWG/Kcmil        | No.          | inch                      | mil                    | inch       | lb/1000ft      |
| 105494!      | Beloit    | 4/0              | 18           | 0.512                     | 80                     | 0.658      | 261            |

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

! Conductor is ASTM B901

**Table 2 – Electrical and Engineering Data**

| Code Word | Phase Cond. Size | Min Bending Radius | Max Pull Tension | Neutral Rated Breaking Strength | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity in Duct 90°C | Allowable Ampacity Directly Buried 90°C |
|-----------|------------------|--------------------|------------------|---------------------------------|----------------------|----------------------|----------------------------|---------------------------------|---|
|           | AWG/Kcmil        | inch               | lb               | Ω/1000ft                        | Ω/1000ft             | Ω/1000ft             | Amp                        | Amp                             |   |
| Beloit    | 4/0              | 2.6                | 1269             | 0.084                           | 0.100                | 0.041                | 205                        | 205                             |   |

Ampacities are based on Table 310.15 (B)(16) of the NEC, 2017 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

