

# Quadruplex 600 Volt RHH/RHW-2 or USE-2 AlumaFlex Underground Service Entrance



### **CONSTRUCTION:**

- 1. **Conductor**: Conductors are stranded, compressed Triple E AA8000 (8176-H24)
- 2. Insulation: Cross Linked Polyethylene (XLPE) Type RHH/RHW-2 or USE-2
- 3. **Neutral**: Cross Linked Polyethylene (XLPE) with three Yellow Extruded Stripes (YES)

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## **APPLICATIONS AND FEATURES:**

Conductors are stranded, compressed aluminum Triple E AA8000 (8176-H24), insulated with cross-linked polyethylene Type RHH/RHW-2 or USE-2. Neutrals are identified by three yellow extruded stripes. Cables with "YES" neutrals have sequential footage markers. Conductors are durably surface printed for identification. Three-phase conductors and one neutral conductor are cabled together to produce the quadruplex cable configuration. 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 B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- UL 44 Thermoset-Insulated Wires and Cables
- 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<br>Number | Code<br>Word   | Phase<br>Cond.<br>Size | Phase<br>Strand | Dia. Over Phase<br>Conductor | Phase Insul.<br>Thickness | Dia. Over Phase<br>Insulation | Neutral<br>Cond. Size | Neutral<br>Strand | Neutral Insul.<br>Thickness | Approx.<br>OD | Approx.<br>Weight |
|-----------------|----------------|------------------------|-----------------|------------------------------|---------------------------|-------------------------------|-----------------------|-------------------|-----------------------------|---------------|-------------------|
|                 |                | AWG/<br>Kcmil          | No.             | inch                         | mil                       | inch                          | AWG/Kcmil             | No.               | mil                         | inch          | lb/1000ft         |
| 606898^         | Wake<br>Forest | 4/0                    | 18              | 0.512                        | 80                        | 0.672                         | 2/0                   | 11                | 80                          | 1.588         | 977               |

All dimensions are nominal and subject to normal manufacturing tolerances

Notes

TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

# Table 2 – Electrical and Engineering Data

| Code<br>Word   | Phase Cond.<br>Size | Min Bending<br>Radius | Max Pull<br>Tension | DC Resistance @<br>25°C | AC Resistance @<br>75°C | Inductive Reactance<br>@ 60Hz | Allowable Ampacity in Duct<br>or Buried<br>75/90°C |
|----------------|---------------------|-----------------------|---------------------|-------------------------|-------------------------|-------------------------------|--|
|                | AWG/Kcmil           | inch                  | lb                  | Ω/1000ft                | Ω/1000ft                | Ω/1000ft                      | Amp  |
| Wake<br>Forest | 4/0                 | 7.9                   | 4062                | 0.084                   | 0.100                   | 0.041                         | 144 / 164  |

#### Notes:

- 1. Inductive reactance assumes cables are cradled in conduit, and the neutral is carrying no current.
- 2. Conductors assumed to be reverse lay stranded, compressed construction.
- 3. Phase spacing assumes cables are touching.
- 4. Resistances shown are for the phase conductors only.
- 5. 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)



<sup>^</sup> HI-SCORE: Medium Density Polyethylene Insulation

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