

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)

For information about our Cable-Rejuvenation Services please visit us at: Cable-Rejuvenation Services
You can email us at: Cable-Rejuvenation Services

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 Number | Code Word | Phase Cond. Size | Phase Strand | Dia. Over Phase Conductor | Phase Insul. Thickness | Dia. Over Phase Insulation | Neutral Cond. Size | Neutral Strand | Neutral Insul. Thickness | Approx. OD | Approx. Weight |
|-----------------|--------------|------------------------|-----------------|------------------------------|---------------------------|-------------------------------|-----------------------|-------------------|-----------------------------|---------------|-------------------|
| | | AWG/ Kcmil | No. | inch | mil | inch | AWG/Kcmil | No. | mil | inch | lb/1000ft |
| TBA | Purdue | 1/0 | 19 | 0.361 | 80 | 0.521 | 1/0 | 7 | 80 | 1.263 | 719 |

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 Word | Phase Cond. Size | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity in Duct or Buried 75/90°C | |
|--------------|---------------------|-----------------------|---------------------|-------------------------|-------------------------|-------------------------------|--|--|
| | AWG/Kcmil | inch | lb | Ω/1000ft | Ω/1000ft | Ω/1000ft | Amp | |
| Purdue | 1/0 | 6.3 | 2027 | 0.167 | 0.201 | 0.044 | 96 / 108 | |

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)





[^] HI-SCORE: Medium Density Polyethylene Insulation

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