

# 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
105437	Mercer	4	7	0.225	60	0.344	62

All dimensions are nominal and subject to normal manufacturing tolerances

## 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 or Buried 75/90°C
	AWG/ Kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	
Mercer	4	1.4	250	0.424	0.511	0.048	65 / 75	

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

<sup>!</sup> Conductor is ASTM B901

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.