

Single 600 Volt USE-2 Aluminum Underground Service Entrance



CONSTRUCTION:

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

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

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



Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | www.southwire.com



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	Approx. OD	Approx. Weight
		AWG/Kcmil	No.	inch	mil	inch	inch	lb/1000ft
105536	Duke	600	61	0.865	110	1.085	1.086	704

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

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	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	
Duke	600	5.4	3600	0.029	0.037	0.039	340 / 385	

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)

