

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
105528!	Emory	500	34	0.789	95	0.956	578

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	
Emory	500	3.8	3000	0.035	0.044	0.039	350	350	

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)

