

AIRPORT LIGHTING CABLES

Single Conductor, XLPE Insulated, Non-shielded 5,000 V Airport Lighting Cables according to the FAA AC 150/5345-7E (L-824 Type C) Specification. ETL Certified

APPLICATION:

For runway, taxiway and approach in underground series airport lighting circuits. At 5,000 V rated voltage and maximum conductor temperatures of 90 °C for continuous normal operation and 250 °C for short circuit. Suitable for use in wet or dry conditions in metallic and non-metallic conduits, ducts, aerial and direct earth burial installations.

CERTIFICATION:

1. ETL Certified
2. FAA Listed as an Approved Supplier

CONSTRUCTION:

A bare copper seven wires stranded circular conductor covered with a separator tape has an extruded tracking resistant XLPE (cross-linked polyethylene) insulation, non-jacketed. Also available with conductor shield, insulation shield and / or PVC or PE jacket, upon request.

STANDARDS:

Conforms to:

1. FAA Advisory Circular (AC) 150/5345-7E, Specification for L-824, Type C;
2. NEMA WC71 / ICEA S-96-659-1999 for non-shielded cables.

PACKAGING

Standard supply lengths are 5000 ft / reel. Other reel lengths are available upon request.



Catalog Number	Conductor				Separator tape thickness	Nominal insulation thickness	Nominal diameter	Ampacity in underground duct (1)
	Size	Number of strands	Nominal Diameter	DC resistance at 25 °C				
	AWG	-	inches	Ω/1000 ft				
F1LC11108	8	7	0.143	0.652	0.5	110	0.364	64
F1LC11106	6	7	0.180	0.411	0.5	110	0.401	85
F1LC11104	4	7	0.226	0.258	0.5	110	0.447	110

(1) Ampacity according to NEC Table 310.77: Three Single-Insulated Copper Conductors in Underground Electrical Ducts (Three Conductors per Electrical Duct) Based on Ambient Earth Temperature of 20°C (68°F), 100 Percent Load Factor, Thermal Resistance (RHO) of 90, Conductor Temperatures of 90°C (194°F)

The information given on this page is subject to change without notice.



AIRPORT LIGHTING CABLES

Specification

**Single Conductor, XLPE Insulated,
Non-shielded 5,000 V Airport
Lighting Cables according to
the FAA AC 150/5345-7E (L-824
Type C) Specification.
ETL Certified**

SCOPE

This specification describes XLPE (cross-linked polyethylene) insulated non-shielded single conductor 5,000 Volts cables for runway, taxiway and approach in underground series airport lighting circuits. For a maximum conductor temperatures of 90 °C for continuous normal operation and 250 °C for short circuit, in wet or dry conditions. Suitable for use in metallic and non-metallic conduits, ducts, aerial and direct burial installations.

STANDARDS

The following standards shall form a part of this specification to the extent specified herein:

- Conforms to FAA Advisory Circular (AC) 150/5345-7E, Specification for L-824, Type C, Underground Electrical Cable for Airport Lighting Circuits
- NEMA WC71 / ICEA S-96-659-1999: "Standard for Non-shielded Power Cables Rated 2,001 – 5,000 Volts for the Distribution of Electrical Energy" as referenced by FAA AC 150/5345-7E.

CONDUCTORS

Bare soft annealed, high conductivity copper per ASTM B-3, concentric stranded, class B (seven strands) per ASTM B 8.

SEPARATOR

A separator is applied to facilitate the insulation stripping.

INSULATION

Directly over the separator shall be applied a homogeneous wall of XLPE (cross-linked polyethylene) insulation meeting the requirements of NEMA WC71 / ICEA S-96-659-1999, Table 4-2.

TESTS

The cable shall be tested in accordance with NEMA WC71 / ICEA S-96-659-1999 Standard, Table 5-1.



Tel. (877) 263 2807
Fax (877) 263 2817
info@synergycables.com
www.synergycables.com