



power connection cable series

# FAA L-824 Type C

## Airfield Lighting Cable

FAA AC 150/5345-7F 5 kV primary &amp; 600 V secondary XLPE airfield lighting cable



FAA AC 150/5345-7F L-824 Type C

5 kV Primary &amp; 600 V Secondary

90 °C XLPE Airfield Cable

### Application

FAA L-824 Type C Airfield Lighting Cable (5 kV primary single-core & 600 V 2-core secondary) certified to FAA Advisory Circular AC 150/5345-7F, ICEA S-95-658 (NEMA WC 70) and ICEA S-93-639—featuring 7- or 19-strand copper conductors.

**Typical uses:** Commercial & Military Airport Runways (CAT I / II / III), Taxiway Edge, Centreline & Apron Flood Loops, L-830 Isolation Transformer Secondary Lamp Leads, Constant-Current Regulator (CCR) Vault Feeders, Regional Airport & Heliport Lighting Upgrades

### Construction



Cross-section, not to scale

- 1 7- or 19-strand annealed bare or tinned copper conductor
- 2 Extruded semiconducting XLPE conductor screen (5 kV)
- 3 110 mil (2.80 mm) 90 °C Cross-Linked Polyethylene (XLPE)
- 4 Optional helically applied copper tape shield (Shielded Type C)
- 5 Single-wall XLPE surface or outer PE/CPE jacket (Shielded)

Dimensioned for FAA L-823 primary connector kits

Technical data

Typical values

|                            |                                                                       |                          |                                                                      |
|----------------------------|-----------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------|
| Voltage ratings            | 5,000 V (1C primary CCR series) · 600 V (2C secondary fixture lead)   | Factory dielectric test  | 18 kV AC for 5 min (5 kV primary) · 3.5 kV AC (600 V secondary)      |
| Max. DC resistance @ 20 °C | 2.14 Ω/km (8 AWG) · 1.35 Ω/km (6 AWG) · 5.43 Ω/km (12 AWG)            | Insulation resistance    | ≥ 10,000 MΩ·km @ 20 °C                                               |
| Continuous conductor temp. | +90 °C Wet or Dry                                                     | Emergency overload temp. | +130 °C                                                              |
| Short-circuit temperature  | +250 °C (5 s)                                                         | 5 kV XLPE wall thickness | 2.80 mm (110 mil) minimum average wall                               |
| Min. bend radius           | 6 × OD (non-shielded single-wall) · 12 × OD (copper-tape shielded)    | Duct pulling coefficient | Low-friction cross-linked XLPE reduces tension on long conduit pulls |
| Water & direct burial      | Approved for direct earth burial, underground ducts and wet base cans | Sunlight & weather       | Carbon-black stabilized XLPE passes UL/ICEA weatherometer tests      |
| Hot creep & deformation    | Thermoset cross-linking passes ICEA +150 °C hot-set test              | Standards                | FAA Advisory Circular AC 150/5345-7F (L-824 Type C)                  |

Sizes

5 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

| FAA designation                                     | Conductors & shield                         | XLPE wall<br>mm | Nominal Ø<br>mm | Weight ≈<br>kg/km | Max. DC R<br>Ω/km |
|-----------------------------------------------------|---------------------------------------------|-----------------|-----------------|-------------------|-------------------|
| 5 kV L-824 Type C Primary Cable 4 sizes             |                                             |                 |                 |                   |                   |
| <input type="checkbox"/> L-824 Type C 8 AWG 5kV NS  | 1 × 8 AWG (7/19W Cu) · Single-Wall XLPE     | 2.80 (110 mil)  | 9.8             | 135               | 2.14              |
| <input type="checkbox"/> L-824 Type C 6 AWG 5kV NS  | 1 × 6 AWG (7/19W Cu) · Single-Wall XLPE     | 2.80 (110 mil)  | 10.8            | 185               | 1.35              |
| <input type="checkbox"/> L-824 Type C 8 AWG 5kV SH  | 1 × 8 AWG · XLPE + 5 mil Cu Shield + Jacket | 2.80 + 1.52     | 14.2            | 265               | 2.14              |
| <input type="checkbox"/> L-824 Type C 6 AWG 5kV SH  | 1 × 6 AWG · XLPE + 5 mil Cu Shield + Jacket | 2.80 + 1.52     | 15.2            | 335               | 1.35              |
| 600 V L-824 Type C Secondary Lead 1 sizes           |                                             |                 |                 |                   |                   |
| <input type="checkbox"/> L-824 Type C 2×12 AWG 600V | 2 × 12 AWG (19W Cu) · 600 V Secondary       | 1.14 + 1.52     | 11.4            | 160               | 5.43              |

– Non-shielded 8 AWG Type C has a compact 9.8 mm OD, allowing multiple circuits to share 2-inch PVC airfield ducts with low pulling tension.

## Standards and approvals

- ✓ FAA AC 150/5345-7F L-824 Type C
- ✓ ICEA S-95-658 / NEMA WC 70
- ✓ ICEA S-93-639 (Shielded)

## Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

### Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

[tebaoflex.com/cables/faa-l-824-type-c-airfield-lighting-cable](https://tebaoflex.com/cables/faa-l-824-type-c-airfield-lighting-cable)



Typical values for this cable type, based on FAA AC 150/5345-7F / ICEA S-95-658 (NEMA WC 70) / S-93-639. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.