



power connection cable series

FAA L-824 Type B

Airfield Lighting Cable

FAA AC 150/5345-7F 5 kV single-core EPR / CPE runway series-circuit cable



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

5 kV 6.6 A / 20 A CCR Series

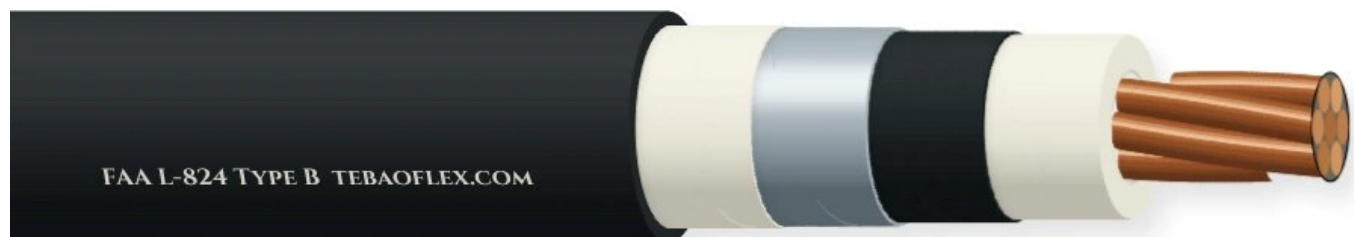
EPR Insulation + CPE Jacket

Application

FAA L-824 Type B Airfield Lighting Cable (5 kV, 8 AWG & 6 AWG) certified to FAA Advisory Circular AC 150/5345-7F and ICEA S-93-639 / NEMA WC 74 for 6.6 A and 20 A constant-current regulator (CCR) airport runway, taxiway and approach.

Typical uses: Commercial Airport Runway Edge & Centreline Lighting, Taxiway Guidance & Stop-Bar Series Loops, Approach Lighting Systems (ALS / MALSR / PAPI), Military Airbase Arresting-Gear & Apron Vaults, Heliport & Vertiport Constant-Current Loops

Construction



Cross-section, not to scale

- 1 8 AWG or 6 AWG Class B/C stranded copper conductor
- 2 Extruded semiconducting conductor stress control layer
- 3 110 mil (2.80 mm) 90 °C EPR (Ethylene Propylene Rubber) insulation
- 4 Helically applied copper tape shield (on Shielded Type B)
- 5 Heavy-duty Black CPE / CSP thermoset elastomer outer jacket

Technical data

Typical values

Rated voltage & circuit	5,000 V (5 kV, 100 % level) for 6.6 A & 20 A CCR series loops
Max. DC resistance @ 20 °C	2.14 Ω/km (8 AWG / 8.37 mm ²) · 1.35 Ω/km (6 AWG / 13.3 mm ²)
Continuous conductor temp.	+90 °C normal operation
Short-circuit temperature	+250 °C
CPE jacket wall	1.14 mm (45 mil non-shielded) · 1.52 mm (60 mil shielded)
Ozone & corona resistance	Passes ICEA 0.03 % ozone chamber test without cracking
De-icer & Jet-A fuel	Thermoset CPE jacket resists runway potassium acetate & Jet-A spills

AC & DC factory test	18 kV AC (5 min) or 35 kV DC (15 min) + partial discharge ≤ 5 pC
Insulation resistance	K ≥ 20,000 MΩ·1000 ft at 15.6 °C
Emergency overload temp.	+130 °C (max. 100 hours/year)
EPR insulation wall	2.80 mm (110 mil) nominal on 5 kV 8 AWG & 6 AWG
Min. bend radius	8 × OD (non-shielded) · 12 × OD (copper-tape shielded)
Moisture & direct burial	Approved for direct burial in soil, sand and submerged conduit
Standards	FAA Advisory Circular AC 150/5345-7F (L-824 Type B)

Sizes

4 standard constructions

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

FAA designation	Conductor & shield	EPR / CPE wall mm	Nominal Ø mm	Weight ≈ kg/km	Max. DC R Ω/km
5 kV L-824 Type B Non-Shielded 2 sizes					
☐ L-824 Type B 8 AWG 5kV NS	8 AWG (8.37 mm ²) 7/19W · Unshielded	2.80 / 1.14	12.2	195	2.14
☐ L-824 Type B 6 AWG 5kV NS	6 AWG (13.3 mm ²) 7/19W · Unshielded	2.80 / 1.14	13.2	255	1.35
5 kV L-824 Type B Copper-Tape Shielded 2 sizes					
☐ L-824 Type B 8 AWG 5kV SH	8 AWG (8.37 mm ²) · 5 mil Cu Shield	2.80 / 1.52	14.5	285	2.14
☐ L-824 Type B 6 AWG 5kV SH	6 AWG (13.3 mm ²) · 5 mil Cu Shield	2.80 / 1.52	15.5	355	1.35

– 8 AWG is standard for 6.6 A series loops; 6 AWG is used for 20 A high-intensity runway loops or extra-long vault home runs.

Standards and approvals

- ✓ FAA AC 150/5345-7F L-824 Type B
- ✓ ICEA S-93-639 / NEMA WC 74
- ✓ ICAO Annex 14 Compatible

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-b-airfield-lighting-cable



Typical values for this cable type, based on FAA AC 150/5345-7F / ICEA S-93-639 (NEMA WC 74). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.