

AIRPORT LIGHTING CABLE

FAA L-824 Type C



Made in USA

**RoHS
Lead Free
Halogen Free**

 **Nexans**

866-663-9267

www.nexans.us



Introduction

Nexans is one of the largest wire and cable manufacturers in the world. In North America we manufacture in locations across the United States and Canada. We design and produce a wide range of cables used in power, industrial, construction and communication applications.

With more than a century of experience as a leader in the industrial and power cable markets, Nexans is contracted by heavy industry and utilities world wide to provide turnkey solutions for the bulk transmission of power – from generating station through the transmission and distribution systems to commercial, residential and industrial areas.

This catalog has been prepared for the convenience of those using electrical conductors in industrial applications. The information included in the many tabulations will be of particular value to the architect, engineer, electrician, and layperson alike.

Although we have listed the types of wires and cables suitable for most conditions, we are equipped to manufacture other types to suit special needs. We would be pleased to recommend the most suitable construction for any condition that you may encounter.

The determination of the correct cable size and type, and the selection of methods of installation suitable for the type and location of particular circuits, should be made in accordance with local regulations. Any questions in this respect should be directed primarily to the local Electrical Inspection Authority.

We are pleased to note that all the cables in this catalog are Halogen Free, Lead Free and RoHS compliant.

“Halogen Free” indicates that halogens may be present only as trace contaminants. There are no halogens as part of the polymer structures or added to the materials.

“Lead Free” indicates that the Nexans cable components have less than 300 ppm of lead, which is well below the 1000 ppm level indicated in RoHS (restriction of hazardous substances) regulations and below the level requiring labeling by California proposition #65.

NOTICE

Nexans has endeavoured to ensure the accuracy of the data in this publication, however we cannot be liable for the consequences of errors or omissions. All data is subject to change without notice. The installer and / or user assumes all liability for the consequences of the installation and / or use of any of our products in contravention of any applicable law, regulation or code.

Applications

Nexans FAA L-824 Type C airport series runway lighting cable is designed for use in between the constant current source and the isolating transformers in the series lighting circuits for runways, taxiways, navigational aids, and obstruction lighting (such as LED, Xenon, and Incandescent light fixtures). It is suitable for direct burial installations, pulled into metallic or non-metallic conduit (where not exceeding the pulling tension and sidewall bearing pressure limits). These XLPE insulated cables are rugged, have excellent abrasion and crush resistance, and are resistant to the chemicals in de-icing fluids.

Manufactured in the USA
Halogen Free
Lead Free and RoHS compliant

Construction

This single conductor cable is 5 kV rated.

Conductor: bare, annealed compressed copper conforming to ASTM B3 and Class B stranded in accordance with ASTM B8.

Conductor Shield: no conductor shield for this construction

Insulation: black cross-linked polyethylene

Termination and Splicing

For unshielded airport lighting cables, standard techniques and accessories may be used (with adequate insulation build-up)

Specifications

- Meets FAA L-824 Type C

Product Features

- Made in the USA
- ARRA (American Recovery and Reinvestment Act of 2009) compliant
- Suitable for installation in metallic and non-metallic conduits
- Suitable for direct burial underground
- Temperature rating of 90°C dry and wet
- Sizes #8 and #6 AWG are available with 19-wire stranding as a manufactured item with a minimum run quantity.
- Halogen Free
- Lead free
- RoHS compliant

Underground Electrical Cable for Airport Lighting Circuits

FAA L-824 Type C 5000 Volts Non-Shielded

Part Number	Package Length	Conductor Size	Insulation Thickness		Nominal Diameter		Approximate Net Cable Weight	
	ft	AWG	mils	mm	In	mm	lb/kft	kg/km
611491	5,000	8 (7w)	110	2.79	0.369	9.37	89	132
670231	10,000	8 (7w)	110	2.79	0.369	9.37	89	132
611533	5,000	6 (7w)	110	2.79	0.406	10.31	125	186
		4 (7w)	110	2.79	0.452	11.48	180	268

Electrical Properties

Part Number	Conductor Size	R _{dc} (20°C)		R _{ac} (90°C, 60Hz)	
	AWG	ohm / km	ohm / kft	ohm / km	ohm / kft
611491, 670231	8 (7w)	2.09	0.636	2.67	0.815
611533	6 (7w)	1.31	0.400	1.67	0.510
	4 (7w)	0.825	0.252	1.05	0.321

Physical Properties

Part Number	Conductor Size	Maximum Pulling Tension (Pulling Eye)		Minimum Bend Radius (during pull, trained)		Maximum Sidewall Bearing Pressure	
	AWG	N	lb	mm	in	N / m	lb / ft
611491, 670231	8 (7w)	577	130	48	1.9	1460	100
611533	6 (7w)	917	206	52	2.0	1460	100
	4 (7w)	1458	328	58	2.3	1460	100



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