

Cord Sets

L-823 Cord Sets and Connector Kits



L-823 Plug w/Cord Set

Compliance with Standards

FAA: L-823 AC 150/5345-26 (Current Edition)

Uses

L-823 plugs and receptacles (cable connectors) are used for underground cable connections, isolation transformer leads, and airport light fixture leads.

Features

- The voltage drop across the contacts of a connected plug and receptacle does not exceed 7.5 millivolts for primary connectors nor 6.0 millivolts for secondary connectors
- Sockets are slotted and spring-loaded to ensure good electrical contact
- Pins and sockets are made of both copper and brass and are tinned for corrosion resistance
- Field-attached connector kits are resistant to direct sunlight and ozone
- Sockets are an annealed sleeve-type spring, which protects the socket slots from filling with insulation compound during molding
- Pins and sockets designed for field assembly connectors have provisions for crimping to the cable conductors at the job site
- Manufactured by various ETL-Certified sources

Operating Conditions

Temperature: -67 °F to +149 °F (-55 °C to +65 °C)
Resistant to: Deicing fluids, jet fuel, rain, snow, ice, and standing water and can be buried in the earth

L-823 Cord Set

L-823 cord sets are used for secondary cable extensions and transformer interconnection cable assemblies. The standard cord set consists of the L-823 plug (Style 1) with molded-on 2C/AWG 16 wire (31-inches long from interface of plug to end of wire). Other lengths and AWGs are available by special order.

Primary Connector Kit

The primary cable connector kit is designed to provide a separable connection between: 1) a non-screened primary airfield cable (5 kV or less) and an FAA L-830 isolation transformer or 2) in a non-screened primary series circuit cable. One kit is required for each cable splice or

transformer installation. Each kit conforms to FAA L-823 Style 3 plug and Style 10 receptacle with crimp-on pin and socket contacts.

Each receptacle is equipped with a disposable sleeve fitted into the receptacle's water seal to catch surplus silicone compound during assembly.

Each socket is equipped with a disposable pin fitted tightly into the pin end of the socket to prevent entry of silicone compound during assembly and provide a visual indication of proper socket position after assembly. An adequate amount of silicone insulating compound is furnished with each connector to insure all internal voids are filled during connector assembly.

L-823 Plug, Style 3 and pin



L-823 Receptacle, Style 10 and Socket

Secondary Connector Kit

Connector assemblies are composed of two parts: an insert assembly and a housing. When plug and receptacle assemblies are assembled, they provide a water-resistant seal to prevent moisture from entering the housing.

The Style 4 plug connector kit is designed to terminate individual secondary wires. The Style 5 kit is designed to terminate non-shielded secondary cables. The plug connector kit contains a plug housing with a crimp-on plug insert that mates to a Style 7, 8, 11, or 12 receptacle.

The Style 11 receptacle connector kit is designed to terminate individual secondary wires. The Style 12 kit is designed to terminate non-shielded secondary cables. The receptacle connector kit contains a receptacle housing and crimp-on receptacle insert that mate with a Style 1, 4, 5, or 6 plug connector.

TRANSFORMERS & CABLES

Cord Sets

Ordering Codes: Cord Sets

Description	Part No.
Style 1 plug, 16 AWG	
31-inch (78.74 cm) without terminals <i>31 inches from interface of L-823 plug to end of wire. Contact your sales team for lengths other and wire sizes available by special order.</i>	73A0009-31
31-inch with fork terminal - #6 stud size <i>Specify length when ordering.</i>	44A1707
31-inch with female disconnect <i>Specify length when ordering.</i>	44A1701

Ordering Codes: Canadian Style Cord Sets

Description	Part No.
Style 1 plug, 16 AWG	
18-inch (450 mm) with 2/C Cable and Fork Terminals for Prefocus Socket	91MPC-.46-M
Style 1 plug, 16 AWG	
18-inch (450 mm) with 2/C Cable and Female Spade Term. for PK30d Lamps	91MPC-.46-H
Style 1 plug, 16 AWG	
29.5-inch (750 mm) with with 2/C Cable and Fork Terminals for Prefocus Socket	91MPC-.75-M
Style 1 plug, 16 AWG	
39-inch (1000 mm) with with 2/C Cable and No Terminals	91MPC-1.0

Ordering Codes: Primary Connector Kits

Cable Diameter (Insulation OD) in (mm)	Wire Size Concentric Stranded AWG	Part No.
Includes both Style 3 plug and Style 10 receptacle		
0.320-0.430 (8.1-10.9)	8	70A0012
0.320-0.430 (8.1-10.9)	8	70A0012/AMERACE
0.320-0.430 (8.1-10.9)	8	70A0012-1
0.320-0.430 (8.1-10.9)	8	70A0012-CK
0.320-0.430 (8.1-10.9)	6	70A0014
0.320-0.430 (8.1-10.9)	6	70A0014-1
0.320-0.430 (8.1-10.9)	6	70A0014-CK
0.420-0.585 (10.7-14.9)	8	70A0017
0.575-0.785 (14.6-19.9)	6	70A0019

Supplier Part No. Reference Table

Part No.	Thomas & Betts	Integro
70A0012		11174-01
70A0012/AMERACE	54D4D4	
70A0012-1	54Super D4-D4	NA
70A0012-CK	NA	11805-01
70A0014	54D3D3	11174-04
70A0014-1	54Super D3-D3	NA
70A0014-CK	NA	11805-04
70A0017	54E4E4	11174-05
70A0019	54F3F3	11174-06

Ordering Codes: Secondary Connector Kits

Cable Diameter (Insulation OD) in (mm)	Wire Size		Part No. * US/Canada
	Concentric Stranded AWG	Solid AWG	
Style 4 plug for terminating two individual conductors			
0.120-0.160 (3.1-4.1)	10-12	8-10	70A0055/90P-S6
0.155-0.205 (3.9-5.2)	10-12	8-10	70A0045/90P-A6
0.195-0.260 (4.9-6.6)	10-12	8-10	70A0044/90P-B6
Style 11 receptacle for terminating two individual conductors			
0.155-0.205 (3.9-5.2)	10-12	8-10	70A0046/90R-A6
0.195-0.260 (4.9-6.6)	10-12	8-10	70A0041/90R-B6
0.155-0.205 (3.9-5.2)	14-16	12-14	70A0049/90R-A8
Style 5 plug for terminating two conductors in a cable			
0.420-0.585 (10.7-14.9)	14-16	12-14	70A0040/91P-E8
0.420-0.585 (10.7-14.9)	10-12	8-10	70A0047/91P-E6
0.575-0.785 (14.6-19.9)	10-12	8-10	70A0239/91P-F6
Style 12 receptacle for terminating two conductors in a cable			
0.420-0.585 (10.7-14.9)	14-16	12-14	70A0048/91R-E8
0.420-0.585 (10.7-14.9)	10-12	8-10	70A0263/91R-E6
0.575-0.785 (14.6-19.9)	10-12	8-10	70A0238/91R-F6

Notes

* Part numbers are listed as US / Canadian part number.



Plug Insert and Housing

Housing and Receptacle Insert

Weight

Primary Connector Kit	0.46 lb / 0.209 kg
Secondary Connector Kit	0.12 lb / 0.054 kg
L-823 Cord Set	0.18 lb / 0.082 kg

Electrical

Insulation Rating:	Primary Kits – 5 kV Secondary Kits – 600 V
Electrical Connector Rating:	Primary Kits – 25 A Secondary Kits – 20 A

Ordering Codes: Cord/Extension Cord Sets

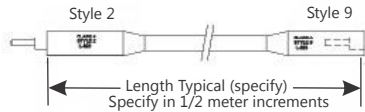
Description	Part No.
16/2 Cord with one Plug, Type II, Class A, Style 1, 37-inch length (93.98 cm)	73A0107-48
16/2 Cord with one Plug, Type II, Class A, Style 1, 6-foot length (182.88 cm)	73A0107-72
16/2 Cord, one Receptacle, Type II, Class A, Style 8, one Plug, Type II, Class A, Style 1, 8-foot length (243.84 cm) Receptacle to be connected to Plug on standard 31-inch (78.74 cm) L-823 cord set.	73A0109-8
16/2 Cord, one Receptacle, Type II, Class A, Style 8, one Plug, Type II, Class A, Style 1, 6-foot length (182.88 cm) Receptacle to be connected to Plug on standard 31-inch (78.74 cm) L-823 cord set.	73A0109-6
16/2 Cord, one Receptacle, Type II, Class A, Style 7, one Plug, Type II, Class A, Style 1, 8-foot length (243.84 cm) Receptacle may be connected to Plug on 73A0107-X or 73A0109-8 cord set.	73A0108-8
16/2 Cord, one Receptacle, Type II, Class A, Style 7, one Plug, Type II, Class A, Style 1, 6-foot length (182.88 cm) Receptacle may be connected to Plug on 73A0107-X or 73A0109-8 cord set.	73A0108-6

TRANSFORMERS & CABLES

Cord Sets

Cord Set Extensions and Secondary Leads

Primary Extension



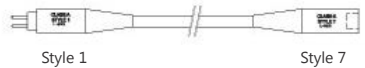
54MPRN-___-___ (LENGTH IN M)
 #8 AWG Type C - Thermoplastic Rubber Insulated Cable
 Rated 5000 V, 20 A, (19 strand)

Secondary Extension (for use with stake)



95MPR8-G-___-___ (LENGTH IN M)
 2/C #12 AWG - Thermoplastic Insulated
 Waterproof Cable with Overall
 Jacket Rated 600 V, 20 A, 90 °C

Secondary Extension



95MPR7-G-___-___ (LENGTH IN M)
 2/C #12 AWG - Thermoplastic Insulated
 Waterproof Cable with Overall
 Jacket Rated 600 V, 20 A, 90 °C

Secondary Lead



95MPG-___-___ (LENGTH IN M)
 2/C #12 AWG - Thermoplastic Insulated
 Waterproof Cable with Overall
 Jacket Rated 600 V, 20 A, 90 °C
 91MPC-___-___ (LENGTH IN M)
 2/C #12 AWG - Type SJO Neoprene Jacket

Secondary Lead



95MR7-G-___-___ (LENGTH IN M)
 2/C #12 AWG - Thermoplastic Insulated
 Waterproof Cable with Overall
 Jacket Rated 600 V, 20 A, 90 °C

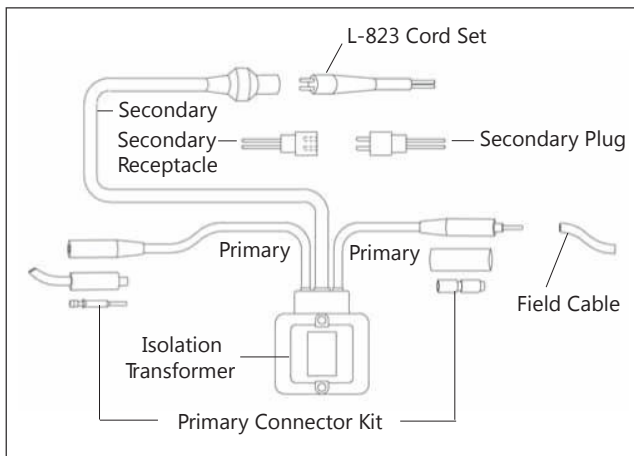
Secondary Lead (for use with stake)



95MR8-G-___-___ (LENGTH IN M)
 2/C #12 AWG - Thermoplastic Insulated
 Waterproof Cable with Overall
 Jacket Rated 600 V, 20 A, 90 °C

Installation

Installation instructions are furnished with each field-attachable plug and receptacle.



The 54 Super Series Primary Connector Kits are the easiest, quickest and most effective connections for unscreened primary cable.

Manufactured using one-piece molded housings with a customized EPDM rubber formulation, the 54 Super Kit features an exclusive cold-shrink sealing system that continuously applies a compression force on the cable. No heat shrink is required for these connections.

www.adbsafegate.com

Product specifications may be subject to change, and specifications listed here are not binding. Confirm current specifications at time of order.