

PRODUCT DATASHEET

AGL Primary Connector Kits KDL1 & KDL10

FAA AC 150/5345-26, L-823, Styles 3 & 10, Class B

KDL1 for screened cable



KDL10 for unscreened cable



KDL1 & KDL10 are the most robust and fastest-to-install connectors in the market, designed for a fast-and-easy watertight connection between the primary cable and the series isolating transformer.

- KDL is fitted with unique cable gland, which tolerates bending well and one connector fits to a wide range of cable diameters.
- Highest insulation resistance is provided by three insulation barriers. Screen continuity without crimping minimizes risk for leakages.
- KDL connectors are Intertek certified to FAA AC.

Electrical characteristics

- Superior insulation resistance by thermoplastic elastomer (TPE)
- Nominal rating: 25 A and 5000 V
- Cable diameter 7.0–17.0 mm (0.275–0.669 inches)
- Conductor size 6–10 mm² (8–6 AWG)
- ROHS compliance with EU directive NO2002/95/EC
- Available for both screened (shielded) and unscreened (unshielded) cables.

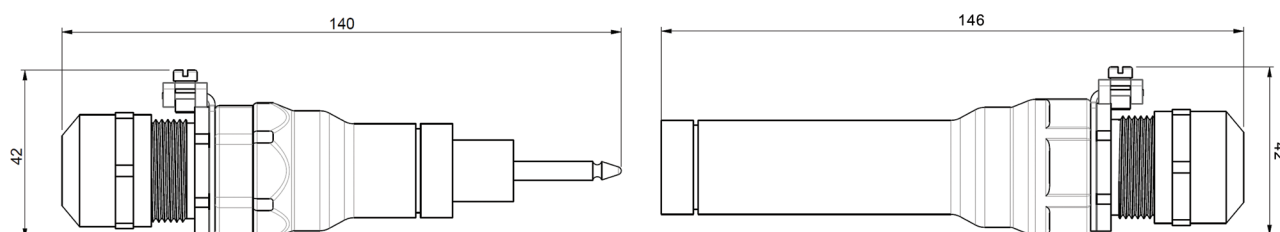


Technical data

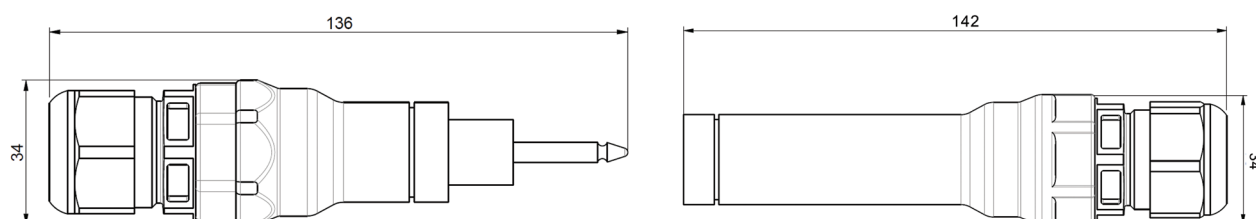
EFLA Type	Conductor Size [mm ²]	AWG	Cable Diameter [mm/inch]	Diameter at Wire Insulation [mm/inch]	Diameter & Length of Assembly [mm/inch]
KDL1	6	8	9.0–17.0 mm 0.354–0.669"	7.5–13.0 mm 0.295–0.512"	42 mm, 276 mm 1.654", 10.886"
KDL1.6	10	6	9.0–17.0 mm 0.354–0.669"	7.5–13.0 mm 0.295–0.512"	42 mm, 276 mm 1.654", 10.886"
KDL10	6	8	7.0–17.0 mm 0.276–0.669"	7.0–13.0 mm 0.276–0.512"	34 mm, 268 mm 1.339", 10.551"
KDL10.6	10	6	9.0–17.0 mm 0.354–0.669"	7.0–13.0 mm 0.276–0.512"	34 mm, 268 mm 1.339", 10.551"

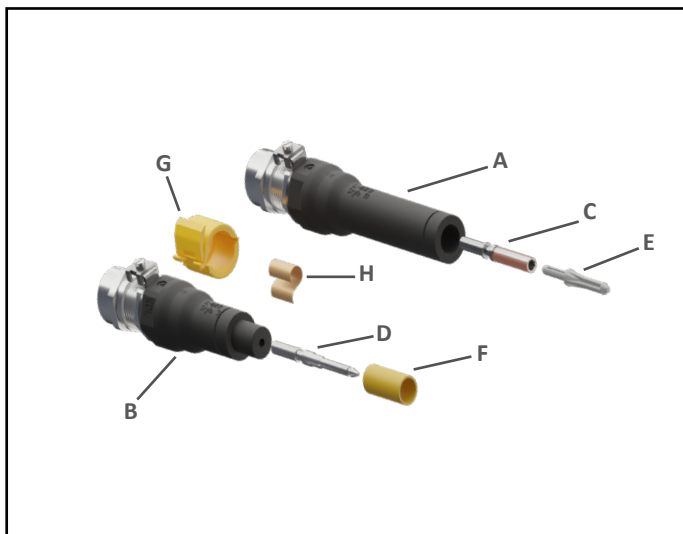
Outline dimensions

KDL1

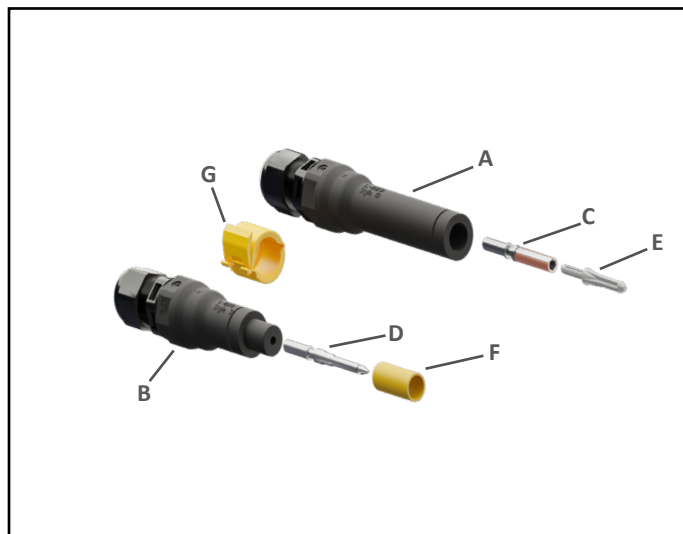


KDL10





KDL1



KDL10

Contents:

- A. Receptacle housing
- B. Plug housing
- C. Socket
- D. Pin
- E. Guiding tool

- F. Measuring tool
- G. EFLA Lock (x2)
- H. Copper tape (x2)

Not illustrated: Installation instructions, paper towel.

Suggested crimping tools

	Manual Crimping Tools	Electric Crimping Tools
Primary connectors	Elpress GWB 4099C KLAUKE K05/6 KLAUKE K24 KLAUKE K18	Elpress PVL 130S - WB4099



Note:

Information given in this document provides general description. We reserve the rights to make technical changes or modify contents of this document without prior notification.

©EFLA Oy, 2023. All rights reserved.





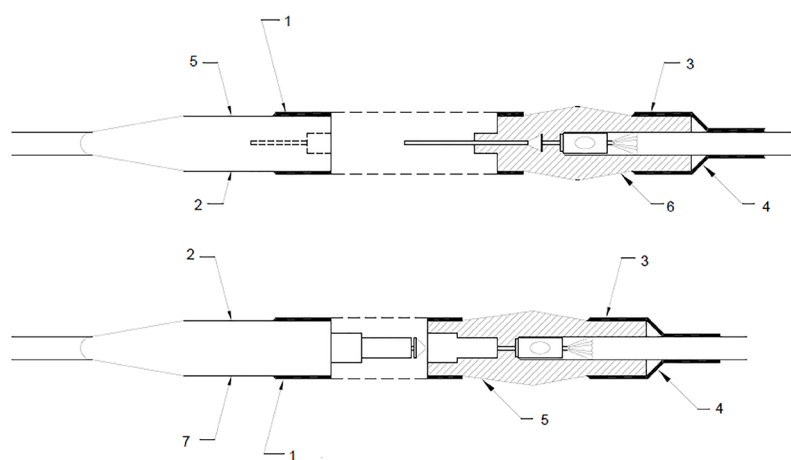
FAA Recommended Design and Installation Details for Primary Connectors

According to FAA - AC No.: 150/5340-30JV

The joints of the L-823 primary connectors must be wrapped with one layer of rubber or synthetic rubber tape and one layer of plastic tape, one half lapped, extending at least 1-1/2 inches (38 mm) on each side of the joint, as shown in the figure below.

The cable entrance into the field attached L-823 connectors must be enclosed by heat-shrinkable tubing with continuous internal adhesive as shown in Figure A. The ID of the primary L-823 field attached connectors must match the cable OD to provide a watertight cable entrance. The entrance must be encapsulated in heat shrinkable tubing with continuous factory applied internal adhesive, as shown in the figure below.

DEB primary connectors must be buried at a depth of 10 inches (254 mm) near the isolation transformer. They must be orientated parallel with the runway/taxiway centerline. There must be no bends in the primary cable 6 inches (152 mm), minimum, from the entrance into the field-attached primary connection.



1. Wrap with at least one layer of rubber or synthetic rubber tape and one layer of plastic tape, one-half lapped, extending at least 1 1/2 in [3.8 Cm] on each side of joint.
2. Factory molded transformer leads
3. Heat shrinkable tubing with internal adhesive
4. Additional adhesive compound filler
5. Receptacle end
6. Plug end
7. L-823 plug end

NOTES:

1. See lighting layout sheet(s) for splice type
2. Properly match the inside diameter of connector to the outside diameter of cable.
3. Connection of conductors must be made by using crimp connectors and a crimping tool approved by the connector/lug manufacturer. The tool must produce a complete crimp before it can be removed. The crimping tool used must be listed by the L-823 kit manufacturer. Make the number and type of crimps per the kit manufacturer's instructions.

EFLA is the world's leading supplier of seamless power and communication products for airfield ground lighting circuits. With more than 30 years experience in the field, it develops, manufactures and sells globally-certified series isolation transformers, connector kits and prefabricated cable leads. The company's components meet the highest qualifications in materials and electrical design to withstand challenging installation in underground pits and cans and direct underground installation. Headquartered in Porvoo, Finland, EFLA supplies products to international airports around the world.

EFLA OY • Kipinätie 3 • FI-06150 Porvoo, Finland • tel +358 (0)20 198 0190 • www.efla.net