

**PRIMARY CONNECTOR KIT**

# KDL10.USA-series



**Caution!**

Only personnel qualified to work with high voltage circuits are allowed to do the installation. Make sure that the circuits are disconnected from the voltage supply and correctly grounded. Never work on live circuits. Voltage of primary circuit is lethal. Make sure that the outer diameter of cable and the diameter of cable insulation are compatible.

EFLA Type	Conductor Size (mm <sup>2</sup> )	AWG	Cable Diameter (mm/inch)	Diameter at Wire Insulation (mm/inch)	Diameter, Length of Assembly (mm/inch)
KDL10.USA	6	8**	8.0 – 12.0 mm 0.315 – 0.472"	7.0 – 13.0 mm 0.276 – 0.512"	34 mm, 268 mm 1.339", 10.551"
KDL10.1.USA	6	8**	12.0 – 17.0 mm 0.472 – 0.669"	7.0 – 13.0 mm 0.276 – 0.512"	34 mm, 268 mm 1.339", 10.551"
KDL10.6.USA	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"

\* 16mm<sup>2</sup> stranded, \*\* up to 19 strands

Follow the local instructions for safety precautions or refer to the FAA advisory circular AC 150/5340-26 Maintenance of Airport Visual Aid Facilities. In addition, follow Advisory circular AC 150/5370-10 Part-XI Lighting Installations. Always test the installation according to above mentioned documents and local regulations.

Make sure that dimensions of the cable comply with the type of connector used. In case any kind of non-compliance, do not proceed with the installation. If any damage has occurred to the connectors or cables, do not proceed with the installation.

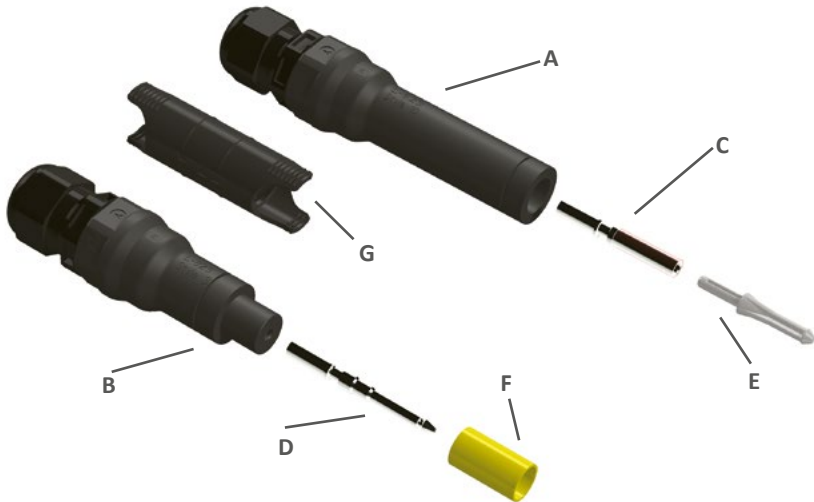
For more information about the products, please visit us at [www.efla.net](http://www.efla.net)



## Contents

- |    |                    |    |                         |
|----|--------------------|----|-------------------------|
| A. | Receptacle housing | E. | Receptacle guiding tool |
| B. | Plug housing       | F. | Measuring tool          |
| C. | Socket             | G. | EFLA Rubber sleeve x2   |
| D. | Pin                |    |                         |

Not illustrated: Installation instructions, paper towel.



Use proper tool when installing Efla products! The recommended crimping tools are following:

- Elpress GWB 4099C
- KLAUKE K05/6
- KLAUKE K18

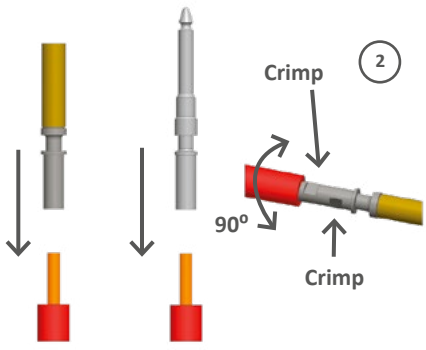
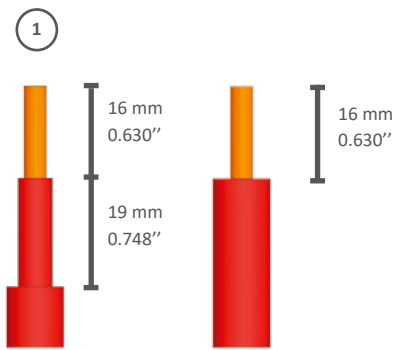
Efla is able to assist you in installation problems and questions about correct installation. The recommended crimping tools are available in Efla. For more information, please visit at [www.efla.net](http://www.efla.net).

**Measuring Tool** →

**Preparing Cables**

**1. Strip cables according to the picture:**

- Clean 20 cm/7.874" of the cables ends with aliphatic solvents (e.g. spirit or corresponding).
- Strip cable insulation 16 mm/0.630" and outer jacket 35 mm/1.378".
- In case of outer jacket only, strip 16mm/0.630".



**Crimping**

**2. Crimp the metal pins (C & D) to the cable conductors.**

- Crimp at two positions
- Turn the cable min 90° between the two crimps
- Size 6 for KDL10.USA, KDL10.1.USA
- Size 8 for KDL10.6.USA

**Assembling the receptacle connector**

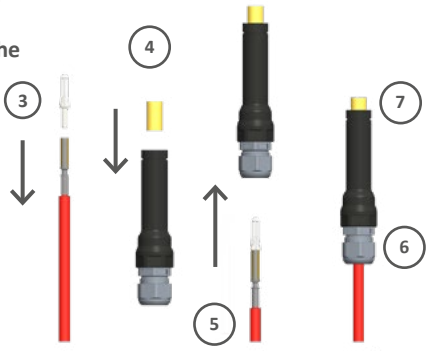
**3. Press the guiding tool (E) it reaches the bottom of the socket (C).**

**4. Place the measuring tool (F) into the receptacle housing (A).**

**5. Push the cable with the socket (C) through the receptacle housing (A). Use the measuring tool (F) to avoid pushing too far.**

**6. Tighten the cable gland until the connector is properly sealed. Max. torque: 4 Nm / 2.95 lb ft torque.**

**7. Remove the measuring tool (F) and guiding tool (E) and clean the connector from silicon grease with paper towel.**



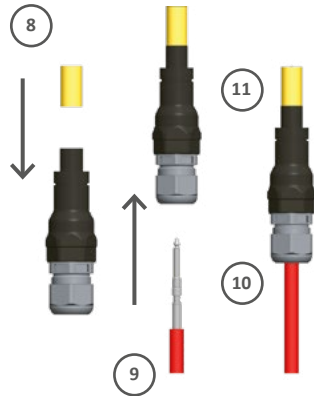
## Assembling the Plug Connectors

8. Place the measuring tool (F) onto the plug housing (B).

9. Push the cable with the pin (D) through the plug housing (B). Use the measuring tool (F) to avoid pushing too far.

10. Tighten the cable gland until the connector is properly sealed. Max. torque: 4 Nm / 2.95 lb ft torque.

11. Remove the measuring (F) and clean connector from silicon grease with paper towel.



## Remember EFLA rubber sleeve

12. Snap on the EFLA Rubber Sleeve (I) when using the connector with other EFLA products. With EFLA Rubber Sleeve connection withstands over 5 times higher pulling force



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.