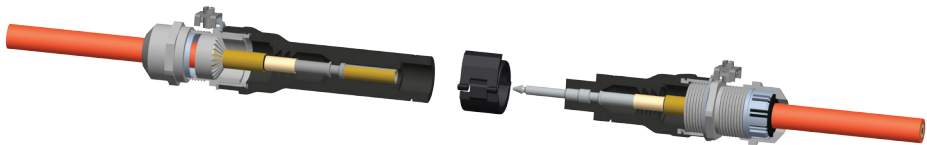


# KDL1

## Installation instructions for KDL1 primary connectors for screened (shielded) cable

Read these instructions before installation



### 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)
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", 10.866"

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.

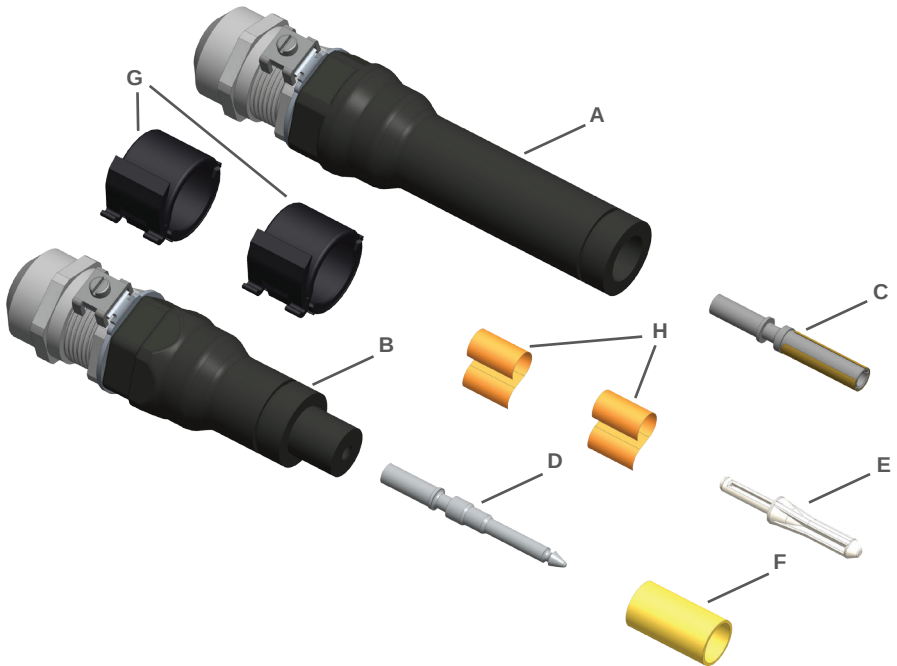
Make sure that dimensions of the cable comply with the type of connector used. In case any kind of non-compliance, do not proceed with the installation. If any damage has occurred to the connectors or cables, do not proceed with the installation. For more information about the products, please visit us [www.efla.net](http://www.efla.net).

## Contents of this kit

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

- G. EFLA Lock
- H. Copper tape

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 K24
- KLAUKE K18

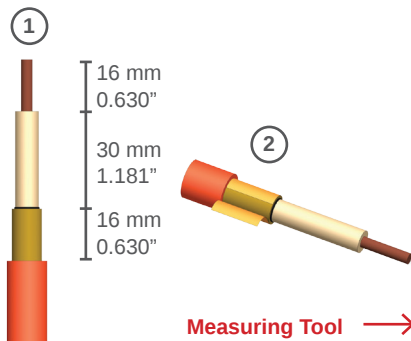
Efla is able to assist you in installation problems and questions about correct installation. The recommended crimping tools are available in Efla. For more information, please visit [www.efla.net](http://www.efla.net).

## Preparing Cables

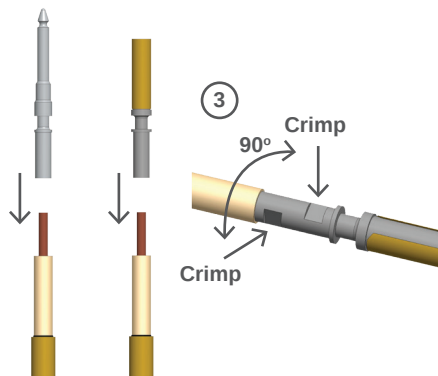
### 1. Strip cables according to the picture:

- Clean 20 cm/7.874" of the cables ends with aliphatic solvents (e.g. spirit or corresponding).
- Outer jackets: 62 mm/2.441"
- Cable screens (shield) and semi-conducting layer: 46 mm/1.811"
- Cable insulations: 16 mm/0.630"

### 2. Tape screens with copper tape (K).



## Crimping



### 3. 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 KDL1
- Size 8 for KDL1.6

## Assembling the Receptacle Connector

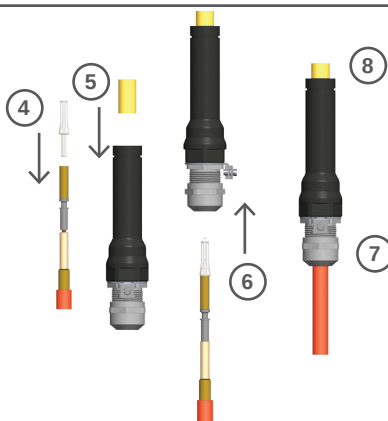
4. Press the guiding tool (E) into the receptacle socket (C).

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

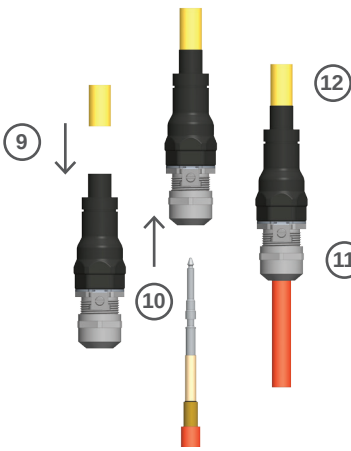
6. Push the cable with the socket (E) through the receptacle housing (A). Use the measuring tool (F) to avoid pushing too far.

7. Tighten the cable gland until the connector is properly sealed. Max. torque: 8 Nm / 5.9 lb ft torque.

8. Remove the measuring (F) and guiding tools (E) and clean connectors from silicon grease with paper towel.



## Assembling the Plug Connectors



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

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

11. Tighten the cable gland until the connector is properly sealed. Max. torque: 8 Nm / 5.9 lb ft torque.

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

## Remember the EFLA Lock

13. Snap on the EFLA Lock (l) when using the connector with other EFLA products.

- With EFLA Lock connection withstands over 5 times higher pulling force

14. Connect the screen continuity wires to cable terminals.

Make sure that the joint will remain straight.

