

## PRIMARY CONNECTOR KIT

# KD500 series



### Caution!

- Disconnect voltage supply and ground all circuits. FAA advisory circulars standards: latest AC150/5340-26 and AC150/5370-10.
- In case of non-compliance, do not install.
- Check that all components are in the plastic bag as per Contents below.
- Check [www.efla.net](http://www.efla.net) for possible updates of installation instructions.

EFLA Type	Conductor size [mm <sup>2</sup> ]	AWG	Cable diameter [mm, inch]	Diameter at cable insulation [mm, inch]
KD500	6	8**	10.0 – 14.5 mm 0.393 – 0.570"	7.0 – 10.5 mm 0.275 – 0.413"
KD500.1	6	8**	14.0 – 18.5 mm 0.551 – 0.728"	10.0 – 13.5 mm 0.393 – 0.531"
KD500.6	6	8**	8.5 – 11.5 mm 0.334 – 0.452"	5.0 – 7.5 mm 0.196 – 0.295"
KD500.2	10*	6	14.0 – 18.5 mm 0.551 – 0.728"	12.5 – 16.0 mm 0.492 – 0.629"
KD500.5	10*	6	10.0 – 14.5 mm 0.393 – 0.570"	7.0 – 10.5 mm 0.275 – 0.413"

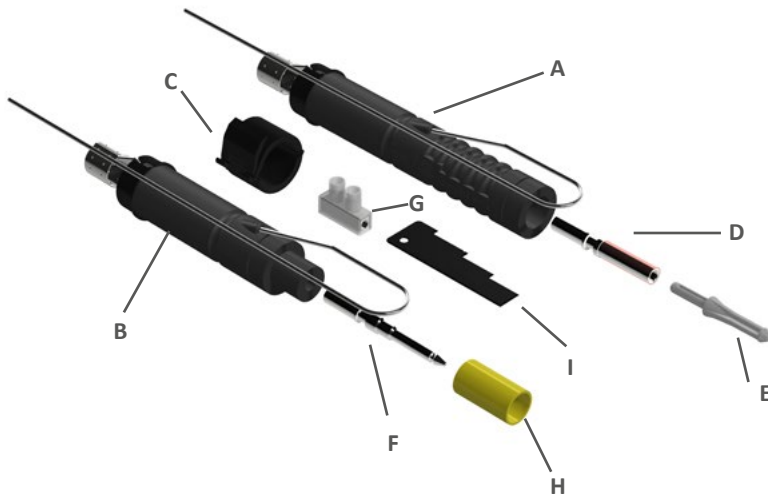
\*16 mm<sup>2</sup> stranded, \*\* up to 19 strands



## Contents

- A. Housing with screen continuity (female)
- B. Housing with screen continuity (male)
- C. Locking device (x2)
- D. Metal socket
- E. Guiding pin (plastic)
- F. Metal pin
- G. Screw type connector (6mm<sup>2</sup>)
- H. Measuring tool
- I. Measure to strip cable

The kit also includes: installation manual, paper towel, silicon grease inside the connector housing.



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

- Epress 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 [www.efla.net](http://www.efla.net).

## Measuring Tool

### Preparing Cables

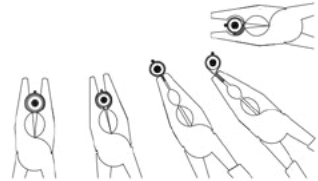
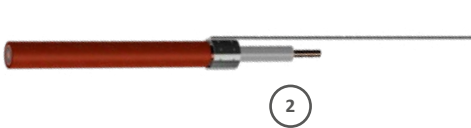
#### 1. Strip cables according to the picture:

- Clean 20 cm of the cables ends with aliphatic solvents (e.g. spirit or corresponding).
- Outer jackets: 50 mm
- Cable screens (shield) and semi-conducting layer: 34 mm
- Cable insulations: 16 mm



### Screening

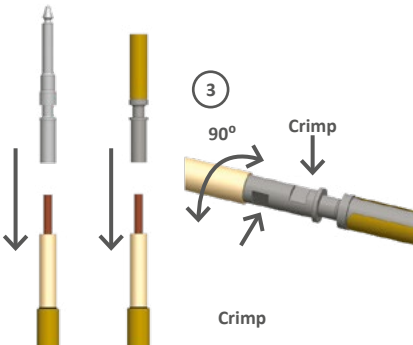
2. Place a screen continuity's ring around the cable shield area and crimp it. Make sure screen continuity wire doesn't slip completely out from the connector housing while crimping.



### Crimping

3. Crimp the metal pins (D & F) to the cable conductors.

- Crimp at two positions
- Turn the cable min 90° between the two crimps
- Size 6mm<sup>2</sup> (AWG 8) for KD500, KD500.1, KD500.6
- Size 10mm<sup>2</sup> (AWG 6) for KD500.2, KD500.5



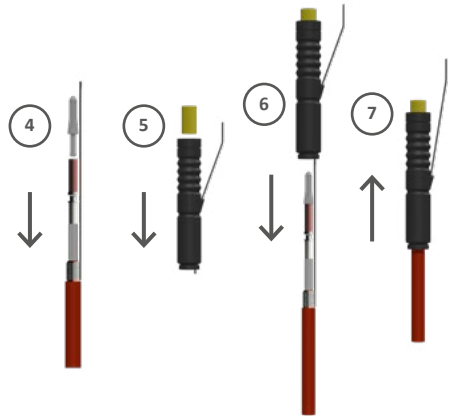
## Assembling the receptacle connector

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

5. Place the measuring tool (H) into the receptacle housing (A) and hold your thumb on top of it.

6. Position screen continuity wire in line with the receptacle housing (A) and push the pin and cable through the connector. Connector is assembled correctly when you feel the tip of the guiding pin against your thumb.

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

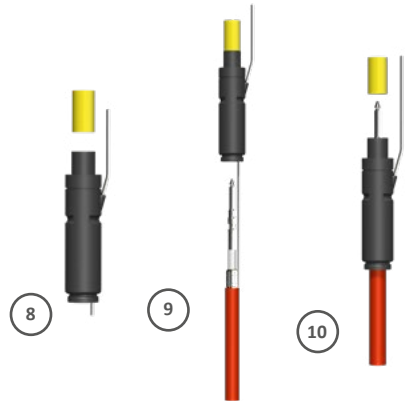


## Assembling the Plug Connectors

8. Place the measuring tool (H) onto the plug housing and hold it with your thumb (B).

9. Position screen continuity wire in line with the plug housing (B) and push the pin and cable through the connector housing. Connector is assembled correctly when you feel the tip of the pin against your thumb.

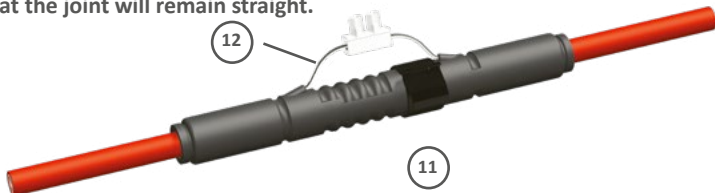
10. Remove the measuring (H) and clean connector from silicon grease with paper towel.



## Remember the EFLA Lock

11. Snap on the EFLA Lock (C) when using the connector with other EFLA products. With EFLA Lock connection withstands over 5 times higher pulling force

12. Connect the screen continuity wires to cable terminals. Make sure that the joint will remain straight.



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.