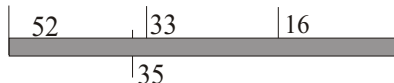


Installation instructions



KD 500 - KD 500.6 primary connectors for screened (shielded) cable
KD 510 - KD 510.6 primary connectors for (unscreened (unshielded) cable

Read these instructions before installation

Caution

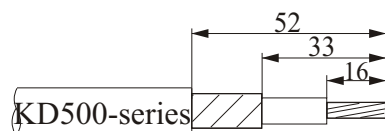
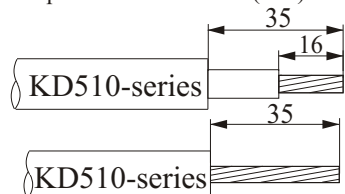
Only personnel qualifying to work with high voltage equipment and circuits are allowed to do the installation. Make sure that the circuits are disconnected from the voltage supply and correctly grounded. Never connect or disconnect live circuits. Voltage of primary circuit is lethal. Make sure that the outer diameter of cable and the diameter of cable insulation correspond to the connector type. Check also that any damage has not occurred for the connectors otherwise do not proceed with the installation. Follow the local instructions for safety precautions or refer to the FAA advisory circular AC150/5340-26 (maintenance of Airport visual Aid Facilities) Follow also Advisory circular AC150/5370-10 part XI Lighting installations Always test the installation according to above mentioned documents and local instructions.

Make sure that dimensions of the cable comply with type of connector used. In case of any kind of non-compliance do not proceed the installation.

Art no: for unscreened cable	FAA L-823	Conductor size	Cable diameter	Diameter of cable insulation
KD 510	Style 3, Style 10	6 mm ² , AWG 8 (up to 19 strands)	7/10.0 - 14.5 mm	7.0 - 10.5 mm
KD 510.1	Style 3, Style 10	6 mm ² , AWG 8 (up to 19 strands)	14.0 - 18.5 mm	10.0 - 13.5 mm
KD 510.2	Style 3, Style 10	10 mm ² (16mm ² stranded), AWG 6	14.0 - 18.5 mm	10.0 - 13.5 mm
KD 510.3	Style 3, Style 10	6 mm ² , AWG 8 (up to 19 strands)	18.0 - 22.0 mm	12.5 - 16.0 mm
KD 510.4	Style 3, Style 10	10 mm ² (16mm ² stranded), AWG 6	18.0 - 22.0 mm	12.5 - 16.0 mm
KD 510.5	Style 3, Style 10	10 mm ² (16mm ² stranded), AWG 6	10.0 - 14.5 mm	7.0 - 10.5 mm
KD 510.6	Style 3, Style 10	6 mm ² , AWG 8 (up to 19 strands)	8.5 - 11.5 mm	5.0 - 7.5 mm

Step 1) Clean 20 cm of the cable end with aliphatic solvents, e.g. spirit or corresponding and let dry. Strip cable sheath according to pictures below:

- Strip cable screen (shield) 33 (± 2) mm including optional semi-conducting layer. Make sure that no sharp edge of the screen defects the cable insulation (Only KD 500-series)
- Strip cable insulation 16 (± 2) mm.



Tools:

Elpress EWB 4099C
 KLAUKE K05/6
 KLAUKE K24
 KLAUKE K18

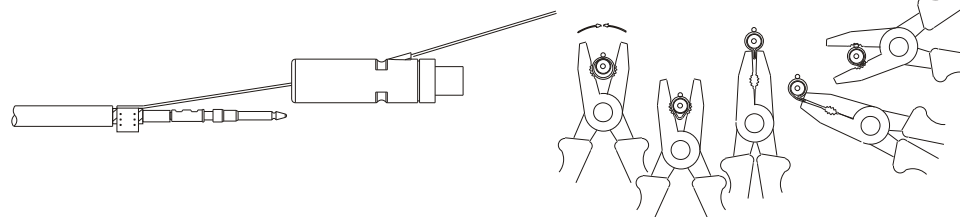
Step 2) Crimp the male pin to the cable conductor with a proper crimping tool (Some suitable crimping tools are listed on the right).



KD500-series and screened (shielded) cable

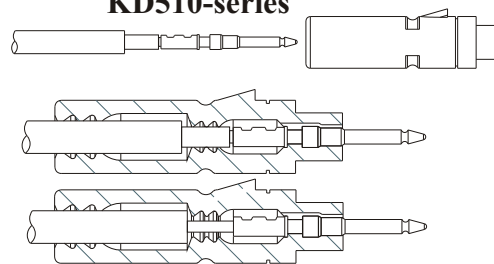
Step 3) Set the conducting sleeve around the cable screen (shield) and press it stage-wise according to the picture series below.

Note ! Do not twist the housing radially. The earthing pin may twist around the cable insulation.

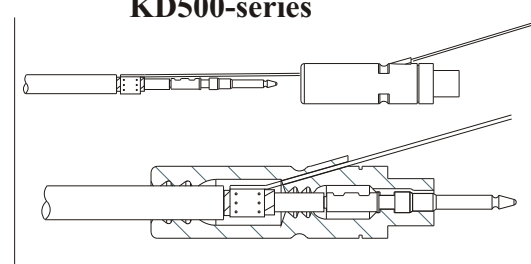


Step 4) Push the rubber housing over the male pin and the cable so that the housing is positioned correctly. (If the cable sticks in front of the rubber housing, wrap electrical tape around the front edge of the sleeve of the screen continuity only KD500-series)

KD510-series



KD500-series



Repeat corresponding steps for female connector and use the socket guide when pushing socket into receptacle rubber housing.

- Grease sealing surfaces of plug and receptacle lightly with silicone grease and clean off the contact surface (metal parts).
- Engage plug and receptacle and snab-on the plastic locking device over the connector to insure mechanical reliability of the joint.
- Connect the screen continuity wires together with included terminal block (KD500-series) Make sure that the joint will remain straight and cables do not bend it.

Additional tape securing

After the connectors are plugged together make sure that the outer surface of connectors are clean and dry. Otherwise clean the outer surface of the connectors between male and female connectors min. 50 mm (2 inch) with aliphatic solvents (Spirit or equivalent). Wrap the joint where the connectors come together with at least one layer self-vulcanizing rubber tape (Scotch 23 or 130C) so that one half-lapped extends at least 30mm (1.2 inch) of each side of joint. Wrap at least one layer of PVC electrical tape (Scotch Super 33+ or equivalent) over the rubber tape.

Disconnection:

- Remove the locking device or tape from the joint of male and female.
- Pull the connector apart without bending.
- KD500-series: Do not turn housings radially or the screen continuity wire may be twisted around the insulation.

Liability for defects

This product will perform within the recommended operational ratings when installed and operated in accordance with these instructions. Ensto Connector Oy liability is limited to replacement of component parts designed and manufactured by Ensto Connector Oy which are proved to be defective in design, workmanship or material. For further details see our conditions of sale NL 92E.