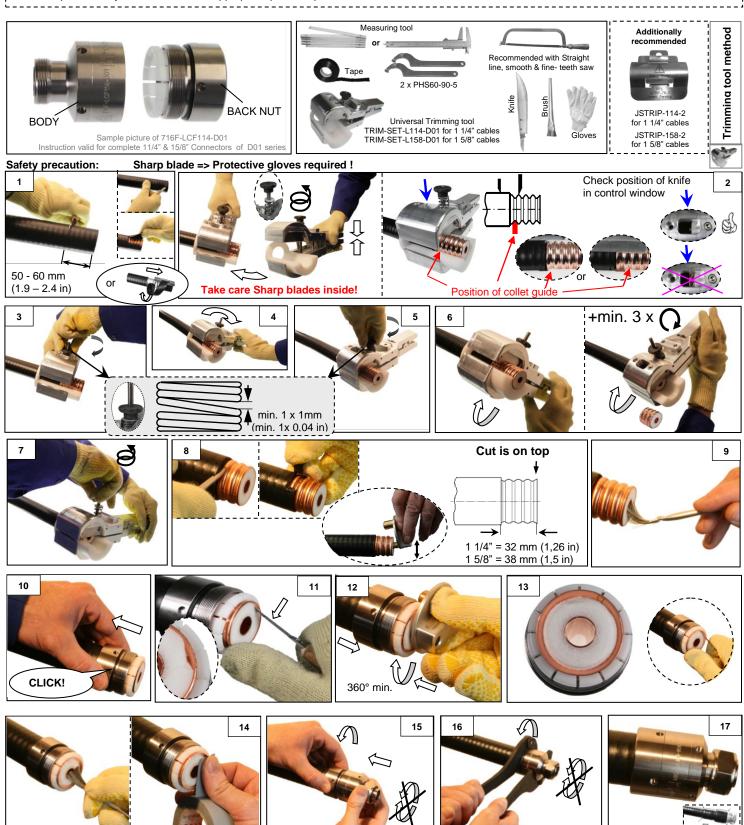


# CELLFLEX® Coaxial Cable Connectors

### **Installation Instruction**

10000012054-04 LCFS114/UCF114-50 & LCF158-50-Cables & RCF114-50 & RCF158-50 Cables OMNI FIT™ D01 Connectors

These instructions are written for qualified and experienced personnel. Please study them carefully before starting any work. Any liability or responsibility for the results of improper or unsafe installation practices is disclaimed. Please respect valid environmental regulations for assembly and waste disposal. Always make sure to use appropriate personal protection!



Importing Remarks – Weatherproofing A heat shrink sleeve with adhesive lining must be used for RCF cables!





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### Installation Instruction

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# **Installation method with Universal Trimming Tool**

TRIM-SET-L114-D01 for 1 1/4" cables

TRIM-SET-L158-D01 for 1 5/8" cables

Consist of:

Consist of: <u>Body</u>: TRIM-U-114-158 <u>Flaring tool:</u> TRIM-FL114-158

Insert: TRIM-IL114-D01 Insert consist of:

Blade holder: TRIM-IL114-D01

<u>Collet:</u> TRIM-IL114

Body: TRIM-U-114-158
Flaring tool: TRIM-FL114-158
Insert: TRIM-IL158-D01

Insert consist of:

Blade holder: TRIM-II

Blade holder: TRIM-IL158-D01
Collet: TRIM-IL158

Attention:

Trimming tool to be handled and used with great care, blades are extremely sharp!

It is recommended to use protective gloves. Do not use great force.

Keep the cable end downwards in order to prevent particles from entering during preparation.

- 1. Straighten the cleaned cable front part in a length of min. 200mm (8").

  Remove the jacket with a knife in the length as shown (it is recommended to use one of the shown JSTRP-\* jacket stripping tool). Do not damage the outer conductor!
- 2. Open the Universal Trimming Tool by pressing the base and the top handle together and insert the cable as shown. Position the collet guide of the insert in a corrugation close to the trimmed cable jacket. The cable fits properly to the complete collet segment of the tool. The main blade is located on the crest (top) of the fourth fifth corrugation and the jacket knife is in a non dismantled area (see control window).
- 3. Keep the tool in the correct position; turn the hand wheel in order to tension the spring. Note: At least one gap should remain with a residual clearance of about 1mm (see sketch).
- **4.** Rotate the Universal Trimming Tool around the cable in direction of the arrow shown on the tool until the outer conductor and the dielectric have been cut.
- 5. Re-adjust the hand wheel again as described in step 3 and shown in the sketch.
- 6. Rotate the Tool again in the same direction as before. Once the cable is completely cut after several turns, continue turning the tool min. 3 more times around the cable in order to make sure the jacket will be cut as well.
- 7. Unfasten the Tool by turning the hand wheel in opposite (counter clockwise) direction and remove the tool by pressing the handles together.
- **8.** Deburr inner conductor. Carefully cut the jacket lengthwise with a knife; do not damage the outer conductor. Remove the jacket. Check trimming dimensions. If the inner conductor should be deformed (from cutting), insert the cable guide pin of the flaring tool and carefully form it back to round.
- 9. Remove any particles.
- **10.** Push back-nut onto cable until claws falls into first corrugation valley as shown.
  - Attention: Make sure that the O-Ring slides over the outer conductor without getting pushed out.
- 11. Push a small part of dielectric to the centre in order to get a small free space for the flaring pin of the trimming tool.
- 12. Insert cable guide pin of the trimming tool into the cable inner conductor (the smaller one for 1 1/4" cables and the bigger one for 1 5/8" cables), make sure that the flaring pin is located between outer conductor and foam/dielectric (in the free space made before). Keep pushing the back-nut to the front while turning and carefully pushing the trimming tool to flare the outer conductor. Flare diameter has to be evenly round and concentric to the cable axis.
- **13.** The flared area (cone) has to be free of any dielectric material, if necessary bend the dielectric back to the centre. Check the complete preparation. Carefull preparation is the key for good VSWR and especially for PIM performance.
- **14.** Clean the cable end, remove any particles very carefully. Tip: tape can be used additionally to remove the finest particles.
- **15.** Push connector front part onto prepared cable end; do never turn the front part! Pay attention to straight position of connector parts while tightening the connector by turning the back-nut only (first by hand). Never turn the front part of the connector!
- **16.** Keep the connector body steady and tighten the back-nut of the connector to mechanical stop (no visible gap between body and back nut) by the use of two poly hook spanners.
- 17. Important Remarks Weatherproofing:

A heat shrink sleeve with adhesive lining (e.g. HEAT-5016-024 for 1  $\frac{1}{4}$ ", or HEAT-6319-026 for 1 5/8") must be used for RCF cables!





# CELLFLEX® Coaxial Cable Connectors

### Installation Instruction

10000012054-04 LCFS114/UCF114-50 & LCF158-50-Cables & RCF114-50 & RCF158-50 Cables OMNI FIT™ D01 Connectors

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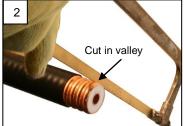




Safety precaution:

#### Sharp blade => Protective gloves required !



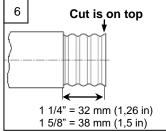






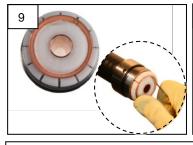
Automated trimming tool

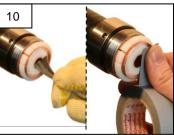




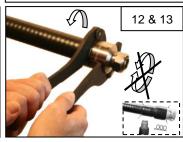












## **Installation method with Automated Trimming Tool**

Keep the cable end downwards in order to prevent particles from entering during preparation.

- 1. Straighten the cleaned cable front part in a length of min. 200mm (8"). Push the jacket stripping tool onto cable. Remove a piece of jacket by slightly pushing and turning the tool until the tool stops removing jacket. Do not damage the outer conductor!
- Cut the cable in the first valley of corrugation using a fine toothed hacksaw.
- Push the tool guide onto cable until the claws falls into the first corrugation valley as shown.
- Carefully press the Automated trimming tool over the tool guide and strip the cable by turning clockwise with medium speed (approx. 300rpm) until mechanical stop (reaching the border/stopper).
- Remove tool guide and repeat the jacket stripping operation. Remove the jacket by slightly pushing and turning the tool until the tool stops removing jacket.
- 6. Check the trimming dimensions.
- 7. Clean the prepared cable end, remove any particles. Push back-nut onto cable until claws falls into first corrugation valley as shown.

Attention: Make sure that the O-ring slides over the outer conductor without getting pushed out.

- Use the flaring tool (opposite end of the jacket stripping tool), press against the prepared cable end (connector back-nut) and rotate several times to slightly flare the outer conductor.
- 9. The flared area (cone) has to be free of any dielectric material, if necessary bend the dielectric back to the centre. Flare diameter has to be evenly round and concentrically to the cable axis. Check the complete preparation. Carefull preparation is the key for good VSWR and especially for PIM performance.
- 10. Clean the prepared cable end, remove any particles very carefully.
- 11. Push connector front part onto prepared cable end; do never turn the front part! Pay attention to straight position of connector parts while tightening the connector by turning the back-nut only (first by hand). Never turn the front part of the connector!
- 12. Keep the connector body steady and tighten the back-nut of the connector to mechanical stop (no visible gap between body and back nut) by the use of two poly hook spanners.
- 3. Important Remarks Weatherproofing: A heat shrink sleeve with adhesive lining (e.g. HEAT-5016-024 for 1 ½", or HEAT-6319-026 for 1 5/8") must be used for RCF cables!