



**CELLFLEX® Coaxial Cable
Connectors**

Installation Instruction
1000006027-05
LCF/UCF78-50 Cables & RCF78-50 cables
OMNI FIT™ C02 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!

	<p>Measuring tool or</p>	<p>Additionally recommended</p> <p>Optional</p>	<p>manual method</p>
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Safety precaution: Sharp blade => Protective gloves required !

Additional weatherproofing must be used for Lite (Aluminium) cable types, a heat shrink sleeve with adhesive lining must be used for & RCF cables.



Manual installation method with standard hand tools

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 the stripping tool JSTRIP-78-2). Do not damage the outer conductor!
2. Cut off the cable on top of corrugation in a distance of max. two and a half pitches from the jacket.
Make sure to cut in a right angle to cable axis!
3. Cut and remove the jacket in the distance as shown. Do not damage the outer conductor.
4. Deburr inner- and outer conductor each from in- and outside. Remove any particles.
5. Slide the O-Ring onto cable – positioned in the valley before jacket as shown. Wipe a light film of grease on the O-Ring.
6. Push back-nut onto cable and over the O-Ring until stop (first corrugation valley is free/exposed).
7. Put Spring O-Ring into first corrugation valley of the cable.
8. Push back-nut back to the front until stop at the Spring O-Ring (Spring O-Ring is approximately covered by its half).
9. Keep pushing the back-nut to the front while running the tip of a screw driver (rounded edges) around the outer conductor to separate the foam and create an outer conductor flare. Flare diameter has to be evenly round and concentrically to the cable axis.
10. The flared area (cone) has to be free of any dielectric material, if necessary bend the dielectric back to the centre.
11. Clean the cable end, remove any particles very carefully. Tip: tape can be used additionally to remove the finest particles.
12. Careful preparation is important especially for proper PIM performance.
13. Wipe the back nut O-Ring with a light film of grease.
14. Push connector front part onto prepared cable end; do never turn the front part!
15. 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 by use of open end wrenches. Tighten properly to mechanical stop (no visible gap between body and back-nut). Keep the interface clean, do not remove the protection cap before mating.
17. Weatherproofing

Important Remarks:

Additional weather protection is necessary when installed on Lite (Aluminium) cable!

In general this is also recommended for Copper cables especially if installed outside.

A heat shrink sleeve with adhesive lining (e.g. HEAT-3812-014) must be used for RCF cables!

Possible methods for LCF cables:

- E.g. with Sealing tape, Weatherproofing kit or Cold Shrink Sleeve
Clean cable and connector and continue according to the applicable installation instruction.
- With Heat shrink sleeve (must be used for RCF cables)
Roughen the jacket with fine grained sandpaper (e.g. 180 grain) and clean the shrinking area e.g. with cable cleaner. Pre-heat the cable jacket to hand warm and the connector to approx. 60°C. Slide the heat shrink sleeve into place over the connector body as shown. Shrink the sleeve with a soft yellow flame if using a gas burner or go for hot air gun. Shrink the sleeve onto the connector by smoothly applying a constant flame (heat) with a circular motion until the sleeve will lay flat all around and the hot solvent adhesive discharged all around. Continue with an even circular motion proceeding in direction of the cable until it shrinks smoothly forming a weatherproof seal and the hot solvent adhesive discharged all around on both ends. Note: Do not overheat especially the jacket (max. temperature = 70°C, shrinking temperature is typically around 130°C).



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	<p>Measuring tool or</p> <p>Tape Gloves Sealing material e.g. Tape, Sleeve etc.</p> <p>Recommended with Straight line, smooth & fine-teeth saw</p> <p>Universal Trimming tool TRIM-SET-L78-C02</p> <p>Knife Brush 2 x 32mm (2 x 1-1/4")</p>	<p>Additionally recommended</p> <p>JSTRIP-78-2</p> <p>Trimming tool method</p>
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Safety precaution: Sharp blade => Protective gloves required !

<p>1</p> <p>min. 45 mm (min. 1.8 in)</p>	<p>2</p> <p>Take care – Sharp blades inside!</p> <p>min. 4 corrugations (in front of the blade)</p> <p>Collet</p>	
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<p>2a</p> <p>Trim blades Main blade on top Position of collet guide max. two and a half pitch</p>	<p>3</p> <p>T1 T2 T3</p>	<p>4</p>	<p>5</p> <p>Top 21.0 – 21.5 mm (0.82 – 0.84 in)</p>
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<p>6</p>	<p>7</p>	<p>8</p>	<p>9</p>
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<p>10</p>	<p>11</p> <p>360° min.</p>	<p>12</p>	<p>13</p>	<p>14</p>
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<p>15</p>	<p>16</p>	<p>17</p>	<p>18</p>	<p>Weatherproofing options</p> <p>19</p>
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Installation method with Universal Trimming Tool



TRIM-SET-L78-C02
Consist of:

Body: **TRIM-U-14-78**
Flaring tool: **TRIM-FL78**
Insert: **TRIM-IL78-C02**
Insert consist of:
Blade holder: **TRIM-IL78-C02**
Collet: **TRIM-IL78**

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.

Please refer to the instruction of the Universal Trimming Tool in addition!

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 the stripping tool JSTRIP-78-2). Do not damage the outer conductor!
2. Insert cable into trimming tool, so that min. 4 corrugations are in front of the main trim blade. Position collet guide of trimming tool in the first corrugation nearest to the trimmed cable jacket. The cable also fits properly to the complete base of the tool. The main blade is located on the crest (top) of the corrugation.
3. Rotate trimming tool around the cable in direction of the arrow shown on the tool by touching tool turning points T1 and T2 only. Do not use any additional force greater than the preset trimming tool spring tension. Once the outer conductor is cut, continue turning the tool whereby the tool can be touched on tool turning points T1, T2 and T3 until the cable is completely cut (outer- & inner conductor). Turn the tool min. 2 more times around the cable in order to make sure the jacket will be cut as well. Open blade housing and remove the tool.
4. Cut the jacket lengthwise with knife carefully; do not damage the outer conductor. Remove the jacket.
5. Check trimming dimensions.
6. Slide the O-Ring onto cable – positioned in the valley before jacket as shown. Wipe a light film of grease on the O-Ring.
7. Push back-nut onto cable and over the O-Ring until stop (first corrugation valley is free/exposed).
8. Put Spring O-Ring into first corrugation valley of the cable.
9. Push back-nut back to the front until stop at the Spring O-Ring (Spring O-Ring is approximately covered to its half).
10. Push a bit of dielectric to the centre in order to have a free space to insert the flaring pin of the tool as required for next step.
11. Insert cable guide pin of the trimming tool into the cable inner conductor; 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 the trimming tool to flare the outer conductor and deburr the inner conductor. Flare diameter has to be evenly round and concentrically to the cable axis.
12. The flared area (cone) has to be free of any dielectric material, if necessary bend the dielectric back to the centre.
13. Clean the cable end, remove any particles very carefully. Tip: tape can be used additionally to remove the finest particles.
14. Careful preparation is important especially for proper PIM performance.
15. Wipe the back-nut O-Ring with a light film of grease.
16. Push connector front part onto prepared cable end; do never turn the front part!
17. 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!
18. Keep the connector body steady and tighten the back-nut of the connector by use of open end wrenches. Tighten properly to mechanical stop (no visible gap between body and back-nut).
Keep the interface clean, do not remove the protection cap before mating.

19. Weatherproofing

Important Remarks:

Additional weather protection is necessary when installed on Lite (Aluminium) cable!

In general this is also recommended for Copper cables especially if installed outside.

A heat shrink sleeve with adhesive lining (e.g. HEAT-3812-014) must be used for RCF cables!

Possible methods for LCF cables:

- E.g. with Sealing tape, Weatherproofing kit or Cold Shrink Sleeve
Clean cable and connector and continue according to the applicable installation instruction.
- With Heath shrink sleeve (must be used for RCF cables)
Roughen the jacket with fine grained sandpaper (e.g. 180 grain) and clean the shrinking area e.g. with cable cleaner.
Pre-heat the cable jacket to hand warm and the connector to approx. 60°C. Slide the heat shrink sleeve into place over the connector body as shown. Shrink the sleeve with a soft yellow flame if using a gas burner or go for hot air gun.
Shrink the sleeve onto the connector by smoothly applying a constant flame (heat) wit a circular motion until the sleeve will lay flat all around and the hot solvent adhesive discharged all around. Continue with an even circular motion proceeding in direction of the cable until it shrinks smoothly forming a weatherproof seal and the hot solvent adhesive discharged all around on both ends. Note: Do not overheat especially the jacket (max. temperature = 70°C, shrinking temperature is typically around 130°C).