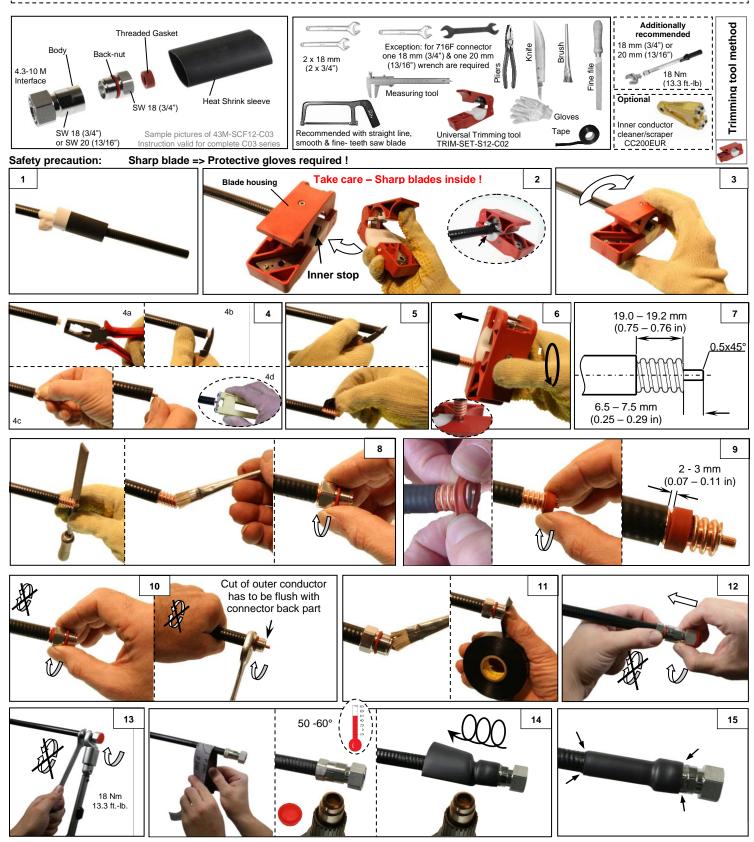


CELLFLEX[®] Coaxial Cable

Installation Instruction 10000018601-06 SCF 12-50 Cables OMNI FIT™ C03 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!



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Installation method with	Universal T	rimming Tool		
Consist of:	<u>Body</u> : <u>Flaring tool:</u> <u>Insert</u> :	TRIM-U-14-78 TRIM-IS12-C02 Insert consist of: <u>Blade holder</u> : <u>Collet:</u>	TRIM-IS12-C02 TRIM-IS12	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 instruc	ction of the U	Iniversal Trimming	g Tool in addition	!

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

- 1. Cut the straightened cable in a right angle to cable axis with a fine toothed hacksaw. Push the heat shrink sleeve onto the cleaned cable and fix it temporarily e.g. with tape always keep the sleeve clean.
- Insert the cable into the Trimming Tool and push against the inner stop as shown. The cable fits properly to the complete insert (collet) of the tool. Close blade housing of the tool.
- 3. Slowly rotate the Trimming Tool with slight pressure on the blade housing in a clockwise direction as indicated by the arrow on the tool. Open blade housing and remove the cable.
- 4. Remove the cable jacket and outer conductor. Carefully cut the dielectric lengthwise and remove it. It is imperative to achieve a pure metallic contact surface on the protruding length of the inner conductor. This may be realized by scrapping away completely <u>all foam</u> and <u>adhesive (thin layer may</u> <u>appear transparent)</u> from the inner conductor manually (fingernail) or with a dedicated tool (e.g. CC200EUR). Take care not to damage the copper cladding, also make sure not to bend the inner conductor out of the straight line.
- 5. Carefully cut the second part of jacket lengthwise by knife and remove it.
- 6. Insert the inner conductor into the hole of the chamfer tool, then slowly press and rotate the Trimming Tool clockwise several times to chamfer the inner conductor. Take care not to bend the inner conductor out of the straight line.
- 7. Double-check trimming dimensions.
- 8. Remove all edges very carefully; rework the outer conductor if necessary in order to get the outer conductor as a passable thread. It is recommended to check easy turn ability with the back-nut of the connector. Remove back-nut after checking. Clean the cable end, remove all particles very carefully.
- 9. Place the threaded gasket on outer conductor as shown on picture 4 before screwing to the final position. Screw the threaded gasket onto the prepared outer conductor until reaching a gap of 2-3mm (0.07-0.11 in) to the jacket as shown. Take care not to damage the gasket.
- **10.** Screw the back-nut onto the outer conductor and over the jacket until the front of back-nut is flush with the cut outer conductor.
- **11.** Clean the prepared cable end; remove any particles very carefully with a brush. It is not recommended to use steel or similar hard brushes, because these can deeply press particles inside the dielectric. Adhesive tape can be used additionally for removing the finest particles.

Check the complete preparation (dimensions). Careful preparation is the key to good VSWR and especially to proper PIM performance!

- **12.** Push and screw connector front part (body) onto prepared cable. Pay attention to align connector parts in one axis while tightening the connector by turning the front part only (first by hand). Do not turn the back-nut or the cable.
- **13.** Keep the back-nut and the cable steady and tighten the front part (body) of the connector by use of open end wrenches. Tighten the connector properly; recommended torque is 18 Nm (13.3 ft-lb).
- 14. Roughen the jacket with fine grained sandpaper (e.g. 180 grain) and clean the shrinking area e.g. with cable cleaner or alcohol. 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 discharges all around (see picture 15). 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 discharges all around on both ends. Note: Do not overheat especially the jacket (max. temperature = 70°C, shrinking temperature is typically around 130°C).
- 15. Keep the interface clean; install the protection cap which was removed during installation of the heat shrink sleeve again if not making the mating immediately. This cap protects the interface against dust. For long term it is recommend to use screw able caps with O-Rings inside, these protect against dirt and humidity as well.

