COMMSCOPE®

SCIL-C Gel donut

INSTALLATION INSTRUCTION

TC-1363-1-IP
Rev A, Oct 2017
www.commscope.com

Gel-sealed in-line fiber optic closure

Contents

1 General

1.1 Installation Instruction description

The installation instruction describes the necessary steps to install the SCIL-C. The installation instruction illustrates the use on loose tube cables. If other cable types are used, please contact the local agent for relevant accessories and instructions.

1.2 Product description

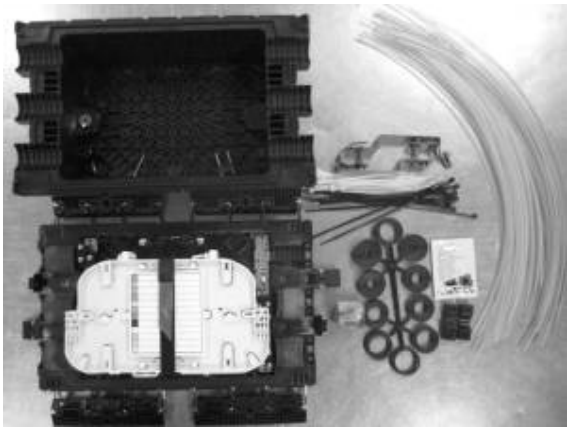
The SCIL-C is a gel sealed fiber optic splice closures designed for cable joint applications in the telecom outside plant network. The closures have maximum splicing capacity of 144F and are suitable for deployment in aerial, underground or direct buried environments. Sealing is achieved visa built-in gel technology, resulting in extremely convenient re-entry and re-sealing. The closure has six cable ports, three on each side.

2 Sizing and product kit information

2.1 Dimensions

Cable diameter range	7~8mm, 10~13mm, 14~16 mm
Closure outer dimensions	350 x 216 x140 mm

2.2 Kit content



* Below listed is a standard kit, alternative kits and accessories are available.

1. Cover and base with latches
2. Splice tray kit (optional)
3. Splice tray lid (optional)
4. Velcro
5. Transportation tubes (optional)
6. Cable fixation bracket (2 pcs)
7. Hanger brackets and screw (optional)
8. Clamp kit (Large) (optional)
9. Ring Tree (Large) (optional)
10. Clamp kit(Small) (optional)
11. Ring Tree (small) (optional)
12. Gel donut A (optional)
13. Gel donut B (optional)
14. Gel donut C (optional)
15. Dummy rods (optional)
16. White tie wraps (optional)
17. Black tie wraps (optional)
18. Tray holder (optional)
19. Cleaning tissue
20. Installation instruction

3 Installation conditions precautions

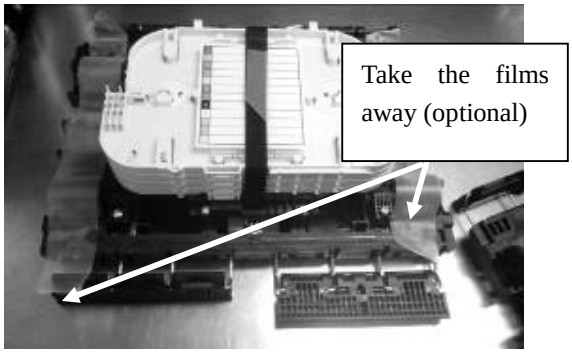
3.1 The closures should be installed at temperature between -5℃ and 45℃.

3.2 Follow the installation instruction steps to ensure the performance of the closure.

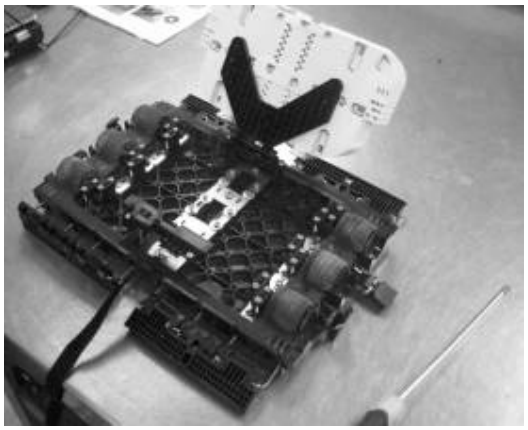
3.3 It is necessary to take precautions and keep the working space clean to protect the closure sealing materials and splices.

4 Cable preparation

4.1 Open the closure, as shown



4.2 Take the films away (optional) and open the Velcro and tray kit.



4.3 Unscrew the upper clamps where you will install the cable.

Note: Prefer to use manual screwdriver or electric screwdriver in low speed.

4.4 Take out upper clamps and gel donut along with the dummy rods.

.

4.5 According to the cable range to choose the appropriate Gel donut.

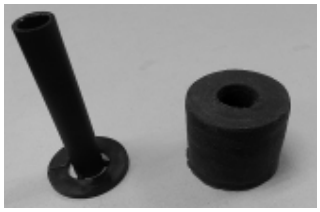
Cable range (mm)	Gel donut
7-12(small cable)	A
12-16(big cable)	B
10-16(big cable)	C

Table 1, Gel donut selection

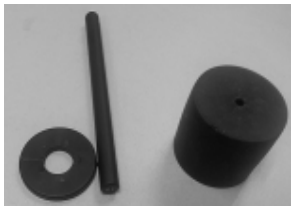
4.6 Separate the gel donut and dummy rod, as shown

Note 1: For Gel donut A:

Note 2: For Gel donut B:



Note 3: For Gel donut C:



4.7 According to the cable range and cable quantity to be installed on each port, choose the appropriate cable clamp and remove the equivalent TPE sleeve layer installed on the lower clamp (refer to Table 2).

Cable range (mm)	Cable clamp	Remove TPE sleeve layer.	Cable qty on each port
7-8	Small	0	1 or 2
10-11	Small	1	1
11-12	Small	2	1
12-13	Large	0	1
14-16	Large	1	1

Table 2, Cable clamp selection

Big clamp type:

Clamp with plastic upper clamps:

Clamp with metal upper clamps:

Small lower clamp:

0 TPE sleeve removed

1 TPE sleeve removed

2 TPE sleeve removed

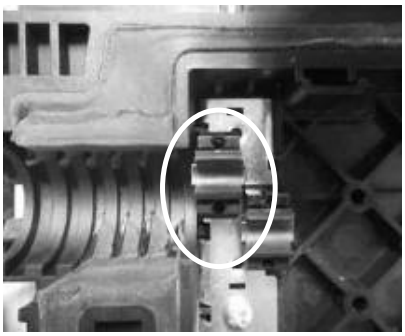
Big lower clamp:

0 TPE sleeve removed

1 TPE sleeve removed

4.8 Leave the lower clamps, as shown.

For install small cable, remove one small lower clamp, as shown.



For install big cable, replace two small lower clamps (refer to Table 2) with one big lower clamp, as shown.

5 Cable Installation

5.1 According to the cable range, chose appropriate gel donut (refer to Table 1) and relevant blocking ring.

5.2 Cable installation

Note 1: For install two small cables, snap both 2 dummy rods off, as shown.

Note 2: For only one small cable installation, snap 1 dummy rod off, as shown.

Note 3: For install big cable, separate dummy rod and blocking ring, as shown

1) Install the Gel donut B or C as following.

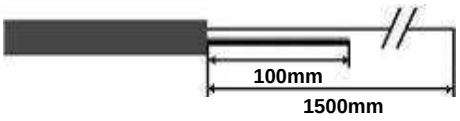
2) Select the appropriate blocking ring from the block tree, according to the cable outer diameter. It is preferred that the blocking ring is slightly larger than the cable diameter (optional).

3) Cut the ring on the mark (optional).

4) Install the blocking ring on the gel donut outside facing.

5.3 Place the blocking ring closed to the gel donut, 1500mm from the cable end.

5.4 Strip the cable and cut the strength member up to 100mm from the cable jacket end.

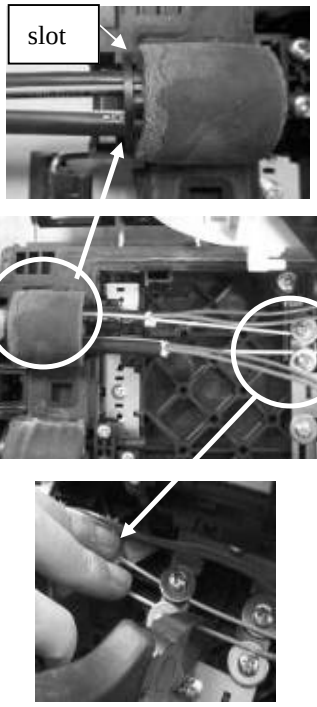


Note: If the cable has jacket covered on strength member, Please remove the jacket before installation.

5.5 Use the clean tissue provided to clean the cable sheath, where gel donut will slide though.

5.6 Insert the strength member underneath the metal washer of the strength member fixture as shown in **Step 5.7**. Tighten the screw to secure the strength member. Cut the excess off.

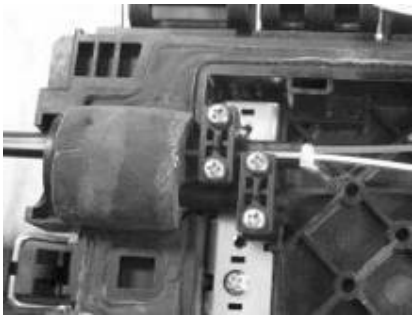
5.7 For two small cables, fit the cable onto the designated cable port and make sure the blocking ring is in the slot, as shown.



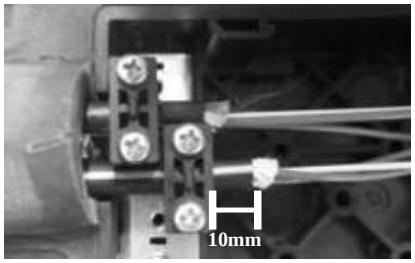
5.8 Screw tight the upper clamps

Note: After slightly tighten the first screw, firmly tighten the second screw. Then, firmly tighten the first screw.

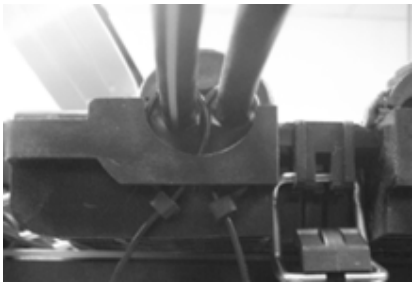
Note: For single cable, secure the dummy rod With upper clamp, as shown below.



Note: Leave 10mm from the clamp end to the tip end For each cable, as shown below.

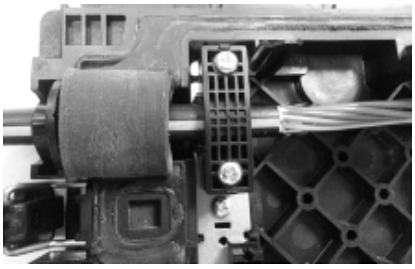


5.9 Secure cables with tie wraps, as shown. Cut the excess off.

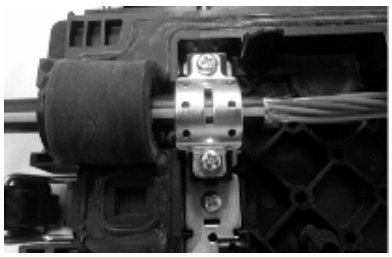


5.10 For one big cable, fit the cable onto the designated cable port and make sure the blocking ring is in the slot, as shown.

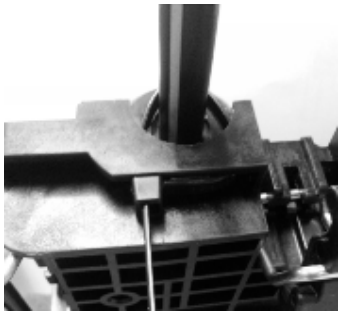
Note: Use a Plastic upper clamp. As Step 5.8 to screw tight the upper clamps.



Note: Use a Metal upper clamp. As Step 5.8 to screw tight the upper clamps.



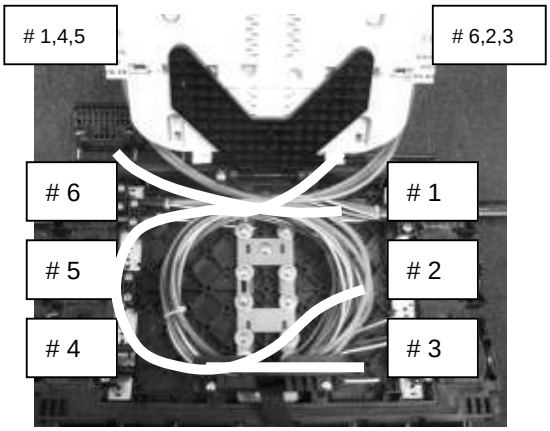
Note: As Step 5.9, secure cables with tie wraps, as shown. Cut the excess off.



6 Fiber preparation

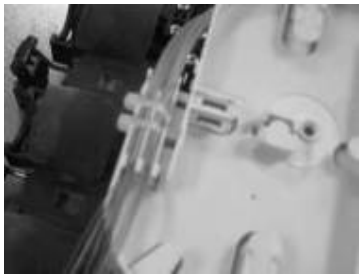
6.1 Degrease the fiber bundle and slide the transportation tubes over the fibers with overlap 100mm

6.2 Route the transparent tubes to the tray entrance, as shown.



6.3 Secure the transportation tube at the tray entrance with two tie wraps.

Note: Maximum two transportation tubes per tray entrance.



6.4 Coil the loops and store them in the space under the tray supporting bracket, and use tie wraps to tie up the bundle

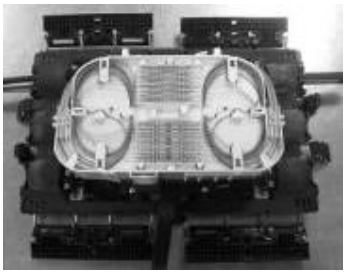
7 Splicing and fiber storage

7.1 Position the closure close to the splicing machine in a convenient location and secure the closure

7.2 Slide the heat-shrinkable splice protection over one fiber and fuse fibers according to local recommendations and procedures. After the fusion splice is made, install the heat-shrinkable splice protection (e.g. SMOUV) with an appropriate heating source. Allow the splice protection to cool down to ambient temperature

7.3 After each splice is made, the splice should be stored in the splice holder in the appropriate position, as shown. Do not deform the splice protector during insertion

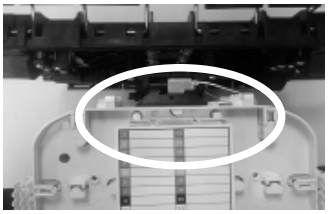
7.4 Put on the tray lid.



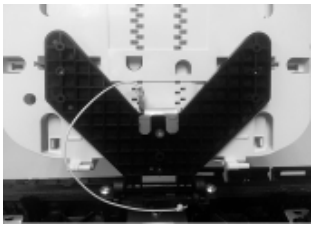
7.5 Press-in to release the next tray.

Note: For maintenance convenience, use the plastic pick to scoop out the desired Smouv, as shown.

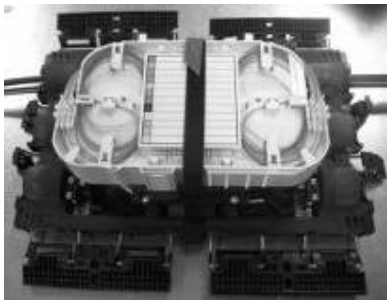
Note: While closure is aerial installed, tray holder is necessary to keep the splice tray in horizontal for maintenance.



Put the tray holder on the tray bracket when it is not used.



7.6 Secure the trays, using Velcro.



7.7 Close the closure by latching the box diagonally

Note: Diagonally close the big latches first, and then the small side latches.

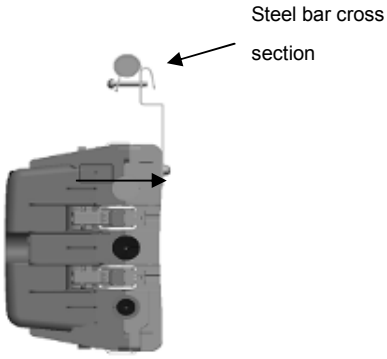
8 Hanger bracket installation (optional)

8.1 Install the two hanger brackets onto the closure, as shown

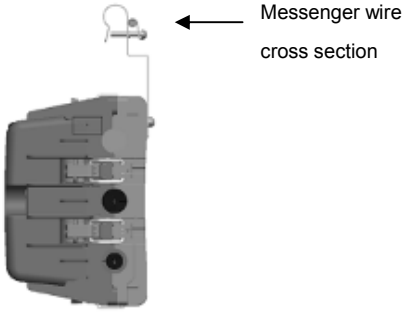
Note: Maximum torque: 4 Nm

8.2 Use screw to close and open the hanger brackets

8.3 Terminate the hanger brackets onto the steel bar firmly, as shown



Note: For Messenger wire installation, as shown.



9 Re-entry

Simply open latches for re-entry.