

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3



Contents

1. General information.....	3
2. Installation Instruction and assembly	6
3. Product installation.....	8
4. Cable installation	14
5. Closing and maintenance.....	25
6. Safety and Care	28
7. Technical Assistance	29

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

1. General information

1.1. Product description

CEIP 12 is an indoor enclosure used in FTTH fiber deployment.

It is used as a point of termination of optical cables using field fusion splices. Pre-terminated configurations are also available to minimize the amount of labor required during installation.

The enclosure has capacity for up to 12 SC /APC adapters. It comes in two configurations: CEIP 12 with 12 SC/APC color marked pigtails (without splitters) and with a 1x8 splitter connectorized with SC/APC connectors on the output side. CEIP 12 configuration with splitter can be used for a mid-span (in-line) installation.

The enclosure can be mounted directly to a wall using provided hardware.

Dimensions:

126 x 216 x 70 mm (W x D x H) .

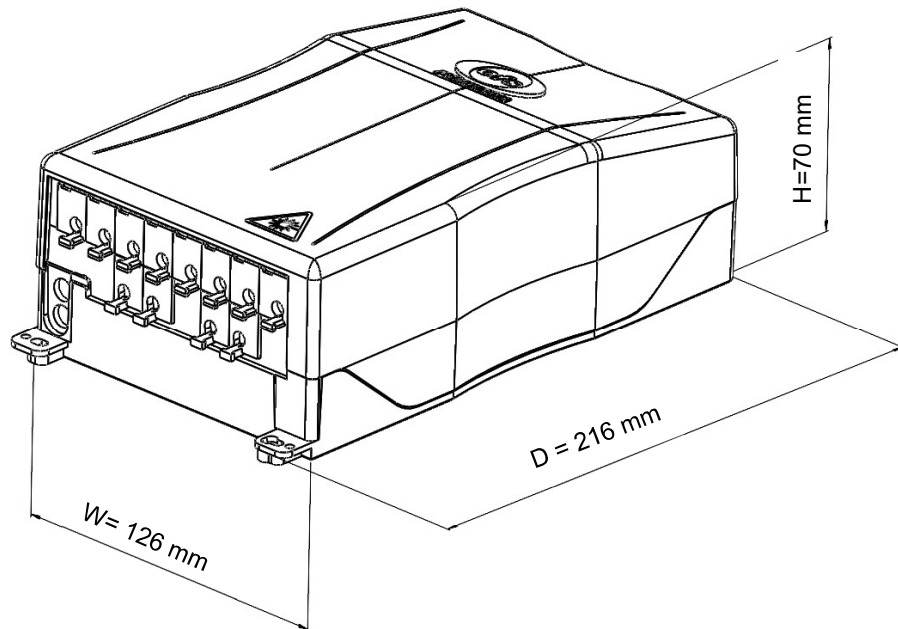


Fig. 1

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
 C16AK0002 Rev.3



1.2. Application

The SlimBox 12 fiber enclosure is a compact design for restrained space applications in indoor and moisture-protected environments.

The enclosure is designed with a separation between the areas of installation and activation. Used for multi-level buildings (MDU) for vertical shaft runs or for horizontal runs down building hallways. The SlimBox 12 fiber enclosure accepts round cables up to 8 mm dia. with a strength member for a vertical run or up to 5 mm dia. round drop cables and low friction rectangular section drop cables for a horizontal run.

1.3. Components

Item	DESCRIPTION	QTY
1	BASE	1
2	INTERNAL BASE	1
3	ENTRY CABLE GROMMET (RUBBER)	2
4	COVER	1
5	OFS LOGO	1
6	SPLITTER TRAY	1
7	FUSION TRAY	1
8	CABLE HOLDING HARDWARE	1
9	DROP CABLE GROMMET	12
10	ADAPTER TRAY	1
11	ADAPTER TRAY COVER	1
12	PIVOTING PANEL	1
13	SELF TAPING SCREW, M4X38	1
-	SELF TAPING SCREW, M4X22	1
-	INSTALLATION KIT	1

INSTALLATION KIT	
PLASTIC CLAMP	16
PAN HEAD SCREW M3.5 X 19 MM LG	4
WALL ANCHOR S5	4
SC ADAPTER	8 OR 12
INSTALLATION INSTRUCTION SHEET	1

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

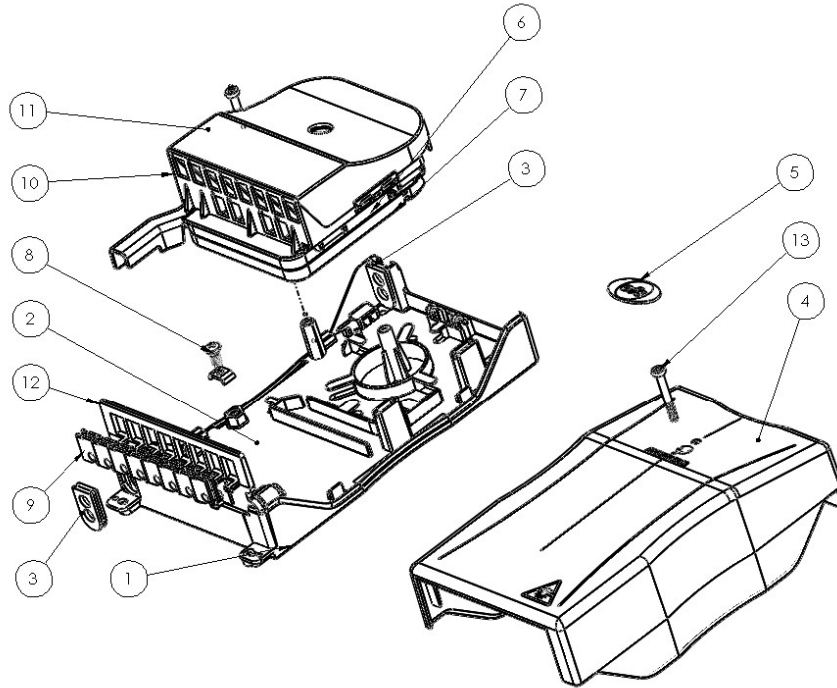


Fig. 2

Note: Upon receiving product, make sure all parts are included in accordance with the components list in paragraph 1.3.

2. Installation Instruction and assembly

2.1. Product opening

2.1.1. Open the package and remove the product;

2.1.2. Turn the OFS logo 180 ° and loosen the screw holding the cover to the base (Fig.3);

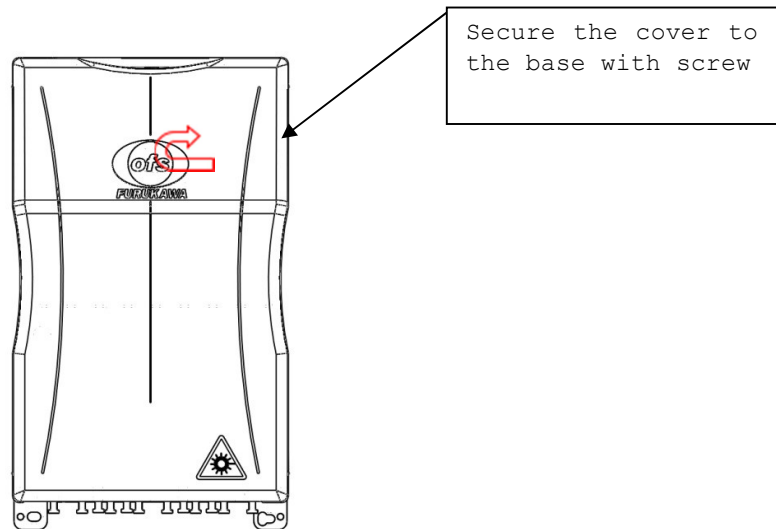
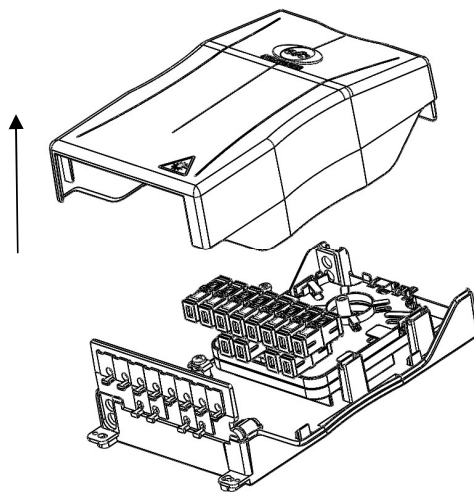


Fig. 3 – Logo rotated 180 degrees to expose the cover holding screw

2.1.3. Remove the cover (Fig. 4);



SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

Fig.4

2.1.4. Loosen the screw securing the adapter cover (Fig. 5)

Note: The screw is captive and cannot be entirely removed from the cover.

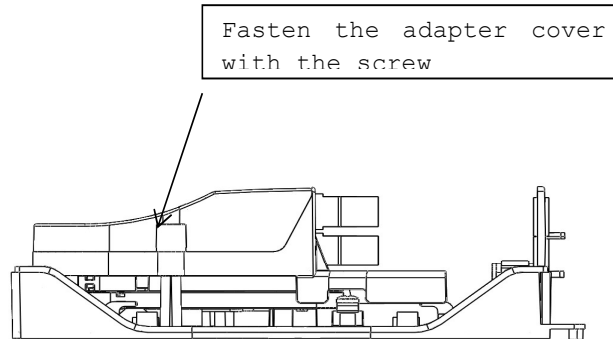
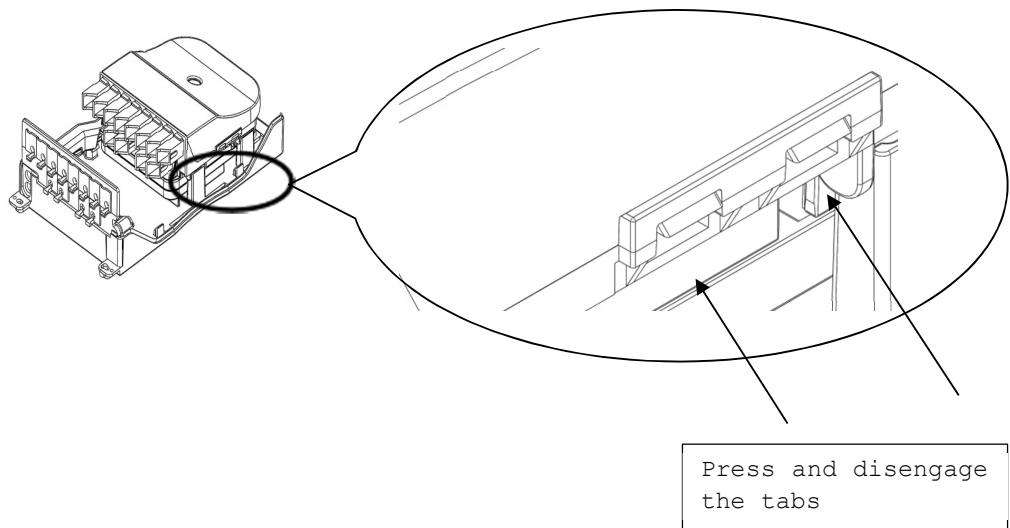


Fig. 5

Disengage the tabs (Fig. 6) and then remove the cover from the adapter tray (Fig.7)



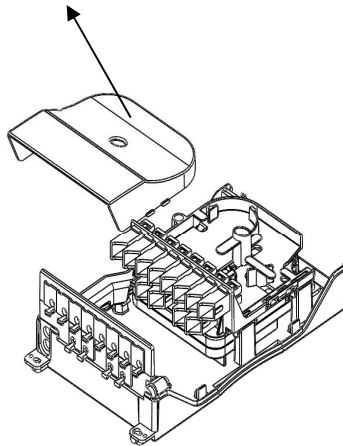


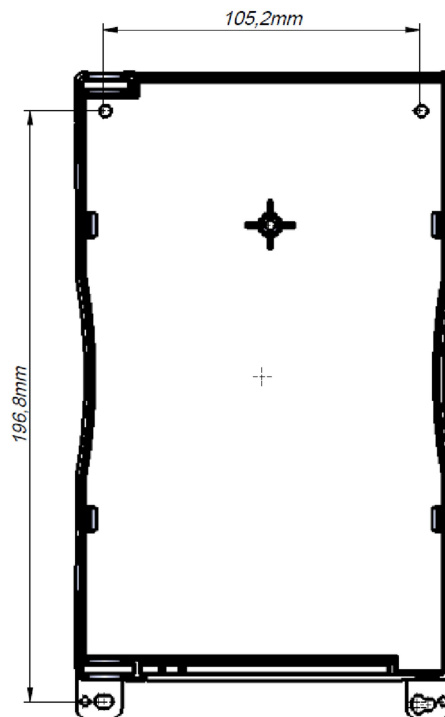
Fig. 7

3. Product installation

3.1. Secure the base to the wall where the enclosure will be installed ;

3.1.1. For wall installation, use a drill with a suitable dia. for S5 wall anchors;

Drill (4) holes 25 mm deep and insert (4) wall anchors.



3.1.2.

Fig. 8 - Mounting holes spacing

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

NOTE: Leave a minimum distance of 50 mm between the base of the enclosure and the wall while performing installation. This is necessary so that the rotation of the adapter plate is not impaired (Fig. 9)

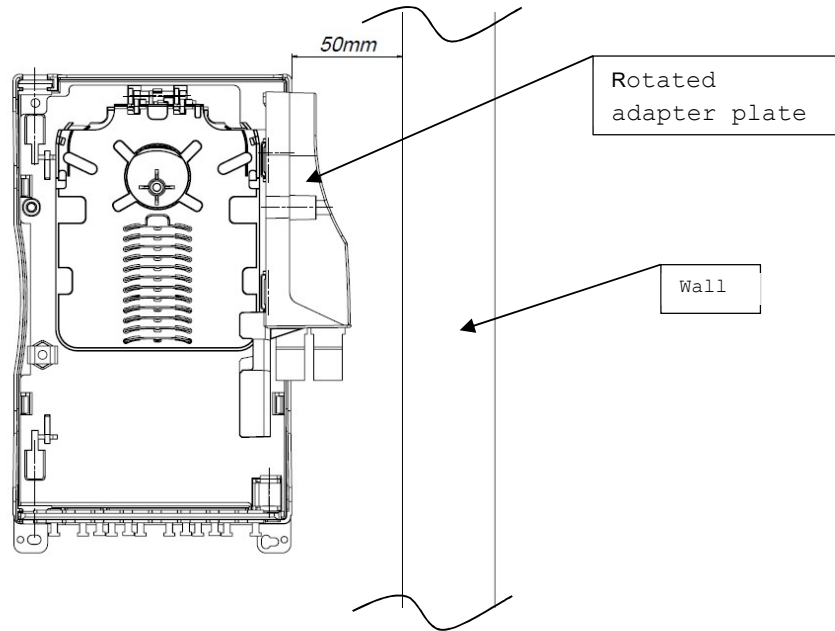


Fig. 9

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

3.1 Attaching optical cables

3.1.3. **Prep the cable 48" for all cable designs.** Regarding Loose Tube Outside Plant cable leave 30" of unit tube which will be stored in the tray below the splice tray and 18" of 250 um fiber. Regarding M Pack and AccuPack cable the jacket is taken directly to the splice tray.

Accumax, Mpack and AccuPack cables



Cable entrance



Cable position in the splice tray

Outside Plant Cable and Breakout Cable



Cable entrance



Slack for the unit

3.1.4. Leave approximately 80 mm of aramid yarn on the Loose Tube Cable to secure the aramid yarn at the enclosure entrance.

3.1.5. Insert the cable and fiber units through the rubber grommet (Fig. 10);

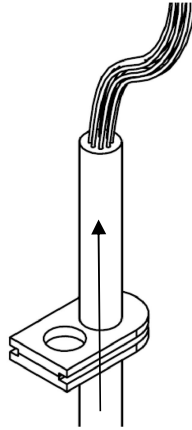


Fig. 10

3.1.6. Position the cable on the support of the internal base;

3.1.7. Pass the aramid under the anchor support of the internal base as shown on Fig. 11;

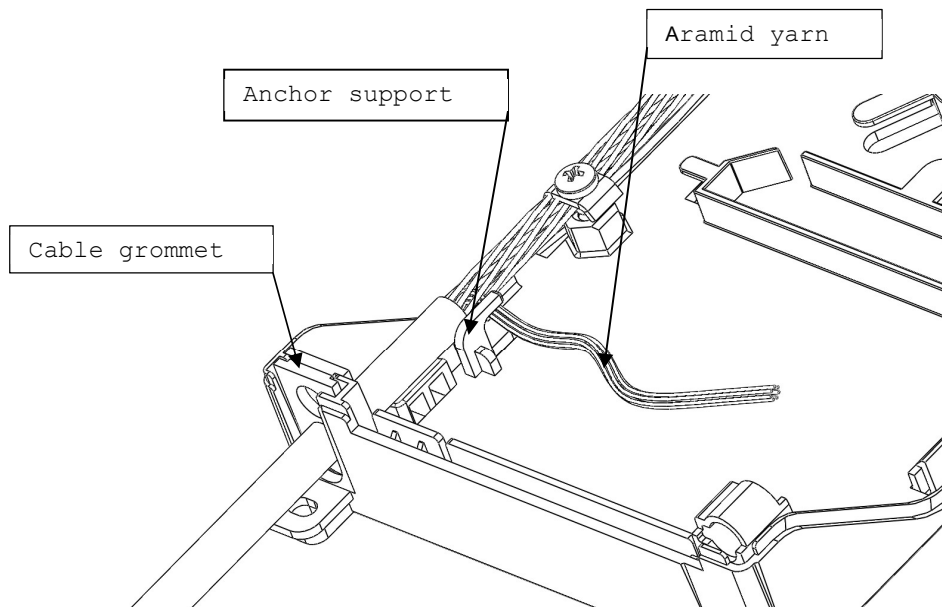


Fig. 11

3.1.8. Move aramid yarn towards the cable grommet (Fig. 12);

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

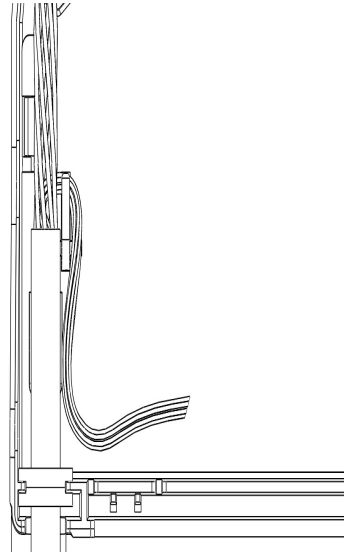


Fig. 12

3.1.9. Thread a cable tie through the indicated hole (Fig.13). Tighten the cable tie to hold the cable and aramid yarn together to prevent the cable movement.

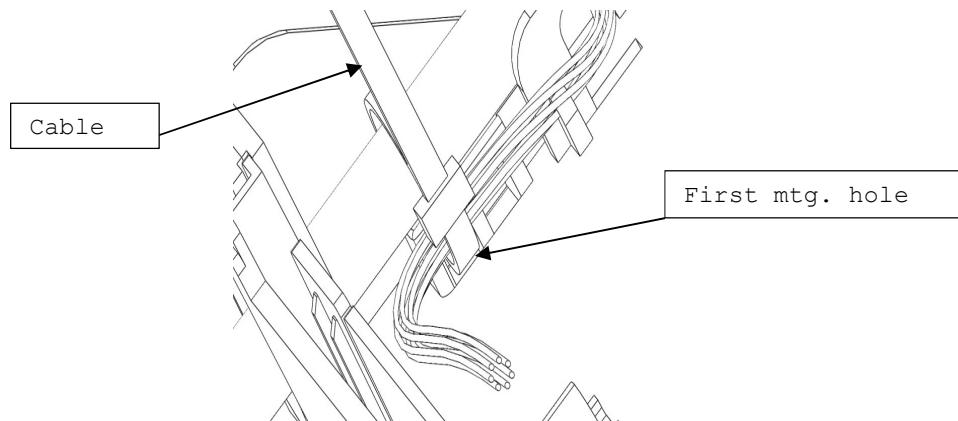


Figura 13

Reverse the direction of aramid and repeat the same steps as with the first cable tie using second mounting hole (Fig.14).

Note: These steps ensure that the cable does not slip when subjected to tensile stresses

IMPORTANT: Be careful to not damage the cable when tightening the cable ties.

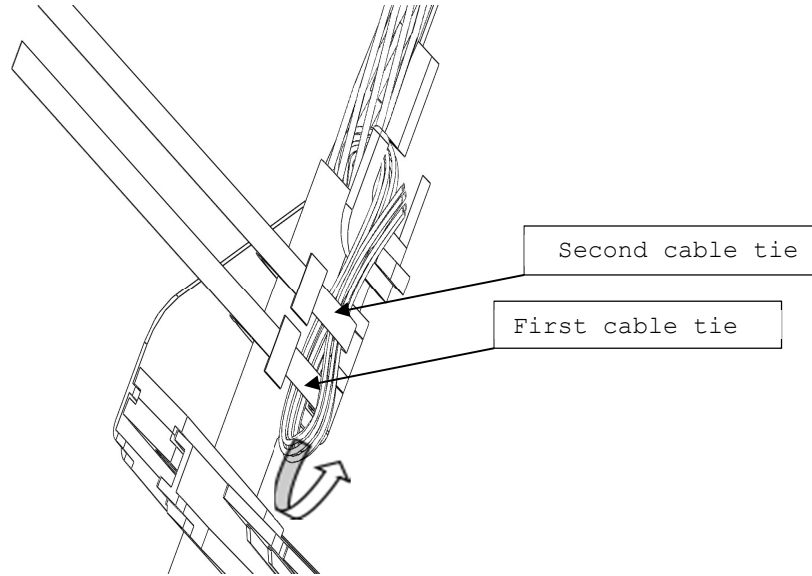


Fig. 14

3.2. Cable installation having central strength member

3.2.1. Leave approximately 60 mm of aramid yarn;

3.2.2. Loosen the screw just enough to pass the cable strength member (Fig.15);

3.2.3. Pass the strength member between the plastic base and the metal mounting bracket;

3.2.4. Tighten the screw until the strength member is fully restrained;

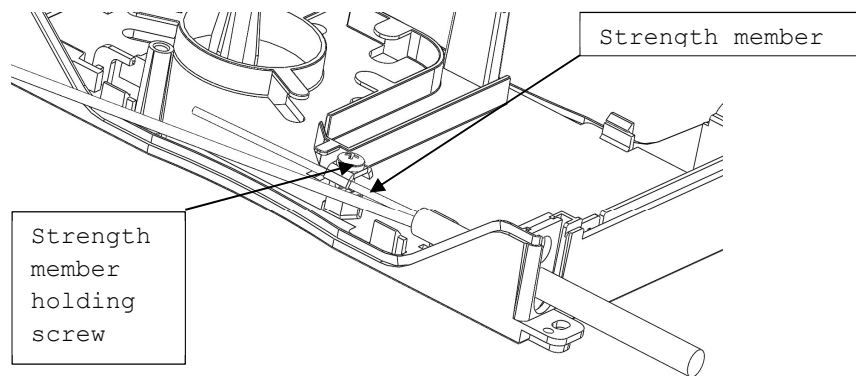


Fig. 15

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

3.2.5. Finally, pass a cable tie through the cable holder hole (Fig.16). Tighten the cable tie to secure the cable.

Important: When tightening the cable cable ties, do not damage the cable

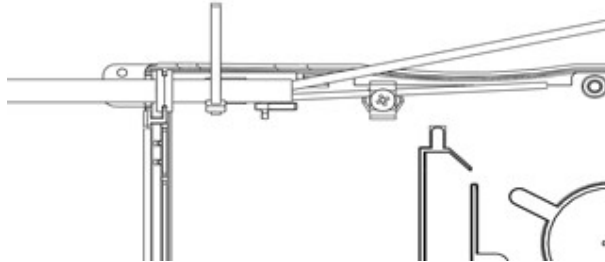


Fig. 16

4. Cable installation

You can perform either a butt (top and/or bottom cable entry) and/or an in-line (mid-span installation). The product has a capacity for circular cables of up to 8 mm dia. There are two entries and two sorties for the cable located on the same side of the enclosure.



Slack of the loose tube unit in the slimbox base

4.1. Butt Installation

4.1.1. When second cable is used, insert the second cable through the other entry position, as shown on Fig. 17;

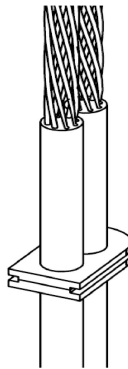


Fig. 17

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

4.1.2. Route and save unused fiber units. Figure 18 shows two cables entering the enclosure and the fiber routing. One cable enters the enclosure from the top and the other from the bottom.

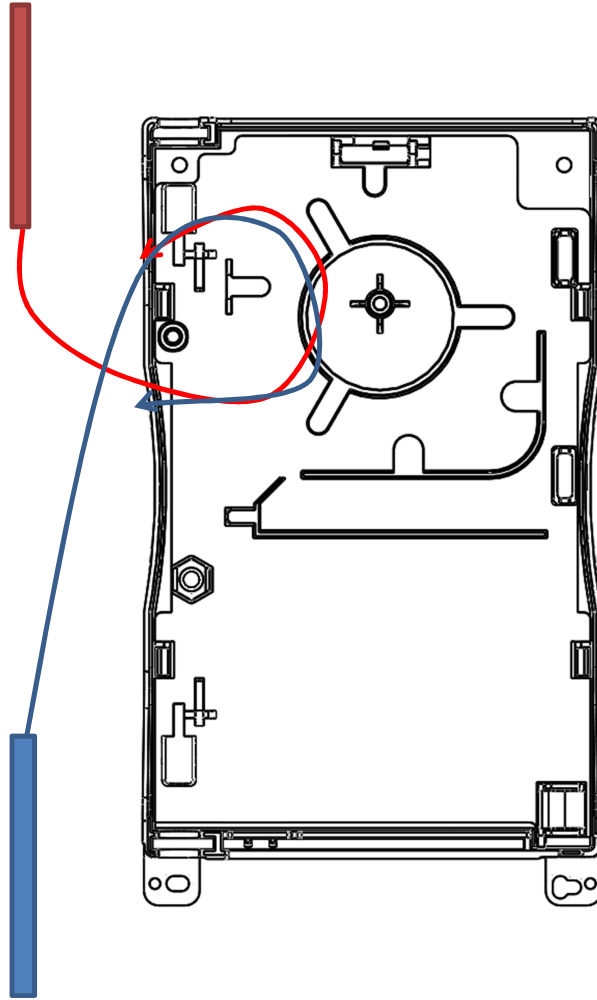


Fig.18 – Routing spare fibers (cables)

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

4.2. Installation (mid-span installation or *in-line*)

4.2.1. The cables should come straight at the bottom and top (Fig. 19).

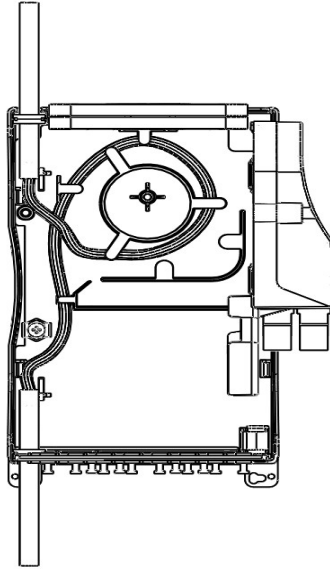


Fig. 19

4.3. Fiber routing to the trays - CEIP Model 12 with a 1x8 splitter

Note: In this configuration, the splitter is already installed. The splitter output fibers are connectorized (Fig. 20)

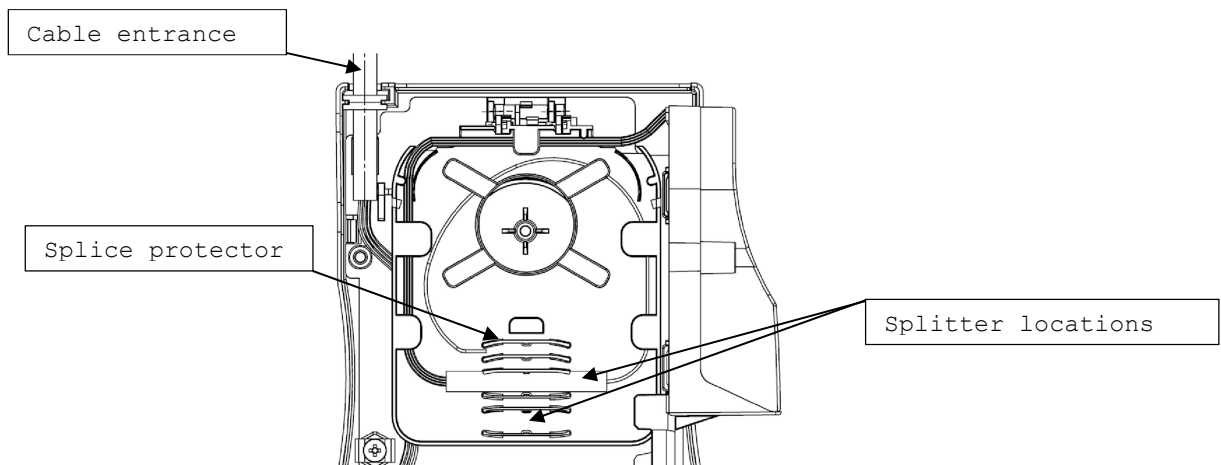


Fig. 20 – Splitter tray

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

- 4.3.1. Route the feeder fiber(s) to the splitter tray(s);
- 4.3.2. Accommodate the fiber in the space provided;
- 4.3.3. Splice the feeder fiber to the splitter input fiber (Fig. 21);

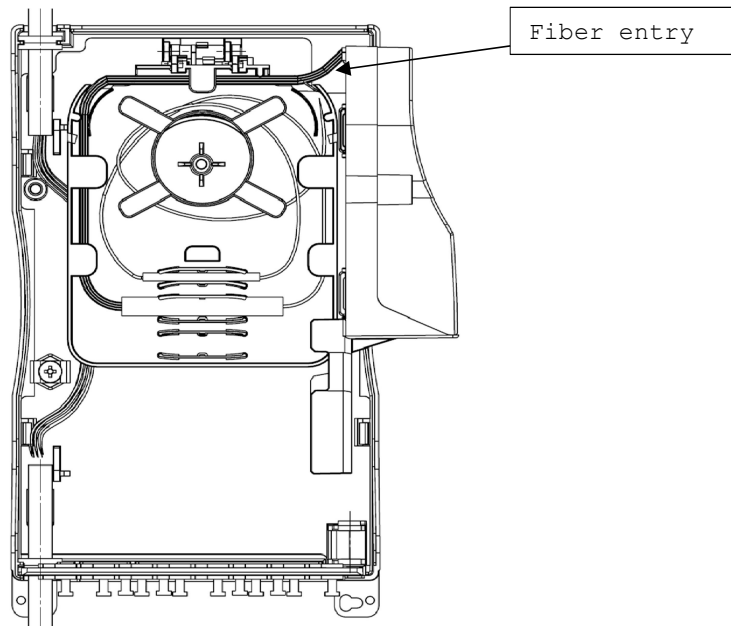


Fig. 21

- 4.3.4. After splicing, follow the installation from paragraph 4.5.

4.4. Fibers routing to Trays - Fusion : CEIP 12 with 12 pigtails

Note: In this configuration, 12 pigtails are already installed (Fig. 22).

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

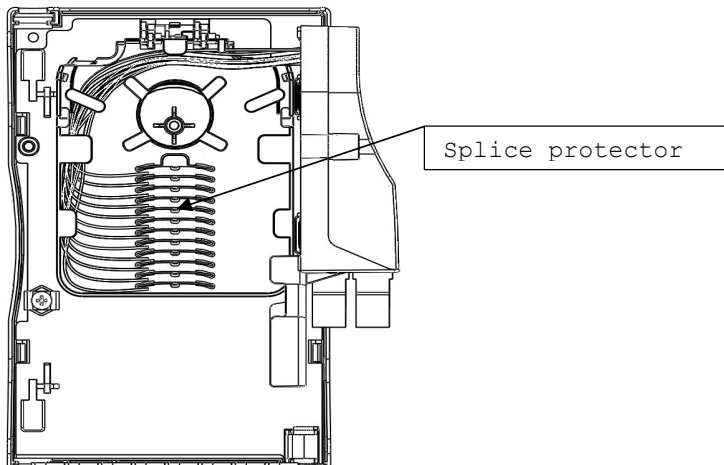


Fig. 22

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

- 4.4.1. Route the fiber units from the internal base to the splice tray. Leave the ends loose until the fusion splice is complete. The splice tray will be
- 4.4.2. Accommodate the spare fibers in the space provided;
- 4.4.3. Remove the splice tray from the unit by depressing the latch to prepare for fusion splicing the cable fibers and the pigtails (Fig. 23). The latch at the top of the fusion splice tray is depressed to release the splice tray.

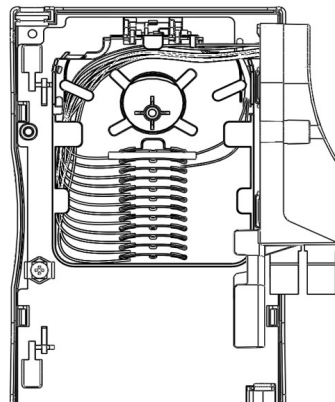
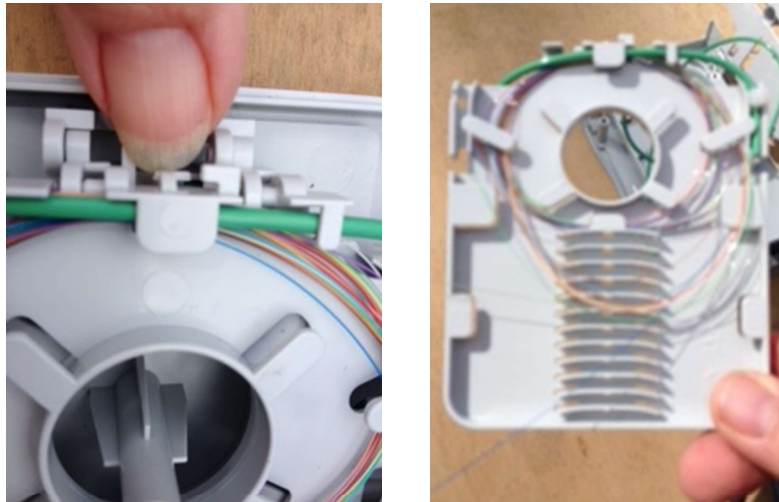


Fig. 23

4.5. Closing adapter cover

4.5.1. After making the necessary splices, store the splice in the splice tray, snap the splice tray in place, route both the unit tube in the base and the fibers and pigtail ends in the splice tray, then close the adapter plate cover (Fig. 24 and 25). Fasten it to the inner base using the cover captive screw (Fig. 26).

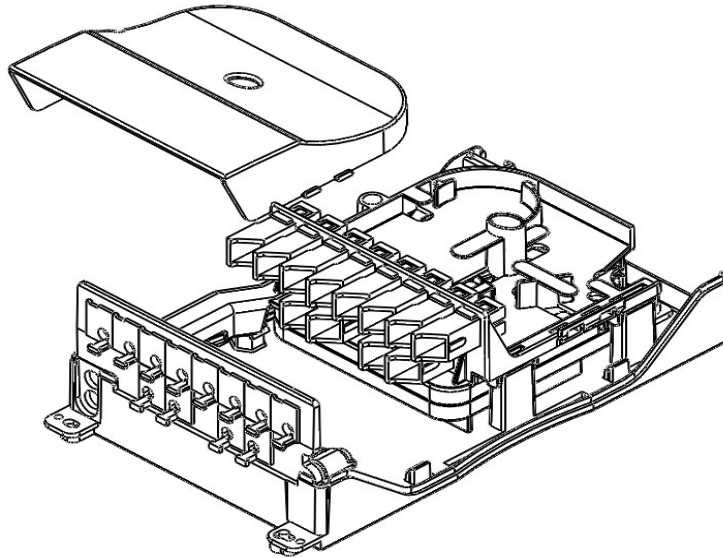


Fig. 24

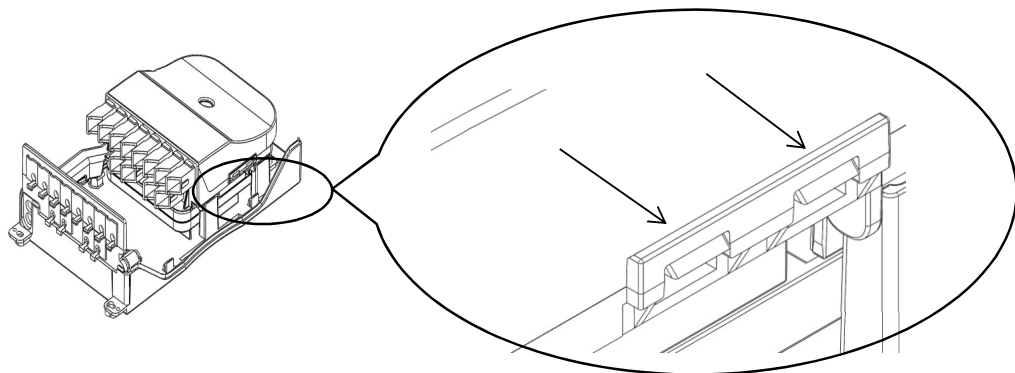


Fig. 25

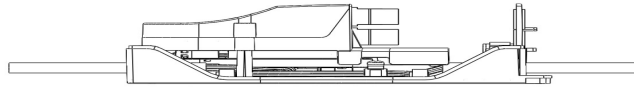


Fig. 26

4.6. Installing drop cables

- 4.6.1. Use round drop cables up to 5 mm dia. or low friction cables (rectangular section 2 x 3 mm with two strength members for field installable connector);
- 4.6.2. Remove a drop cable grommet from the front plate at the position where you want to install the connectorized cable (Fig . 27);

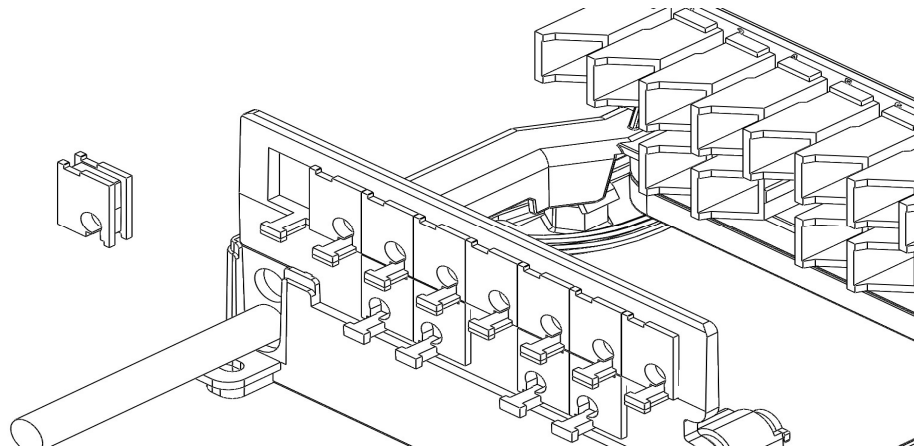


Fig.27

- 4.6.3. Connectorize the drop cable before passing through the grommet;
- 4.6.4. Pass the connector through the face plate (Fig. 28);

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

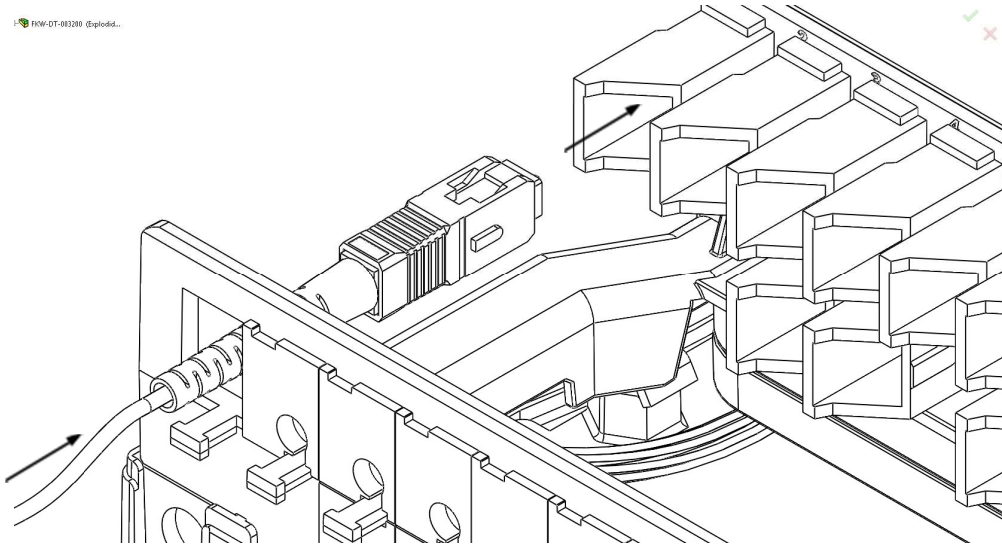


Fig. 28

4.6.5. Insert the connector into the appropriate adapter (Fig . 29);

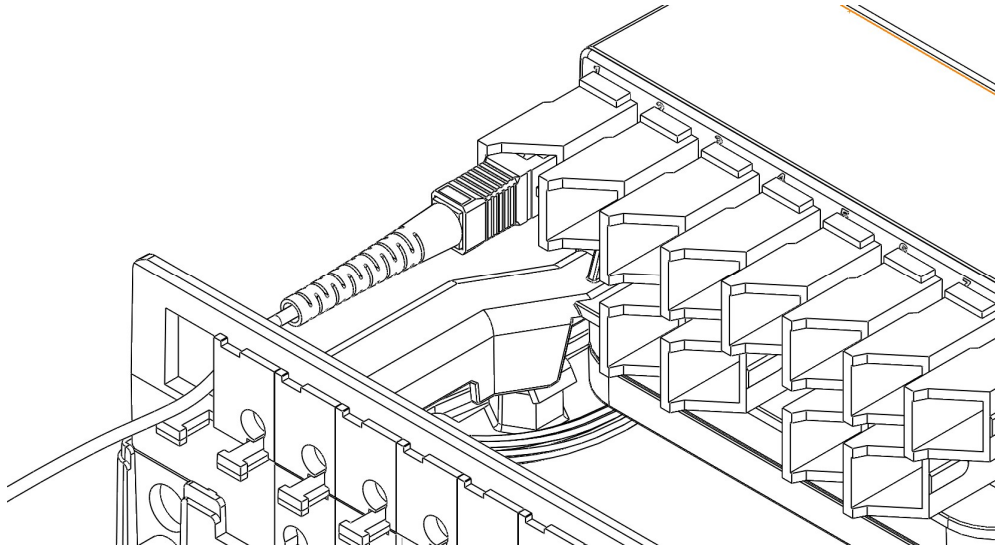


Fig. 29

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

4.6.6. Re-install the grommet (Fig. 30) followed by the installation of the face plate (Fig. 31);

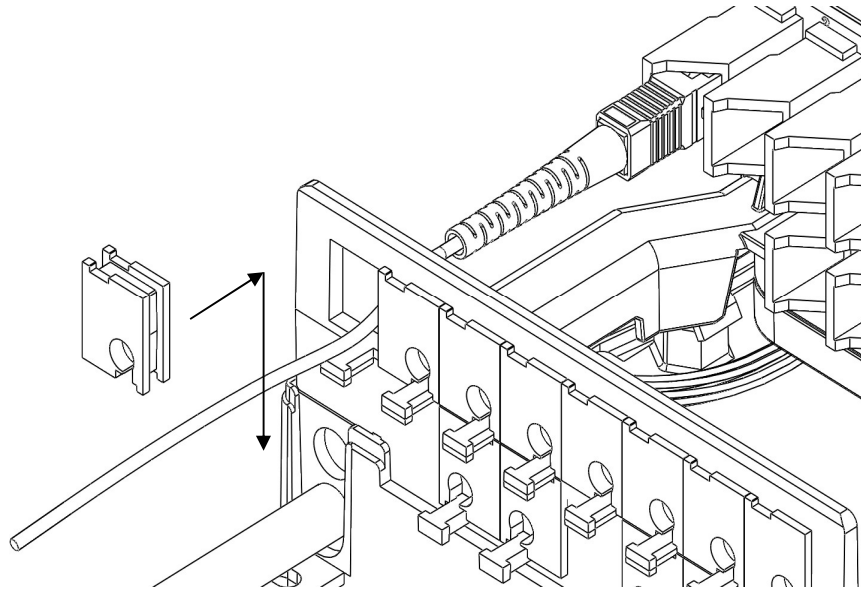
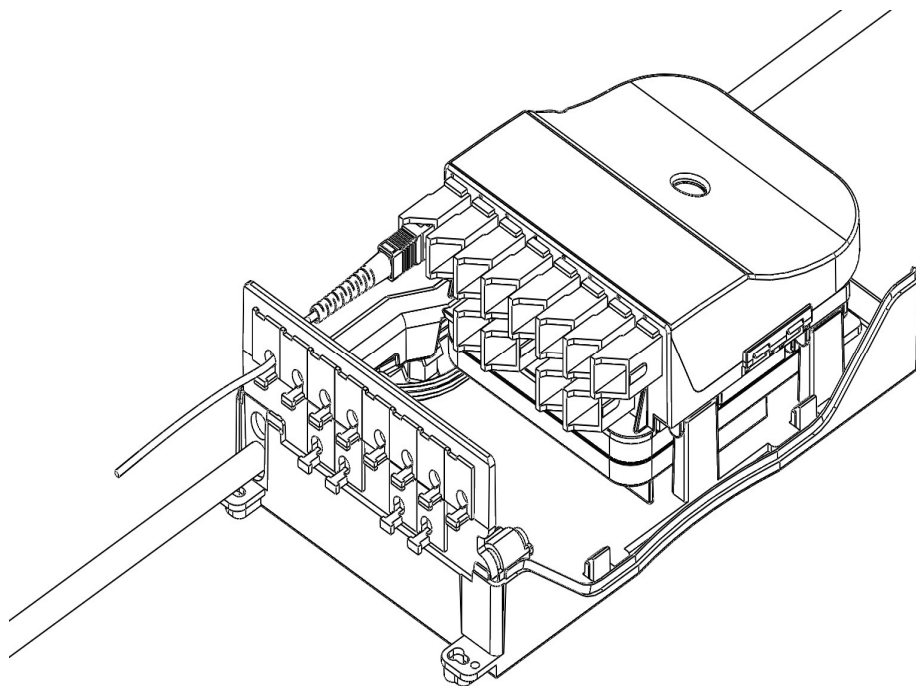


Fig. 30



SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

Fig. 31

4.6.7. Secure the cable to the face plate using a cable tie (Fig. 32).

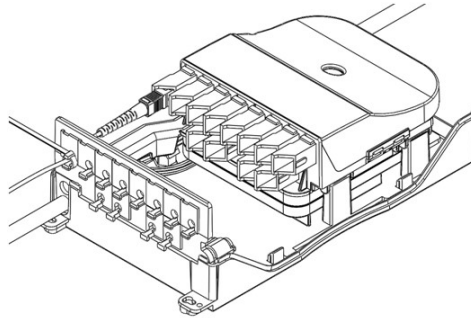
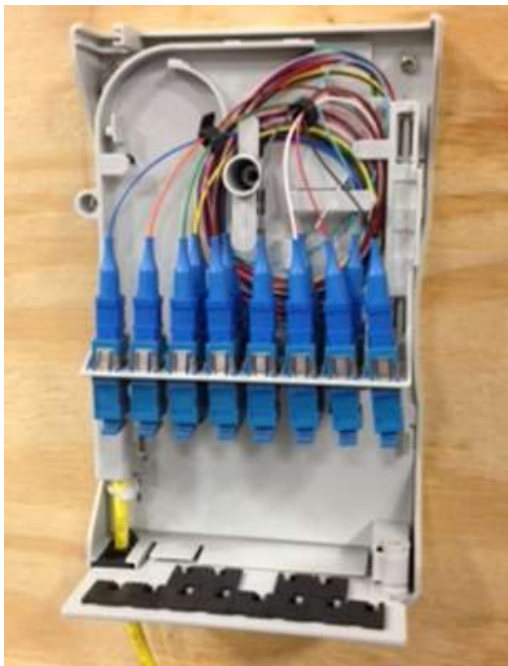


Fig. 32



5. Closing and maintenance

- Make sure that drop cable grommets are properly installed;
- Cut the excess of cable tie;
- Install the cover;
- Turn the OFS logo to expose the cover mounting screw. Fasten the cover to the base using cover captive screw (Fig. 33);
- Turn the logo 180 degrees to hide the cover captive screw (Fig. 34)

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3

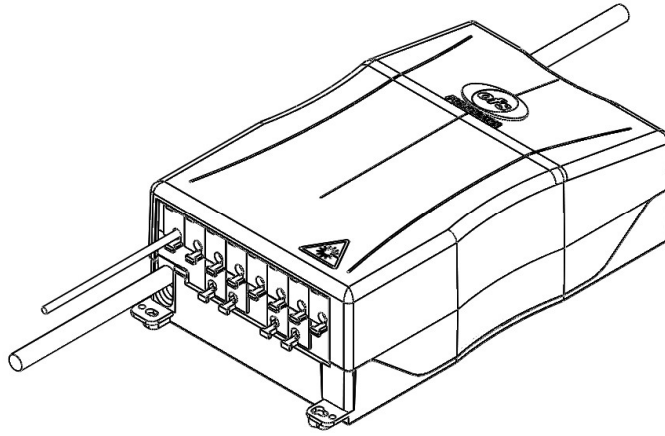


Fig. 33

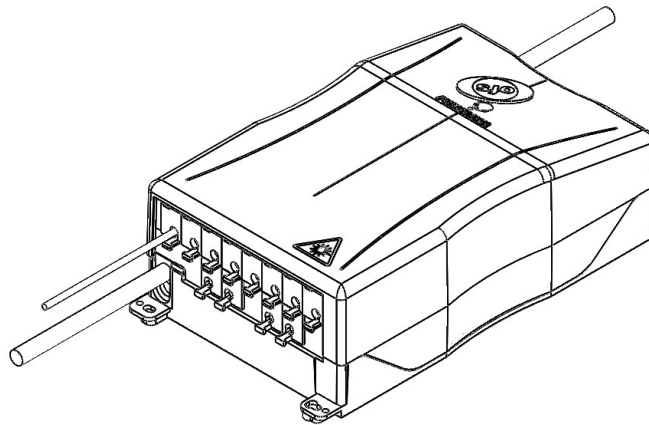


Fig. 34

5.1. Adapters pivoting tray

- 5.1.1. Unscrew the adapter tray cover;
- 5.1.2. Pivot the adapter tray to access the cables without disconnecting them;
- 5.1.3. Pivot the adapter tray and the face plate to gain access to other trays (Fig 35);

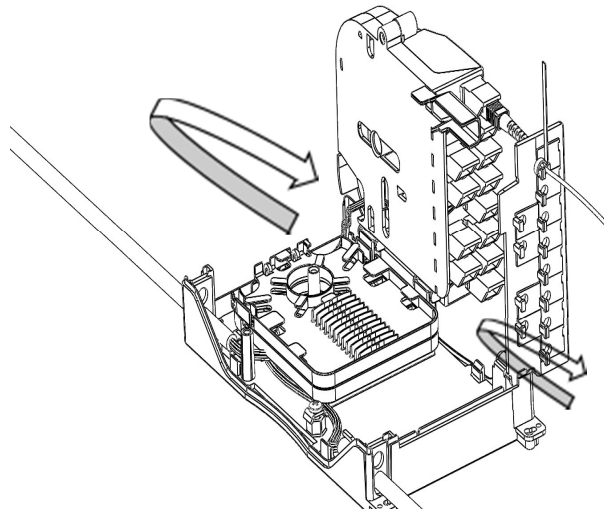


Fig. 35

- 5.1.4. Make the necessary adjustments;
- 5.1.5. When finished, secure the adapter tray cover to the base by using the cover captive screw.

5.2. Removing the Internal Base with Trays

If you need to remove the internal base, follow these steps:

- 5.2.1. Separate the inner base from the outer base. Keep the trays already installed on the wall of the inner base (Fig. 36);

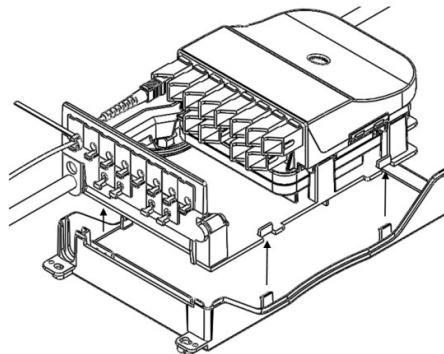


Fig. 36

5.2.2. To re-install the inner base, push the inner base straight down until the lower base latches fully engage. Make sure that the latches are aligned with the inner base cutouts before pushing the inner base down (Fig. 37);

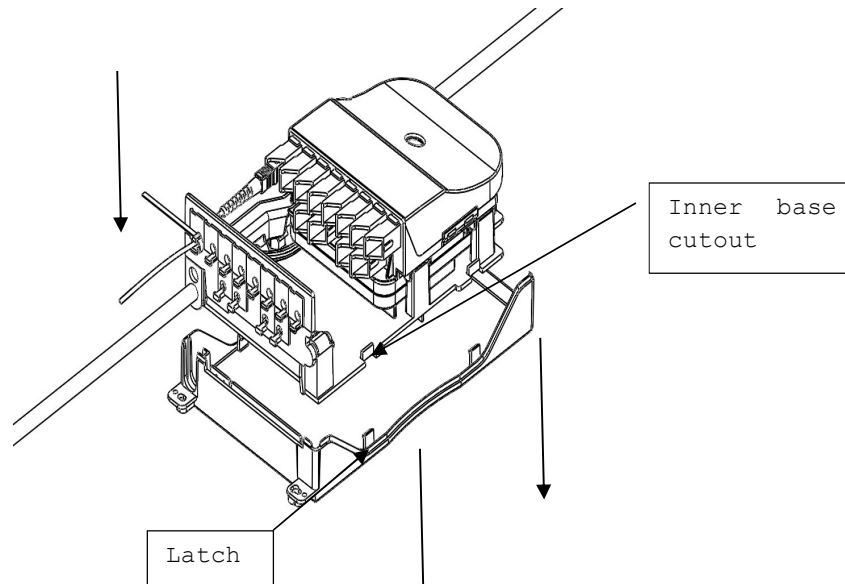


Fig. 37

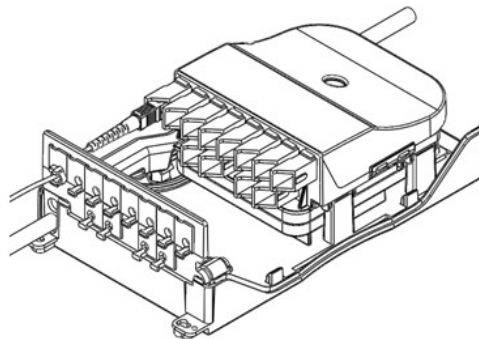


Fig. 38 Final assembly without the cover.

Close the product as described in paragraph 5 (Fig. 33 and 34).

6. Safety and Care

- Be careful when handling cables and optical cords, especially when handling bare optical fiber. Take special care during routing of fibers and cords inside the product by checking the bend radii and interference with other components during the opening and closing of the product;
- Optical connectors should be cleaned after every reconnection;

SlimBox 12 Fiber Internal Adapter Enclosure
Installation instruction sheet
C16AK0002 Rev.3



- Be aware of the laser radiation warnings. Do not point connectors to the eye and avoid handling them when the lasers are turned on;
- Wear eye protection appropriate for the type of laser used;
- Be careful when handling sharp tools.

7. Technical Assistance

If you need technical assistance or more information for the application of this product, contact OFS at:

Customer Service Center: 1-888-fiberhelp (1-888-342-3743) U.S.A. or 1-770-798-5555 outside the U.S.A.

Site: www.ofsoptics.com