DGOI-C 64 ASSEMBLY INSTRUCTIONS

C16AK0001, Issue 1

Contents

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C16AK0001, Issue 1

1. General Information

1.1. Product Description

The enclosure is used in optical MDU networks at the building entrance or as a combiner on individual floors in the building, or as a drop cable distribution point for vertical wiring. The enclosure is compatible with connectorized splitters, fan-outs and accepts 64 adapters. It also has cable entry points for drops and building Riser cable.

1.2. Application

Designed for indoor use at the building entrance, the enclosure provides security and quick activation of drops on the front adapter panel. The rear of the panel houses the fusion splices for connecting to either an Outside Plant cable or a Building Riser cable with pigtail splices. The enclosure may also be pre-terminated with a cable when splicing isn't possible. The cable entry port accepts cables with a diameter of up to 8 mm and provides retention for the cable.

1.3. Dimensions

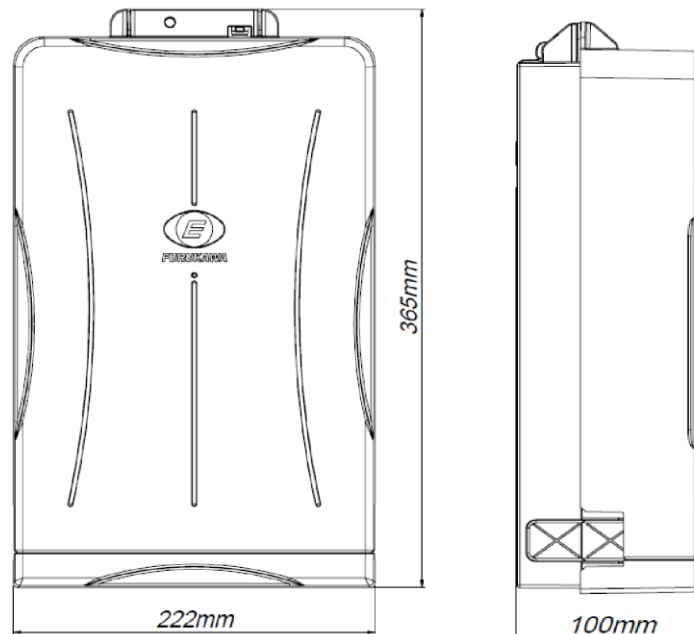222 x 365 x 100 mm (L x H x D), shown in Figure 1.

Figure 1 – Dimension of Product

2. Composition

It is comprised of the components shown in Figure 2 and listed in the Table 1.
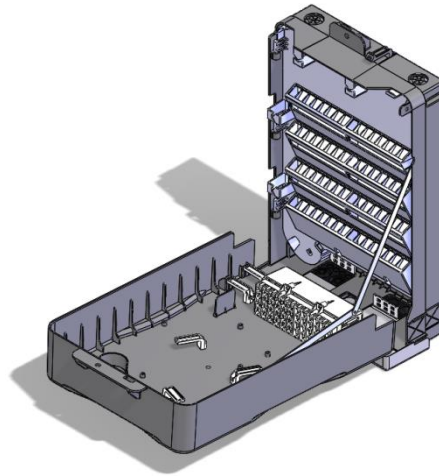
Fig. 2

Table 1 – List of components in the basic module

	Description	Quantity
1	Cover	1
2	Base	1
3	Connection Cover and Base	1
4	Adapter Tray	1
5	Splice Tray	1
6	Tray Cover	1
7	Splice Protector support	2
8	Splice Tray Holder	1
9	Fiber Holder	13
10	Expansion Bracket	1
11	Parking Cap	1
12	Splitter Support	1
13	Rubber Cable Entry Grommet	2
14	Metal Cable Anchor Bracket	2
15	Cable Anchor	4
16	Articulation Rod	2
17	Fiber Protection Sheet	1

Installation Accessories:

- Installation Manual
- M3.5X19 mm long steel, white galvanized, Pan Head Combo Tapping Screw. Qty.4
- 4 nylon wall anchors S5 (5 x 25)
- 2 Cable Glands (PG 13.5)
- M3 x 6 mm long screws for the attachment of a protection sheet to the back of the adapter panel and for attachment of an expansion piece to the base, qty. 8 (Fig.11)
- Other supplies for installation include: protection tube, spiral tube, Velcro, cable ties (ty-wraps), splice protectors and mounting template for screw placement.

3. Installation Instruction and Assembly

Check product and make sure all of the components listed above

3.1. Product Opening

3.1.1. Remove the enclosure from the packaging

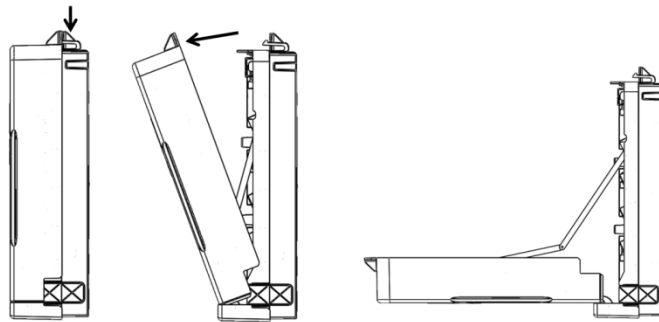3.1.2. Depress plastic latch to open the enclosure (Fig. 3)

Figure 3 – Method to Open Cover

3.2. Enclosure wall mounting

3.2.1. Remove the base cover by depressing the locking tab (Fig.4, vertical red arrow)

3.2.2. Push the plastic insert and remove the adapter plate (Fig.4);

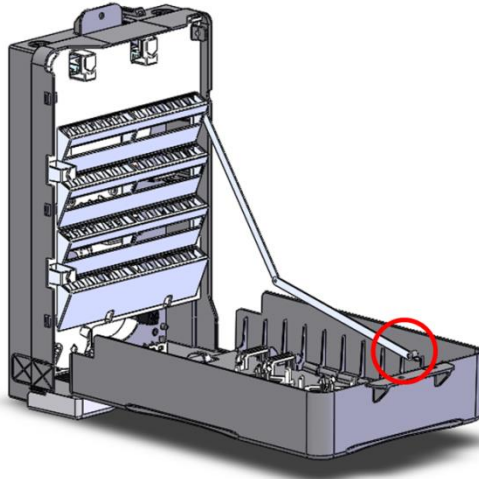3.2.3. Unscrew the connecting rod from the base and the cover (Fig. 5);

Fig.5

NOTE: Select a drill with suitable diameter for anchor wall installation.

3.2.4. Drill holes at least 25 mm deep in order to insert the provided nylon wall anchors.

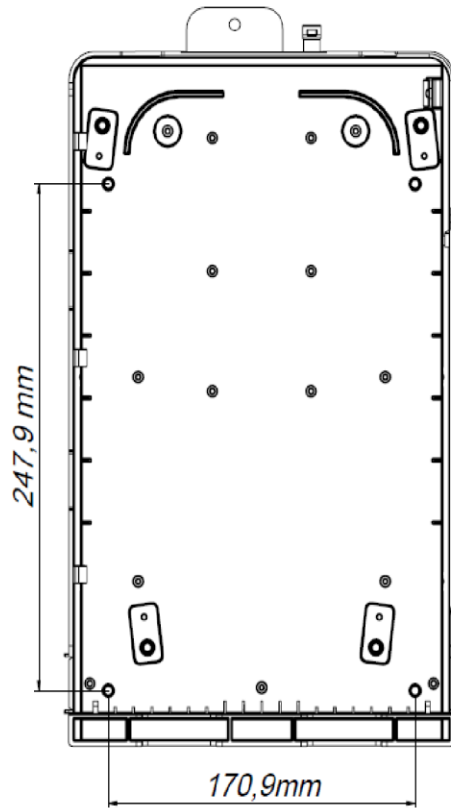3.2.5. Secure the base to the wall. The distance between mounting holes is shown on Figure 6.

Fig. 6

3.3. Module installation

3.3.1. Use pliers to open the base side where the expansion module is installed (Fig.7)

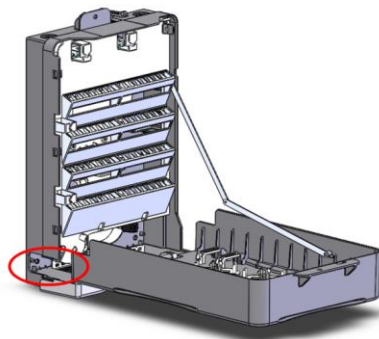NOTE: Use sandpaper to smooth the freshly exposed surface

Fig.7

3.3.2. Install the two enclosures to the wall. Use the following distances for drilling when installing two or more enclosures (Fig. 8).
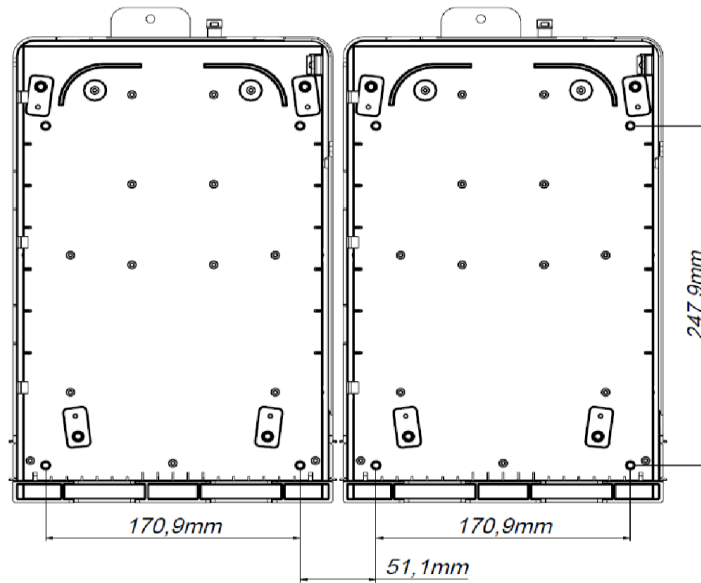
Fig. 8

3.3.3. After attachment of the modules to the wall, insert the plastic expansion bracket (see Fig. 9)
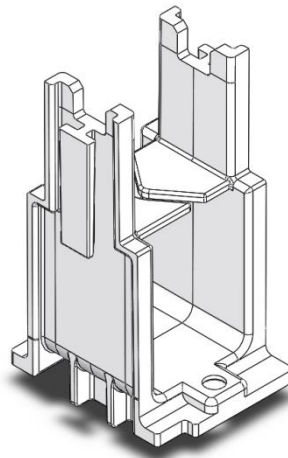

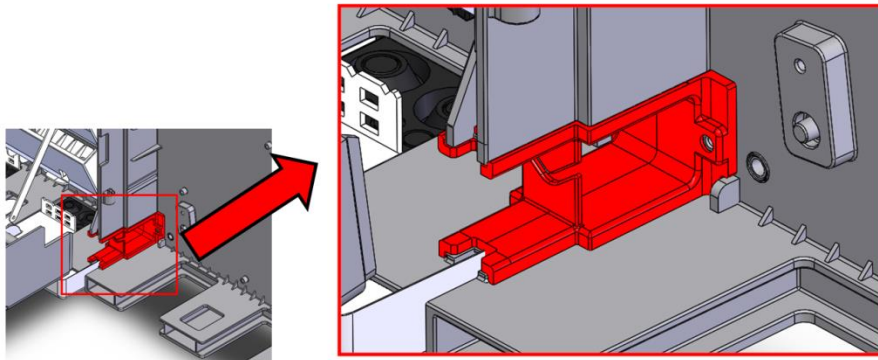Fig. 9 Expansion Bracket

3.3.4. Connect both Products (Fig. 10)

Fig. 10

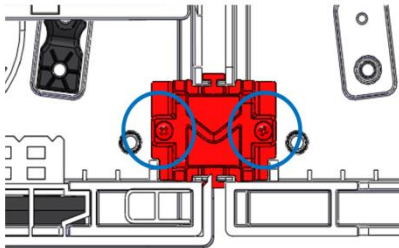3.3.5. Screw the plastic expansion bracket with two M3X6 mm screws (Fig. 11)

Fig. 11

3.4. Adapter Installation

3.4.1. Install adapters. Fill the adapter plate from left to right and top to bottom (Fig. 12).
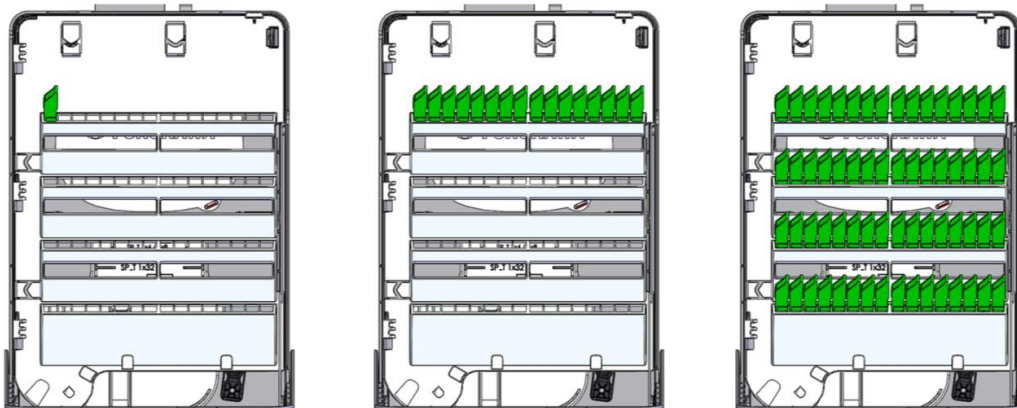

Fig. 12

NOTE: Install optical adapters in the direction with the smaller side to the left. Observe the same position of the adapter slot.

3.5. Input Cables Installation

Fig. 13

3.5.1. Open 2.5 m of the cable and reserve fiber unit(s) to accommodate the fibers within the enclosure

3.5.2. Insert the cable in the rubber cable entry port.

3.5.3. When preparing the cable leave 60 mm of strength member (FRP – Strength member) for anchoring the cable

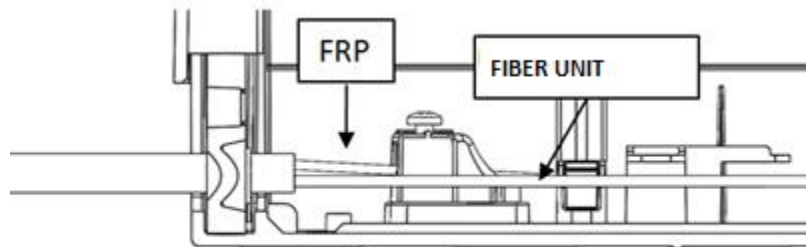3.5.4. Insert the strength member in the position and tighten the bracket screw to secure the cable (Fig. 14);

Fig. 14   Support for anchoring FRP (strength member)

3.6. Fiber unit routing to the splice tray

3.6.1. Rotate the plastic holders and position the cable as indicated below in Fig. 15

Fig. 15

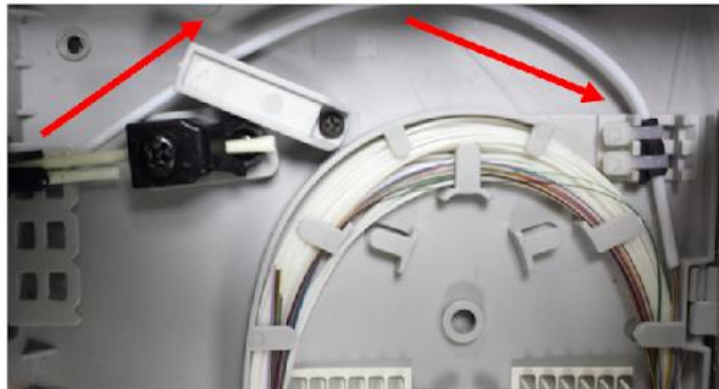3.6.2. Route the fibers and prepare the ends for splicing (Fig. 16)

Fig. 16

3.6.3. Remove the splice tray cover (Fig. 17)
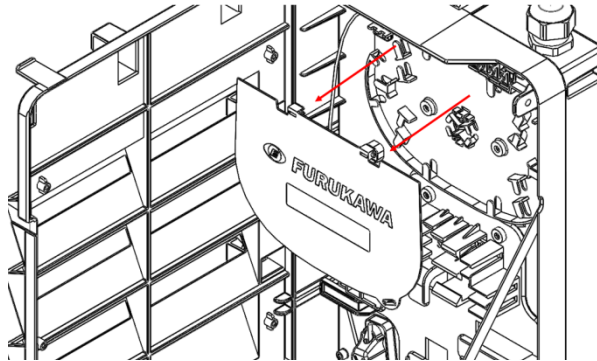

Fig. 17

3.6.4. Place the fiber unit into the desired position for installation. Place a mark where to prep the tube/jacket of the cable. (Fig. 18)
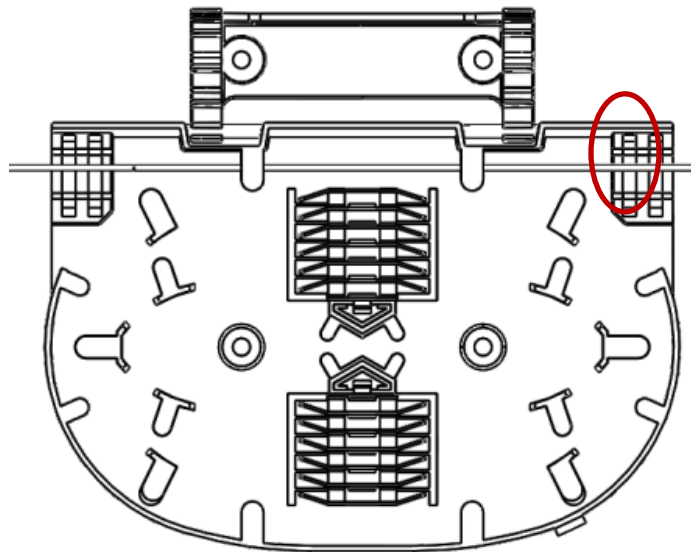

Fig. 18

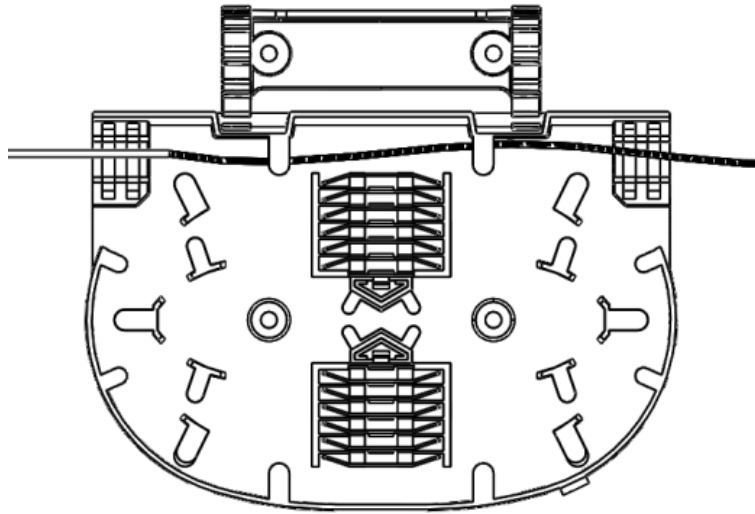3.6.5. Open the jacket or tube and clean the fibers (Fig. 19)

Fig.19

3.6.6. Secure the fiber unit in the tray. Cut approximately 10 mm of the foam supplied with the splice tray.

3.6.7. Place the fiber unit (either tube or buffered fiber) in the location highlighted in Fig.20; and place the previously cut foam on top.
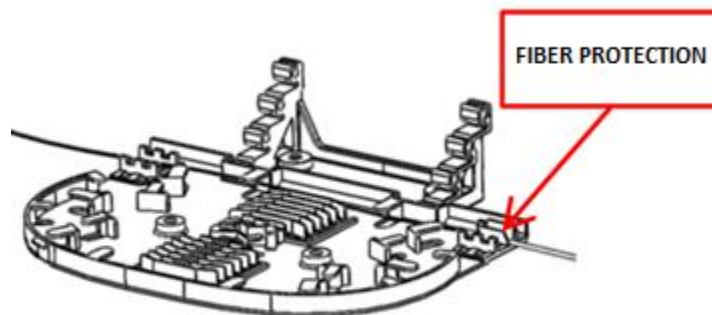

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Fig. 20

3.6.8. Use a cable tie to secure the fiber unit (Fig. 21). Rotate the splice tray to facilitate the plastic cable tie installation
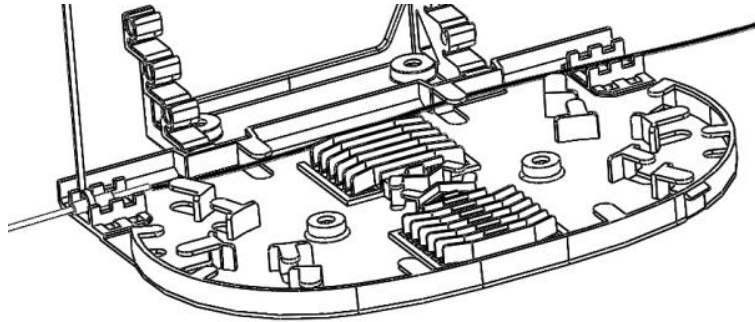

Fig. 21

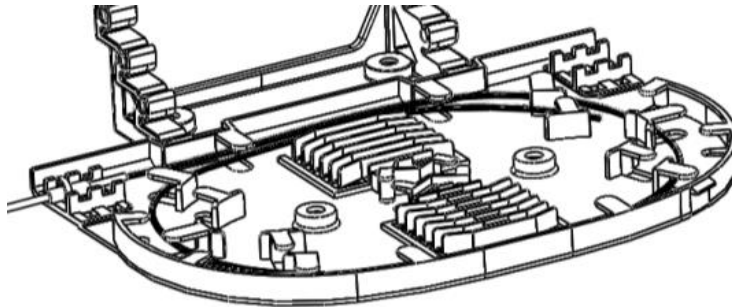3.6.9. Route the fibers in the tray and cut off the tie-wrap excess (Fig.22)

Fig. 22

3.6.10. Re-install the lid on the splice tray.

3.7. Splitter Installation

3.7.1. Unscrew the parking support for the splitter (Fig. 23). Maintain the screws in a safe place in order to attach them back in place at the end of the installation.
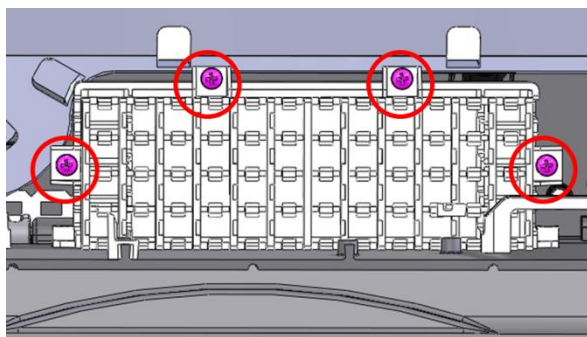

Fig. 23

3.7.2. Install the splitter into the holder (Fig. 24) and screw the parking holder in place to support the splitters

Fig. 24

3.7.3. Screw the splitters parking support and route the fiber to the tray (Fig.25)

Fig. 25

3.7.4. Remove the cord cover to the entrance of the splice tray with a suitable tool and accommodate the fibers slack in the splice tray. Wrap the fibers with the foam and secure with cable ties. Route the fibers. (Fig.26)
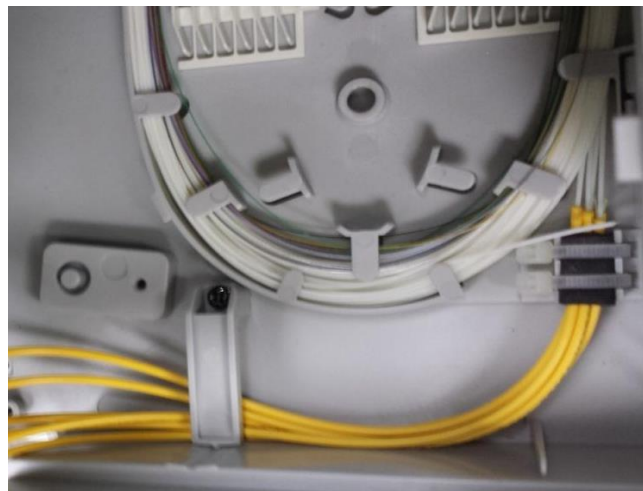

Fig. 26

3.7.5. Attach the fibers with Velcro. Route the fiber units following the path shown in Figure 27. Plug the connectors to the parking holder as shown.
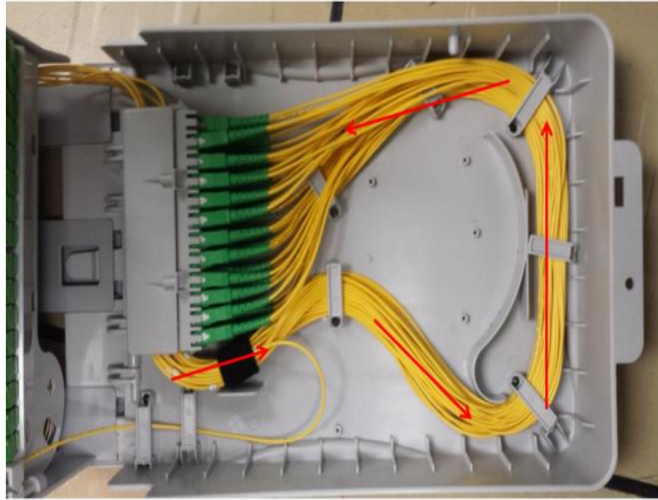

Fig. 27 Fiber units routing

3.8. Pigtail Installation

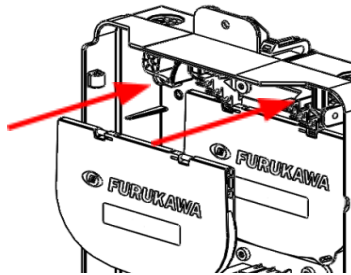3.8.1. Install the splice trays as needed (Fig.28)

Fig. 28

3.8.2. Insert the connectors into the adapters on the rear of the panel (Fig.29)
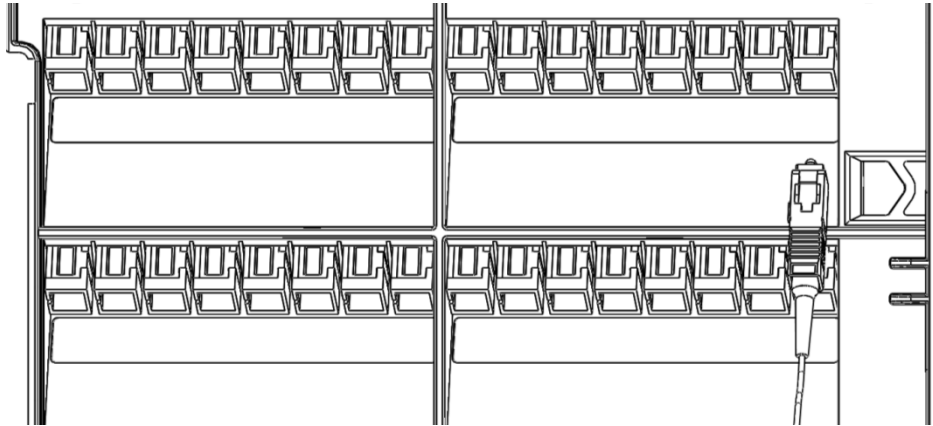

Fig. 29

3.8.3. Accommodate the fibers along the way and attach a transparent protection sheet into position with the screws provided. (Figs.30 and 31)
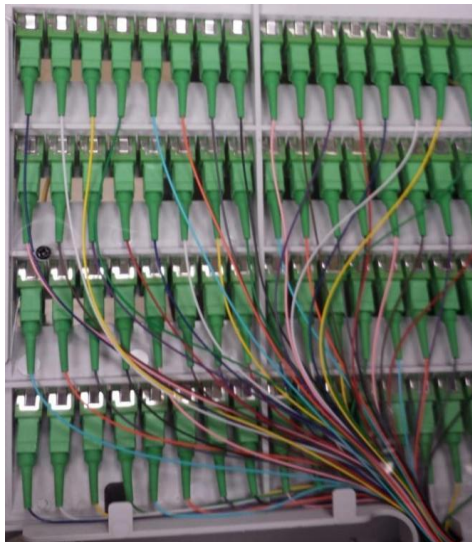

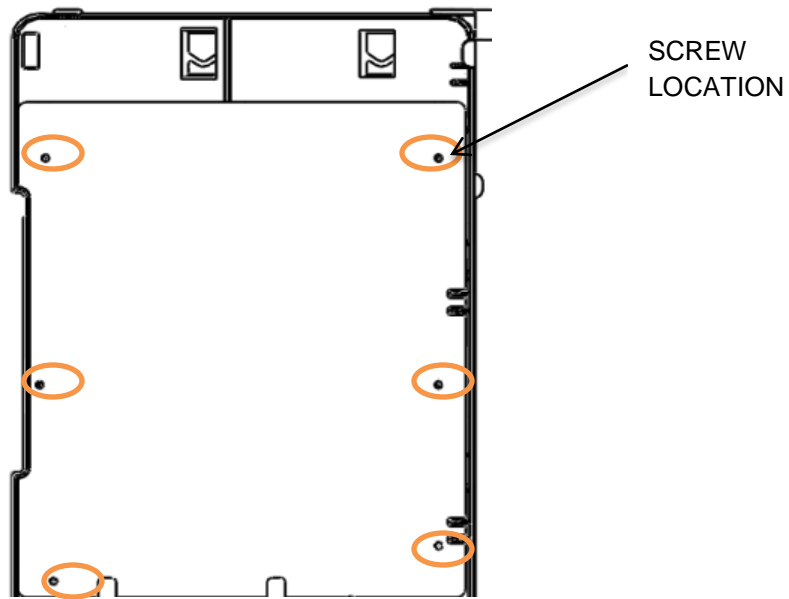Fig. 30   Fibers protected by a clear protection sheet

FIG. 31   Position of the protection sheet screws

NOTE: Accommodate the fibers under the fiber routing fingers. (Fig.32);
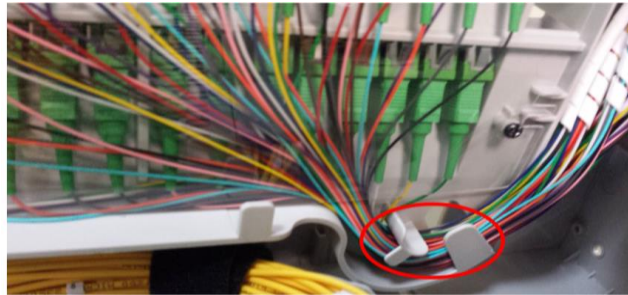

Fig. 32

3.8.4. Take the fibers to the splice tray by 12 fiber groups and insert the spiral tube in position (Fig.33)

Fig. 33

3.8.5. Take the fibers to the splice tray. Use the foam tape to protect the fibers and secure the fibers in the splice tray (Fig.34)
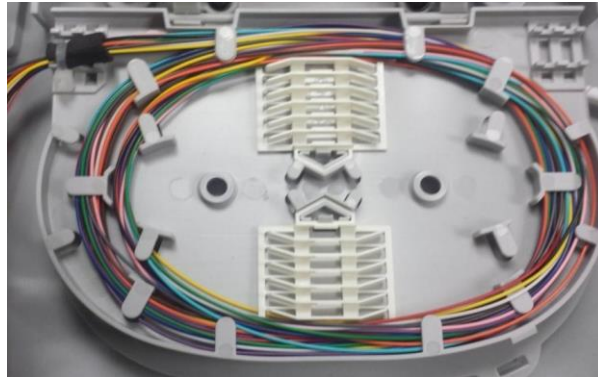

Fig. 34

3.9. Output cables installation. Alternative entries

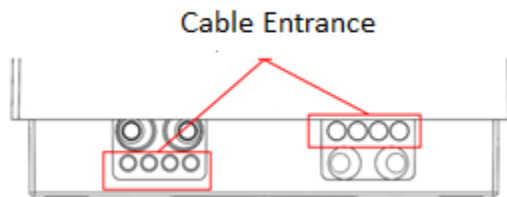Note: Utilize one of the holes indicated (Fig. 35)

Fig. 35

3.9.1. Insert the cable in one of the positions shown

3.9.2. Leave approximately 120 mm to make aramid yarn anchorage
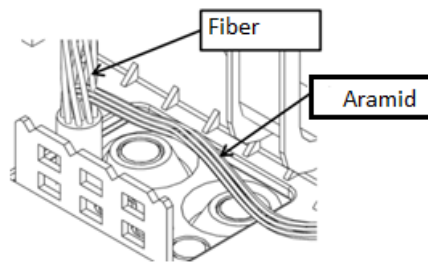
3.9.3. Separate aramid yarn (Fig.36)

Fig. 36

3.9.4. Go around the metal support and pass through the bracket holes. The assembly should appear as shown in Fig. 37;
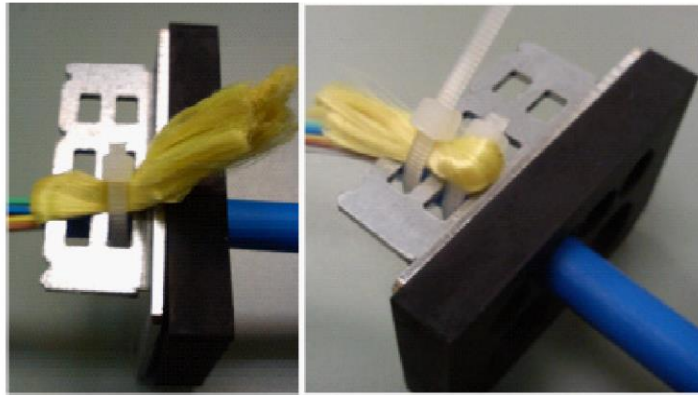

Fig.37

NOTE: Fasten a cable tie to secure the yarn. Trim the excess of the cable ties.

3.10.   Installing the cable gland

If necessary, decide which of the two entry locations the gland will be installed.

3.10.1. After the determination of inputs and outputs cable locations, position the cable gland and anchoring supports for FRP

3.10.2. Remove one of the plastic knock-out shown in Fig. 38 (use a screwdriver). Smooth the edges of the opening with sandpaper
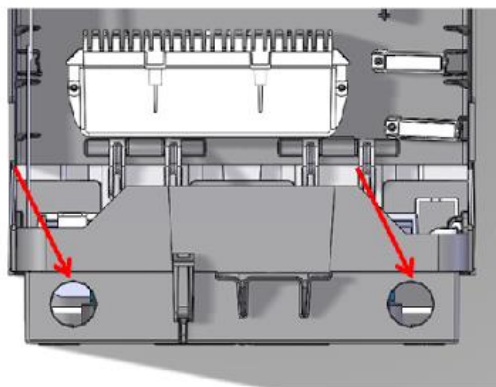
3.10.3. Insert the cable glands

Fig. 38

3.10.4. Thread the cable through the gland. Tight the nuts to secure gland and the cable (Fig.39)
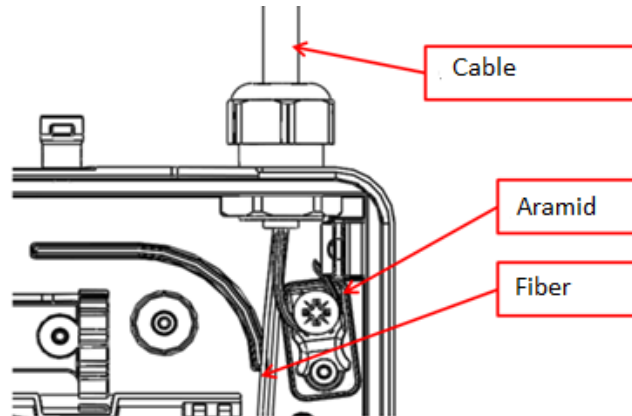

Fig. 39

3.11. Adding Customer Fiber Patch

3.11.1. In order to activate a client, remove the connecter to be used (from the parking bracket) and plug it into a proper position. Use the cable routing as indicated below to perform the activation (Fig.40)

Fig. 40

3.11.2. Insert the Velcro in position (Fig.41).

Fig. 41

3.12.   Lock and Security

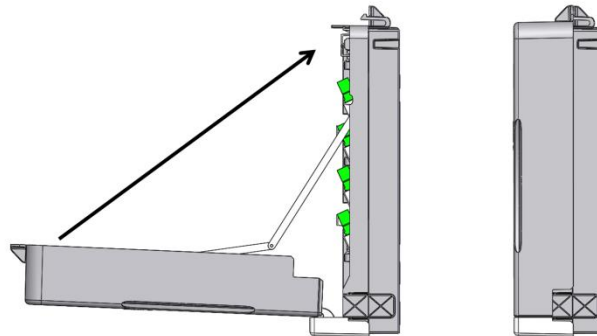3.12.1. To close the box, lift the lid and lock the plastic cover in place (Fig.42)

Fig. 42

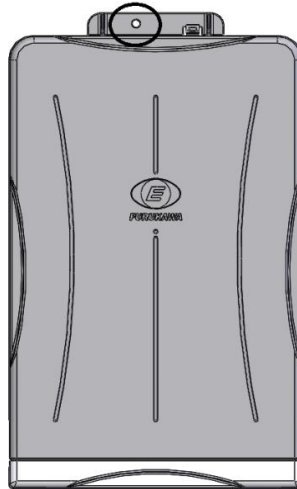3.12.2. A padlock can be installed for added security. (Fig. 43)

Fig. 43

4. **Care and Security**

   ● The installer should take necessary precautions when handling optical cables and cords, especially in the handling of the bare optical fiber. Follow local safety practices. Check the bending radii or any interference with other components during the opening and closing of the product.

   ● Optical connections should be cleaned before every reconnection.

   ● Pay attention to the laser radiation warnings, avoiding looking into active connections with a magnifying device when the laser is connected.

   ● Use goggles appropriate for the type of laser in the link and when scoring and breaking fiber;

   ● Be careful when handling sharp tool

5. **Discard**

   ● The packaging of the product and its accessories must be disposed of in appropriate places as material composition.

   ● When discarding the enclosure separate the different materials and dispose of the material in appropriate locations.

6. **Technical Assistance**

   If you need technical assistance or additional information about the product, please contact us:

   ● Contact your customer service representative;

   ● Website: www.ofsoptics.com

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