## NOVUX™ Fiber Optic System
## SEC 100 Basic Instructions

About this manual

This manual describes the basic installation steps of the SEC 100 system with an inline feeder cable. The document starts with providing an overview of the tools required to perform the installation. Also warnings and cautions are indicated, which should be observed before starting the product installation.

Installation steps in this document are limited to: closure preparation, mounting the closure, organizer preparation, inline feeder cable preparation and installation, storing feeder fibers and closing the closure. For the installation steps required for the splice application, refer to TC-1557-IP-SP: SEC 100 Splice application. For the installation steps required for the patch application, refer to TC-1557-IP-PA: SEC 100 Patch application. Images in this manual are for reference only and are subject to change.
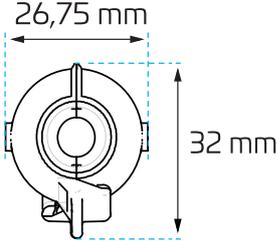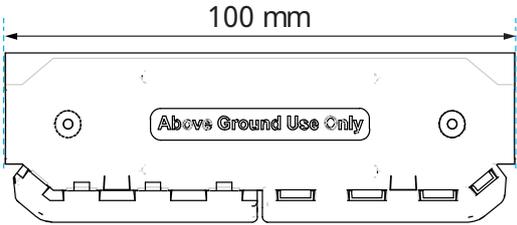
System overview
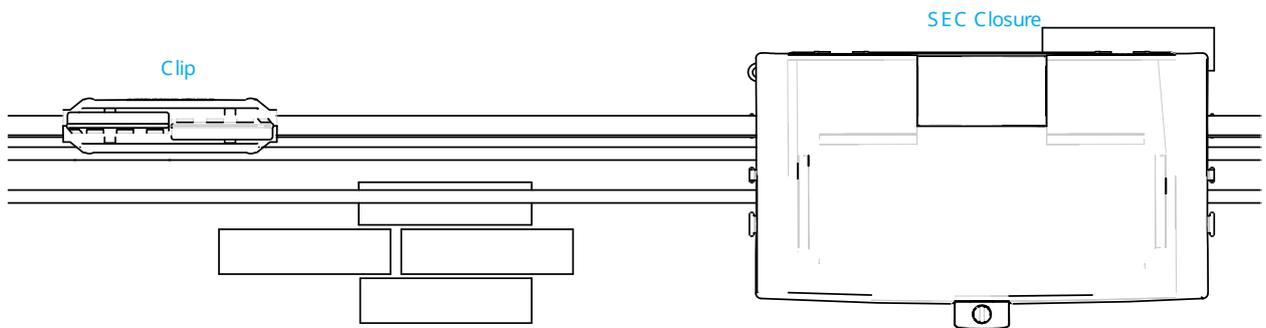
Dimensions closure
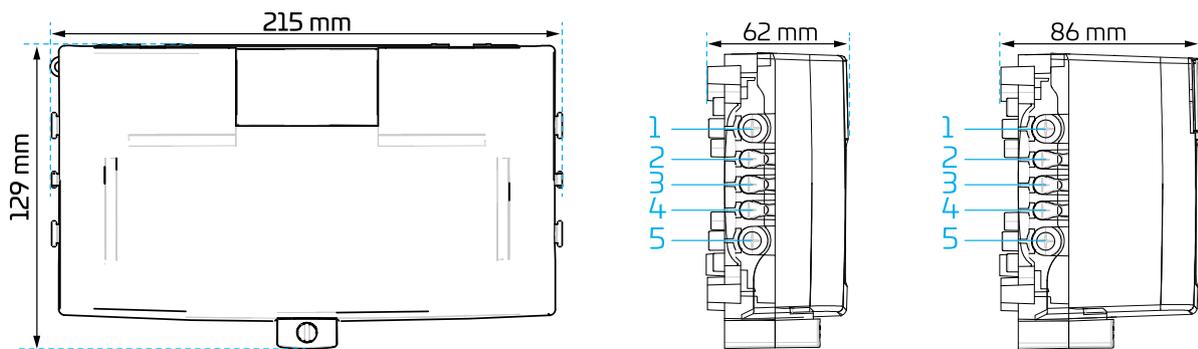
Cable range

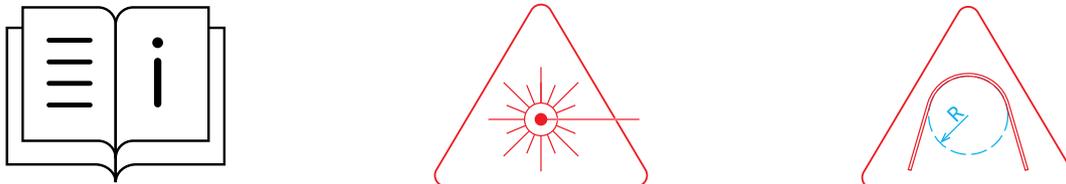|	Cable range (mm)	Position in closure
Feeder Cable	8-12	1
Drop cable push through	3-7	2, 3, 4
Drop cable connectorized	3-6	2, 3, 4, 5 or 1, 2, 3, 4
Branch cable	8-12	5

Dimensions clip

100 mm

Above Ground Use Only

26,75 mm

32 mm

Contents

1   Tools

Optional

Fiber splice equipment
and fiber cleaning tools

2   Warnings and Cautions

- Follow the installation instruction steps to ensure the performance of the closure. It is necessary to take precautions and keep the working space clean to protect the closure sealing materials and splices.
- Exposure to laser radiation can seriously damage the retina of the eye. Do not look into the ends of any optical fiber. Do not assume the laser power is turned off or that the fiber is disconnected at the other end. Looking into the ends of any optical fiber is entirely at your own risk. A protective cap or hood MUST be immediately placed over any radiating adapter or optical fiber connector to avoid the potential of dangerous amounts of radiation exposure. This practice also prevents dirt particles from entering the connector and adapter.
- Fiber optic cables may be damaged if bent or curved to a radius that is less than the recommended minimum bend radius. Always observe the recommended bend radius limit when installing fiber optic cables, subunits and patch cords.

3   Kit contents
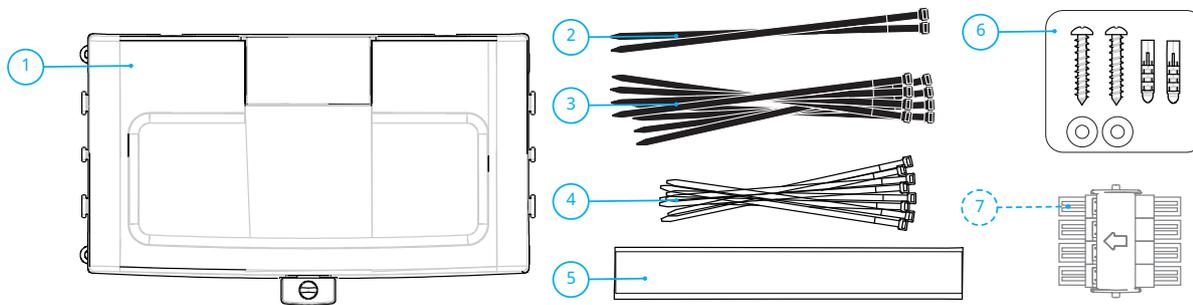
N°	Description	Qty
1	SEC 100 closure	1
2	Cable ties black large	2
3	Cable ties black small	12
4	Cable ties white	8
5	Silicone tape (1,25 cm width)	1
6	Mounting equipment	1
7	*Patch panel (SC or LC) - patch application only*	*1*

📑 **Note:** Contents can vary depending on the configuration.

4   Accessories

Following accessories can be used to install the inline cable into the closure.

Clip kit contents   Accessory 2: cable holder   Accessory 3: shaving tool
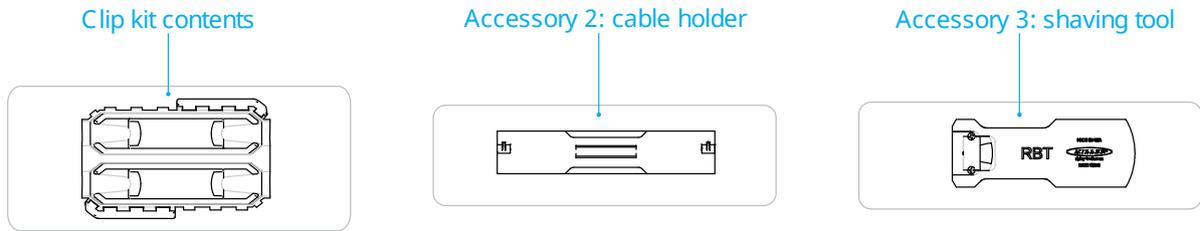
N°	Description
1	Clip
2	Cable holder (cable diameter 9 mm)
3	Shaving tool

5   Closure preparation

5.1   Open the closure

Rotate
quarter turn
left or right
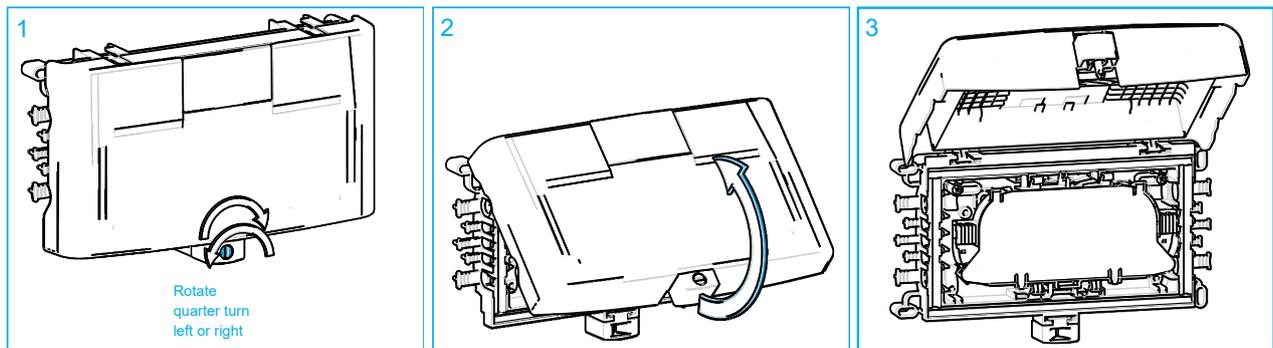
1   To open the closure, the screw can be turned a quarter turn left or right to unlock.
2   Hinge the cover open to the top.
3   Cover fully open.

5.2   Lock the cover

Lock cover

130°
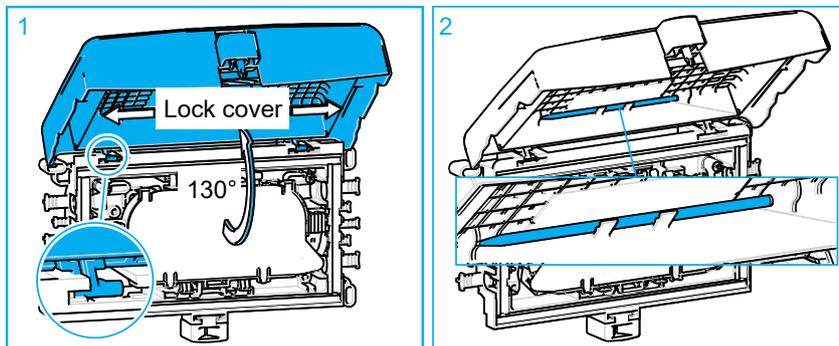
1   The cover can be locked to keep it open. Open the cover 130° and slide the cover to the left or the right. The hinge will be locked in the bottom.
2   In the cover a fiber guidance pen is stored to help to handle the fibers.

5.3   Remove the cover

When the cover is removed it is easier to install the inline feeder cable.
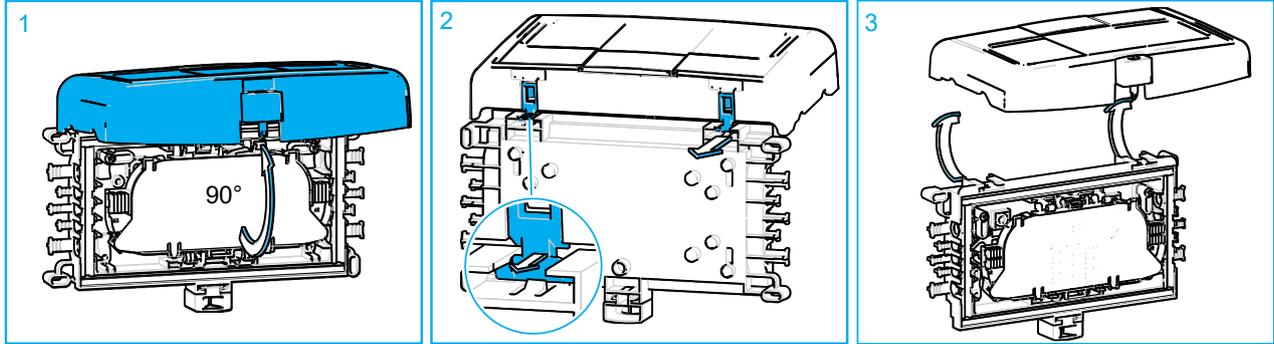
1   Rotate the cover 90°. Make sure the cover is not locked.
2   Slide the cover to the rear side. The hinges should pass the locking features that keep the hinges in place.
3   Now the cover can be taken off.
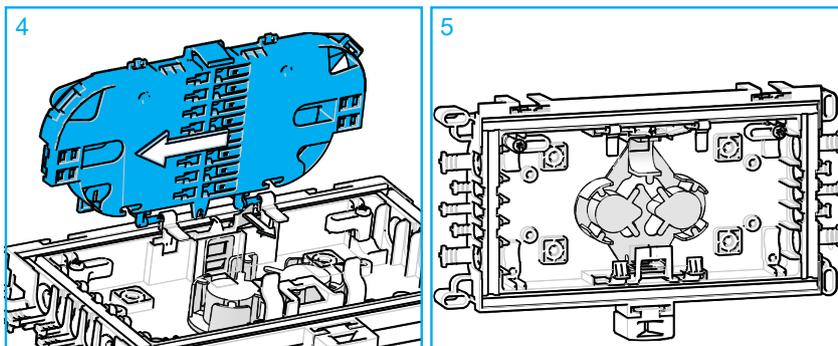
5.4   Remove the tray

To easier access the bottom of the closure to install the inline feeder cable, the tray(s) can be removed as well.
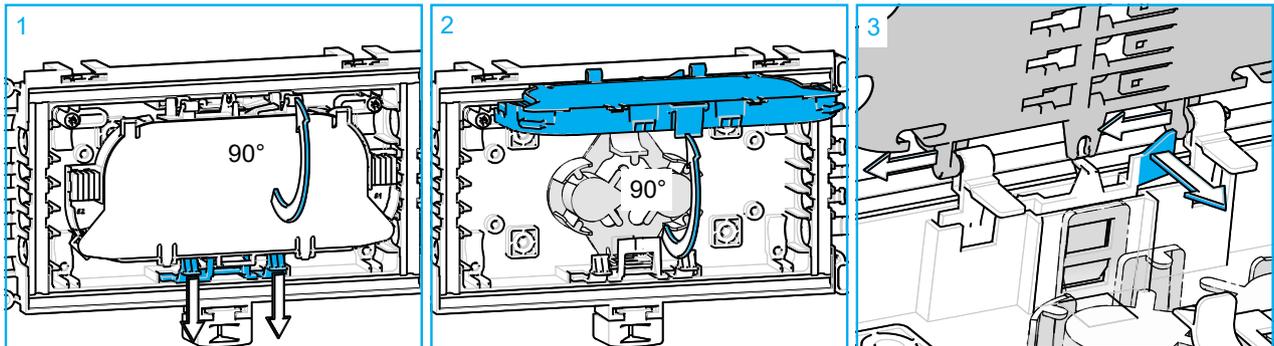
1   Push the tabs that lock the tray downwards.
2   Rotate the tray open 90°.
3   Pull the lock forward to be able to release the tray.

📑 **Note:** Note that the tray is lifted to the top position in the hinges to be removed.

4   Slide the tray to the left to release it from the hinges.
5   Tray fully removed. The bottom is now accessible to install the inline feeder cable.

📑 **Note:** The components mounted in the bottom are application dependent. The images are showing a router island in the bottom.

6   Inline feeder cable preparation

Two window cuts should be made. One is the opening to pick the fiber and will be mounted in the closure. The other one will be at least 1 m from the first window cut and will be used to cut the fiber. This second window cut can be protected with the clip afterward.
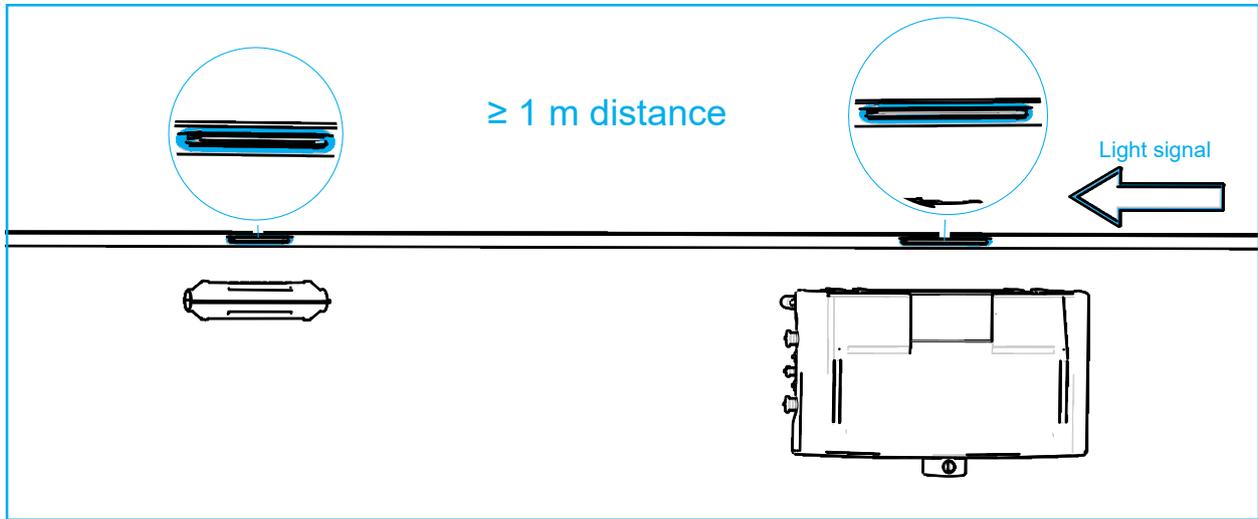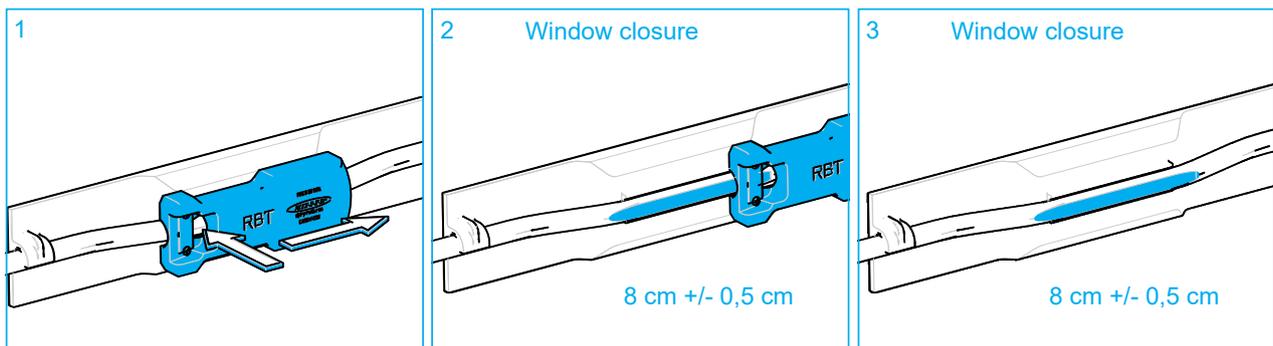

6.1   Use cable holder

The cable holder can be used with a CommScope cable of 9,2 mm.
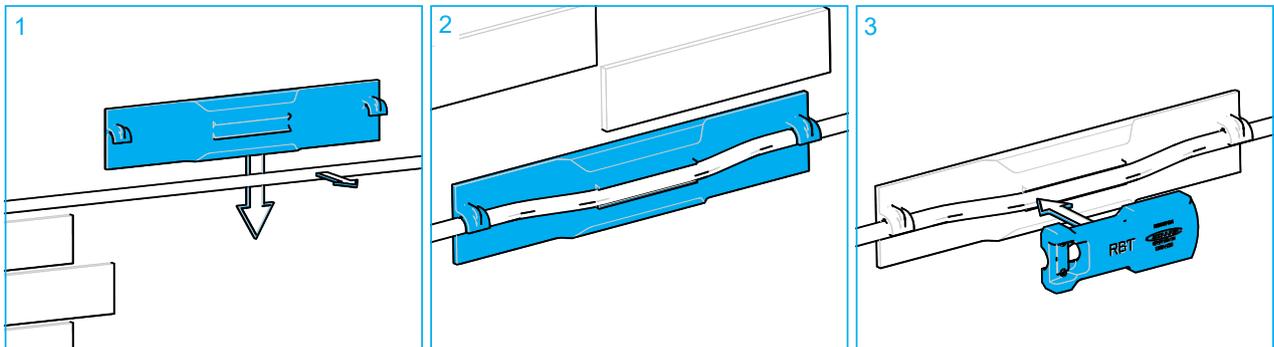
1   Slide the cable holder between the cable and the mounting surface where the window cut should be created.
2   Secure the cable under the two locking tabs.
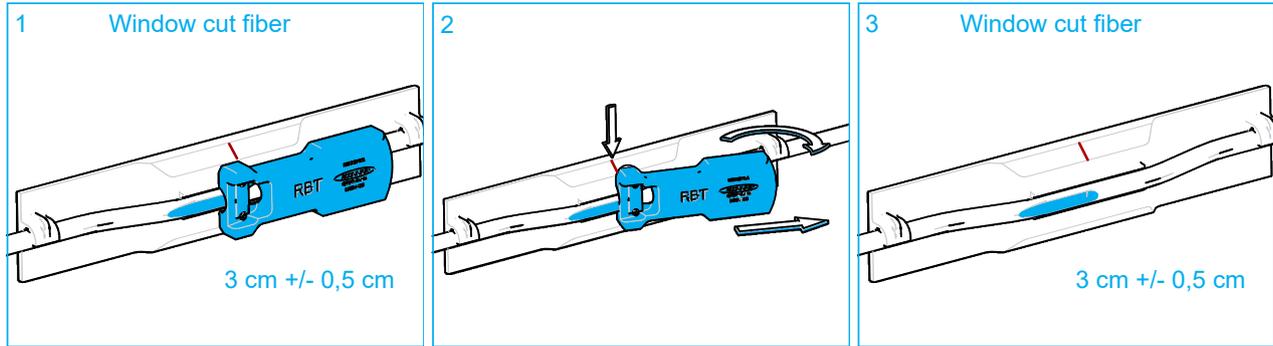3   Now the shaving tool can be used to make the window cut.

6.2   Window cut mounted in the closure

1   Position the shaving tool on the cable at the left side of the bump.
2   Push firmly while moving to the right side over the complete length of the bump.

3   The opening will be around 8 cm ±0,5 cm.
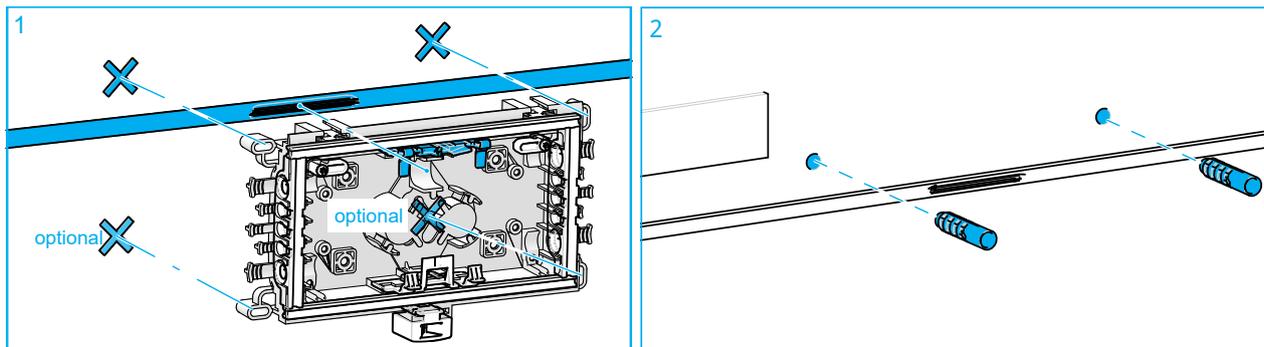
6.3   Window cut to cut the fiber

1   Position the shaving tool on the cable at the left side of the bump.
2   Push firmly while moving to the right side until the middle of the bump, indicated by a groove. Turn the shaving tool away from the cable.
3   The opening will be around 3 cm ±0,5 cm.

7   Inline feeder cable installation

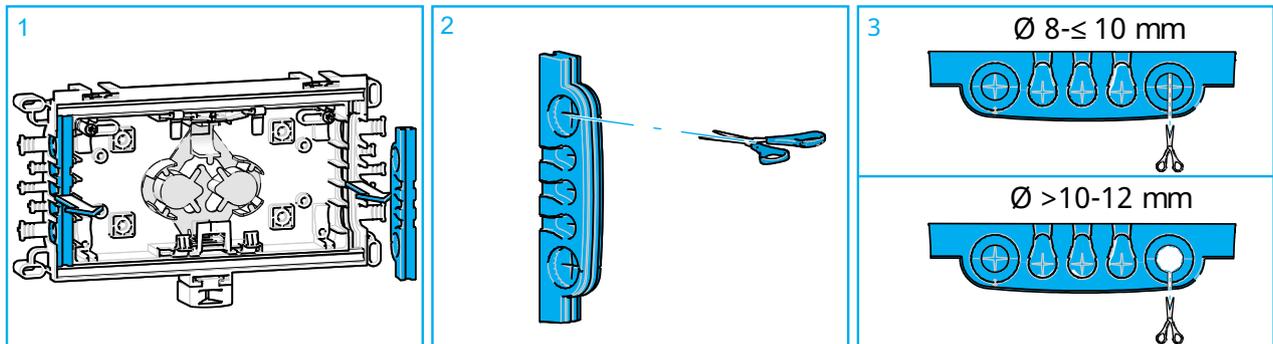## 7.1   Indicate mounting position

1   There are 4 mounting position options to mount the closure. It is preferred to use the 2 upper mounting positions.

📑 *Note:* Make sure the window cut is in the middle of the closure, in the foreseen cavity.

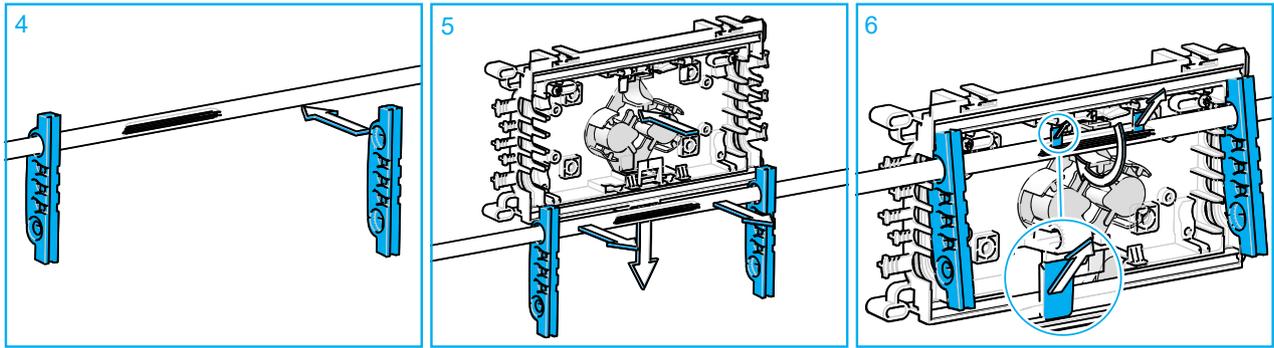2   Drill the holes and insert the plugs.

7.2   Install the inline cable in the closure

1   Remove the seals from the closure.
2   Cut an opening from the bottom side in one of the feeder ports.
3   For a cable larger then 10 mm cut away the inner rubber.

4   Install the seals around the cable on the wall.
5   Slide the bottom behind the cable. Lift the cable a bit to the front if possible.
6   Mount the tip of the seal in its cavities and lift the 2 flange in the closure (above the window cut of the cable) a bit to facilitate the cable falling into the cavity.
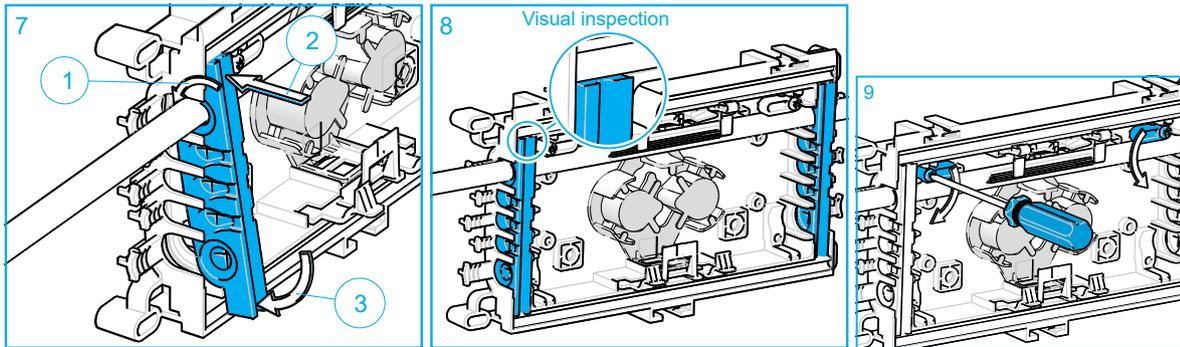

7   Make sure the rubber material under the cable is correctly seated in the cavity. Push the cable downwards, then rotate the rest of the seal in its cavity.
8   Make sure the step between the 2 seals is as small as possible.
9   Loosen the two cable bridges and turn them over the cable.
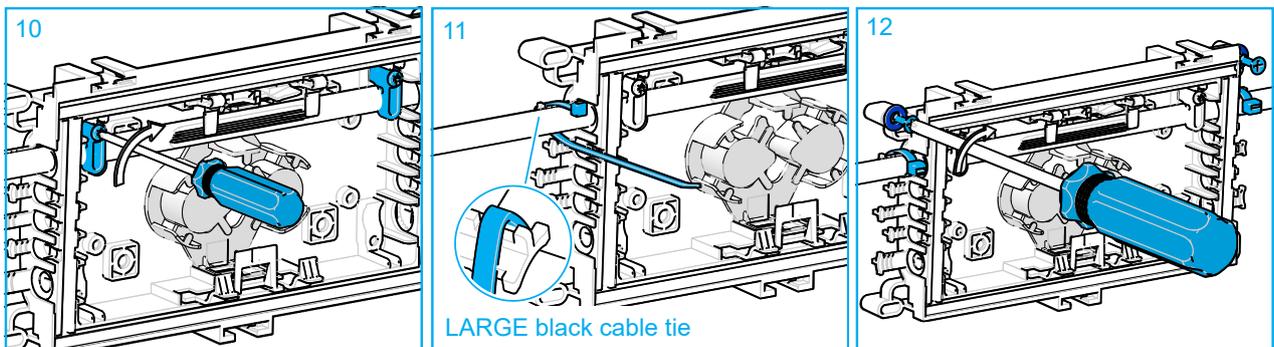
10   Secure the two cable bridges.
11   Secure the cable with **one large black** cable tie to the outside of the closure. Do this at the left side and at the right side.
12   Secure the bottom of the closure to the mounting surface with the 2 screws and install a washer between the bottom and the head of the screw.
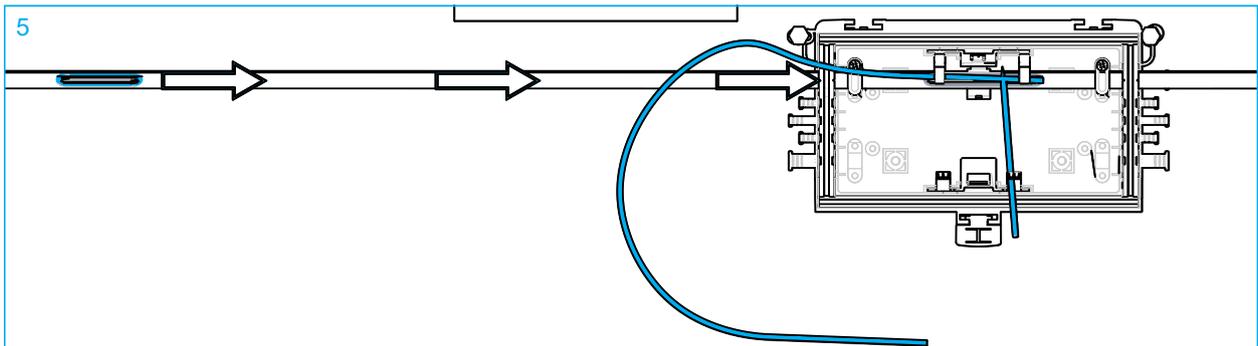
7.3   Pull back the fiber
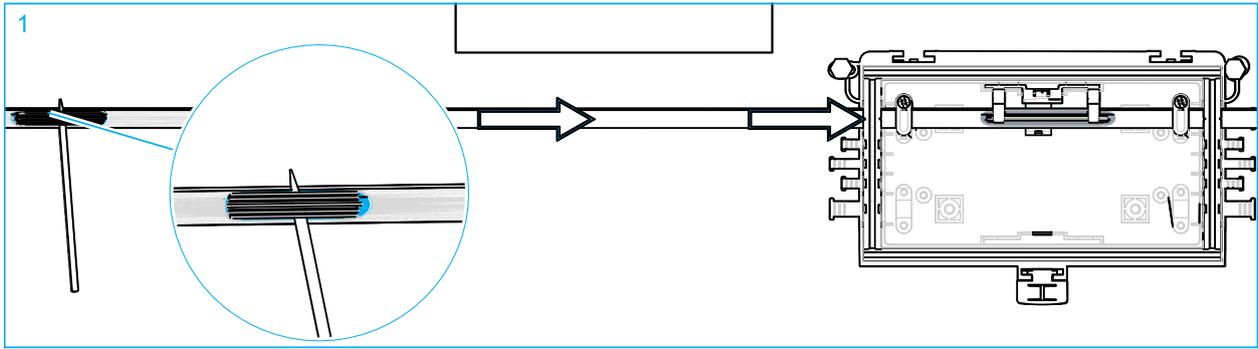
1   To have a feeder fiber available in the closure, select the correct fiber in the opening made outside the closure.
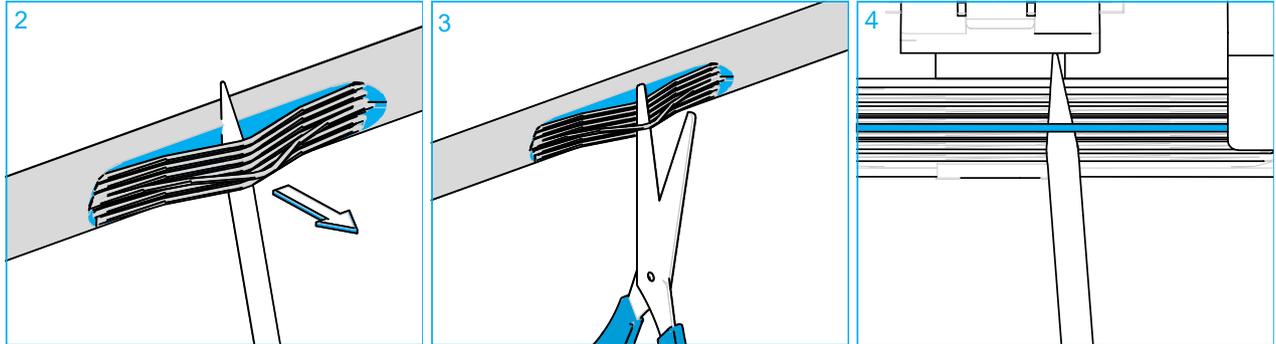
2   Pull out the bundle a little bit to have easier access to the fibers.
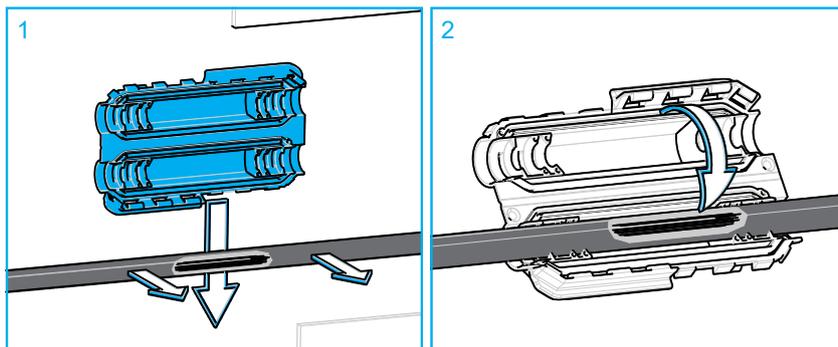3   Select the correct one and cut it.
4   In the closure, pick this fiber with the fiber guidance pen and pull it out.
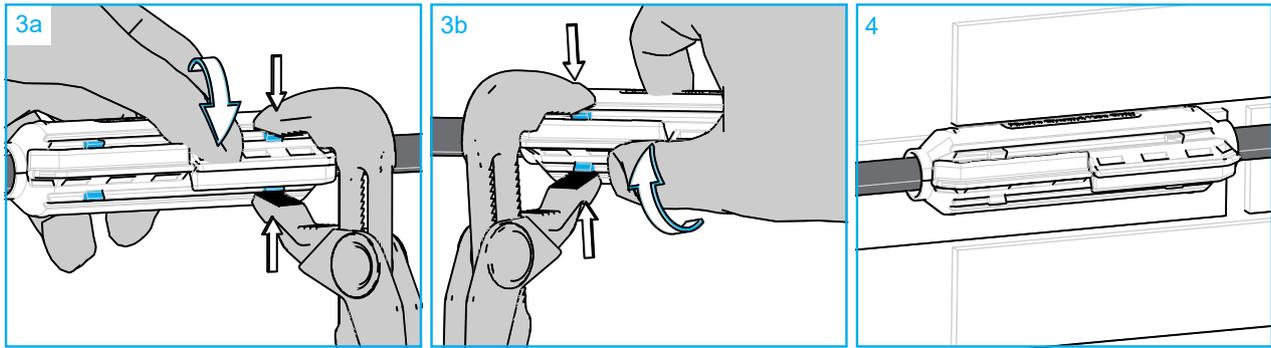

5   Completely pull back the fiber. Now it is available to be used in the closure.

7.4   Install clip

1   Slide the clip between the cable and the mounting surface.

2   Close the clip.

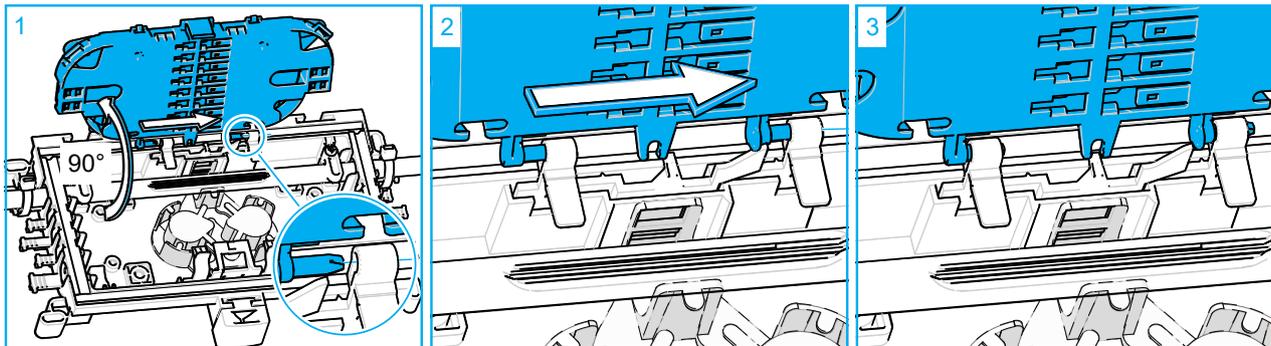3   If required, a pair of pliers can be used on the supporting brackets to assist.
    a   At the right side.
    b   On the left side.

📋 *Note:* Make sure all snap hooks are properly closed. A clicking sound is observed when closing the clip.
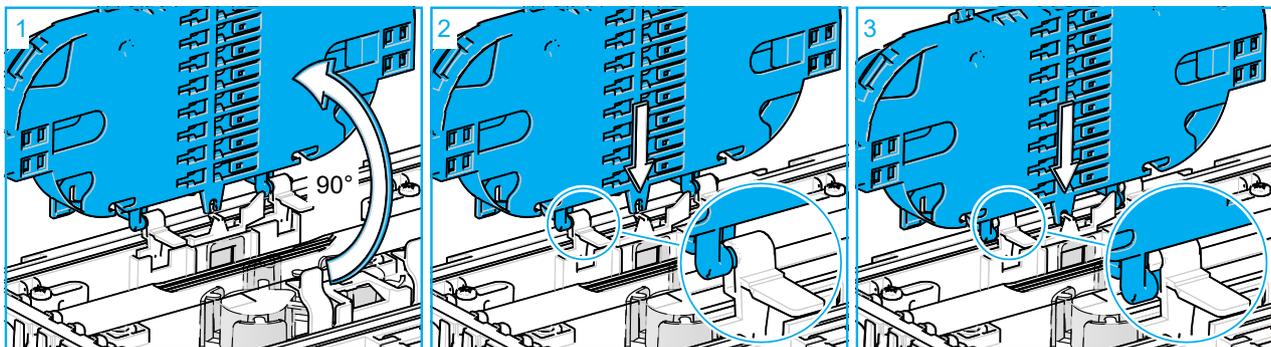
4   Figure 4 shows the closed clip.

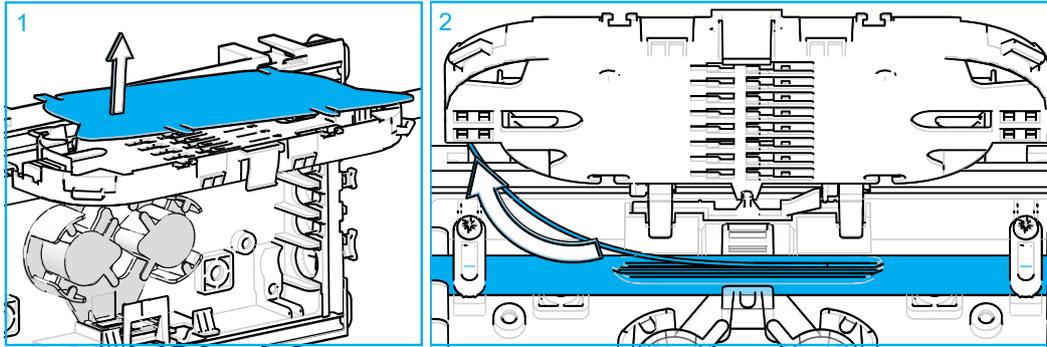# 8   Route feeder fibers to the tray

8.1   Reinstall the tray

1   To reinstall the tray, make sure its orientation is 90° relative to the bottom. The hinges slides in the holes.
2   The hinges of the tray will push away the locking feature in the bottom.
3   Now the tray is correctly positioned and locked into the bottom.
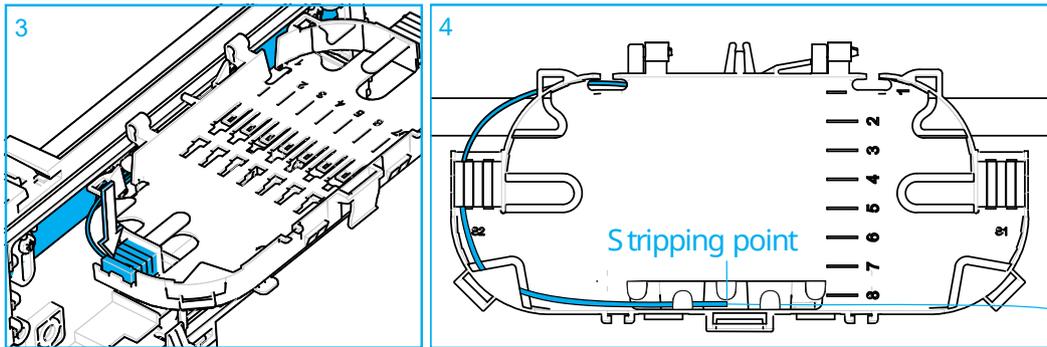
8.2   Lock the tray

1   Make sure the tray is positioned 90° relative to the bottom to lock the tray.
2   Slide the tray downwards.
3   The hinges of the tray will lock now into the squared cavities of the bottom.

8.3 Route the fiber to the tray

1 Remove the cover of the tray.
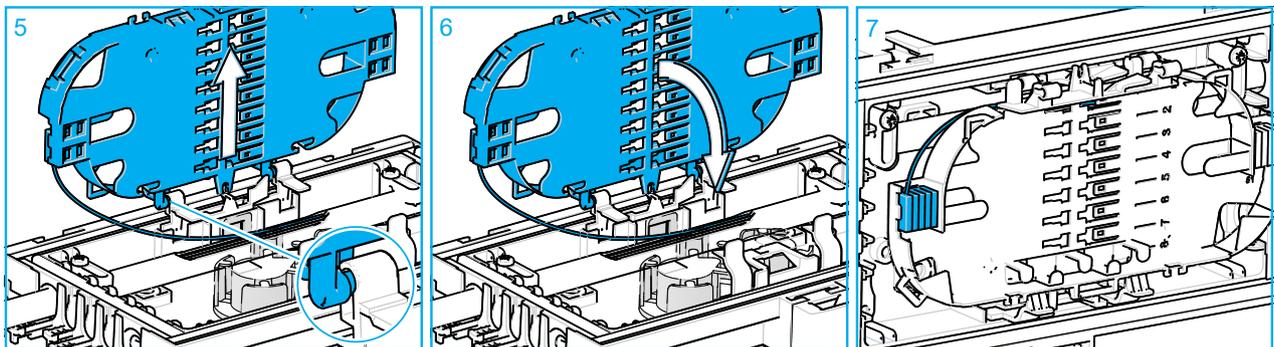2 Bring the feeder fiber to the tray.

Stripping point

3 Push the feeder fiber in one of the grooves of the foam.
4 If applicable, mark the stripping point in the middle of the fiber guidance channel. Strip the buffer tube off the fiber and store the fiber temporarily on the tray.

📄 *Note:* For the patch application it is not required to strip the buffer tube.

📄 *Note:* The tray layout depends on the application. Please consult the correct application instructions for further details on the fiber routing on the tray.
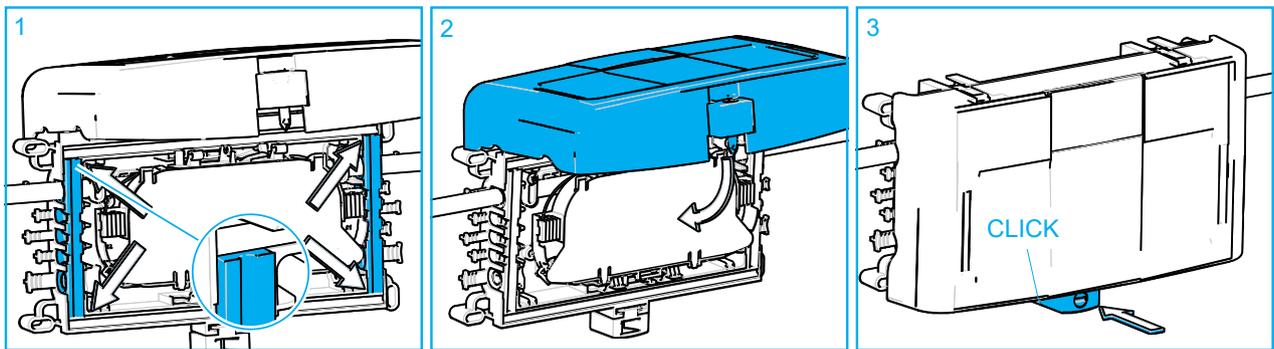

5 To close the tray, the tray should first be lifted upwards. The hinges fall into the free openings.
6 Turn the tray towards the bottom cover.
7 Tray closed with the feeder fiber routed to the tray.

9　　　　　Reinstall the cover
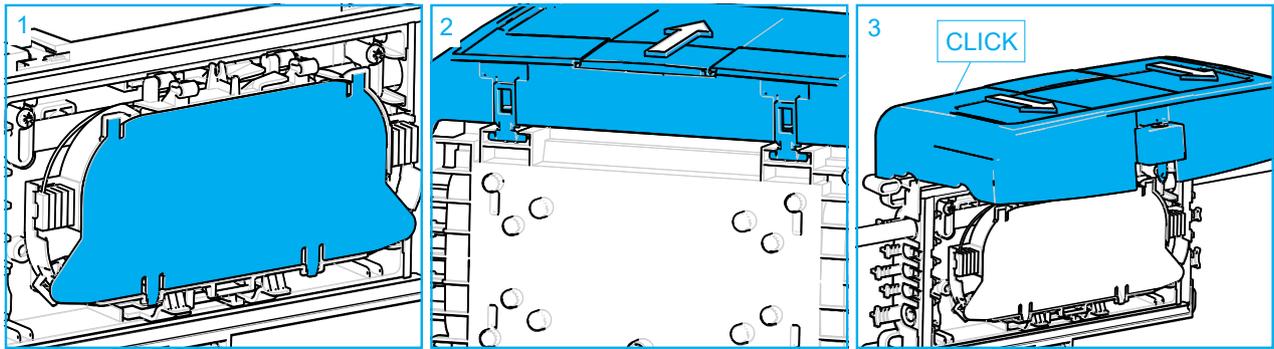
1　Reinstall the tray cover.
2　Mount the cover on the bottom by sliding the hinges into the cavities.
3　A clicking sound is observed.

10　　　　Close the closure

1　Verify the long seal and make the step between the 2 seals as small as possible.
2　Slide the cover a maximum to the front then rotate the cover downwards
3　To lock the closure, push the locking feature to the rear side. A clicking sound is observed.

11   Disclaimer

All trademarks identified by ® are registered trademarks in the US and may be registered in other countries. All third party product names, trademarks and registered trademarks are property of their respective owners.

This product may be covered by one or more U.S. patents or their foreign equivalents. For patents, see www.cs-pat.com.

This document is not intended to modify or supplement any specifications or warranties relating to CommScope products or services.

12   Contact information

Visit our website or contact your local CommScope representative for more information. www.commscope.com

For technical assistance, customer service, or to report any missing/damaged parts, visit us at:

http://www.commscope.com/SupportCenter