NOVUX™ Fiber Optic System
SEC 100 Patch Application

1 About this manual

This manual describes the installation steps of the patch application of the SEC 100 series. Installation steps in this document are limited to: splicing input of the connectors to the feeder fibers, patching SC cables and patching LC cables.

Installation steps of the inline feeder cable are explained in manual TC-1557-IP: SEC 100 Basic Instructions. 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.

Images in this manual are for reference only and are subject to change.

2 Cable range patch cable

	Cable range (mm)	Position in closure
Connectorized drop cable (slit in rubber seal)	3 - 6	2,3,4,5

3 Tools

- Cable stripping and cleaning tools
- Cable tie gun (optional) or small side cutter (to cut excess cable tie)
- Fiber splice equipment and fiber cleaning tools
- Scissors (to cut the silicon tape)

4 Warnings and Cautions
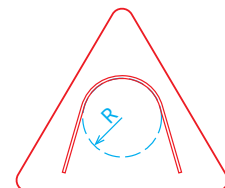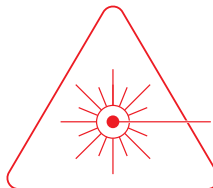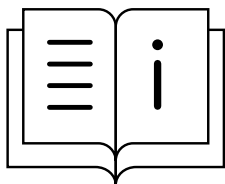
- Follow the installation instruction steps to ensure the performance of the closure. It is necessary to take precautions and keep the working space clean to protect the closure sealing materials and splices.
- Exposure to laser radiation can seriously damage the retina of the eye. Do not look into the 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.

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5   Remove the patch tray

To easier access the bottom of the closure and to install the inline feeder cable, the patch tray can be removed.
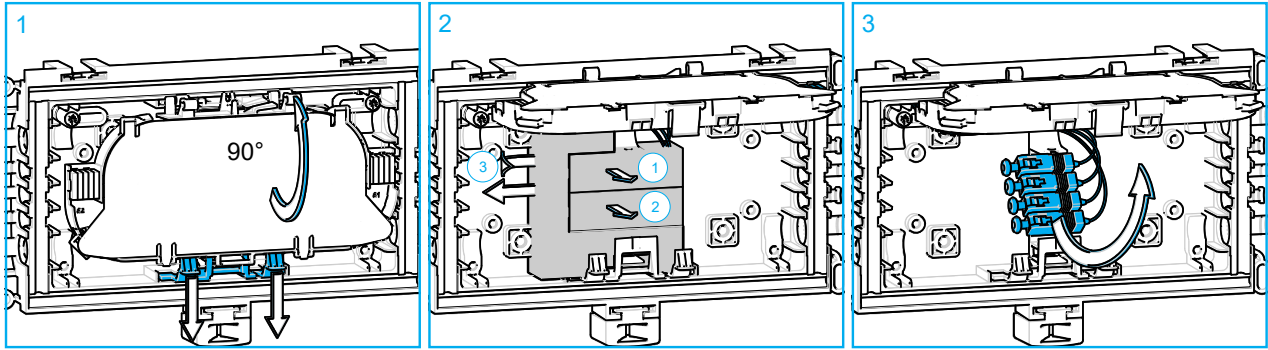
1. Push the tabs to unlock the tray downwards and rotate the tray open 90°.
2. The connectors (output of the splitter which is installed on the tray) are protected in the bottom with foam blocks. Remove the foam blocks as indicated.
3. Carefully take out the connectors.
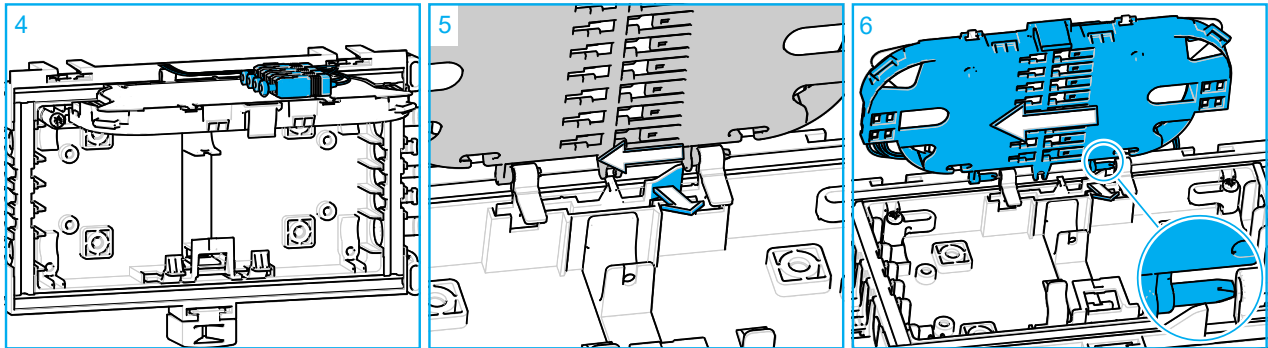
4. Position the connectors on top of the tray before removing the tray.
5. Pull the lock forward to be able to release the tray.

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

6. Slide the tray with the connectors on top to the left.

6   Install the patch panel

The patch panel is delivered as a separate part and should be installed as follows:
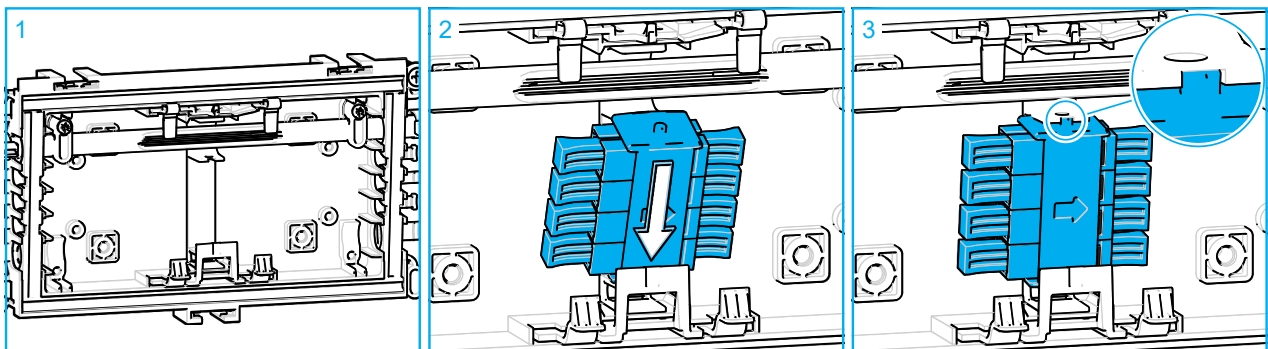
1. Install the inline feeder cable as explained in document TC-1557-IP.
2. Slide the patch panel in its first lock as shown.
3. Rotate the patch panel so its second locking feature falls into the hole at the top side.
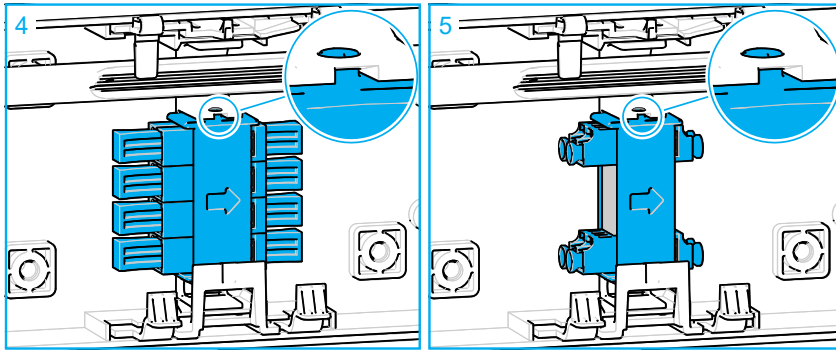
4   SC patch panel installed
5   LC patch panel installed.

7   Install and lock the tray
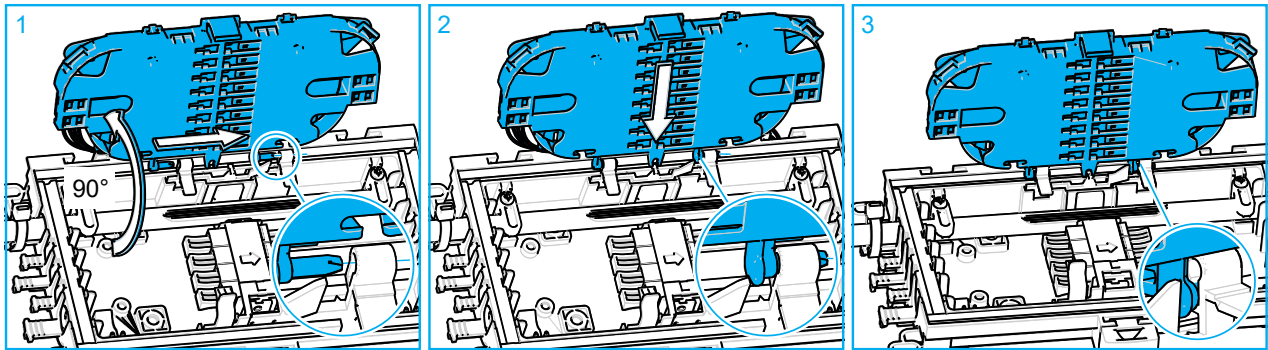
1   Now the tray with its connectors can be reinstalled. Make sure the tray is positioned 90° relative to the bottom and slide the hinges in the holes.
2   To lock the tray, slide the tray downwards (maintaining is 90° position relative to the bottom).
3   Tray installed and locked into the bottom.

8   Connect the output of the splitter to the patch panel
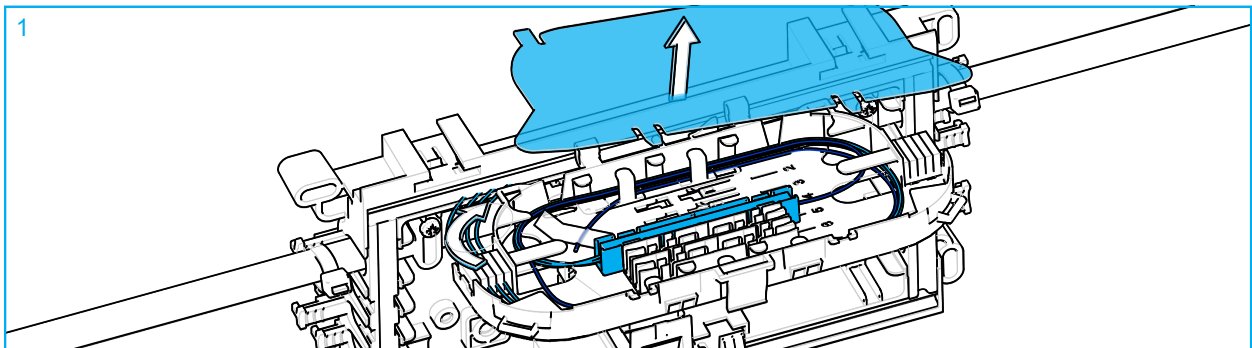

1   Remove the cover of the tray and guide the output of the splitter to the patch panel.

8.1　　　　SC patch panel

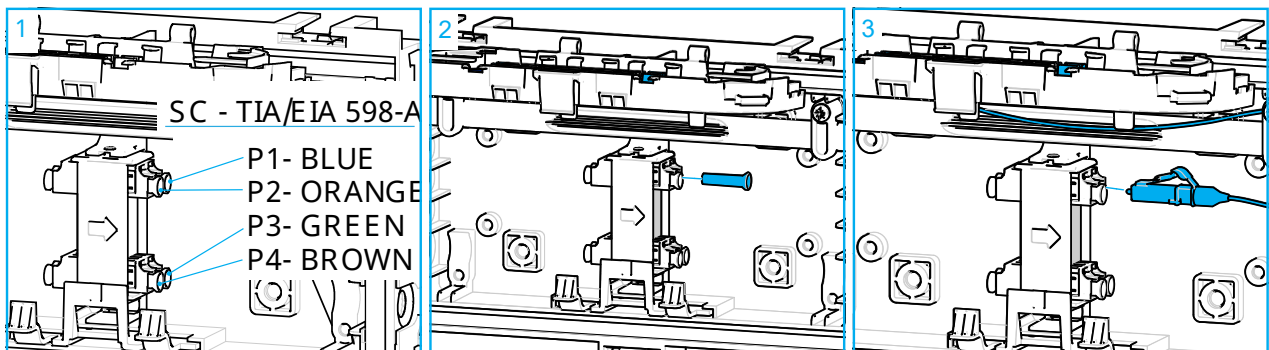

SC - TIA/EIA 598-A

P1- BLUE
P2- ORANGE
P3- GREEN
P4- BROWN
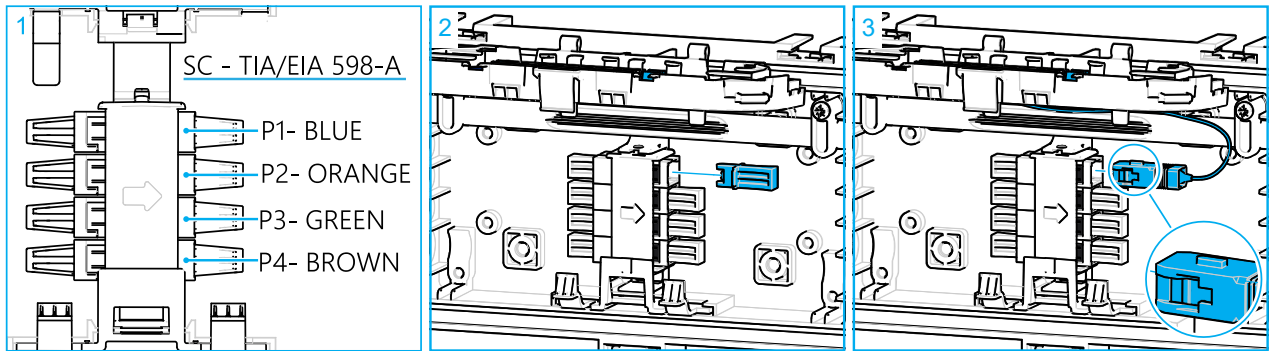
1　Check the color scheme above before connecting the splitter outputs to the patch panel.
2　Remove the dust caps of both the adapter and the connector. Clean per standard practice.
3　Position the connector in the correct orientation (rib facing upward as shown in figure above).
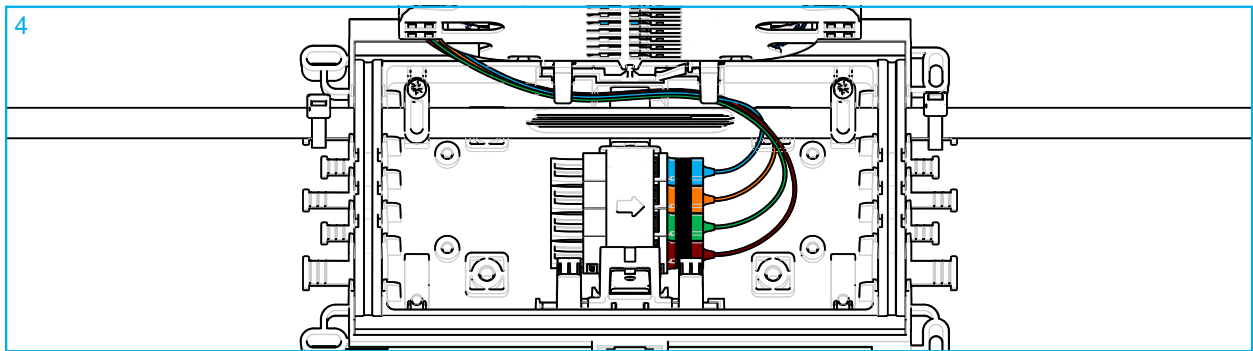
4　Connect the SC connector to its assigned port. A clicking sound is observed when the connector is properly seated. Dress the patch cords under the tabs as shown. All 4 SC connectors installed.

8.2　　　　LC patch panel

SC - TIA/EIA 598-A

P1- BLUE
P2- ORANGE
P3- GREEN
P4- BROWN

1　Check the color scheme above before connecting the output of the splitter to the patch panel.
2　Remove the dust caps of both the adapter and the connector. Clean per standard practice.
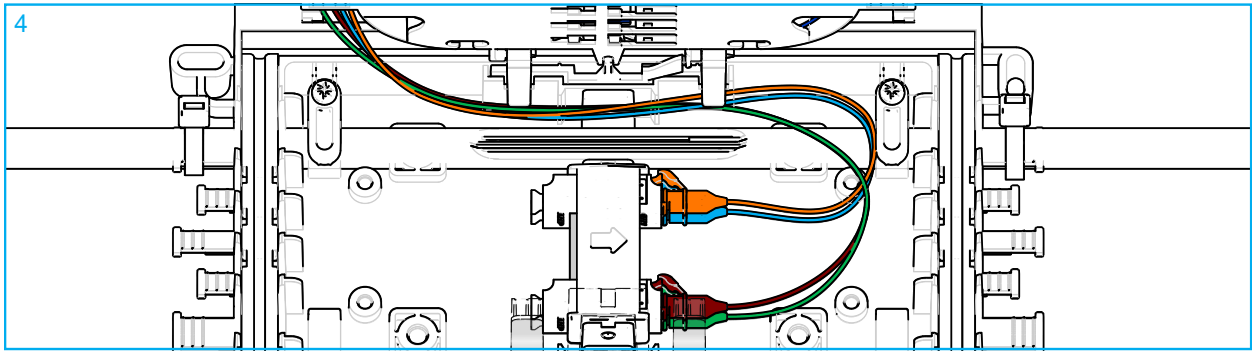3　Position the connector in the correct orientation (clip facing upward as shown in figure above).

4   Connect the LC connector to its assigned port. A clicking sound is observed when the connector is properly seated. Dress the patch cords under the tabs as shown. All 4 LC connectors installed.

9   Splice feeder fiber to input splitter

Bring the feeder fiber to the tray as explained in the basic instructions document TC-1557-IP. Push the feeder fiber into one of the grooves of the foam.
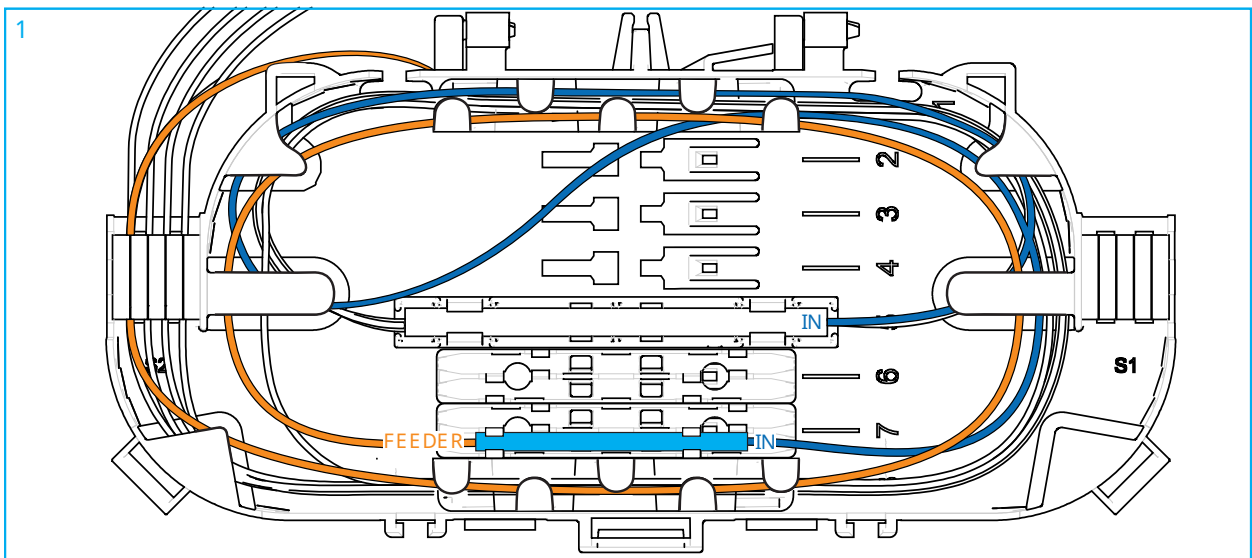
1   Splice the feeder fiber to the input of the splitter per standard practice and store the splice protector in the splice protector holder. Every position can hold up to 3 splice protectors.

📄 *Note:* The configuration of the splitter tray can differ depending on the order.

     a   If the feeder fiber enters the tray from the left side, make an S-shaped U-turn on the tray with one of the fibers as shown, then store over length in loops on the tray (full tray width).
     b   If the feeder fiber enters the tray from the right side store over length in loops on the tray (full tray width).

📄 *Note:* Make sure all fibers are properly positioned under the lips and avoid bulging of the fiber.

📄 *Note:* The fiber guidance pen can be used to position all the fibers under the lips.

10 Install connectorized drop cable

10.1 Install SC connectorized drop cable
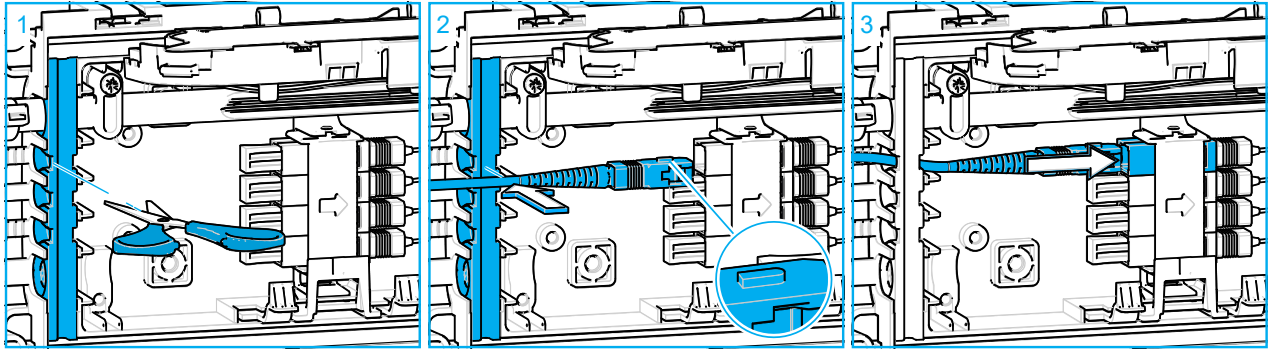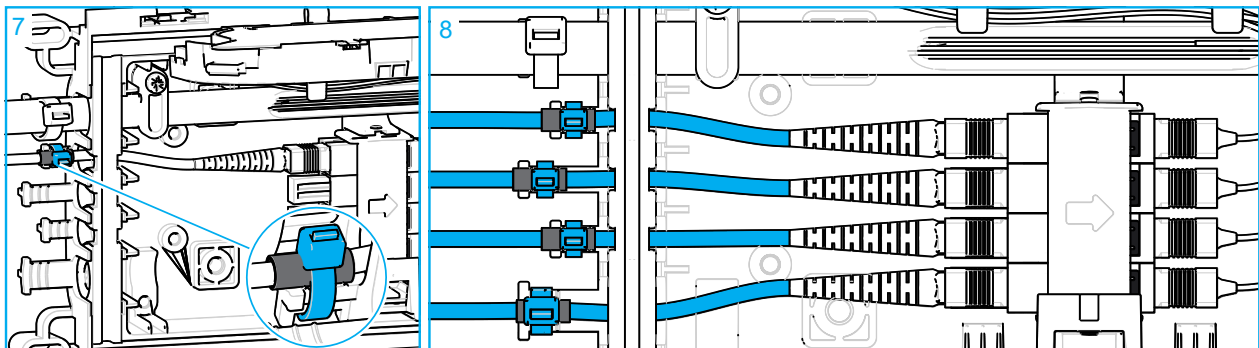

1   Cut a slit in the rubber seal as shown.
2   Push the connectorized drop cable in the opening. Make sure the connector has the correct orientation (rib facing upwards). Remove the dust caps of both, the adapter and the connector. Clean per local practice.
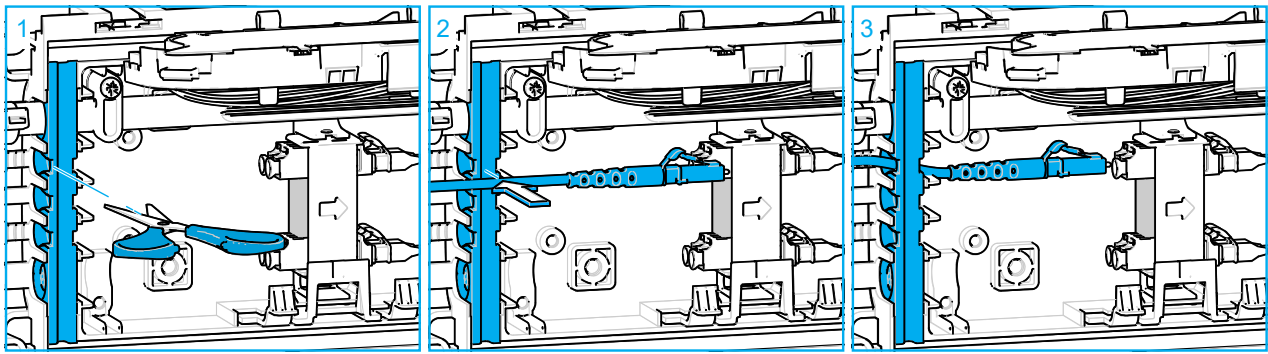3   Connect the SC-connectorized cable to its assigned port.
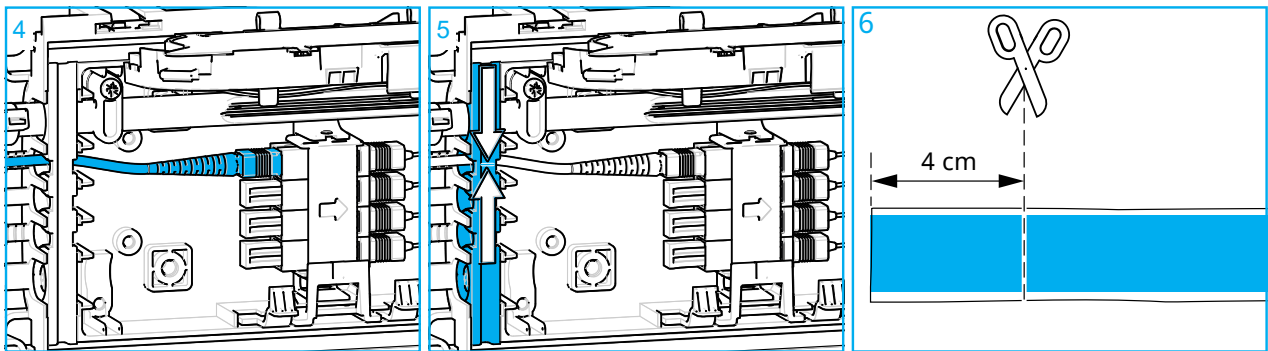
4   A clicking sound is observed when the connector is properly seated.
5   Position the rubber seal in place so no gap is visible where the seal has been cut.
6   Cut the silicone tape to a length of 4 cm.

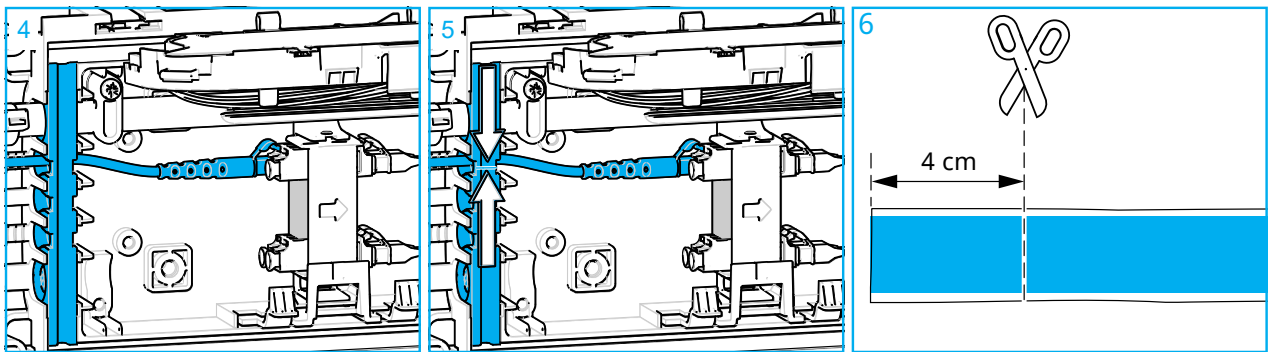📄 *Note:* Make sure your hands are clean and degreased before preparing and installing the cables.

7   Remove the protective paper. Apply the silicone tape on the cable between the marks. Stretch the tape minimum 50% while wrapping the tape around the cable. First apply a full turn around the cable, then continue to cover up.
8   Secure the cable with a **black** cable tie at the outside T-shape over the silicon tape. Make sure at the bottom side it grips in the recess.
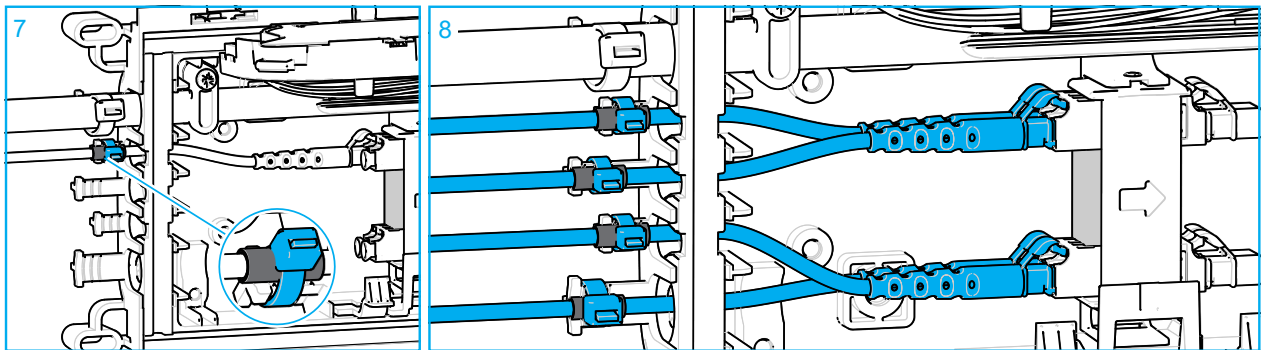
10.2   Install LC connectorized drop cable

1   Cut a slit in the rubber seal as shown.
2   Push the connectorized drop cable in the opening. Make sure the connector has the correct orientation (clip facing upwards). Remove the dust caps of both, the adapter and the connector. Clean per local practice.
3   Connect the LC-connectorized cable to its assigned port.

4   A clicking sound is observed when the connector is properly seated.
5   Position the rubber seal in place so no gap is visual where the seal has been cut.
6   Cut the silicone tape to a length of 4 cm.

📄 *Note:* Make sure your hands are clean and degreased before preparing and installing the cables.

7   Remove the protective paper. Apply the silicone tape on the cable between the marks. Stretch the tape minimum 50% while wrapping the tape around the cable. First apply a full turn around the cable, then continue to cover up.
8   Secure the cable with a **black** cable tie at the outside T-shape over the silicon tape. Make sure at the bottom side it grips in the recess.