

Installation Instructions

TC-1449-IP rev. C, April 2021 http://ww.commscope.com

# NOVUX™ Fiber Optic System SEC 100

#### **About this manual**

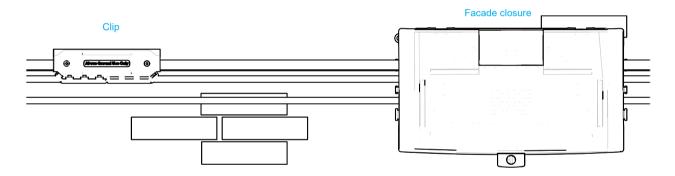
This installation instructions document describes the installation of the SEC 100. The document starts with providing an overview of the tools required to perform the installation. Also warnings and cautions are indicated, which should be observed before starting the product installation.

Following installation steps are covered in this document: closure preparation, organizer preparation, feeder cable preparation and installation, drop cable preparation and installation, routing towards and on the trays, splicing, patching, closing the closure and mounting the closure.

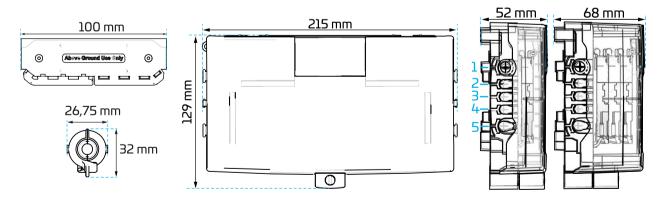
Images in this manual are for reference only and are subject to change.

#### **General product information**

#### **System overview**



#### **Dimensions**



#### **Cable range**

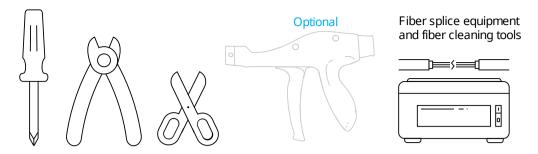
Position	Cable diameter range
1, 5(turn seal)	8-12 mm
2, 3, 4	up to 7 mm

# **Contents**

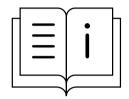
1	Tools	3
2	Warnings and Cautions	3
3	Kit contents and accessories	3
4	Closure preparation	4
	4.1 Open closure	4
	4.2 Lock cover and locate fiber guidance pen	4
	4.3 Remove the closure cover	4
	4.4 Remove tray	4
5		
	5.1 Feeder cable preparation	
	5.2 Position closure on the cable	
	5.3 Mount the closure	7
	5.4 Feeder cable installation	8

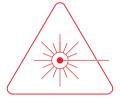
	5.5 Splice application	
	5.6 Patch application	14
6	Cable to cable application	17
	6.1 Prepare cable (Ø 9 mm)	17
	6.2 Route to tray	17
	6.3 Routing on tray	
	6.4 Make splice	
	6.5 Use bottom port	18
7	Reinstall tray cover	
8	Reinstall closure cover	19
9	Lock the closure	19
1(	0 Trade-marks	20
	1 Contact information	

#### 1 Tools



# 2 Warnings and Cautions





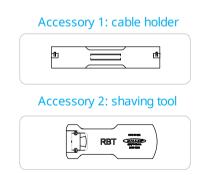


- Follow the installation instruction steps to ensure the performance of the closure. It is necessary to take precautions and keep the working space clean to protect the closure sealing materials and splices.
- Exposure to laser radiation can seriously damage the retina of the eye. Do not look into the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

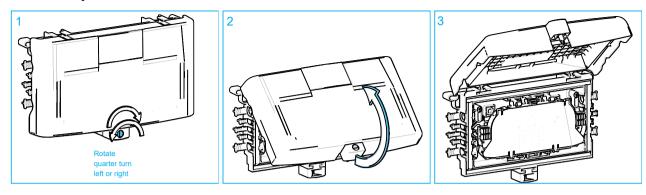




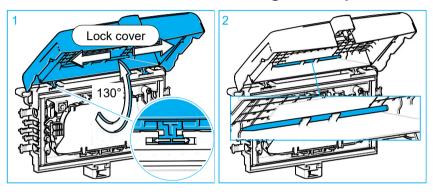


# 4 Closure preparation

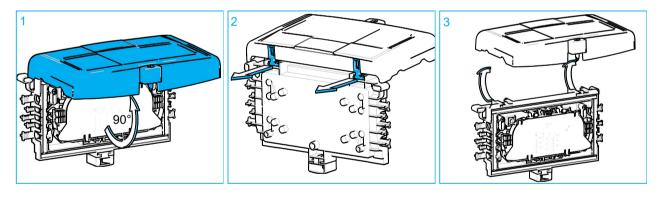
# 4.1 Open closure



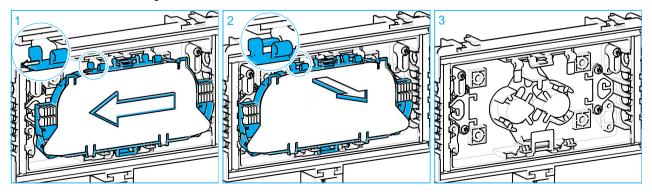
# 4.2 Lock cover and locate fiber guidance pen



# 4.3 Remove the closure cover



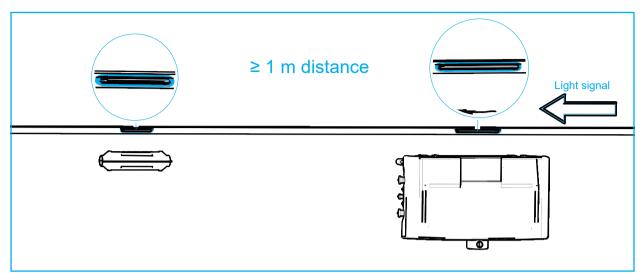
#### 4.4 Remove tray



# 5 Inline applications

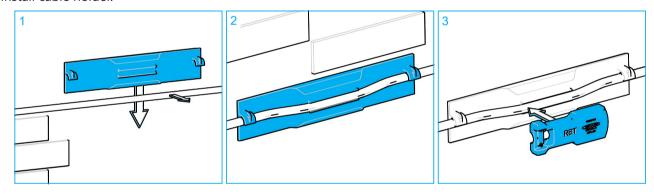
# 5.1 Feeder cable preparation

#### 5.1.1 Window cut

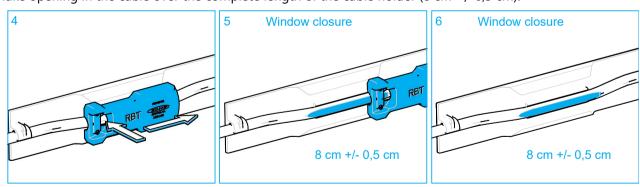


#### 5.1.2 Shave cable

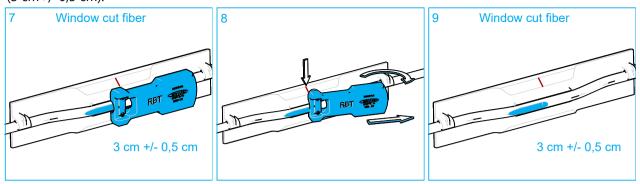
1 Install cable holder.



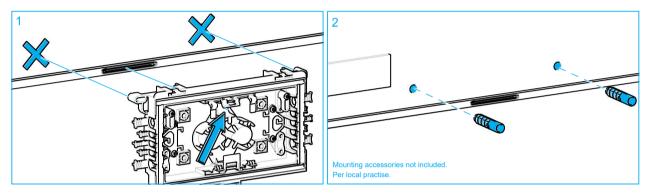
Make opening in the cable over the complete length of the cable holder (8 cm +/-0.5 cm).



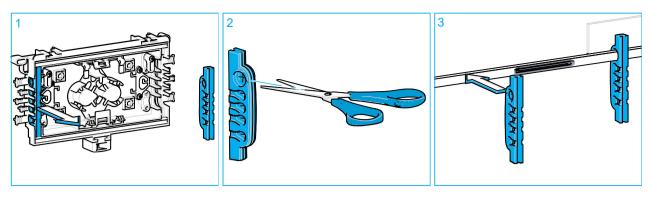
Make second opening, at minimum 1 m distance of the existing opening, until mark on the cable holder (3 cm+/-0,5 cm).

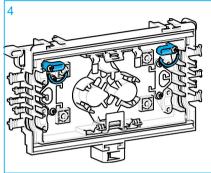


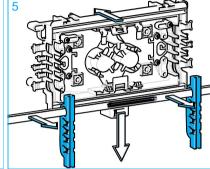
# 5.2 Position closure on the cable

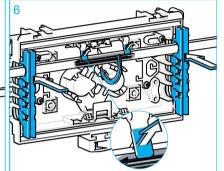


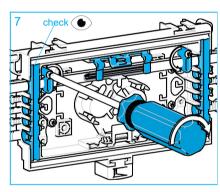
# 5.3 Mount the closure

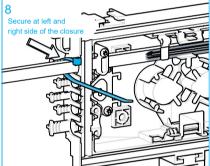


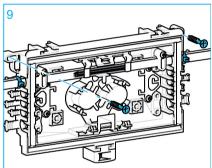






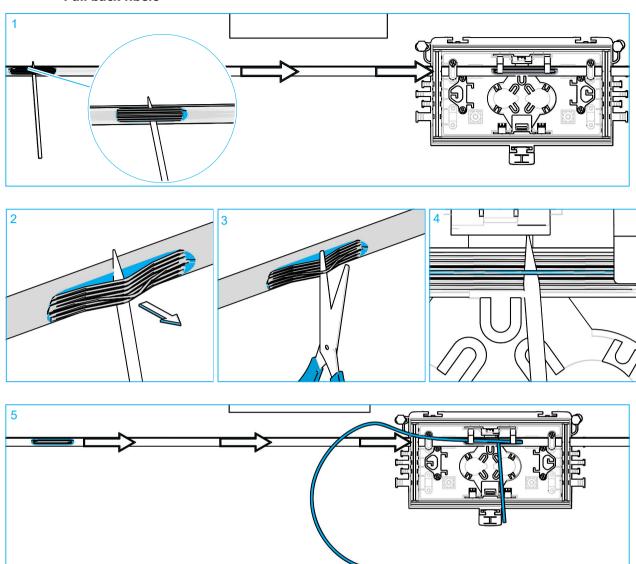




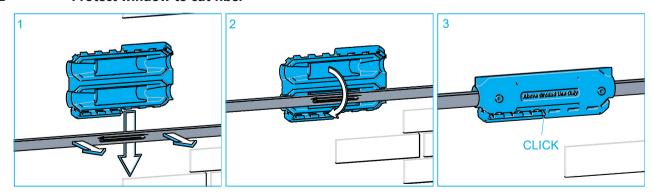


# 5.4 Feeder cable installation

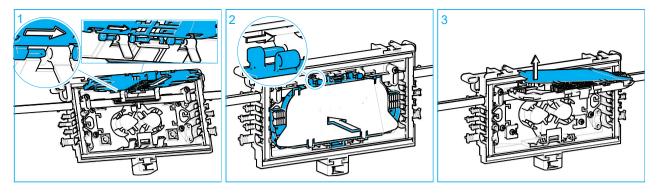
#### 5.4.1 Pull back fibers



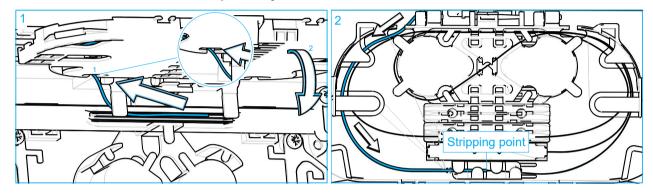
#### 5.4.2 Protect window to cut fiber



#### 5.4.3 Reinstall tray



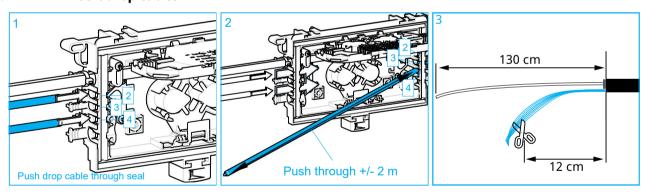
#### 5.4.4 Route feeder fibers to splice tray



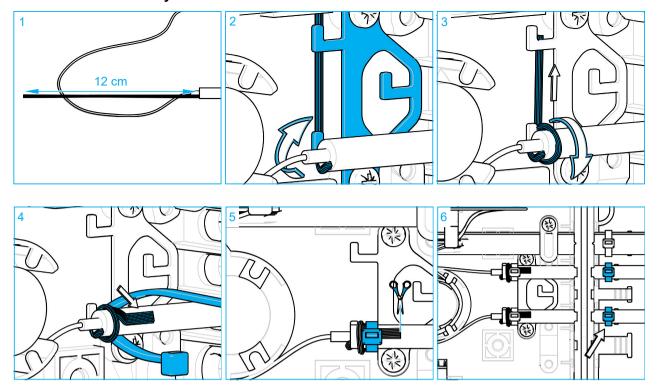
# 5.5 Splice application

#### 5.5.1 Install drop cable

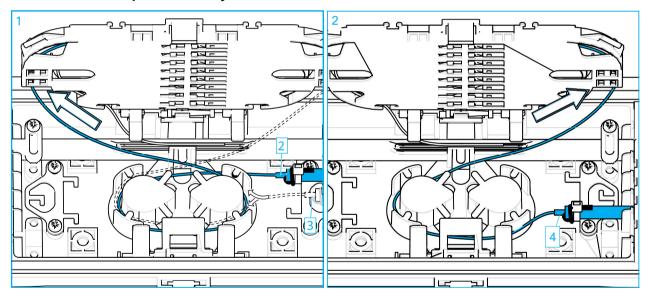
#### 5.5.1.1 Insert drop cables

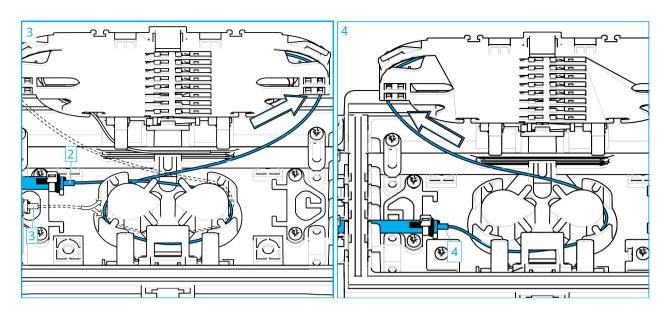


#### 5.5.1.2 Secure aramid yarn

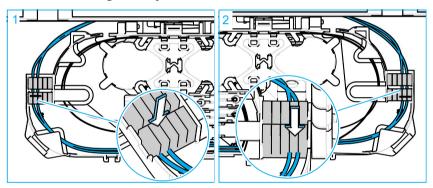


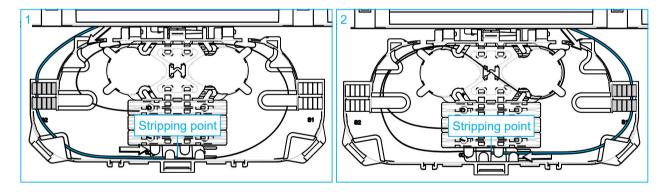
#### 5.5.1.3 Route drop cables to tray





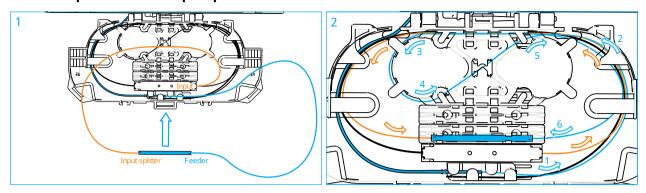
#### 5.5.1.4 Routing on tray



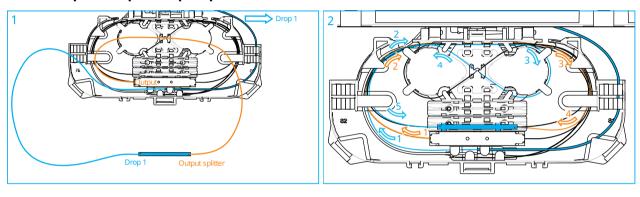


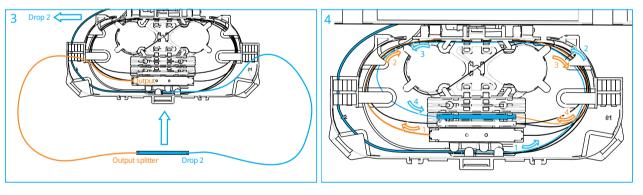
#### 5.5.2 Splitter application

#### 5.5.2.1 Splice feeder to input splitter

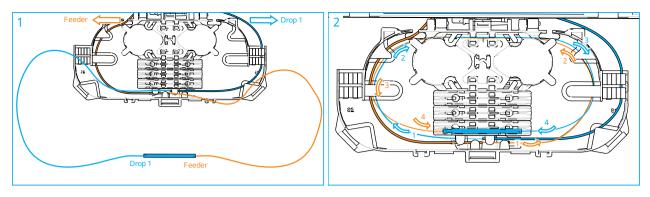


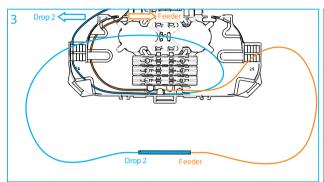
#### 5.5.2.2 Splice drop to output splitter

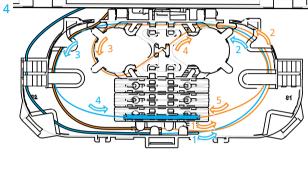




#### 5.5.3 Direct connection



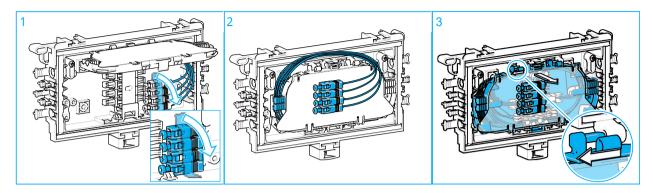




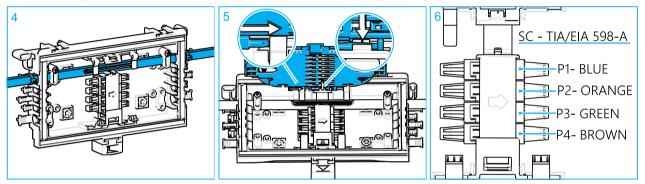
#### 5.6 Patch application

#### 5.6.1 Install feeder cable

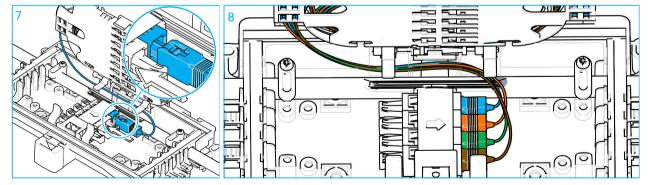
Prepare closure as explained in section Open closure on page 4 until section Remove the closure cover on page 4.



- 1 Open the tray and remove the tape to unattached the SC connectors in the bottom cover.
- 2 Hinge the tray down and put the connectors on top.
- 3 Remove the tray. More details can be found in section Remove tray on page 4.



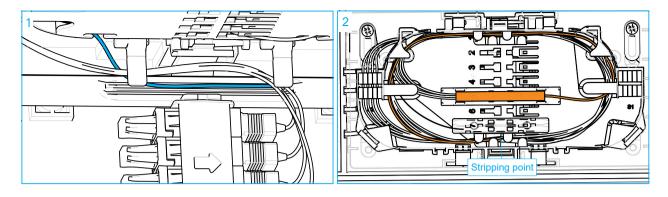
- 4 Prepare feeder cable, mount closure and install feeder cable as explained in section Feeder cable preparation on page 5 until section Mount the closure on page 7.
- 5 Reinstall tray. More details can be found in section Reinstall tray on page 9.
- 6 Before connecting the splitter output connectors to the patch panel, observe the TIA/EIA 598-A fiber color standard in figure 6.

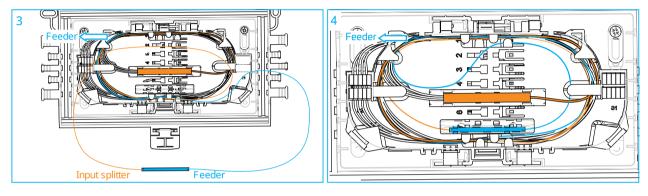


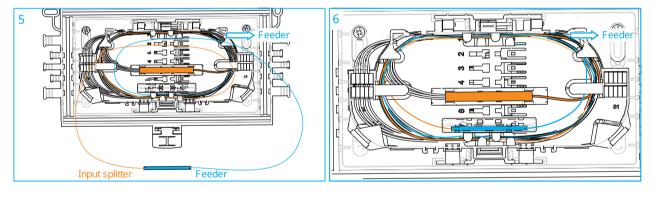
- Remove dust caps of both connector and adapter. Clean the connector and adapter per standard practice when necessary. Position the connector in the correct orientation (rib facing forward as shown in image above). A clicking sound is observed when the connector is properly seated.
- 8 Dress pigtails under the two lips and make sure correct bend radius is always respected.

#### 5.6.2 Splice feeder fiber to input splitter

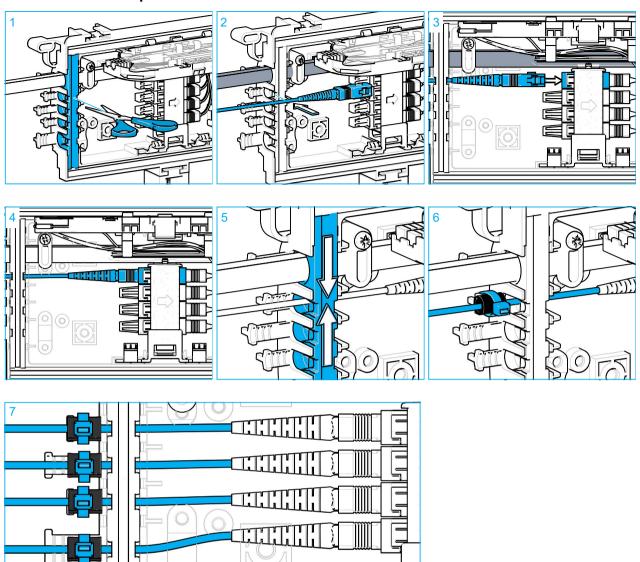
Pull back the fiber and protect the window cut to cut the fiber. Route the feeder fiber to the tray (either left or right).





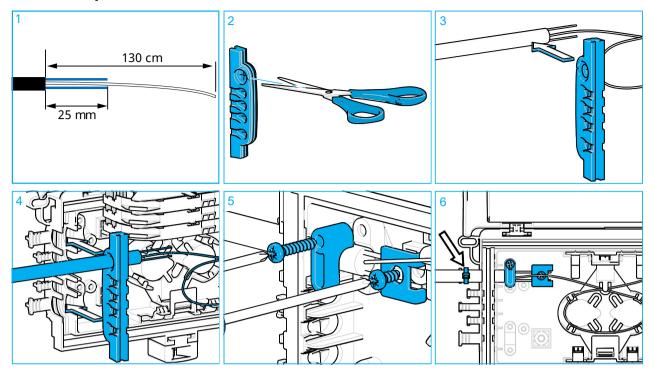


#### 5.6.3 Connect drops



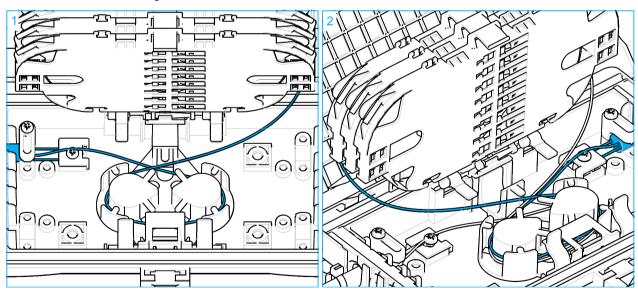
# 6 Cable to cable application

# 6.1 Prepare cable (Ø 9 mm)

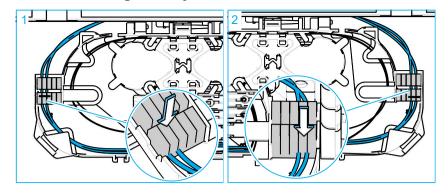


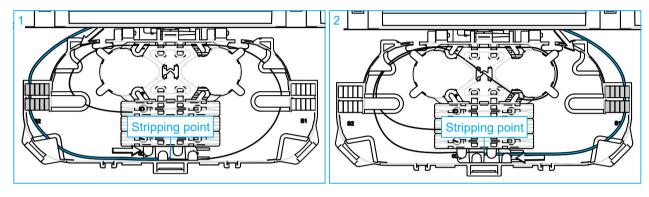
**Note:** To secure the strength member(s), a separate kit with the required components can be ordered.

# 6.2 Route to tray

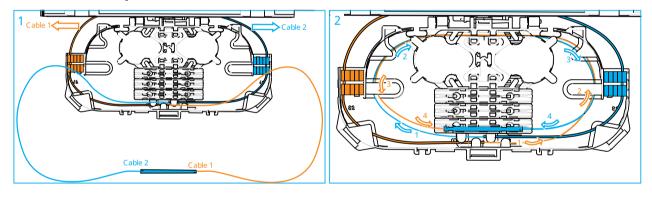


# 6.3 Routing on tray

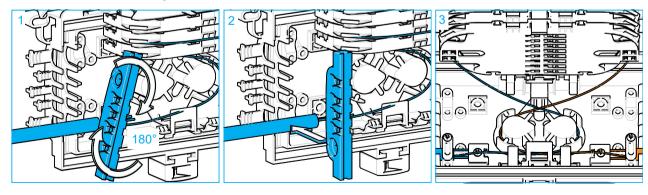




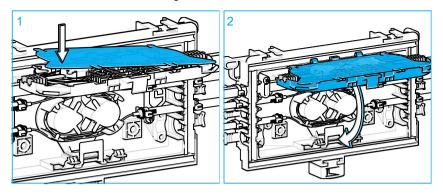
# 6.4 Make splice



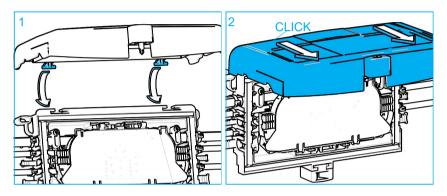
# 6.5 Use bottom port



# 7 Reinstall tray cover

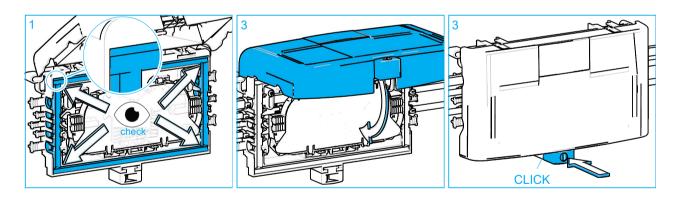


# 8 Reinstall closure cover



# 9 Lock the closure

**Attention:** Make sure that seals are in correct position before closing the cover!



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#### 11 Contact information

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