

<b>OPTOTEC</b> <i>NTET Group</i>	<b>Tipo documento</b> <i>Document Type</i>	Numero-Rev: <b>O.IO.IA.0106-01</b>	
		Data: <b>23/11/2018</b>	Pagina: <b>1/13</b>
Titolo: <p style="text-align: center;"><b>NGB2-SL</b></p>			

01	23.11.2018	General Update	IN-Crisano	IN-Villani	Q-Mariani
00	19.10.2018	ID9987 First issue	IN-Viola	IN-Villani	Q-Mariani
Revisione	Data	Descrizione	Preparato	Verificato	Approvato

# NGB2-SL



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## 1 INTRODUCTION

FOCUS NGB line, designed with simple and innovative design appealing and linear look, properly to PON and FTTH needs. Reliable and able to match the highest international quality standard (IEC 61753) in order to operate in C (controlled) – G (outside) – A (aerial) categories. Suitable both for internal (buildings, technical rooms...) and external application (wall, pole, cabinet, pedestal...), they can be used in dust and water presence. The full selection of available accessories allows the management of different types of cables and fibers (G.652 and G.657 standards), besides the possibility to obtain different versions for splicing only or both patch and splice. By using FOCUS SAM modules it is possible to match different splice capacity, applying both mechanical (FIBERCLIP) and heat-shrinkable (FIBERTERM) splice protections. FOCUS NGB series is featured by a variety of lock security systems against accidental or unauthorized openings. NGB2 box is supplied with latch assembly only (default). Triangular key or hex key or metallic key lock systems available upon request

### APPLICATION

Access network subscriber termination  
 Optical distribution premises box  
 TLC - FTTH - PON networks

### TECHNICAL FEATURES

Reliable – international standards  
 Multifunctional – patch, splice or both  
 Compact – highest performance in minimum space  
 Multitasking – internal and external application  
 Easy installation – simple and with a full accessories' selection  
 Flexible – customized  
 Approachable - costs/benefits

NGB2 size (mm):

- Width: 216
- Height: 325
- Depth: 125



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## 2 KIT CONTENT

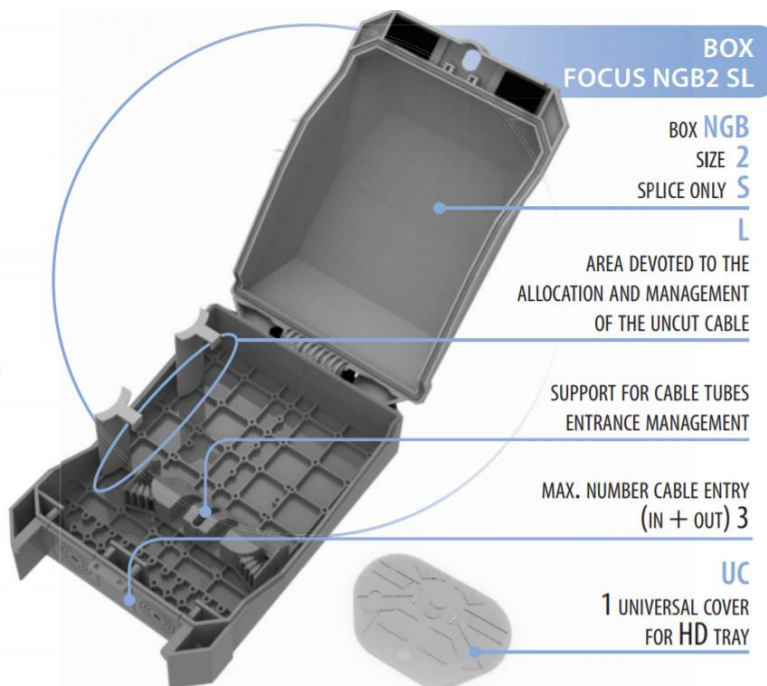
The compact design and the multifunctional variety of FOCUS SAM tray allows the NGB2 box to be suitable to be customized in order to match client's needs.

Is possible to mount different splicing capacity modules up to 96 fibres per module.

NGB2-SL allows an easy management of the uncut cables, placing the uncut fibres either on the right or on the left according to the installation needs.

### NGB2-SL




NGB Box - size 2 - SPLICE and cable LOOP space. This box includes arrangements cable entry system and 1 Universal cover for high density tray



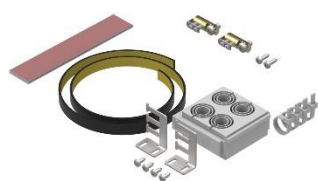
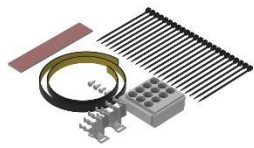
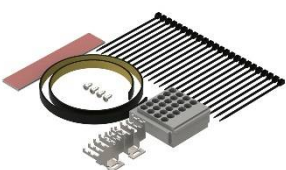
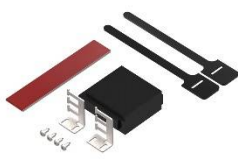
<b>OPTOTEC</b> <i>NTET Group</i>	<b>Tipo documento</b> <i>Document Type</i>	Numero-Rev: <b>O.IO.IA.0106-01</b>	
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### 3 OPTIONAL KIT

#### NGBKIT to multiple seal for many cables

<p style="text-align: center;"><b>NGBKIT-PG16-6X4</b>  <i>CABLE GLAND PG 16 FOR 6 CABLES Ø 4 mm</i></p> 	<p style="text-align: center;"><b>NGBKIT-PG29-4X10</b>  <i>CABLE GLAND PG 29 FOR 4 CABLES Ø 10 mm</i></p> 
<p><b>NGBKIT-PG29-2X13</b>  <i>CABLE GLAND PG 29 FOR 2 CABLES Ø 13 mm</i></p> 	

#### NGBKIT devices for microcable and patchords cold sealing

<p style="text-align: center;"><b>NGBKIT-MCS-4X20</b>  <i>MULTIPLE CABLE SEAL GASKET          MADE OF SILICON RUBBER          FOR 4 CABLES OR 2 UNCUT CABLES Ø 20 mm</i></p> 	<p style="text-align: center;"><b>NGBKIT-MCS-12X10</b>  <i>MULTIPLE CABLE SEAL GASKET          MADE OF SILICON RUBBER          FOR 12 CABLES Ø 10 mm</i></p> 
<p style="text-align: center;"><b>NGBKIT-MCS-24X6</b>  <i>MULTIPLE CABLE SEAL GASKET          MADE OF SILICON RUBBER FOR 24 CABLES Ø 6 mm</i></p> 	<p style="text-align: center;"><b>NGBKIT-MCS-PATCHCORD BLOCK</b>  <i>GASKET OF POLYURETHANE FOAM BLOCK          48 PATCHCORDS CAPACITY</i></p> 

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**NGBKIT to single seal for tube or cable**

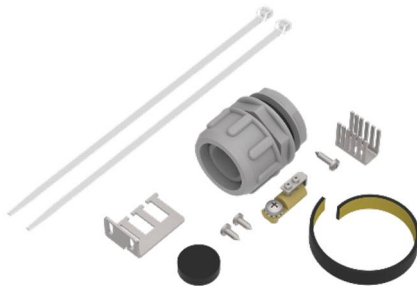
**NGBKIT-CABLE CLAMP-20CC**  
CABLE GLAND SINGLE SEAL  
FOR 1 CORRUGATED TUBE  $\varnothing$  20 mm



**NGBKIT-CABLE CLAMP-25CC**  
CABLE GLAND SINGLE SEAL  
FOR 1 CORRUGATED TUBE  $\varnothing$  25 mm



**NGBKIT-PG21-25 TUBE**  
CABLE GLAND PG29 SINGLE SEAL  
FOR 1 TUBE  $\varnothing$  25 mm



**NGBKIT-PG11-05-10**  
CABLE GLAND PG11 SINGLE SEAL  
FOR 1 CABLE  $\varnothing$  5~10 mm



**NGBKIT-PG16-10-14**  
CABLE GLAND PG16 SINGLE SEAL  
FOR 1 CABLE  $\varnothing$  10~14 mm



**NGBKIT-PG21-13-18**  
CABLE GLAND PG21 SINGLE SEAL  
FOR 1 CABLE  $\varnothing$  13~18 mm



**NGBKIT Pole Mounting Kit**

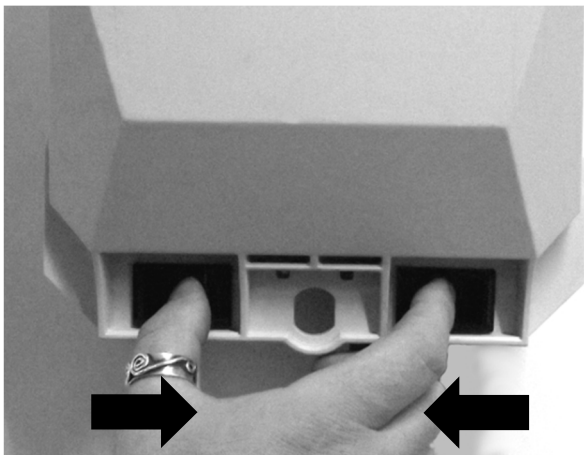
**NGBKIT-PMK**



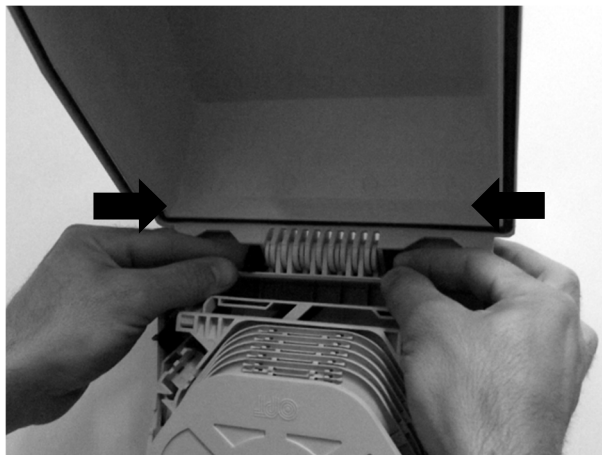
<b>OPTOTEC</b> <i>NTET Group</i>	<b>Tipo documento</b> <i>Document Type</i>	Numero-Rev: <b>O.IO.IA.0106-01</b>	
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## 4 PRELIMINARY OPERATIONS

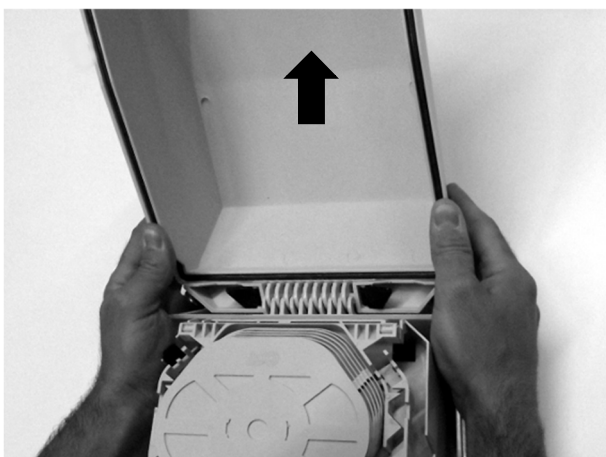
### 4.1 BOX OPENING



Approach the sliding latches on the cover and open the box.

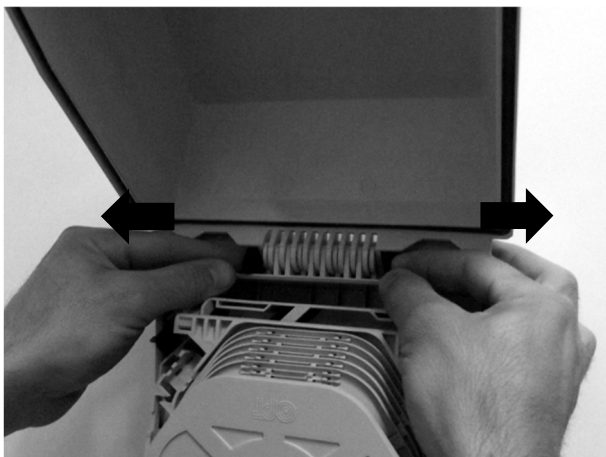


Extract the stoppers to keep open the cover.

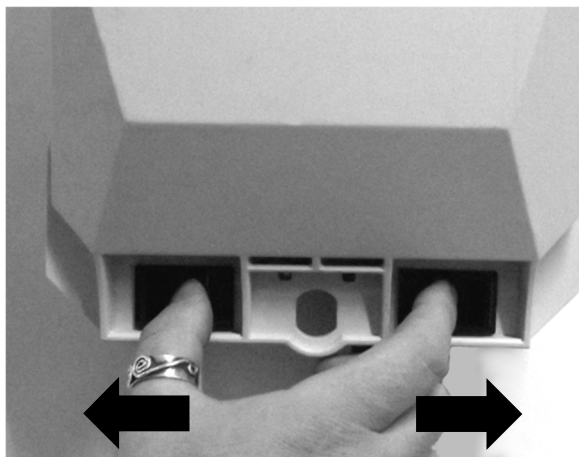


If necessary, pull and remove the cover from the base.

### 4.2 BOX CLOSING



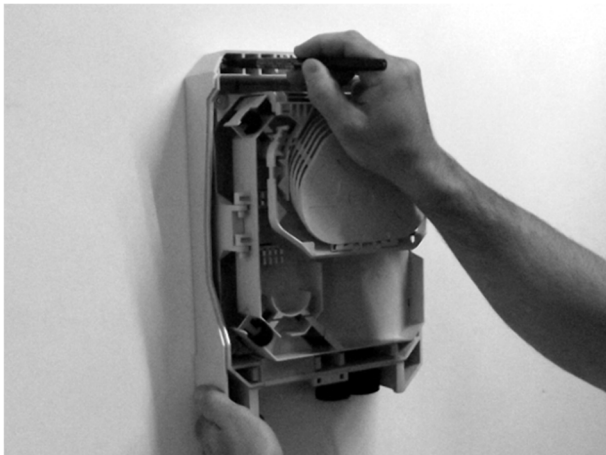
Rotate the stoppers to keep close the cover.



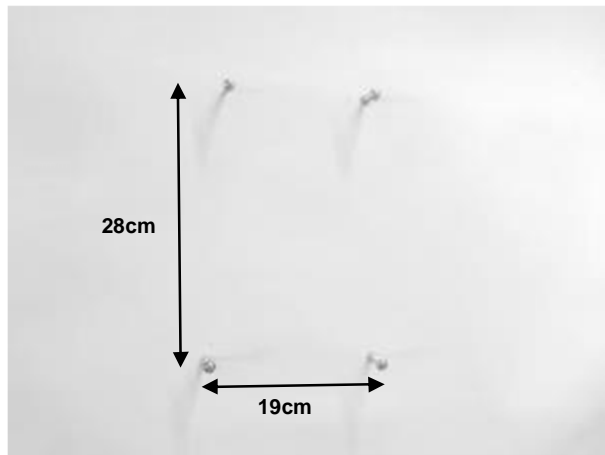
Approach the sliding latches on the cover and open the box.

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#### 4.3 WALL MOUNTING



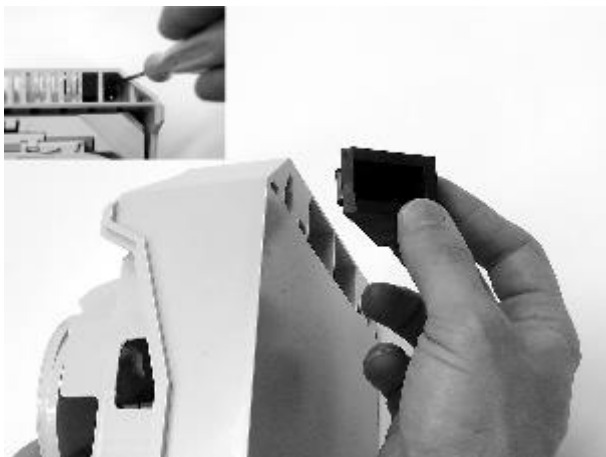
Pull and remove the cover from the base. Put the box against the wall and mark the 4 points for the holes. **Note: leave at least 30cm of free height from the top of the box necessary to open and/or remove the cover.**



Drill the wall making four 6mm diameter holes and install the anchors.

#### 4.4 POLE MOUNTING

**NOTE: It's necessary optional kit NGBKIT-PMK**



Remove cover and install 4 brackets with the screws in kit.

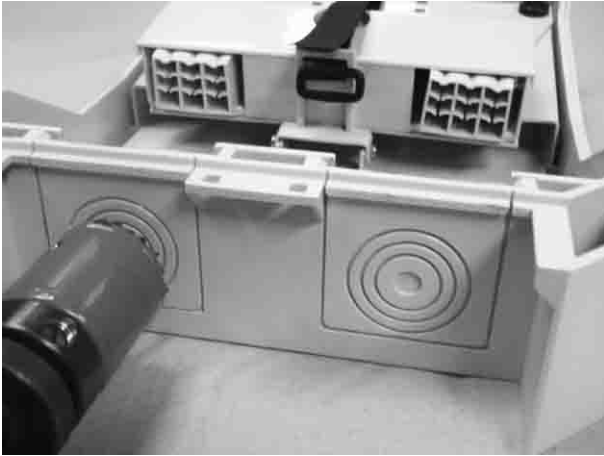


Fix on pole by tie wraps (not included).  
Place cover and rotate 2 stoppers to close box.

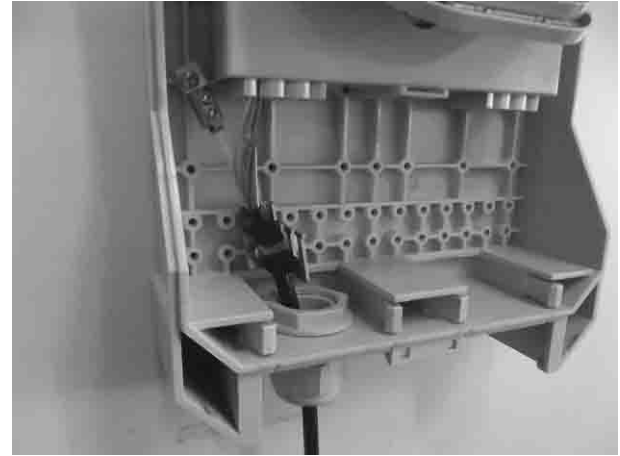
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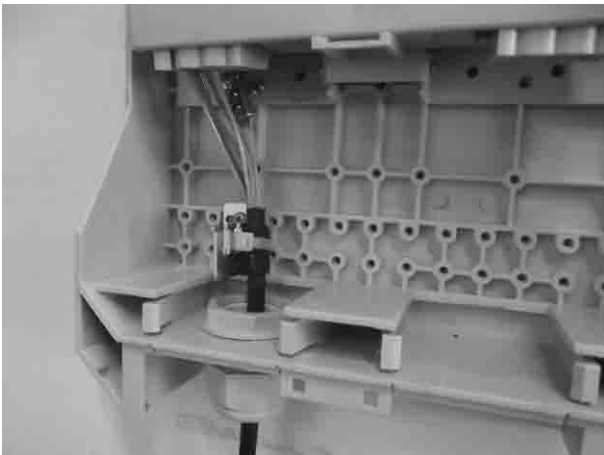
## 5 SEALING KIT INSTALLATION



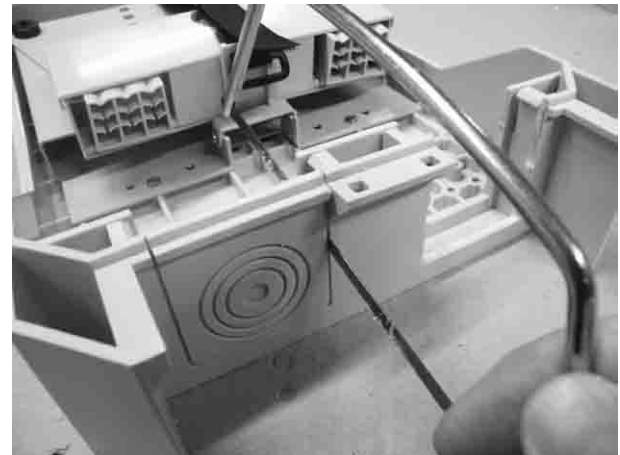
In case of **cable gland installation**, open the port choosing the appropriate diameter according with the selected PG gland. Be careful to drill the box in the right position in order to align the cable to the internal strength member/cable fixation.



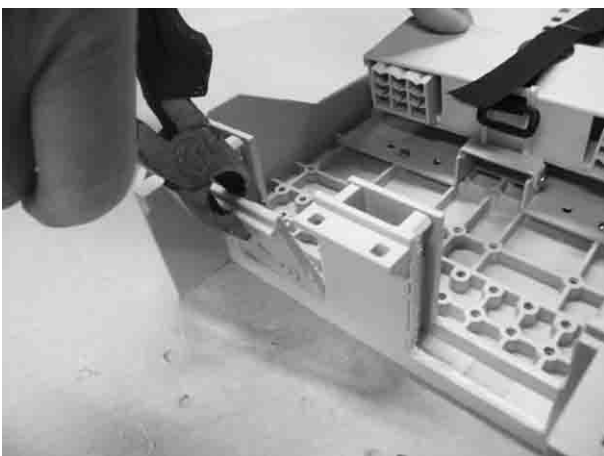
Screw the tie-wrap saddle or the bracket. Install the cable gland. Remove 1.30m of the cable jacket leaving 5cm of the strength member (when available). Protect the cable transition by foam and fix to the saddle by the tie-wrap.



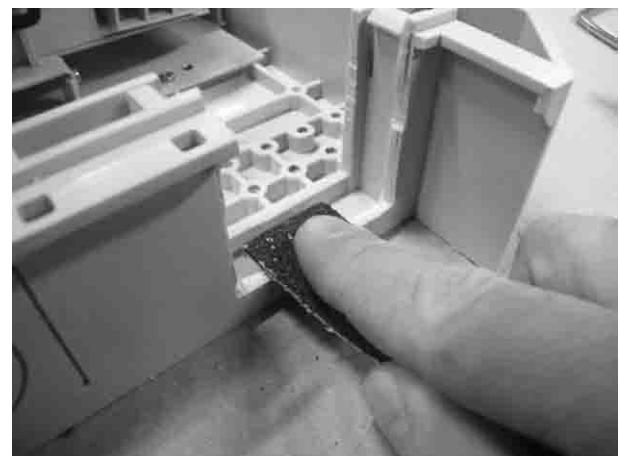
Route the fibre modules and the fibres to the near tube holder. Fix the strength member (when required) as depicted.



In case of **multi cable seal block installation**, use a hacksaw to cut the 2 vertical engravings of the rectangular port to be used.



Remove the wall of the rectangular port with the help of tongs.



Remove sharp edges on the cutting profile using sandpaper.

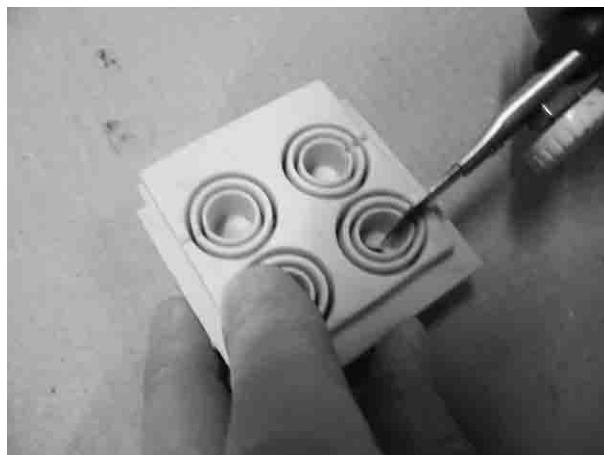


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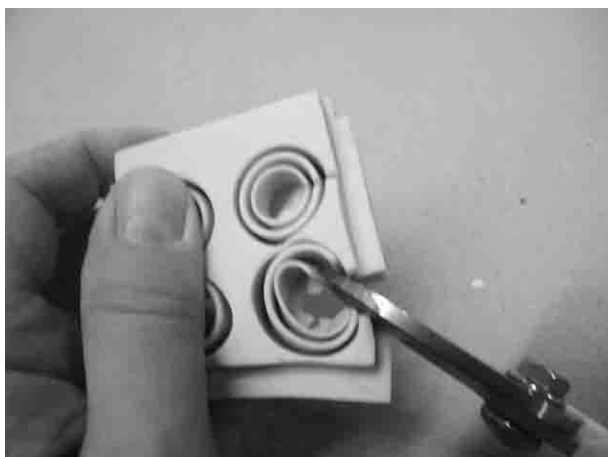
5.1. Looped cables - FOCUS-NGBKIT-MCS-4X20



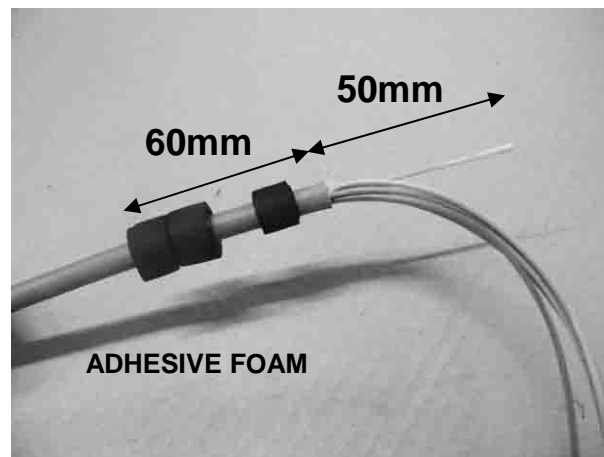
**FOCUS-NGBKIT-MCS-4X20** Multi cable seal for 4 single or 1 looped cable having  $\varnothing \leq 20\text{mm}$ .



Cut the 2 sides of the block following the horizontal engravings. Use always the 2 ports at the bottom of the block (1 and 2).



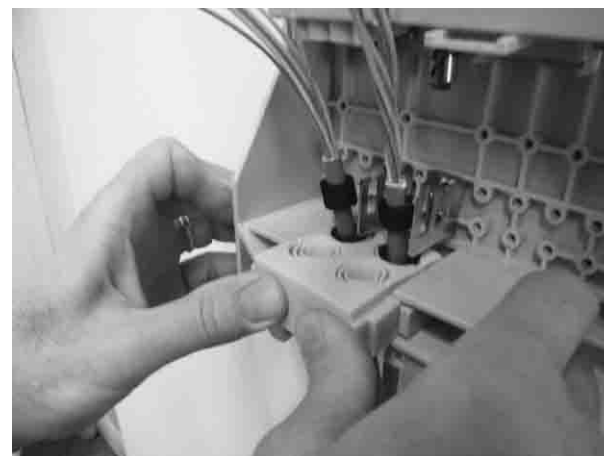
For cables with  $\varnothing \leq 12\text{mm}$  cut and peel only the smaller ring. For cables with  $\varnothing \leq 20\text{mm}$  cut and peel both.



The window cut needed for the installation in the box is 4m. Prepare the heads of the looped cable as shown.



Use the foam to fill the gap between the jacket of the cable and the port of the block. Install the cable into the block.



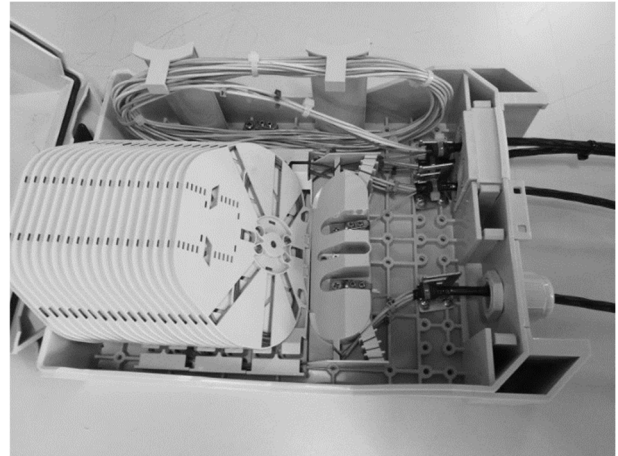
Push the block into the port of the box until the 2 lateral latches snap. If necessary, align the brackets to the cable prior to completely install the block.

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Install the strength members of the cable into the connectors and fix the cable to the brackets.



Identify and keep separate the tubes to be spliced. Make a loop with the rest of the tubes and bundle using tie wraps. Choose the according to the pitch of lay direction change of used cable. Window cut max 2.1 m.

## 5.2 Drop cables

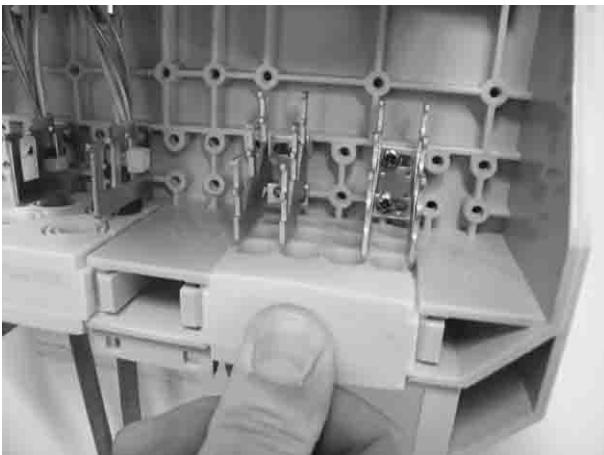
### 5.2.1 Drop cables - FOCUS-NGBKIT-MCS-4X20



Follow the procedure in 5.1.1. In this case it is possible to install up to four drop cables. Installed cables in this case shall be fixed by foam and tie-wraps only.

When remove the rings, if necessary for small cables, fill the gap among the hole of the block and the cable jacket using adhesive foam.

### 5.2.2 Drop cables - FOCUS-NGBKIT-MCS-12X10



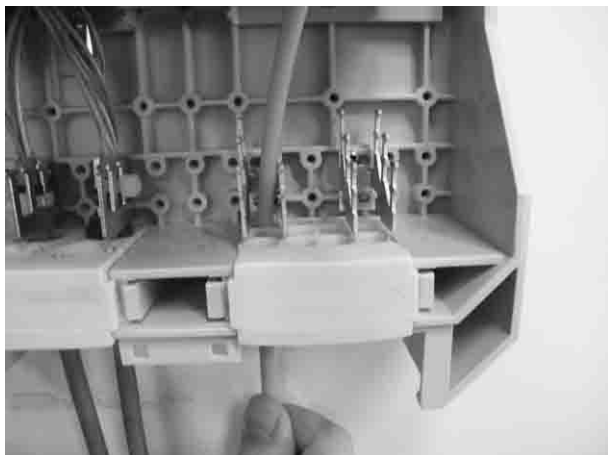
Install the 2 brackets and the block. Align the brackets so that they are tangent to the holes of the block.



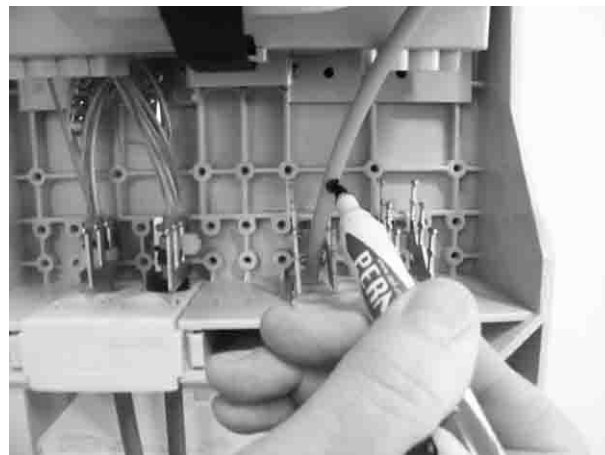
Pierce the selected hole prior to install the cable. Start the installation always from the bottom of the block.

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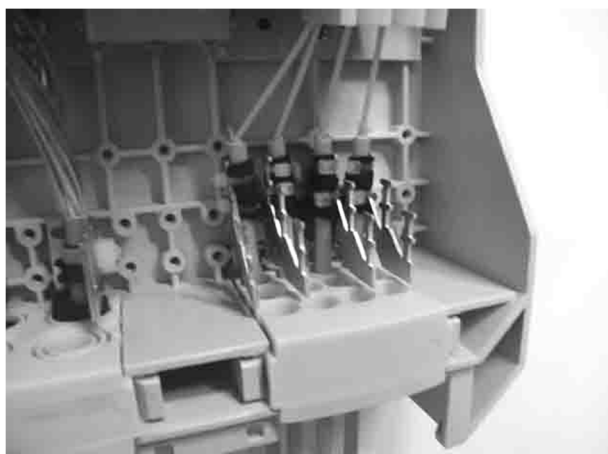
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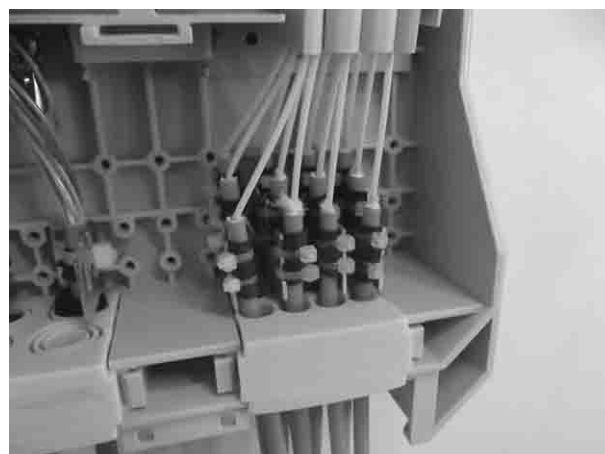
Push the cable through the hole inside the box. The required cable length for splicing is 2m.



Mark the cable at the end of the corresponding bracket. Remove the outer jacket, strength members and Kevlar.

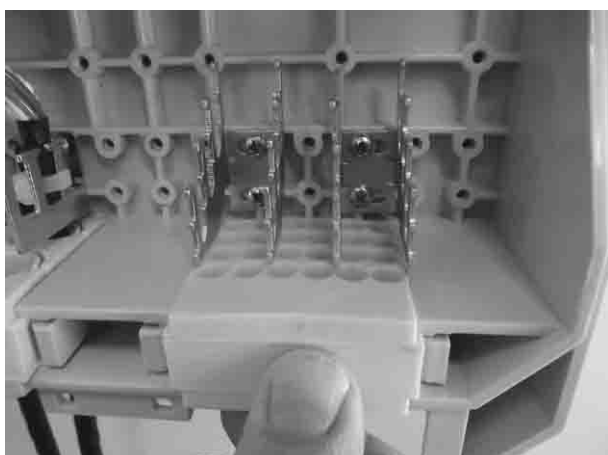


Fix the cable at the bracket using slices of foam and tie-wraps. Install the loose tubes into the tube holder.



Fill the block by proceeding per rows.

### 5.2.3 Drop cables - FOCUS-NGBKIT-MCS-24X6



Install the 2 brackets and the block. Align the brackets so that they are tangent to the holes of the block.

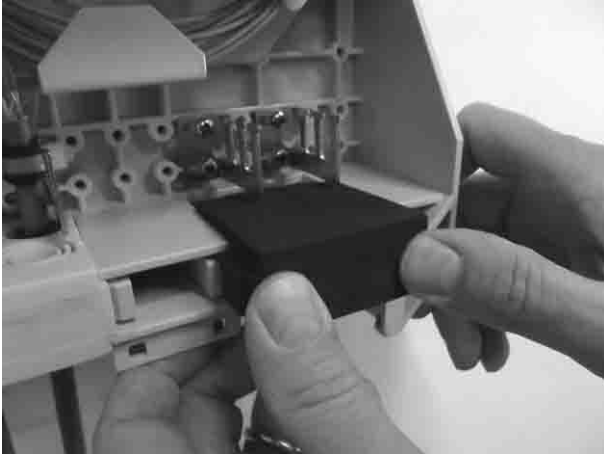


Install the cables as described in the previous section.

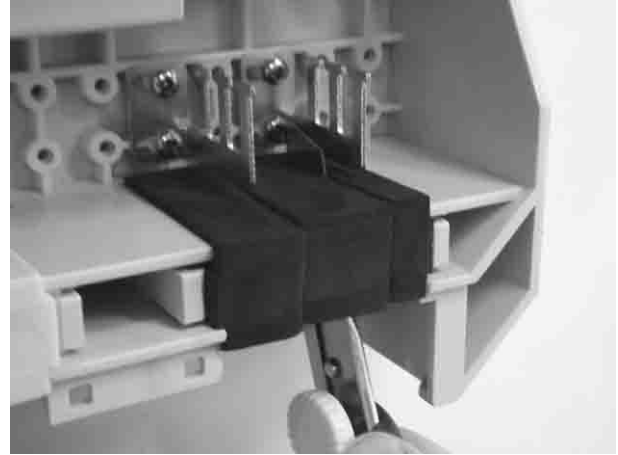
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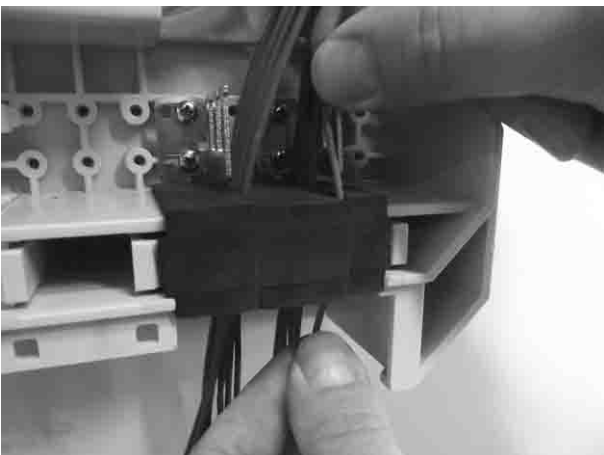
#### 5.2.4 NGBKIT-MCS-PATCHCORD BLOCK



For the outgoing patchcords, install the **FOCUS-NGBKIT-MCS-PATCHCORD BLOCK**.



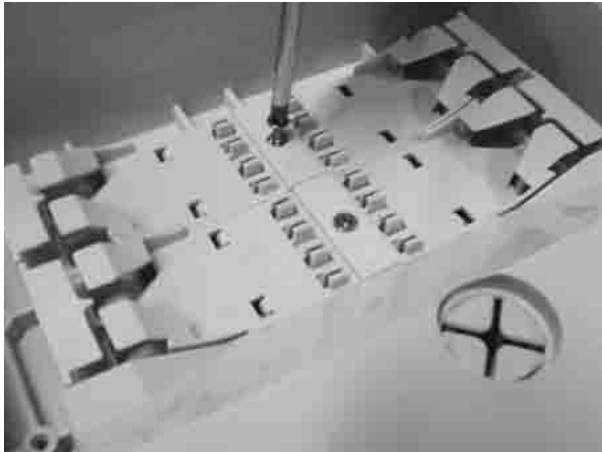
Make perpendicular cuts on the foam block following the 2 brackets.



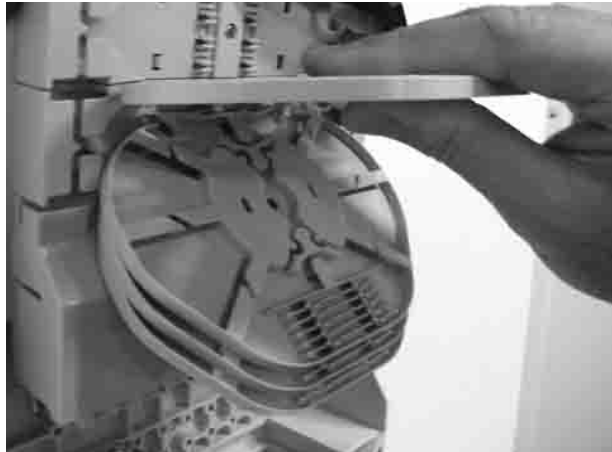
Push the patchcords though the cuts of the foam block.

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## 6 FIBRE MANAGEMENT INSTALLATION



Install the wraparound groove plate directly on the base of the box using the self tapping screw supplied with the box.



Place a tray in the wraparound groove plate by pushing the tray perpendicularly into the hinge until it snaps. In case of 4mm or 6mm height trays mount one organizer on each hinge.



In case of 9mm height tray mounting on groove plates leave always one hinge open between two consecutive trays.

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