



Hybrid FiberManagement Plate FttX Distribution Closure

Instruction manual for the splice technician



24v + Window Cut



48v + Window Cut



48v

Product contents

- 1x FiberManagement Plate incl. splice trays
- 4x special stainless steel bolts M6 x 50 mm
- 1x desiccant in a sealed bag
- 2x tie-wrap 2,5x100 transparent
- 20x Cover plugs (for the hybrid entry ports)
- 1x tube silicone grease
- Window Cut Kit (only in the FMP's with a window cut)

Required tools

- 10 mm socket spanner with extension piece of at least 60 mm
- Torx screwdriver (T20)
- Clamp
- Soft brush
- Measuring tape, permanent marker, cable knife, side-cutting pliers and Kevlar scissors.

Instructions when making alterations

Desiccant bag: replace every time the Fiber Management Plate is removed from the cover (article No. 29041).

When removing the FiberManagementPlate from the lid, check the O-ring for dirt and damages. If this is the case, replace the O-ring (Article No. 29040).

Bundling cables and/or ducts



1. Slide open the attachment clips on both sides of the closure

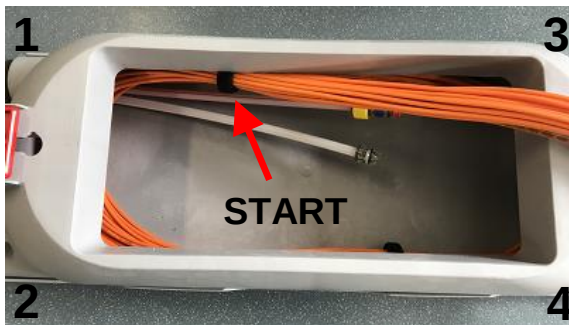
2. Remove the lid.



3. Remove all the cables / ducts from the housing. Bundle the mini feeder cable with the customer cables / ducts from the "start point" using the Velcro strip. The "start point" was made by the civil technicians.

Shorten all the cables / ducts from the "start point".

Make sure you can neatly store the overlength of the cables / ducts, so they will end up correctly at the entry ports of the hybrid FiberManagement Plate (FMP).



!! Pay attention !! that the feeder cable must **always** turn clockwise!

Feeder cable inserted into ports 1 or 4 by the civilian team: cable then automatically turns clockwise.

Feeder cable inserted into ports 2 or 3 by the civilian team: cable must be crossed once diagonally at the bottom of the closure so that the feeder cable still turns clockwise in the closure.



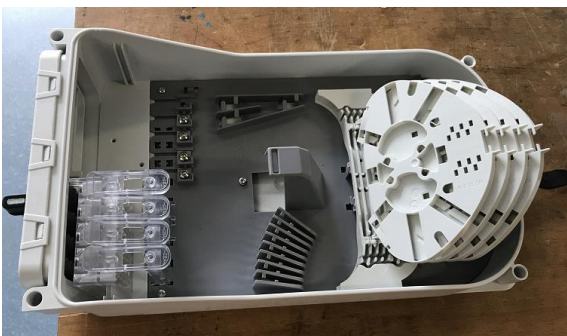
4. **Pay attention!** As a tool for determining both the correct length of the feeder and customer cable / duct, you can put the bundle about 2.5 times around the housing. Mark the cables/duct at the same height as the outside (as shown in the picture on the left and **NOT** further) of the housing. This is **IMPORTANT** so that the feeding- and customer cables / duct have the correct length to make the turn and enter the FiberManagementPlate.

From the outside / marking point you then need another 1.50m overlength for in the FMP (see also step 7). In case a window cut has to be made this is 2x 1.50 m.



5. If necessary, use a clamp to secure the Fiber Management Plate to the workbench..

The photo on the left shows the Hybrid FMP 24v + Window Cut. (in addition a 48v and a 48v + window cut is available).

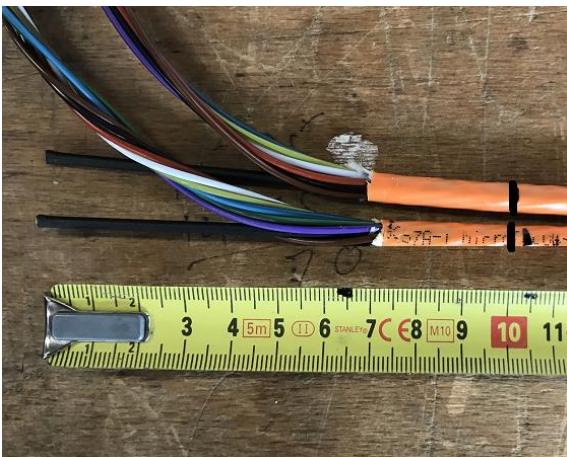


6. Pull the Velcro strip loose and remove it from the eye.

Flip the splice trays back so that there is more room to feed in the cables / ducts.



(For FMP's with window cut, first take the storage module for the window cut overlength out of the FMP)



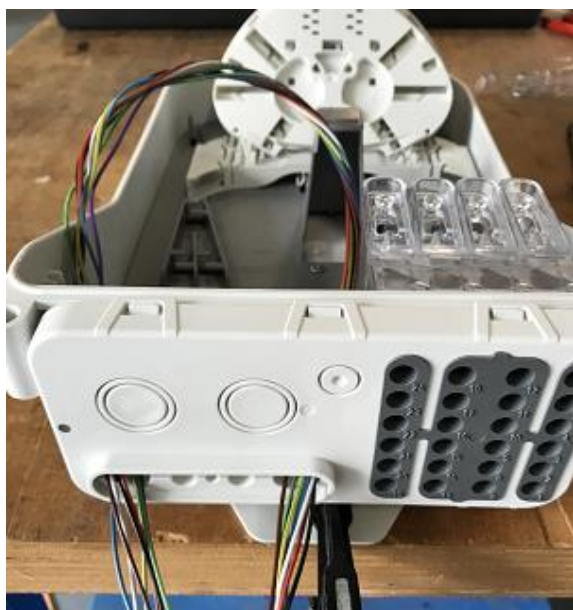
7. Make sure that the outer side of the feeder cable (Ø 5.8 - Ø 8.3 mm) is dry and free of sand and make a Window Cut with an opening of 3 m (2x 1,5m measured from the SZ-point so that tubes do not get twisted) in the cable from the marking point as in step 4.

Remove the strength element up to approx. 7 cm from both ends where the cable was opened and mark the cable at 3 cm from the other side of the open end.

Pay attention! In case there is NO window cut to be made, then perform step 7 for a single feeder cable. Then proceed to step 10 and then to step 16.

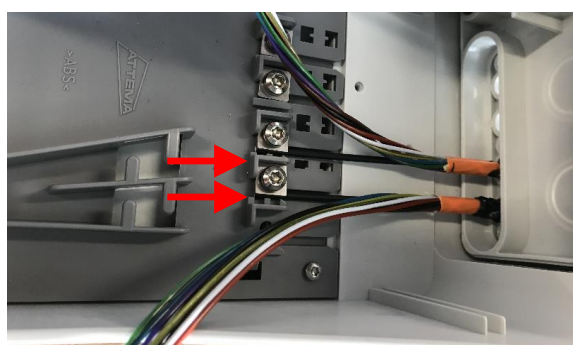


8. Place the 2 short pieces of rubber band around the cable ends (marking in the middle)



9. Enter the window cut through the port.

The pieces of rubber band must protrude partly inside and partly outside the input port (see the photo at step 10).



10. Place both strength elements directly under the plates directly opposite the input port (the recess helps to push the plate up)

Then screw the two strength elements under the pressure plate of the strain relief.

Pay attention! that no tubes are stuck under the strength element.



11. Break open the port(s) of the inner part of the window cut port seal where a feeder cable is inserted

Photo 1: inner part of the FMP (24v)



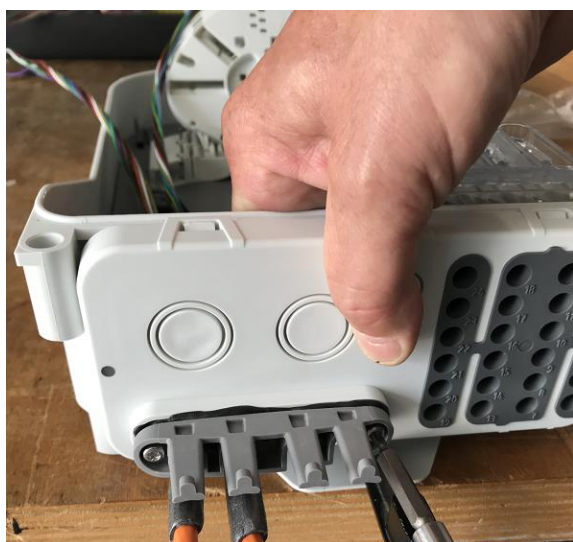
Photo 2: inner part of the FMP (48v)



12. Place the inner part of the window cut port seal over the cables in the window cut port.

13. Roll the piece of 30cm rubber band into the shape of a sausage and divide it equally into the port.

Place the 2 pieces of foam tape around the cable directly in front of the input port



14. Fixate the outer part of the window cut port seal over the cable by tightening the 3 screws.

Attention! Hold the inner part of the Window Cut port seal when tightening the 3 screws so that the screws cannot push it away.

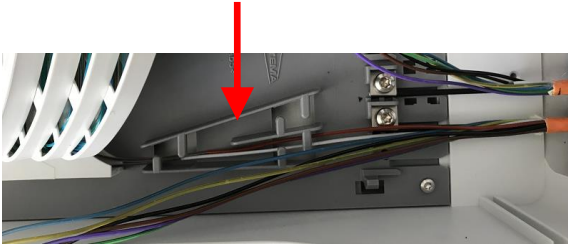
If a black edge of rubber is visible around the Window Cut port seal, the seal is made correctly.

If the black edge of rubber is not visible, the rubber is not well divided.

Port seal must be unscrewed, re-divide rubber (step 13) and step 14 must be re-done until rubber edge is visible.



15. For extra fixation secure the feeder cables to the outer part of the window cut port seal by using the supplied tie-wraps.



16. Make sure the stripping point for the optical Fibers is in the middle between the clasps of the tube guide (± 12 cm from the end of the cable mantle)

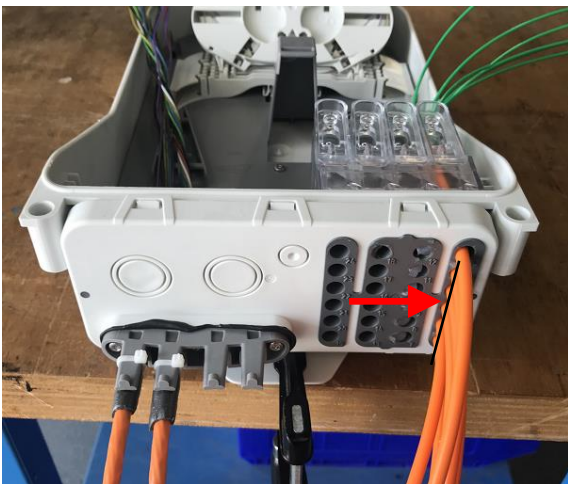
Place the tubes in the tube guide (leave window cut outside the tube guide).



17. Strip the cables / ducts 150 cm from the end according to the instructions provided by the cable manufacturer. This should correspond to the marking point of step 4.

Add an extra mark 155 cm from the end.

Cut the outer sleeve perpendicularly. There must not be any lengthways cuts past the end. Use alcohol to remove any grease from the first 4 cm of the sleeve. Make sure the mark is not removed.



18. Sort the cable / duct bundles per port in advance, so that there is no unnecessary crossing of cables before the entry ports.

Rub a thin layer of the silicone grease provided on the insert length of the mantle.

Insert the cables or duct through the numbered flexible entry ports (numbering is mentioned on inside and outside).

Do not yet push the cable or duct through the strain relief plate, so that changes can be made easily. The mark of step 17 thus remains visible in front of the entry port.



19. Fit the rest of the cables/ducts from right to left the same way as explained in step 18.



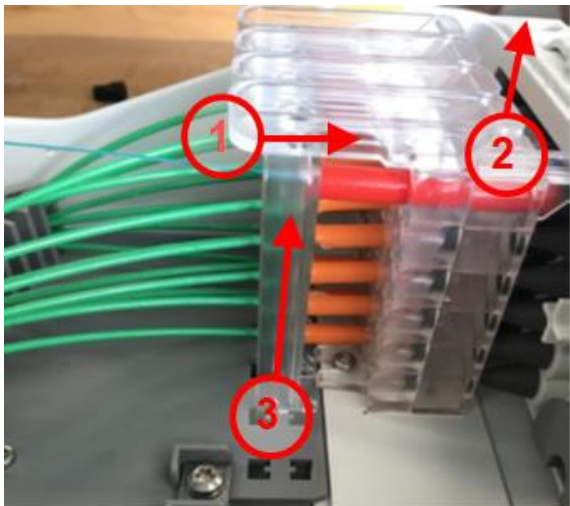
20. Once all the customer cables have been inserted into the correct entry port, push them, one by one, through the strain relief plate as far as the stop.

Attention! In the event that direct buried duct is used, do **NOT** push the ducts completely against the end stop. This is **important** for step 21.

The mark will be level with the front of the entry port.

Rub a thin layer of the silicone grease provided on the insert length of the cover plug. Fit the cover plugs in the entry ports which do not contain drop cables.

In the event that direct buried cable is used, proceed to step 24.



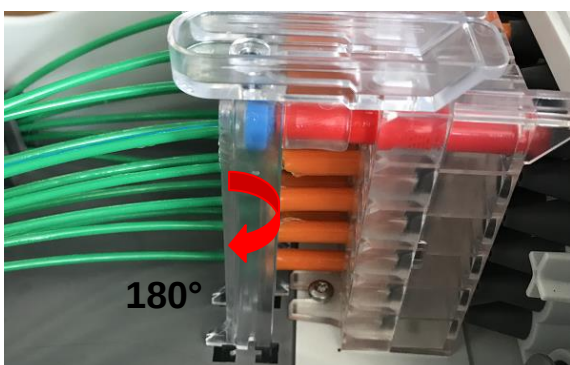
21. In the event that direct buried duct is used, a gasblock must be provided.

Remove the end stop by **(1)** pushing the hook toward the strain relief plate to **(2)** pull the hook off the strain relief plate.

(3) Then pull the lower part of the end stop out of the cover plate and remove the entire endstop set.



22. Place a gasblock according to the instructions provided by the contractor / supplier of the gasblock.



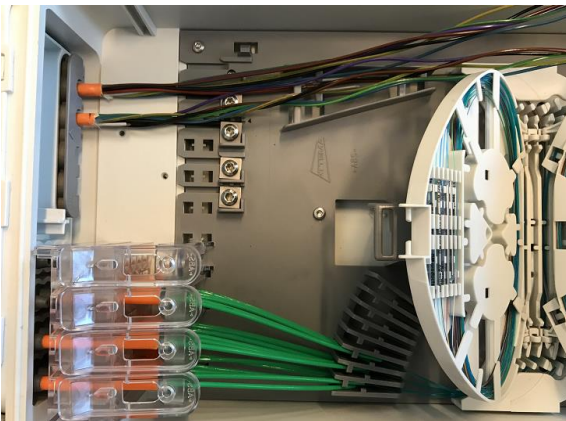
23. Turn the lower part of the end stop 180° and push the end stop back into the FiberManagement Plate.



24. Strip the optical fibers in the middle between the hooks and the end of the tube guide.

Pay attention! that the upper tubes need a little more length.

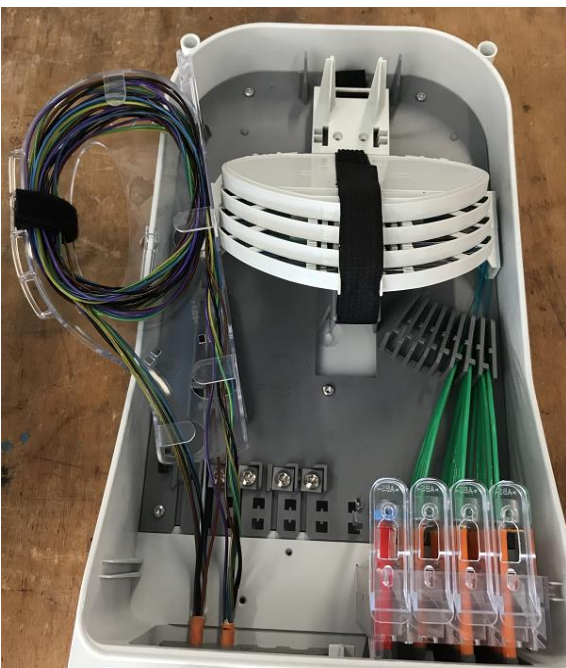
Remove the gel from the optical Fibers.



25. Splice the Fibers according to the instructions.

Place the fibers in the splice tray according to the splice diagram.

Attention! use the tube guide farthest to the right for the first splice tray because of the specified minimum bend radius



26. Tilt the splice trays back against the support.

Place the cover plate on the top splice tray.

Place the desiccant bag on the cover plate and pull the Velcro strap tightly over it.

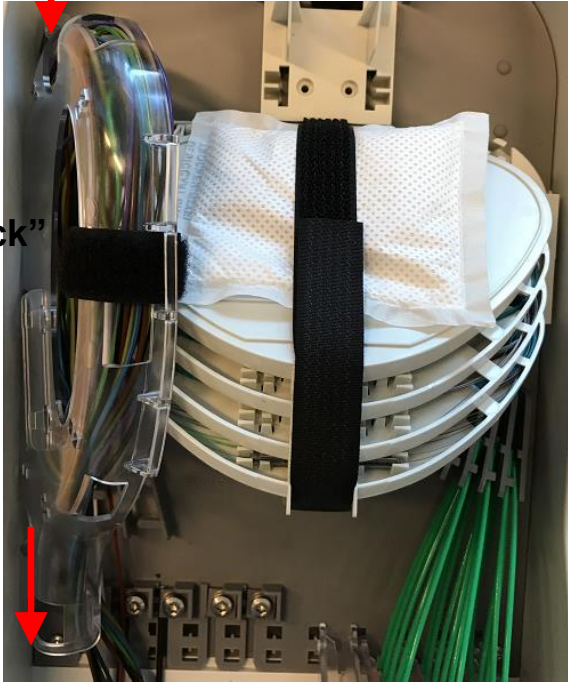
Feed the Velcro through the eye, fold it back and push it together.

(Proceed to step 28 if no window cut needs to be made)

Place the storage module for the overlength of the window cut on the edge of the FiberManagement Plate.

Wind up the overlength and place it in the storage module.

“Click”



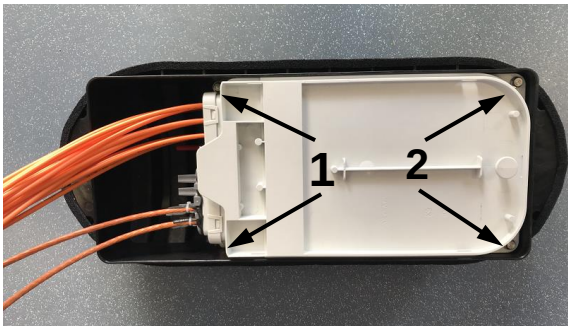
27. Click the storage module with the window cut overlenght back in to its original position.

Both on the top and bottom you click the storage module back on the FiberManagement Plate.



28. Place the lid upside down. Check whether the O-ring is clean and undamaged.

Check the foam strip for damage and brush away any soil. Remove the four stainless steel bolts from the packaging.



29. Push the Fiber Management Plate firmly into the lid against the O-ring.

First, use a socket spanner to screw in the two bolts on the cable side a couple of turns and then do the same for the two bolts at the back.

Next, tighten the bolts diagonally to a torque of 4 – 5 Nm.



30. Wrap the cables / ducts back into the housing.

!! Make sure the cables or ducts do not bend while storing them back in the closure **!!**



31. It is IMPORTANT to place the lid diagonally back on the closure (side with customer connections first) so that the customer- and especially feeder cable(s) can be guided back in the closure without causing any kinks.

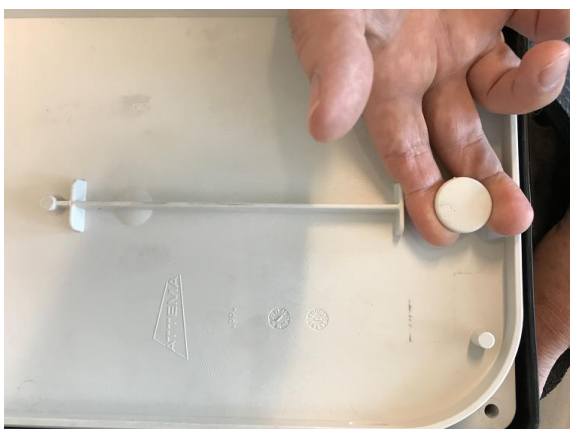
Brush the top edge of the housing to remove any soil.

Carefully place the cover on the housing, because of the cables / ducts, to prevent kinks in the cables or ducts.



32. Slide the attachment clips over the edge of the lid.

Disassembling the Fiber Management Plate



Unscrew the four bolts. Remove the bolts from the holes and keep them in a safe place.

Use the grip to lift the back of the Fiber Management Plate 1 cm out of the cover.

Next, disassemble the Fiber Management Plate on the cable side of the lid.