Tyco Electronics

FIST-MB2-S

INSTALLATION INSTRUCTION

FIST Medium Box for Cable Splicing Only

Contents

1 Introduction

1.1 Product Description

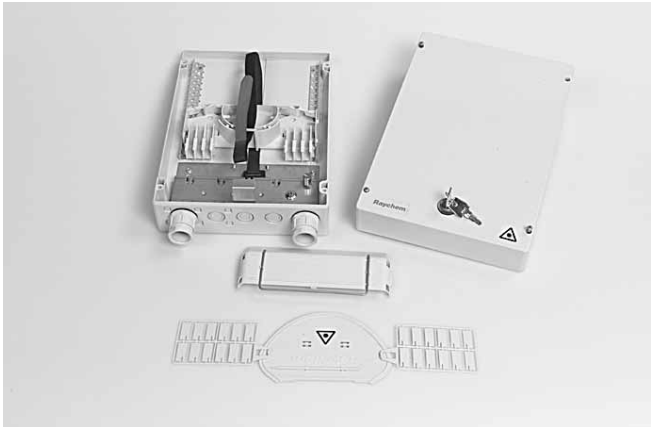
The FIST-MB2-S is a Generic Box for a fiber management system that offers the function of splicing cables to cables. It provides a mechanical and environmental protection for all the fiber optic components and permits easy access by both the network provider and the customer. The box is applicable indoor and inside street cabinets.
The FIST-MB2-S box is designed to splice fibers and can handle 96 splices (fully occupied by SE-trays).

2 General

2.1 Tools

Hammer	
Screwdriver	
Marker	
Fiber guiding pin	
FACC-tube-cutter-01	to cut loose tubes
FIST-GB-CUT-TOOL-PG16	to cut holes for glands
FACC-TUBE-Stripper-02	to strip loose tubes
FACC-HEAT-GUN-220V or 110V 1460W hot air gun	to install the heatshrink cable seals

2.2 Kit contents



Depending on the network layout and the construction of the cables the used kit content may be different. Some of the components will be pre-assembled in the box depending on the selection and the ordering. The minimum content will be:

- 4 PCs of mounting bolts and plugs for wall mounting
- The box base
- Pre installed
  - Universal Mounting System profile.
  - Small fiber routing block with tube holders
  - Tray lid, guiding pin and retainers
  - Velcro strap
  - FAS cap including the Tray wedge
  - Cable strain relief connectors and fixing plate
- Cable glands
- Tiewraps
- The Cover (including 4 preinstalled screws)
- Installation instruction

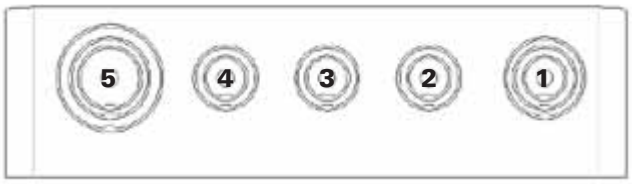
3 Installation

3.1 Preparation of box

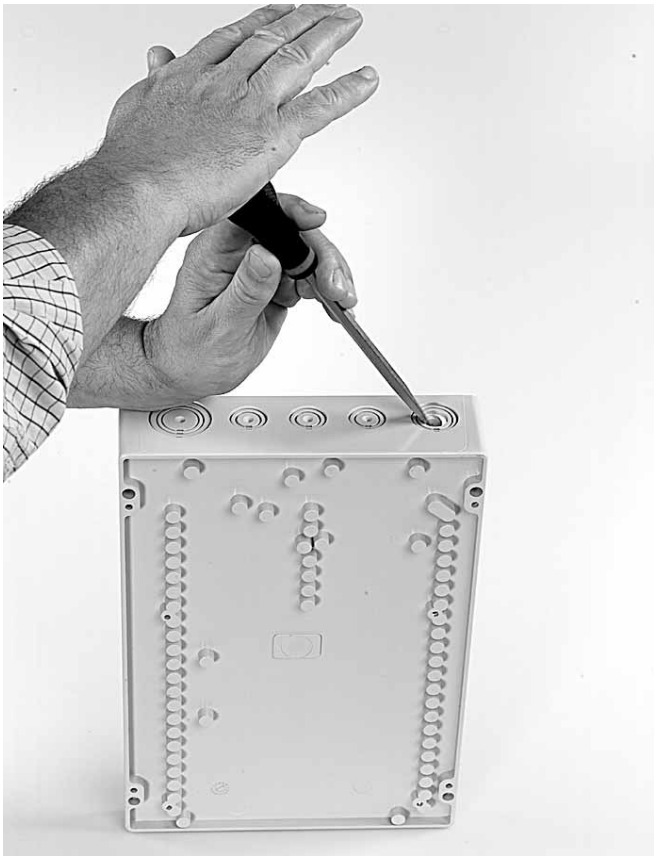
3.1.1 Unlock the screws and remove the cover.

3.1.2. In case of a box with lock, lift cover and remove the guiding pins.

3.2 Opening of the cable ports

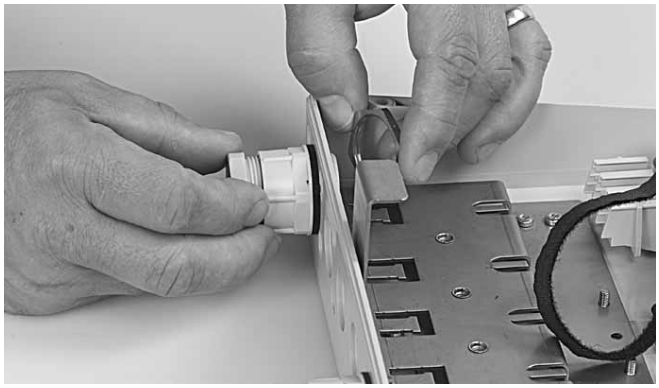


Port 1 and 2 for cables routed to the right tubeholder.
Port 4 and 5 for cables routed to the left tubeholder.
Port 3 can be used to route a cable through both sides.



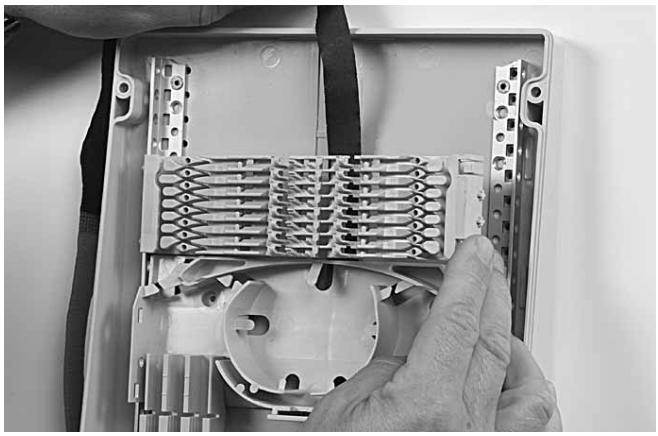
3.2.1. Drill or knock out the ports to be used ,
Incoming cables Ports 1-2
Outgoing cable Ports 4-5

3.2.2. Select the appropriate gland depending on the cable diameter.



3.2.3. Install the glands in the selected ports by tighten the nut on the inside of the box, do not forget to install the rubber ring on the outside of the box.

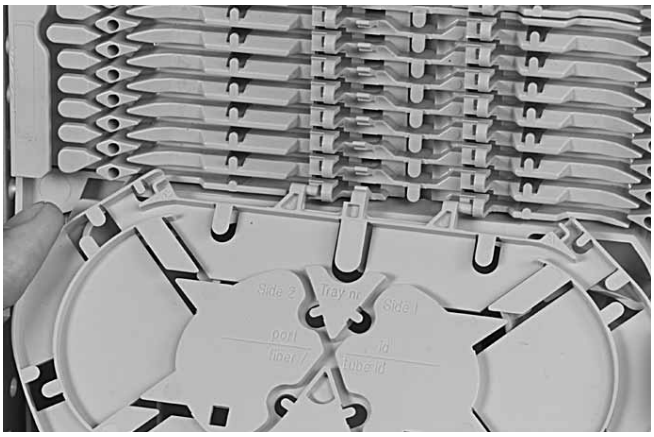
3.3 Installation of wraparound groove plates



3.3.1. Take the groove plates and slide the long protrusions into the left bracket of the UMS bracket.

3.3.2. Pull on the long snapfit towards the profile till it clicks in the UMS bracket; start on the FAS block without leaving gaps between the plates.

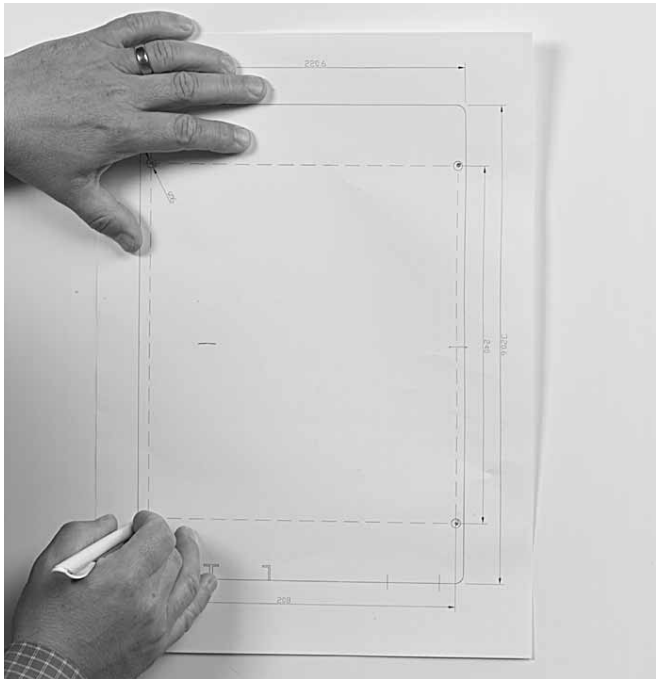
3.4 Installation of the trays



3.4.1 Install the splicing cassette by pushing the lip on the groove plate slightly up with the tray and move the tray lateral from left to right into the hinging cavity.

Note 1 for single element tray, start on the second position leaving one position open between each of the cassettes.
2 for ribbon 4-8 trays, the tray hinges have to be inserted from right to left.

3.5 Mounting of the box on the wall



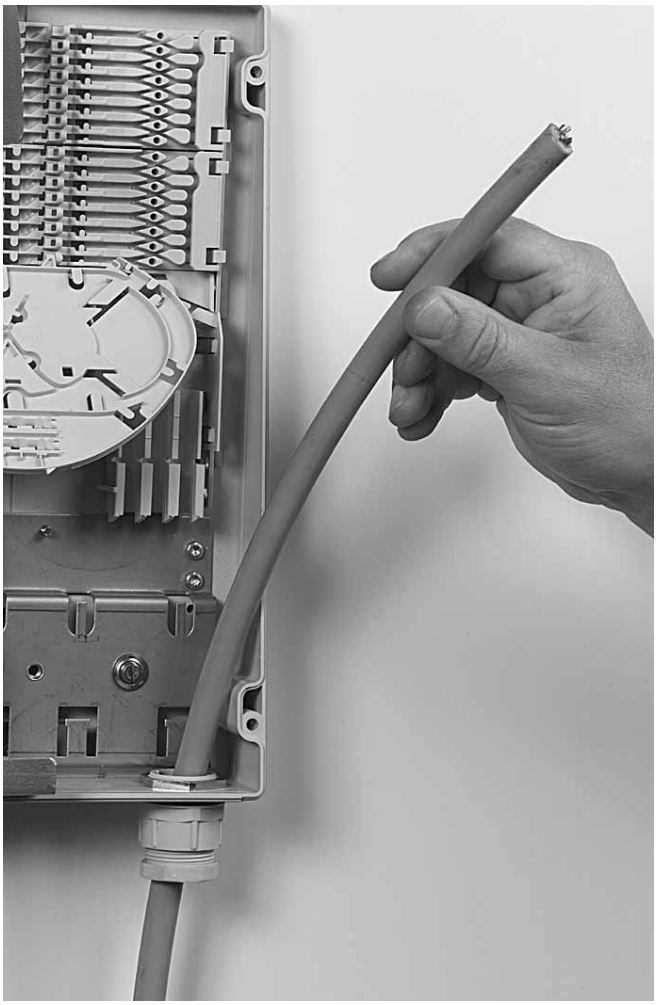
3.5.1. Place the template against the wall and mark the selected mounting positions onto the wall.

3.5.2. Drill the holes (dia. 6 mm, depth 60 mm) and place the plugs into the holes.

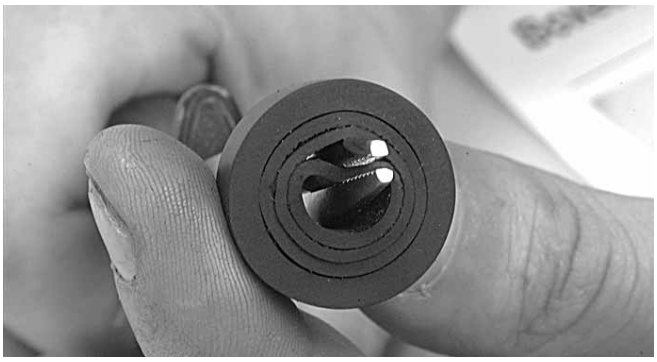
3.5.3. Hold the base part onto the wall. Insert the screws and tighten.

4 Cable installation

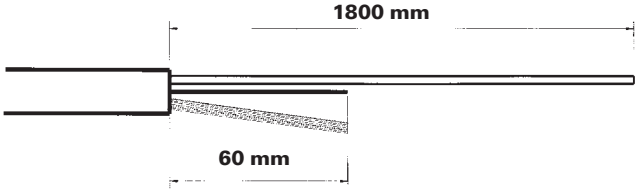
4.1 Cable preparation



4.1.1. Feed the cable through the cable port gland.

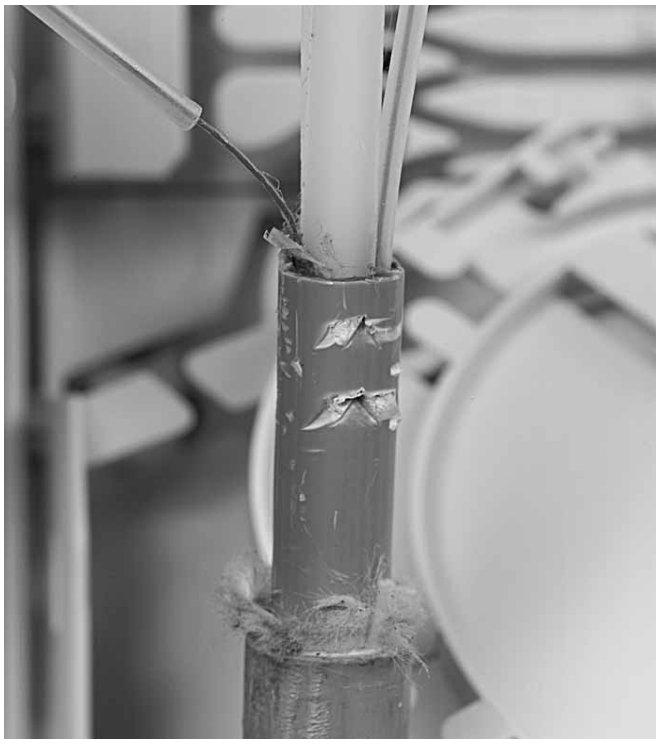


4.1.2. In case the cable diameter does not match with the diameter of the gland seal, remove the plastic nut, metal ring and rubber seal inside the gland and peel out some of the break out rubber rings up to the right diameter.



4.1.3 Prepare the cable according to the drawing, Strip and clean the cable over a length of 1800 mm. and cut the strength member at 60 mm length.

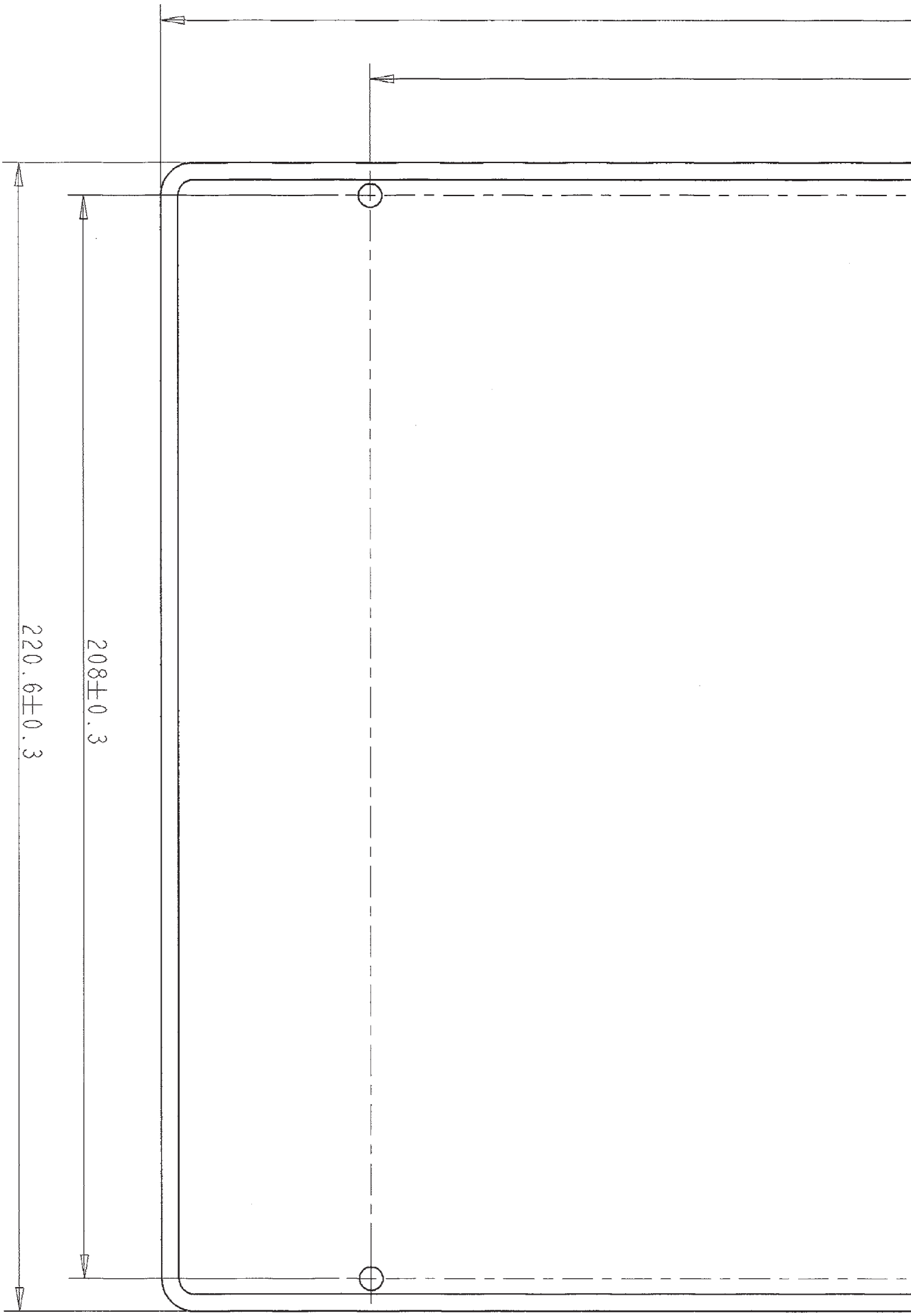
For slotted core cable only



4.1.3.1 Install a protection tube of 150 mm. over the fibers of each slot and slide the tube into the slot of the cable.

4.1.3.2 Protect the transition from the cable to the tubes with a few layers of Teflon tape.

4.1.3.3 Consider the protection tubes now as loose tubes in the installation.


220.6±0.3
208±0.3

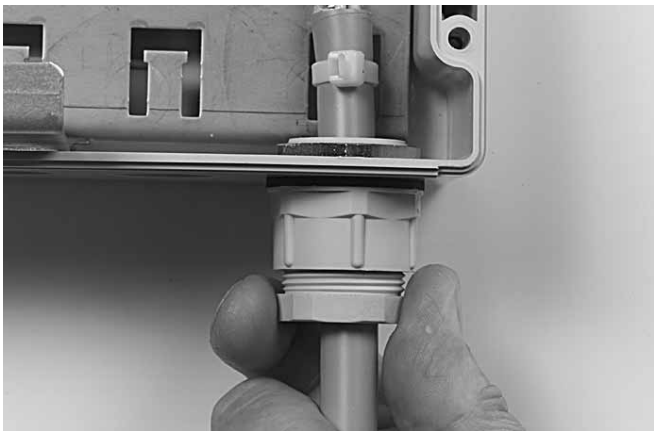

320.6±0.3
240±0.3

4.2. Cable termination

4.2.1. Pull the cable back in the correct position, the cable jacket should protrude 30 mm into the box passing the cable strapping point.

4.2.2. Insert the strength member in the strength member connector and tighten the connector with a screwdriver. If necessary, remove the plastic core from the strenght member till it fits in the strain relief connector.

4.2.3 Secure the cable with a tiewrap onto the cable attachment plate.



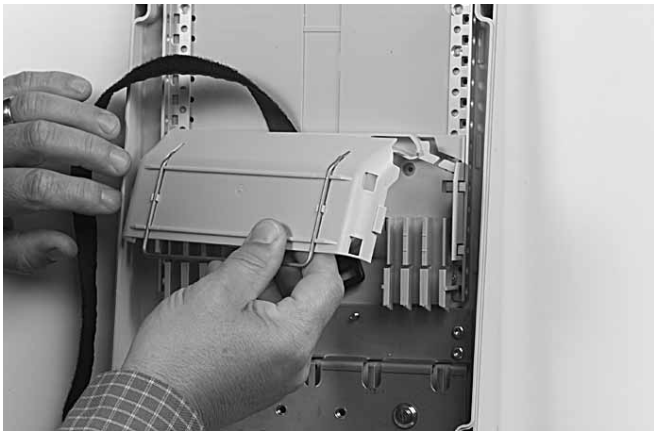
4.2.4 Tighten the gland.

5 Fiber routing to the individual trays

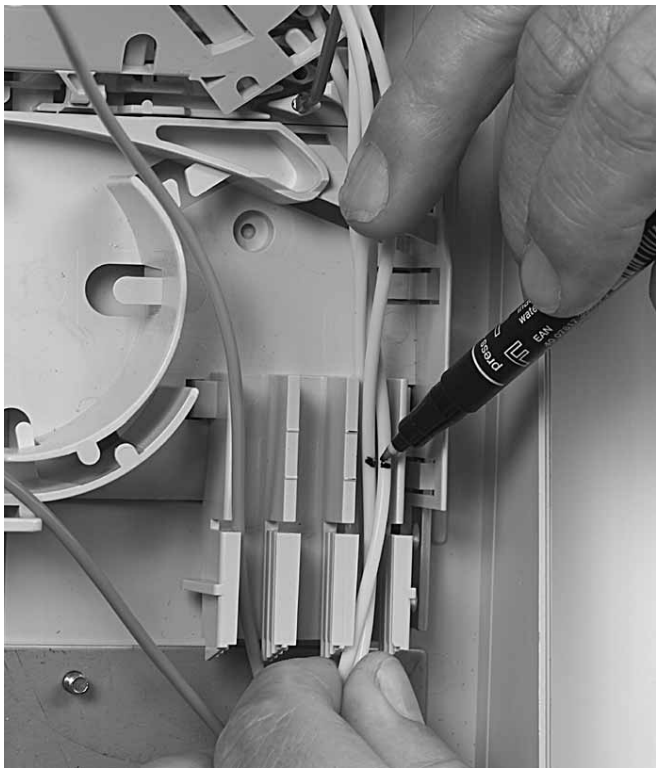
5.1 Allocation of the tubes in the tubeholders

Important. Loose tubes should be routed up to the tubeholder in such way that access to all the tubes is possible at all times in case of re-routing without crossings of already installed tubes.

5.2 Routing of cable fibers

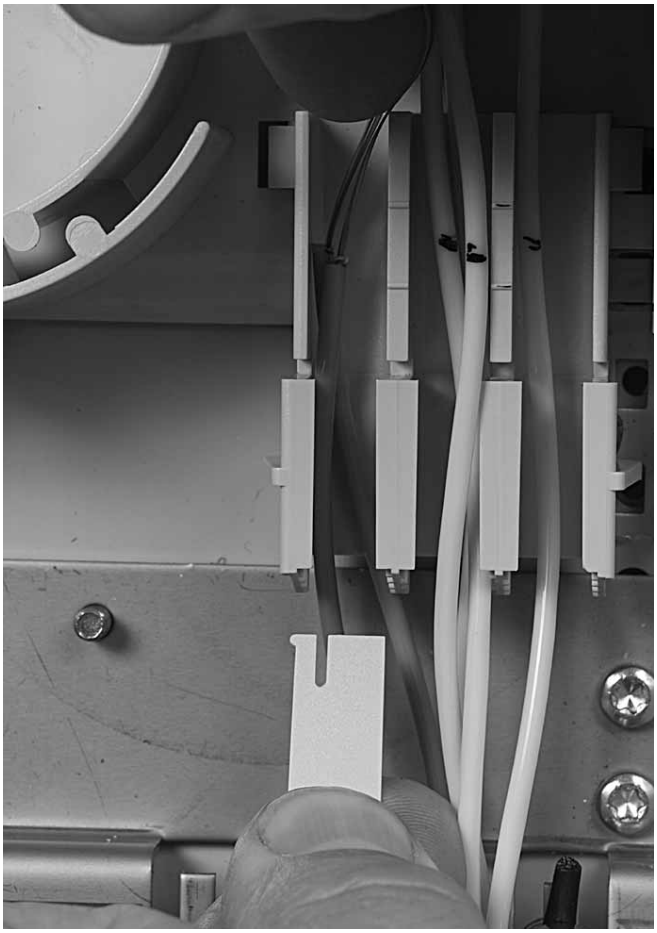


5.2.1. Open the Velcro strap and remove the FAS block cap.



5.2.2 Mark the tubes between the two marks on the tubeholder.

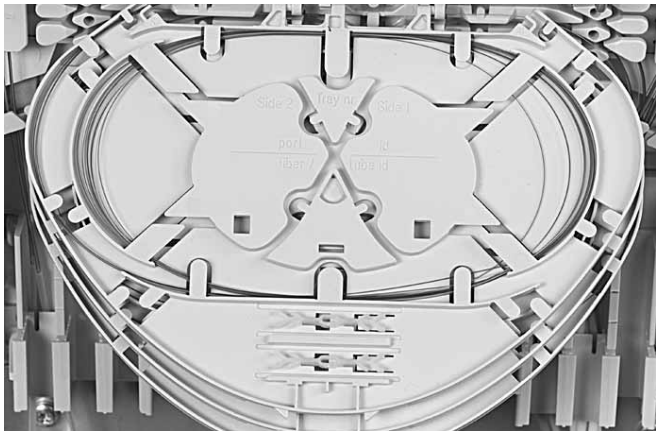
5.2.3 Cut and remove the excess of the loose tubes from the mark, and clean the fibers.



5.2.4 Position the loose tubes in the tubeholder and slide the tube holder retainer with the snap forwards in the lowest possible cavity of the tube holder above the loose tubes. The tube holder retainer must snap.

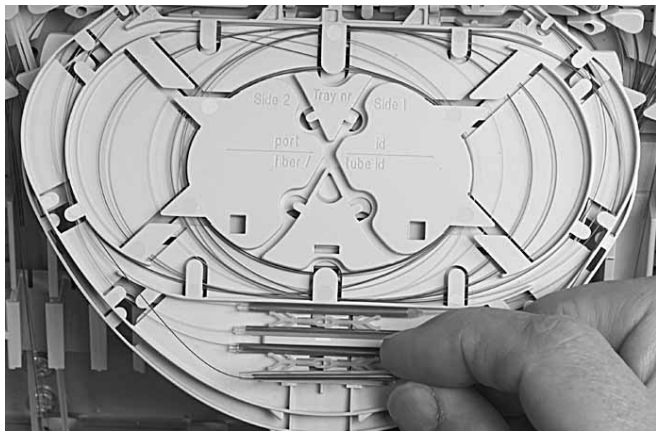
5.2.5 Route the fibers in the grooves of the wraparound groove plate to the entrance of the identified tray. Fiber must be routed in the groove underneath the tray hinge.

5.2.6 Pull gently on the fibers in the tray and make sure that the fibers are well contained in FAS block and wraparound groove plate.



5.2.7 Store the fibers temporarily on a tray.

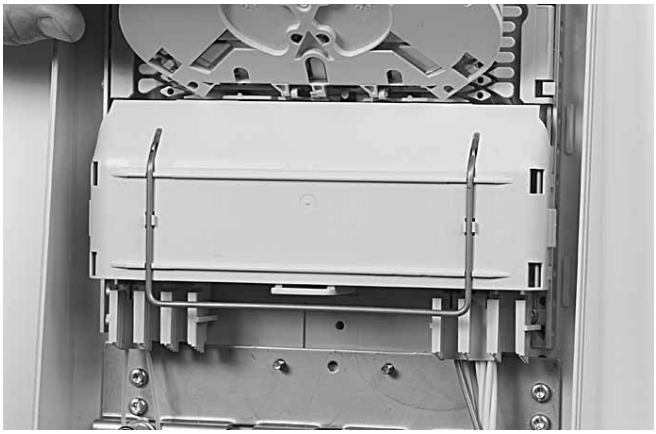
6 Fiber organisation on trays after splicing



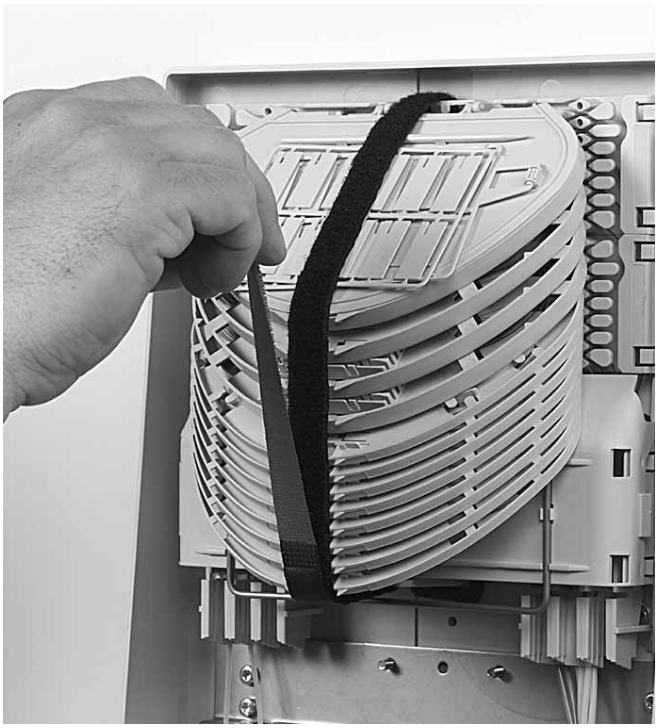
6.1 Take the splice protector and put it centered towards the splice holder.

6.2 Different types of splice holders can be fitted in the cassette with the use of an adapted splice holder.

7 Closing the box



7.1 Install the FAS block cap and the retainer.



7.2 Secure the splicing cassettes with the Velcro strap.

7.3 Place on the cover on the box base and secure the cover with the screws.

7.4 In case of a box with lock insert first the four guiding pins in the box before installing the cover.

8 Important steps during installations

- Make sure that grooves on FAS and wraparound groove plate are clean.
- Clean the fibers.
- Tubes routed up to the tube holder should be routed in such a way that complete access to the tubes is possible without creating crossings and without creating distortions on the tubes already installed in the tube holder.
- Use correct lengths in the tubeholder.
- Make sure not to loose ID.

9 Rearrangement

- Avoid to pull fibers in-between groove plates.
- Avoid fiber movement between tubeholders and first containment on the FAS block.
- If accidentally active fibers are removed from the containment devices, reposition them carefully.

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