NAF BRANCH JOINT

Introduction

NAF branch joint is used for branching of fiber optic cables in areas where the cable is lying straight on the ground. It allows branching of the trunk cable into one or two cables.

Features:

- Suitable for different cable structures but is best suited for Multi Loose Tube and Flex tube cables.
- Capacity for 48 splices
- Cable glands are implemented with Roxtec's pass-through solutions.
- Can be opened and closed after initial installation
- Dimensions Ø 110 x 1100 mm
- Plastic cover
- IP 68

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Equipment for the joint closure

- Split cable tube Ø 110 mm, length 1100 mm, 2 pcs
- Splice tray including a plex cover
- Splice holder for 12 fibers, 4 pcs
- Cable clamp for grounding and fastening, 2 pcs
- Grounding connector and screws, 6 pcs
- Connectorized grounding wire, 1 pc
- Cable ties 3 x 200 mm, 12 pcs
- Acid proof steel hose clamp, 4 pcs
- Cleaning wipe, 1 pc
- Silica gel bag 25 g, 1 pc
- Vulcanized tape, 1 pc
- Roxtec pass-through frame, 2 pcs
- Roxtec RM-module, 4 pcs
- Roxtec RM solid compensation module, 4 pcs
- Roxtec lubricant, 2 pcs

Installation of NAF branch joint

Mark the cables with their peeling lengths and peel them according to the instructions below

Trunk cable

760 mm

900 mm

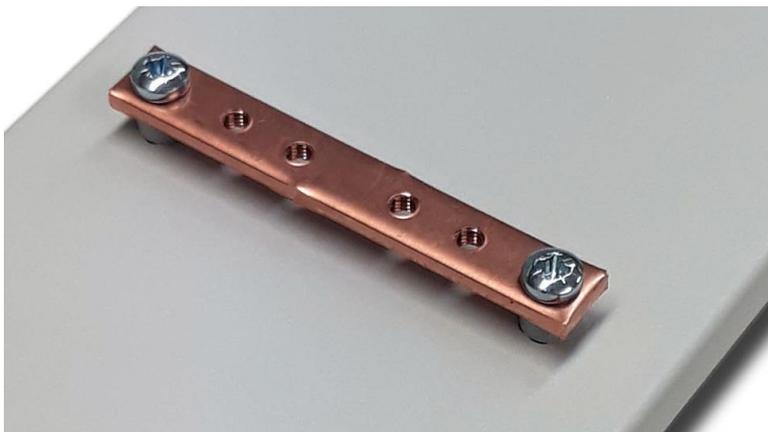branching distribution or FTTH cable

150 mm

480 mm

1200 mm
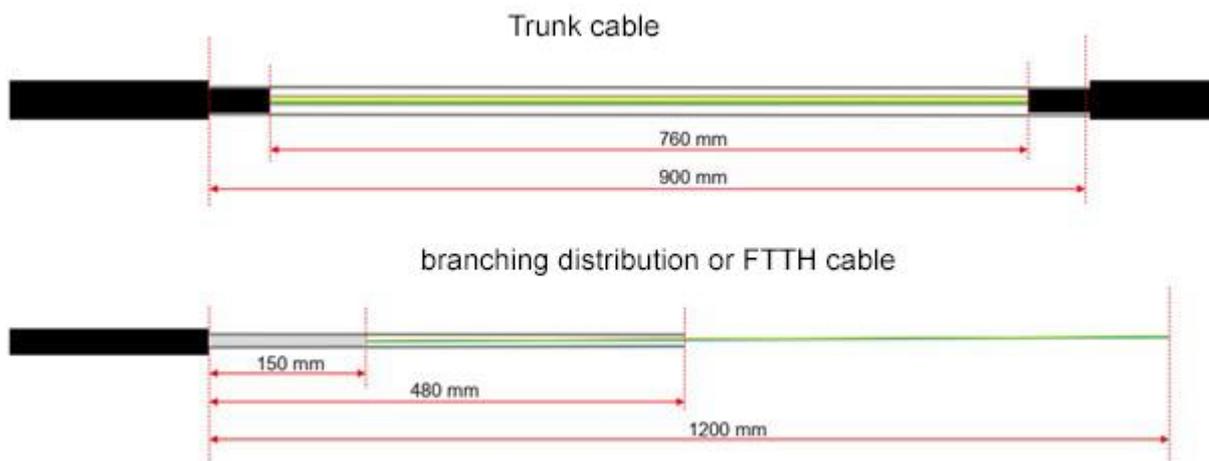
Clean the surfaces of the cables carefully, outwards from the ends of the cable sheaths. For cleaning, you can use the cleaning wipe that comes with the package.

Fasten the cables to the splice tray

If the trunk cable contains steel wires, do not cut the wires, but guide them underneath the splice tray and attach them to the grounding rail, which is below the splice tray.

If there is a armoring steel sheath on the cable, connect it with the grounding wire to the achor point on the splice tray.

Grounding rail below the splice tray.

If the distribution or FTTH cable has steel wires as well, guide them under the splice tray and connect them to the grounding rail.
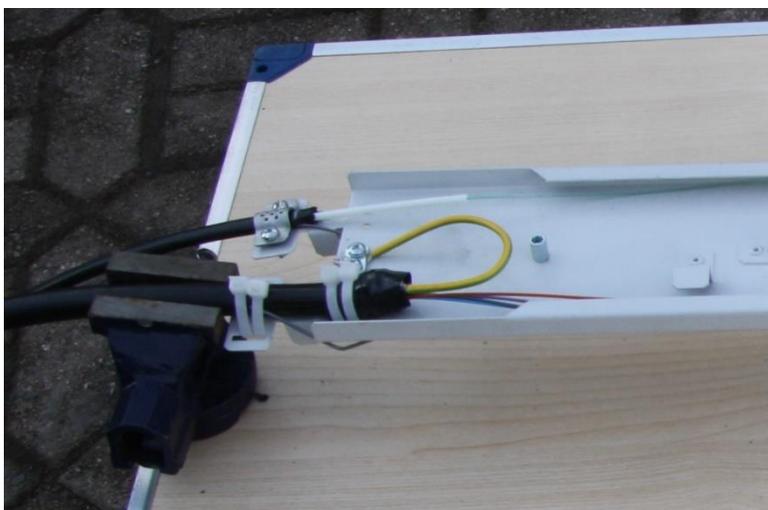
Cables attached and their metal parts connected to the splice tray.

Note, the joint closure is not grounded at all with an external grounding copper wire, as the grounding takes place at the closest metallic joint closures.

Place the fibers of the cables on the splice tray.

Bring up the branched fibers from the trunk cable.

In case of Central Loose Tube cable, cut the center tube at three points and pull out the fibers at the middle cut-off point. Cut off the fibers to be branched and pull them out at either of the two outer cut-off points.

In the case of multi loose tube or flex tube cables, take out the fiber tube with the fibers to be branched. Cut the tube preferably at the middle of the splice tray so that the fibers to another direction can be used if necessary.

Note, fiber tubes for MLT and Flex tube cables can be split lengthwise, so that all fibers in the tube do not need to be cut at the branching point. This requires its own special tool for MLT cables and its own technique with Flex tube cables.

The cables have been attached to the splice tray and the branched fibers have been spliced.

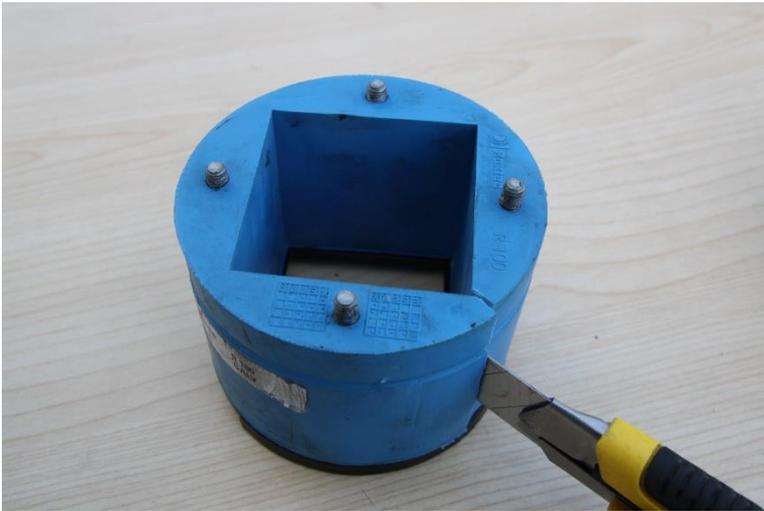Finally, to protect the fibers, secure the plexiglass cover that comes with the splice tray.

Be sure to add the silica gel bag that is part of the equipment.

Fasten the bag with tape to the cover of the splice tray.

Prepare the pass-throughs.

Remove the metal support pieces on the front of the pass-through frames and split the sealing rubber from one corner of the square opening with a sharp knife
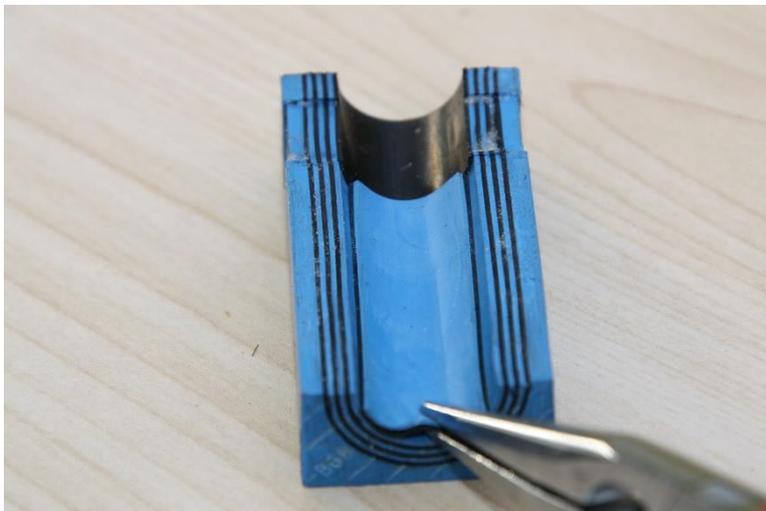

Bring up the split cable tube with a smaller splitting groove and direct the cable or cables to this groove. Pull the tube over the splice tray so that the splice tray enters the center of the tube.
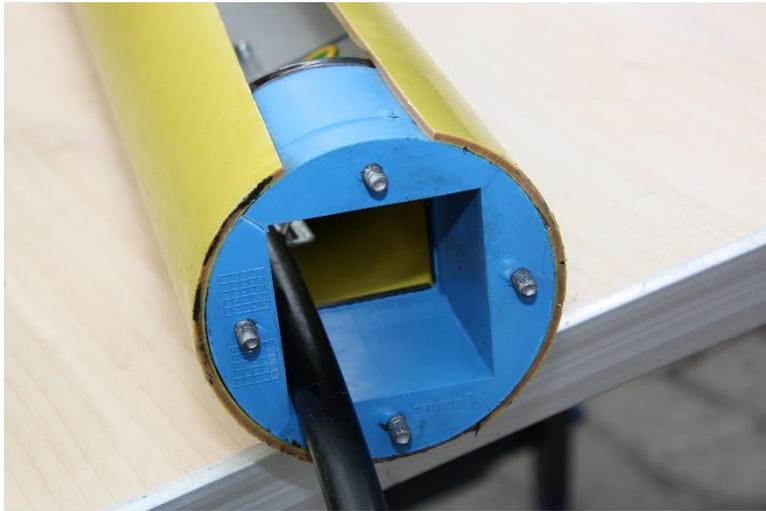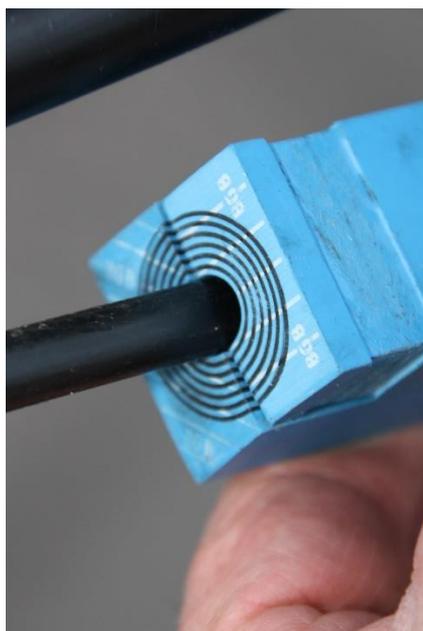
Push pass-through frames to the ends of the tube.

Note. Do not push the pass-through frame up to the tube but leave its outer edge about 5 mm outside the end of the tube.
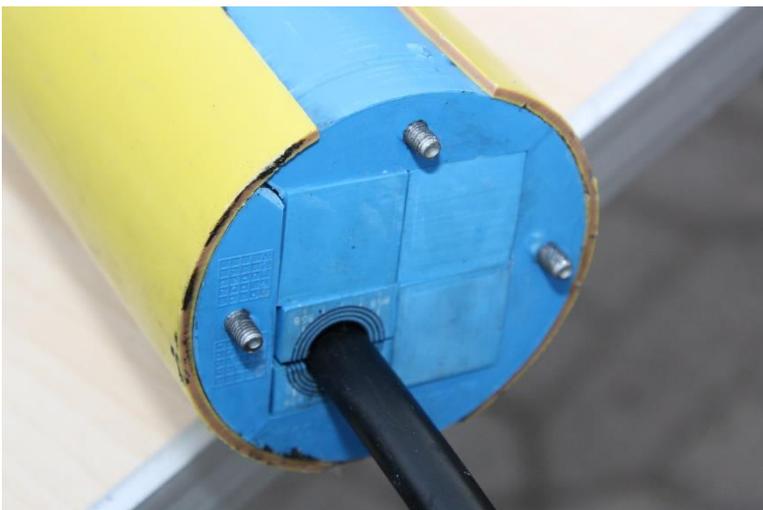

Prepare the pass-throughs for cables.

Remove enough layers from RM modules to fit the cable for the pass-through. Remove only the necessary number of layers to allow the pass-through to be tight.

Carefully lubricate the outer and inner surfaces of the RM modules with the lubricant that comes with the package.

Install RM pass-through and RM solid compensation modules in the pass-through frame.

Attach the metal supports of the pass-through frame but leave the nuts loose.

Press the remaining split cable tube on to protect the extension. Position the top tube so that its slit comes to the opposite side to the slit of the inner tube.

Install two rounds of vulcanized tape on each end.

Tape the seams of cable tubes and finally another round to the ends of the extension.

Open the hose clamps that come with the package and install them on top of the joint closure. Install two hose clamps at the ends of the joint closure and the other two quite close to the ends of the joint closure.

Finally, tighten the nuts of the pass-through frames at the ends of the joint closure. Tightening should be done carefully to ensure that the pass-throughs are properly sealed.

Installed NAF branch joint.

In this case, the four fibers of the Flex tube trunk cable are branched into one 4-fiber FTTH cable.