Splice Closure System for Telephone Network

XAGA 500/530/550 kit content
- Heat-shrinkable sleeve
- Channels (underclip)
- Liner
- Cleaning tissue
- Abrasive strip
- Desiccant (silica gel)
- PVC tape (only XAGA-530)
- Installation procedure
- Shield continuity wire
- BOKT kit

XAGA 550 kit content
- Heat-shrinkable sleeve
- Metal canister (2 half shells)
- Self-adhering aluminum closing strip
- Channels (underclip)
- Desiccant (silica gel)
- Aluminum cable foil
- Cleaning tissue
- Shield continuity wire
- Installation procedure
- BOKT kit

Safety rules
- Check manhole for presence of gas and follow locally prescribed precautions.
- When working with open flame, use standard safety equipment such as gloves, safety glasses etc… as required by local practices.

BOKT kit content
- Branch off clip
- Shield continuity wire + connector
- Cleaning tissue
- Aluminum cable foil
- Tie wrap

Branching kit BOKT
TE Connectivity part number
BOKT 5S-43/8-75/15
for XAGA 5XX-43/8-XXX up to XAGA 5XX-75/15-XXX
BOKT 5M-92/25-122/30
for XAGA 5XX-92/25-XXX up to XAGA 5XX-122/30-XXX
BOKT 5L-160/42-200/50
for XAGA 550-160/42-XXX and XAGA 550-200/50-XXX

Recommended torches

<table>
<thead>
<tr>
<th>Torch</th>
<th>Nozzle</th>
<th>Size</th>
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</thead>
<tbody>
<tr>
<td>FH-T001-0005</td>
<td>FH-T001-0020</td>
<td>up to 75/15</td>
</tr>
<tr>
<td>FH-T001-0030</td>
<td>FH-T001-0030</td>
<td>larger sizes</td>
</tr>
<tr>
<td>FH-1630-PIE</td>
<td>FH-1630-PIE-BN28</td>
<td>up to 75/15</td>
</tr>
<tr>
<td>FH-1630-PIE-BN38</td>
<td>FH-1630-PIE-BN38</td>
<td>larger sizes</td>
</tr>
</tbody>
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Notes for branched joints
The standard XAGA 5XX kit is designed for maximum two cables branched in one end only. Branched joints for more than two cables require the use of an additional branch off kit (BOKT-5S or 5M or 5L) per added cable.

XAGA 5XX will accommodate a maximum of 3 cables at each end. For joints with 2 or 3 cables in one end the overall diameter must be determined.

**Example for three cables and small clips**

Add 6 mm for every small clip or 8 mm for every medium clip or 10 mm for every large Clip. In each case the total diameter must not exceed the max. joint diameter of the kit.
1. Following local jointing technique and instructions, select appropriate size of XAGA 5XX. Remove cable sheath for length L.

2. In order to install the shield continuity assembly on each cable use cable sheath slitter: cut cable jacket over a length of 20 mm and a width of 10 mm.

3. Put cotton or PVC tape (not included in standard kit except for XAGA 530) underneath the cable jacket strip. Complete joint.

4. Install a shield continuity wire on each cable using a standard pair of pliers.

5. Interconnect the shield continuity wires using a continuity wire clip.

6. Take the desiccant out of the aluminum bag and place it within the joint.

7. Before installation of the liner, preshape the liner cylindrically by rolling. Wrap the liner tightly around the splice bundle and secure with tape.

8A. Wrap joint with tape (paper insulating tape, cotton tape or equivalent - not included in standard kit). Taped length should not exceed the length inside the liner/metal canister.

8B. XAGA 550: assemble the two half shells symmetrical to form a hinged canister. Secure one of the seams with self adhering aluminum tape. Center and fit metal canister over the joint. Secure canister with tape. Seal canister seam with self adhering aluminum tape. Smooth the tape with a blunt tool.

9. Using PVC tape (not included in standard kit except for XAGA 530), tape the crowns, starting from the liner/canister body (10 mm), down to the cables with a 50% overlap.

10. Tape maximum 5 mm onto the cable.

11. Use measuring strip of the corresponding BOKT (at bottom of installation instruction) from the end of liner/canister and mark the bondline length on each cable.
12. Remove the cleaning tissue from its package and clean the cables over a distance of about 200 mm. Abrade the cables circumferentially over the cleaned length.

13. Apply the aluminum foil to the cables, positioning the blue line at the mark of the bondlength and smooth the aluminum foil.

14. Flame brush cable areas between arrows for about 10 seconds. Make sure to touch entire cable surface with yellow tip of flame. For lead cables: preheat cables up to 60°C (hot to the touch).

15. Slide the flexible channels over the sleeve rails leaving a small gap at the center for the underclip. Position the underclip in the opening between the channels and slide the channels evenly over the clip.

16. Center the sleeve between the blue lines of the aluminum cable foils.

17. In branched configurations the sleeve must be positioned such that the adhesive flap and sleeve rails are over the largest cable (see drawing).

18. For branched joints insert the branch-off clip (from BOKT-kit) between the cables. Ensure that it is totally inserted. Best results are achieved by apportioning the sleeve according to the cable diameters.

19. Notes for heating
   - Regulate flame to a total length of 300 mm with a yellow tip of 100 mm.
   - During installation move the flame continuously to avoid local overheating.
   - Apply heat until the temperature indicating paint has changed color.

20. Start heating in the center of the sleeve opposite to the channel. Shrink the sleeve circumferentially until the TI paint has changed from green to black.

21. Gradually and progressively move towards one end.

22. Press the channel gently down with a blunt tool to give it channel the shape of the transition.

23. In branched joints press the branch-off cables firmly together and secure with a tie wrap. Postheat the clip and the rail and channel area at the cable ends.
24. Check whether the clip adhesive is seen to flow. If not, apply additional heat all around the clip until the clip adhesive appears at the end.

25. When all T.I. paint has been converted to black of the first half of the closure, white lines should be visible in the slots of the channel. If at any point the white lines are not visible then heat the closure in that area until the white lines appear.

26. Repeat steps 21 through 25 towards the other end of the sleeve.

Allow the completed joint to cool to ambient temperature before moving cable.

**XAGA 5XX - re-entry**

1. Heat the channel area and remove the channel starting at the end cutting towards the center.

2. Retheat gently the sleeve circumferentially at both ends of the splice body and make complete circumferential cuts through the sleeve material onto the inner protection.

3. Heat the branch-off clip area and remove the clip with a pair of pliers.

4. Remove the sleeve end with pliers. Retheat slightly if necessary.

5. Remove the aluminum flap of the sleeve with a pair of pliers; if necessary reheat.

6. While the adhesive is hot, separate the cables with an appropriate tool (e.g. screwdriver) to facilitate clip insertion when reclosing. Remove the PVC tape on the crowns of the liner/canister.

7A. Do the same at the other side. Longitudinally cut the sleeve and liner and remove both.

7B. Do the same at the other side. Locate one of the seams on the canister. Make a cut through the sleeve along the seam, separate the canister and remove it.

**Note**

Protect the remaining adhesive from grease and dirt immediately. Rework the splice.

**Reclosing**

Use a new XAGA 5XX kit and repeat the installation procedure. The remaining adhesive does not have to be removed from the cables, but it has to be cleaned free of grease and dirt.