

# Splice Closure System for Telephone Distribution Systems - Network Rail

# TELECOM OUTSIDE PLANT

### Kit contents



#### XAGA-500-55/12-300-UK04 XAGA-500-100/25-460-UK04

- · 1 Heat-shrinkable reinforced sleeve
- · 1 (2) Channel(s) (+ underclip)
- · 1 Liner
- 1 Shield continuity wire
- · 1 Cable aluminium foil
- 1 Dessicant
- 1 Cleaning tissue
- · 1 Abrasive paper
- · 1 Installation instruction

### Safety rules

- Check environment 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.

#### **Recommended torch**

· Gas torch fitted with a Calor "C" nozzle.

## Sizing information (all dimensions in mm)

Item code N.R.: CC-10-55/12-300

CC-30-55/12-300 CC-50-100/25-300

PE & ZHLS cables armoured/unarmoured up to 50 pairs 0.63 & 0.9  $\,$ 

Item code N.R.: CC-100-55/12-460

PE & ZHLS cables armoured/unarmoured up to 100 prs 0.63 & 0.9

	Splice bundle Diameter	Min cable Diam. OD	Max. splice opening
XAGA-500-55/12-300-UK04	55	12	300
Item code N.R.: CC-10-55/12-300			
CC-30-55/12-300			
CC-50-55/12-300			
XAGA-500-100/25-460-UK04	100	25	460
Item code N.R.: CC-100-100/25-46	0		

#### **Cable preparation**

Prepare the cables following N.R.'s approved practices and use approved tooling. Splice opening: according to each cable type. Max. distance: see above.

#### Important

Cleaning of conductors for grease filled cables: use only products approved by Railtrack. Final cleaning of cable jackets: use cleaning tissues (isopropyl alcohol) approved by Railtrack.

### **Installation instruction**



1 Remove the outer cable jacket at both sides over a distance of 110 mm using local approved techniques and make the splice.



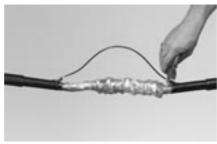
2 In order to install the shield continuity wire, use a jacket cutting cutting tool to cut the jacket of the inner cable over a length of 25mm and a width of 10mm.



3 Apply PVC tape underneath the cable jacket strip.



4 Using splice wrapping tape ( or cotton), wrap the entire splice tightly together over its total length.



5 Install the shield continuity wire on the cable jacket strip using a standard pair of pliers.



6 Apply PVC tape over the shield continuity clips.



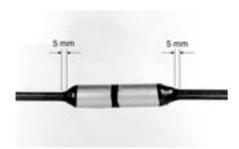
7 Take the dessicant out of its packaging and tape it on the splice.



8 Preshape the liner cylindrically by rolling. Centre it over the splice and secure it with PVC tape.



 $9\,$  Using PVC tape, tape the crowns starting from the linerbody (10mm) down to the cable with 50% overlap.



10 Tape maximum 5 mm onto the cable.



11 Clean the inner jacket and approx.150mm of the outer jacket of the cable on both sides of the splice bundle with cleaning tissues (isopropyl alcohol).



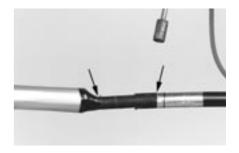
12 Abrade the cables circmferentially over the same distance as indicated in step 11.



13 Centre the sleeve over the splice and mark the ends on the outer cable jacket.



14 Apply cable aluminium foil to the cable, positioning the blue line at the mark. Smooth the foil with a blunt tool.



15 Flame brush the cable areas with a soft flame for about 10 seconds, as indicated between the arrows.



16 15 Wrap the sleeve around the splice. Press the underclip (if applicable) over the rail at the centre of the sleeve.



17 Pull the flexible channel over the sleeve rails until they butt on top of the underclip. Centre the sleeve over the splice such that the ends match the blue line of the cable aluminium foil.



18 Start heating in the center of the sleeve, opposite from the channel. Then shrink the closure circumferentially through the center and continue to one end. Turn all the temperature indicating paint to black as you go.



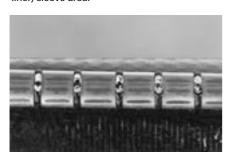
19 When all the green paint has turned to black on the the first half of the closure, support it and press down the channel with a suitable tool following the transition from the liner/sleeve area.



20 Postheat the rail and channel area at the sleeve end for approx. 30 seconds.



21 Continue heating the sleeve, starting again from the centre to the other end. Repeat steps 19 and 20.



22 When all TI paint has changed from green to black, white lines should be visible in the slots of the channel. If the lines are not visible, apply more heat at that point until they appear.



23 Wait approx. 15 minutes (cooling time) before moving the finished splice.

### **Quality checks**

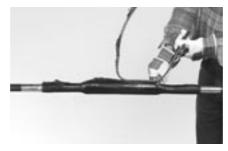
- All TI paint should be converted to black.
- White lines should be visible in the slots of the channel.
- Some adhesive will be visible at the ends of the sleeve.

# Re-entry procedure

Note: for safety, protect hands with gloves.



1 Heat the channel area completely.



2 Cut off the channel starting from the cable end up to the centre of the splice to avoid cable damage. Apply more heat if needed.



3 Heat the sleeve circumference. Pull the sleeve away using a suitable tool. Apply more heat if needed.



4 Remove the PVC tape on the crowns of the liner.



5 Open the liner and remove it completely.

# **Re- closing**

Use a new XAGA-500 kit and repeat all steps

starting from · step 7 till 10

- · step 13 and 14
- · step 16 till the end.

Note: adhesive remaining on the cables does not have to be removed. Protect it with a dry and clean cloth when working on the splice itself.

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