

LoviSil® M-series

Installation instruction

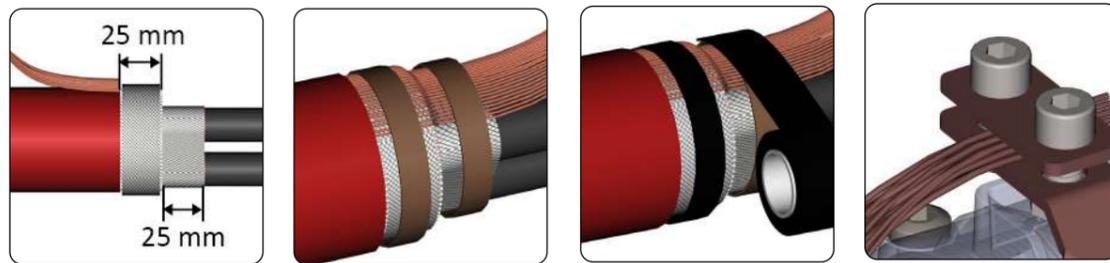
3 - core PILC
3x1 & 1X3 - core XLPE /
XLPE - TS - S(A)WA

U₀ / U (U_{max})

12 / 20 (24) kV

Conductor cross-section

25 - 300 mm²

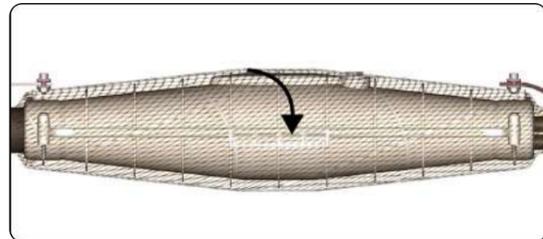


6. Wind 3 layers of gauze over the armour (wire or tape) and tape screen.

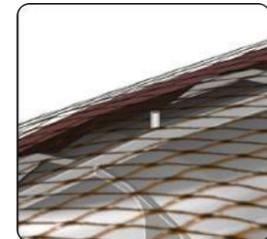
7. Fix the screen wire or braid to the armour by means of a constant force spring or jubilee clip. Fix the wire screen or braid to the tape screen using a constant force spring.

8. Tape over the connections with PVC tape.

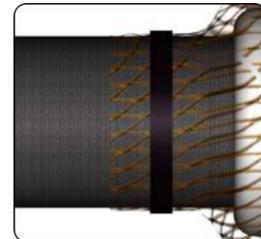
9. Fix the screen wires // braid to the earth strip using a 6mm allen key (10Nm) and cut the excess wires.



10. Wrap the earth screen around the inner joint.

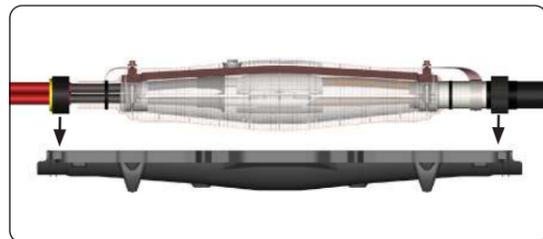


11. Hook the earth screen to the hooks on top of the lower shell of the inner joint.



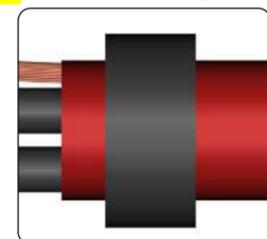
12. Fasten the earth screen to both cables with a plastic cable ties.

6 Assembly of outer joint

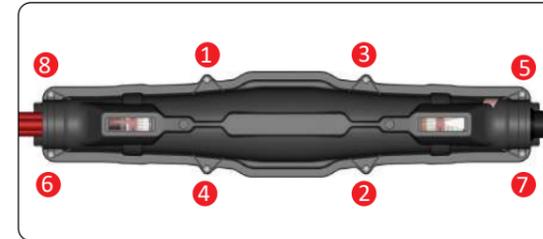


1. Position the lower shell and mark the positions of the self-amalgamating tape and/or filling piece.

! First few windings firmly!



2. Wind the tape. Check the correct diameter using the callipers provided in the lid of the box.



3. Place the upper shell and turn the pre-mounted screws with a 6mm allen key (8-12Nm) according to the image above.

7 Filling the outer joint with Protolin®

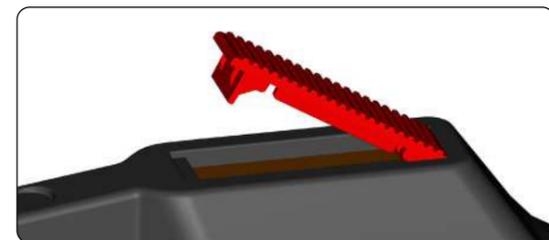
! Support the joint and cables with sand.



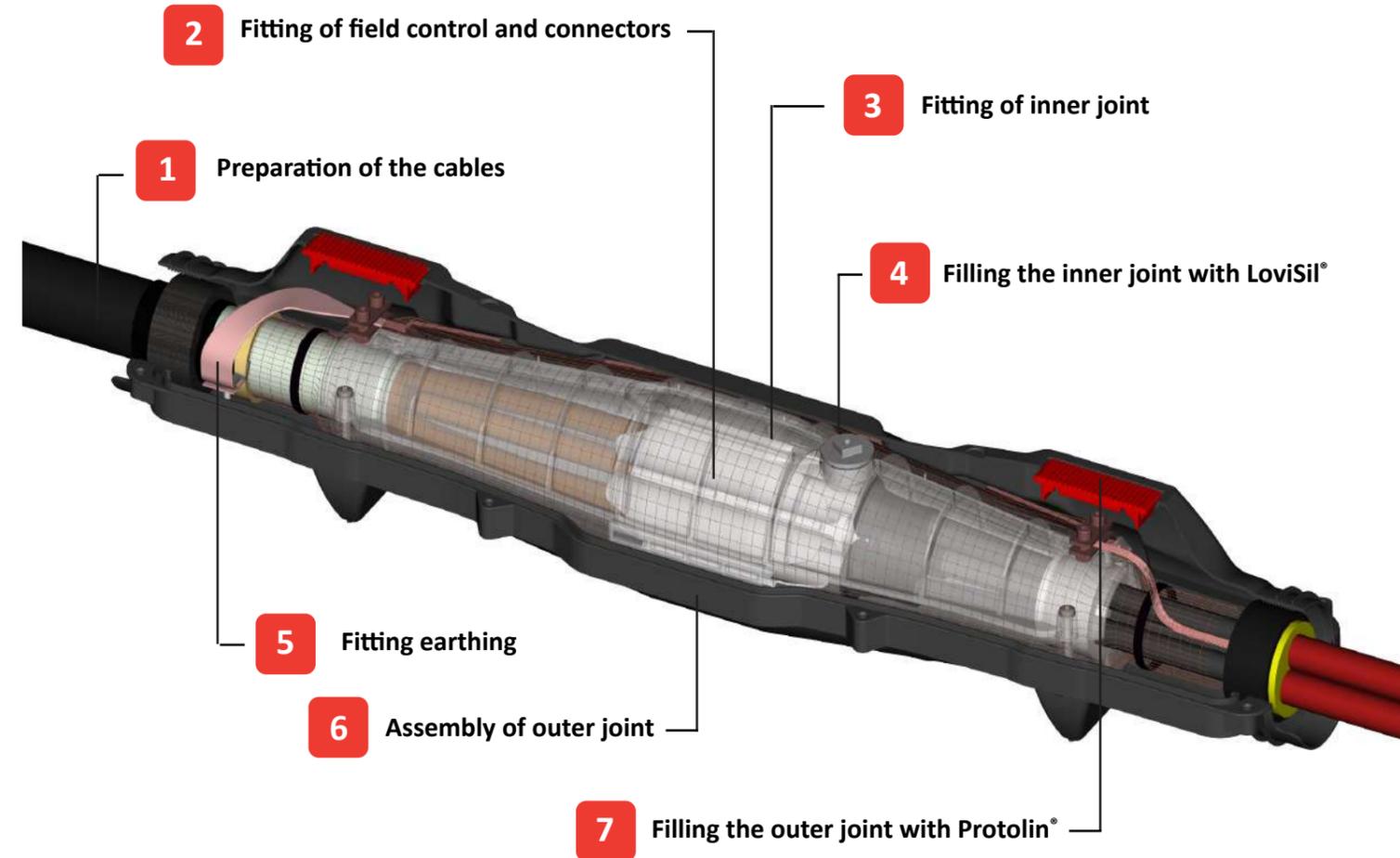
1. Mix the Protolin® resin, attach the bag to the fill opening as indicated in the instruction on the bag.



2. Fill the outer joint with Protolin® to just under the inner edge.



3. Push both covers in the filling holes. Cover the joint with sand and put into service according to the instructions of the network administrator.



General remarks

! Follow any **safety instructions** issued by the network administrator and/or your employer!

! Check whether the **paper-insulated cable** contains any moisture according to the instructions of the network administrator and/or your employer!

! Make sure the connection stays **dry and clean** all through the assembly!

! This instruction is meant as a guideline for **trained and certified jointers**. Knowledge of medium voltage technology and experience in cable preparation should be present!

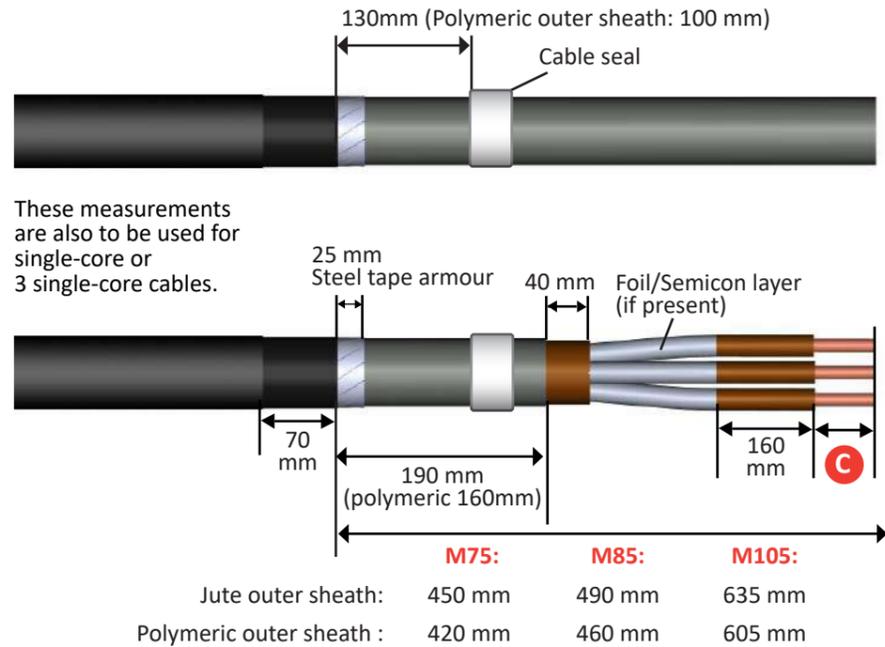
! Note the **correct dimensions** as mentioned in this instruction when installing the joint!

Disclaimer: Lovink Enertech takes the utmost care in the production and assembling of this installation instruction, but can in no way guarantee the accuracy or completeness. Lovink Enertech accepts no responsibility for damage of any kind caused by not following the installation steps described in this instruction. Lovink Enertech reserves the right to modify the contents of this publication or remove parts at any time without having to give notice.

1 Preparation of the cables

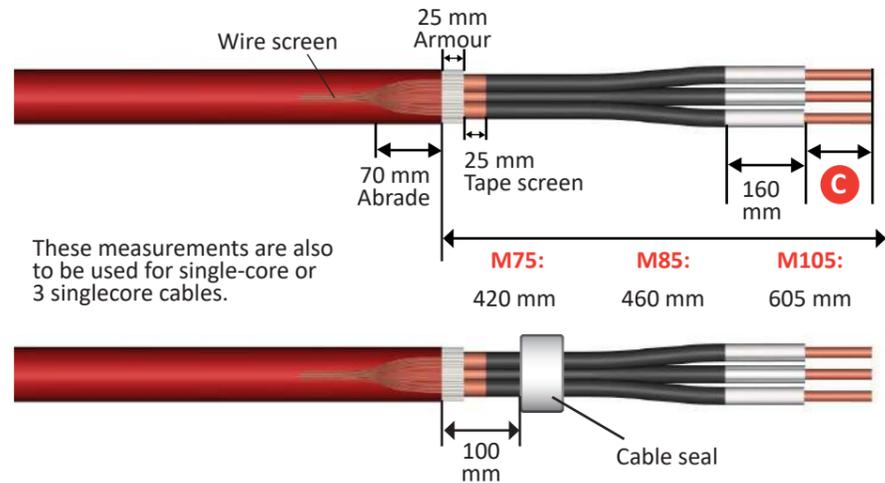
PILC

Slide the cable seal on the cable **before cutting and removing the lead sheath**. Use Lovink silicon paste as a lubricant.



XLPE-TS S(A)WA 3-core

Strip the cable to the required dimensions, then slide the cable seal into position using the Lovink silicon paste as lubricant.



2 Fitting of field control and connectors

- Position the stress cones with the push on- applicator and Lovink silicon paste.
- In the case of EPR cable, apply void filling tape over the interface between EPR and semi-conductive layer.
- Slide the stress cones 10mm over the end of the semi-conductive layer.
- First clean the core insulation and then the stress cones with a clean Lovink wet cleaning tissue.
- Fit the connectors according to the specifications of the supplier.

Dimensions connectors

With blocked connectors:

½ connector + 5 mm

Without blocked connectors:

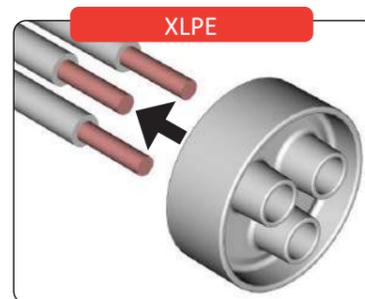
½ connector + 10 mm

Always abrade polymeric outer sheath (70mm) and/or lead sheath!

Bend back the screen wires but **do not** cut them!



De-burr any sharp conductor/sheath edges and mask with PVC tape to prevent damage when applying the cable seal



If necessary, make a **crossing** first before cutting the cables!

3 Fitting of inner joint

Before positioning the tube set, **clean the connection** with a clean Lovink wet cleaning tissue.

Clean all surplus silicon paste from cable surfaces.

- Click the tubes into each other and centralize over the connectors.
- For 3 X single core cables - place a plastic cable tie around the cables sheaths.
- Use the inner shell to gauge and reposition the cable seals. Offer up the outer shell to determine the position of the foam filler pieces (**Only for 3 x single core cables**). Place the Foam filler pieces.
- Fit the upper shell to the lower shell.
- Apply Lovink silicon paste on the outer contour of the cable seals.
- Click the upper shell partly on the lower shell.
- Turn all screws with a 6mm allen key according to the image above (8-12Nm). **Attention! The M105 joint has 8 screws.**
- Check if the shells are fully locked and snapped shut.**

4 Filling the inner joint with LoviSil®

- Position the LoviSil® bag on the fill opening as indicated in the instruction on the bag.
- Hold the spout firmly on the fill opening.
- Fill the inner joint with LoviSil® to the level between MIN and MAX.
- Tighten the plug with a 19 mm spanner.

5 Fitting the earth

- If required, wind 3 layers of gauze over the armour (wires or tape). Fix the smaller braid to the armour with a jubilee clip
- Fit the small and big braid to the lead sheath with a constant force spring or LDV-clamp
- Fix the LDV-clamp / spring 40 mm from the armour over the braid.
- Tighten the bolt until the clearances between the disc springs are closed and turn the bolt 360° back.
- Fix the braid to the earth strip with a 6mm allen key (10 Nm) and cut away the excess braid.