Components resin injection joint

Injection gun

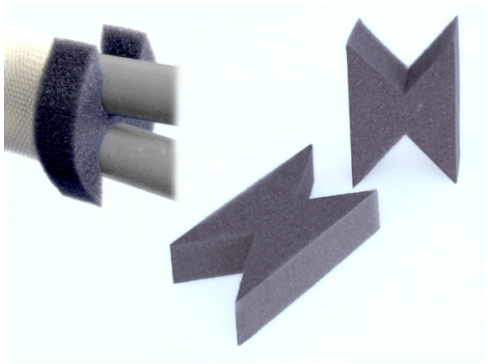
Polyurethane- or Epoxy resin
(various types)

Gauze wire
(different types & sizes)

Transparent wrap around tape
(various lengths and widths)

Injection nipple
(6,1 or 12,2mm)

Injection valve
(6,1 or 12,2mm)



Branch-off foam-filler
(neck closure)

Additional components:

- **Core separator**
- **Constant Force Springs**
- **Self fusing tape**
- **Glassfibre reinforced tape**

Components resin injection joint

Installation instruction

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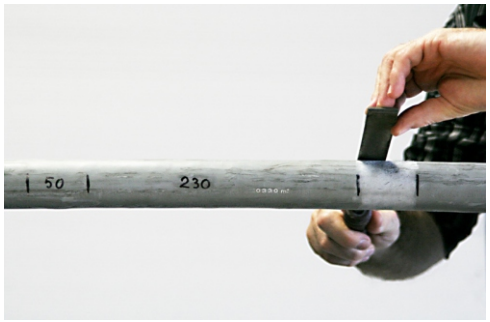
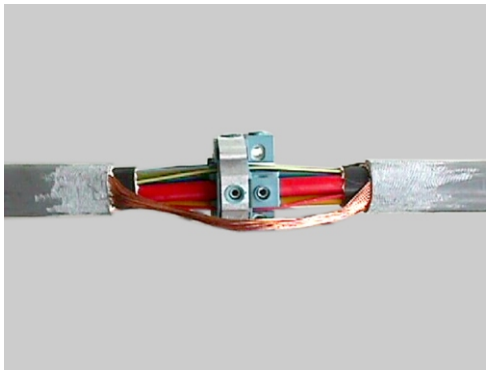
Resin injection joint, branch-off polymeric

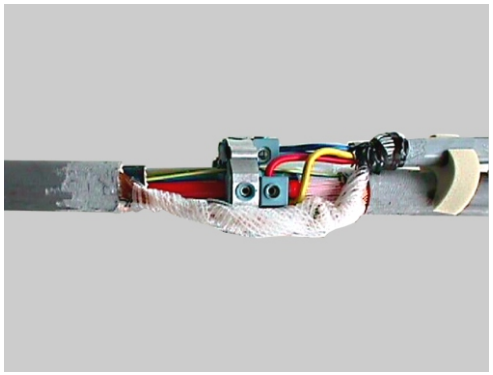
FILOform



- Mark the part of the cable oversheath which must be removed.
- On both sides, mark minimal 50mm or 1,5x the cable diameter to be roughened
- Roughen oversheath with sandpaper
- Remove cable oversheath.



- Clear the laid up cores of the earth screen and remove embedding.
- Leave 30mm of the inner bedding and roughen this with sandpaper.
- Spread the cores and remove the cable core.
- Place the ring connector.



- Wrap gauze (5 layers) around earth wires.
- Place the branch-off foam-filler next to the roughened area.
- Place ‘gauze books’ between wire pressure points.
- Also isolate crossing wires with gauze

- Wrap with gauze half overlapping until a thickness of at least 5mm.
- After wrapping, no parts of the joint are allowed to be visible, check the downside of the joint with a mirror as well.
- Note: no part of the joint is allowed to be thinner than the cable diameter

- Place the injection valve at 1/3 of the lenght of the joint, on the opposite site of the branch-off cable.
- Wrap the joint with 2-3 layers of transparent tape, stretching the tape constantly.
- Fill the joint with equal pressure.
- Prick through eventual inclusions of air with a non-conductive sharp tool.

Branch-off polymeric

Installation instruction

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Resin injection joint, branch-off PILC

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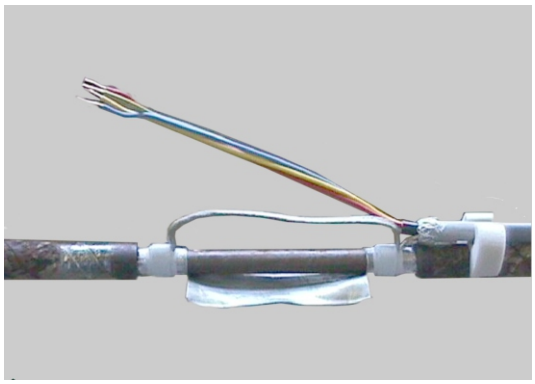
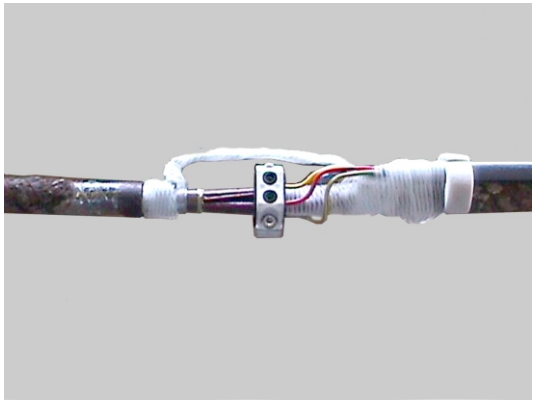
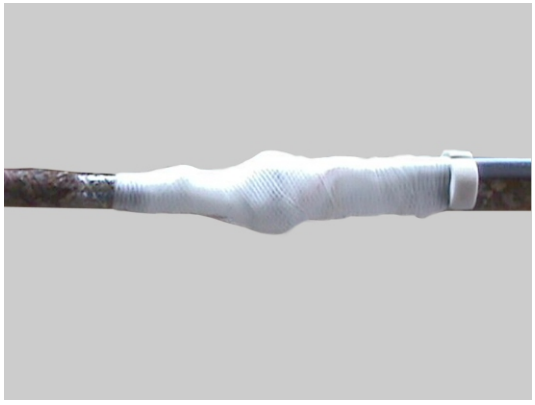
- Mark off the part of the cable oversheath which must be removed and remove jute.
- Leave 50mm steel tape armour on both sides and clean this.
- Leave 80mm of the lead sheath on both sides, clean and roughen the sheath.



- Install earth connection
- Remove lead sheath



- Leave 30mm of the belt insulation.
- Place gauze around the earth connection and in the neck – near the branch-off cable.
- Place the branch-off foam-filler and ring connector.
- Eventually place ‘gauze books’ between pressure points.



- Wrap gauze half overlapping until a thickness of at least 5mm.
- After wrapping, no parts of the joint are allowed to be visible, check the downside of the joint with a mirror as well.
- Note: no part of the joint is allowed to be thinner than the cable diameter

- Place the injection valve at 1/3 of the lenght of the joint, on the opposite site of the branch-off cable.
- Wrap the joint with 2-3 layers of transparent tape, stretching the tape constantly
- Fill the joint with equal pressure.
- Prick through eventual inclusions of air with a non-conductive sharp tool.

Branch-off PILC

Installation instruction

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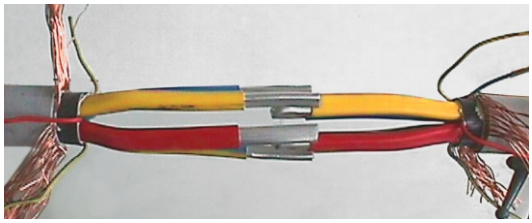
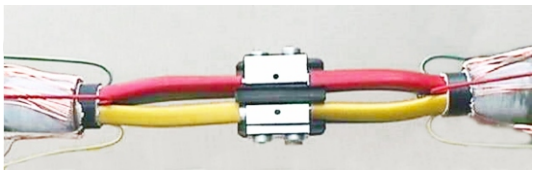
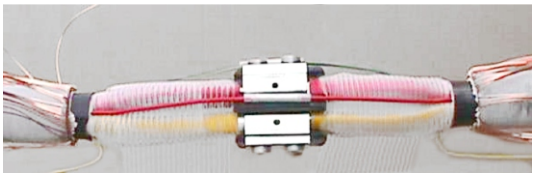
Resin injection joint, straight joint



- Ensure that the cables overlap and determine the centre of the joint.
- Mark the part of the cable oversheath which must be removed
- On both sides, mark minimal 50mm or 1,5 x the cable diameter to be roughened.
- roughen oversheath with sandpaper

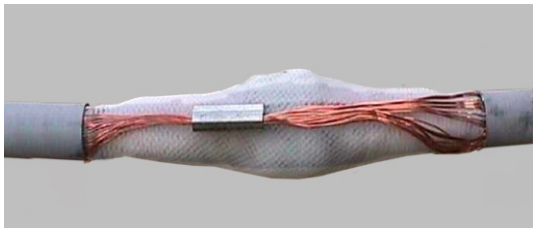


- Strip the conductors according to dimensions of the connector.
- Leave 30mm of the inner bedding and rroughen with sandpaper.
- Install the connector.



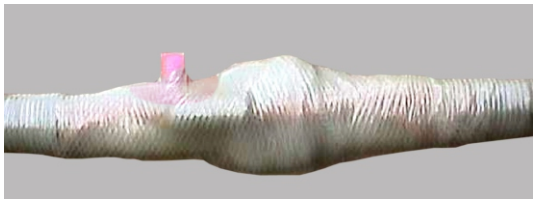
- Fill the space between wires and connector with ‘gauze books’
- Isolate pressure points and crossing wires with ‘gauze books’.

- Wrap 5 layers of gauze half overlapping.



- Connect the cores of the earth screen.

- Wrap gauze half overlapping until a thickness of at least 5mm.
- After wrapping, no parts of the joint are allowed to be visible, check the downside of the joint with a mirror as well.



- Place the injection valve at 1/3 of the joint.
- Wrap the joint with 2-3 layers of transparent tape, stretching the tape constantly.
- Fill the joint with equal pressure.
- Prick through eventual inclusions of air with a non-conductive sharp tool.

Resin injection joint, straight joint

Installation instruction

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Mixing instruction resin package

1.
- Remove the aluminium outer bag without damaging the clear inner bag.
- Immediately use the resin after opening the aluminium outer bag.

Attention:
- **Do not mix different types or brands of resins.**
- **Take steps to prevent damage as a result of spilling resin.**
- **Wear disposable gloves and process only in a well ventilated room.**

2.
- Remove the separator from the centre of the bag.

3.
- **Mix contents by kneading vigorously for at least two minutes.**
- Make certain all the resin compound is squeezed from the corners and edges of the bag.

4.
- Move the resin to one side of the package
- Remove the protective film from the self adhesive foamring on the injection nozzle
- Adhere the injection nipple on top of the packaging on a clean and non-greasy position. Do not push the teeth of the nipple through the packaging.

Attention:
- **Place the injection nipple always on the resin package before it is inserted in the injection gun, thereby preventing that the resin package can leak into the injection gun.**

Mixing instruction resin package

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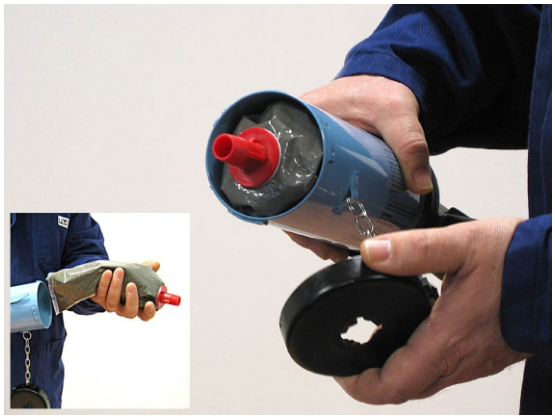
Mixing instruction resin package



5.
- Place the resin package in the injection gun.

Attention: do not fold the resin pack in the injection gun.

6.
- Place the injection nipple through the opening of the lid.
- Close the lid.
- Fix the nipple in the lid by turning it.

7.
- Screw the injection gun (nipple) on to the injection valve.
- Press the resin package empty with equal pressure and quiet pumping strokes.
- Release the pressure from the injection gun before removal.
  Give time to the resin to flow in to the cable joint.
- Remove the pressure of the injection gun before removing it from the cable joint.
- Unscrew the injection gun (nipple) of the injection valve.

8.
- Remove the empty resin package from the injection gun.
- Repeat step 1 till 8 until the resin injection joint is completely filled with resin.
- The empty resin package can be disposed of as normal waste material

- **Attention**
  Do not mix different types or brands of resins.

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