

Installing Terminations

End-cap and cable take-off

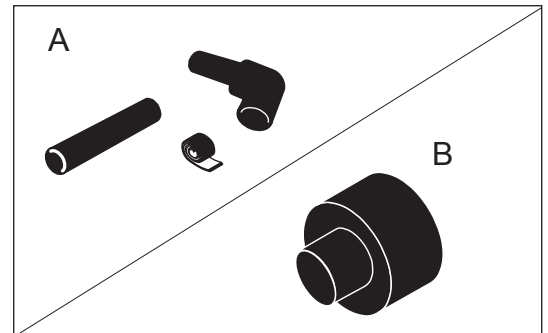
Application

End-cap and cable take-off are used in leak detection systems, e.g. SafePipe. The overall purpose is to seal the pipes and/or fittings to prevent moisture from penetrating into the foam insulation.

They are e.g. used at terminations in chambers, in connection with branch adaptors to concrete ducts, in cellars etc.

Cable take-off and end-cap

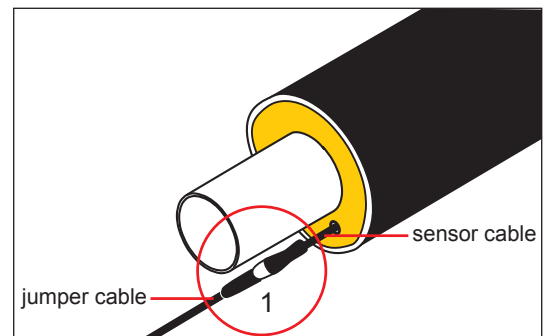
Cable take-off is carried out with installation set A and end-cap B.



The cable take-off is installed **after** assembling the sensor cable and the jumper cable.

Detail 1:

Please note that the sensor/jumper cable assembly is not part of this instruction.

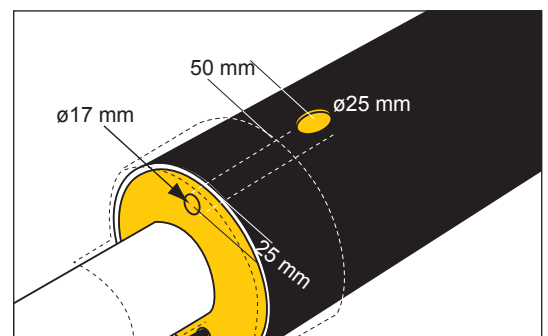


Preparing cable installation

Drill a 25 mm conic hole 50 mm from the marked end of the end-cap.

Mill the hole and remove foam remnants from it.

Drill a 17 mm hole approx. 25 mm from the top of the outer casing through the foam to the conic hole.

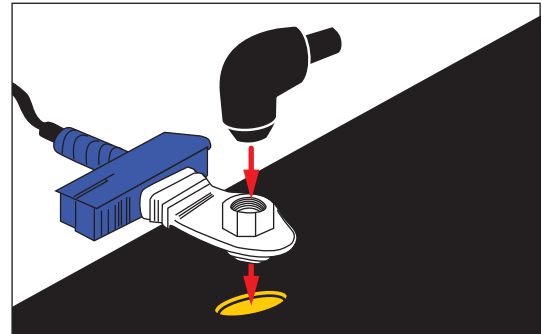


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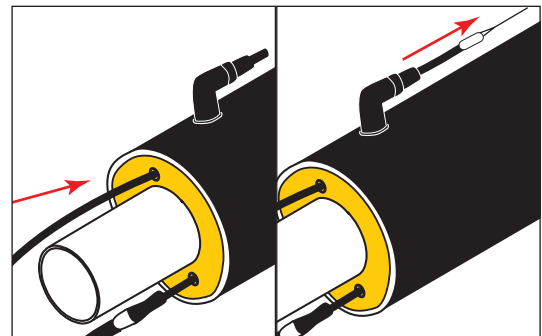
Welding on cable foot

1. Mill the hole with the special milling cutter.
2. Heat the cable foot and the hole edge at the same time with the preheated plug welder.
3. Press the cable foot down.
4. When lips of melted HDPE are visible, remove the plug welder from the hole and press the cable foot into the hole.
5. Press for min. 30 sec., until a homogeneous weld bead has formed.



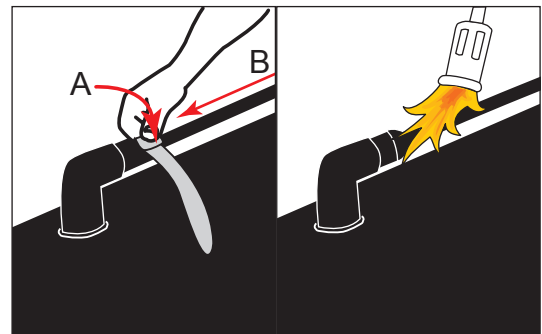
Cable through cable foot

6. Pull the jumper cable through the cable foot.



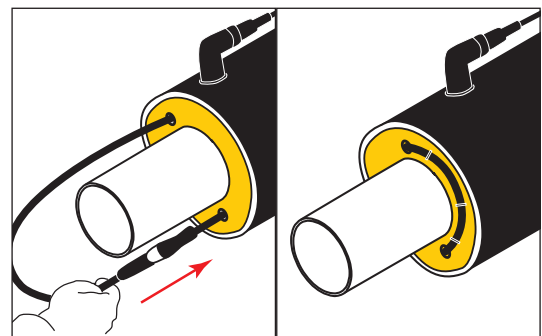
Sealing cable take-off

7. Wrap the mastic tape around the cable as close to the cable foot as possible, A
8. Push the cable into the cable foot, so the mastic tape fills and seals the end of the cable foot, B
9. Place the shrink tube over the end of the cable foot. Shrink until the tube is in contact with both cable foot and cable.



Attachment of installation cable at foam end

10. Push the cable connection into the pipe and attach the jumper cable with 3 plastic staples.

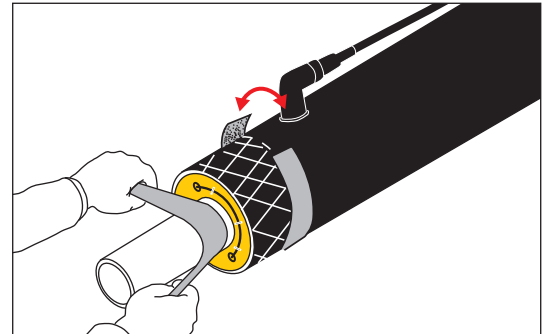


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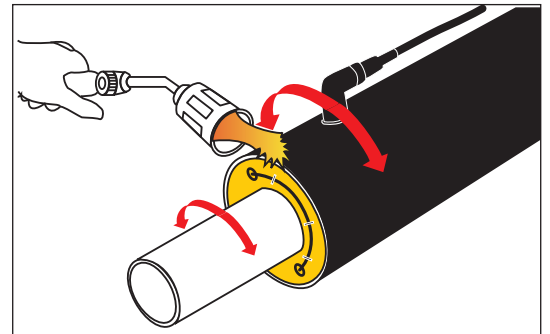
End-cap and cable take-off

Preparing the end-cap installation

11. Wipe the outer casing and steel pipe clean and dry.
12. Grind the outer casing, using emery cloth, grain size 60, until the surface becomes mat.

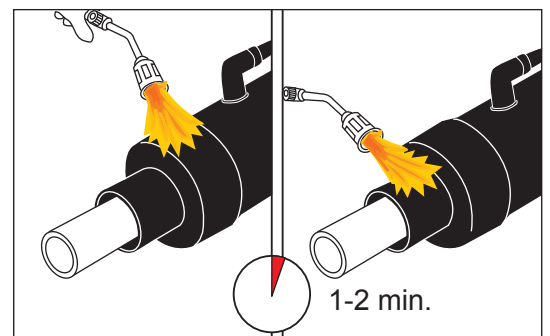


13. Preheat outer casing and steel pipe to approx. 60° C.
Protect the foam and installation cable from direct flame contact.
Centre the end-cap on the clean, pre-heated pipe end.



Shrinkage

14. Use a soft gas flame for the shrinking.
Important:
Start with the part of the end-cap which is placed on the outer casing.
When it has been shrunk, wait 1-2 minutes, before shrinking the part on the steel pipe.
15. Carry out the shrinking on the steel pipe as shown in the drawings in order to avoid air pockets.
Do not heat directly on the vertical part.



Do not heat the part on the outer casing during the final shrinking, as the end-cap might slide off the outer casing.

Max. temperature:
After the installation the part of the end-cap on the steel pipe must not be exposed to more than 130° C.
The part on the outer casing must not be exposed to more than 70° C.

