

# DESITEK end termination for 1-core XLPE cables

12-17,5 kV type EMI17A1 & EMI17B1 - indoor

12-17,5 kV type EMU17A1 & EMU17B1 - outdoor



Member of DEHN group

## ASSEMBLING INSTRUCTIONS

### Important!

Installation is only allowed for skilled personnel with the necessary education and knowledge of relevant safety instructions.  
 Read through instructions before starting the installation.  
 Use only approved dedicated special tools for removal of cable sheath, easy-strip layer and XLPE insulation.  
 Avoid excess use of liquid cleansers.

### 1-core cable with screen wires

- 1) Remove cable sheath on 320 mm + optional overlength for connection of screen wires.
- 2) Remove the screen Cu-foil at the edge of the cable sheath - avoid any sharp edges.
- 3) Apply one turn of red sealing mastic around the cable sheath without overlapping, see dimensions in fig. 1.

Bend the screen wires backwards, fasten them with tape and apply another turn of red sealing mastic upon the screen wires.

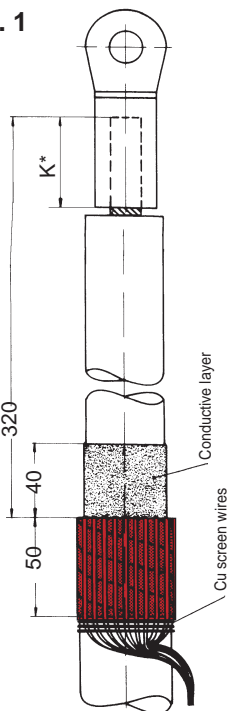
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### 1-core cable with Cu-foil screen

- 1) Remove the cable sheath on 320 mm. From the edge of the cable sheath, a piece of Cu-band or mesh is attached to the Cu-foil with a roll spring. The Cu-band or mesh is soldered as indicated in fig. 1A in order to seal against ingress of moist.
- 2) Remove the Cu-foil screen to 20 mm from the edge of the cable sheath. Sharp edges from the Cu-foil or mesh can be wrapped with conductive tape.
- 3) The Cu-band or mesh is bent backwards along the cable sheath and fixed with approximately 3 turns of Cu-wire. Apply 2 turns of red sealing mastic upon the soldered area in order to avoid moist ingress.

Go to paragraph) 4 below

Fig. 1



\* Depth of cable lug

- 4) Remove the easy-strip conductive layer to:
  - 40 mm from the edge of the cable sheath on wire-screened cable
  - 20 mm from the edge of the cable sheath on foil-screened cable

The yellow stress grading mastic is stretched to 10 times original length. Apply it onto approximately 3 mm of the easy-strip conductive layer and max. 10 mm of the XLPE-insulation. It should be homogenous and shaped like a cone - see fig.2.

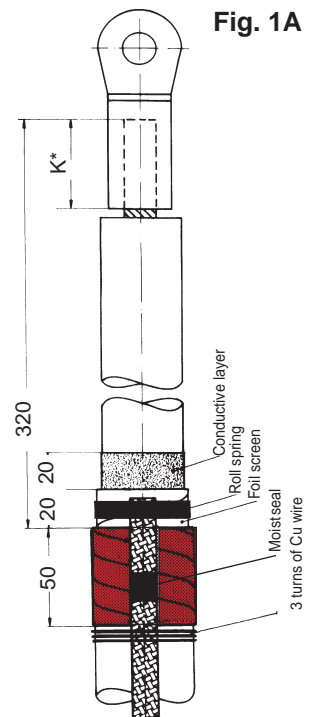
Remove the XLPE insulation from the conductor according to the depth of the cable lug (\*K).

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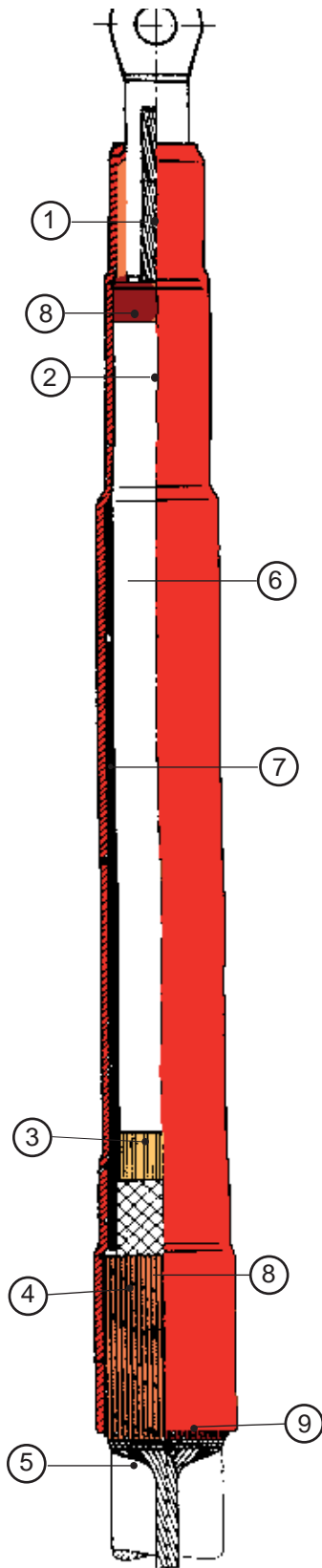
Fig. 2

Fig. 1A



\* Depth of cable lug

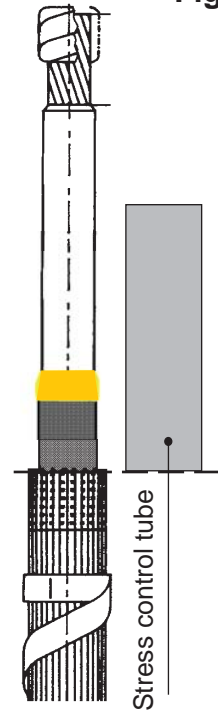
**Fig. 3**



- 5) Align the black stress control tube with the edge of the cable sheath and shrink. See fig. 4.
- 6) Assemble the cable lug, remove any burrs and excess grease.
- 7) Clean the cable lug and apply red sealing mastic + 10 mm of the XLPE insulation to obtain min. 12 mm diameter.
- 8) Place the red antitrack tube so that the red mastic is covered in both ends and shrink.
- 9) Wind 2 of the screen wires around the cable at the edge of the red antitrack tube.
- 10) For outdoor application, 3 pcs. of creepage extension sheds should be applied onto each end termination as shown in fig. 5.

- ① Conductor Cu or Al
- ② XLPE insulation
- ③ Yellow stress control mastic
- ④ Screen wires
- ⑤ Cable sheath
- ⑥ Stress control tube
- ⑦ Red antitrack tube
- ⑧ Red sealing mastic
- ⑨ Screen wire winding

**Fig. 4**



**Fig. 5**

