



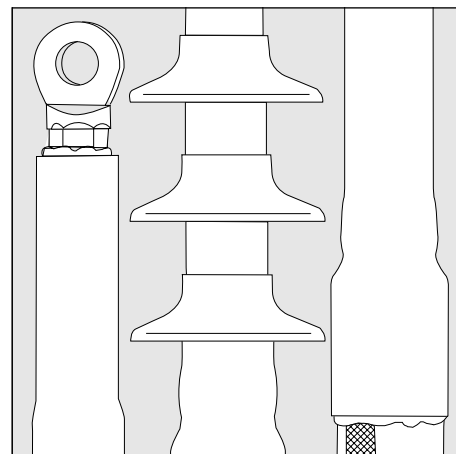
TE's Raychem Cable Accessories

Scan QR codes and get video support.



This installation manual contains video information.

In the case of any inconsistency, the written
installation instructions shall prevail.



Installation Instructions EPP-0956-1/19

**Terminations for
Screened Single Core
Polymeric Insulated
Cables for 36 kV & 42 kV
without Armour**

Type: IXSU-F / OXSU-F

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Before Starting

Check to ensure that the kit you are going to use fits the cable.

Refer to the kit label and the title of the installation instructions.

Components or working steps may have been modified since you last installed this product.

Carefully read and follow the steps in the installation instructions.

General Instructions

Use a propane (preferred) or butane gas torch.

Ensure the torch is always used in a well-ventilated environment.

Adjust the torch to obtain a soft blue flame with a yellow tip.

Pencil-like blue flames should be avoided.

Keep the torch aimed in the shrink direction to preheat the material.

Keep the flame moving continuously to avoid scorching the material.

Clean and degrease all parts that will come into contact with adhesive.

If a solvent is used follow the manufacturer's handling instructions.

Start shrinking the tubing at the position recommended in the instruction.

Ensure that the tubing is shrunk smoothly all around before continuing along the cable.

Tubing should be smooth and wrinkle free with inner components clearly defined.

The Information contained in these installation instructions is for use only by installers trained to make electrical power installations and is intended to describe the correct method of installation for this product. However, TE Connectivity has no control over the field conditions which influence product installation.

It is the user's responsibility to determine the suitability of the installation method in the user's field conditions.

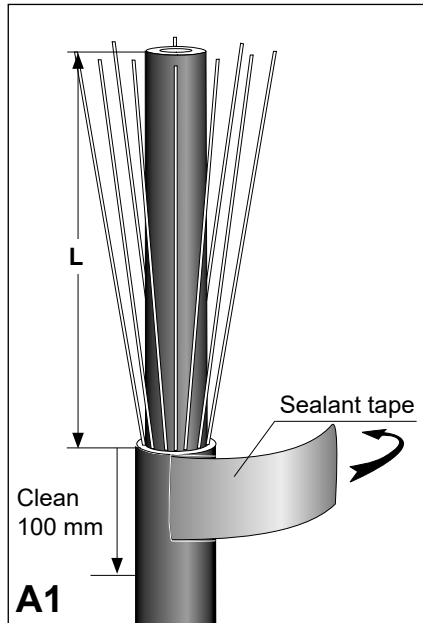
TE Connectivity's only obligations are those in TE Connectivity's standard Conditions of Sale for this product and in no case will TE Connectivity be liable for any other incidental, indirect or consequential damages arising from the use or misuse of the products.

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Cable Preparation

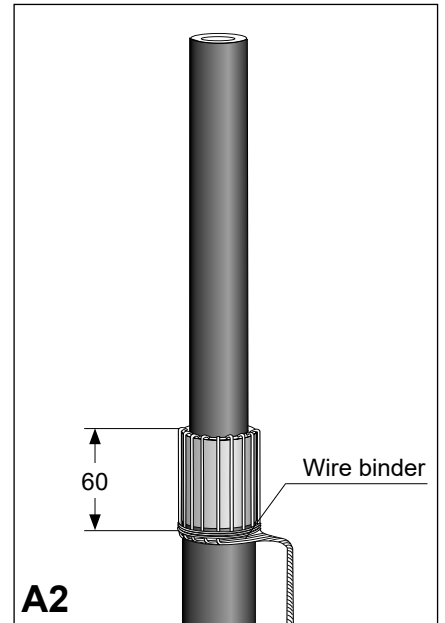
A. Cable with wire shield



Cut the cable to the required length. Remove the oversheath according to dimension **L**, see **Table 1** for crimp lugs. For mechanical lug BLMT see **Table 2**.

Degrease and clean the end of the oversheath for about 100 mm.

Wrap the red sealant tape around the end of the oversheath.



Bend the shielding wires back onto the oversheath. Avoid crossing the individual wires.

Fix the shielding wires with a wire binder 60 mm from the end of the oversheath.

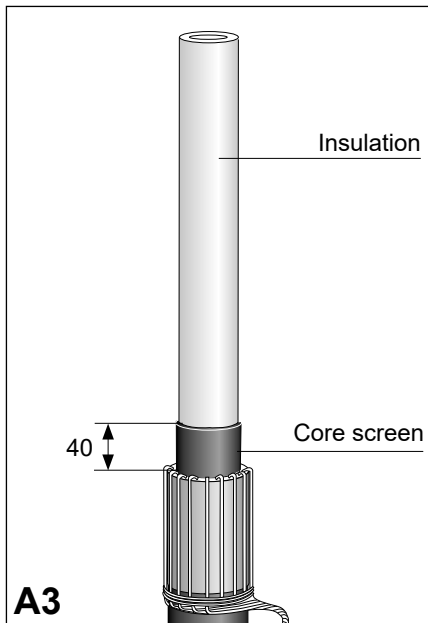
Gather the shielding wires together to form an earth lead.

Table 1 - Crimp Lug

Max. system voltage [kV]	L indoor [mm]	L outdoor [mm]
36	380	440
42	440	500

Table 2 - Mechanical Lug BLMT

BLMT (range mm ²)	25 to 95 L [mm]	35 to 150 L [mm]	95 to 240 L [mm]	120 to 300 L [mm]	185 to 400 L [mm]	500 to 630 L [mm]
36 kV indoor	375	370	370	370	365	360
36 kV outdoor	435	430	425	430	425	420
42 kV indoor	435	430	425	430	425	420
42 kV outdoor	495	490	485	490	485	480



Thoroughly remove the core screen to within 40 mm of the oversheath cut.

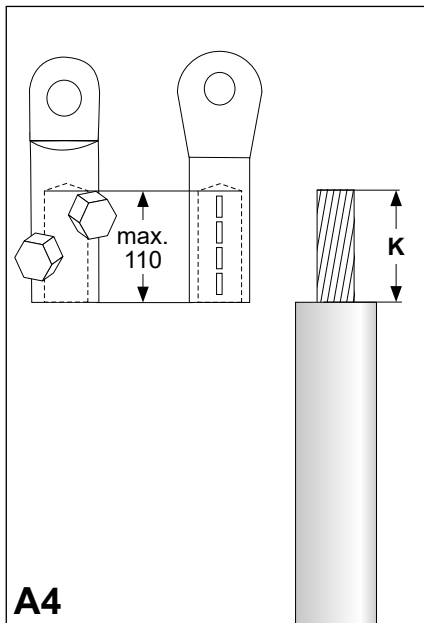
The surface of the insulation should be free from all traces of conductive material.

Smooth out any irregularities.

NOTE

Do not nick the insulation.

Watch video:
(View-0132)



Cut back the insulation according to dimension **K**.

For crimp lug:

K = depth of cable lug barrel hole + 5 mm.

For BLMT:

K = depth of the cable lug + 0 mm.

Install the cable lug.

Degrease and clean the core insulation and the lug.

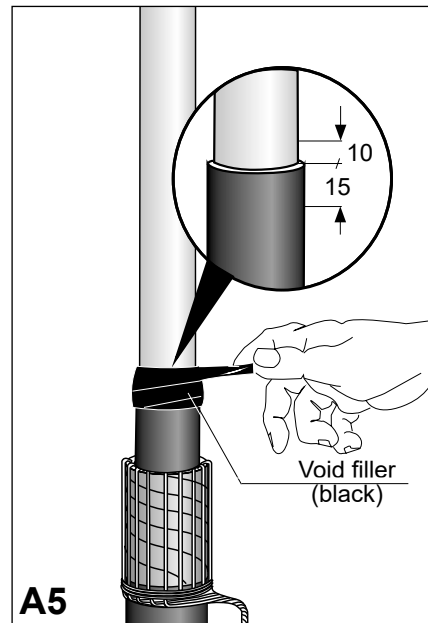
NOTE

Do not use cable lugs with barrel holes deeper than max. 110 mm.

NOTE

Make sure to remove protruding bolt residues from the cable lug.

Watch video:
(View-0135)



Remove the release paper and wrap the void filling strip around the end of the core screen. **Stretch the tape to 50% of its original width.**

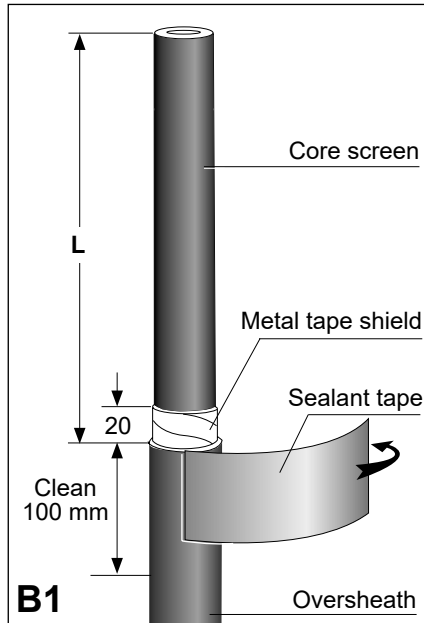
Cover **15 mm of the core screen** and **10 mm of the insulation** (see detail and video information).

Watch video:
(View-0133)



Cable Preparation

B. Cable with metal tape shield

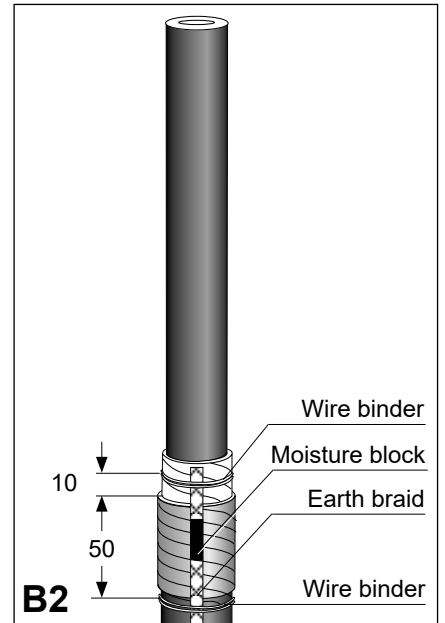


Cut the cable to the required length. Remove the overshath according to dimension **L**, see **Table 3** for crimp lugs. For mechanical lug BLMT see **Table 4**.

Remove the metal tape shield to within 20 mm of the overshath cut.

Degrease and clean the end of the overshath for about 100 mm.

Wrap the sealant tape (red) around the end of the overshath.



Bind and solder the earth braid to the metal tape shield (or attach the earth lead by any other equivalent method).

Fill the earth braid with solder to form a 30 mm moisture block 20 mm from the overshath end.

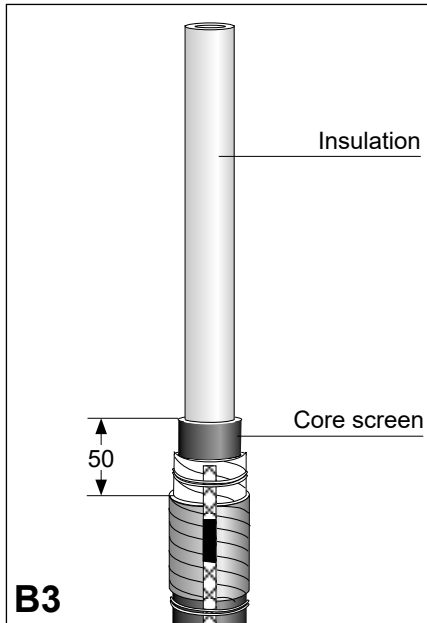
Tie the earth braid with a wire binder to the overshath directly below the sealant tape.

Table 3 - Crimp lug

Max. system voltage [kV]	L indoor [mm]	L outdoor [mm]
36	390	450
42	450	510

Table 4 - Mechanical lug BLMT

BLMT (range mm ²)	25 to 95 L [mm]	35 to 150 L [mm]	95 to 240 L [mm]	120 to 300 L [mm]	185 to 400 L [mm]	500 to 630 L [mm]
36 kV indoor	375	370	370	370	365	360
36 kV outdoor	435	430	425	430	425	420
42 kV indoor	435	430	425	430	425	420
42 kV outdoor	495	490	485	490	485	480



Thoroughly remove the core screen to within 50 mm of the oversheath cut.

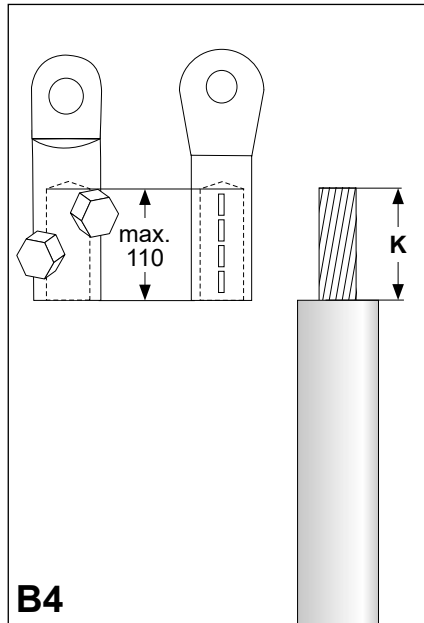
The surface of the insulation should be free from all traces of conductive material.

Smooth out any irregularities.

NOTE

Do not nick the insulation.

Watch video:
(View-0132)



Cut back the insulation according to dimension **K**.

For crimp lug:

K = depth of cable lug barrel hole + 5 mm.

For BLMT:

K = depth of the cable lug + 0 mm.

Install the cable lug.

Degrease and clean the core insulation and the lug.

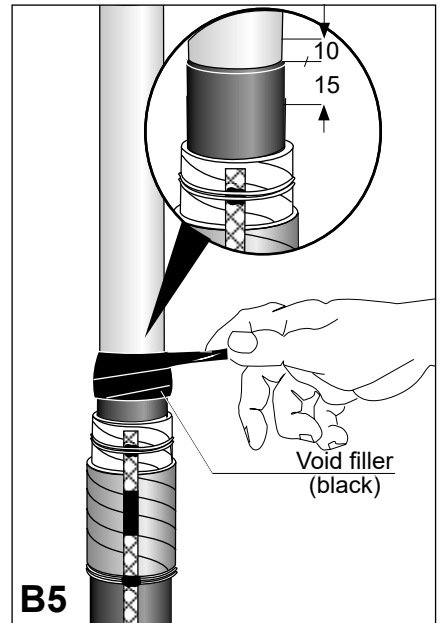
NOTE

Do not use cable lugs with barrel holes deeper than max. 110 mm.

NOTE

Make sure to remove protruding bolt residues from the cable lug.

Watch video:
(View-0135)



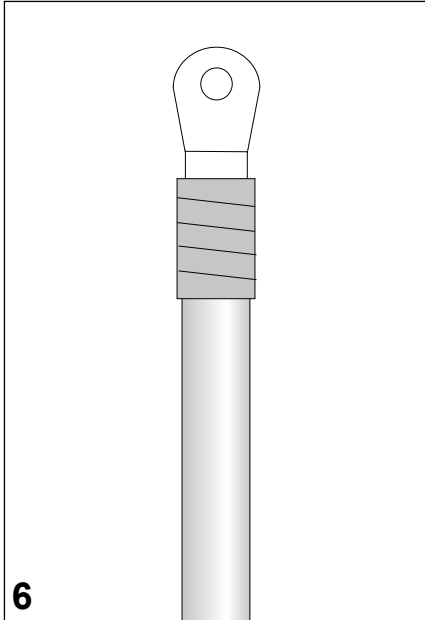
Remove the release paper and wrap the void filling strip around the end of the core screen. **Stretch the tape to 50% of its original width.**

Cover **15 mm of the core screen** and **10 mm of the insulation** (see detail and video information).

Watch video:
(View-0133)



Completion of Termination



Shim the cable lug barrel:

Use additional red sealant tape to shim the cable lug barrel for the following voltage levels and cross sections (only for crimp lug):

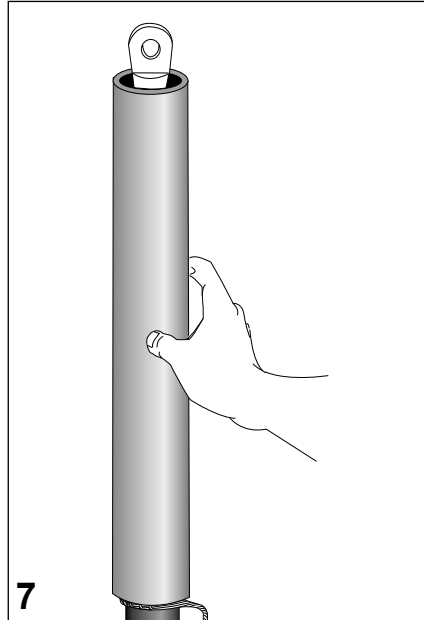
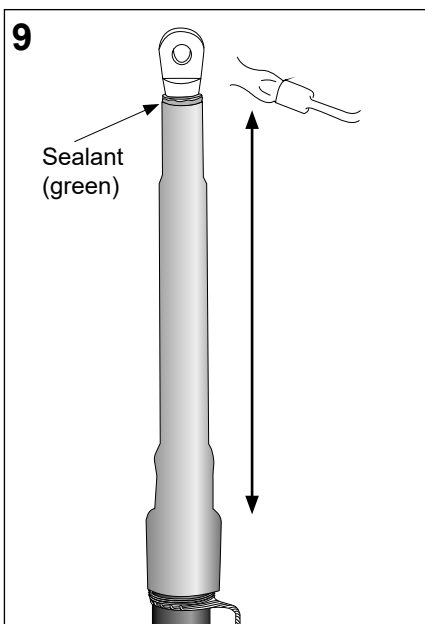
36 kV: 35 - 50 mm²

42 kV: 35 - 50 mm²

After installation, the **termination** as well as the **palm** of the cable lug must be post-heated until a **bead of sealant (green)** appears around the top of the tubing.

Allow the termination to cool before applying any mechanical strain.

Indoor termination completed.



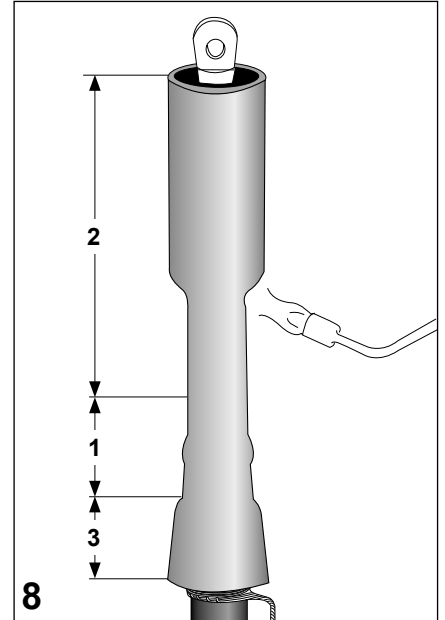
Preheat the cable lug slightly before placing the tubing over the core.

The bottom end of the tubing should be level with the wire binder.

For outdoor terminations:

Shrink the skirts into place at the position shown in the drawings on the back page. Start with the first skirt in the lowest position.

Watch video:
(View-0137)

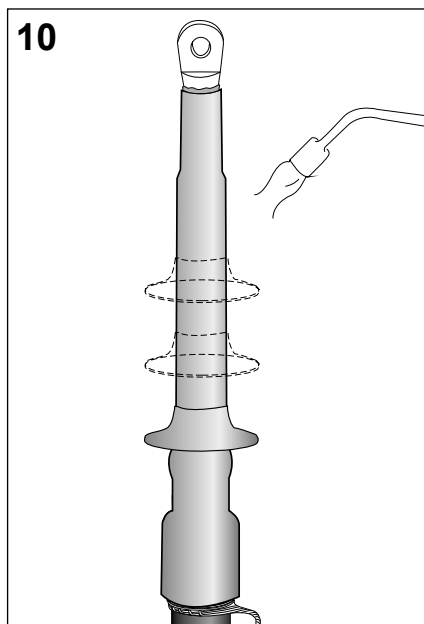


Shrink the tubing down starting at the screen cut (1) using a **soft yellow flame**. Heat the area well but avoid scorching of surface.

Continue shrinking towards the cable lug (2).

Finally shrink down the bottom end of the tubing (3). The numbers in the drawings indicate the shrinking sequence.

Watch video:
(View-0134)

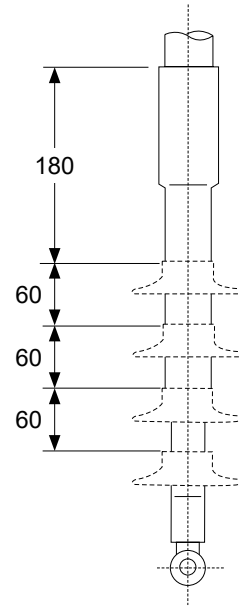
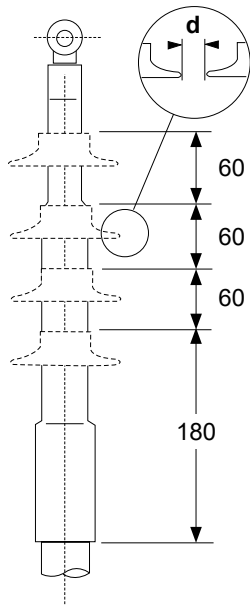


Please dispose of all waste according to environmental regulations.

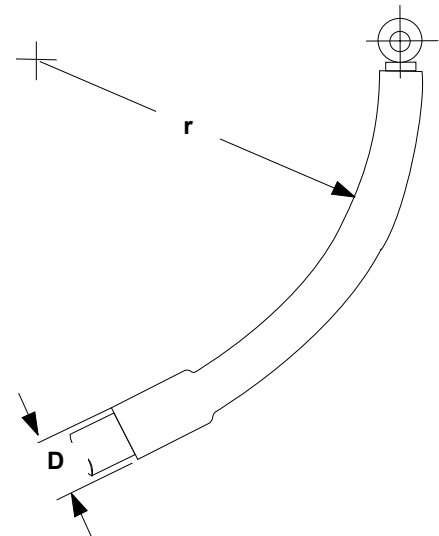
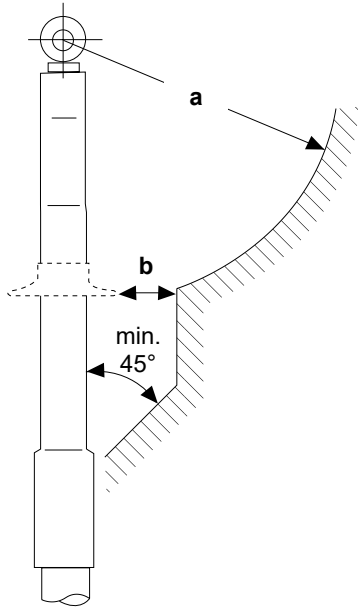


Number of skirts per core		
kV	Indoor	Outdoor
36	0	4
42	0	4

Skirt position for reversed installation



Minimum bending radius and clearances



Min. clearances		Max. system voltage in kV	
		36	42
a	Air clearance	as for local specifications	
b	ph/ph and ph/ground in mm	35	45
d	Between skirts in mm	25	35
r	(min. bending radius) = 15 x D		