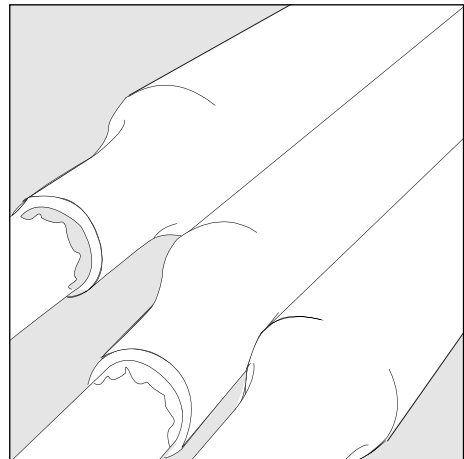




## **TE's Raychem Cable Accessories**



### **Installation Instruction EPP-0166-9/05**

**Joints for Screened  
Single Core Polymeric  
Insulated Airfield  
Lighting Cables  
12 kV without Armour**

**Type: EA-  
KJ/12A 1XU-1XU**

To view the TE Energy website:



**Tyco Electronics Raychem GmbH**  
a TE Connectivity Ltd. Company  
Finsinger Feld 1  
85521 Ottobrunn/Munich, Germany  
Tel: +49-89-6089-0  
Fax: +49-89-6096-345  
[TE.com/energy](http://TE.com/energy)

## **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.

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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.

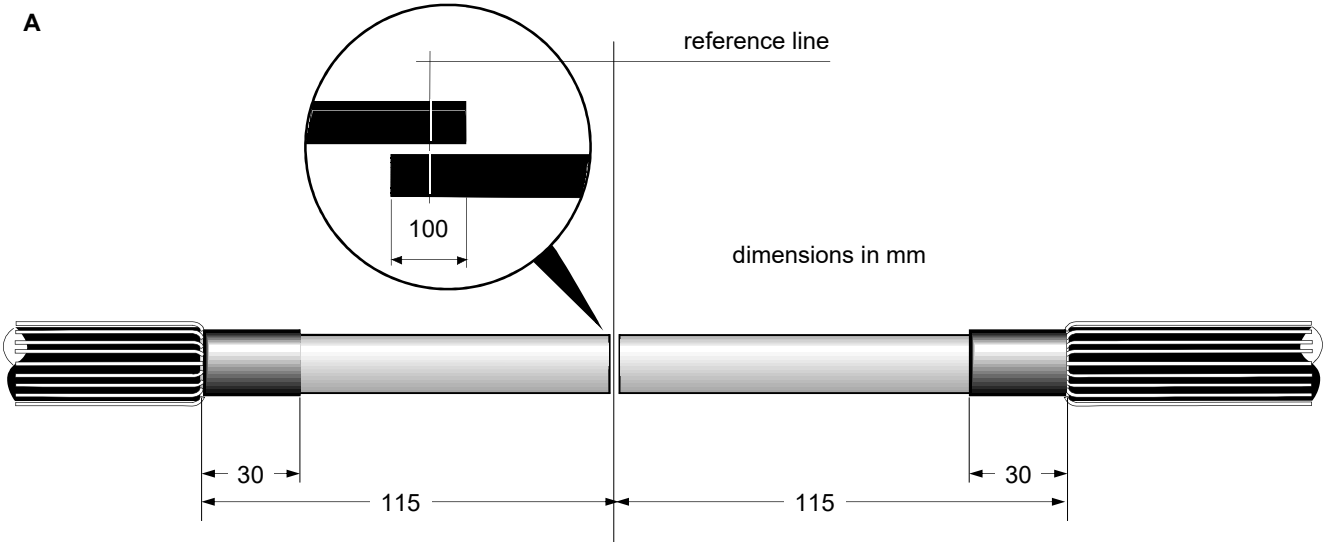
TE Connectivity's only obligations are those in TE Connectivity's standard Conditions of Sale for this product and in no case will TE Connectivity be liable for any other incidental, indirect or consequential damages arising from the use or misuse of the products.

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Cable Preparation

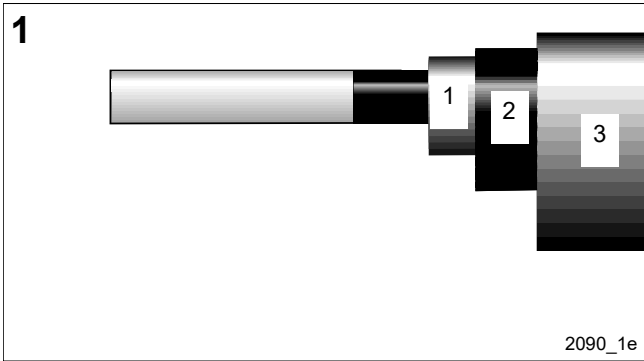
Overlap the cables to be jointed by about 100 mm.  
Mark the reference line (the middle of the overlap).  
Remove the oversheath to the dimension given in drawing,measured from the reference line.  
Clean the remaining oversheath for about 300 mm.  
Bend back the shielding wires onto the oversheath. Cover the sharp wire ends with plastic tape.  
Cut the cores at the reference line. Thoroughly remove the core screen to the dimension given in drawing, so that the insulation surface is free from all traces of conductive material.  
**Note:** Do not use a knife. Use a round file or any other suitable tool to remove the screen. Do not nick the insulation!



Completion of Joint

Slide the combined tubing set and the outer sleeve over one cable end.

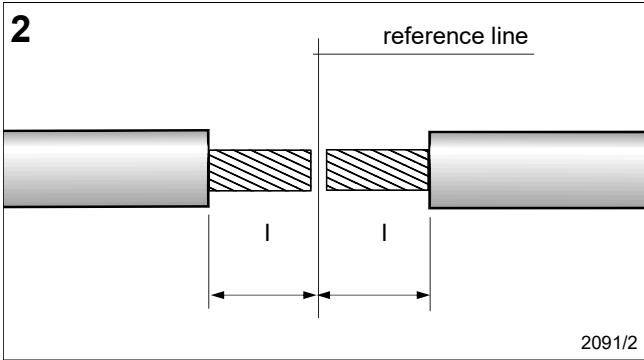
- 1. Stress control tubing (black)
- 2. Screened insulating tubing (black and red)
- 3. Outer tubing (black)



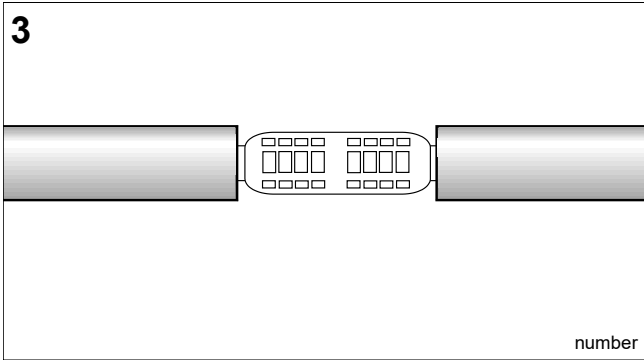
Remove the insulation on all cores to dimension **l = half length of connector**.

Maximum dimensions of connector before installation

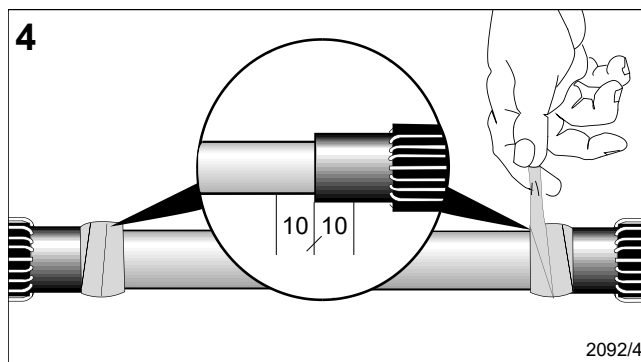
Cross Section	Connector diameter	length
mm <sup>2</sup>	mm	mm
6 - 16	10	50



Joint the conductors by crimping soldering or any other equivalent method. Remove any sharp edges. Clean and degrease the connector and insulation.



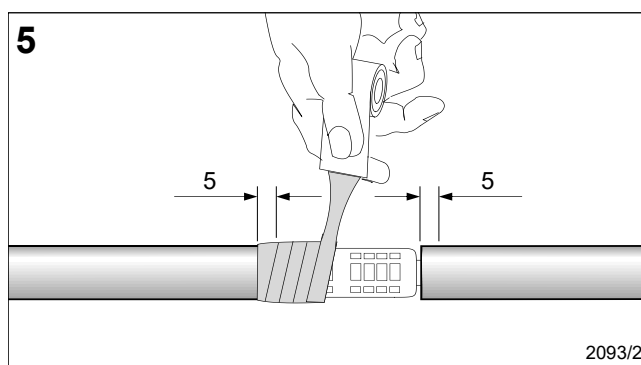
Open the aluminium bag and take one yellow void filling strip with the pointed ends.  
Remove the release papers and wrap the void filler around the core screen on both cable sides, starting 10 mm from the end of the screen cut and continue onto the insulation for 10 mm. Stretch the strip to half of its original width to achieve a fine thin edge.



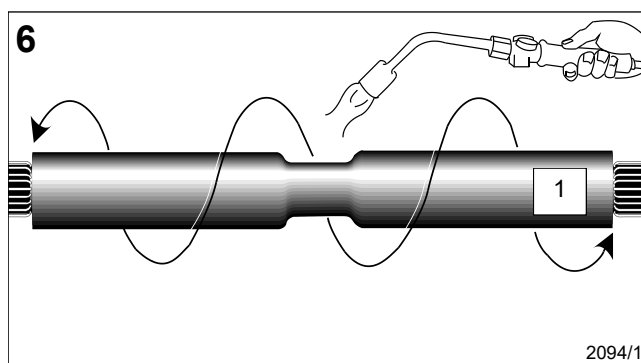
Take a second (third) yellow void filling strip and wrap it around the conductor with a 50% overlap stretching it to about half of its original width.  
Fill up the connector area continuing onto the insulation for not more than 5 mm.

**Note:** Do not use too much void filling tape.

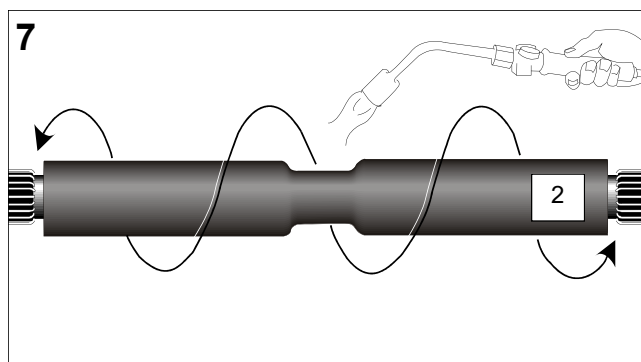
The final diameter should be only slightly greater than the insulation diameter. Smooth out any step between insulation and connector. Ensure a minimum thickness of 2 mm over the connector.



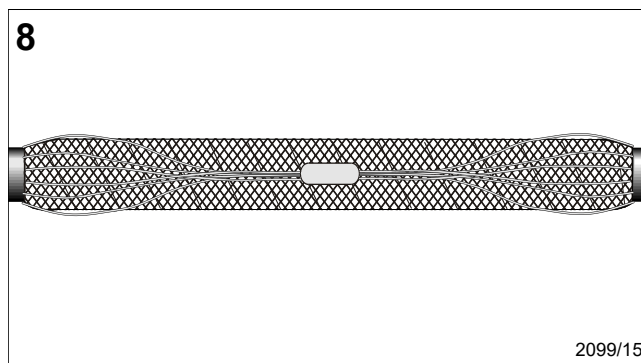
Pull the stress control tubing (black) from the inside of the tubing set and position it centrally over the connector.  
Start shrinking in the centre working towards the ends.  
The tubing should be fully shrunk and wrinkle free.  
Do not prolong shrinking to avoid overheating of joint area.  
Continue immediately with step 7.



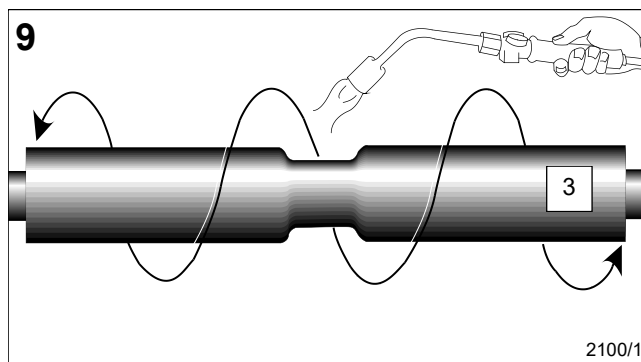
Position the screened insulating tubing (black and red) centrally over the previously installed tubing.  
Start shrinking in the centre working towards the ends.  
The tubing should be fully shrunk and wrinkle free. Allow the joint to cool.



Wrap one layer of copper braid round the joint with a 50% overlap so that the whole joint area is covered.  
Bend the shielding wires back over the joint area.  
Gather the ends of the shielding wires together and connect them on the side of the joint by crimping or any other equivalent method.  
Distribute the shielding wires evenly over the joint area.

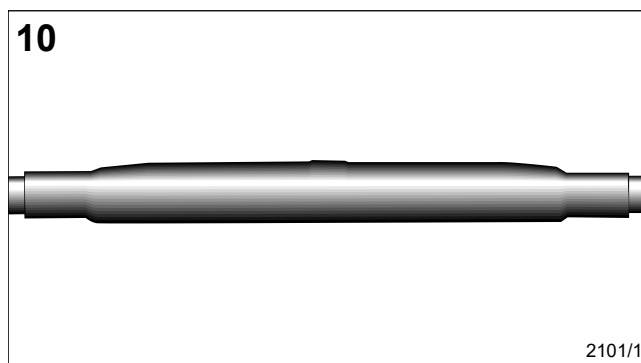


Clean and degrease the ends of the oversheath for a length of about 100 mm.  
Centre the outer tubing (black) over the joint area.  
Start shrinking in the centre, working towards the ends.



**Joint completed.**

Allow the joint to cool before applying any mechanical strain.



**Please dispose of all waste according to environmental regulations.**

