

# TE's Raychem Cable Accessories



Installation Instruction EPP-0089-5/08

Raychem Joint for Screened 3-Core Flexible Cables 3.6 and 7.2 kV with and without Metal Shields

To view the TE Energy website:



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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**

Clean one oversheath end for about 1 m and slide the outer sleeve over it. Remove the oversheath, bedding and fillers to the dimensions shown in drawing **A** (Table1). Position the cables as in drawing **A** with a distance **a** between the ends of the oversheath.

Cables with wire shields: Fold back the shielding wires for about 120 mm on each core.

Match the phases and cut the cores to length. Note: Do not cut the shielding wires (if any).

## A Cables with one earth core



### B Cables with three earth cores



# Table 1

Size of conductor	а	b	C	d	L
mm <sup>2</sup>	mm	mm	mm	mm	mm
10-95	450	300	225	150	half length of
120-185	520	360	260	160	connector max. 30 mm

#### **Core Preparation**

Slide the connector insulating parts over the long core ends.

Remove the core screen and insulation to the dimensions shown in Table 1.

## Table 2

Size of connector	e
mm <sup>2</sup>	mm
10	65
16-185	80



Joint the connectors by crimping or any other equivalent method.

Clean and degrease the insulation and core screen. Wrap semi-conductive tape with a 50 % overlap round each connector area using slight tension. The final diameter should be equal to the insulation diameter.



Position the connector insulating tubing centrally over the connectors. Start shrinking in the centre working towards the ends.



Wrap semi-conductive tape with a 50% overlap round each connector insulating tubing using slight tension. Continue onto the core screen for about 20 mm.







Cables without wire shields

a 50 % overlap round the whole joint area.

## Cables with wire shields

Joint the shield wires by crimping or any other equivalent method.

Relay the cores as far as possible. Wrap copper braid with

Wrap a layer of copper braid with a 50% overlap round each connector area, continuing onto the wire shield for about 20 mm. Relay the cores as far as possible.

Wrap separator tape with a small overlap round the whole joint area.







Smooth out the joint area with black filler folded in half lengthwise.

Abrade, clean and degrease the ends of the oversheath for about 200 mm.

Preheat the oversheath and position the outer sealing sleeve centrally over the joint area. Start shrinking in the centre working towards the ends, following the general instructions.

Joint completed. Allow joint to cool before applying any mechanical strain.

Please dispose of all waste according to environmental regulations.



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