

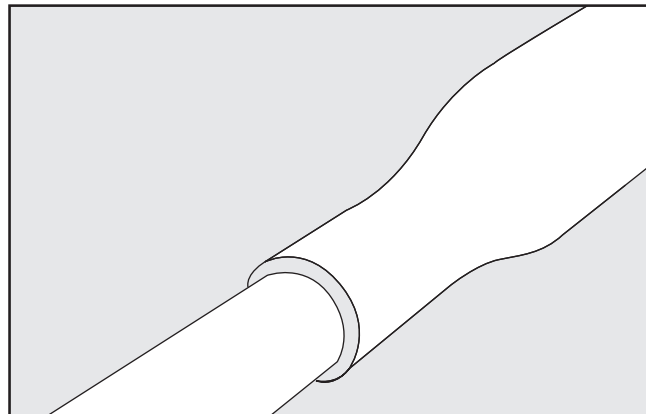


INSTALLATION INSTRUCTIONS

EPP-1261-5/21

CSJA-M

**Cold Shrinkable Joint
for Screened Single Core Polymeric
Insulated Cables without Armour
with Mechanical Connector
24 kV**



TE's Raychem Cable Accessories

Please dispose of all waste according to environmental regulations.



For more information: te.com/energy

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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

- Clean and degrease all parts that will come into contact with adhesive.
- If a solvent is used follow the manufacturer's handling instructions.
- Check core preparation dimensions before installing the joint body.
- Grease the jointing area only with the provided grease.
- Check cable ends for ingress of moisture before starting with cable preparation.
- For easy strip screen layers always use a round file to cut radially through the core screen.

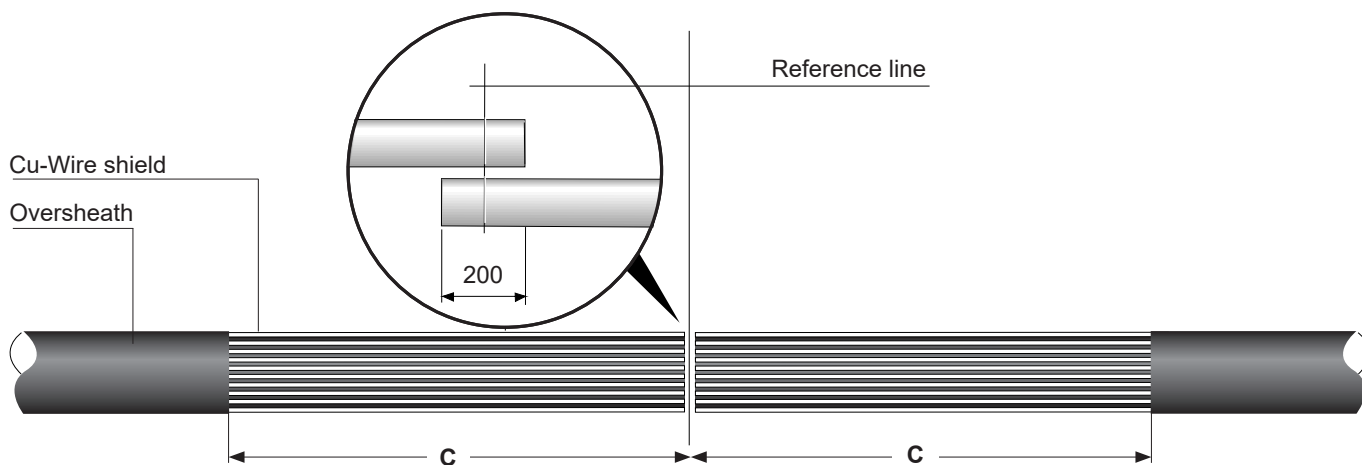
Table 1

Admissible Cable Dimensions for CSJA Joints with Mechanical Connectors

	Diameter	Conductor Ø		Core insulation Ø		Outer cable Ø	
		min	max	min	max	min	max
Kit number	(mm ²)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
CSJA-24C-M1	95 - 240	11.0	19.2	23.5	32.6	30.0	44.0
CSJA-24C-M2	120 - 300	12.5	21.6	24.3	34.6	32.0	46.0

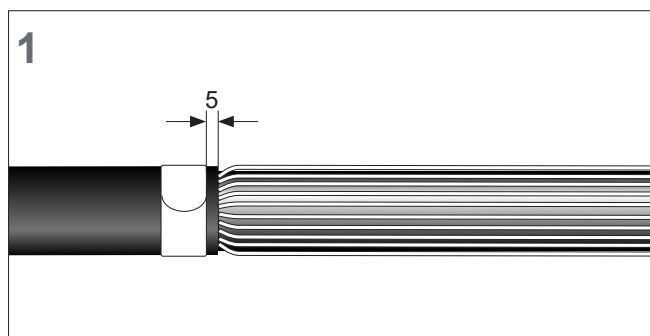
Cable Preparation

Cu-Wire Shield



Overlap the cables by 200 mm.
 Mark the reference line as shown.
 Remove the overshath to dimension **c** (see Table 2), measured from the reference line.
 Clean the remaining overshath for about 600 mm.
 Cut the cores at the reference line.

Apply the **small** roll spring onto the overshath so that it is positioned 5 mm behind the overshath cut.



Bend back the shield wires over the roll spring and trim them to 40 mm.
 Protect the sharp wire ends with adhesive tape.

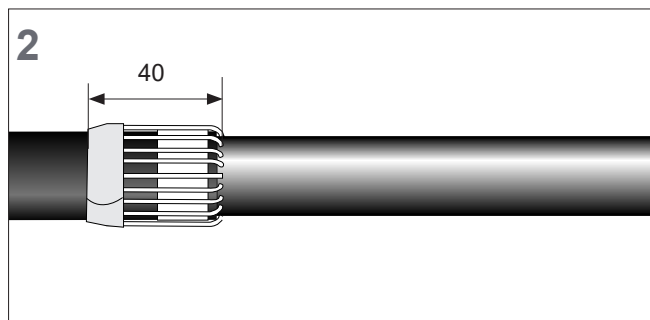
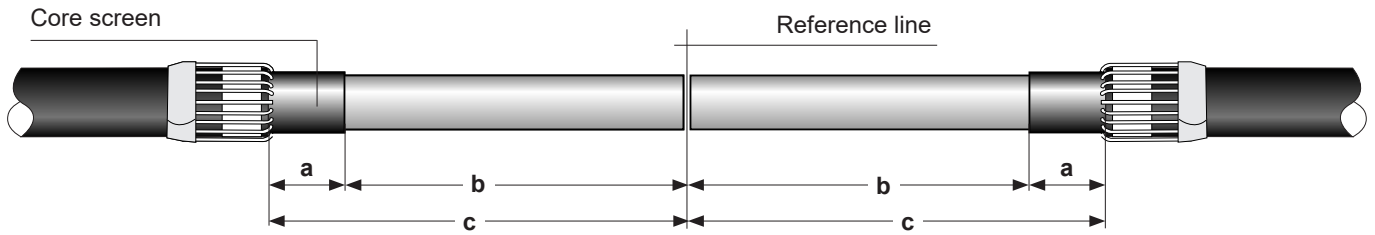


Table 2

Nominal cross-section (mm ²)		Dimensions (mm)		
		c	a	b
Connector 95-240 mm ²	95	215	40	175
	120			
	150	210	40	170
	185			
	240			
Connector 120-300 mm ²	120	210	40	170
	150			
	185			
	240			
	300			



Thoroughly remove the core screen to the dimension given in drawing, so that the insulation surface must be free from all traces of conductive material.

NOTE

Do not nick the insulation! Smooth out any irregularities.

Check cable ends for ingress of moisture before continuing with cable preparation.

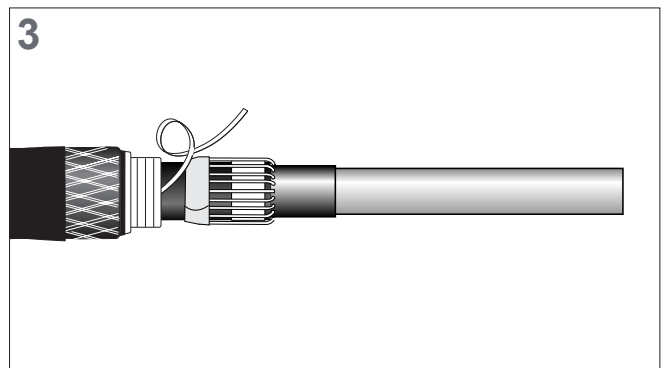
For easy strip screen layers use a round file to cut radially through the core screen.

Do not use a knife!

Completion of Joint

Slide the joint module over the cable end so that the release strip of the spiral holdout points towards the cable end.

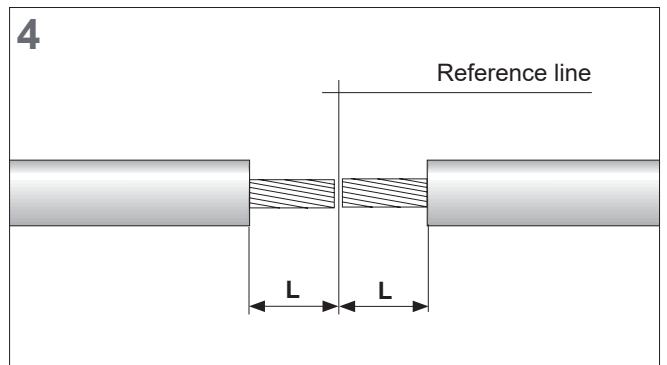
Take care that the release strip of the spiral is positioned with enough clearance to the overshooth.



Remove the core insulation according to dimension L = bore depth of ferrule (see table below).

Table 3

Connector type	Kit range [mm ²]	L [mm]
BSM-95/240	95 - 240	60
BSMB-120/300	120 - 300	65

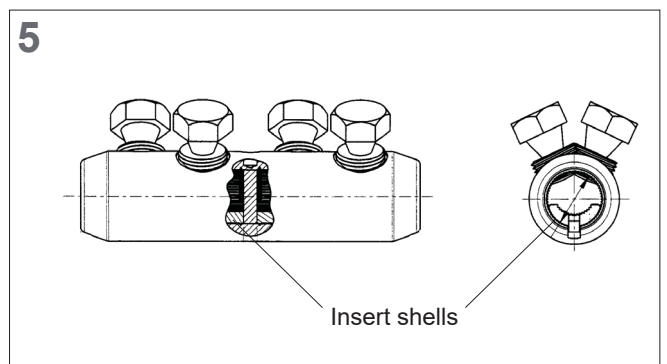


Installation of mechanical connector

The connector is supplied with insert half shells which have to be used on small cross sections.

Check before installation if the conductor can be inserted into the connector with the half shells installed.

In case the conductor can not be inserted, remove the inserts from the connector bore.



Clean and abrade the surface of the exposed conductors. Insert conductors so that the insulation butts up with the end of the connector. Hand tighten the shear bolts so that the connector stays in place. For connectors using more than one shear bolt per side, tighten the bolts alternately and shear them off starting with the outer bolts (see also sequence shown in the drawing).

NOTES

- When a cordless impact wrench is in use the tightening intervals should be in the range of 2 seconds.
- Avoid core bending on smaller cross sections by using a support tool available such as IT-1000-019 or similar.

Smooth out any sharp edges of protruding bolts where appropriate.

It could be possible that the bolt shears but the top is retained in the connector body. In that case unscrew the head of the bolt until it is removed from the connector.

Clean the insulation and the connector area with a cleaning wipe.

Grease the joint area with a thin film of silicone grease. Grease the connector area last.

Use **gloves** when applying the grease.

Position the joint module centrally over the connector.

Position the joint module with distance **d** (see Table 4) from cable overshooth.

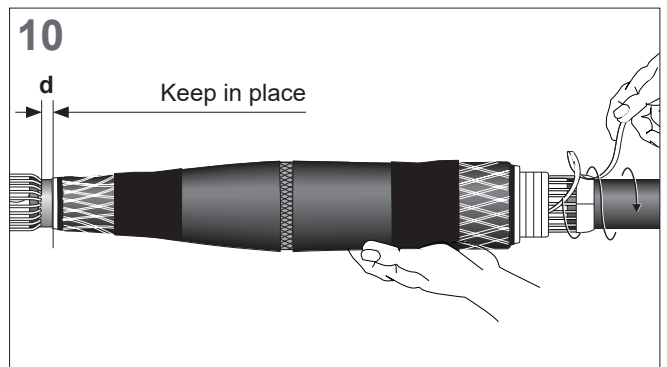
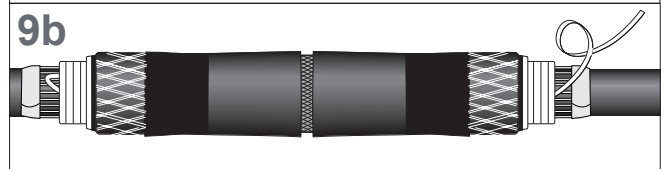
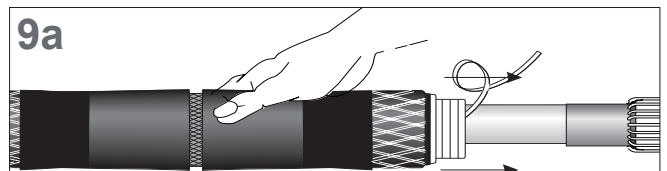
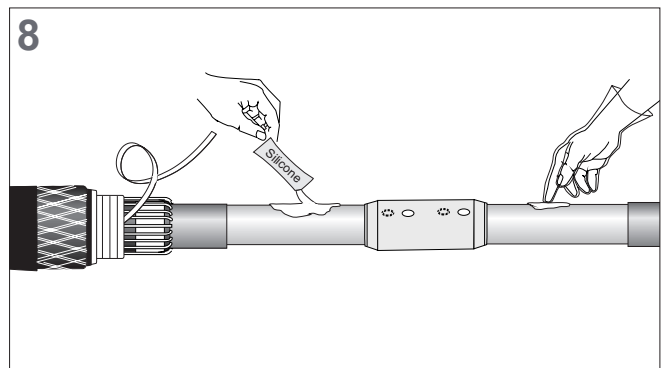
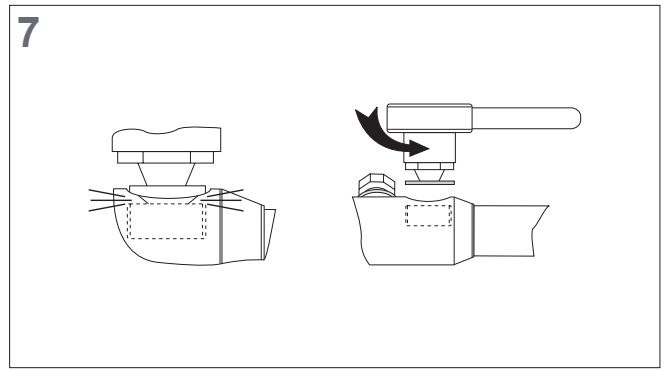
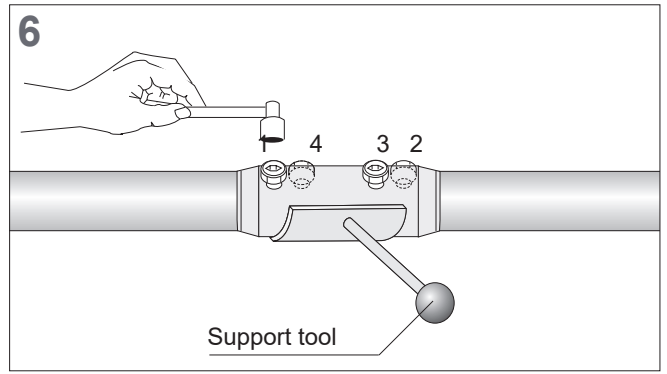
Release the spiral by pulling counterclockwise.

Check the position of the joint body after you have released 5 turns. In case of misplacement move the joint body to the correct position (see Table 4 ► distance d).

Take care not to twist the cord of the spiral holdout during the release process. The cord of the spiral holdout should always be in line and never be wrapped around the cable.

Table 4

Cross Section [mm ²]	Distance d [mm]
95-120	5
150-300	10

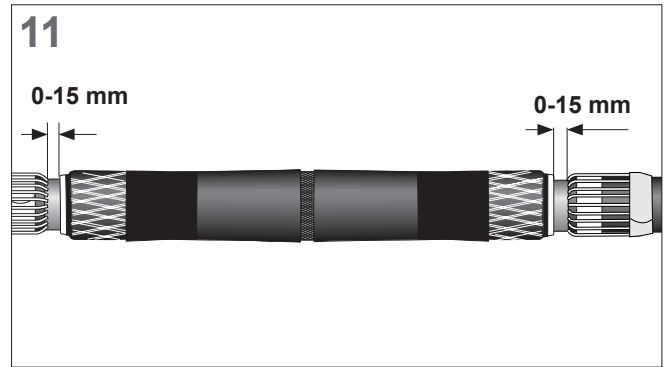


Control the position of the joint module

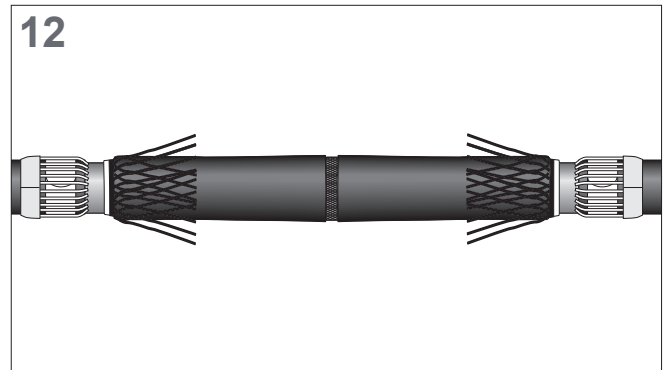
The joint module is correctly installed when the **distance between joint and overheath does not exceed 15 mm.**

The joint module should not **overlap onto the overheath.**

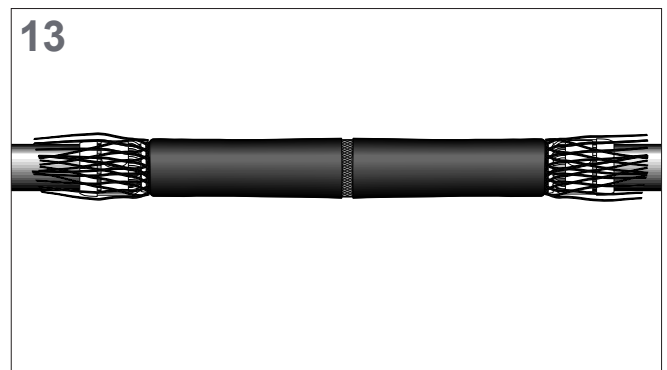
If necessary move the joint body to the correct position as shown.



Remove the adhesive on the copper braid.



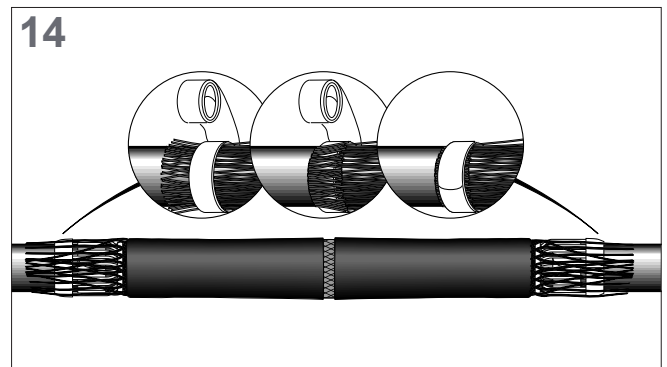
Flip the copper braid back over the cable Cu-wire screen.



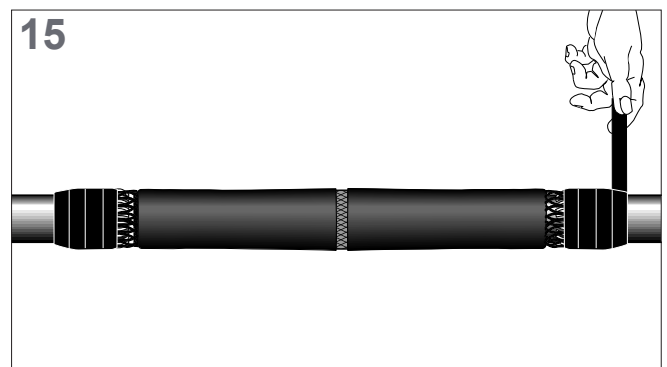
Wrap the **larger** roll spring around the copper braid. Make sure that the large roll spring is placed on the small roll spring.

Bend back the end of the copper braid after the installation of the second wrap of the roll spring (see details).

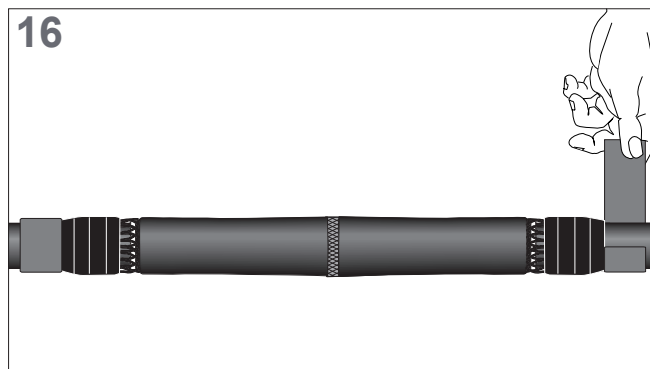
After installation, twist the large roll spring in order to get a good electrical contact!



Apply at least three layers of PVC tape over the roll spring. Make sure that every sharp edge is covered by PVC tape.



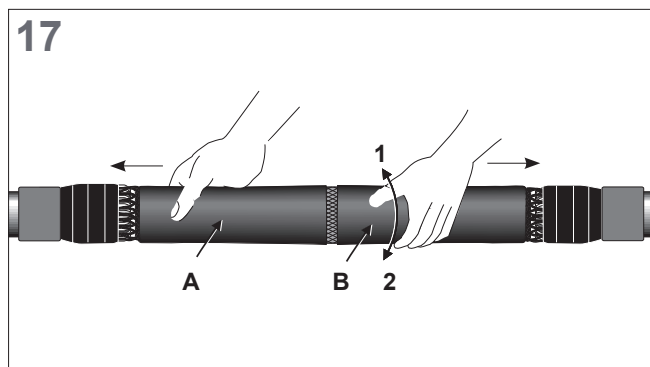
Wrap one strip of grey mastic onto every cable sheath next to the PVC tape, as shown in the drawing.



Clean the surfaces **A + B** accurately.

Move the re-jacketing sleeve rotationally (**1 + 2**) in order to make them free to move.

Flip back the sleeves towards the cable jacket.



Remove the red plastic mesh.

Joint completed.

