

# JTS1...W-CS

SINGLE CORE HEATSHRINKABLE

STRAIGHT THROUGH JOINT

INSTALLATION INSTRUCTION IM2219I

TYPE OF CABLE: Solid insulation (XLPE-HEPR)

SECTION: up to 1600 mm<sup>2</sup> Cu/Al

TYPE OF SCREEN: Copper wires

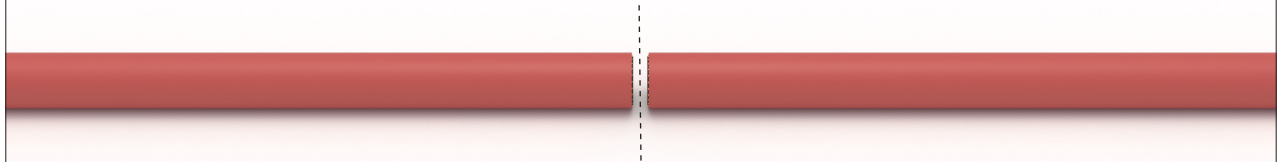
VOLTAGE: U<sub>max</sub> 24 kV





## 1.1

Straighten and set cables at the joint position. Determine the centre of the joint and cut the cable. Clean both outer sheaths for 1500 mm.

### CENTER OF THE JOINT



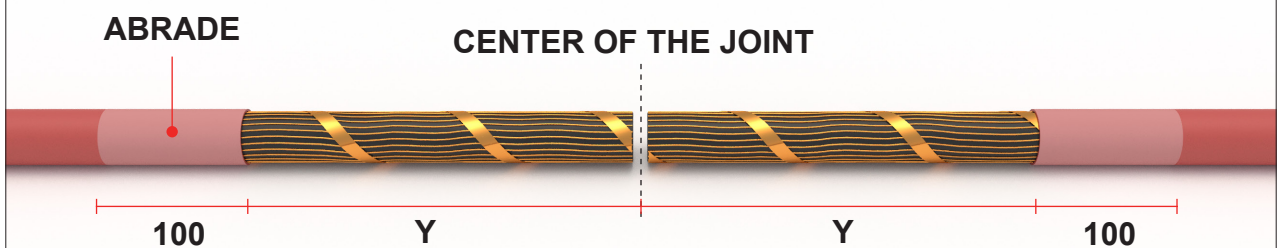
	Length of "Triple wall" tube	 L max	12/17 kV	24 kV
	300 mm		150 mm	110 mm
	350 mm		180 mm	150 mm
	400 mm		240 mm	200 mm
	500 mm		280 mm	270 mm
	600 mm		320 mm	300 mm


## 2.1

Remove the outer sheath for a distance "Y" as listed in the table.

## 2.2

Abrade the outer sheath on both cables for a distance of 100 mm. Clean the abraded area.



	Length of "Triple wall" tube	Y
	300 mm	190 mm
	350 mm	210 mm
	400 mm	240 mm
	500 mm	290 mm
	600 mm	340 mm

### 2.3

Cut the copper wires screen leaving 65 mm from the cut outer sheath apply the adhesive copper tape over the outer sheath.



### 2.4

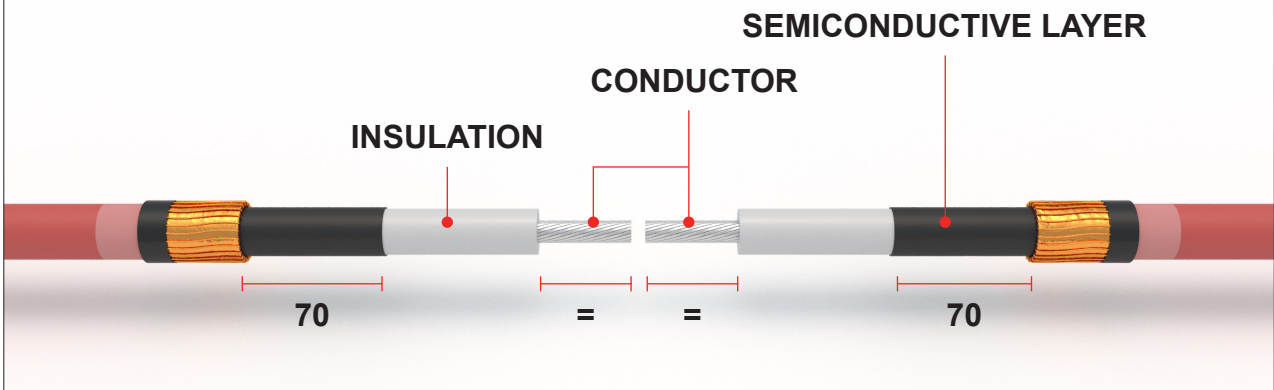
Fold back the screen wires over the adhesive copper tape and fix them with pvc tape.

### 2.5

Remove the semiconductive layer up to a distance of 70 mm from the sheath cut. Take care not to damage the insulation.

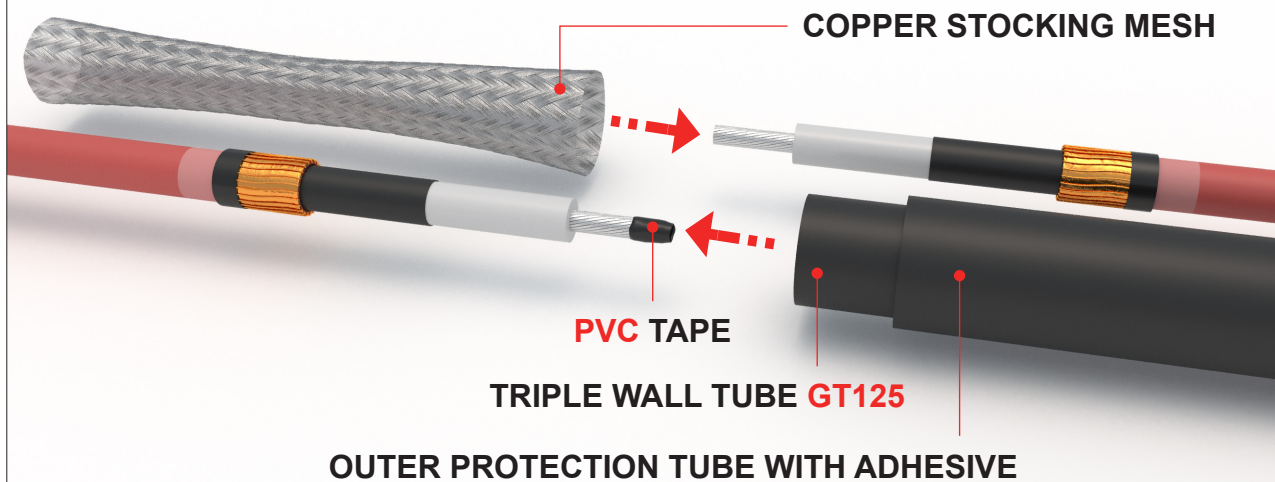
### 2.6

Bare the conductor for a length of inside depth of the connector for mechanical types or, in case of compression ones, for a length of inside depth of the connector + 5 mm. Clean and degrease the conductor.



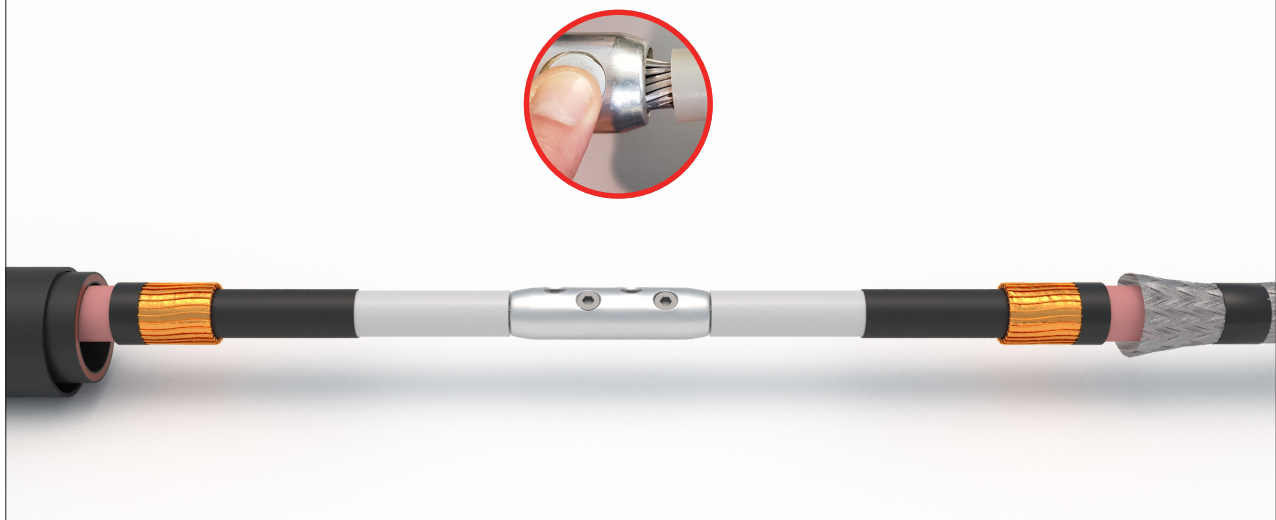
## 2.7

As a protection, wrap few turns of adhesive tape around the conductor end. Slide all the heat shrinkable tubes onto the cable on one side of the joint and the copper stocking mesh on the other side.



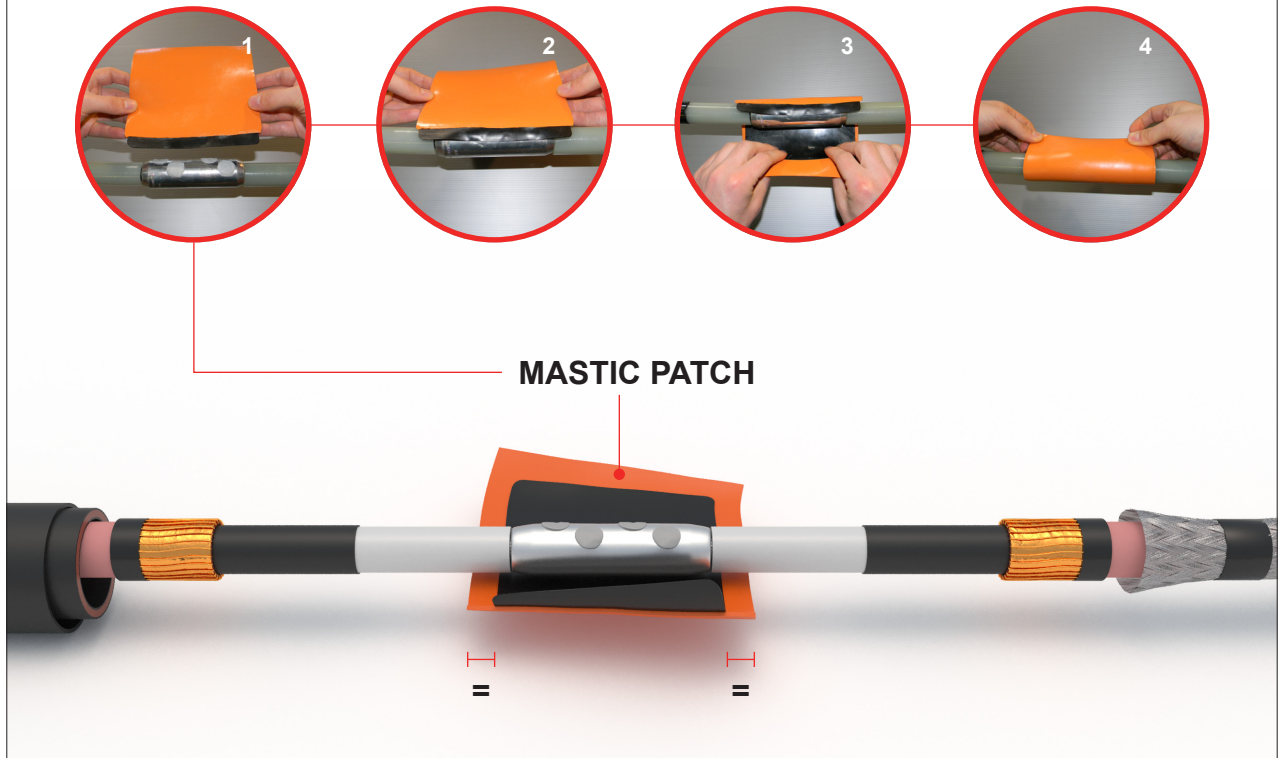
## 3.1

Install the connector onto the cable cores as per the manufacturer's instructions. If using hexagonal compression connectors ensure that any sharp edges and flashing are removed from the connector with a file or abrasive cloth. If using mechanical connectors make sure any indents left after shearing the bolts are filled with "CLAY" mastic mas.



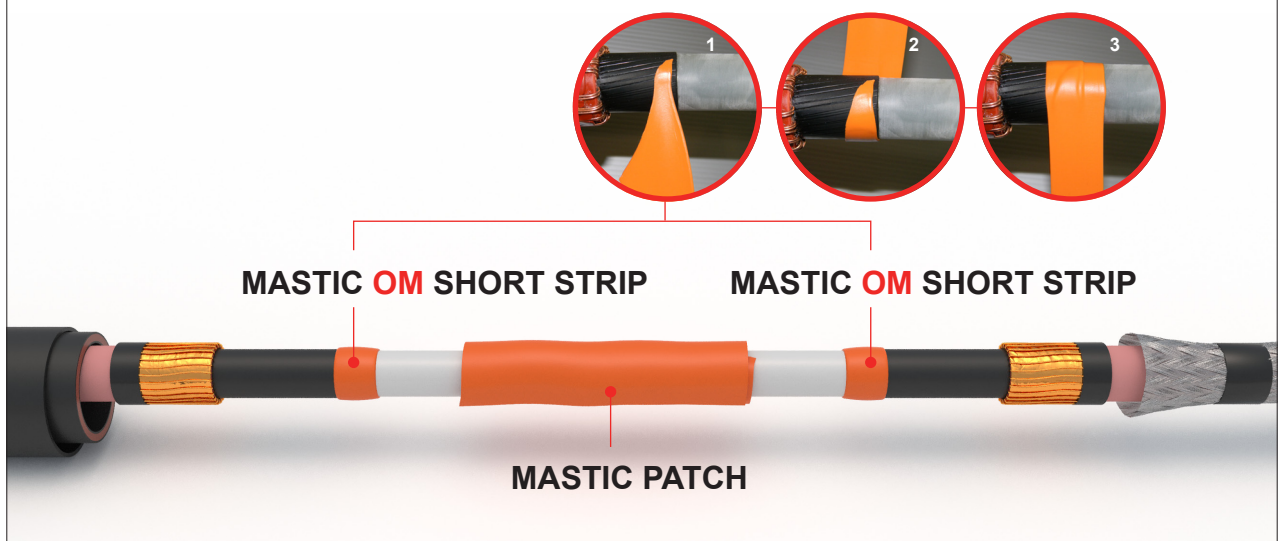
### 3.2

Wrap the mastic patch around the connector area, centering the patch over the connector with equal distance at both sides.



### 3.3

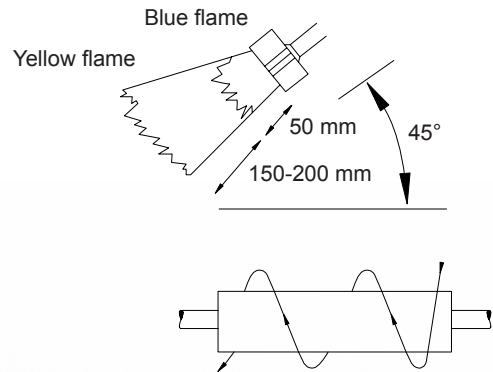
Apply a layer of stress relief mastic "OM" overlapping the semiconductive layer and the insulation of the cable (short mastic strip).



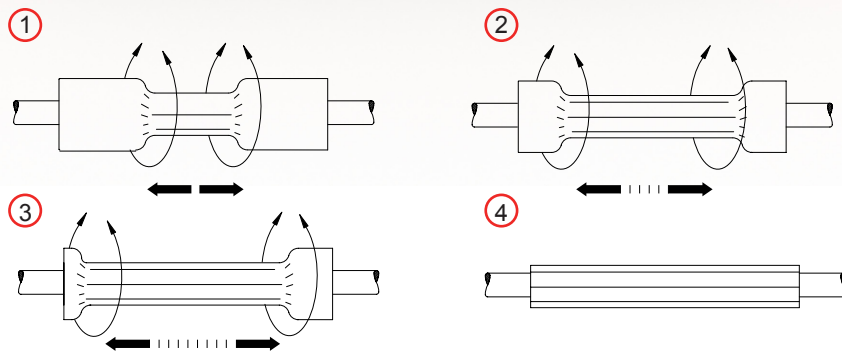
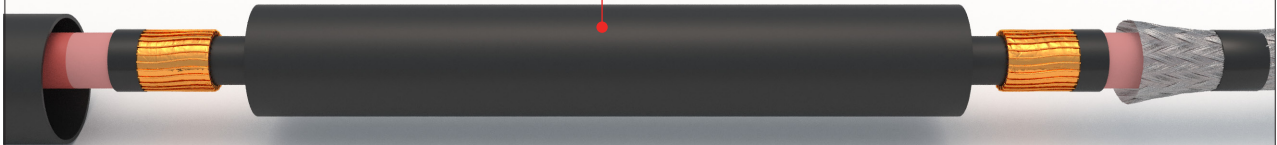


### 3.4

Position the triple wall tube "GT125" in the centre of the joint, pre-heat the tube for a minute and start shrinking from the centre towards to the extremities.



**TRIPLE WALL TUBE GT125**



- To avoid over-heating of the heatshrunkable tube, keep the flame moving continuously and maintain an adequate distance with the angle of 45°.
- Heatshrink the tube from the center until obtaining a smooth surface.
- Continue the heatshrinking for circular sector of 100 mm alternating itself from both sides.
- At the end of the work, the surface of the heatshrunkable tube must be smooth.



### 3.5

Slide and position the copper stocking mesh starting and ending 40 mm over the copper wires screen. Fix the stocking mesh to the copper wires screen with the constant roll force springs. Apply some pvc tape over the constant roll force springs.



### 3.6

Fold back the stocking mesh exceeding towards the centre of the joint. Apply some pvc tape over the edge of stocking mesh.

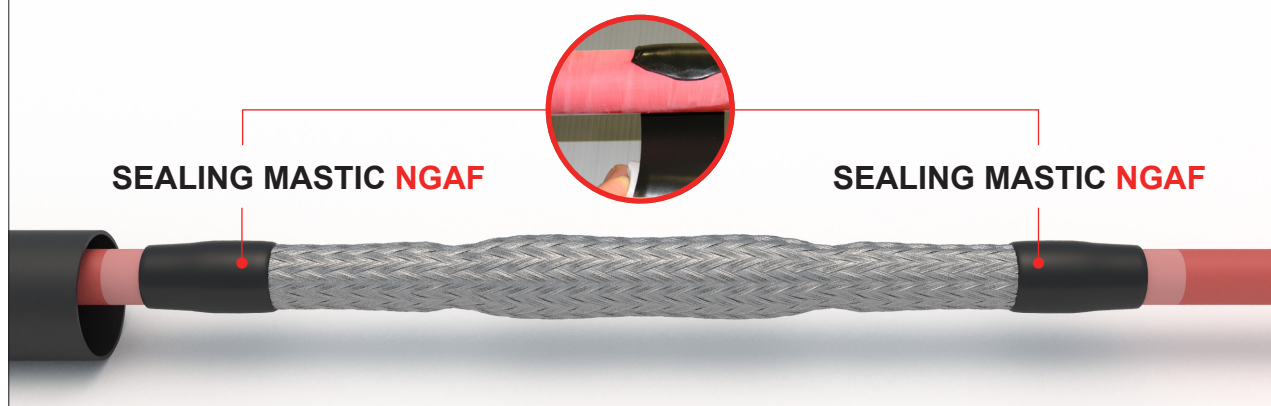


### 4.1

Clean the abraded area of the outer sheath.

### 4.2

Apply a layer of sealing mastic "NGAF," to the ends of the cable sheath. Starting over the constant force spring and extending onto the cable sheath.

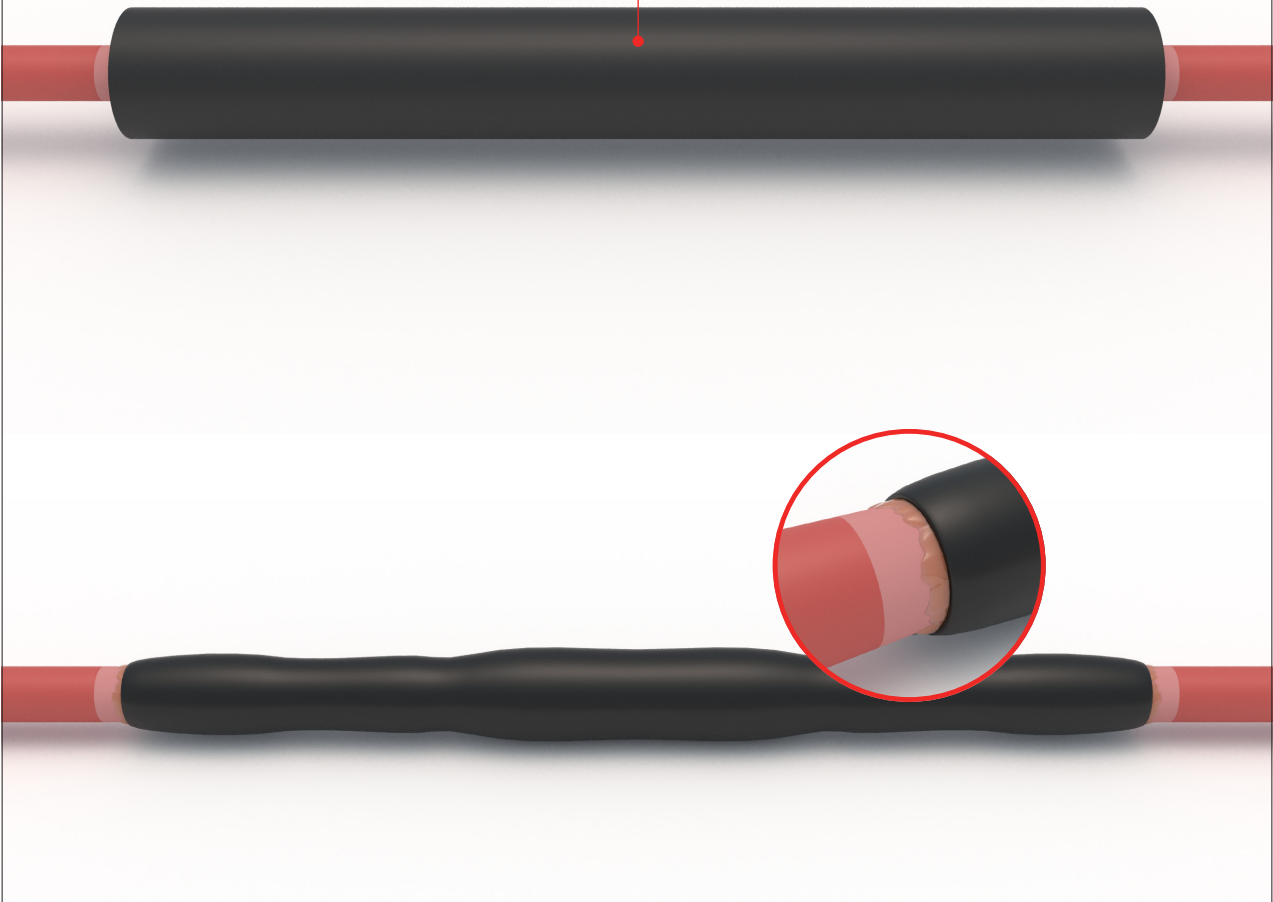


#### 4.3

Position the outer protection tube over the centre of the joint and start shrinking from the centre towards the ends.



#### OUTER PROTECTION TUBE WITH ADHESIVE



#### 4.4

The joint is complete. Allow to cool before moving.





Adjust torch to give a soft blue flame with yellow tip.  
Heatshrink tubes uniformly avoiding wrinkles along the surface.  
Keep the flame moving continuously and maintain adequate distance to avoid over heating.

This product should be installed by competent personnel familiar with electrical equipment and safe operating practices. Parts contained in this kit should be visually inspected for possible damage, and installed in accordance with these instructions. These instructions are not intended as a substitute for adequate training and experience.



Please dispose of all waste according to environmental regulations.

The company reserves the right to alter without notice the information contained in this installation manual.

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