

# Assembly instructions

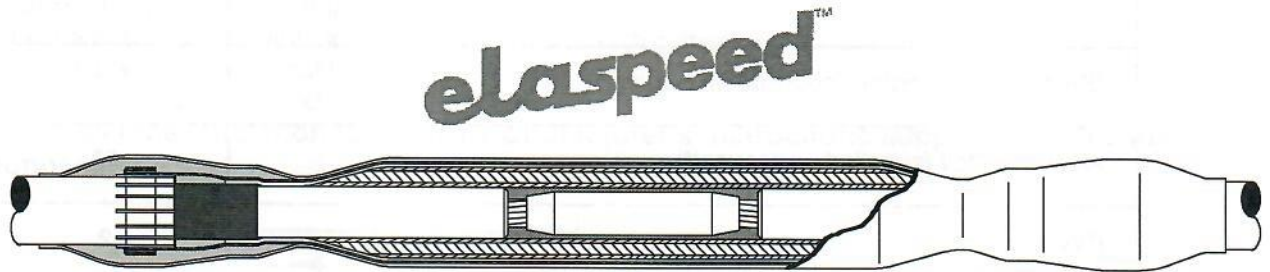
N° 2790F

Part number : 112 625 R

Page 1/7

## EPJMe/EC-1C-24-F-T3 C1.2

### STRAIGHT THROUGH JOINT WITH SHEAR BOLT CONNECTOR



#### USES AND CHARACTERISTICS

Voltage  $U_m$  : 12/20 (24) kV

| Cable type           | Cable core          |
|----------------------|---------------------|
| Synthetic insulation | Copper or Aluminium |

|                  | Cross section (IEC 502)  |
|------------------|--------------------------|
| EPJMe/EC-1C-24-F | 95 - 240 mm <sup>2</sup> |

The proper use or installation of this product requires the skills and expertises of a licensed electrician. The onus is on the user to check that the accessories suits the foreseen use and that the real using conditions allow the proper conditions. The components of this package have to be checked before using. The fitter must follow the assembly instruction and he has to use the suitable equipment and tools. This assembly instruction does not substitute for training session, or expertise about security orders.

Prysmian Câbles et Systèmes France

Usine de GRON  
Z.I. de GRON - Rue du Port au Vin - BP 316  
89103 SENS Cedex  
FRANCE  
Fax : +33 (0)3.86.95.58.95

#### ED AP DE 0005 D

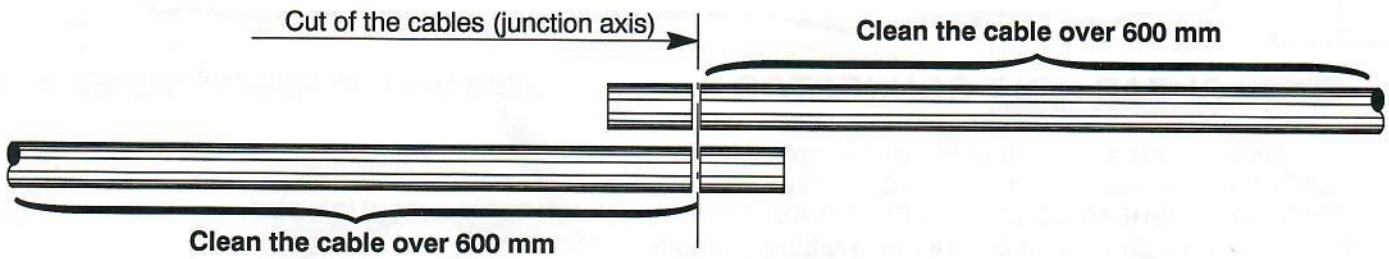
| Index    | Date     | Written   | Approved  |
|----------|----------|-----------|-----------|
| <b>e</b> | 10/03/11 | M. Huchet | M. Robert |
| <b>f</b> | 05/02/18 | M. Huchet | M. Robert |

**MATERIAL LIST**

| <b>Items description</b>                    | <b>quantity</b> |
|---|-----------------|
| Joint body type Fe                          | 1               |
| Red twisting handles                        | 2               |
| PVC Tape E20/10                             | 1               |
| Mastic ME38/0.20m                           | 4               |
| Abrasive sand paper band 0,4m               | 1               |
| Constant force spring                       | 2               |
| Silicone oil (30g)                          | 1               |
| Shear bolt connector (supplied on request*) | 1*              |
| Aluminium foil (supplied on request*)       | 1*              |
| PVC glove                                   | 2               |
| Box   | 1               |
| Assembly instruction and list of components | 1               |

## 1. SETTING OF THE CABLES

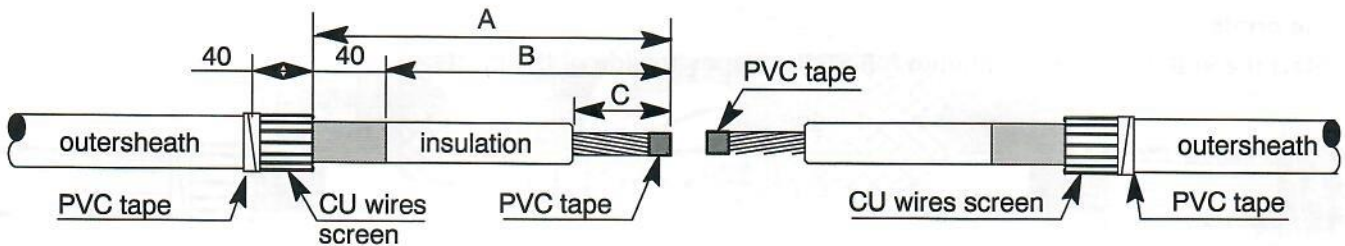
- Train the cables and cut them at the place chosen as the axis of the junction.
- Clean the cable outersheath over **600mm**.



## 2. PREPARATION OF CABLES

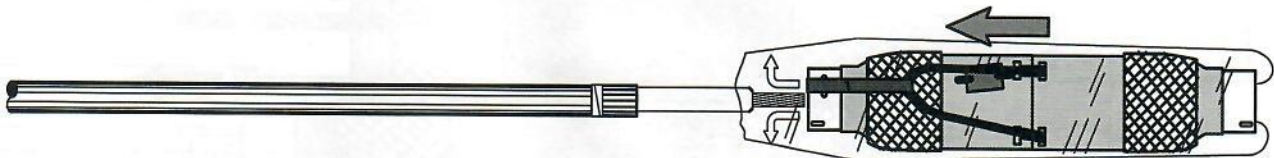
| Prysmian part ref:  | "A" dimension | "B" dimension" |
|---------------------|---------------|----------------|
| EPJMe/EC-1C-24-F-T3 | 185mm         | 145mm          |

- Remove outersheath for distance "A" .
- Clean and abrade outersheath 100mm from outersheath cutback.
- Fold and cut the CU wires at **40 mm** from outersheath cutback..
- Tape CU wires ends to hold down.
- Remove the semi-conducting on B.
- **Remove the insulation (C) as per manufacturer's instructions supplied with the mechanical connector.**

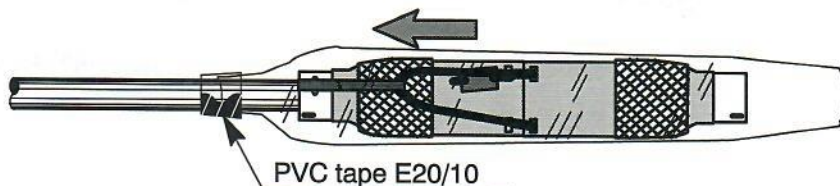


## 3. SLIDING OF THE JOINT

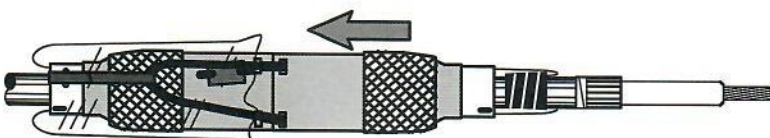
- On one side, take out the end of the plastic sleeve from the carrier tube.
- Slide the joints on the cables until to see the beginning of the core.



- Bind the plastic sleeve end on the cable by turns of PVC tape E20/10 as shown.



- To free the work place, follow the sliding of the joint body until is fully over the plastic sleeve, this made a cleanliness interface between the cables and the inner side of the carrier tube.



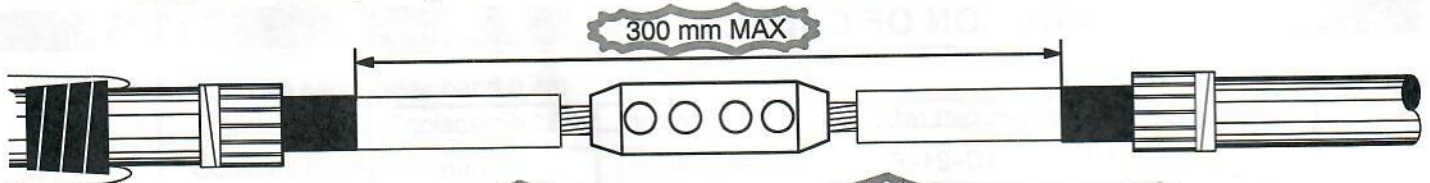
## 4. SETTING OF THE CONNECTOR



Check that the body has been parked on the cable

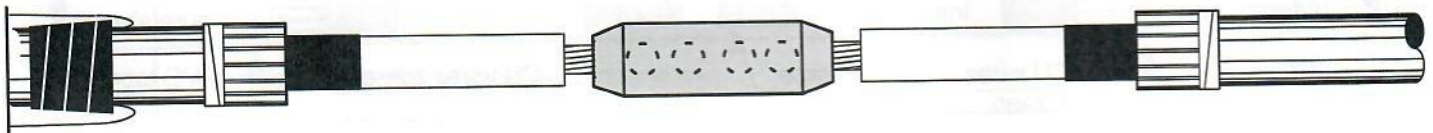
### SHEAR BOLT CONNECTOR

- Only use the shearbolt connector supplied in the in the kit.
- Insert the conductor fully into the connectors.
- **INSTALL SHEAR BOLT CONNECTOR AS PER MANUFACTURER'S INSTRUCTIONS.**
- Check the dimension before the breaking of the fusible screws.
- After connection, straighten the whole, so that cables and connection are in the same axis.



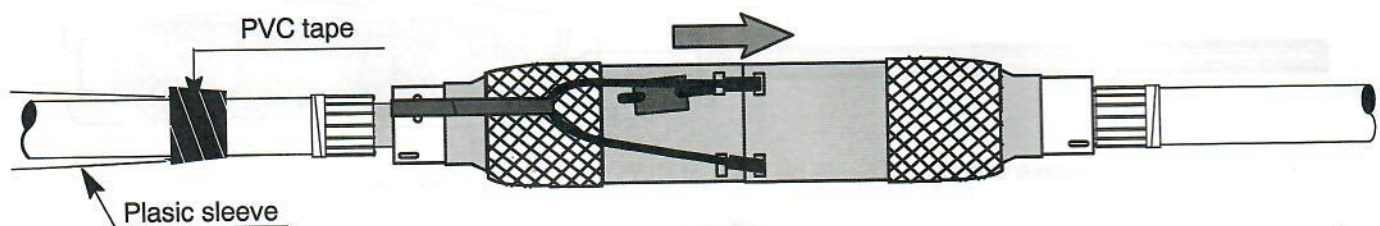
For core connection, pls, respect the steps of installation according to assembly instruction supplied with the shear bolt connector.

- Remove any excess of inhibitor
- Take out the aluminium foils 120x120, progressively remove the interleaf, center and wrap the al. foil over the prints.
- Start the setting of the aluminium foil on the opposite side of the prints.



## 5. INSTALLATION OF THE JOINT BODY

- Clean the insulations of the cables with a proper and dry rag.
- Slide the joint bodie into center area, holding the plastic sleeve on the cables.

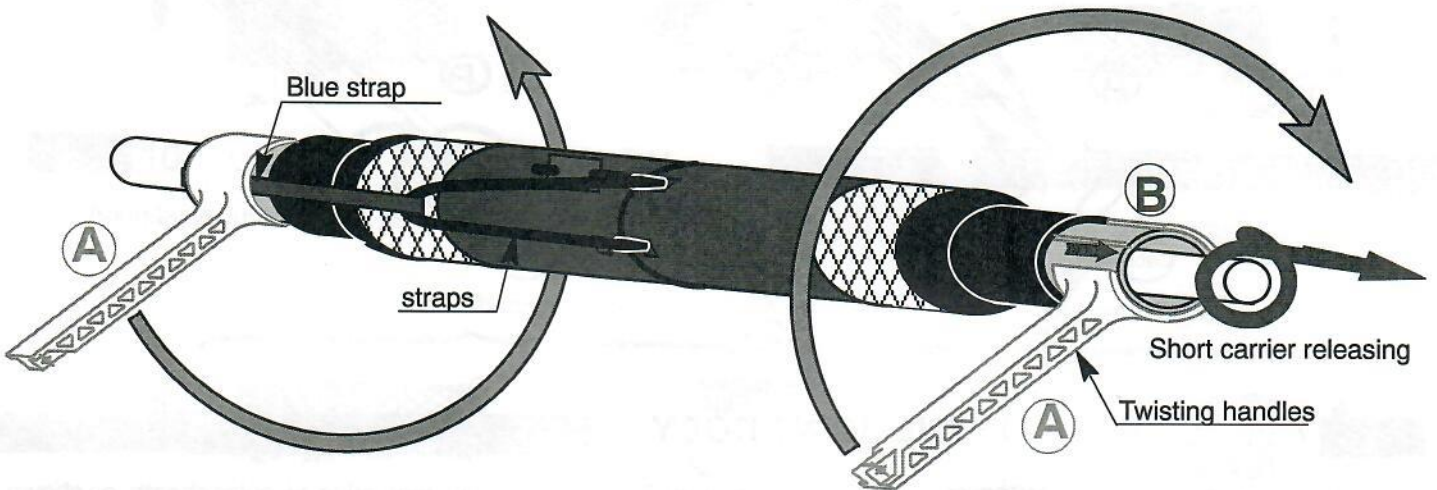


- Remove plastic sleeve.

## 6. SETTING OF THE JOINT BODY

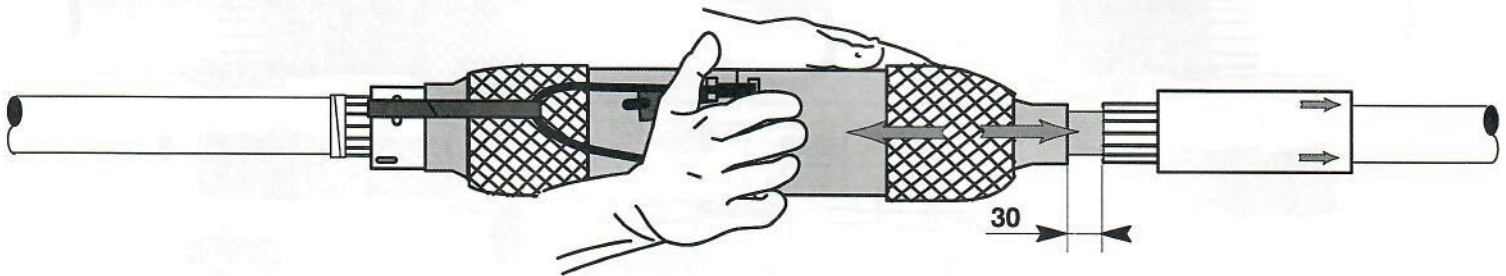
### - RELEASING OF THE SELF-EXTRACT CARRIER (SHORT SIDE) -

- Insert the twisting handles into the slots at each end of the carrier as shown.
- Be sure the joint body is centered from the end of the splice to the edge of neutrals.
- Twist steadily the handles as shown to release the short carrier section.



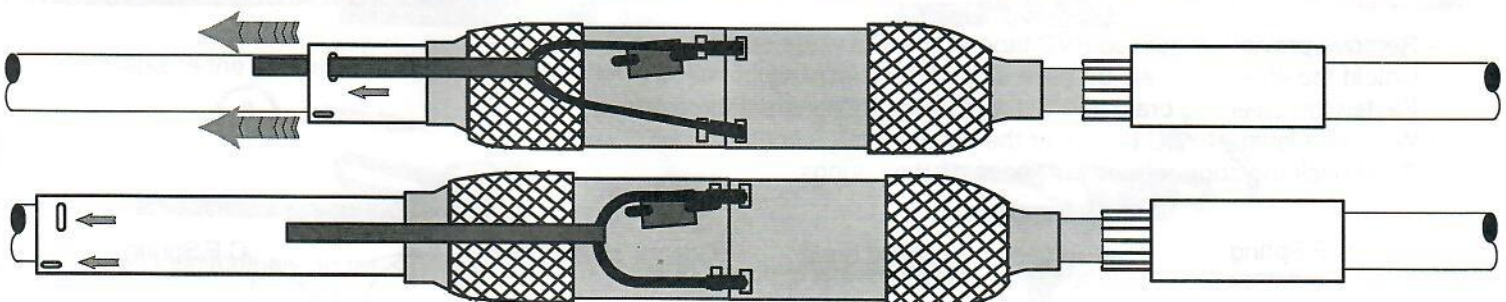
### - RESET OF THE SPLICE -

- Reset and measure the distance of 30 mm from the end of the joint body to the edge of neutral as shown.



### - RELEASING OF THE SELF-EXTRACT CARRIER (LONG SIDE) -

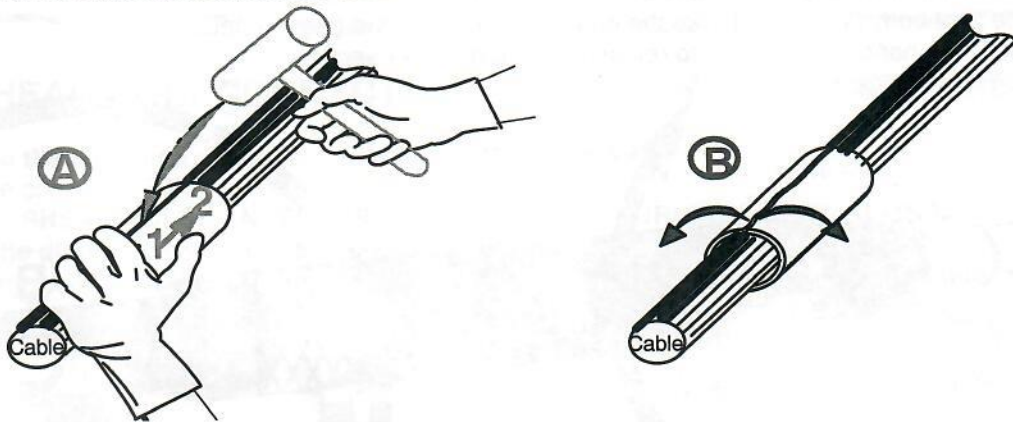
- When positioned correctly, remove the blue straps from the joint body to allow the second carrier to eject itself.



- Remove the blue strap.

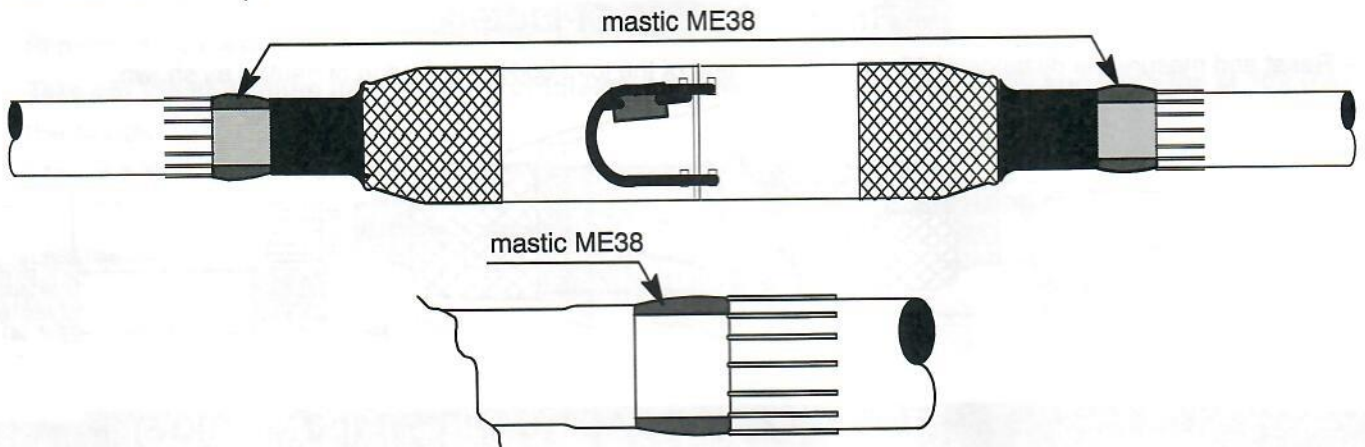
## - SELF-EXTRACT CARRIER REMOVAL -

- (A) - Hammer strongly over 2 of the 3 black lines of the carrier until it splits.
- (B) - Open and remove the carrier from the cable.



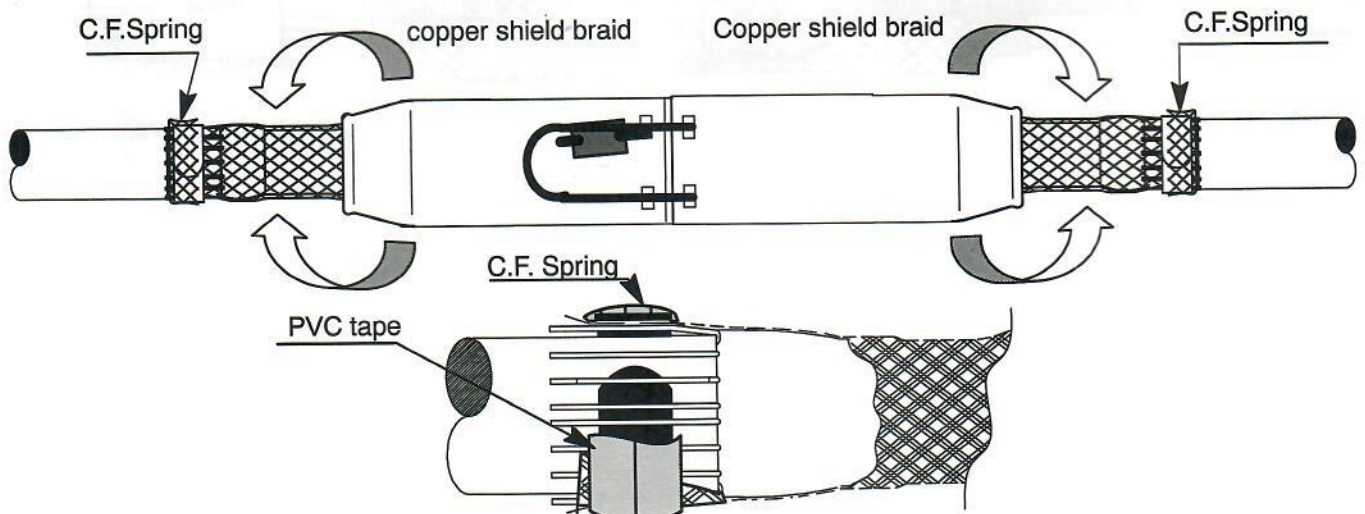
## 7. SEALING OF THE JOINT BODY

- Wrap 2 turns of black mastic ME38, in view to fill area between the end of joint to cutting edge of outer sheath, as shown.
- Remove the PVC tape.



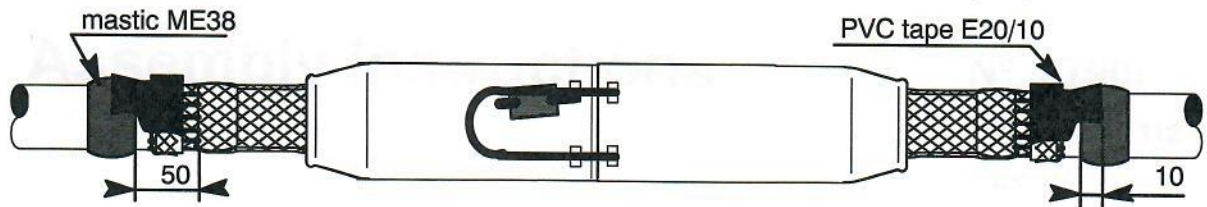
## 8. SETTING OF THE METALLIC SCREEN

- Remove previously applied PVC tape at the CU wires screen.
- Unfold the shielding braid on each side of the joint body.
- Fasten the shielding braid and CU wires with the constant force spring.
- Wrap one layer of PVC tape over the constant force springs.
- Bend back the copper braid in excess on the springs.



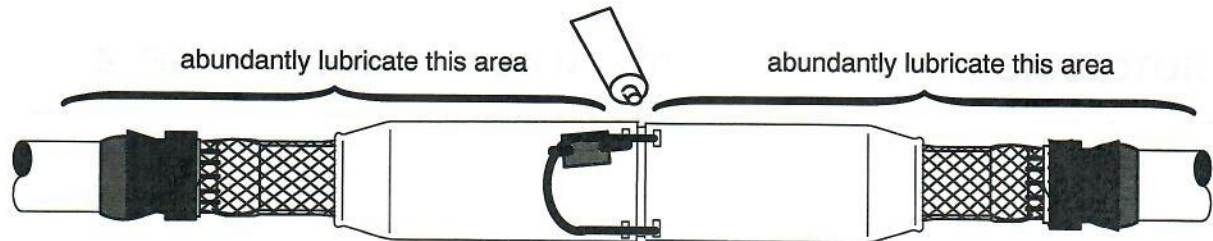
## 9. WATERTIGHTNESS

- Wrap 2 turns of black mastic ME38 at 50 mm from the outer sheath cutback, as shown.
- Wrap 1 turn of PVC tape E20/10 overlapping the mastic ME38 on 10 mm and the constant force spring, as shown.



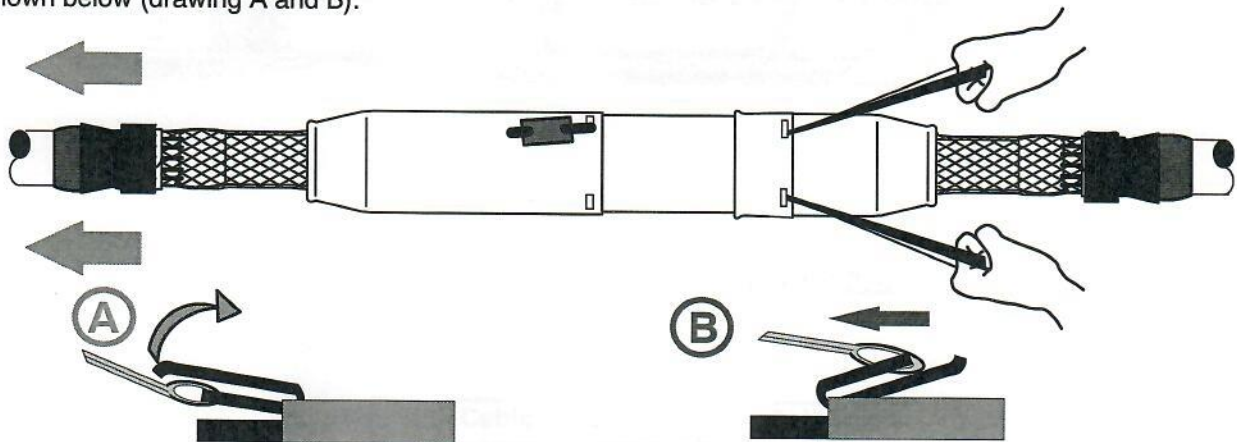
## 10. JACKET LUBRICATION

- Abundantly lubricate the area as shown with silicone oil V300.



## 11. UNFOLD THE JOINT OUTER JACKET

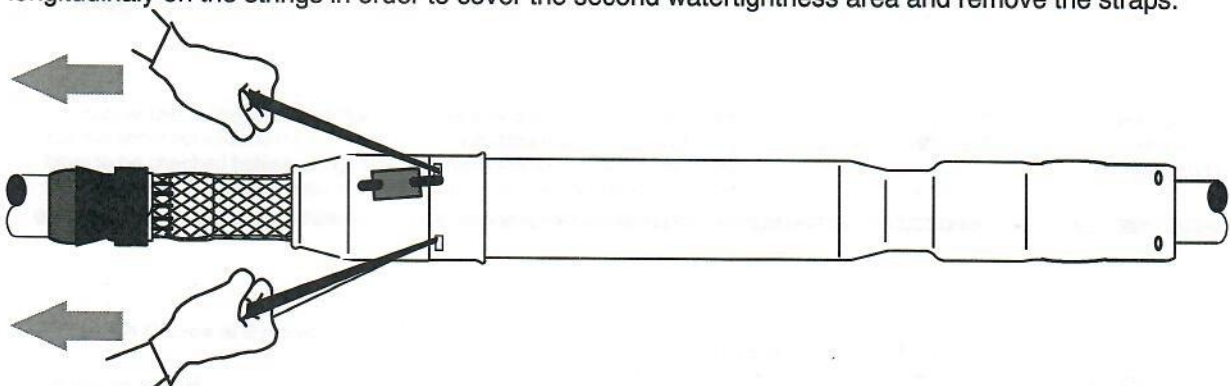
- Pull longitudinally on the strings in order to cover the watertightness area and remove the straps as shown below (drawing A and B).



- Replace the straps on the other side as shown below (drawing A and B).



- Pull longitudinally on the strings in order to cover the second watertightness area and remove the straps.



- THE END -