

<div> 嘉盟电力设备有限公司</div>	包材印字图	物料代码	ZGSM-MZJK-3-10-P/872	文件编号	GSM-MZJK-3-10-P/872
		物料名称	10KV中间说明书PILC/872	配套包材图图号	T2GSM-Fxxx-01
				配套包材图编号	GSM-FD1A4S1
<div>印刷要求:</div> <div><div>1、 印刷页面数：6；</div><div>2、 印刷颜色：彩色全部转为灰度；</div><div>3、 印字清晰完整。</div></div>					
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Diagrammatic



No.	Description	No.	Description
1	HEAT SHRINKABLE OIL RESISTANT TUBING	13	CONSTANT FORCE SPRING
2	HEAT SHRINKABLE TUBING	14	SOLDER WIRE
3	HEAT SHRINKABLE BUSBAR INSULATION TUBING	15	SOLDER FLUX
4	HEAT SHRINKABLE SEMI-CONDUCTIVE BREAKOUT	16/17	HEAT SHRINKABLE TUBING
5	FILLER MASTIC	18	PVC TAPE
6	FILLER MASTIC	19	TIN PLATING COPPER BINDING-WIRE
7	OIL RESISTANT MASTIC	20	SANDCLOTH PAPER
8	WATERPROOF SEALING MASTIC	21	CLEANER
9	NYLON ROPE	22/23	CLEANING CLOTH/GLOVES
10	HEAT SHRINKABLE TUBING	24	INSTALLATION INSTRUCTION
11	ALUMINIUM-FOIL PAPER	25	PACKAGE LIST
12	INSULATION COPPER BRAID		

⚠ CAUTION:

1. Working around energized high voltage systems may cause serious injury or death.
2. Installation should be performed by personnel familiar with good safety practice in handling high voltage electrical equipment.
3. Deenergize and ground all electrical systems before installing this product.

Please dispose of all waste according to environmental regulations.

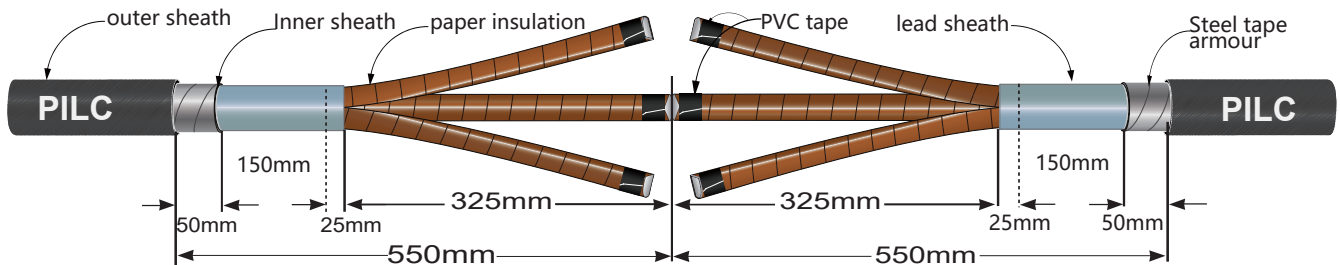
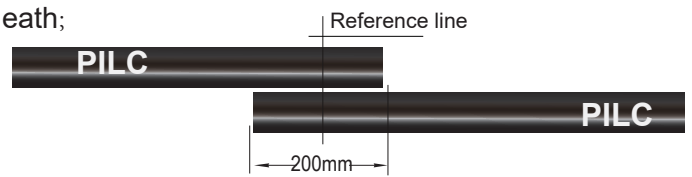


A. General Instructions:

1. This product should be installed by competent personnel familiar with cables, accessories and safe operating practices. Parts contained in this kit should be installed in accordance with the following instructions. These instructions are intended to be a guideline for a proper installation and not a substitute for a adequate training and experience in good safety practices.
2. Check to ensure that the kit you are going to use is for the correct cable (refer to the kit label and the title of the installation instruction). Carefully read and follow the steps in the installation instruction.
3. Inspect cable for presence of water or moisture and ensure that the cable is in good condition for termination. Keep the cable outer sheath clean and free from dust, oil and mud.
4. Use a propane (preferred) or butane gas torch in a properly ventilated and safe environment.
5. Use the yellow portion of the flame for shrinking. Avoid pencil-like blue flames.
6. Direct the gas torch flame in the shrink direction.
7. Keep the flame moving continuously to avoid scorching the sleeves and other shrinkable parts.
8. Ensure that the heat shrinkable components are shrunk uniformly and free of wrinkles and air bubbles.
9. Allow shrunk components to cool before applying mechanical fixtures.

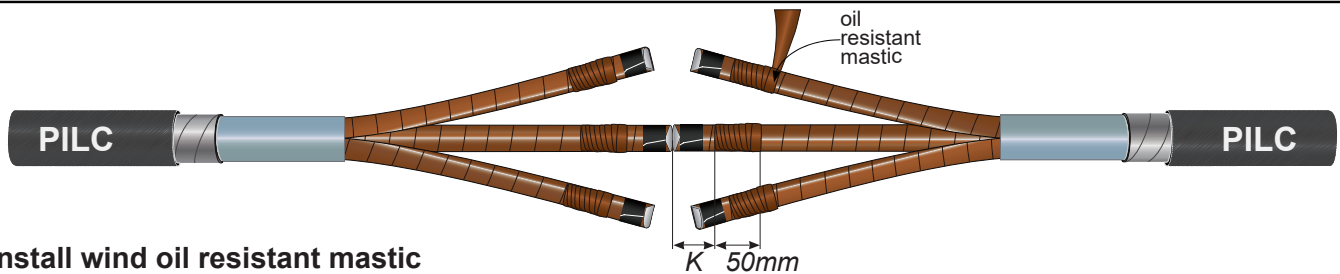
B. Strip xlpe cable shield layer

- 1) Use cleaner to clean the armoured layer and overshield;
- 2) Overlap the cables to be joined by about 200 mm;
- 3) Mark the reference line (the middle of the overlap);
- 4) Slide the screw clips over the cable ends.



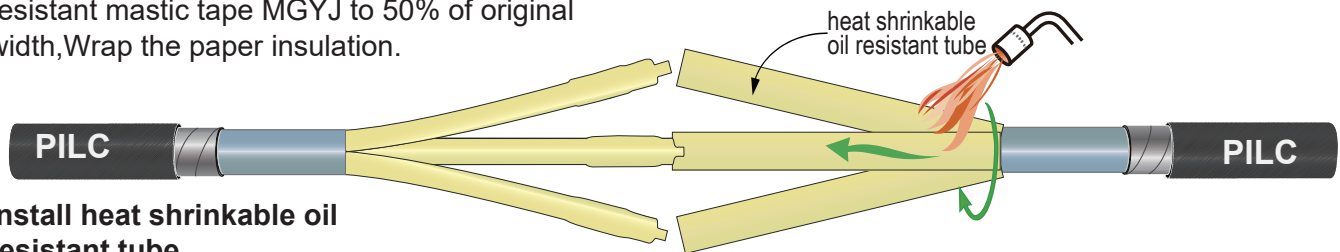
Remove cable jacket, armor, bedding (inner sheath) and core fillers according dimensions and equipment requirements. Secure copper wire shield ends with a temporary band of Pvc tape.

C. Install heat shrinkable oil resistant tube



Install wind oil resistant mastic

As shown the ends Stretch the oil resistant mastic tape MGYJ to 50% of original width,Wrap the paper insulation.



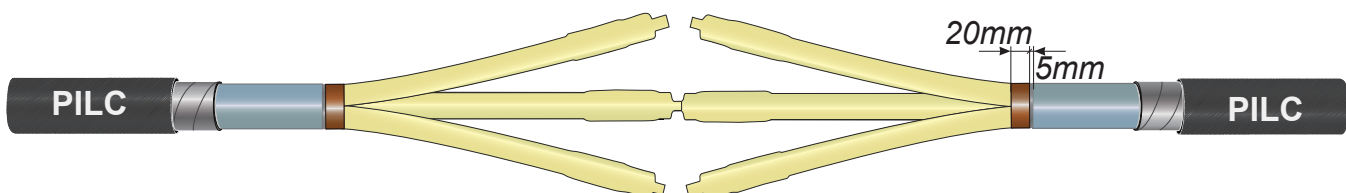
Install heat shrinkable oil resistant tube

- 1) Place an heat shrinkable oil resistant Tube over each phase, butted to the lead sheath (or belt paper) cutback;
- 2) Shrink the three heat shrinkable oil resistant Tube in place starting at the lead sheath cutback

PS: To achieve a smooth, wrinklefree installation, use a reduced flame to install the thin-walled MOR

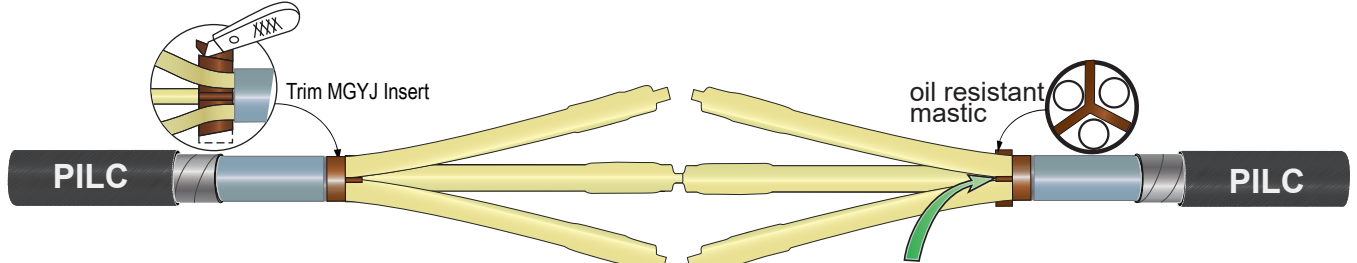
D. Strip the lead sheath

As shown Strip the lead sheath for 25mm ;

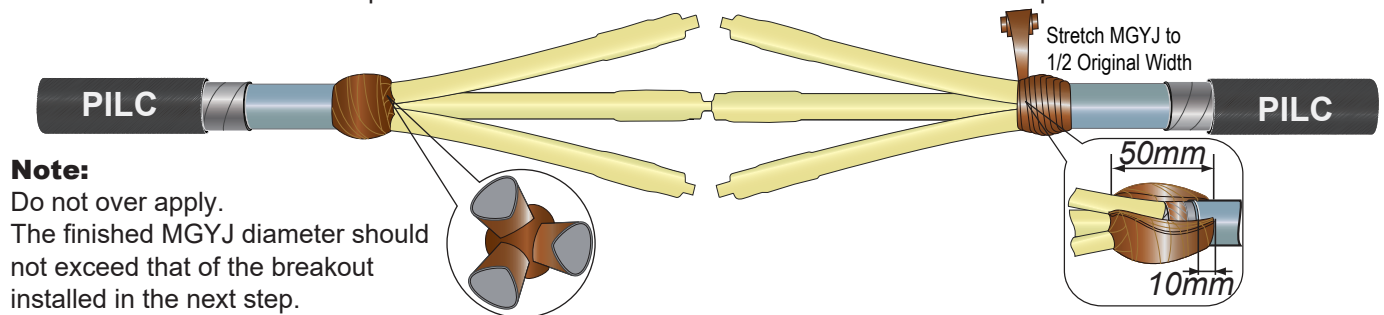


E. Install oil resistant mastic

- 1) Spread the oil resistant mastic into the root of the cable as shown;
- 2) Trim MGYJ insert to extend 3mm beyond each phase;

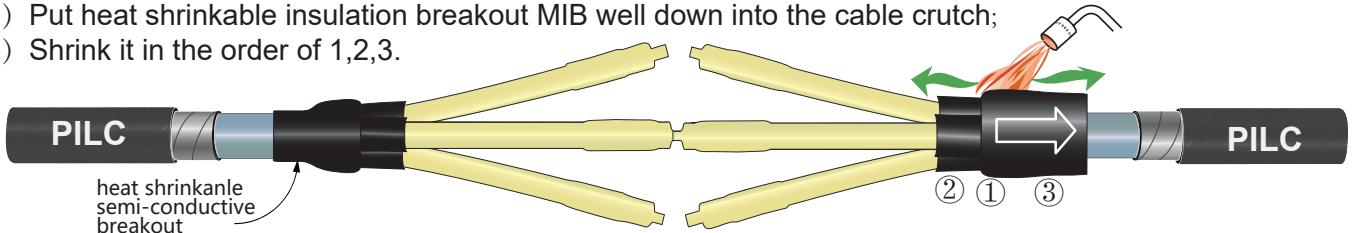


- 4) Remove backing from one side of a long strip of MGYJ. Roll the MGYJ and remaining backing strip into a convenient size.
Removing the remaining backing strip, tightly wrap the MGYJ from the mark on the lead sheath to the outer edge of the MGYJ insert. 2 to 3 strips of MGYJ should be used to build the MGYJ to the shape shown.



F. Install Shrink heat shrinkable semi-conductive breakout

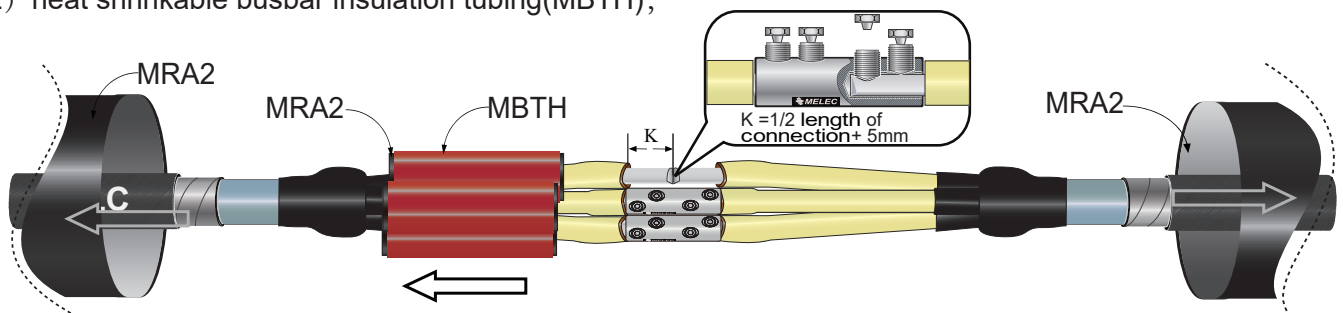
- 1) Put heat shrinkable insulation breakout MIB well down into the cable crutch;
- 2) Shrink it in the order of 1,2,3.



G. Position the tubing and installation connectors

Slide one combined tubing set over each long core end

- 1) heat shrinkable protection tubing (MRA2);
- 2) heat shrinkable busbar insulation tubing (MBTH);



- 1) Remove the oxide layer on the conductor surface with a brush;
- 2) Select suitable tool to install metal connectors according to the process requirements (The sequence of screwing off the bolts should be in accordance with the installation instructions of connectors);
- 3) After installing, smooth the sharp edges with a file, then remove the polished metal powder with cleaning kits;
- 4) Clean connectors and insulation.

H、 Shrink the heat shrinkable tubing by heating

Installation sequence of heat-shrinkable tubing

- 1) heat shrinkable stress control tubing(black)
- 2) heat shrinkable busbar insulation tubing(red)

Installation method

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

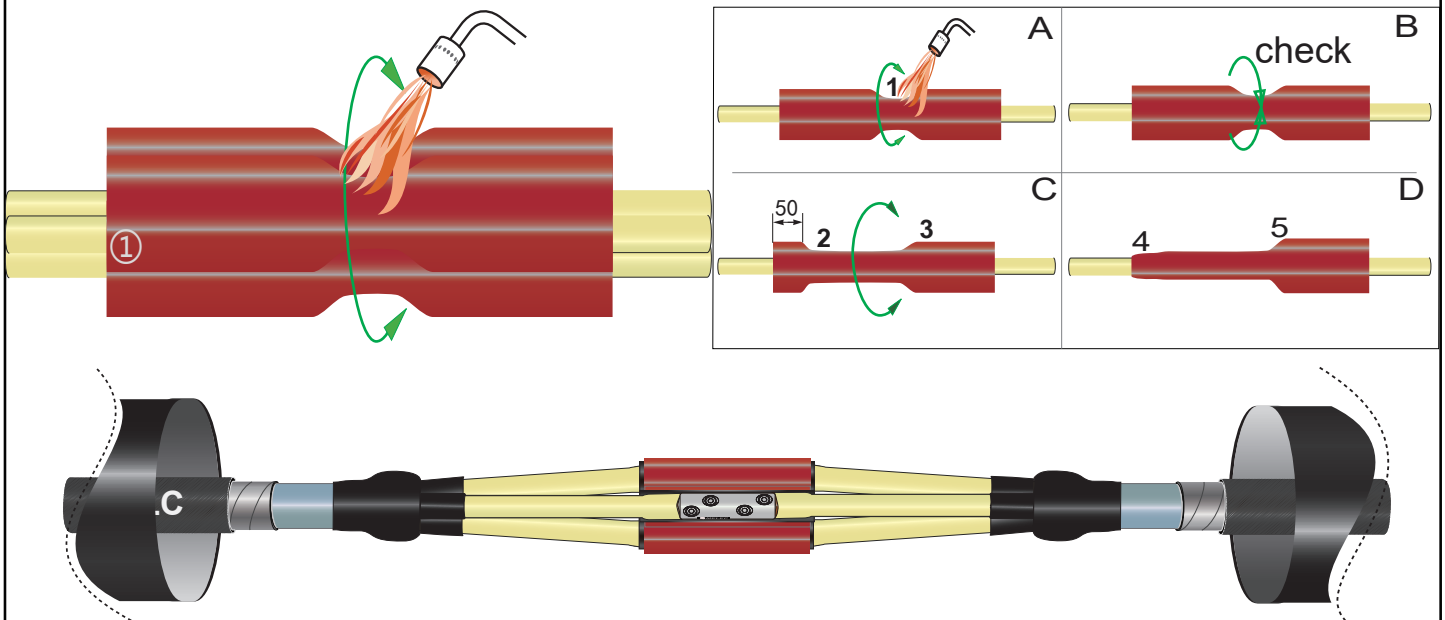
Note:

Continue with the next step while the tubing are still hot.

- A) Start shrinking the sleeves in the centre (1);
 - B) Check if fully shrunk by twisting the end. The sleeves should not move from its position;
 - C) Continue shrinking by working towards one side (2), stopping 50 mm from the end;
 - D) Shrink down the first end (4) and finally the second (5)
- The sleeves should be fully shrunk without leaving ridges

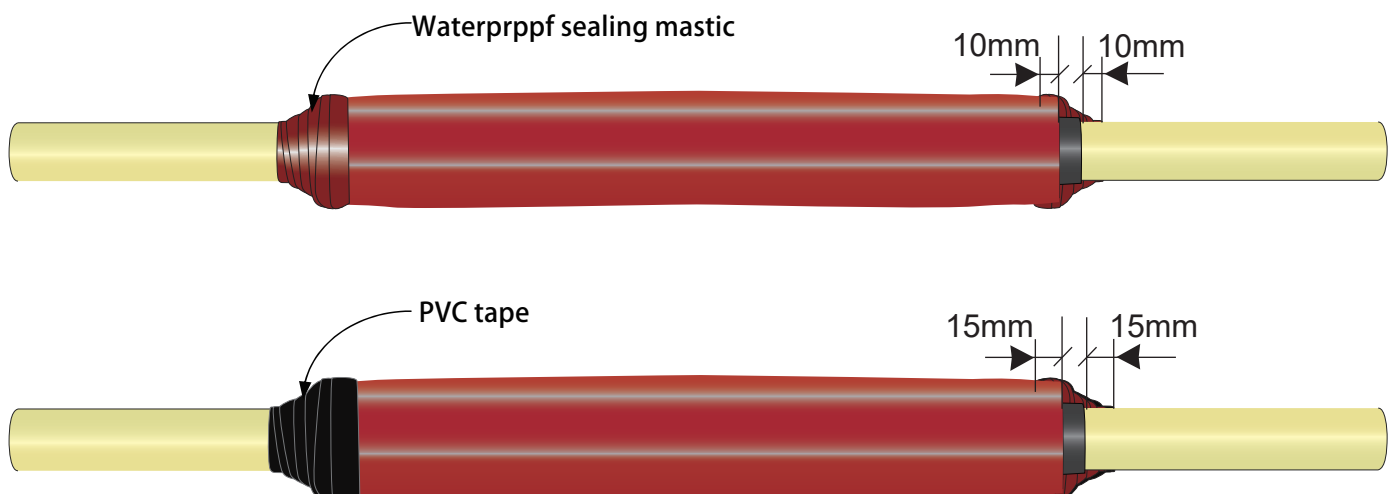
Shrinkage instructions:

- 1) Adjust the voltage regulator and combustor properly, Use the outer yellow flame for heating, Keep the area for installation ventilated in order to avoid the influence of smog;
- 2) Use outer flame to heat the heat shrinkable products. The height of the flame should be 100-300 mm;
- 3) Unless otherwise stated, keep the flame move around the tubing evenly and with rotation;
- 4) Do not keep the flame at the same spot for over 3 seconds. It will burn the heat shrinkable products occasionally Instructions for combustor .



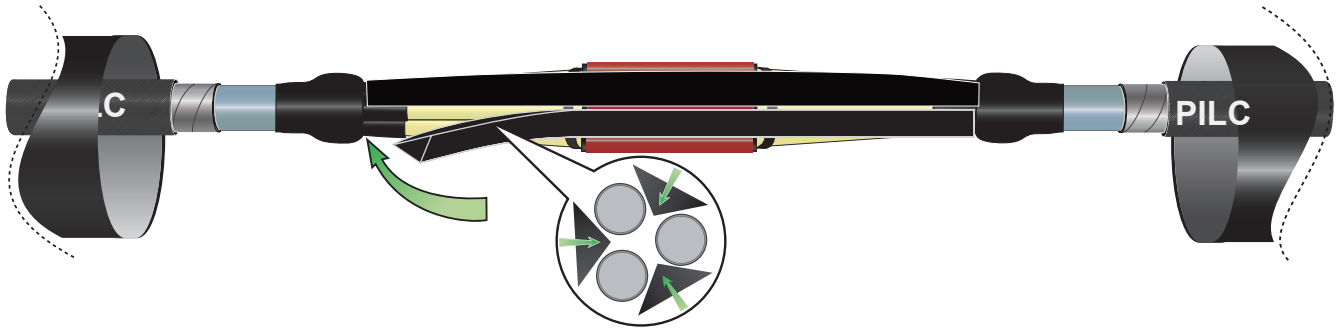
I、 Wrap waterproof sealing mastic tape MMFJ

Wrap waterproof sealing mastic tape MMFJ in both end of tube. Use adhesive tape to cover tubing for 10 mm distance, the outer layer is wrapped with PVC tape.



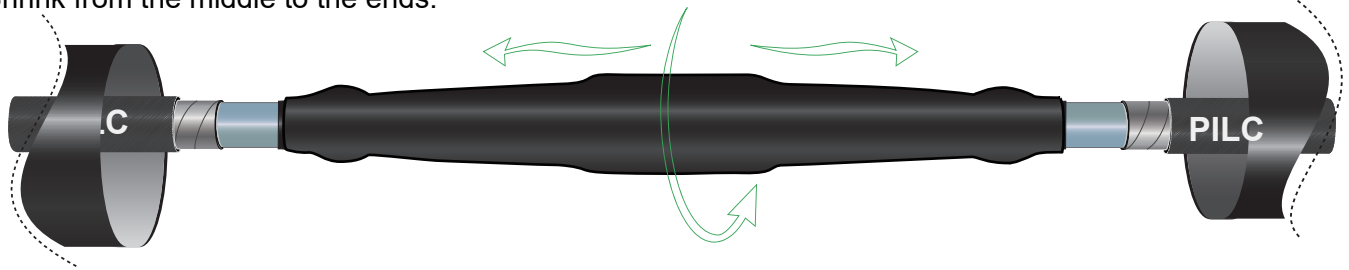
J、 Fill the spaces between cores with Triangular Black Filler Mastic

Position the triangular black Filler Mastic between the cores to fill up spaces. Apply one piece of Filler Mastic each between the spaces of two cores longitudinally and compact it into gaps using hands. Apply PVC tape at both ends and centre of the Triangular Black Filler Mastic to hold them together in position.



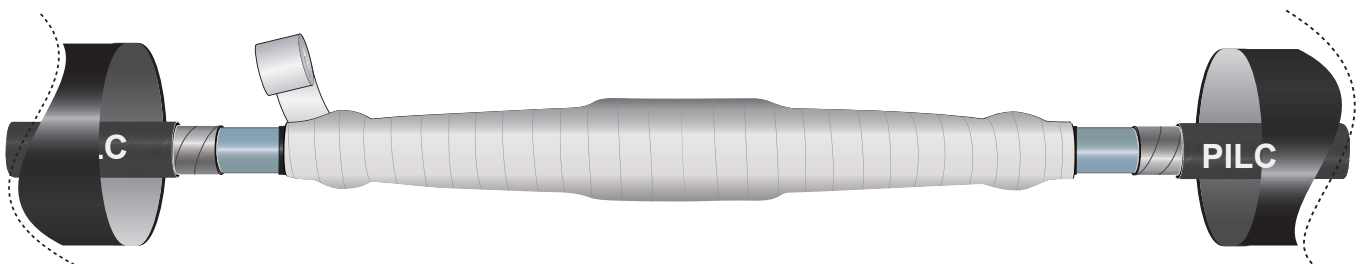
K、 Install heat shrinkable tubing MRA2 for inner sheath

As shown Position the inner sheath Protective Sleeve at the center of the joint. Heat shrink it uniformly, Shrink from the middle to the ends.



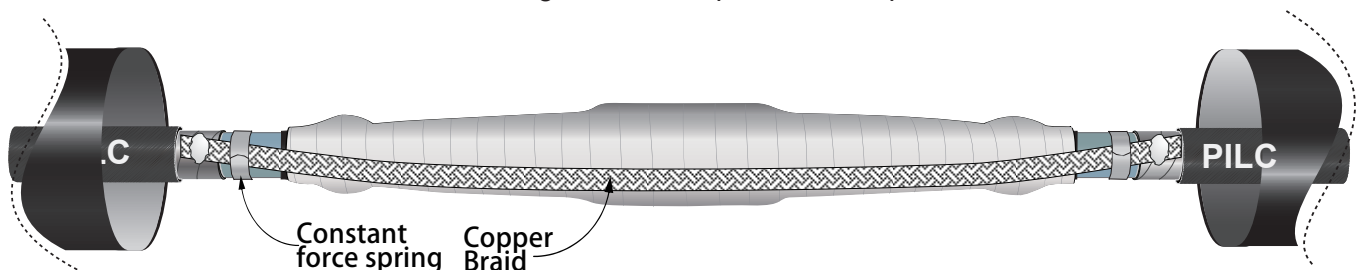
L、 Wrapping foil tape and Install Copper braid

1) As shown, Wrap a layer of aluminum foil tape around the inner sheath.



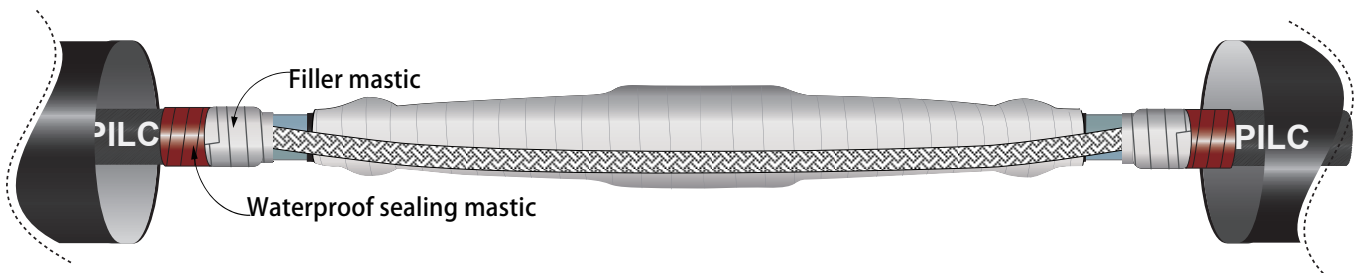
2) As shown, use constant force spring to fix ground wire on lead sheath.

3) As shown, use solder wire to weld ground wire upside steel tape armour.

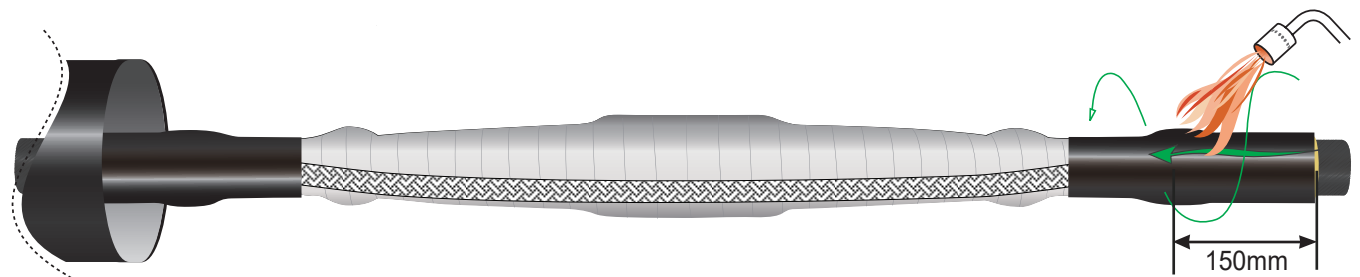


M、 Install shielding layer tinned shielding copper net MTW and Copper braid

- 1) As shown, Wrap the filler mastic over the constant force spring coil.
- 2) As shown, Wrap waterproof sealing mastic tape MMFJ in both end of outer sheath .

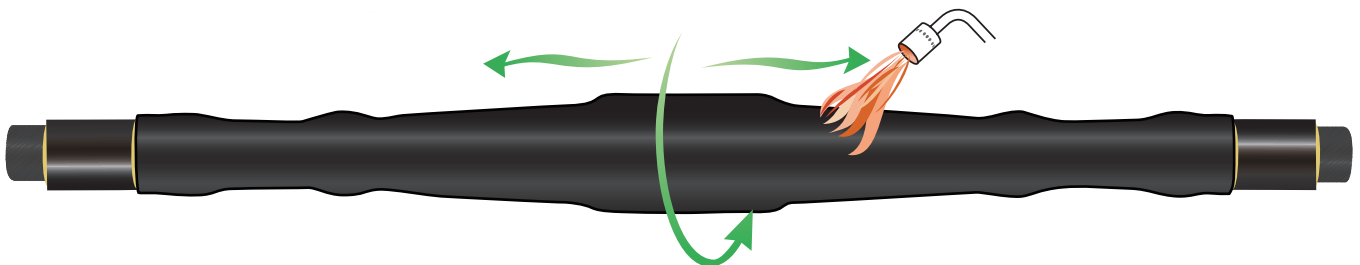


- 3) As shown in the figure, a heat shrink tube is installed on the outer sheath layer and is shrunk from one end of the outer sheath to the other.



N、 Install heat shrinkable tubing MRA2 for outer sheath

- 1) CPlace the guard casing symmetrically in the center of the connector connector
- 2) It starts contracting in the middle, Encircling contraction, Then move to the top.



O、 Joint completed

Allow the joint to cool before applying any mechanical strain

