

## 17.5kV Indoor Cold Shrinkable Termination (Three-Core)

### Installation Instructions

#### Important:

1. Please cut off the power of the system before installation, maintenance, and disassembly, and make sure that the product rating (17.5kV and below) is consistent with the application.
2. Check all spare parts specifications, verify the quantity is as listed, and ensure that it matches the cable or product.
3. This product must be installed and operated by well-trained electricians, and the installation should comply with Installation regulations for cold-shrinkable cable accessories with rated voltage 35kV and below.
4. Read the installation manual carefully before installation, prepare the tools required for installation, and keep them clean throughout the installation process.

**Required installation tools:** Cable stripping tools, terminal crimping tools.

#### Part Description:

Voltage Rating	Part Number	Cable Insulation O.D. Range
17.5kV	T-17-CSTI-A	15.0-21.0
	T-17-CSTI-B	19.0-25.0
	T-17-CSTI-C	23.0-31.0
	T-17-CSTI-D	29.0-37.0
	T-17-CSTI-E	37.0-46.0

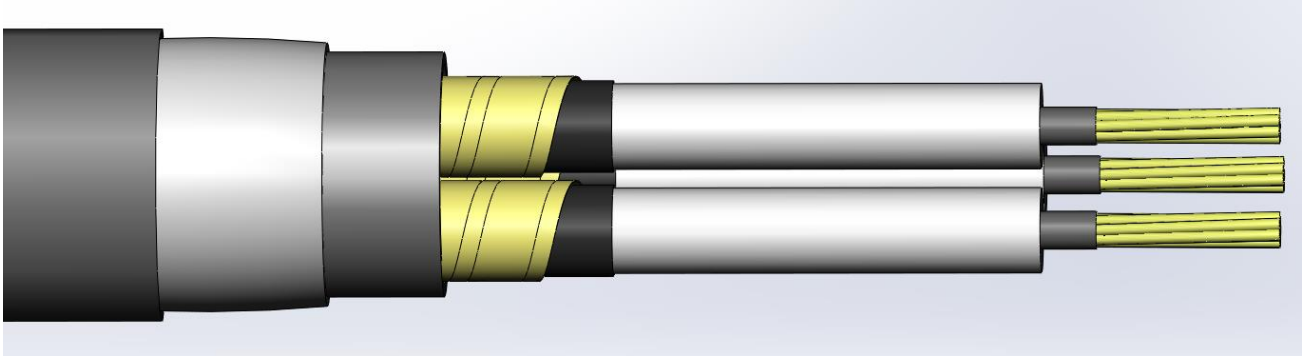
#### Product accessories list:

17.5kV Indoor Cold Shrink Termination(Three-Core)					
No.	Description		No.	Description	
1	Cold Shrink Termination		10	Silicone lubricant	
2	Cold Shrink Jacket Seal Tube		11	Paper towel	
3	Cold Shrinkable Breakout		12	Installation instructions	
4	Silicone Tape		13	Packing List	
5	PVC Tape (Black)		14	Cable lug (Optional)	
6	Sealing Tape		15	Grounding kit	
7	Filling Tape		16	Connecting pipe (Optional)	
8	Sandpaper belt		17	Trigonometric cone	
9	Gloves				

## INSTALL PROCEDURE

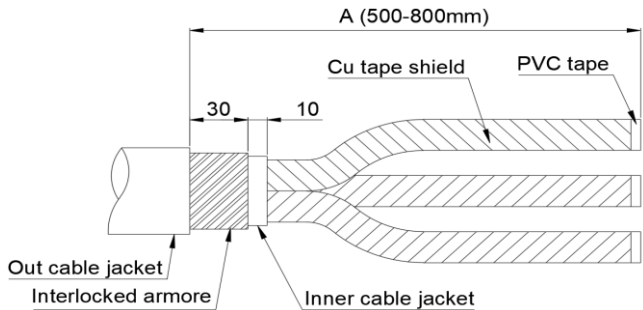
### A. Install Cold Shrinkable Accessories

#### Aluminum Interlocked Armor and Tape Shielded



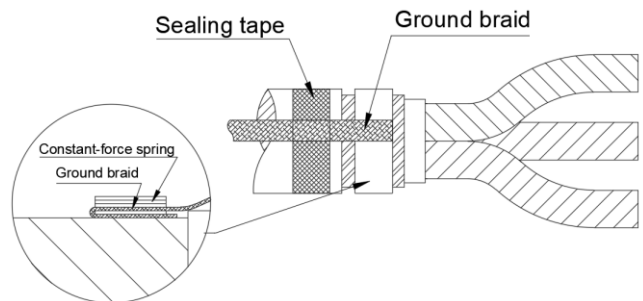
#### STEP 1

- Fixed 3 core cable, remove the outer jacket A ( Adjust according to the actual situation ) and prepare cable to armor 30mm and inner jacket 10mm.
- Use PVC tape to fixe Cu conductive shield of 3 phase cable.



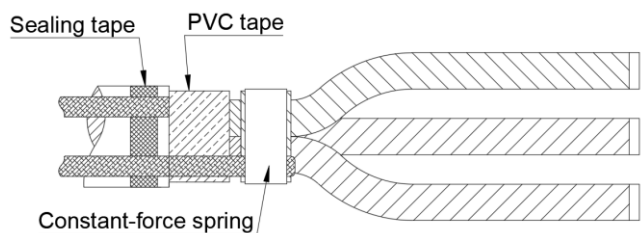
#### STEP 2

- Clean outer jacket and armor , and 15mm is evenly wrapped around a layer of sealing tape.
- Use constant-force spring to fix grounding braid into armor.
- Wrap PVC tape to cover inner jacket and armor area.



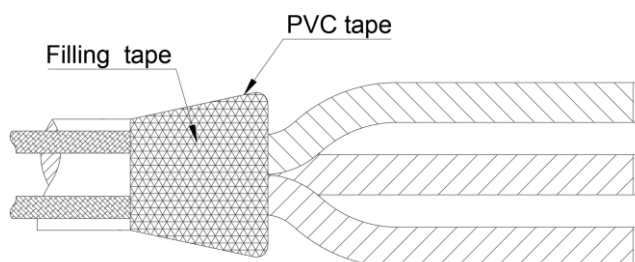
#### STEP 3

- The trigonometric cone inserts the bottom of the three core cable bifurcation.
- Wrap the other grounding braid in root of 3 phase cable and place on outer jacket.(Notice : the grounding braid should be placed different to first one).
- Use constant-force spring to fix second grounding braid or weld it on root of 3 phase cable.



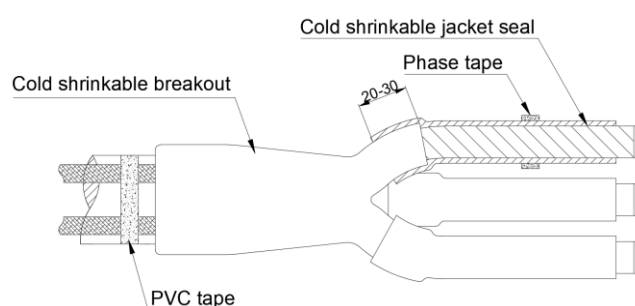
#### STEP 4

- Wrap 1 circle sealing tape around the first seal.
- Wrap the filling tape onto the cable area. Include copper shield(10mm)/inner jacket (10mm)/armor(30mm)/out jacket(above 50mm).
- Wrap 1 circle PVC tape onto the filling tape.



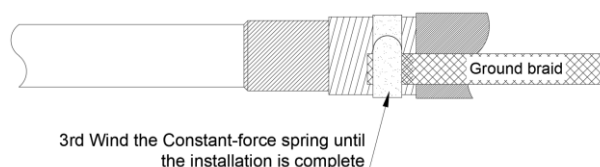
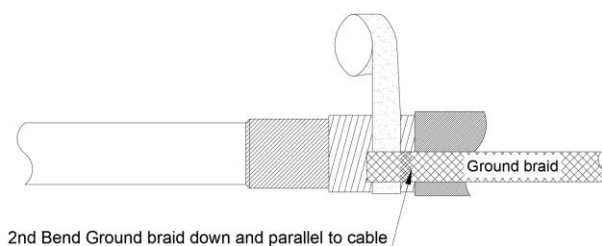
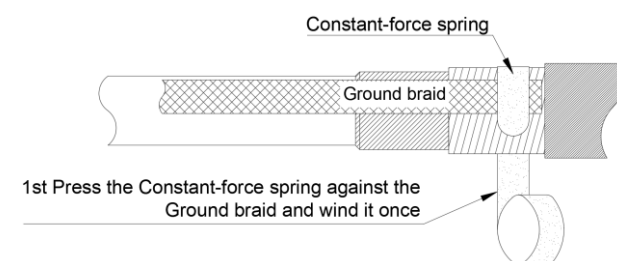
#### STEP 5

- Cover three finger cold shrink tube tight to root of 3 phase cable. Pull the hold out tubes at the anti-clockwise.
- Cover cold shrinkable tube tight to the end of 20-30mm from break out.
- Remove hold out tube, check cold shrink tube shrink completely.

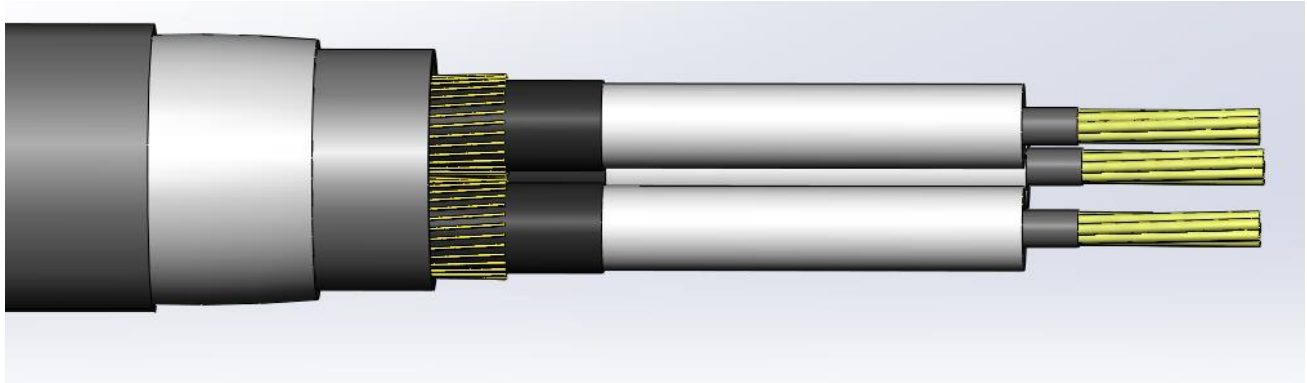


#### Constant-force spring installation instructions

- 1<sup>st</sup> Press the Constant-force spring against the Ground braid and wind it once.
- 2<sup>nd</sup> Bend Ground braid down and parallel to cable.
- 3<sup>rd</sup> Wind the remaining Constant-force spring until the installation is complete

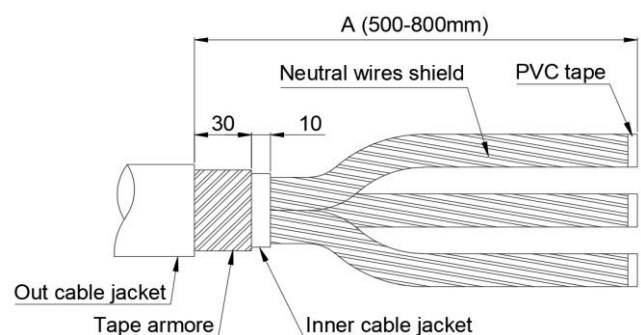


## Aluminum Interlocked Armor and Wire Shielded



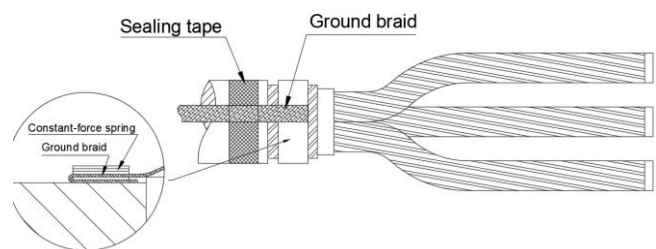
### STEP 1

- Fixed 3 core cable, remove the outer jacket A ( Adjust according to the actual situation ) and prepare cable to armor 30mm and inner jacket 10mm.
- Use PVC tape to fix Neutral wires shield of 3 phase cable.



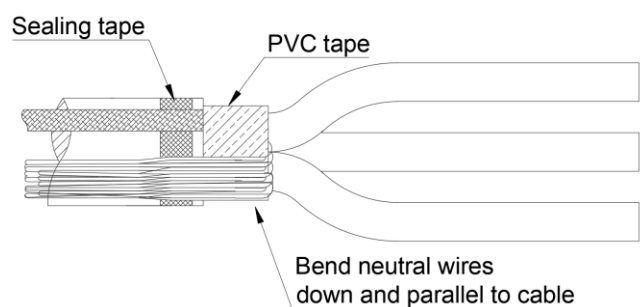
### STEP 2

- Clean outer jacket and armor , and 15mm is evenly wrapped around a layer of sealing tape.
- Use constant-force spring to fix grounding braid into armor.
- Wrap PVC tape to cover inner jacket and armor area.



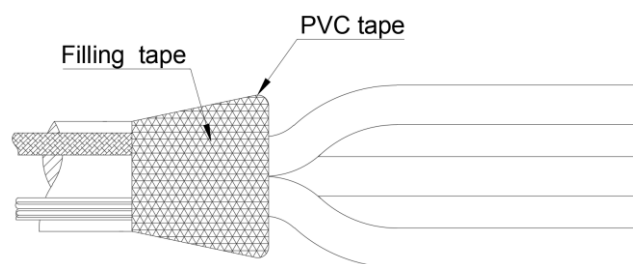
### STEP 3

- The trigonometric cone inserts the bottom of the three core cable bifurcation.
- Bend neutral wires down and parallel to cable. Use copper wire to secure neutral wires to cable jacket. ( Notice : the neutral wires should be placed different to grounding braid).
- Wrap 1 circle sealing tape around the first seal.



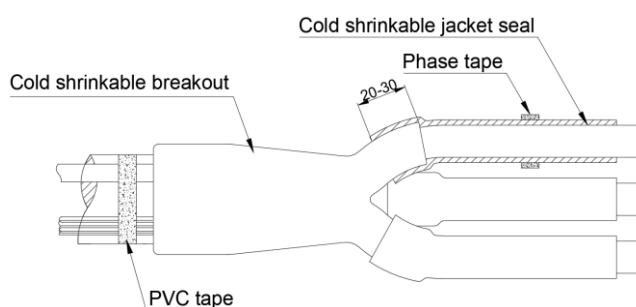
#### STEP 4

- Wrap the filling tape onto the cable area. Include neutral wires (10mm)/inner jacket (10mm)/armor(30mm)/out jacket(above 50mm).
- Wrap 1 circle PVC tape onto the filling tape.



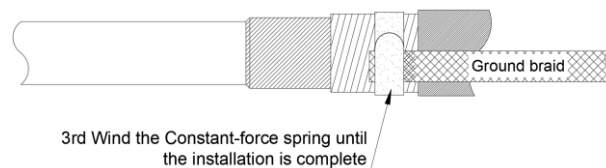
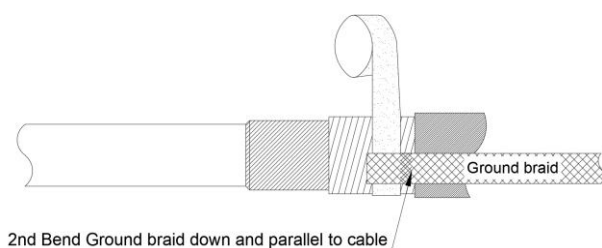
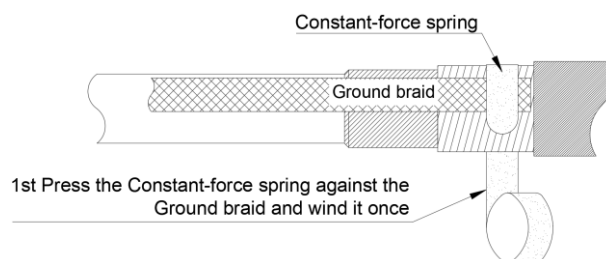
#### STEP 5

- Cover three finger cold shrink tube tight to root of 3 phase cable. Pull the hold out tubes at the anti-clockwise.
- Cover cold shrinkable tube tight to the end of 20-30mm from break out.
- Remove hold out tube, check cold shrink tube shrink completely.



#### Constant-force spring installation instructions

- 1<sup>st</sup> Press the Constant-force spring against the Ground braid and wind it once.
- 2<sup>nd</sup> Bend Ground braid down and parallel to cable.
- 3<sup>rd</sup> Wind the remaining Constant-force spring until the installation is complete

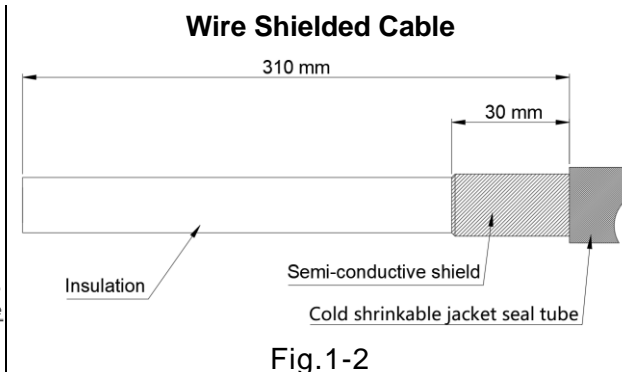
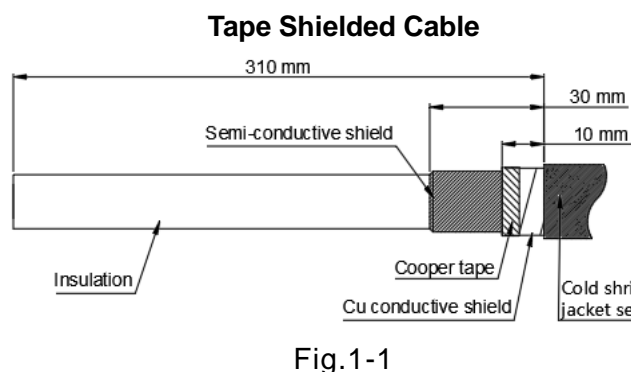


## B. Install Terminal

### STEP 1

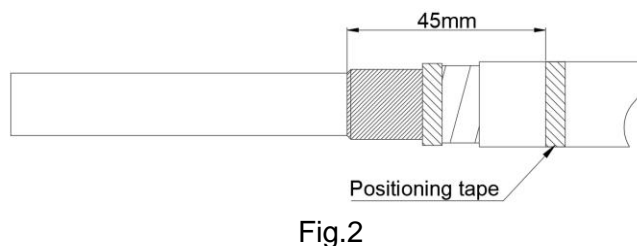
- Prepare cable using dimensions as shown in Fig.1 .

**NOTE:** Ensure that all parts of the cable are not damaged. If there is any irreparable damage, a new cable needs to be made. If there is any impurity or slight damage on the surface of the insulation, it can be polished with fine sandpaper.



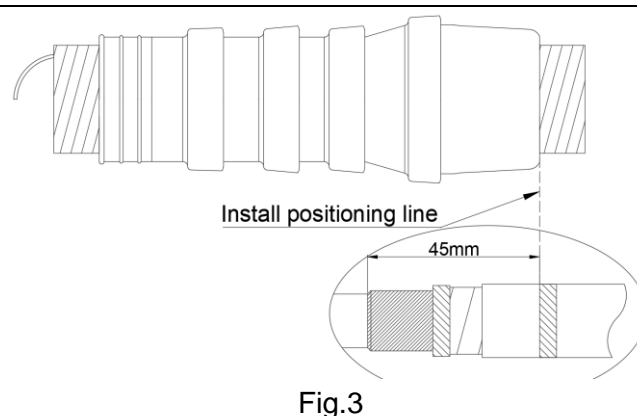
### STEP 2

- Polish and clean thoroughly the insulation by using fine sandpaper belt and paper towel then apply the silicone lubricant around the dotted line area.
- Measure down 45mm from the top of the semi-conductive shield. Mark this position.



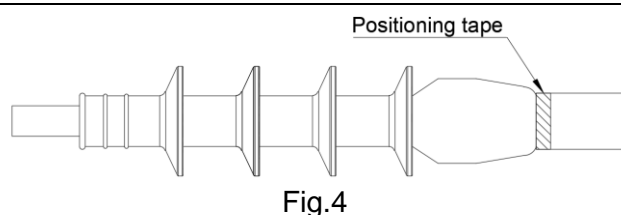
### STEP 3

- Place the cold shrink termination onto the cable, aligning the mark with the end of the termination as shown in Fig.3.
- Pull out the plastic tube wire at a constant speed, in a clockwise direction.
- Pay attention to the termination positioning during operation.



### STEP 4

- Complete the shrinkage of the product, as shown in Fig.4.



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### C. Install Terminal Lug

#### STEP 1

- Keep the “L+10mm” insulation and remove the excess part.
- Remove the insulation to expose the bare conductor according to lug depth “L” as shown in Fig.5.

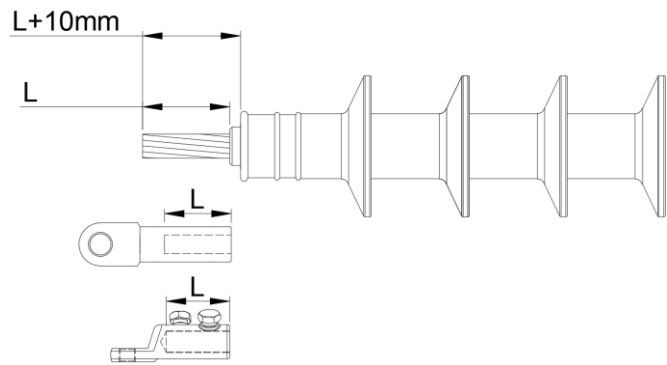


Fig.5

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#### STEP 2

- Clean the conductors and terminal lugs to remove any oxide layer or impurities.
- Install the crimp terminal with specialized crimping pliers, and Install the shear bolt terminal as per the installation manual of the terminal. (Fig.6)

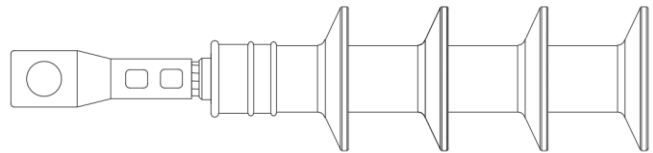


Fig.6

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#### STEP 3

- Wrap sealing tape from the crimping position (or first bolt) of the terminal to the port of the cold shrink product in a tapered shape, creating a smooth transition

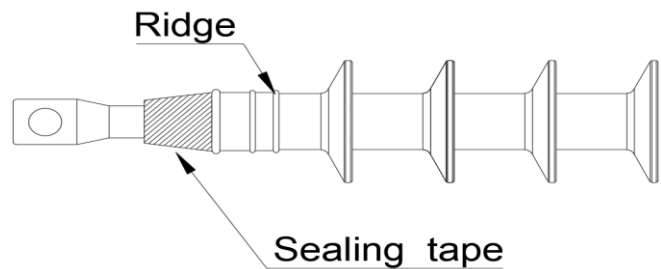


Fig.7

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#### STEP 4

- Install the Silicone Tape to completely cover the terminal tube body to the area of the sealing ridge of the cold shrink product. (Fig.8)

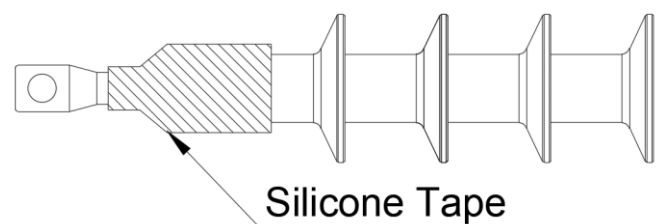
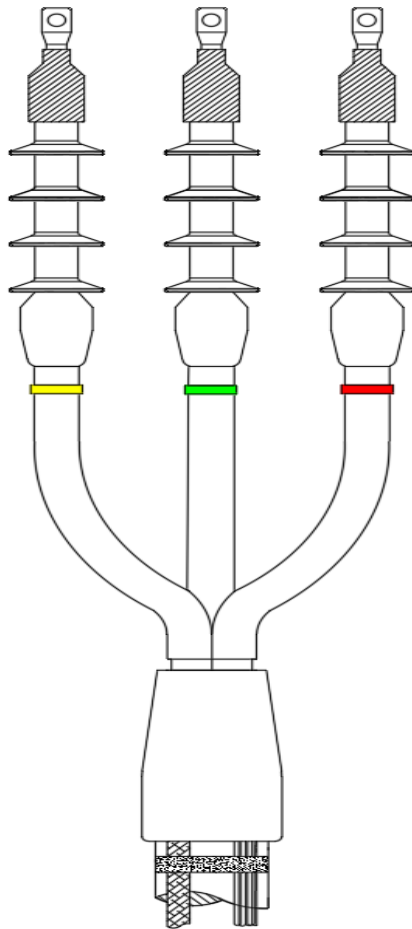


Fig.8



The waste generated during the installation, use and replacement of this product should be sorted and should not be discarded at will.

This installation manual cannot cover all the instruction details, nor can it completely solve various problems encountered during the installation process, so when encountering difficulties or special problems during the specific installation process, please contact us in time.

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