QUANZHOU SEVENSTARS ELECTRIC CO.,LTD

COMPANY INTRODUCES

Seven Star Electric was established in 1995. It is a national high-tech enterprise dedicated to the research, development and production of electric insulation products and high-voltage transmission and distribution products. The main products of the company include ring network cabinets, production and development of smart grid software and hardware (primary and secondary fused column switches, intelligent stations, power clairvoyance, etc.), cable branch boxes, low-voltage complete sets of equipment, cable connectors, cold shrink cable accessories, insulators, lightning arresters, etc. The company has a registered capital of RMB 130 million, fixed assets of RMB 200 million and more than 600 employees. The company has registered capital of 130 million yuan, fixed assets of 200 million yuan and more than 600 employees. 2021, the company will achieve a turnover of 810 million yuan and tax revenue of nearly 30 million yuan. 2022, the annual output value is expected to exceed 1 billion yuan. The company's products have been sold to Vietnam, Philippines, Brazil, South Africa, Singapore, Malaysia and other countries.

In 2022, Quanzhou Tianchi Electric Import & Export Trading Co., Ltd. will be established to serve overseas customers.

TEL:+86-15005059589 Email:Sales1@tianchielectric.com

七星电气 7-Stars

QUANZHOU SEVENSTARS
ELECTRIC CO.,LTD

Figure 1 processing cable

1.1, according to the size of the cable shown in Figure 1, the three cores of the cable should be straightened separately, with yellow, green, red PVC with a good cable phase sequence mark, and then the end of the cut flat, size K is equal to 1/2 of the length of the connection tube plus 5mm, insulation end chamfering 2X45°, size L selected according to Table A.

1.2, peel off the semi-conductive layer, do not scratch the main insulation, semi-conductive layer cut off with sanding cloth to remove the sharp corners, so that the smooth transition, the main insulation on the residual semi-conductive particles with a clean sanding cloth to polish clean.

1.3, copper shielding and semi-conducting layer transition with PVC tape will be wrapped around the end of the copper shield two layers, so as not to scatter the copper screen.

Figure 1

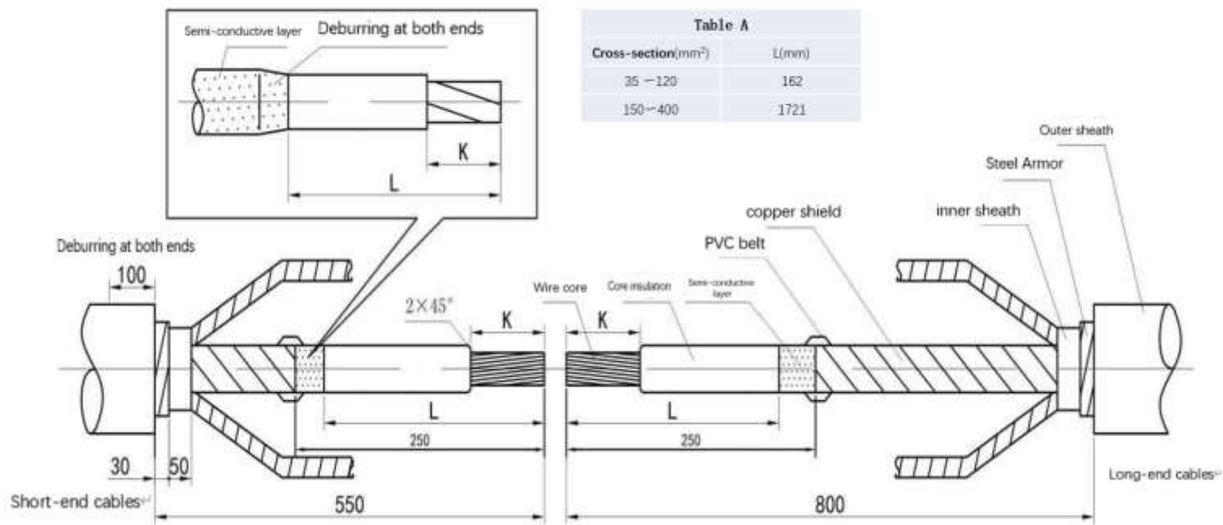


Table A

Cross-section(mm²)	L(mm)
35 —120	162
150~400	1721

Figure 2 Insert the cold shrinkable intermediate joint to be installed

2.1. Slowly set the cold-shrink intermediate connector into the long end of the cable on standby, pay attention to the support tube liner pulling end first.

2.2. Put the three connecting tubes onto the cable core for crimping (note the cable phase sequence and crimping order, the position of the connecting tube in the middle).

Figure 2

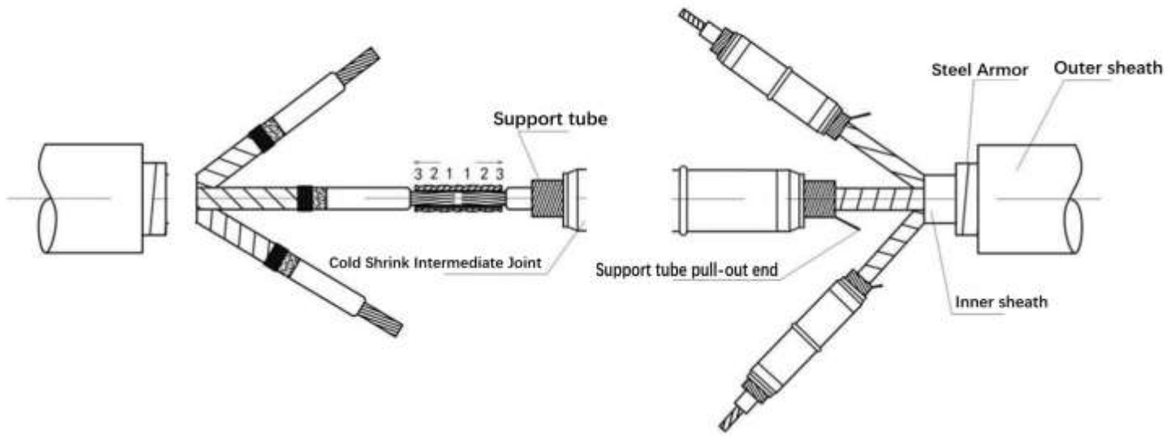


Figure 3 Cable core waterproof treatment and core insulation surface cleaning

3.1. Flatten the burr on the connecting pipe, then smooth it with sandpaper, remove the PVC tape marking the cable phase sequence, and clean the sundries on the connecting pipe with a cleaning cloth.

3.2. Wrap the waterproof and insulating composite tape between the connecting pipe and the two ends of the core insulation. Note that the outer diameter of the wound waterproof and insulating composite tape cannot exceed the outer diameter of the core insulation.

3.3. As shown in the figure: Determine the middle point between the semi-conductive layers of the two cables, and mark the middle point on the connecting pipe.

3.4. Measure the length L from the middle point mark of the connecting pipe to the short end cable side (see table: B for L), and mark it with a PVC tape. This mark is the installation reference of the intermediate joint. Measure the length H300mm from the middle line mark to the short-end cable side, and mark it with PVC tape as a calibration line.

3.5. Thoroughly clean the metal powder and conductive impurities on the three-phase main insulating layer with a cleaning cloth. When cleaning, it can only be cleaned from the cable insulation to the semi-conductive layer of the cable, and cannot be cleaned back and forth. After the cleaning agent is fully volatilized, apply a little silicone grease evenly (note that the silicone grease cannot be applied on the semi-conductive layer).

Table B

Cross-section(mm^2)	L (mm)
35～120	195
150～400	205

Figure 3

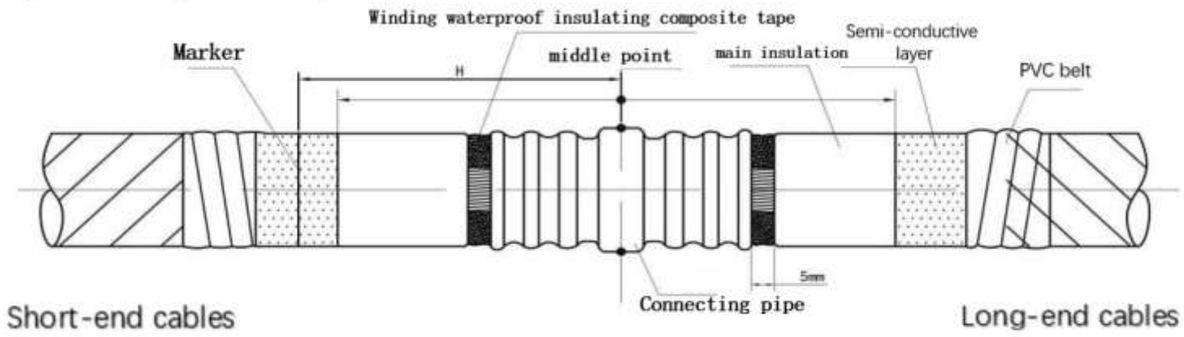


Figure 4 Install the cold-shrink intermediate joint

4.1. Insert the main body of the cold-shrinkable intermediate joint so that a section of the main body of the cold-shrinkable intermediate joint is aligned with the mark on the short-end cable.

4.2. While rotating the intermediate joint, slowly pull the support tube liner, so that the cold-shrinkable intermediate joint begins to shrink and pay attention to the alignment of the contracted end of the intermediate joint with the mark on the short-end cable. During the drawing process, always pay attention to the shrinkage of the intermediate joint first. One end of the is aligned with the always mark. until the middle joint is fully shrunk.

Note: When pulling out the support tube liner, keep the cable in a straight line, rotate counterclockwise and slowly pull out the support tube liner to prevent the liner from being broken.

Figure 4

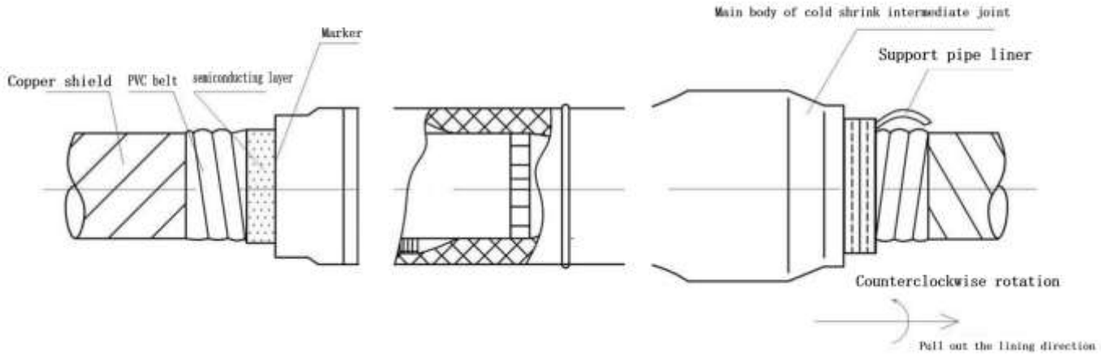


Figure 5 Verify the installation position and waterproof treatment at both ends of the intermediate joint

5.1. After the shrinkage of the cold-shrinkable intermediate joint is completed, the installation position should be verified immediately, and the distance between the calibration line of the PVC belt and the center line of the cold-shrinkable intermediate joint should be equal to 300mm.

5.2. If there is a deviation in the installation position, please push the intermediate joint immediately until the mark is aligned with the end face of the intermediate joint and H is 300mm. Note: the installation position is very important, please ensure that the installation position is correct.

5.3. Use a cleaning cloth to wipe off the dirt and silicone grease on the semi-conductive layer at both ends of the intermediate joint. Connect more than 40mm.

Figure 5

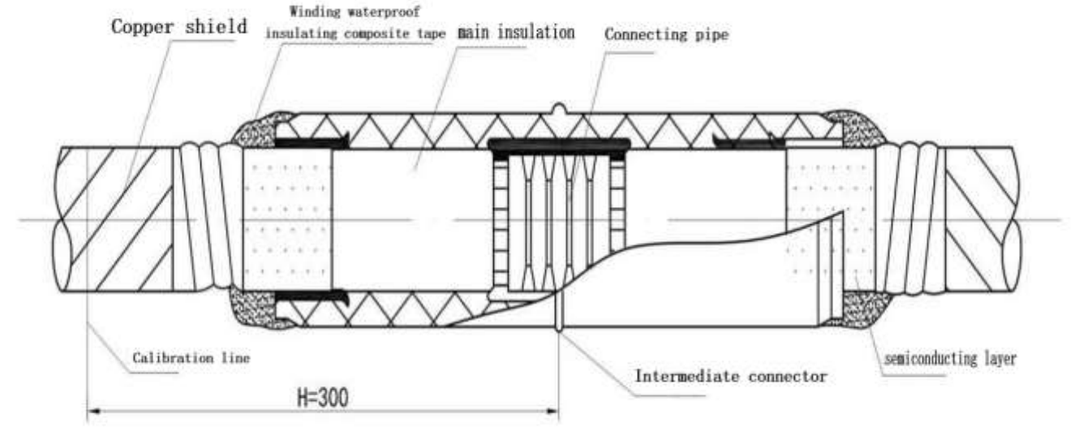


Figure 6 Restoration of the outer semiconductive layer and copper shielding layer

6.1. As shown in the figure, wrap the copper mesh tape flatly and tightly on the surface of the intermediate joint, and let the two ends of the copper mesh tape overlap with the copper shields of the cables at both ends for 30 minutes.

6. 2. Use a small constant force spring to fix the two ends of the copper mesh belt on the copper shielding layer at both ends of the intermediate joint.

6.3. Complete the installation of the other two-phase cables in turn, paying attention to the following:

1. Before installation, please be sure to understand the product and process in detail

2. Before installation, you must first confirm that there is no water in the cable, and then start the installation of the intermediate joint

3. Please install it by a specially trained and qualified cable technician in accordance with the "Power Cable Operation Regulations"

4. Please install in strict accordance with the installation process

Figure 6

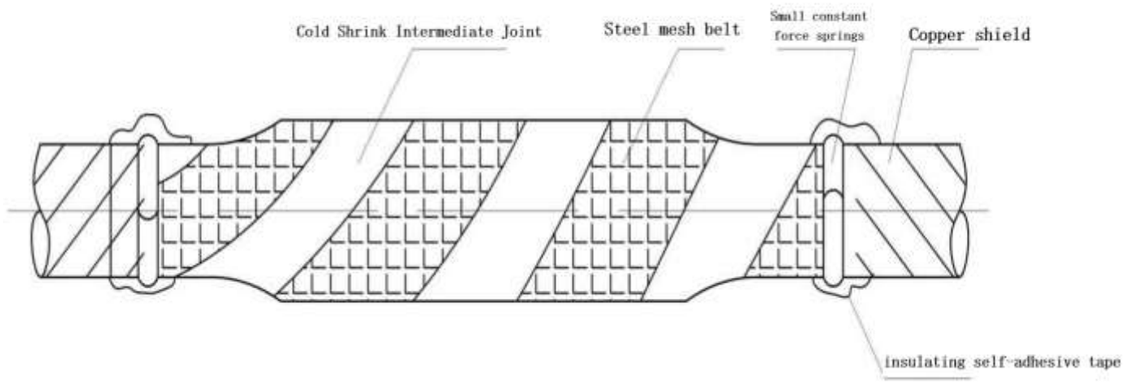


Figure 7 Restoring the inner sheath and connecting the armor layer

7.1. Use PVC tape to wrap several turns in the middle of the three-phase cold-shrink intermediate joint, so that the three-phase cold-shrink intermediate joints are close together, and use insulating self-adhesive tape to cover the tip of the constant force spring and the copper mesh sleeve.

7.2. Use a waterproof insulating composite tape to seal and wind from the inner sheath of the cable steel armor at one end to the inner sheath of the cable steel armor at the other end, and go back and forth one layer to form a complete first waterproof layer.

7.3. Knock off the paint layer on the steel armor, and then use a large constant force spring to connect the tinned copper braid to the steel armor at both ends.

Figure 7

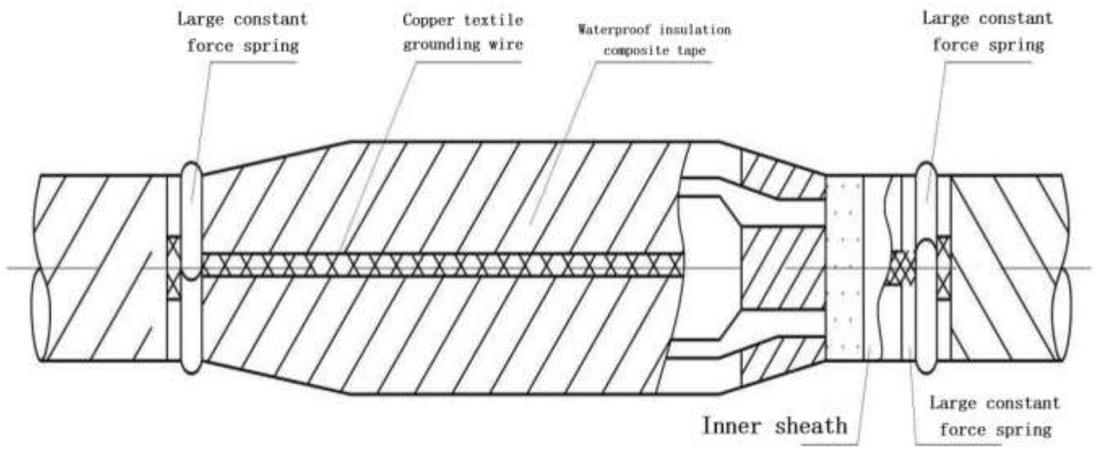


Figure 8 Restoring the outer sheath and installing the protective layer

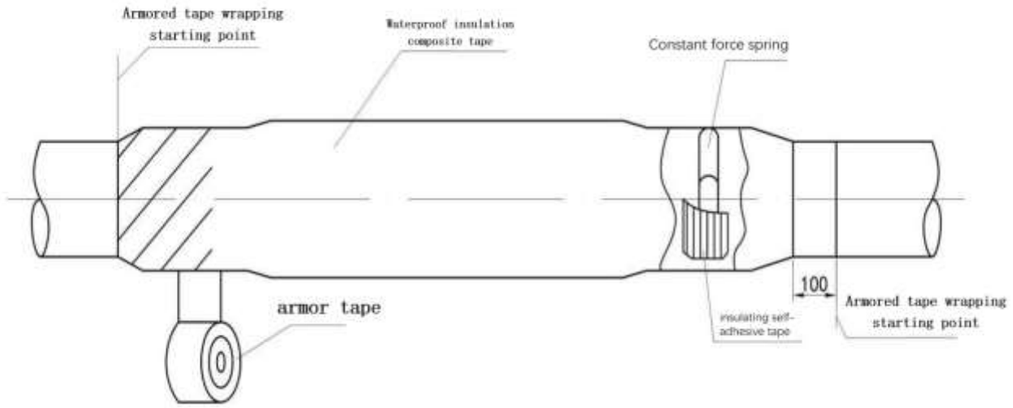
8.1. Cover the large constant force spring and the head of the tinned copper braid with an insulating self-adhesive tape, and use a flame-retardant tape to seal and wind from the point where it overlaps with the outer sheath of one end of the cable by 20mm until it is connected to the outer sheath of the other end of the cable. Sheath overlap 20mm.

8.2. Use a waterproof insulating composite tape to start sealing and winding from the point where the cable at one end overlaps the outer sheath by 100mm, until it overlaps the outer sheath of the cable at the other end by 100mm, and go back and forth one layer to form a complete second waterproof layer.

8.3. Install the armor tape. Operate according to the instructions for the use of the armored tape. Wrap the soaked armored tape on the three-core intermediate joint in a half-overlapping manner with appropriate force, and overlap the outer sheaths at both ends by more than 100mm, and the installation is complete.

Note: After wrapping the armor tape, please wait 30 minutes before moving the cable.

Figure 8



Specification	Suitable cable insulation diameter	Applicable cable reference cross section – mm?	Voltage level
1	16. 0∽21. 5	35 ∽70	8. 7/10 8. 7/15
2	21. 5∽24. 5	95 ∽120	
3	24. 5—30. 0	150∽240	
4	30. 0∽36. 0	300∽400	