

## 35kV Cold Shrinkable Termination INSTALLATION

### DESCRIPTION

The Chardon Cold Shrinkable Termination offers easy installation and reliable performance when terminating indoor and outdoor medium voltage cables. Made from high quality, UV resistant, silicone rubber, the Chardon Cold Shrinkable termination offers a combination of durability and high performance in the field.

The Chardon Cold Shrinkable Terminations include a stress controlling compound housing, preassembled on a plastic “hold out” tube. As the plastic hold out is removed, the stress-relief housing shrinks onto the cable. Chardon terminations are easy to install, and have a wide application range. No tools, or heat sources are required. The products are designed to last the entire life of the cable.

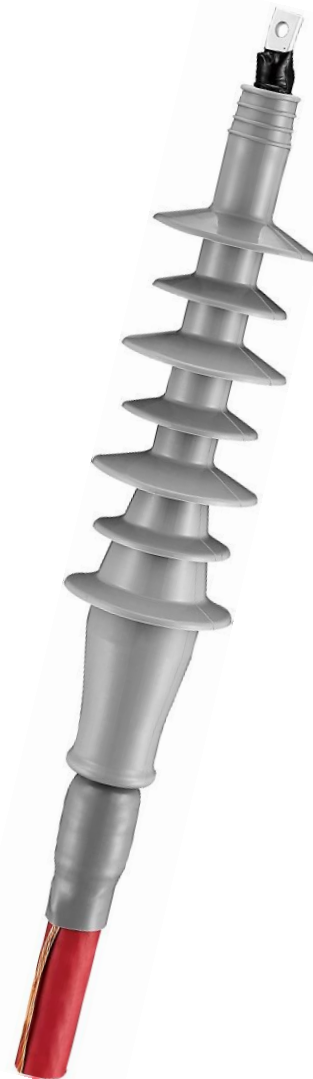
The Chardon Cold Shrinkable terminations are tested according to IEEE Standard 48.

### ORDERING INSTRUCTIONS:

Standard Voltage Class	Part Number	Cable Insulation O.D. Range
35kV	35-CSTO-MK1-A	25.0 – 32.8
	35-CSTO-MK1-B	31.0 – 37.5
	35-CSTO-MK1-C	35.0 – 42.5
	35-CSTO-MK1-D	40.5 – 49.6

### COLD SHRINKABLE TERMINATION KIT CONTENT:

- - Cold shrinkable Termination (Contains hold out tubes)
- - Cold Shrinkable Jacket Seal (Contains hold out tubes)
- - Paper towel
- - Silicone lubricant
- - Sealing tape
- - PVC tape
- - Sandpaper belt
- - Gloves
- - Installation & Operating instructions
- - Grounding kit (Optional)
- - Cable lug (Optional)



**CAUTION:** All associated apparatus must be de-energized during installation and/or maintenance.

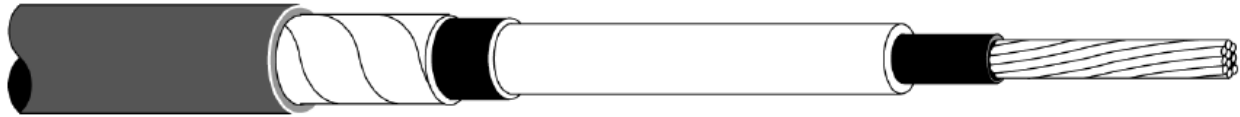


**DANGER:** Do not touch or move energized product by hand. Failure to follow this instruction may result in serious or fatal injury, as well as damage to the product.

## SAFETY INFORMATION

The instructions in this manual are not intended as a substitute for proper training or adequate experience in the safe operation of the equipment described. Only competent technicians, who are familiar with this equipment should install, operate and service it.

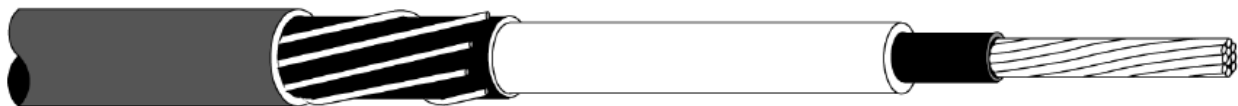
### The Chardon Cold Shrinkable Termination Part for Single Conductor Tape Shielded , Wire Shielded or Jacketed Concentric Neutral (JCN) Cable



Tape Shielded Cable



Wire Shielded Cable



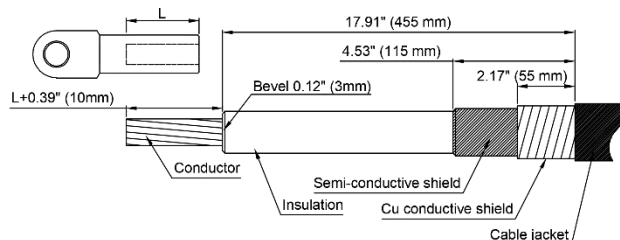
Jacketed Concentric Neutral (JCN) Cable

## INSTALL PROCEDURE

### A. Prepare Cable

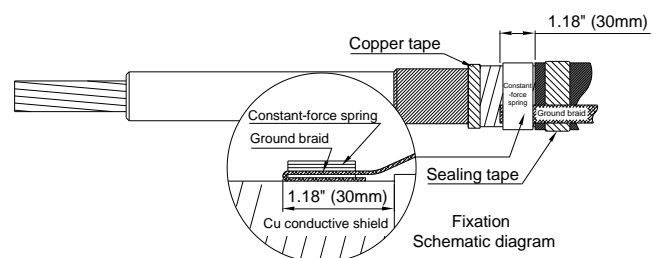
#### Tape Shielded Cable (Only this cable to use the grounding kit.)

#### STEP 1



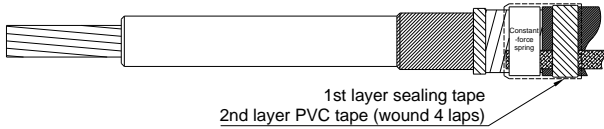
- Prepare cable using dimensions as shown.

#### STEP 2



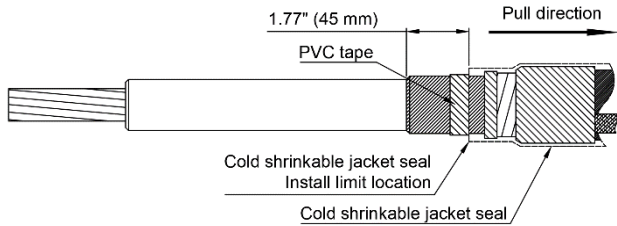
- Clean cable jacket and Semi-conductive shield.
- Wrap the copper tape onto the Cu conductive shield top as shown.
- Wrap the sealing tape onto the cable jacket.
- Measure down 1.18" from top of the cable jacket use constant-force spring to fix ground braid into Semi-conductive shield.

### STEP 3



- Use sandpaper to grind the cable jacket to rough the surface.
- Wrap the sealing tape onto the ground braid.
- Wrap the PVC tapes on top of it, wound 4 laps.

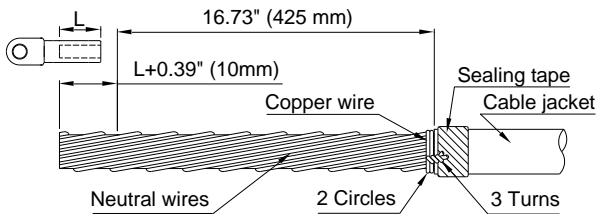
### STEP 4



- Mark semi-conductive shield for 1.77" on the PVC tape.
- Place the Cold Shrinkable Jacket Seal onto the cable, aligning the mark with the end of the rubber tube. Pull the chord slowly to complete the installation.
- Proceed to step B.

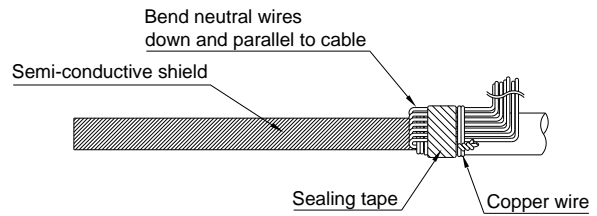
## Wire Shielded Cable / JNC Cable

### STEP 1



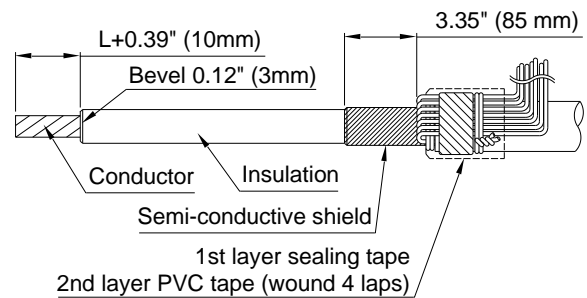
- Measure down from top of the cable (lug depth  $L+0.39"$  +  $16.73"$ ). Remove cable jacket (if jacketed cable is used) to expose neutral wires. Provide sufficient length of neutral wires for grounding after installation.
- Use copper wire to secure neutral wires to insulation shield of cable as shown.
- Use tinned copper wire to lash the neutral wires. Use sandpaper to grind the cable jacket to rough the surface, clean the grinded surface then bind the sealing tape on.

### STEP 2



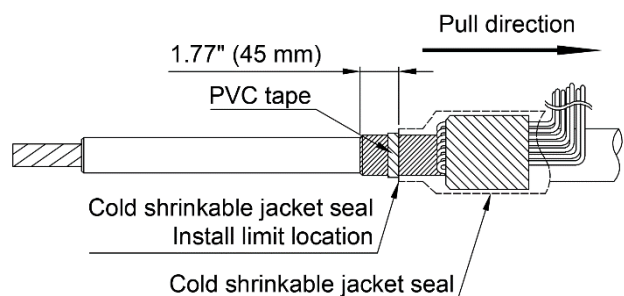
- Unwind neutral wires.
- Bend neutral wires down and parallel to cable.
- Use copper wire to secure neutral wires to cable jacket as shown.

### STEP 3



- Wrap the sealing tape onto the neutral wires.
- Wrap the PVC tapes on top of it, wound 4 laps.
- Remove semi-conductive shield for 3.35".
- Remove the insulation to expose the bare conductor for according to lug depth  $L+0.39"$ . Do not to nick the conductor.

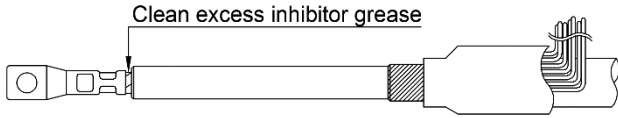
### STEP 4



- Mark semi-conductive shield for 1.77" on the PVC tape.
- Place the Cold Shrinkable Jacket Seal onto the cable, aligning the mark with the end of the rubber tube. Pull the chord slowly to complete the installation.
- Proceed to step B.

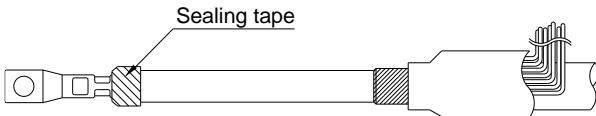
## B. Install Compression Connector

### STEP 1



- Clean the exposed conductor by using a wire brush.
- Place the compression connector on the exposed conductor and crimp it.

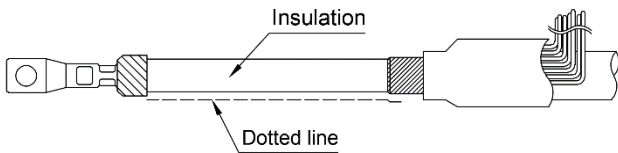
### STEP 2



- Wrap the sealing tape between the insulation and connector.

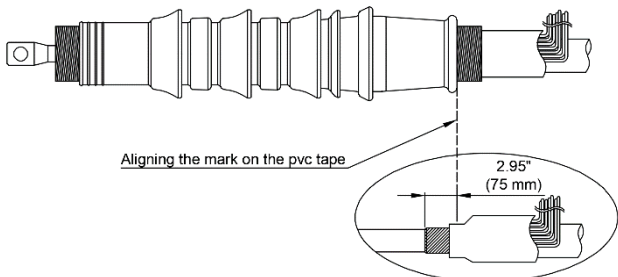
## C. Install Termination

### STEP 1



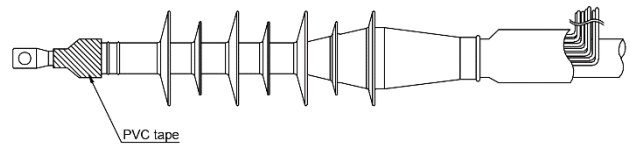
- Polish and clean thoroughly the insulation by using sandpaper belt and paper towel then apply the silicone lubricant around the dotted line place.

### STEP 2



- Mark semi-conductive shield for 2.95" on the PVC tape
- Place the cold shrinkable termination onto the cable, aligning the mark with the end of the rubber tube. Pull the chord slowly to complete the installation.

### STEP 3



- Seal the top of the terminator at the connector area with PVC tape.

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FOR FURTHER INFORMATION WRITE TO

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