

# Installation Instructions

## 15/25 PCJ1LMXXXX

**CONTENTS:** Joint Housing, Splice (Conductor Contact), Lubricant (**DO NOT SUBSTITUTE**), Installation Instructions.

The straight joint is a permanent, fully shielded, fully submersible joint for aluminum and/or copper conductor, wire shielded cables, with a continuous operating current rating equal to that of the cable on which it is installed and a rated voltage as indicated on the joint housing.

### DANGER

Inspect parts for damage, rating and compatibility with mating parts.

This product should be installed only by competent personnel trained in good safety practices involving high voltage electrical equipment. These instructions are not intended as a substitute for adequate training or experience in such safety practices.

Failure to follow these instructions will result in damage to the product and serious or fatal injury.

If this product is supplied with a protective shipping cover(s), remove this shipping cover(s) and replace with the appropriate HV insulated cap(s) or connector(s) before submerging or energizing the circuit.

FOR MORE INFORMATION ON PARTS, INSTALLATION RATINGS AND COMPATIBILITY, CALL THE NEAREST ELASTIMOLD OFFICE.

### IMPORTANT

1. Check contents of package to ensure they are complete and undamaged.
2. Check all components to ensure proper fit with cable and/or mating products.
3. Read entire installation instructions before starting.
4. Have all required tools at hand and maintain cleanliness throughout the procedure.

### STEP A

1. Overlap both cables and cut to 12" (305mm) from centerline of joint. This procedure will insure sufficient length of shield wires to be able to rejoin over joint.
2. Where applicable, remove cable jacket of Cable 1 to 34" (865mm) and that of Cable 2 to 20" (510mm).
3. Fold back shield wires.
4. Cut both cables at center line of joint.

### STEP B - PREPARE CABLE 1 & STORE HOUSING

1. Taper edge of Cable 1 from 1/2" to 1-1/2" (13mm to 38mm). Clean, then lubricate insulation shield. Lubricate inside bore of joint housing on both ends.
2. Slide the housing on the cable up to the shield wires. Tests have shown this procedure will not contaminate electrical interfaces.

### STEP C - PREPARE CABLES FOR SPLICE INSTALLATION

Use the stripping guide on the side and carefully remove the cable insulation and then the insulation shield from both cables. **DO NOT CUT OR NICK THE CABLE INSULATION OR CONDUCTOR.** This could result in failure of the assembly.

### STEP D - SPLICE INSTALLATION

1. Aluminum conductors must be wirebrushed and immediately inserted into the splice. Be sure "Check" dimension does not exceed 5-1/4" (133mm) otherwise redo assembly.
2. Crimp the splice following the recommendations provided with it.
3. Wipe off all excess inhibitor (where applicable), then check the distance between cable insulations. If it exceeds 5-1/2" (140mm) redo assembly.
4. Remove any sharp protrusions/burrs that were generated when crimping the splice. **Metal chips/filings must be removed from the splice and joint assembly area prior to sliding joint.**
4. Clean cables where indicated. Then lubricate in the direction of arrows to provide a build-up or ramp of lubricant at the edge of the insulation shield.

### STEP E - COMPLETE JOINT ASSEMBLY

1. Slide housing into final position. Proper positioning is insured by observing and equalizing the deformation of the joint ends caused by the underlying cable insulation shield.
2. Reshape shield wires and secure to ends of joint as shown.
3. Insert one of the shield wires from Cable 1 (if #14 AWG or larger) through the joint grounding eye. Repeat for Cable 2. If shield wires are smaller than #14 AWG use separate #14 AWG copper wire or equivalent.
4. Connect joint grounding wires and remaining shield wires, using an appropriate connector, as shown.
5. Reconstruct cable jacket (where applicable) over both cables and also over joint housing.

### STEP F

**WARNING:** IF ONE OR BOTH OF THE CABLES BEING JOINED ARE JACKETED IT IS IMPORTANT TO SEAL THE ENDS OF THE JACKET OR COMPLETELY RESTORE THE JACKET ACROSS THE JOINT. Follow standard operating procedures or instructions provided with the compatible jacket sealing or restoration kits to provide the appropriate jacket seals or restoration.

