



CAUTION : Read instructions thoroughly and completely prior to beginning installation.

### Installation Instructions for Separable Tee Connector - Type C interface



Only to be used on copper wire screened cable with extruded easy strip or bonded semi-conductive screen



Check if the diameter over cable core insulation is in accordance with the cable reducer range as indicated in table below:

Cable reducer size (see label on cable reducer)	Dia. over core insulation (mm)	
	min	max
CA0-11	12.0	19.0
CA0-15	16.0	26.5
CA0-18	19.0	32.6
CA0-21	22.0	34.6
CA0-27	28.5	37.5

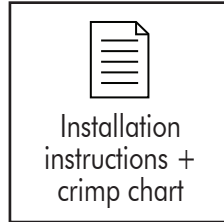
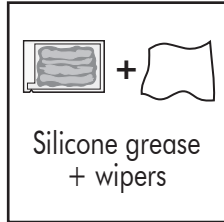
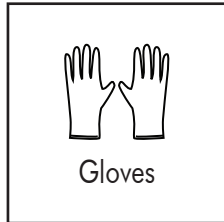
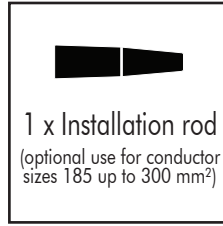
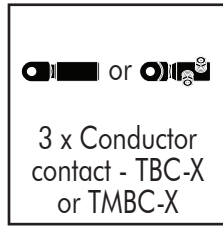
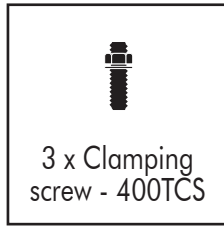
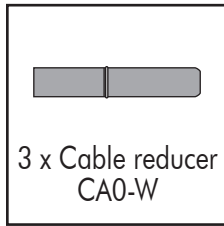
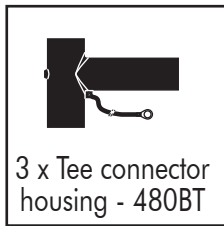


This product should be installed only by competent personnel trained in good safety practices involving high voltage electrical equipment. These instructions are not intended as a substitute for adequate training or experience in such safety practices. These instructions do not attempt to provide for every possible contingency. Failure to follow these instructions could result in damage to the product and serious or fatal injury.

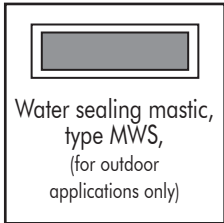
**IMPORTANT :** Cable and associated apparatus must be de-energised, locked out, and tagged prior to product installation.

## Required components for the connector installation :

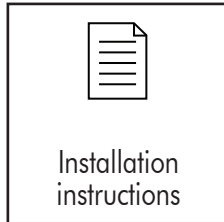
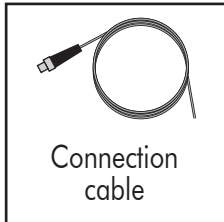
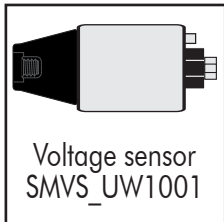
### Box 1:

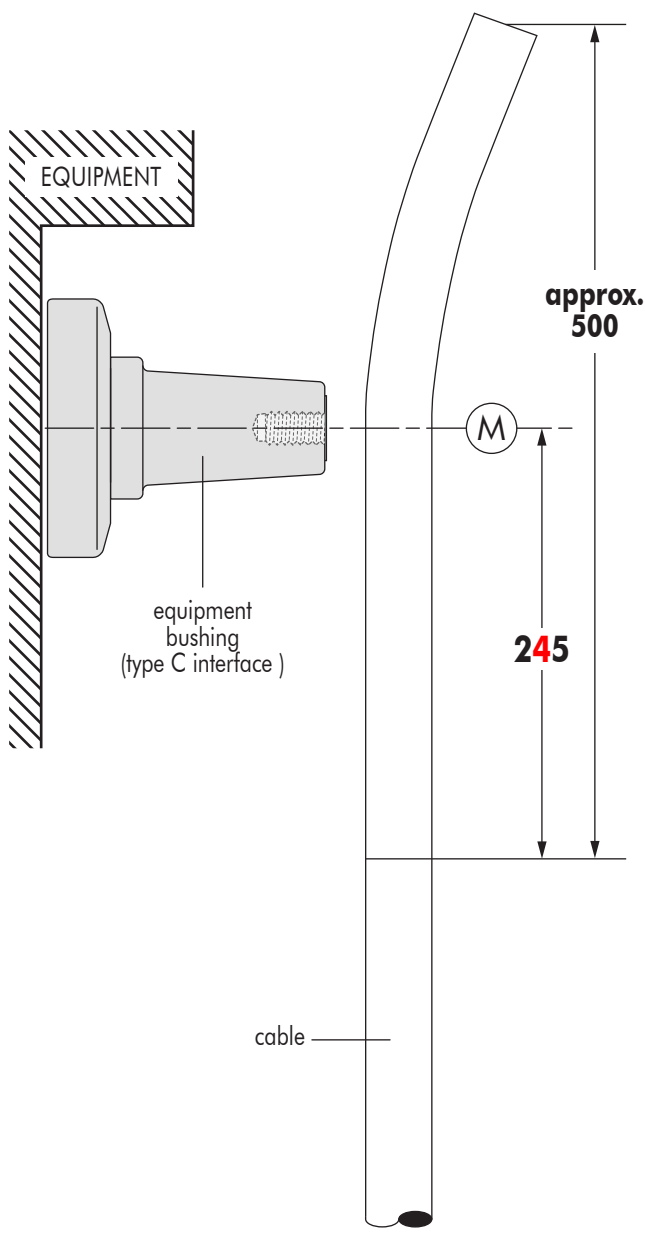


### Further required components depending on application and cable type (optional supply) :

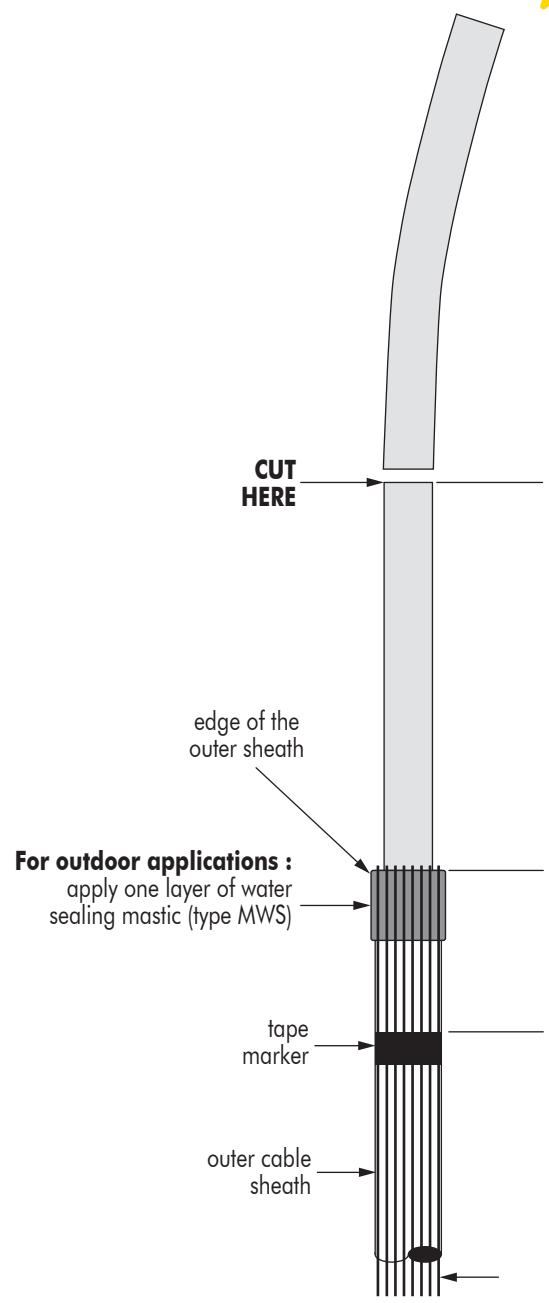


### Box 2:



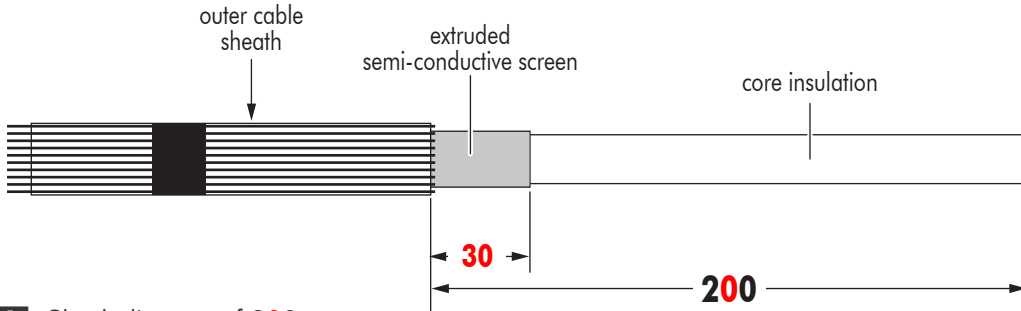


Train the cable into the approximate finished position next to the equipment bushing. Remove the outer cable sheath to a point **245** mm from the centre line « **M** » of the bushing.



- 3 For indoor applications**, bend the screen wires back over the outer sheath and proceed to step no. 4.
- For outdoor applications :**
- Wrap one layer of water sealing mastic (type MWS) around the outer sheath, flush with the end (**25** mm minimum width). Completely encircle the cable.
  - Bend the screen wires back over the mastic and along the outer sheath, pressing them into the mastic.
- Important:** screen wires should not touch each other when pressed into the mastic to prevent water ingress.
- 4** Apply a tape marker around the outer sheath **65** mm from the edge.
- 5** Cut the cable to a point **200** mm from the outer sheath.

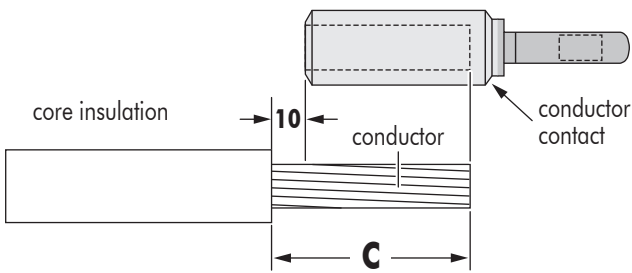
## CABLE PREPARATION



- 1 Check distance of **200** mm.
- 2 Remove the extruded semi-conductive screen up to a point **30** mm from the outer sheath.  
**For extruded easy strip conductive screen :** cut squarely taking care not to cut the core insulation.  
**For bonded extruded conductive screen :** use an appropriate pencilling tool.
- 3 Remove any traces of conductive residue from the core insulation.

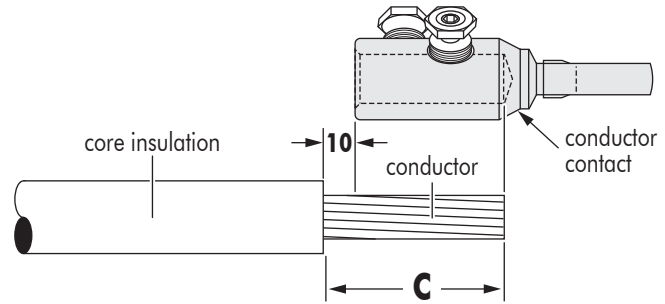
## REMOVAL OF THE CORE INSULATION

### A. Compression type contacts (Type TBC-X)



- 1 A. Remove the core insulation from the conductor for a distance « **C** » mm  
**(C = depth of contact bore + 10 mm).**

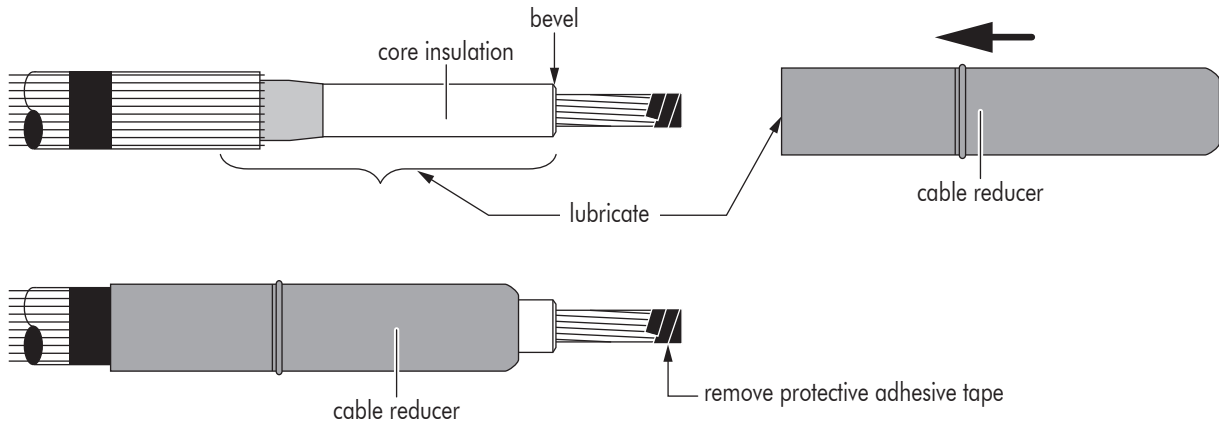
### B. Mechanical type contacts (Type TMBC-X)



- 1 B. Remove the core insulation from the conductor for a distance « **C** » mm  
**(C = depth of contact bore + 10 mm).**

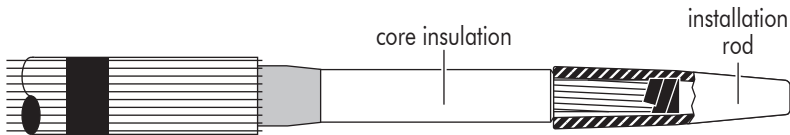
## INSTALLATION OF THE CABLE REDUCER

For conductor sizes 16 mm<sup>2</sup> up to 150 mm<sup>2</sup>

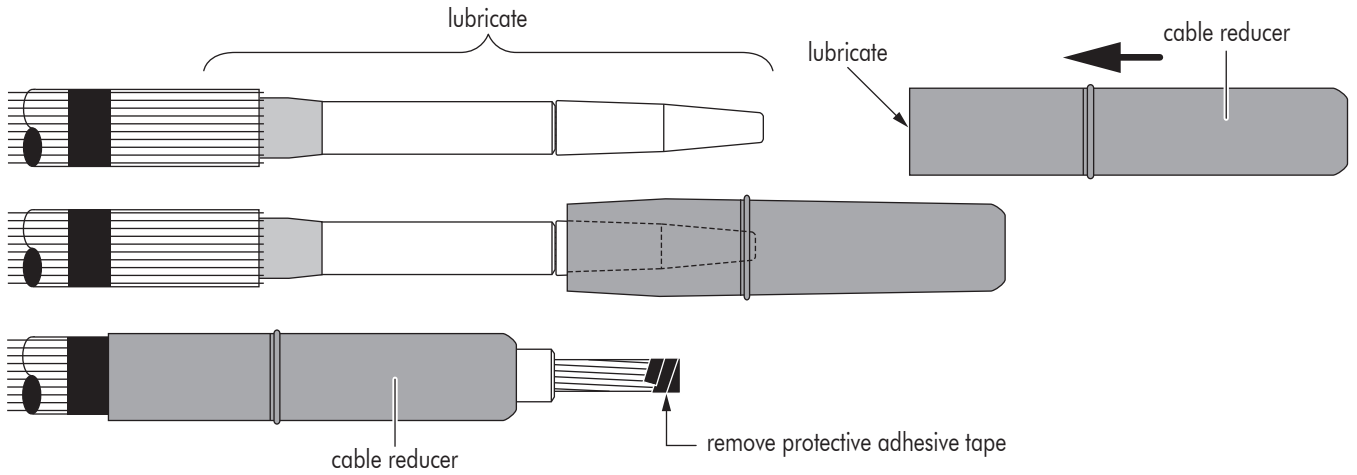


As a protection, wrap a few turns of adhesive tape around the conductor end.  
 Slightly bevel the edge of the core insulation.  
**Thoroughly clean core insulation.** Always wipe towards the screen wires.  
 Lubricate\* core insulation and the inside surface of the cable reducer.  
 Slide the reducer down the cable.

## For conductor sizes 185 mm<sup>2</sup> up to 300 mm<sup>2</sup>



**1** Slide the installation rod on to the conductor until it butts against the core insulation.



**2** Thoroughly clean installation rod and core insulation. Always wipe towards the screen wires.

**3** Lubricate\* the indicated area: installation rod, core insulation, semi-conductive screen, water sealing mastic and inner surface of the reducer.

**4** Slide the reducer on to the installation rod.

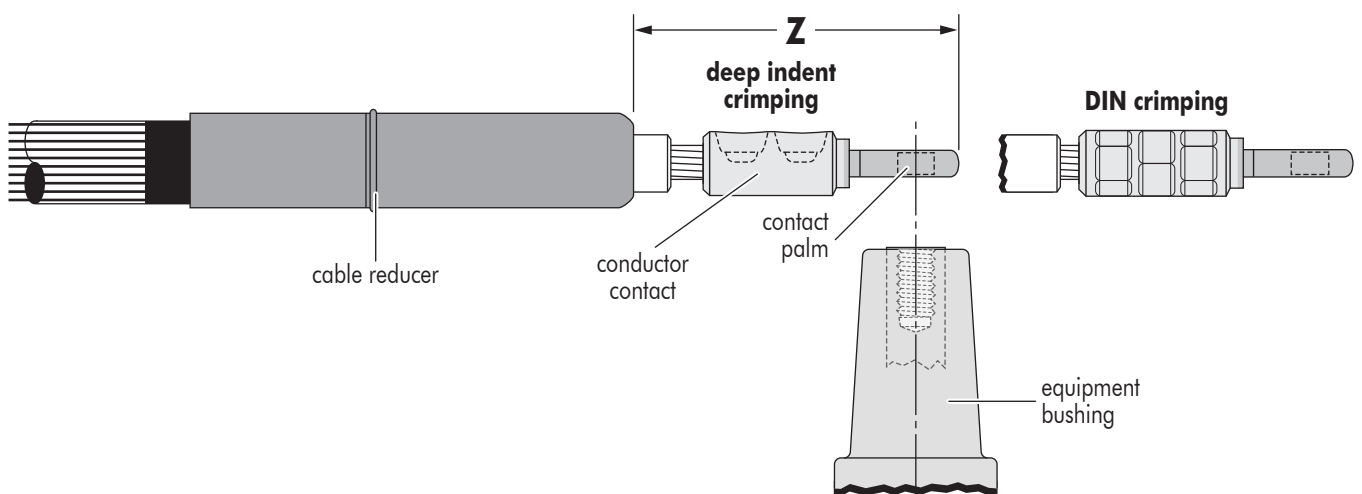
**5** Slide the reducer down the cable until flush with the tape marker. Take care to slide the reducer without hesitation and in one smooth move.

**6** Remove installation rod and protective adhesive tape from the conductor.

## CRIMPING/TIGHTENING OF THE CONTACT

**A**

### Compression type contacts (Type TBC-X)



**1** For aluminium conductors : before installing the conductor contact, wire brush the conductor.

**2** Fit the contact on to the conductor.

**3** Position the crimp contact taking care that the contact hole aligns with the bushing hole.

**4** Prior to crimping distance « Z » must be between **145** and **160** mm.

**5** Crimp the contact. Please refer to the crimp chart for crimp sequence.

**6** After crimping distance « Z » must be between **145** and **165** mm.

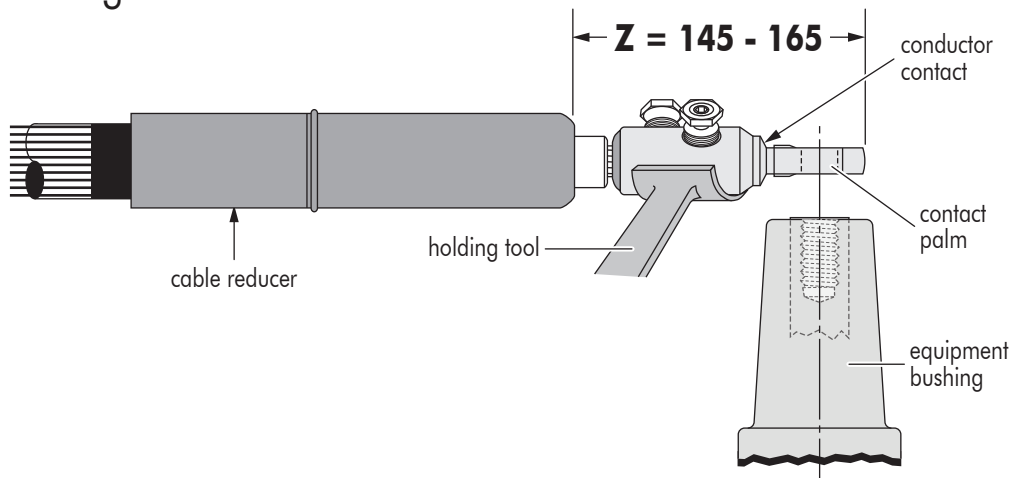
If necessary, adjust the position of the cable reducer until distance « Z » is within the tolerance range.

**7** Remove any burrs left after crimping and wipe-off excess inhibitor.

\* USE ONLY THE SILICONE LUBRICANT SUPPLIED

## Mechanical type contacts (Type TMBC-X)

### Before tightening



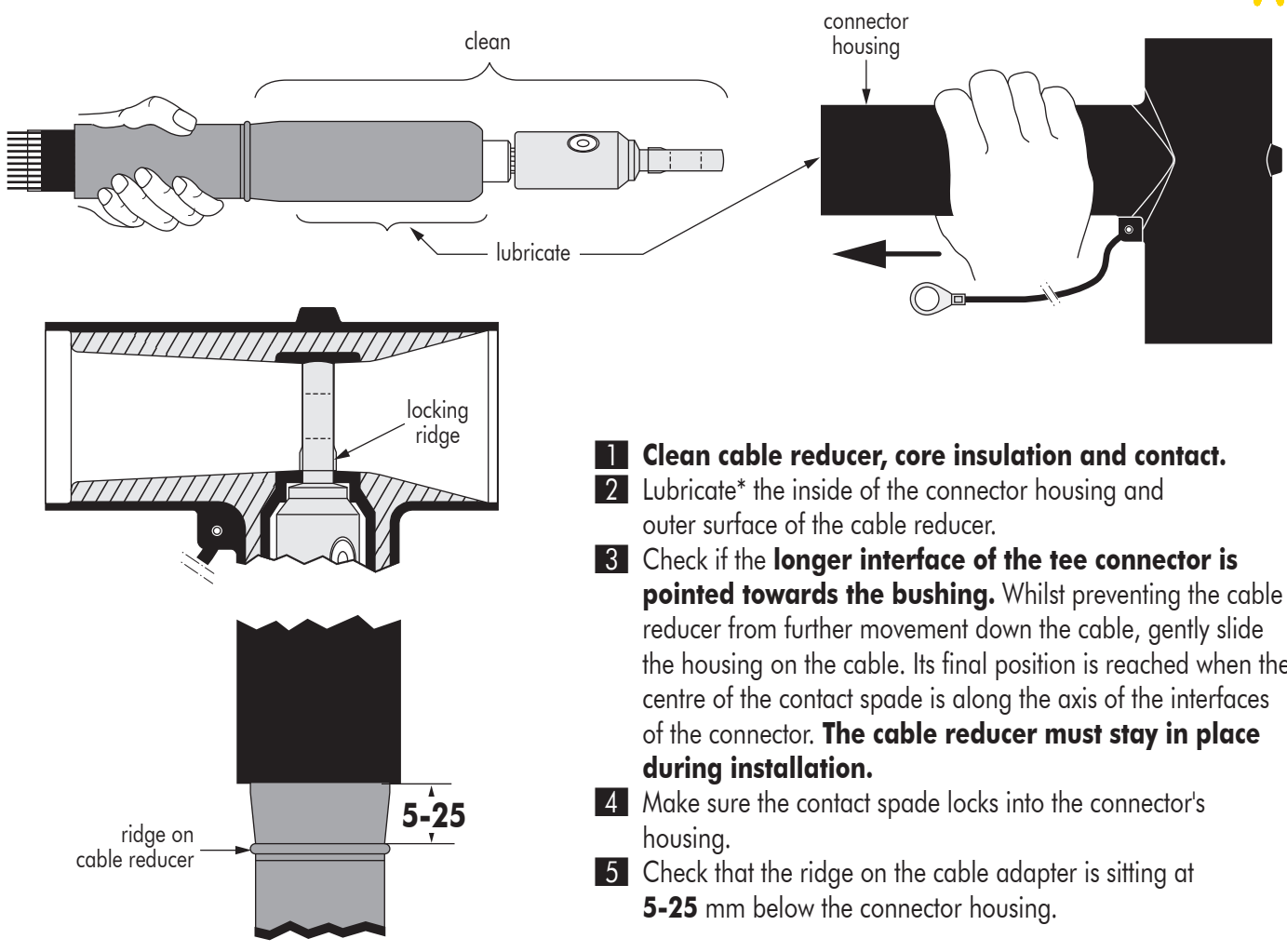
- 1 For aluminium conductors : before installing the conductor contact, wire brush the conductor.
- 2 Insert, if necessary, the centre ring into the contact barrel according to the table in the contact installation instruction.
- 3 Position the contact so that the contact hole aligns with the bushing hole.
- 4 Before tightening, distance «  $Z$  » must be between **145** and **165** mm.
- 5 Tighten the contact. Please refer to the installation instruction included with the contact.

### After tightening

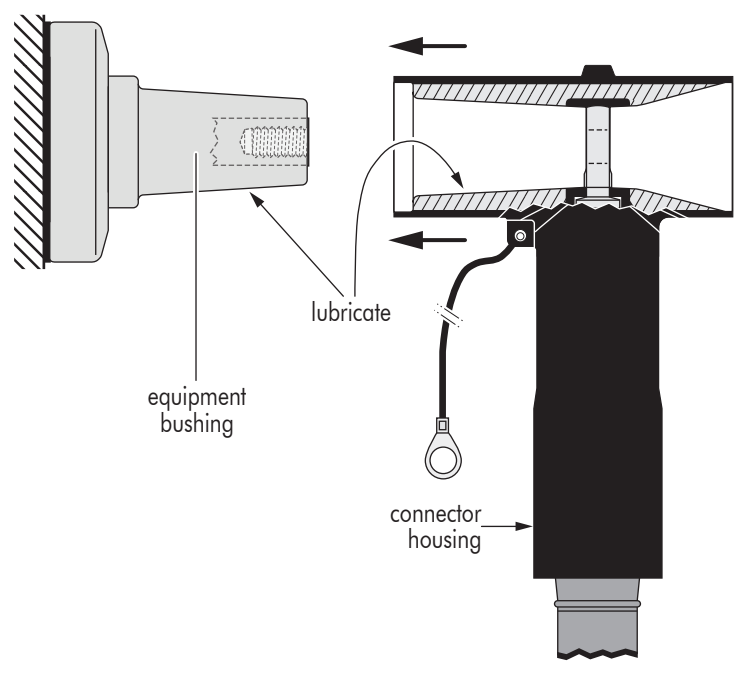


- 6 After tightening, distance «  $Z$  » must be between **145** and **165** mm.  
If necessary, adjust the position of the cable reducer until distance «  $Z$  » is within the tolerance range.

## CONNECTOR INSTALLATION ON CABLE

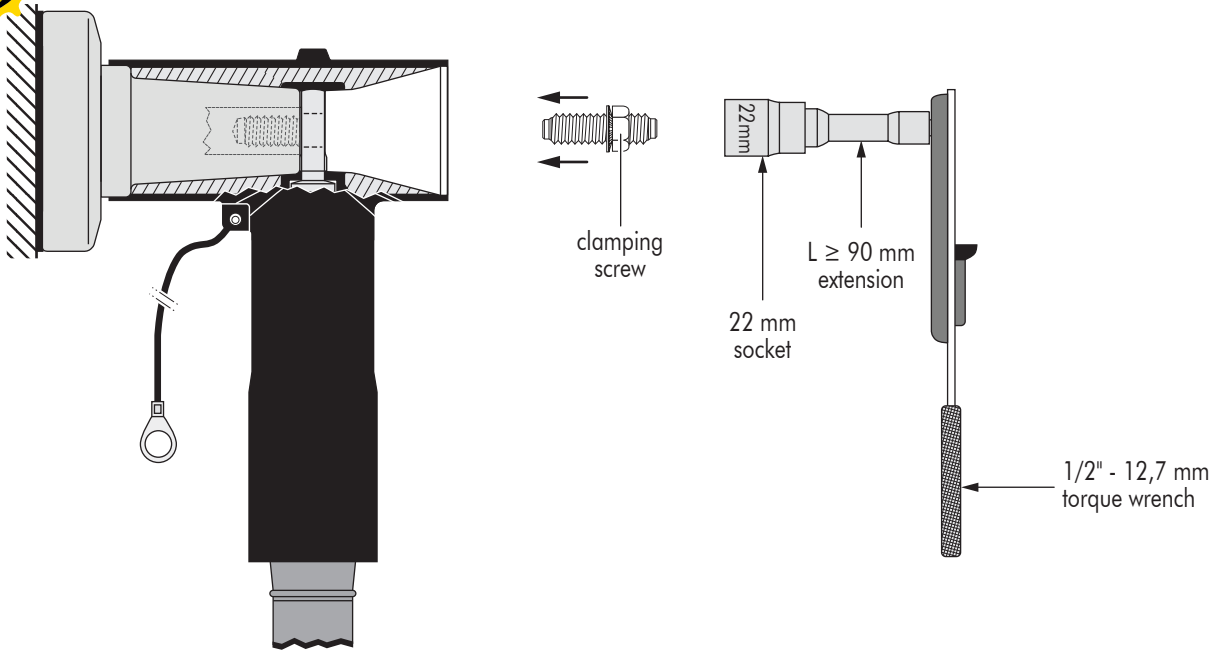


## CONNECTOR INSTALLATION ON BUSHING

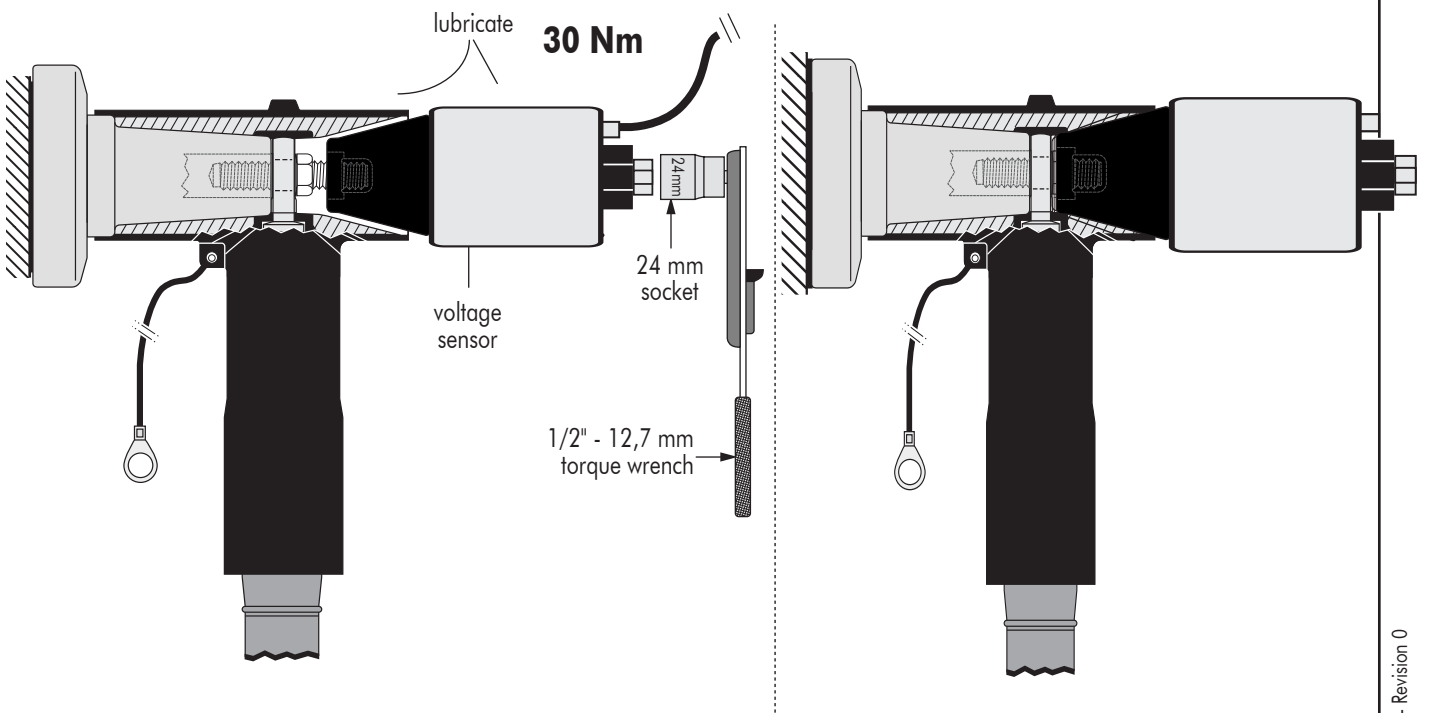


- 1** Clean and lightly lubricate\* both connector and bushing interface.
- 2** Push the connector on to the bushing.

\* USE ONLY THE SILICONE LUBRICANT SUPPLIED



- 3 Insert clamping screw into the threaded hole of the bushing **by hand**.
- 4 Use a torque wrench with a 22 mm socket and tighten exerting **50 Nm** (5 kgm or 36,9 foot-pounds) of torque. **In order to achieve the correct applied torque ensure that there is no lubricant on the threaded parts.**

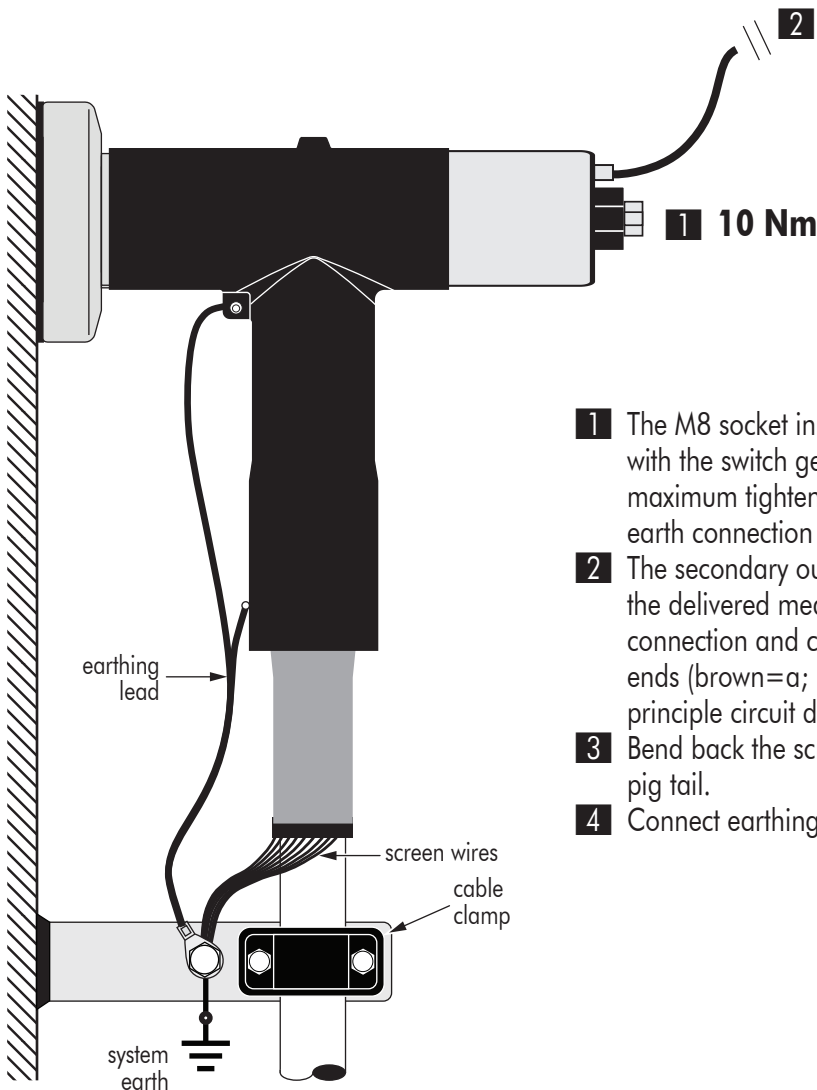


- 5 Clean and lubricate\* the insulating plug for the opposite side of the connector.
- 6 Insert the plug in the connector, engage the threads and hand tighten.
- 7 Tighten assembly : use torque wrench with socket of 24 and tighten exerting **30 Nm** (5 kgm or 37 foot-pounds) of torque (**See important notes on page 9**).

\* USE ONLY THE SILICONE LUBRICANT SUPPLIED



## CONNECTOR EARTHING AND CABLE CLAMPING



- 1** The M8 socket in the cast resin hexagon has to be connected with the switch gear earth with a minimum 6 mm<sup>2</sup> cable, maximum tightening torque **10 Nm**. During mounting of the earth connection pay attention to remove the earth label.
- 2** The secondary output cable of the sensor shall be extended with the delivered measurement cable by the means of a plug-in connection and connected with the evaluation unit. The open ends (brown=a; black=n) has to be connected as shown in the principle circuit diagram (see instruction of the supplier).
- 3** Bend back the screen wires along the outer sheath to form a pig tail.
- 4** Connect earthing lead and screen wires to the system earth.

### NOTE :

**A connector/bushing mated combination should not be allowed to carry the full weight of the cable. Therefore it is necessary to clamp the cable as close as possible to the connector.**

### IMPORTANT NOTES :

- In order to achieve the correct applied torque ensure that there is no lubricant on the threaded parts.
- Never disconnect the connector from energised equipment nor energise a disconnected connector without previously installing on its appropriate corresponding mating part.
- Do not allow hydrocarbon oils or solvents to contaminate the E.P.D.M. rubber. In the event of contamination, wipe the surface clean with a dry cloth.