

# Connector Application HVBRM Branch Joint Connectors (Solid and Split)

As a safety check, bolts should be run through the threaded holes in the body before installation to ensure there is no contamination trapped in the thread.

- 1. Arrange the three conductors to be jointed together in their final position.
- 2. Place the connector along side the conductors in the position it will finally occupy and mark the centre line of the connector and all conductors. Remove the connector.
- 3. Cut off the surplus conductor at a point 15mm from the marks made in 2, away from the conductor ends. This will leave 30mm gap between the conductor ends.
- 4. Remove the insulation to 70mm from each conductor end.
- 5. If the conductor is oil-impregnated, remove any oil on the outer strands.

#### For solid connectors:

 Insert the prepared conductor ends into the connector. In order to limit the possibility of damage to paper insulated conductors care should be taken to avoid bending during insertion.

## For split connectors

7. Slide the sleeve over the main cable conductor on the single end of the joint. Insert the branch cable conductor and the main cable conductor on the branch end of the joint into the two conductor entries in the branch end of the fitting.
Place the end of the first conductor into the open channel in the connector. Ensure that all the strands are within the channel. Place the insert over the channel. Line up the holes in the sleeve with the holes in the insert by sliding the sleeve over the insert thus locking the insert to the connector body.

#### For split and solid connectors

8. Fit the bolts to the connector and tighten them up 'hand tight'. Using a 19mm socket, tighten each bolt half a turn at a time before moving on to the next bolt and repeat the operation to ensure that all the bolts are evenly and progressively tightened until they shear off.

## Notes:

- a) For sector shaped stranded aluminium conductors, fitting is facilitated if, prior to removal of the insulation, the conductor is circularised where it is to enter the connector. this is only necessary on the largest conductor size for which the connector is intended.
- b) An adjustable connector holding tool is available for the connectors (IT-1000-019).
- c) If the bolt is felt to shear, but the head does not immediately become free, the direction of rotation should be reversed until the bolt head detaches itself.