



BRANCH JOINT CONNECTORS WITH RANGE TAKING BOLTS

These connectors are available in two basic types, "SOLID" **BLOCKED** and the patented "SPLIT" **BLOCKED** (for extreme ease of application while retaining the blocked facility).

Each connector type is available in two sizes; the first for aluminium or copper conductors up to and including 185sqmm (M18 fitting); the second for aluminium or copper conductors up to and including 300sqmm (M22 fitting). Connectors are supplied with range taking bolts.

Product Features

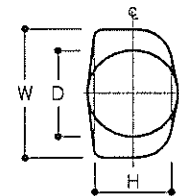
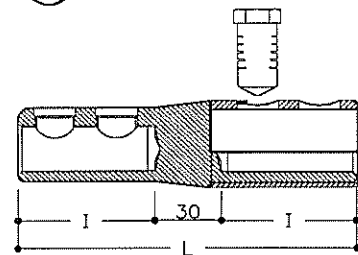
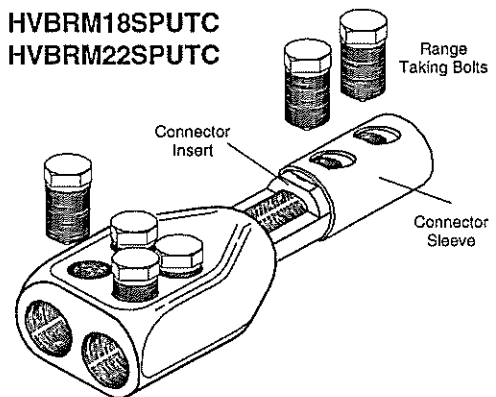
- ◆ **Threaded Cable Entries**
 - Reduce conductor contact resistance.
 - Improve tensile performance.
 - Allow use of low shear bolt torques.
- ◆ **"BLOCKED" Design**
 - Separates M.I.N.D. oil compound from polymeric insulation.
 - Ensures even conductor insertion lengths.
- ◆ **Smooth Profile**
 - Allows better control of electrical stresses.
 - Facilitates application of insulation.
- ◆ **Patented Range Taking Bolts**
 - Ensure correct clamping pressures.
 - Eliminate the need for various bolt lengths to suit different conductor sizes.
 - Avoid the necessity for a special bolt application tool.
 - All bolts use 19mm socket or spanner.
- ◆ **Split Version** * also offers:
 - Extreme ease of application.
 - Elimination of excessive conductor bending.
 - Reduction of overall joint length.
 - Retention of "blocked" design.
 - Retention of smooth profile.
- ◆ **Solid Centre Section**
 - Replaces conductor lost by 'spiking'
 - Allows main to be opened out for easier jointing.

*UK and International Patents granted.

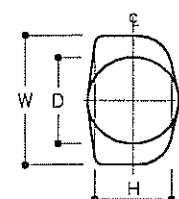
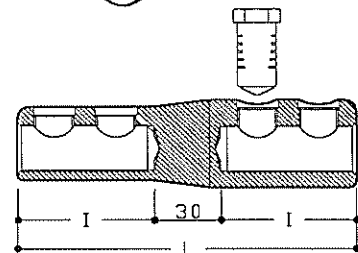
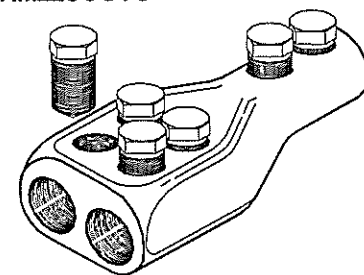
Dimensions (mm)

Connector Type	L	W	D	H	I
HVBRM18SOUTC	154	61	41	35	62
HVBRM18SPUTC	154	61	41	35	62
HVBRM22SOUTC	154	77	46	42	62
HVBRM22SPUTC	154	77	46	42	62

HVBRM18SPUTC
HVBRM22SPUTC



HVBRM18SOUTC
HVBRM22SOUTC





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Connector Application

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 (5/8") from the marks made in 2, away from the conductor ends. This will leave 30mm (1 1/4") gap between the conductor ends.
4. Remove the insulation to 70mm (2 3/4") from each conductor end.
5. If the conductor is oil-impregnated, remove any oil on the outer strands.
6. a) **SOLID TYPE**
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 over bending during insertion.
b) **SPLIT TYPE**
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.
7. 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.
Part No. CHT1.
- 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.

Application Data

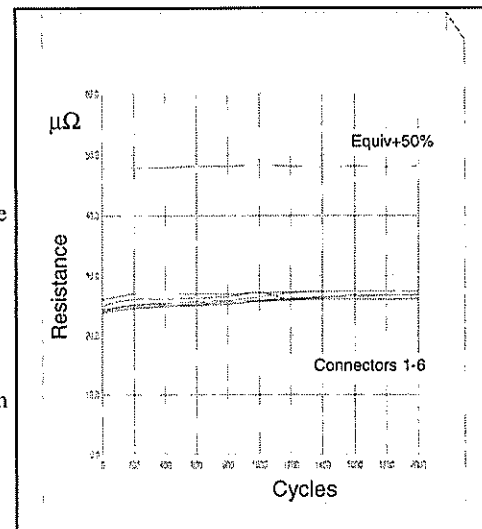
Connector Type	Part No.	Conductor (sqmm)	
		Min.	Max.
SOLID BRANCH	HVBRM18SOUTC	14*	185*
SPLIT BRANCH	HVBRM18SPUTC		
SOLID BRANCH	HVBRM22SOUTC	14**	300**
SPLIT BRANCH	HVBRM22SPUTC		

Testing

B&H Mechanical Branch Joint Connectors are designed to meet the requirements of: Engineering Recommendation C79 for Aluminium conductors. BS4579 Part I for copper conductors. BS4579 Part III for aluminium conductors.

Resistance / Cycles

For M18 fittings on 11kV compacted circular stranded polymeric insulated aluminium conductor
Test Ref. No. HVBRM18SP/1



Notes:

For copper conductors, brass gauze may be used as an option:

* Part No. GA5070
(pack of 3)

**Part No. GA50100
(pack of 3)