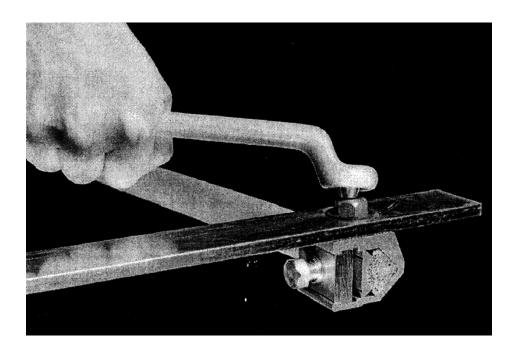
Mechanical Busbar Termination Connectors

MECHANICAL CONNECTORS



UT Connectors



Principle Application

Termination connections to busbars (max. thickness 8.0mm)

The **Hepworth UT** range of mechanical connectors is designed as an alternative to the traditional flat busbar termination with the following advantages: -

- 1. With the aid of shear torque screws, both to secure the conductor and to bolt the termination to the busbar, the necessary consistency between connections can be achieved without the use of specialised tooling.
- 2. The full connection can be carried out using basic hand tools.
- 3. The busbar face of the connector provides a more consistent area of contact with the additional advantage, in the case of aluminium busbars, of surface oxide rupture and penetration under pressure.*
- 4. By employing a double-headed shear screw at the basbar interface, any subsequent disconnection is a simple matter.

*Note: With tinned copper busbars, the tin acts effectively as a bi-metallic interface and the soft tin surface layer yields under pressure to the surface ridges of the connector, deforming around the penetrating aluminium as a corrosion-resistant contact.





MECHANICAL CONNECTORS

UT Connectors

UT1 CONNECTOR

Conductor

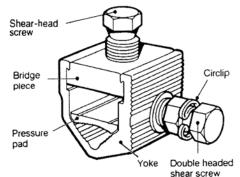
3 & 4 core Stranded

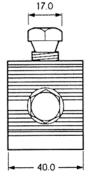
Principle Range

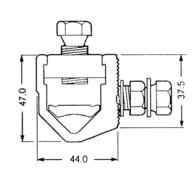
240 - 300 mm2

Material

Aluminum Alloy







UT2 CONNECTOR

Conductor

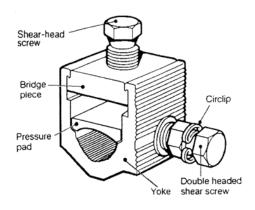
Circular Stranded

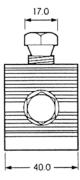
Principle Range

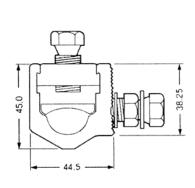
185-300mm2

Material

Aluminium Alloy







UT3 CONNECTOR

Conductor

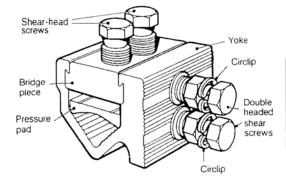
3 & 4 core Stranded

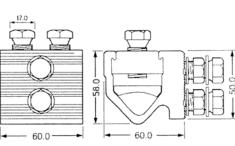
Principle Range

400 - 500 mm2

Material

Aluminium Alloy







Mechanical Busbar Termination Connectors

MECHANICAL CONNECTORS

UT Connectors

UT4 CONNECTOR

Conductor

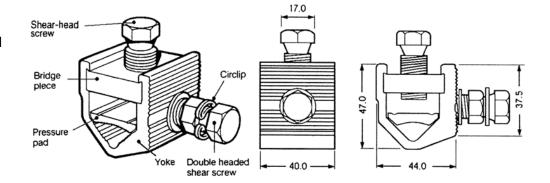
3 & 4 core Stranded

Principle Range

150-185mm2

Material

Aluminium Alloy



UT5 CONNECTOR

Conductor

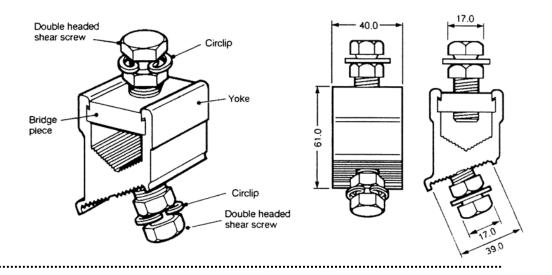
3 & 4 core Solid

Principle Range

70-300mm2

Material

Aluminium Alloy



UT6 CONNECTOR

Mains Conductor

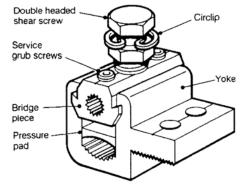
3 & 4 core Stranded or Solid Circular

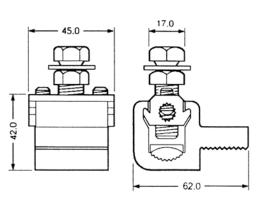
Principle Range

90-150mm2 Service Conductor: - 2 x 4-35mm2

Material

Aluminium Alloy







MECHANICAL CONNECTORS

UT Connectors

UT7 CONNECTOR

Conductor

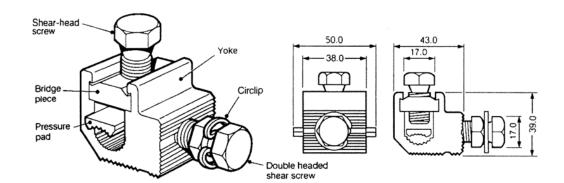
Stranded Neutrals

Principle Range

50-150mm2

Material

Aluminium Alloy



UT8 CONNECTOR

Conductor

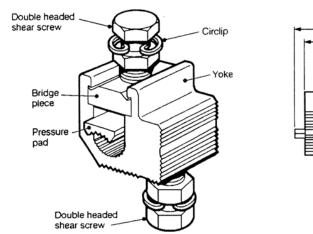
Stranded Neutrals

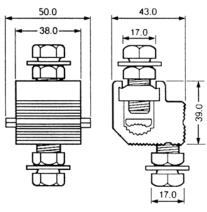
Principle Range

50-150mm2

Material

Aluminium Alloy





UT9 CONNECTOR

Conductor

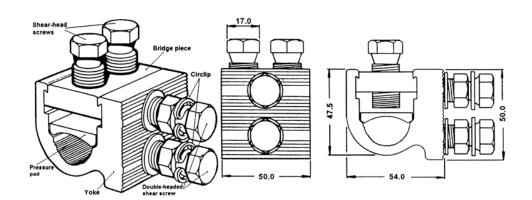
Circular Stranded

Principle Range

400mm2

Material

Aluminium Alloy





Mechanical Busbar Termination Connectors

MECHANICAL CONNECTORS

UT Connectors

Fitting Instructions

Set the conductor to the required position, cut to length and strip the insulation equal to the connector length plus 5 mm. Thoroughly abrade the exposed conductor and clean, or if necessary, abrade the busbar in the contact area (e.g. in the case of aluminium). Assemble the connector around the conductor and tighten the screw sufficiently to secure to the conductor, temporarily, but do not shear the screw head at this stage. Offer the connector to the busbar and assemble using the double-headed shear screw, adjusting the position of the connector on the cable if necessary. Carefully tighten the double-headed screw, using the outer screw head only, until the head shears, ensuring that the socket does not engage or foul the lower hexagon. Finally check for correct alignment of the conductor and tighten the cable clamping screw until the head shears.

NOTES

- 1. The connector is normally supplied with disc-spring type washers for the busbar clamping screw but if the busbar is less than 8 mm (or 5/16") thick, suitable spacer washers must be used to achieve a nominal thickness of 8 mm or 5/16".
- 2. If copper cable is to be jointed it should be wrapped in brass gauze to improve the electrical stability of the interface connection.
- 3. Should it be necessary to disconnect the fitting from the busbar, it should only be reconnected using the genuine replacement double-headed shear screw.