

RAIL WEB ELECTRICAL CONNECTION SYSTEM TYP AR

The advantages of using the rail web contact, **AR60D** are that the bush can be installed in all weather and environmental conditions, with a simple easy to operate, portable tool, producing a consistent, quality installation, independent of the skill of the operator. The reduced installation time of this systems results in overall cost savings.

During installation the bush is 'extruded' and the copper material flows into the wall of the hole, compensating for variation in hole size and filling any voids and uneven surfaces.



Schematic view of the extrusion process (section)



Extensive testing, performed in the test laboratory and in the field, has demonstrated a low and constant resistance, mechanical stability and protection from atmospheric corrosion.

Examples of the electrical tests



Heat Cycling Tests



Short Circuit Testing



On site Testing

Examples of tests in salt water environments

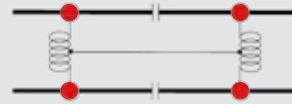


Salt Mist Exposure Testing

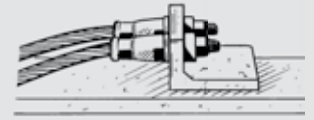
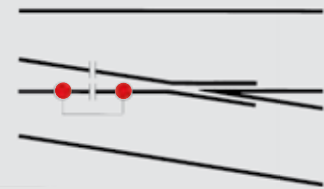


TYPICAL APPLICATIONS

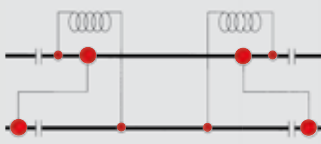
- AR 60 installation
- AR 67 installation



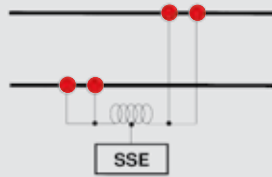
Transmission of coded and return current on lines fitted with automatic block



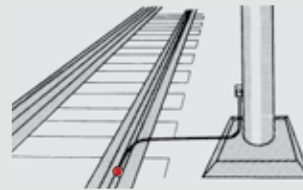
Signalling and traction current connection to manganese steel cast exchange units



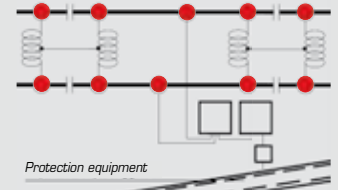
Various connections involved in the train location system



Return current connections to substations



Connection of metal structures to rails for earthing purpose



Protection equipment

Electrical connection of underground metal structures to rails



Examples of lines equipped with automatic block.



Examples of AR60D system in electrical joint applications.



Features and benefits of the AR 60D system have appeared in various Railway Industry journals

Used by all major European Railway Companies, the AR60D system is proving to be reliable in all conditions.

ELECTRICAL CONNECTION SYSTEMS TO RAILS AND TO TRACK EQUIPMENT



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1) Example of electrical connections using a low stranded conductor to provide electrical continuity on cast manganese steel crossovers.

1a) AR60D rail web connection, rail side

2) Example of electrical connections using a flexible cable to provide electrical continuity on cast manganese steel crossovers.

2a) AR60D rail web connection, rail side

3) AR260D double contact rail web connection



1a



2



3



2a

ELECTRICAL CONNECTION SYSTEMS TO RAILS AND TO TRACK EQUIPMENT



4

4) Example of electrical connection where cable layout is perpendicular to the rail.



5

5-6) AR 60D rail web connection, rail side.

7) AR 67 rail web connection, rail side.

8-9) Example of electrical connection, on cast manganese steel crossovers.



6



7



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