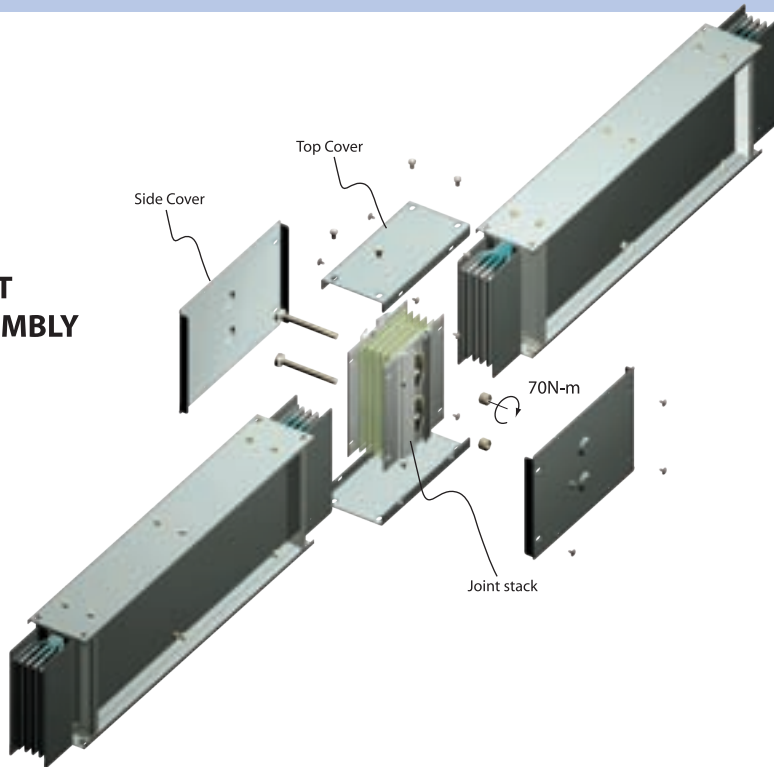


DAVIS[®]

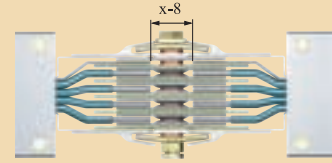
POWER BUSWAY SYSTEM

JOINT ASSEMBLY

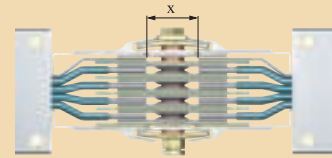


SPECIAL THERMAL COMPENSATION JOINT

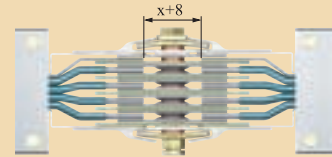
8mm Contraction: (-ve Expansion)



Normal: (zero Expansion)



8mm Expansion: (+ve Expansion)



THERMAL COMPENSATION JOINT

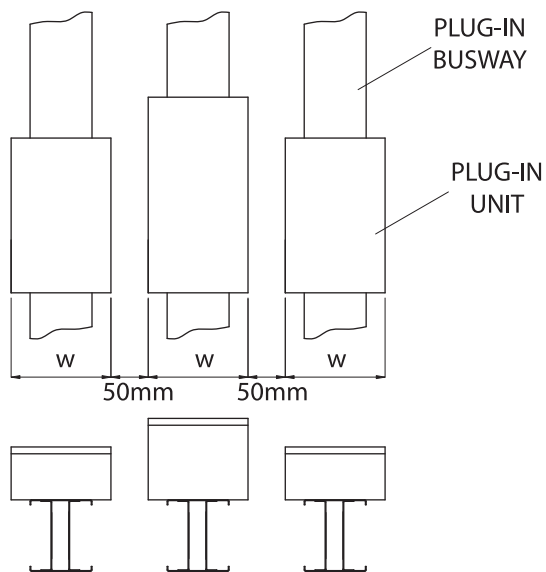
The joint coupler is the most critical part of any busbar trunking system. DAVIS busway incorporates a proven MAINTENANCE FREE thermal compensation joint design using a single or multiple high-tensile grade insulated through-bolt to tighten the current carrying conductors together. The bolt is specially made with a double-head hexagonal nut and a red indicator mark that breaks off at a predetermined torque value of 70N-m. The tightening torque label is always shown on the joint stack. Two opposing Belleville disc spring washers are put in place to maintain a constant contact pressure under all service conditions.



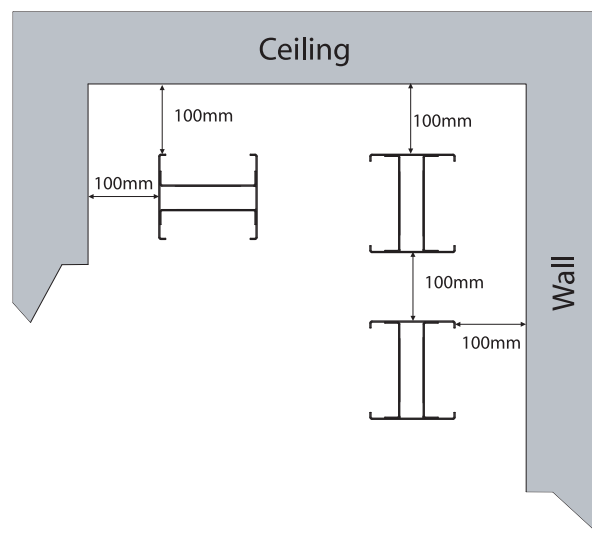
Every DAVIS busway section is factory-fitted with a joint-stack. After two adjacent sections of the busways have been joined together, the whole joint stack can be removed without removing the already installed busway. This unique feature will simplify any site alteration tasks. The joints can be inspected at any time by removing the joint covers.

Each joint is designed to allow longitudinal busbar expansion or contraction by as much as $\pm 8\text{mm}$. The tightening force is calculated in such a way that the joint efficiency remains unchanged under all service conditions. This provides for cost-savings as expansion joints are no longer necessary for any length of the busway run.

CLEARANCE



Clearance between runs



Clearance from wall & ceiling

PLUG-IN BOXES

DAVIS busway plug-in boxes are available from 15A to 800A with different levels of fault protection. A maximum of five pieces of plug-in boxes can be mounted on a standard 3000mm plug-in busway. The maximum current rating of each plug-in opening is 400A. Above 500A, bolt-on plug-in boxes are recommended.

Safety Features:

DAVIS busway plug-in boxes are designed with full mechanical interlocks. This is to prevent any illegal insertion or removal when the plug-in box is in the "ON" position.

The front operating switch allows padlocking at the "OFF" position. This is to prevent switching "ON" accidentally during servicing or maintenance. The plug-in earth contact is being designed to ensure the EARTH contact is made prior to LIVE contact of the busway in any situation. The Plug-in boxes are rated at IP42 as standard but IP55 plug-in boxes are also available.

