Constant Positioning Mount (CPM)

PRODUCT DATA

APPLICATION

Sensitive equipment such as navigation and communications facilities in some cases require a rigid connection to the ship's foundation and accurate repositioning after heavy shock impact. Trelleborg's Marine Center developed the highly innovative constant positioning shock mount (CPM) as a solution to ensure flawless operation of high-precision applications during regular sea-going conditions as well as after being exposed to shock. It has relatively small dimensions and the ability to reduce shocks from all directions. It provides highly accurate repositioning after the impact in both vertical and horizontal direction.

For the vibration excitation, the relative displacement of the equipment is zero and the CPM will behave rigidly. In case the shock excitation force is higher than a predefined value, the CPM will absorb the shock and the equipment will be positioned into its original position after the shock. CPM is the ultimate in constant positioning: shocks from all directions can be reduced from 250g to 4g or less with repositioning deviations of less than 0,5 mm. These qualities make CPM an excellent shock mount for navigation and guided weapons systems as well as other military and civilian high-precision applications where a constant positioning is important.

Each CPM solution is completely tailored to meet specific requirements and military standards. For many navies worldwide Trelleborg delivered the CPM specifically according customer requirements based on shock inputs, allowed rest shock level, size and weight of equipment.

For more information about this product, please contact us via antivibration@trelleborg.com.



GENERAL

Every CPM is designed according to the specific customer requirements and it therefore does not have a NATO Stock Number.

TECHNICAL INFORMATION

- Zero relative displacement of the equipment from vibration excitation
- Active protection of the equipment when shock excitation exceeds a predefined value
- Adjustment of both predefined values and maximum deformation as needed
- Retention of equipment's fixed position during low-frequency swings in the structure, e.g. ship movements

