



## Operation:-

The two main sub- assemblies of the hydraulic thruster, the electric motor and the hydraulic unit are co-axially assembled from the working unit. In the switched off state (de-energised) the piston is at its lowest position due to external load (as brake spring of the drum brake), and the brake is applied. When energised, the electric motor rotates the impeller immersed in hydraulic oil creates a pressure inside the chamber and pushes the piston gives thrust to the lever attached resulting opening brake

The delivered thrust is jerk-free, smooth, in constant magnitude and perfectly linear, Except at the end positions, the power intake of the motor is reduced as compared to the power demand while lifting. This makes the thermal over-load protection to the motor unnecessary.

The asynchronous motor can be wound for any suitable line voltage, but the supply frequency must be maintained at 50 Hz, because the performance of the impeller is highly sensitive to motor speeds. If the thruster is required to operate at any other frequency. The components must be altered at factory.

The impeller has radial vanes and is equally efficient in both directions. here fore, the supply lead to the motor terminals can be terminated irrespective to the phase sequence.

The motor winding is star connected, with internal star point

## Specific Conditions of Use:-

The manufacturer has maintained more stringent gaps that required by the standard. The user must refer to manufacturer before carrying out any repairs or refurbishment to the equipment. The gap observed in certification drawing must never be exceeded

The fastening screw for box cover with spigot joint shall be carbon steel socket head cap screw of property class 12.9 and minimum yield stress of 1100 Map.

Use cable gland, Blanking element (plug) and thread adapter of appropriately Ex certified and IP certified parts

## Inside Assembly Details:-

