



Product Code . JL-FMAHLE-7327

Journal Bearing Apparatus

Description

Journal Bearing Apparatus

The apparatus consists of a plain steel shaft excavated in a bearing and directly driven by an FHP Motor.

The speed of the motor is controlled accurately by the speed control unit and it can be made run in both directions.

The bearing is freely supported on the shaft and sealed at the motor end.

The bearing can be loaded by attaching weights to the arm supported beneath it.

Twelve equal-spaced pressure tapping around the circumference and four along the axis are provided and are connected to manometer by PU Tubing so that the pressure head of oil in all tubes can be observed at a time.

Experiments:-

To study the pressure profile of lubricating oil at various conditions of load and speed.

To measure the frictional torque and power transmit.

Plotting the Cartesian polar pressure curves.

Utilities Required:-

Electric supply: 230 V AC, Single Phase.

Bench area: 1.5 x 1.5 x 4 m.

Oil SAE 40 about 5 Ltrs.

Tachometer to find out RPM of the journal.
