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**Product Name :**  
Air Bearing Apparatus

**Product Code :**  
LBNY-0005-1400002



#### **Description :**

A self-contained product that shows how a self-acting gas lubricated journal bearing works. It also shows the onset of whirl. A hand operated load control and load cell allow the user to apply and measure the load on the bearing bush. The bush has pressure tappings equally spaced around its circumference. The shaft has a high-quality surface finish and spins inside a vertically loaded bush. The main part has a variable speed motor that turns a belt drive. The belt drive turns a precision bearing shaft. The tappings connect to a multi channel digital pressure display unit.

#### **Experiments:**

Demonstrate how bearing speed and therefore compressibility number affects the pressure distribution in the bearing, and how this compares with theory.  
Demonstrate how a vertical load affects the pressure distribution around an air-lubricated journal bearing.  
Demonstrate the onset of whirl.

#### **Technical Specification :**

##### **Operating Conditions:**

Operating environment: Laboratory  
Operating relative humidity range: 80% at temperatures Storage temperature range: 25C to +55C (when packed for transport)  
Operating temperature range: +5C to +40C.



**Laboratory Instrument India**