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**Product Name :**  
Journal Bearing Friction Apparatus Unit

**Product Code :**  
LBNY-0005-10100060



#### **Description :**

The basic tribological phenomena of journal bearings can be investigated using this unit. A lever with a sliding weight attached to it is connected to the bearing housing. This enables an external moment to be set corresponding to the friction moment generated in the bearing. The journal bearing to be investigated consists of a stainless steel bearing journal and the free-moving gunmetal bearing housing. A three-phase ac motor with a frequency converter for speed control serves as the drive. Another lever, combined with a set of weights, applies the defined load to the bearing. It is possible to view the bearing journal and the lubrication gap through the transparent cover. The continuously adjustable speed, as well as the temperature of the lubricant, is indicated digitally on the control unit. Lubricant is supplied by a drip-feed lubricator that feeds oil to the shaft via two lubrication channels. A drip tray collects the oil that leaks out.

#### **Technical Specification :**

Measurement of friction moment achieved through the use of a lever with sliding weight  
Balance weight to compensate for the intrinsic weight of the measuring set-up  
Drip-feed lubrication for continuous lubricant supply (drip-feed lubricator)  
Unit to investigate basic tribological topics  
Radial journal bearing with stainless steel shaft journal and free-moving bronze bearing shells  
Control housing with digital displays for oil temperature and speed, also allows speed to be varied  
Three-phase ac motor with frequency converter for speed control  
Load applied to journal bearing using a mechanical lever, transmission ratio 5:1  
Drip tray for leakage oil  
Inductive speed sensor  
Thermocouple for oil temperature measurement.



**Laboratory Instrument India**