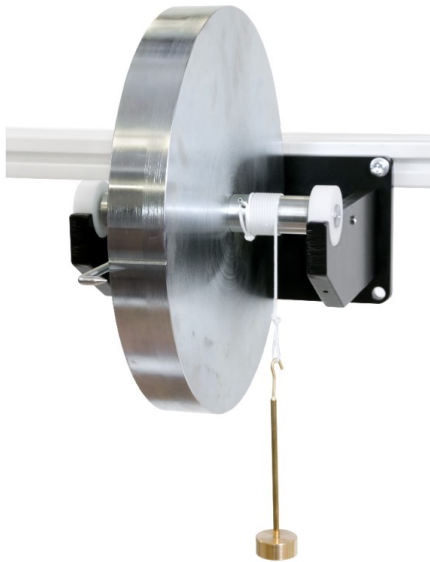




BEARING FRICTION APPARATUS HFN6



Features

- Compares the frictional losses of bearings by measuring the coefficient of friction between materials
- The wall mounted unit consists of a flywheel 300mm diameter x 40mm thick (approx.) on a horizontal steel shaft. Interchangeable bearing materials house the shaft
- Bearing materials are cast iron, Tufnol, sintered bronze and ball bearing
- Torque is provided by a load hanger and loaded cord wrapped around the flywheel shaft

Description

The apparatus consists of a flywheel on a horizontal shaft carried in a pair of similar bearings, the flywheel being used to even out small variations in friction. The shaft is of mild steel, and interchangeable bearings in a range of materials are provided. This experiment provides an opportunity to study journal bearing friction over a range of commonly used materials including a self lubricating sintered bronze. For comparison a ball bearing is supplied to demonstrate the advantages of rolling rather than sliding contact. Torque is applied by a loaded cord wrapped round the flywheel shaft. A set of calibrated weights and load hanger is supplied for loading the flywheel.

Learning capabilities

- Allows students to compare the frictional losses of bearings by measuring the coefficient of sliding friction between pairs of materials
- Allows students to measure, compare and contrast losses when comparing different bearing materials

Technical Specification

- Wall mounted apparatus. Can also utilise the HAC14 vertical stand as an alternative to drilling and wall mounting
- Ships complete with four bearing materials - cast iron, Tufnel, sintered bronze and ball bearing
- Load hanger applies torque to flywheel
- Calibrated weights set supplied: 10 x 0.1N, 1 x 1N, 2 x 2N, 1 x 5N, 2 x 10N, 10 x 0.2N
- Disk size approximately 300mm (Dia) x 40mm (W). Can double as flywheel apparatus if required

What's in the Box?

- 1 x HFN6 wall mount
- 1 x Flywheel 300mm (Dia) x 40mm (W)
- 4 x Sets of bearings of different materials

You might also like

- HAC14 - Vertical Stand

Weights & Dimensions

- Unit net weight excluding set of weights: 30Kg
- Net dimensions: 200mm (L) x 300mm (W) x 400mm (H)

Operational Conditions

- Storage temperature: -10°C to +70°C
- Operating temperature range: +10°C to +50°C
- Operating relative humidity range: 0 to 95%, non condensing

Ordering information

To order this product, please call PA Hilton quoting the following code:
HFN6 - Bearing Friction Apparatus

All brand and/or product names are trademarks of their respective owners. Specifications and external appearance are subject to change without notice. The colour of the actual product may vary from the colour shown in the brochure.

Copyright © 2018 P.A. Hilton Limited. All rights reserved. This technical leaflet, its contents and/or layout may not be modified and/or adapted, copied in part or in whole and/or incorporated into other works without the prior written permission of P. A. Hilton Limited. Hi-Tech Education is a registered trade mark of P. A. Hilton Limited.

COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS