PIVOT FRICTION APPARATUS

HFN4



Year 2
study

Features

- Wall mounted apparatus.
- Can be mounted to HST1, HST100, HAC10, HAC14, HVT12f frames
- Pure torsion applied to the table
- Apparatus supplied with four sets of pivots
- The seating is in mild steel and the pivot is in brass
- Ball thrust bearing is included
- All Load hangers and calibrated weights are supplied.

Description

The apparatus consists of a rotating circular turntable attached onto the end of a vertical shaft. The shaft is held vertical within a sturdy wall bracket that must be attached to a rigid vertical surface, i.e. a wall. At the lower tip of the shaft a special fixing has been created to accept a variety of end pivots. Mating seating's have been manufactured for the end pivots. The seating's positively locate at the bottom of the wall bracket so that they mate with their respective seating's but do not rotate under testing. The seating's are made from different materials and with different internal cone angles. Pure torsion is applied to the table through a pair of diametrically opposite loaded cords and pulleys. A set of calibrated weights and the hangers are supplied. To vary the thrust on the end pivot, the calibrated weights are added incrementally to the turntable surface. Weights are then added to the Load hangers to calculate the necessary parameters. A comprehensive Instruction manual and 2 year warranty are also supplied. A set of optionally available seating's and end pivots are also available.

Related Laws/Applications

- Automotive
- Friction
- Machines
- Wear
- Torque
- Slip

Learning capabilities

- To investigate the relationship between frictional torque and axial thrust
- To determine the influence of the bearing cone angle
- To obtain the coefficient of friction for different bearings

Technical Specification

- Four pivot sets at angles of 60°, 90°, 120°, 180° (flat)
- Turntable mass: Approximately 1kg
- Turntable effective diameter: Ø200mm
- Thrust bearing seating supplied

Recommended Ancillaries

- HAC10
- HAC14
- HST1
- HST100
- HVT12f

What's in the Box?

- 1 x HFN4
- 4 x Pivot set
- 2 x Load hanger
- 1 x Thrust bearing set
- 1 x 10m Spare cord
- 10 x 0.1N; 10 x 0.2N; 2 x 1N; 8 x 2N; 2 x 50N; 1 x 100N
- Instruction manual
- Packing list
- Test sheet

You might also like

- HFN3

Weights & Dimensions

- Weight: 9kg
- Length: 330mm
- Width: 270mm
- Height: 200mm

Essential Services

- Sturdy vertical support

Ordering information

To order this product, please call PA Hilton quoting the following code: HFN4

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COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS