

Friction (HFN)



ROPE BELT FRICTION APPARATUS HFN8



Year 2 study

Features

- Wall mounted apparatus for ROPE belts
- Can be mounted to HST1, HST100, HAC14, HVT12f frames
- Coefficient of Friction, angle of lap for different belts
- Four different 'V' angled pulleys supplied
- · Single rope with metal ends
- Customer specific rope can be used

Description

The apparatus consists of a wall mounted fixed pulley with a loaded belt. Four different pulleys are supplied with different vee groove angles; flat rim, 120°, 90°, and 60°. A load is added to one of two hangers until the rope just begins to slide. This is the datum condition. Loads are now added to both sides of the rope to cause very slow sliding of the rope. This enables the coefficient of friction to be obtained. The angle of lap can be easily varied.

Related Laws/Applications

- Automotive
- Friction
 - Machines
 - Wear
 - Torque
 - Slip
 - Belt drives
 - Angle of lap

Learning capabilities

- To investigate the ratio of belt tensions when a rope passes over pulleys of different Vee angle
- To determine the coefficient of friction between the steel pulley and cotton rope.
- To assess the variation of belt tension ratio with lap angle



Technical Specification

- 4 x Fixed pulleys
- Flat; 60°; 90°; 120° pulleys
- Double hooked hangers
- Rope assemblies
- Pulley: 150mm effective diameter

Recommended Ancillaries

- HAC14
- HST1
- HST100
- HVT12f

What's in the Box?

- 1 x HFN8
- 4 x Pulley
- 2 x Double hooked Load hanger
- 2 x Rope assemblies
- 1 x Bearing pulley assembly
- 2 x 0.1N; 4 x 0.2N; 2 x 1N; 4 x 2N; 2 x 5N; 3 x 10N; 4 x 20N
- Instruction manual
- · Packing list
- Test sheet

You might also like

• HFN9

Weights & Dimensions

- Weight: approximately 19kg
- · Length: 250mm
- Width: 150mm
- Height: 370mm

Essential Services

• Rigid Vertical Support

Ordering information

To order this product, please call PA Hilton quoting the following code: $\ensuremath{\mathsf{HFN8}}$

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