DISC BRAKE APPARATUS

HTM38



Year 1
study

Features

- Wall mounted apparatus.
- Can be mounted to HST1, HST100, HAC10, HAC14, HVT12f frames
- One stainless steel disc; four brake pad materials
- Three pad radii
- 360° Protractor for angle recording
- Full set of weights and hangers provided

Related Laws/Applications

- Braking Force
- Braking Torque
- Friction coefficient
- Automotive
- Disc Brakes
- Levers

Description

A brake disc is mounted vertically into a sturdy frame. A single shaft runs through the brake disc and the wall bracket supports. A cord pulley mounts to the shaft onto which is mounted a cord terminating in a Load hanger. Two bell crank levers are mounted either side of the brake disc. Through the Load hanger and calibrated weights the force is applied to the brake disc and the parameters of braking force, braking torque, normal force can be assessed. All Load hangers, and calibrated weights are supplied with the apparatus. The rotational angle of movement of the disc wheel can be viewed using the external protractor. Different brake pad materials can be tested as well as their radial position on the brake disc.

Learning capabilities

- To determine the most effective brake pad material
- To determine the most efficient radial placing of the brake pad

Technical Specification

- Stainless steel disc wheel: Ø210mm x 3mm
- Radial positions for brake pad: 20mm intervals
- Brake pad: Ø25mm x 6mm max
- Brake pad: Brake material, aluminium, brass, nylon
- Protractor: 360°, 1° increments
- Weights set: 3 x 0.1N, 8 x 0.2N, 3 x 1N, 3 x 2N, 1 x 5N
- 2 x Load hanger

Essential Ancillaries

- HAC14
- HAC10
- HST1
- HST100
- HVT12f

What's in the Box?

- 1 x HTM38 Assembly
- 2 x Brake Pad Specimen
- 2 x Aluminium Pad Specimen
- 2 x Brass Pad Specimen
- 2 x Nylon Pad Specimen
- 1 x Hanger
- 3 x 0.1N, 8 x 0.2N, 3 x 1N, 3 x 2N, 1 x 5N weights
- Spare Cord
- Instruction manual
- Packing list
- Test sheet

You might also like

- HFN3
- HFN11
- HFN1

Weights & Dimensions

- Weight: 8 kg
- Length: 450mm
- Width: 200mm
- Height: 260mm

Essential Services

- Sturdy vertical support

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: HTM38

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