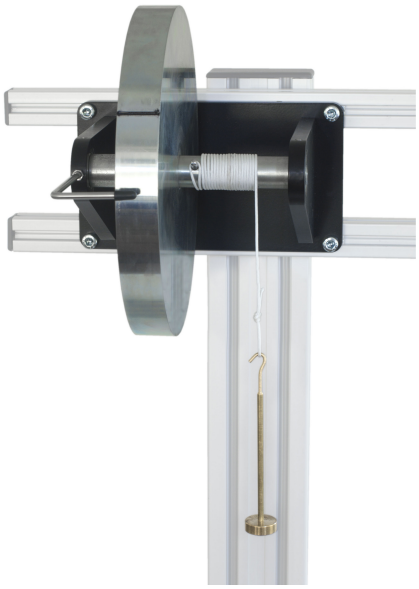
SIMPLE FLYWHEEL
HTM9



Year 1
study

Features
- Wall mounted apparatus.
- Can be mounted to HST1, HST100, HAC10, HAC14, HVT12f frames
- Flywheel ‘locked’ before weights applied
- All hangers and weights supplied
- Timing system supplied

Description
A steel disc Ø250mm diameter and 30mm thick is mounted on a shaft running in precision bearings housed in a substantial wall bracket. A mark on the flywheel and a pointer on the bracket enables the revolutions to be counted and timed with the stop watch supplied. A cord, Load hanger and set of weights are provided to start the flywheel rotating. From the timings of a known number of revolutions, students can then verify the experimental capabilities of the apparatus.

Related Laws/Applications
- Newton's Second Law of Motion
- Rotational Mass
- Rotational Acceleration
- Moment of Inertia
- Angular Acceleration
- Torque
- Couple
- Rotating Machinery

Learning capabilities
- To verify the second law of motion applied to a flywheel, i.e. the relationship between torque and angular acceleration
- To compare experimental and calculated moments of inertia of a disc
- To study the energy transformations and to demonstrate that a flywheel can be used to store energy

Technical Specification

- Coated Steel Flywheel
- Flywheel: Ø250 x 30mm thick
- Weights set: 10 x 0.1N, 10 x 0.2N, 1 x 1N, 2 x 2N, 1 x 5N, 1 x 10N
- 1 x Load hanger

Essential Ancillaries

- HAC14
- HAC10
- HST1
- HST100
- HVT12f

What's in the Box?

- 1 x HTM9 assembled
- 1 x Load hanger
- 10 x 0.1N, 10 x 0.2N, 1 x 1N weights
- 2 x 2N, 1 x 5N, 1 x 10N weights
- 1 x Stopwatch
- 1 x Tape measure
- Spare Cord
- Instruction manual
- Packing list
- Test sheet

Weights & Dimensions

- Weight: 18 kg
- Length: 190mm
- Width: 250mm
- Height: 300mm

Essential Services

- Recommended Suspension height not to exceed 1.0metres

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:
HTM9

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COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS