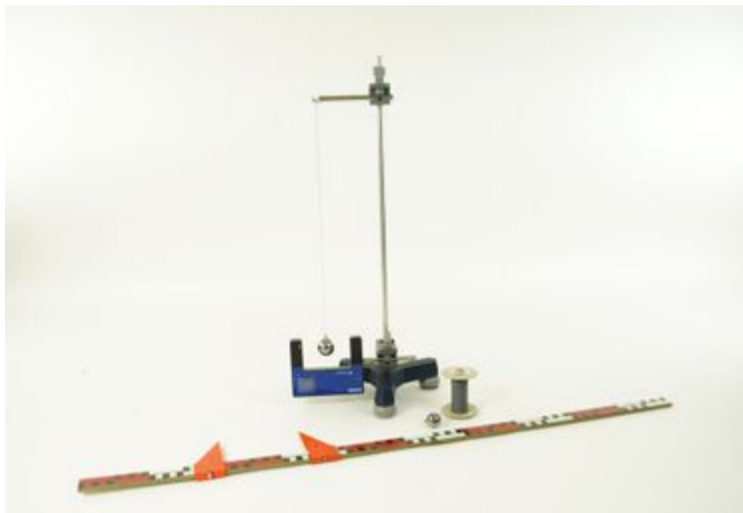


Mathematical pendulum with COBRA SMARTsense

Article no: P2132167



Principle

A mass, considered as of point form, suspended on a thread and subjected to the force of gravity, is deflected from its position of rest. The period of the oscillation thus produced is measured as a function of the thread length and the angle of deflection.

Benefits

- Quick and easy set-up
- Automatically measure the oscillation period using the light barrier

Tasks

1. For small deflections, the oscillation period is determined as a function of the cord length.
2. The acceleration due to gravity is determined.
3. The oscillation period is determined as a function of the deflection.

Learning objectives

- Duration of oscillation
- Period
- Amplitude
- Harmonic oscillation

Scope of delivery

Cobra SMARTsense Dual Photogate - Double light barrier 0 ... ∞ s (Bluetooth + USB)	12945-00	1
Steel ball with eyelet, d 25.4mm	02465-01	1
Steel ball with eyelet, d 32mm	02466-01	1
Meter scale, l = 1000 mm	03001-00	1
Cursors, 1 pair	02201-00	1
Fish line, l. 100m	02090-00	1
Boss head	02043-00	2
Clamping pads on stem	02050-00	1
Support rod, stainless steel, different lengths	02041-00	1
Tripod base PHYWE	02002-55	1