Hooke's Law Apparatus

(EDC-SM-112)

EXPERIMENTAL DATA:

- Study of the proportionality of the active force and the spring deflection.
- Purpose of the spring constant.
- Series configuration of two tension springs.
- Study of the influence of the spring constant on the frequency of a spring-mass system.

DESCRIPTION:

Hooke's law defines the elastic behavior of components where deformation is proportional to the load acting upon them. demonstrates the application of Hooke's law and shows the deformation of tension springs under load.

In this apparatus a spring is suspended from a stand and loaded. The extension is read-off directly from the scale printed on the sheet on apparatus. As a linear relationship is shown between the active force and the elongation of the spring, Hooke's law can be applied.

SPECIFICATIONS:

- Experiments relating to Hooke's Law.
- Stand with printed scale on sheet.
- Helical springs as tension springs.
- Tension springs configured.
- Load applied to tension spring by provided weights.

DIMENSIONS AND WEIGHT:

- L x W x H (mm): 250 X 250 X 1000 approx.
- Weight: 11 kg approx.

SCOPE OF DELIVERY:

- 1 x EDC-SM-112.
- 1 x Instructional Manual.

TECHNICAL DATA:

- Helical spring short:
  - Coils: 53.
  - Ø=18mm.
  - Wire diameter: Ø=1mm.
- Helical spring long:
  - Coils: 109.
  - Ø=18mm.
  - Wire diameter: Ø=1mm.
- Scale, graduation: 1mm.
- Weights:
  - 1 x 1N (hanger).
  - 10 x 0.5N.