EXTENSION and COMPRESSION of SPRINGS

HSM56



Year 1
study

Features

- Two experiments in ONE: Tension and Compression
- Wall mounted apparatus
- Can be mounted to HST1, HST100, HAC10, HAC14, HVT12f frames
- Four Tension Spring
- Three Compression Spring
- Full set of weights and hanger supplied

Related Laws/Applications

- Hooke's Law
- Modulus of Elasticity
- Strain
- Wire
- Extension
- Compression

Description

A wall mounted vertical bracket houses two independent mechanisms side by side for testing tension and compression springs. The left hand side tests tension springs whilst the right hand side tests compression spring. A set of springs is supplied which allows the student to test the relationship between applied load and extension for tension and compression springs. The springs are easily installed and changed, and the integral deflection scale ensures accurate monitoring of the deflection during spring loading. A set of calibrated weights is supplied with this apparatus. Weights are attached to the Load hanger for the tension and compression testing.

Learning capabilities

- Determine the relationship between applied load and deflection of springs
- To compare tension and compression springs
- To view how springs work and installed
- Understand Hooke's law

Technical Specification

- Integral deflection scale: 0……80mm; 1mm resolution
- 4 x tension springs supplied, with spring rates of:
- - 0.58N/mm
- - 1.04N/mm
- - 0.31N/mm
- - 0.79N/mm
- 3 x Compression springs supplied with spring rates of:
- - 2.71N/mm
- - 3.29N/mm
- - 3.06N/mm

Essential Ancillaries

- HST1
- HST100
- HAC10
- HAC14
- HVT12f

What's in the Box?

- 1 x HSM56
- 2 x Load hanger
- 4 x Extension spring
- 3 x Compression spring
- 1 x Hex wrench set
- 1 x 5N; 6 x 10N; 1 x 20N
- Instruction manual
- Packing list
- Test sheet

You might also like

- HSM7
- HSM8
- HSM6

Weights & Dimensions

- Weight: 16 kg
- Length: 660mm
- Width: 460mm
- Height: 130mm

Essential Services

- Sturdy vertical support

Ordering information

To order this product, please call PA Hilton quoting the following code: HSM56

All brand and/or product names are trademarks of their respective owners. Specifications and external appearance are subject to change without notice. The colour of the actual product may vary from the colour shown in the brochure.
Copyright © 2018 P.A. Hilton Limited. All rights reserved. This technical leaflet, its contents and/or layout may not be modified and/or adapted, copied in part or in whole and/or incorporated into other works without the prior written permission of P. A. Hilton Limited. Hi-Tech Education is a registered trade mark of P. A. Hilton Limited.
COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS