

DEADWEIGHT TESTER F110A



Year 1
study

Description

The Deadweight Tester F110A is designed not as a laboratory standard but as a teaching unit for student use and practical understanding by hands on operation. The design enables students to visualise the Force/unit Area of pressure and to understand the way in which a known pressure is generated. The unit is mounted on a base and consists of an oil reservoir which feeds oil to the main control valve at the base of a piston barrel. The weight carrier and piston slides in the piston barrel and applies a known pressure onto a column of oil. This is connected to a pressure gauge carrier. Supplied with the unit and for fitting into the pressure gauge carrier on installation is a bourdon tube pressure gauge with a clear background dial allowing the gauge operating mechanism to be clearly seen. The unit uses calibrated weights that are stamped in units of force so that students understand that they are applying a force to the piston and hence to the oil. The combination of the weight carrier and standard weights supplied allows students to calibrate the pressure gauge up to 240kN/m² at regular increments.

Related Laws/Applications

- Relationship between Pressure, Force and Area
- Bourdon Tube Pressure Gauge

Learning capabilities

- Investigation of Deadweight Pressure Gauge Calibration.
- Examination of the Difference Between Absolute and Gauge Pressure.

Technical Specification

- Weight Carrier and Piston applied force = 2.5N
- Bourdon Pressure gauge: 0...250 Kpa

Recommended Ancillaries

- F110B

What's in the Box?

- 1 x F110A
- 1 x 0.5N weight
- 1 x 2N weight
- 1 x 5N weight
- 2 x 10N weight
- 1 x Drain hose
- Instruction manual
- Packing List
- Test Sheet

Essential Services

- Sturdy Bench top

Ordering information

To order this product, please call PA Hilton quoting the following code:
F110A

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COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS