



Dead Weight Tester (Pressure Gauge Callibrator) (SMT-FM-18)

A dead weight tester is a calibration standard that uses the principle of a pressure balance to calibrate pressure measuring instruments.

Dead-weight calibrator consists of a piston, with is free to move vertically, in cylinder. Flexible hose connects the cylinder with the Bourdon pressure manometer. A set of weights are included. Bourdon type manometer with internal mechanism clearly visible through the transparent dial, range: 0 to 2.5 bar.

TECHNICAL SPECIFICATIONS

Specifications:

- Bourdon tube pressure gauge for pressure measurement.
- Accurately fitting piston and cylinder of the piston manometer without seals.
- Hydraulic oil for transfer of the force.
- Weights for applying force.

Technical Data:

- Diameter of Piston: 18mm
- Area of the Piston: 255mm²
- Weight of the Piston: Approx. 500g
- Measuring ranges.
 - Pressure: 0 to 2.5bar.
- LxWxH: 400x400x400mm.
- Weight: approx. 15kg.

Experimental Data:

- Working principle of a Bourdon tube pressure gauge
- Calibrate manometers, read off applied pressure
- Determine systematic errors
- Principle of operation and working with a piston manometer

