

Dead Weight Tester (EDC-FM-105DW)

EXPERIMENTAL DATA:

- Calibration of a Bourdon type gauge
- Determination of Hysteresis Curve



DESCRIPTION:

The dead weight tester is a calibration standard that uses the principle of a pressure balance to calibrate pressure measuring instruments. Dead Weight Pressure Gauge Calibrator consists of a precision-machined piston with is free to move vertically, in cylinder and cylinder assembly mounted on levelling screws. A Bourdon gauge is supplied for calibration. Flexible hose connects the cylinder with the Bourden pressure manometer. Bourden type manometer with internal mechanism clearly visible through the transparent dial. The weights supplied are added to the upper end of the piston rod, which is rotated to minimise friction effects. Hydraulic oil for the transfer of the force. The gauge is thus subject to known pressures, which may be compared with the gauge readings and an error curve drawn.



RELATED LAWS:

- Hydraulics
- Pascal's Law

SCOPE OF DELIVERY:

- 1 x EDC-FM-105DW
- Set of Calibrated Weights
- 1 x Instructional Manual

TECHNICAL DATA:

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

Piston Assembly:

- Minimum piston diameter: 18mm
- Piston area: 255 mm²
- Approximate piston weight: 500g

Pressure Measurement:

- Measuring range: 0 to 2.5 bar

Dimensions and Weight:

- Minimum size: 400 x 400 x 400 mm (L x W x H)
- Maximum weight: 15 kg