

Product Name :
Dead Weight Pressure Gauge Calibrator**Product Code :**
FLDM0008**Description :**

Dead Weight Pressure Gauge Calibrator

Technical Specification :

The advanced equipment is self-contained and portable, so it may be used in lecture theatre demonstrations or as a master calibrator for the laboratory.

Deadweight testers are the basic primary standard used worldwide for the accurate calibration of pressure gauges, pressure transducers etc.

The instrument combines a low and high-pressure range provided by two pistons of different effective area. Calibration is accurate to within $\pm 0.025\%$ of reading.

A laboratory calibration certificate is supplied for each piston together with a traceable certificate of overall accuracy.

The pressure in the system is produced by means of a capstan-operated hydraulic ram, balanced by deadweight acting upon a piston of known area.

Oil is used as the hydraulic fluid.

The pressure developed is applied to the gauge that is to be calibrated.

A spirit level and adjustable feet are provided to enable the operator to level the instrument.

A flotation indicator mounted on the top plate removes the guesswork when floating the piston.

FEATURES:

A bench top unit comprising a simple Deadweight Pressure Calibrator with weights

Pressure sensors, manometers or Bourdon gauges other than those supplied can be calibrated over the range 20 kNm⁻² to 200 kNm⁻²

Bourdon gauge with inlet and outlet valves

Set of weights

The direct measurement of pressure ($p=F/A$)

Masses added are proportional to the target pressure

Calibration of pressure gauges by deadweight method to accuracy better than 0.025% of reading

Dual pistons enable calibration over a wide range of pressures

Precision machined piston and cylinder with leveling screws

Educational software available as an option

SPECIFICATION:

Portable, self-contained deadweight precision pressure gauge calibrator

Calibration gauges with 1-1,200 bar range to $\pm 0.025\%$ of reading

Includes carrying case and weights

Minimum standard weight increment is 0.05 bars.

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