

This calibrator functions under the same principle adopted in calibrating industrial pressure gauges.

F1-11 shown with the F9092 bench



Description

The Dead Weight Calibrator consists of a precision-machined piston and cylinder assembly mounted on levelling screws.

A Bourdon gauge is supplied for calibration. The weights supplied are added to the upper end of the piston rod which is rotated to minimise friction effects.

The gauge is thus subject to known pressures which may be compared with the gauge readings and an error curve drawn.

Technical specifications

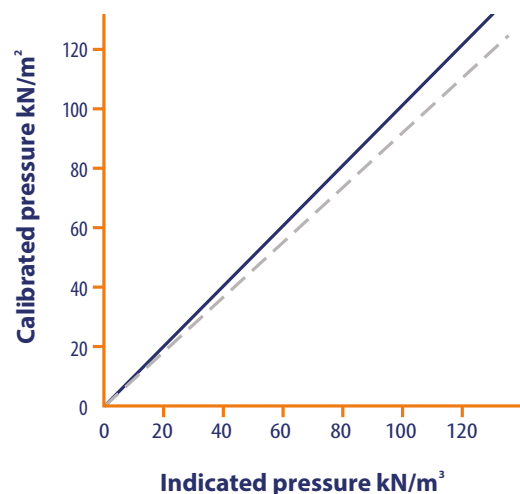
Pressure gauge	Bourdon tube range 0 to 200 kN/m ² (kPa)
Area of piston	244.8 x 10 ⁻⁶ m ²
Mass of piston	0.5kg
Ancillary masses	2x 0.5kg, 1.0kg and 2.5kg

Overall dimensions

Length	0.25m
Width	0.125m
Height	0.50m

Experimental content

- ▶ To calibrate a Bourdon type pressure gauge and to determine the gauge errors
- ▶ To determine the measurement errors in the reference pressure source used for calibration



Ordering codes

- ▶ F1-11