



P4811 PRESSURE MEASUREMENT BENCH

EXPERIMENTAL CAPABILITIES

- ◆ Comparison of two methods of measuring pressure
- ◆ Comparison of two methods of measuring vacuum
- ◆ Measurement of differential pressure using a manometer
- ◆ Digital pressure calibrator
- ◆ Calibration of pressure transducer

Pressure variations are made by the rotary vane pump which is provided with needle valves at entry and discharge. A further valve is incorporated at the pump outlet with pressure tappings either side of it to enable differential pressure measurements to be made and plugs are supplied to blank off any connections not in use.

The bench also includes a microprocessor based portable digital pressure calibrator for pressures between -1 and 10 bar.

INTRODUCTION

Cussons P4811 Pressure Measurement Bench provides the Student with the means of taking various pressure measurements within the laboratory by several different methods and allowing comparisons to be made of the accuracy of one measurement against another.

DESCRIPTION

The apparatus consists of a series of pressure/vacuum measuring instruments mounted on a wheeled bench with an electrically driven rotary vane pump to provide the necessary pressure and vacuum.

The measuring instruments include a sloping, liquid filled manometer reading pressure from 0 to 75 mm of water, a vertical manometer reading from 0 to 200 mm of water, a mercury manometer reading from 0 to 760 mm of mercury, a pressure transducer with analogue readout and a Bourdon tube gauge scaled -1 to 2.5 bar for reading both pressure and vacuum.

TENDER SPECIFICATION

Welded steel-frame bench complete with sloping and vertical manometers. Pressure transducer (potentiometer type) with analogue readout. Bourdon type gauge scaled -1 to 2.5 bar. Rotary vane pump to provide pressure and vacuum. Microprocessor based digital pressure calibrator. Instruction manuals and all other items required including plastic interconnecting tubes, blanking plugs and mains connector.

SERVICES

Electrical power supply for 110/115 or 220/240 volts, 50/60 Hz single phase. Please specify when ordering.

PHYSICAL DETAILS

	Nett Weight		Length		Width		Height	
	kg	lb	m	in	m	in	m	in
P4811	140	308	1.0	39	0.7	27	1.8	71