

CPB5000DP Pressure Balance

Applications

- Primary Standard for the application and control of pressure over a range of up to 100bar (pneumatic) and 4000bar (hydraulic)
- Reference instrument for testing, adjusting and calibrating instruments in factory and calibration laboratories.
- Self-sustaining complete system, capable of measuring static line pressure as well as differential pressure.



Special Features

- Total uncertainty of measurement up to 0.008%RDG accuracy. Adaptation to specific customer requirements and documentation in the calibration certificate. (Traceable to a National/International Standard).
- High long-term stability with a recommended re-calibration cycle of 5 years.
- A single instrument base can be fitted with individual measuring elements, which includes a patented concept for fast and safe replacement of the measuring system.
- Optional CPU5000 calibrator unit for easy calibration of transmitters.

General Description

The CPB5000DP exhibits all the credentials of a standard CPB5000, however, unlike the CPB5000, this instrument has two test pressure gauges, two fixtures for the patented ConTect system, two connections for a test specimen and two spindle pumps. This makes the CPB5000DP ideal for testing differential pressure devices at elevated static line pressures and also the ability to test multiple instruments at the same time.

The CPB5000DP includes two common pressure balances of the basic series CPB5000. For calibration of differential gauges at a static line pressure, the systems can be separated. One system is used to generate line pressure, and the second supplies the differential pressure (including line pressure).

CPB5000DP Specifications

Measuring Range, Bar	Version	Mass Load Required, kg	Min. Pressure Step, Bar	Accuracy, % RDG	Accuracy Min. mbar
0.03 to 2	Pneumatic	10	0.01	0.015	0.03
0.2 to 10	Pneumatic	10	0.05	0.015	0.15
0.4 to 50	Pneumatic	10	0.25	0.015	0.75
0.2 to 100	Pneumatic	20	0.25	0.015	1.5
0.2 to 60	Hydraulic	30	0.10	0.015	0.9
0.2 to 100	Hydraulic	50	0.10	0.015	1.5
1 to 250	Hydraulic	25	0.5	0.015	3.75
1 to 400	Hydraulic	40	0.5	0.015	6.0
2 to 600	Hydraulic	30	1.0	0.015	9.0
2 to 1000	Hydraulic	50	1.0	0.015	15.0