

INSTALLATION AND OPERATING INSTRUCTIONS

Differential Pressure Meter

Model: CBDM 200

This CBDM 200 Differential Pressure Meter is a precision measuring instrument designed to measure the differential pressure of liquids between two points in a pressurized system.

The instrument can cover a broad range of differential pressures with accuracies of +/- 3-2-3% full scale (ascending).

The gauge is protected against over-range to the maximum working pressure of the system.

While primarily used for checking pump performance, it has numerous other HVAC System applications.



SAFETY PRECAUTIONS

Caution!

The CBDM should only be used by qualified personnel, in accordance with all applicable codes, and following generally accepted safety practices.

Warning!

Always exercise extreme caution when connecting any instrument to a pressurized system.

Warning!

Prevent operator exposure to pressurized fluid leaks to avoid personal injury.

Caution!

Always drain system and hoses after use.

Caution!

Never allow liquid to freeze in the system or hoses.

MATERIALS OF CONSTRUCTION

Gauge	Aluminum Body, Stainless Steel Internals, Buna-N Seals
Dials	One 2-1/2" Dial with 0-200' H ₂ O scale
Fitting / Filters	Brass
Hoses	Nitrile Jacket and "Schrader" 1/4" Brass Coupler. (Connects with 1/4" 37° Flare Male Fittings)
Case	Plastic, shock resistant



NORMAL OPERATION

1. Ensure the liquid is within the temperature and pressure limits of the test kit and hoses.
2. Connect hoses to test connections - red hose to high pressure, green hose to low pressure.
3. Open valves on device being tested, and read differential pressure.
4. Upon completion of test, close valves, disconnect hoses and store them in test kit case.

The CBDM 200 is equipped with filters near the ends of the hoses. If the gauge responds slowly to changes in differential pressure, the filter elements may be partially plugged. Refer to **Maintenance and Repair Procedures – Cleaning Filters** should this condition be encountered.

ENVIRONMENTAL CONDITIONS

The CBDM 200 is a precision measuring instrument intended for storage and use indoors only. Keep in a clean, safe, dry place, where ambient temperature is maintained between 32°F and 100°F (0°C and 30°C), and relative humidity is maintained between 5% and 95%.

PREVENTATIVE MAINTENANCE PLAN and SCHEDULE

The CBDM 200 does not require any special preventive maintenance. However, before each use, and at least annually, all hoses should be inspected for cracks, and fittings for tightness. Additionally, the system should be calibrated at least every 3 years. Contact S. A. Armstrong Limited, Service Department, for calibration information.

MAINTENANCE and REPAIR PROCEDURES

General

The CBDM 200 does not require any special maintenance. Good housekeeping practices should be employed, typical for a precise measuring instrument. All components may be cleaned with water and mild detergent and should be wiped dry promptly with a soft cloth.

Cleaning Filters

It is possible that if proper handling, care, and use of the instrument is not practiced, that the filters near the ends of the hoses can become plugged. To remedy this, unscrew the two halves of the filter housing and remove the brass filter element. It may be cleaned by flushing with mild detergent and water.

WARRANTY

The standard Armstrong warranty (document file number 9.10) applies.

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