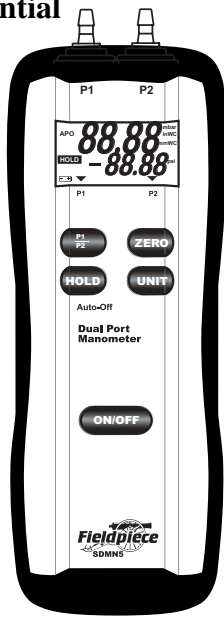


Dual Port Differential Manometer

Model: SDMN5



OPERATOR'S MANUAL

General

Accuracy: Stated accuracy at 0 to 50° (32 to 122°F): ±1.5% FS

Battery: Single standard 9-volt battery, NEDA 1604, JIS 006P, IEC 6F22.

Battery Life: 200 hours with low battery indicator on display.

Operating environment:

32°F (0°C) to 122°F (50°C)

Compatible Media: Dry, non-corrosive gases

Overrange: "OL" or "-OL" is displayed.

Auto-Off power: 15 minutes

Low Battery:  symbol is displayed.

Dimensions: 180mm(~7 1/16")(H) x 60mm(~2 3/8")(W) x 30mm(~1 3/16")(D)

Weight: approximately 195g (~1/2 pound) including battery

Pressure

Pressure Ports: tube connectors for 8mm (~5/16 inch) I.D. flexible tubing

Units of Measure: inWC, mmWC, mbar, PSI

Resolution: 0.01 inch WC

Accuracy: ±1.5% FS

Measurement Range:

In WC: 0.00 to ±60.0

mm WC: 0.0 to ± 1500

mBar: 0.00 to ±150.0

PSI: 0.000 ±2.000

Description

The SDMN5 is a portable standalone dual port manometer. The SDMN5 is capable of taking gas pressure as well as static pressure. The SDMN5 comes in a rugged rubber boot. The SDMN5 also has a zero adjust and a hold button to hold the currently displayed reading. The auto-power-off function conserves battery life, but can be disabled if desired.

The SDMN5 will allow you to take gas pressure up to ±60" of WC. The SDMN5 will take differential pressure readings and display the difference between P1 and P2 at all times in the lower right corner of the LCD. The SDMN5 also has four different measurement scales including inches of water column, millimeters of water column, mBar and PSI. Static pressure is possible with the resolution to 0.01" of WC. Special purpose static pressure instruments are on the market with better accuracy and temperature compensation but they typically cost many times more than the SDMN5.

Operation

1. Zero the SDMN5 by pressing the ZERO button just before taking the pressure readings, while at ambient pressure. This will zero both P1 and P2.
2. Connect a single hose to get the gauge pressure relative to the ambient or ZERO pressure.
3. Connect both hoses if you want to see relative pressure, P1 minus P2.
4. By pressing the P1 / P2 button you can change between displaying P1 or P2, P1 - P2 is constantly displayed in the lower right of the LCD.
5. Pressing the unit button makes it possible to switch between the four measurement scales of inches of water column (inWC), millimeters of water column (mmWC), mBar, and PSI. The scale being viewed is displayed on the right side of the LCD.
6. To disable the auto-power-off hold the HOLD button while turning the unit on. If the auto-power-off is enabled (meter will turn off automatically) an APO will appear on the display. If Auto-power-off is disabled (meter will not turn off on its own), then no designation will appear on the LCD.
7. If you are in an environment where the temperature is noticeably changing while you are taking your reading, it is advised that you disconnect the meter from the hoses and ZERO it relative to ambient before each reading.

Checking Gas Pressure on a Regulator

1. Screw the brass fitting into the pressure port on the regulator.
2. Put unit into operation (i.e. turn on the furnace and have furnace ignite, as if running it in normal operation.)
3. This will give you the pressure coming out of the regulator.
4. If you suspect high or low inlet pressure into the regulator, the manometer can hook into the inlet port in the same manner it can connect into the outlet port. If you have a dual-port manometer, you can check both the inlet and the outlet simultaneously and see the pressure drop across the regulator.
5. See manufacturer's specification for the specifications on target inlet and outlet pressure for a given regulator or piece of combustion equipment.

Field Calibration

Pressure:

By pressing the ZERO button, both the P1 and P2 are zeroed to the pressure they are being exposed to. For this reason the calibration should be done when both P1 and P2 are disconnected from the hoses.

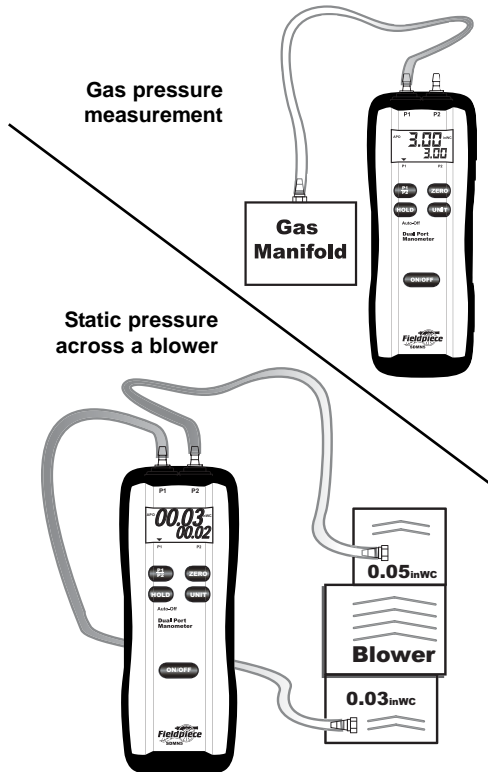
Warranty

The product is warranted to the original purchaser against defects in material or workmanship for a period of one (1) year from the date of purchase. During the warranty period, Fieldpiece Instruments will, at its option, replace or repair the defective unit.

This warranty does not apply to defects resulting from abuse, neglect, accident, unauthorized repair, alteration, or unreasonable use of the instrument. Any implied warranty arising out of the sale of Fieldpiece's products including but not limited to implied warranties of merchantability, and fitness for purpose, are limited to the above. Fieldpiece shall not be liable for incidental or consequential damages.

Service

Any defective SDMN5 should be returned to Fieldpiece Instruments for warranty service along with proof of purchase. Call Fieldpiece for a return material authorization (RMA). For out of warranty service, send the SDMN5 along with a check or money order for \$70 to Fieldpiece. Your SDMN5 will be repaired or replaced at Fieldpiece's option.



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