

## HP2000 Differential Pressure Gauge



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## Overview

Differential pressure gauge is widely used to measure fan and blower pressure, filter resistance, wind speed, furnace pressure, orifice plate differential pressure, bubble water level and liquid amplifier or music system pressure, etc. It is also used for air to gas ratio control and automatic valve control in the combustion and raking process, as well as blood pressure and respiratory pressure monitoring in health care equipment. Medical and health care, microelectronics, aerospace, environmental protection engineering, biological engineering, pharmaceutical, building intelligence, HVAC, food and beverage, precision electronic processing, etc.

## Features

- The product is fully cast in aluminum outside bright, and the magnetic moving media vortex rod mechanism inside the meter fundamentally eliminates the friction generated by gear transmission.
- The table does not need to be filled with liquid.
- No inertia, no source-shift pointer movement, no hysteresis.
- Excellent anti-vibration and anti-jitter performance.
- Extremely high resistance to overload pressure, can measure positive, negative or differential pressure.
- Over 81 ranges, minimum 30Pa, maximum 0-100KPa.
- Free and flexible installation methods, etc.

## Technical Specifications

Medium: Air and non-flammable, compatible gas (natural gas optional)

Overall dimension:120.65mm\*55.6

Weight: about 560g

Housing: Cast aluminum or ABS housing with Plexiglas beveled panel Dark gray coating.

Interface: 1/8" NPT internal normal temperature and pressure dual high and low pressure connections (back)

Accuracy:  $\pm 2\%$  to  $\pm 4\%$  (subject to range)

Pressure resistance range:-20Hg. to 15psig.(-0.677bar to 1.034bar)

Temperature range:-7°C~60°C

Hole size: 114mm

Installation direction: vertical installation

Rated pressure:-68~103KPa

Process connection: both high pressure and low pressure holes are 1/8" vertebral pipe thread, two sets ( Side & Rear )

Housing material: die-cast aluminum, the main body and chromed aluminum parts after 168 hours salt bath test, the final external coating dark gray.

Mounting: Panel Mount

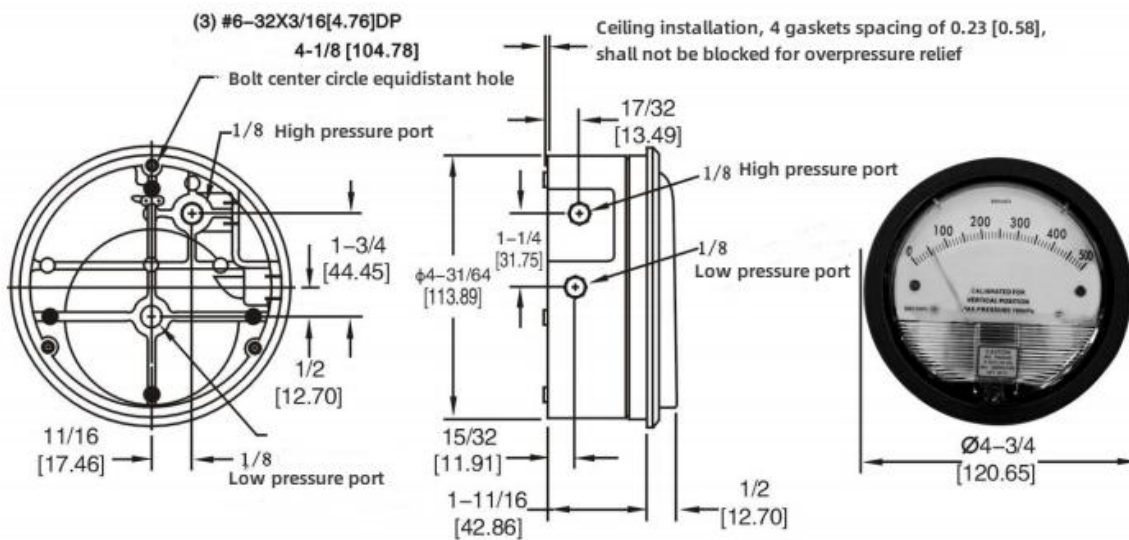
Parts list:

- 1) 2\*1/8" NPT threaded fittings as high and low-pressure fittings for connection to rubber tubing;
- 2) 2\*1/8" NPT plugs for plugging the remaining two high and low-pressure ports;
- 3) 3\*threaded mounting connections.

Note: This product is only suitable for use with air or other compatible gases, over pressure indicators or other abnormalities please contact the manufacturer.

Please note when using hydrogen gas: The instrument magnet will release toxic gas or explode easily when gas enters. In this case, please consult the manufacturer before use to solve the problem.

## Installation



1. Choose a location without violent vibration and a surrounding temperature no greater than 140 degrees Fahrenheit (or 60 degrees Fahrenheit). In addition, avoid direct sunlight, so as not to aggravate the fading of the transparent plastic cover. Excessive tube lengths will not affect accuracy but will delay response time; do not allow these tubes to become obstructed. If pulsating pressure or vibration causes excessive pointer oscillation, contact the manufacturer for additional damping and shock absorption.
2. All standard differential pressure gauges are calibrated with longitudinal diaphragms and must be kept operating in the direction of the gauge to achieve the highest accuracy requirements. If the gauge is not longitudinally operated, please specify in advance in the contract order.
3. The suction top is mounted in a 120 degree size circle at the location of the fixed mounting holes, using the appropriate length of mechanical screws.



4. For inset installation, drill a good size opening in the mounting plate. Poke the differential pressure gauge in and secure it with the appropriate length of mechanical screw and connector. If the differential pressure gauge is to be mounted on a pipe, please order a pipe mounting kit as an extra.

5. Zeroing operation after installation: Use the external zeroing screw on the bottom of the cover to set the needle exactly at the zero position. Please note: Zeroing checks or adjustments can be made from the vented high and low pressure gauge connections.

Accuracy: 2% FS at 21 °C (3% for -125PA and 250PA model, 4% for -60PA model)

2 sets of pressure connections (side and back) + 3 types of mounting = free and flexible application.

## Operation

- Positive pressure: Connect the pressure source to one of the two high pressure orifices with tubing and seal the unconnected high pressure orifice. Ventilate one or two ventilated low pressure holes
- Negative pressure: Connect a vacuum or low pressure source to one of the two low pressure orifices with tubing and seal the unconnected low pressure orifice. Ventilate one or two ventilated high pressure orifices.
- Differential pressure: connect the slightly higher of the two high-pressure sources with the slightly lower of the two low-pressure sources with a tube. And block the unconnected outlet hole.

If one end of the differential pressure gauge is ventilated dirty, it is recommended to install a filter vent plug in the vent to keep the inside of the gauge clean.

A. For temporary installation and portability, use 1/8 pipe threaded rubber tubing and connect to the pressure source with rubber or polyethylene tubing.

B. For permanent installation, use 1/4 or more pipe threads and copper or aluminum tubing is recommended.

**Note:** Our products are constantly being improved and updated.

If there is inconsistency between the image and the actual product, the actual product shall govern.