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CALIBRATED FOR  
VERTICAL POSITION  
MAX.PRESSURE 100kPa



# DP80

## Mechanical Differential Pressure Gauge

### Working principle

A flexible pressure gauge that uses a simple, frictionless spiral movement of a magnet and uses a rubber diaphragm as a component to measure the work. It can use a pointer to quickly indicate the pressure of the measured gas, whether it is positive, negative or differential pressure.

### Product application

Healthcare, microelectronics, aerospace;

Environmental engineering, biological engineering, pharmaceutical;

Building intelligence, HVAC, food and beverage;

Precision electronic machining, etc

### Product description

DP80 differential pressure gauge is an elastic pressure gauge that uses a simple, frictionless spiral magnet movement and uses rubber diaphragm as a sensitive element to measure the work. It can use the pointer to quickly indicate the pressure of the measured gas, whether it is positive pressure, negative pressure or differential pressure. This design is designed to withstand shock, shaking and overpressure. And there is no need to fill the table with liquid, and there is no problem of gasification, freezing, and odor. Widely used to measure fan and blower pressure, filter resistance, wind speed, furnace pressure, orifice differential pressure, bubble level and liquid amplifier or hydraulic system pressure, but also used in the combustion process of air gas ratio control and automatic valve control, as well as health care equipment in the blood pressure and respiratory pressure monitoring.

### Product description

- The magnetic link drive mechanism fundamentally eliminates the friction caused by gear transmission
  - No liquid filling is required
  - No inertia, no drift pointer movement
  - There is no lag in nature
- Excellent anti-vibration and anti-jitter performance
- Positive and negative differential pressure can be measured
  - A variety of ranges can be selected, the minimum 0 ~ 30Pa, the maximum 0 ~ 10KPa
  - 2 sets of pressure interfaces (side, back) + 3 mounting methods = free and flexible application



## Technical parameter

Ambient temperature	-7~80°C
Rated pressure	-68~103kPa
overvoltage	At about 172kPa, the rubber overpressure plug is blown open
Process connection	Both high and low pressure holes are 1/8" spinal canal threads, two sets (one each on the side and back)
Shell material	Die cast aluminum, body and chrome aluminum components after 168 hours of salt bath test, exterior final coating dark gray
precision	±2%FS at 21°C (3% for -125Pa type, 4% for -60Pa type)
Standard accessories	2 1/8NPT plugs, 2 1/8" threaded rubber pipe fittings, and 3 recessed mounting screws with screws

## Differential pressure meter operation

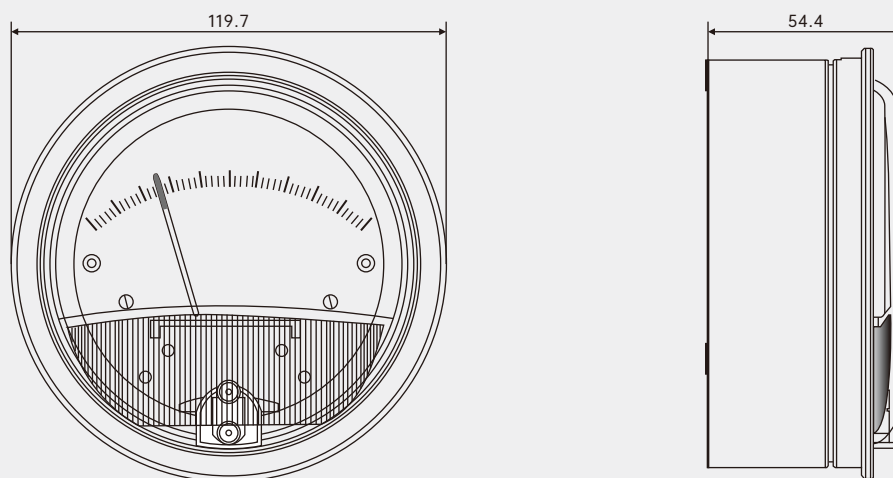
2 pressure interfaces each for L (low pressure) and H (high pressure). Different connections can quickly indicate gas pressure, including positive, negative or differential pressure; Zero calibration can be operated directly externally.

Pressure measurement: the pressure source is connected to either of the two high-pressure mouths with the airway, and the unused one is blocked; Aerate one or two low pressure openings.

Differential pressure measurement: the high pressure source is connected to any one of the two high pressure mouths with the airway, and the low pressure source is connected to any one of the two low pressure mouths with the airway; Plug the two pressure taps on the table that are not used.

Measure negative pressure: Connect the pressure source with any one of the two low pressure mouths with the airway, and block the one that is not used; Aerate one or two high-pressure ports.

## Size mm



## DP80-Selection composition

Selection example DP80 **B / X**

1.Measuring range	<b>A</b>	0~30Pa
	<b>B</b>	-30~30Pa
	<b>C</b>	0~60Pa
	<b>D</b>	-60~60Pa
	<b>E</b>	0~125Pa
	<b>F</b>	-125~125Pa
	<b>G</b>	0~250Pa
	<b>H</b>	-250~250Pa
	<b>I</b>	0~300Pa
	<b>J</b>	0~500Pa
	<b>K</b>	0~750Pa
	<b>L</b>	0~1kPa
	<b>M</b>	0~2kPa
	<b>N</b>	0~3kPa
	<b>O</b>	0~4kPa
	<b>P</b>	0~5kPa
	<b>Q</b>	0~6kPa
	<b>R</b>	0~7kPa
	<b>S</b>	0~8kPa
	<b>T</b>	0~9kPa
<b>U</b>	0~10kPa	
<b>T ( )</b>	Other range ranges	
2.Precision class	<b>X</b>	±2%FS
	<b>Y</b>	±3%FS (125Pa)
	<b>Z</b>	±4%FS (-60Pa)

**Instructions:**

The DP80 differential pressure gauge has a measuring range of -30~30Pa and an accuracy level of ±2%FS.

**Product Certification**

Compliance and approval; Rodewieg pressure gauges meet key standards and certifications for process measurement technology; Thus guaranteeing the highest reliability in such Settings;