

Micro Differential Pressure Gauge User Manual

Model LFB-2000



Product Applications

This gauge is widely used for measuring positive and negative differential pressure in cleanrooms or clean workshops in pharmaceutical and electronics plants. It is also ideal for HVAC systems, purification air conditioning, and air showers to monitor filter pressure drop, as well as for pharmaceutical machinery integration.

Product Features

- **Mechanism:** The magnetic spiral worm mechanism eliminates friction typically caused by gear transmissions.
- **Maintenance:** No liquid filling is required within the gauge.
- **Precision:** Provides pointer movement with no inertia, no drift, and essentially zero hysteresis.
- **Durability:** Offers excellent resistance to vibration, jitter, and pressure overload.
- **Versatility:** Capable of measuring positive, negative, or differential pressure with flexible installation options.

Technical Specifications

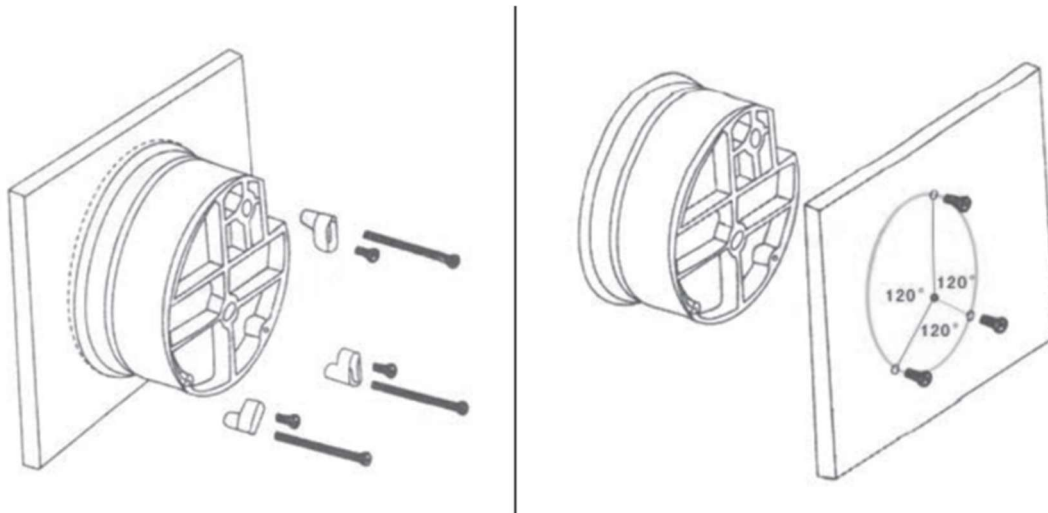
Item	Specification
Dimensions	120 x 55.6 mm
Weight	Approximately 560g
Surface Treatment	Powder coated
Interface	1/8" NPT female thread dual High/Low ports (back)
Range	Min 30 Pa, Max 5 kPa
Accuracy (at 21°C)	±2% F.S (125 Pa, 250 Pa models 3%; 60 Pa model 4%)
Temperature Range	-7°C to 60°C

IMPORTANT: This product is only suitable for use with air or other non-corrosive gases!

Installation Instructions

1. **Environment:** Select a location free from severe vibration with an ambient temperature not exceeding 60°C (140°F). Avoid direct sunlight to prevent premature aging of the plastic cover.
2. **Piping:** Keep tubing as short as possible to minimize response time and ensure there are no kinks. If pulsating pressure causes pointer oscillation, contact the manufacturer for a throttle damping device.

3. **Calibration:** The gauge is calibrated vertically by default. If it is not installed vertically, this must be specified at the time of ordering.
4. **Mounting Methods:**
 - **Surface Mounting:** Use three screw holes spaced at 120°.
 - **Flush Mounting:** Use the screw seats and screws provided in the accessory kit as shown in the diagram.



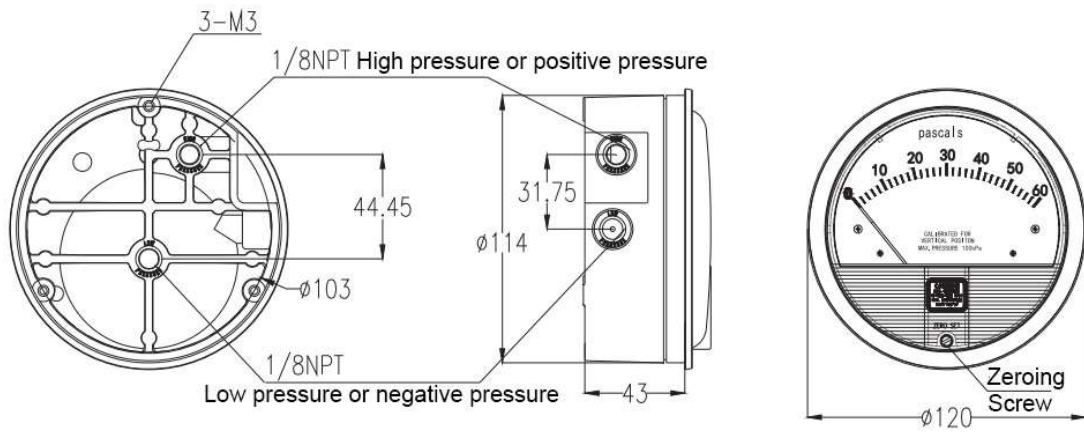
Flush Mounting

Surface Mounting

Pressure Connections

- **Zero Adjustment:** After mounting, ensure accuracy by checking if the pointer is at zero. Use a flat-head screwdriver to turn the "Zero Set" screw until the pointer aligns with "0".
- **Positive/High Pressure (HIGH):** Select a port on the back or side. Seal the unused HIGH port with the provided plug. Connect the pressure source to the active port using the brass barbed fitting. Leave the LOW port open to the atmosphere.
- **Negative/Low Pressure (LOW):** Select a port on the back or side. Seal the unused LOW port with the provided plug. Connect the pressure source to the active port using the brass barbed fitting. Leave the HIGH port open to the atmosphere.
- **Differential Pressure:** Connect the higher of the two pressure sources to the **HIGH** port and the lower to the **LOW** port. Seal all unused ports with the

provided plugs.



Accessory List

1. 2x Brass barbed tubing pressure fittings.
2. 2x 1/8" NPT male thread plugs.
3. 3x Flush mounting screw seats and screws.