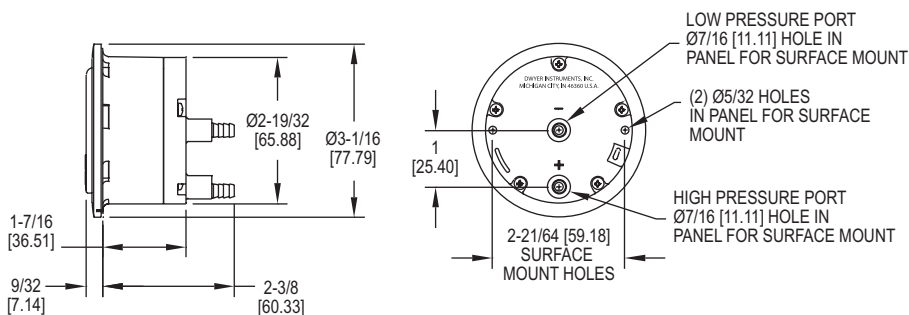


# MINIHELIC® II DIFFERENTIAL PRESSURE GAGE

Combining High Accuracy, Compactness, Dependability, and Low Cost



Combining clean design, small size and low cost with enough accuracy for all but the most demanding applications our **Series 2-5000 MiniHelic® II Differential Pressure Gage** offers the latest in design features for a dial type differential pressure gage. It is our most compact gage but is easy to read and can safely operate at total pressures up to 30 psig.

## FEATURES/BENEFITS

- Removable lens and rear-housing provides easy, cost-effective servicing
- Accuracy and value provides an excellent solution for OEM and user applications
- Durable housing materials make it well-suited for rough environments and total high pressure

## APPLICATIONS

- Room positive pressure sensing
- Cabinet air-purging
- Medical respiratory equipment
- Air samplers
- Electronic air cooling systems
- Laminar flow hoods
- Local indication on filter status
- Face velocity on fume hood
- Duct pressures

## SPECIFICATIONS

**Service:** Air and compatible gases.

**Wetted Materials:** Consult factory.

**Housing:** Glass filled nylon; polycarbonate lens.

**Accuracy:**  $\pm 5\%$  of FS at 70°F (21.1°C).

**Pressure Limits:** 30 psig (2.067 bar) continuous to either pressure connection.

**Temperature Limits:** 20 to 120°F (-6.67 to 48.9°C).

**Size:** 2-1/16" (52.39 mm) diameter dial face.

**Mounting Orientation:** Diaphragm in vertical position. Consult factory for other position orientations.

**Process Connections:** Barbed, for 3/16" ID tubing (standard); 1/8" male NPT (optional).

**Weight:** 6 oz (170.1 g).

**Agency Approvals:** Meets the technical requirements of EU Directive 2011/65/EU (RoHS II).

**Caution:** For use only with air or compatible non-corrosive gases.



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**Housing** is molded from strong mineral and glass filled nylon.

**Pointer stops** of molded rubber prevent pointer over-travel without damage.

**Full view lens** is removable and molded of acrylic.

**Aluminum scale** litho-printed black on white, enhances readability.

**Red tipped aluminum pointer**, rigidly mounted to helix is easy to see.

**Wishbone assembly** provides mounting for helix, helix bearings, and pointer shaft.

**Jewel bearings** provide virtually friction-free helix motion.

**Helix** is free to rotate in jewel bearings. It aligns with magnetic field of magnet to transmit pressure indications to pointer.

**Zero adjustment screw**, located behind the removable lens, eliminates tampering.

**Range spring calibration clamp** fixes live length of spring for proper gage calibration and is factory set and sealed.

**Silicone rubber diaphragm** allows accurate response to a broad range of temperatures and at extremely low pressure. Incorporates blow out area for overpressure protection.

**Diaphragm support plates** of lightweight aluminum on each side of the diaphragm minimize position or attitude sensitivity and help define pressure area.

**Flat leaf range spring** reacts to pressure on the diaphragm. Live length is adjustable for calibration. Small amplitude of motion minimizes inaccuracies and assures long life.

**Low pressure tap** connects to rear chamber.

**Coil spring link** provides a resilient connection between the diaphragm and the range spring.

**Ceramic magnet** mounted on a molded bracket at the end of the range spring rotates the helix without direct mechanical linkage.

**High pressure tap** connects with the front chamber through passageway in the plastic case and a sealing ring molded into the edge of the diaphragm.

MODEL CHART			
Model	Range, Inches of Water	Model	Range, MM of Water
2-5000-0	0-0.5	2-5000-25MM	0-25
2-5001	0-1.0	2-5000-50MM	0-50
2-5002	0-2.0	2-5000-100MM	0-100
2-5003	0-3.0		
2-5005	0-5.0	Model	Range, Pascals
2-5010	0-10	2-5000-125PA	0-125
2-5020	0-20	2-5000-250PA	0-250
2-5040	0-40	2-5000-500PA	0-500
2-5060	0-60		
2-5100	0-100	Model	Range, kPa
Model	Range, PSI	2-5000-1KPA	0-1
2-5205	0-5	2-5000-3KPA	0-3

OPTIONS	
To order add suffix:	Description
-NPT	1/8" male NPT connections
Example: 2-5001-NPT	
-BB	Bottom barbed surface mount
Example: 2-5001-BB	
-NIST	NIST traceable calibration certificate
Example: 2-5001-NIST	
-FC	Factory calibration certificate
Example: 2-5001-FC	

ACCESSORIES	
Model	Description
A-302F-A	303 SS static pressure tip with mounting flange; for 3/16" ID rubber or plastic tubing; 4" insertion depth; includes mounting screws
A-434	Portable kit
A-489	4" straight static pressure tip with flange
A-497	Surface mounting bracket
A-609	Air filter kit
A-480	Plastic static pressure tip

## SURFACE MOUNTING



Optional surface mounting with back mounting plate allows for quick installation to any surface. Process connections are barbed and point downwards. Add -BB for bottom barbed surface mount option.



## PANEL MOUNTING



Mounting hardware is supplied with the MiniHelic® II gage for panel mounting through a single hole, 2-5/8" (67 mm) in diameter. Panel thickness up to 1/2" (13 mm) can be accommodated with the hardware supplied. If necessary, surface mounting of the gage can be accomplished by means of two 4-40 screws into the tapped mounting bracket stud holes in the rear of the gage. Surface mounting requires clearance holes in the panel for the two pressure taps.

