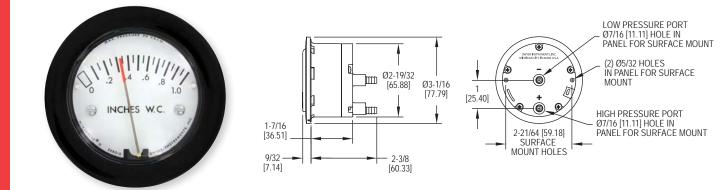
# Dwyer **SERIES 2-5000** MINIHELIC<sup>®</sup> II DIFFERENTIAL PRESSURE GAGE Combining High Accuracy, Compactness, Dependability, and Low Cost



SPECIFICATIONS



PRESSURE

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

Service: Air and compatible gases. Wetted Materials: Consult factory. Housing: Glass filled nylon; polycarbonate lens. Accuracy: ±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.

## **Dwyer** SERIES 2-5000 **MINIHELIC® II DIFFERENTIAL PRESSURE GAGE** Combining High Accuracy, Compactness, Dependability, and Low Cost

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.

MODEL CHART			
	Range,		Range,
Model	Inches of Water	Model	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		Range,
2-5005	0-5.0	Model	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		Range,
2-5100	0-100	Model	kPa
	Range,	2-5000-1KPA	0-1
Model	PSI	2-5000-3KPA	0-3
2-5205	0-5		

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		

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.

## 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.





Mounting hardware is supplied with the Minihelic<sup>®</sup> 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.

Process Tubing Options: See page 455 (Gage Tubing Accessories)