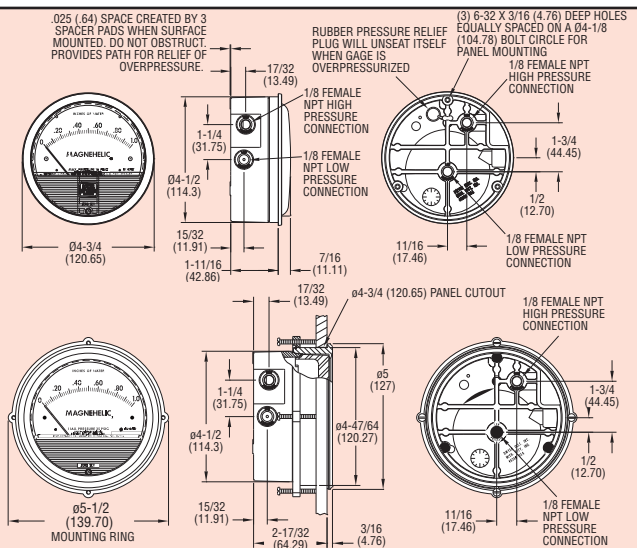




Series  
2000

# Magnehelic® Differential Pressure Gages

Indicate Positive, Negative or Differential, Accurate within 2%



Select the Dwyer® Magnehelic® gage for high accuracy – guaranteed within 2% of full scale – and for the wide choice of 81 models available to suit your needs precisely. Using Dwyer's simple, frictionless Magnehelic® gage movement, it quickly indicates low air or non-corrosive gas pressures – either positive, negative (vacuum) or differential. The design resists shock, vibration and over-pressures. No manometer fluid to evaporate, freeze or cause toxic or leveling problems. It's inexpensive, too.

The Magnehelic® gage is the industry standard to measure fan and blower pressures, filter resistance, air velocity, furnace draft, pressure drop across orifice plates, liquid levels with bubbler systems and pressures in fluid amplifier or fluidic systems. It also checks gas-air ratio controls and automatic valves, and monitors blood and respiratory pressures in medical care equipment.

**Note:** May be used with hydrogen. Order a Buna-N diaphragm. Pressures must be less than 35 psi.



Flush, Surface or  
Pipe Mounted

## Mounting

A single case size is used for most models of Magnehelic® gages. They can be flush or surface mounted with standard hardware supplied. With the optional **A-610** Pipe Mounting Kit they may be conveniently installed on horizontal or vertical 1-1/4" - 2" pipe. Although calibrated for vertical position, many ranges above 1" may be used at any angle by simply re-zeroing. However, for maximum accuracy, they must be calibrated in the same position in which they are used. These characteristics make Magnehelic® gages ideal for both stationary and portable applications. A 4-9/16" hole is required for flush panel mounting. Complete mounting and connection fittings plus instructions are furnished with each instrument.

## Vent Valves

In applications where pressure is continuous and the Magnehelic® gage is connected by metal or plastic tubing which cannot be easily removed, we suggest using Dwyer A-310A vent valves to connect gage. Pressure can then be removed to check or re-zero the gage.

## High and Medium Pressure Models

Installation is similar to standard gages except that a 4-13/16" hole is needed for flush mounting. The medium pressure construction is rated for internal pressures up to 35 psig and the high pressure up to 80 psig. Available for all models. Because of larger case, the medium pressure and high pressure models will not fit in a portable case size. Installation of the A-321 safety relief valve on standard Magnehelic® gages often provides adequate protection against infrequent overpressure.

① See Note.

## SPECIFICATIONS

**Service:** Air and non-combustible, compatible gases (natural gas option available).

**Wetted Materials:** Consult factory.

**Housing:** Die cast aluminum case and bezel, with acrylic cover. Exterior finish is coated gray to withstand 168 hour salt spray corrosion test.

**Accuracy:** ±2% of full scale (±3% on -0, -100 Pa, -125 Pa, 10MM and ±4% on -00, -60 Pa, -6MM ranges), throughout range at 70°F (21.1°C).

**Pressure Limits:** -20" Hg to 15 psig† (-0.677 to 1.034 bar); MP option: 35 psig (2.41 bar); HP option: 80 psig (5.52 bar).

**Overpressure:** Relief plug opens at approximately 25 psig (1.72 bar), standard gages only. See Overpressure Protection Note on next page.

**Temperature Limits:** 20 to 140°F\* (-6.67 to 60°C).

**Size:** 4" (101.6 mm) diameter dial face.

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

**Process Connections:** 1/8" female NPT duplicate high and low pressure taps - one pair side and one pair back.

**Weight:** 1 lb 2 oz (510 g), MP & HP 2 lb 2 oz (963 g).

**Standard Accessories:** Two 1/8" NPT plugs for duplicate pressure taps, two 1/8" pipe thread to rubber tubing adapter and three flush mounting adapters with screws. (Mounting and snap ring retainer substituted for 3 adapters in MP & HP gage accessories.)

\*Low temperature models available as special option.

†For applications with high cycle rate within gage total pressure rating, next higher rating is recommended. See Medium and High pressure options at lower left.

## OPTIONS AND ACCESSORIES



### Transparent Overlays

Furnished in red and green to highlight and emphasize critical pressures.



### Adjustable Signal Flag

Integral with plastic gage cover. Available for most models except those with medium or high pressure construction. Can be ordered with gage or separate.

## INSTRUMENTS • CONTROLS • VALVES

**ARCO**  
Engineering, Inc.  
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### Differential Pressure Gages

**OPTIONS** — To order, add suffix: I.E. 2001-ASF  
**ASF**, Adjustable Signal Flag  
**HP**, High Pressure Option  
**LT**, Low Temperatures to -20°F  
**MP**, Med. Pressure Option  
**SP**, Setpoint Indicator  
**Scale Overlays**, Red, Green, Mirrored or  
 Combination. Specify Locations