



DUST SPARES
dust control spare parts for industry
www.dustspares.co.uk

Tel: 08456 800 696
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Magnehlic Pressure Gauge – Series 2000



Specifications

Service:

Air and non-combustible, compatible gases. (Natural Gas option available.)

Note:

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

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 FS (±3% on -0, -100PA, -125PA, -10MM and ±4% on -00, -60PA, -6MM ranges), throughout range at 70°F (21.1°C).

Pressure Limits:

-20 in Hg. to 15 psig.† (-0.677 bar to 1.034 bar); MP option; 35 psig (2.41 bar), HP option; 80 psig (5.52 bar).



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Overpressure:

Relief plug opens at approximately 25 psig (1.72 bar), standard gages only. See Overpressure Protection note on Catalog 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 adapters and three flush mounting adapters with screws. (Mounting and snap ring retainer substituted for three adapters in MP & HP gage accessories.)

Agency Approval:

RoHS. (Note: -SP models not RoHS approved.)

Features

- **Bezel** provides flange for flush mounting in panel.
- **Clear plastic face** is highly resistant to breakage. Provides undistorted viewing of pointer and scale.
- **Precision litho-printed scale** is accurate and easy to read.



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- **Red tipped pointer** of heat treated aluminum tubing is easy to see. It is rigidly mounted on the helix shaft.
- **Pointer stops** of molded rubber prevent pointer over-travel without damage.
- **"Wishbone" assembly** provides mounting for helix, helix bearings and pointer shaft.
- **Jeweled bearings** are shock-resistant mounted; provide virtually friction-free motion for helix. Motion damped with high viscosity silicone fluid.
- **Zero adjustment screw** is conveniently located in the plastic cover, and is accessible without removing the cover. O-ring seal provides pressure tightness.
- **Helix** is precision made from an alloy of high magnetic permeability. Mounted in jeweled bearings, it turns freely, following the magnetic field to move the pointer across the scale.
- **Calibrated range spring** is flat spring steel. Small amplitude of motion assures consistency and long life. It reacts to pressure on diaphragm. Live length adjustable for calibration.
- **Silicone rubber diaphragm** with integrally molded O-ring is supported by front and rear plates. It is locked and sealed in position with a sealing plate and retaining ring. Diaphragm motion is restricted to prevent damage due to overpressures.
- **Die cast aluminum case** is precision made and iridite-dipped to withstand 168 hour salt spray corrosion test. Exterior finished in baked dark gray hammerloid. One case size is used for all standard pressure options, and for both surface and flush mounting.
- **OVERPRESSURE PROTECTION**
Blowout plug is comprised of a rubber plug on the rear which functions as a relief valve by unseating and venting the gage interior when over pressure reaches approximately 25 psig (1.7 bar). To provide a free path for pressure relief, there are four spacer pads which maintain 0.023" clearance when gage is surface mounted. Do not obstruct the gap created by these pads.



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The blowout plug is not used on models above 180" of water pressure, medium or high pressure models, or on gages which require an elastomer other than silicone for the diaphragm. The blowout plug should not be used as a system overpressure control. High supply pressures may still cause the gage to fail due to overpressurization, resulting in property damage or serious injury. Good engineering practices should be utilized to prevent your system from exceeding the ratings or any component.

- **O-ring seal** for cover assures pressure integrity of case.
- **Samarium Cobalt magnet** mounted at one end of range spring rotates helix without mechanical linkages.

Options

- **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, Yellow, Mirrored or Combination, Specify Locations
- **Mounting**

A single case size is used for most models of Magnehelic® gages. They can be flush or surface mounted with standard hardware supplied. 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.