### FEATURES/BENEFITS
- Easy to read gage through undistorted plastic face permits viewing from far away
- Patented design provides quick response to pressure changes means no delay in assessing critical situations
- Durable and rugged housing and high-quality components combine to provide long-service life and minimized down-time
- High accuracy option is twice as accurate as the standard Magnehelic® gage

### APPLICATIONS
- Filter monitoring
- Air velocity with Dwyer pilot tube
- Blower vacuum monitoring
- Fan pressure indication
- Duct, room or building pressures
- Air velocity with Dwyer pitot tube
- Filter monitoring

### 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.
- **Diaphragm:** May be used with hydrogen. Order a Buna-N diaphragm. Pressures must be within the gage total pressure rating.
- **Accuracy:** ±2% (-HA model ±1%) of FS (±3% (-HA ±1.5%) on -0, -100PA, -125PA, -10MM and ±4% (-HA ±2%) on -00, -60PA, -6MM ranges), throughout range at 70°F (21.1°C).
- **Pressure Limits:** -20 in Hg to 15 psig (-0.677 to 1.034 bar); MP option: 35 psig (21.1°C).
- **Overpressure:** Relief plug opens at approximately 25 psig (1.72 bar), standard gages only.
- **Temperature Limits:** 20 to 140°F (-6.67 to 60°C), -20°F (-28°C) with low temperature option.
- **Size:** 4” (101.6 mm) diameter dial face.
- **Mounting Orientation:** Dial gage 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 for high 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 three adapters in MP & HP gage accessories.)
- **Agency Approvals:** Meets the technical requirements of EU Directive 2011/65/EU (RoHS II). **Note:** -SP models not RoHS approved.

### ACCESSORIES

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-432</td>
<td>Portable kit; combine carrying case with any Magnehelic® gage of standard range, except high pressure connection. Includes 9 ft (2.7 m) of 3/16” ID rubber tubing, standhang bracket and integral tube with holder.</td>
</tr>
<tr>
<td>A-605</td>
<td>Air filter gage accessory kit; adapts any standard Magnehelic® gage for use as an air filter gage. Includes aluminum surface mounting bracket with screws, two 5 ft (1.5 m) lengths of 1/4” aluminum tubing, two static pressure tips and two molded plastic vent valves, integral compression fittings on both tips and valves.</td>
</tr>
<tr>
<td>A-605B</td>
<td>Air filter gage accessory kit; air filter kit with two plastic open/close valves, two 4” steel static tips, plastic tubing and mounting flange.</td>
</tr>
<tr>
<td>A-605C</td>
<td>Air filter gage accessory kit; air filter kit with two plastic open/close valves, two plastic static tips, plastic tubing and mounting flange.</td>
</tr>
</tbody>
</table>

**Over Protection Note:** See page 21 (Series 2000)
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. 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. 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. 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. Zero adjustment screw is conveniently located in the plastic cover, and is accessible without removing cover. O-ring seal provides pressure tightness.

Differential Pressure Gages

Example: 0.5 in w.c. = 16,000 CFM.

When ordering volumetric flow scales please specify the maximum flow rate and its units. In inches w.c. and feet per minute are shown above. For other ranges contact the factory.

O-ring seal for cover assures pressure integrity of case.

OVERPRESSURE PROTECTION

Blowout plug is comprised of a rubber plug on the rear which functions as a relief valve by unsealing 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. 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 over pressurization, resulting in property damage or serious injury. Good engineering practices should be utilized to prevent your system from exceeding the ratings of any component.

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.

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 retainer ring. Diaphragm motion is restricted to prevent damage due to overpressures.

Samarium Cobalt magnet mounted at one end of range springs rotates helix without mechanical linkages.
HIGH ACCURACY MAGNEHELIC® DIFFERENTIAL PRESSURE GAGE

Twice as accurate as the standard Magnehelic® gage
Mirrored scale overlay eliminates parallax error
IP67 weatherproof housing
Optional brushed SS bezel

OPTIONS - HIGH ACCURACY MAGNEHELIC® GAGE
To order add suffix: Description
-HA High accuracy Magnehelic® gage. Accuracy within 1% and weatherproof. Also includes mirrored scale overlay and a six point calibration certificate
-SS Corrosion resistant brushed 304 stainless steel bezel

6-point calibration certificate included

ADDITIONAL GAGE OPTIONS

OPTIONS - LED SET POINT INDICATOR
To order add suffix: Description
-SP Bright red LED on right scale shows when set point is reached. Field adjustable from gage face, unit operates on 12-24 VDC. Set point indicator option comes with medium pressure (MP) bezel.

Note: 4-13/16˝ hole for flush mounting.

OPTIONS - ADJUSTABLE SIGNAL FLAG
To order add suffix: Description
-ASF Integral with plastic gage cover. Available for most models except those with medium or high pressure construction. Can be ordered with gage or separate.

OPTIONS - TRANSPARENT OVERLAYS
To order add suffix: Description
-G Green (to highlight and emphasize critical pressures)
-R Red (to highlight and emphasize critical pressures)
-Y Yellow (to highlight and emphasize critical pressures)

OPTIONS - MIRRORED SCALE OVERLAY
To order add suffix: Description
-M A mirrored scale overlay is also available to assist in reducing parallax error.

OPTIONS - INTEGRATED MOUNTING PLATE
To order add suffix: Description
-AHU1 Furnished with attached surface mounting plate
-AHU2 Furnished with attached surface mounting plate and including A-481 installer kit (2 plastic static pressure tips and 7´of PVC tubing)

OPTIONS - FOR HIGH STATE PRESSURE APPLICATIONS
To order add suffix: Description
-HP High pressure option: for pressures to 80 psig
-MP Medium pressure option: for pressures to 35 psig

OPTIONS - OTHER OPTIONAL BEZELS
To order add suffix: Description
-CB Chrome bezel option: A chrome plated aluminum bezel for an aesthetically pleasing finish when mounting on metal surfaces such as control panels.
-SB Stainless steel bezel option: 304 stainless steel electro polished Rs 16 finished bezel.
-SS Corrosion resistant brushed 304 stainless steel bezel

OPTIONS - OTHER OPTIONAL BEZELS
To order add suffix: Description
-FC Factory calibration certificate
-LT Low temperatures to -20°F (-28°C)
-NIST NIST traceable calibration certificate
A single case size is used for most models of Magnehelic® gages. They can be flush or surface mounted with standard hardware supplied. Complete mounting and connection fittings plus instructions are furnished with each instrument. A 4-9/16˝ hole is required for flush panel mounting.

Flush mounting is easily accomplished with the new A-300 Flush Mounting bracket. This bracket provides a solution to quickly and conveniently flush mount the Magnehelic® gage. The A-300 is ideal for mounting the Magnehelic® gage on control panel doors.

The A-368 is a simple bracket for quickly surface mounting the Magnehelic® gage. After securing the Magnehelic® gage to the A-368 bracket, mount the bracket on any flat surface.

The A-369 allows the Magnehelic® gage to be easily carried to locations where pressure readings need to be taken. The A-369 can stand on its own or hang on a nail or hook.

**SERIES A-320**

**INSTRUMENT ENCLOSURES**

Protects Various Instruments

The Series A-320 Instrument Enclosures protect instruments in all applications. The enclosures, available in plastic and stainless steel, fit a variety of gages including the Series 605 transmitter, DM-2000, 3000MR/MRS and DH3. All models include silicone tubing, Banjo fittings, and threaded pressure connections pre-installed. The threaded pressure connections allow the user to easily change the connection type through the use of fittings or adapters. This modification can be implemented to allow connection to a wide variety of plastic or metal tubing.

**MODEL CHART**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-320-B1**</td>
<td>3000MR/MRS Photohelic® switch/gage, Series 605 Magnehelic®</td>
</tr>
<tr>
<td>A-320-BC</td>
<td>differential pressure transmitter, DH3 Digihielic® pressure controller,</td>
</tr>
<tr>
<td></td>
<td>2000 Magnehelic® gage with medium and high pressure options</td>
</tr>
<tr>
<td>**For DH3 to fit on A-320-B1 the casing on the electrical plug must be removed.</td>
<td></td>
</tr>
</tbody>
</table>

**SPECIFICATIONS**

- **Housing Material:** ABS plastic or 304 SS.
- **Process Connection:** 1/8˝ female NPT (-SS models: 1/8˝ BSPT).
- **Enclosure Rating:** Plastic models: IP66.
- **Weight:** A-320-A1: 1.1 lb (0.5 kg); A-320-B1: 1.4 lb (0.65 kg); A-320-BC: 1.4 lb (0.65 kg); A-320-A-SS: 2.3 lb (1.05 kg); A-320-B-SS: 3.0 lb (1.35 kg).

**ACCESSORIES**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-610</td>
<td>Pipe mounting kit for installing on 1-1/4˝ to 2˝ horizontal or vertical pipe</td>
</tr>
<tr>
<td>A-286</td>
<td>Magnehelic® gage panel mounting flange</td>
</tr>
<tr>
<td>A-369</td>
<td>Stand-hang bracket, aluminum, for Magnehelic® gage</td>
</tr>
<tr>
<td>A-300</td>
<td>Flush mounting bracket</td>
</tr>
<tr>
<td>A-464</td>
<td>Flush mount kit for Magnehelic® gage</td>
</tr>
<tr>
<td>A-368</td>
<td>Surface mounting plate, aluminum, for Magnehelic® gage</td>
</tr>
<tr>
<td>A-299</td>
<td>Mounting bracket, flush mount for Magnehelic® gage, bracket is then</td>
</tr>
<tr>
<td></td>
<td>surface mounted, steel with gray hammerloid epoxy finish</td>
</tr>
<tr>
<td>A-371</td>
<td>Surface mounting bracket, use with medium pressure (-MP) or high</td>
</tr>
<tr>
<td></td>
<td>pressure (-HP) models only</td>
</tr>
</tbody>
</table>