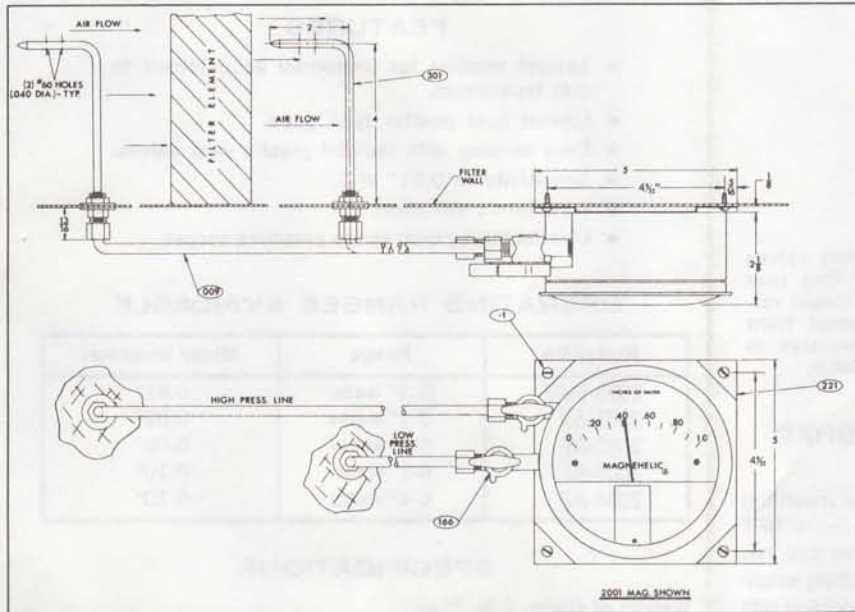




MAGNEHELIC® AIR FILTER GAGES

Installation and Operating Instructions

Operating instructions and parts list for Magnehelic Differential Pressure Gages are included in Bulletin No. A-27 packed with the gage.



PARTS LIST

Part No.	Part Name
2000-1	Mounting panel self-tapping screws #8 x 1-3/4" size (4 required)
2000-009	1/4" aluminum tubing (2 - 5' lengths provided)
2000-166	Molded vent valves (2 required)
2000-221	Mounting panel
2000-301	Static pressure tips with integral 1/4" compression fittings (2 req'd.)
2000-2	Gage mounting screws, 6-32 x 1/4" (3 required)

Options

Not shown	Automatic signal flag integral with plastic gage cover.
Not shown	Scale plate overlays in green and red.

INSTALLATION PROCEDURE

1. Screw vent valves into side connections of gage. Be sure back connections of gage are sealed with plugs provided with the gage. Attach gage to mounting plate with three No. 6-32 screws provided.
2. Select a convenient location on filter wall and punch or drill four 1/8" dia. max. holes for mounting plate as shown in drawing above. Attach mounting plate to filter wall with four self-tapping screws provided. If gage is to be flush mounted in control panel, refer to Bulletin No. A-27.
3. Drill two 7/16" holes in the duct, one on each side of the filter and at least 12" distant.* Secure the static pressure tips as in the drawing above, with the tips directed into the air flow.
4. Connect 1/4" metal tubing from the static pressure tips to the gage. The tip on the downstream side of the filter is connected to the vent valve in the low pressure connection of the gage. The tip on the upstream side is connected to the vent valve in the high pressure connection.
5. Turn both vent valves to "VENT" position and adjust the gage pointer to zero by means of the external adjustment screw in the face of the gage. After zeroing, turn vent valves to "LINE" position.

*NOTE ON LOCATION OF STATIC PRESSURE TIPS. The location of static pressure tips is of primary importance in securing reliable readings. For maximum accuracy, it is essential that the influence of the velocity of the air be eliminated to permit sensing the true static pressure. Note that some installations do not provide a straight duct approach to the filter

INSTALLATION CHECK AND TROUBLE SHOOTING

Before putting your air filter gage into service or in the event of initial pressure drop readings that don't agree with the filter manufacturer's specified pressure drop, make the following checks:

1. Check zero adjustment of the gage as described above.
2. Check all tubing connections for tightness from gage to the static tip or fitting connection.
3. Check plastic cover of gage to be sure it is securely in place and air tight.
4. Check static pressure tips or fittings to be sure they are not plugged.
5. Check installation of static tips or fittings.* Be sure static pressure tips point directly into the air stream. A velocity pressure error can be created if the air blows directly into the openings.

OPERATION

With vent valves in "LINE" position the gage will indicate pressure drop across the filter. If the reading varies substantially from the filter manufacturer's rating for a clean filter, check the system for proper setting of controls, air balancing of system, leakage in system and whether or not the correct filter has been installed.

When pressure drop across the filter reaches the maximum recommended by the manufacturer, the filter should be serviced or replaced.

bank which may cause air to swirl and eddy.

Tips should be located as recommended by the specifying engineer or by the filter manufacturer. In the absence of such recommendations, locate the tips at least 12" upstream and downstream from the filters in a zone of minimum turbulence.