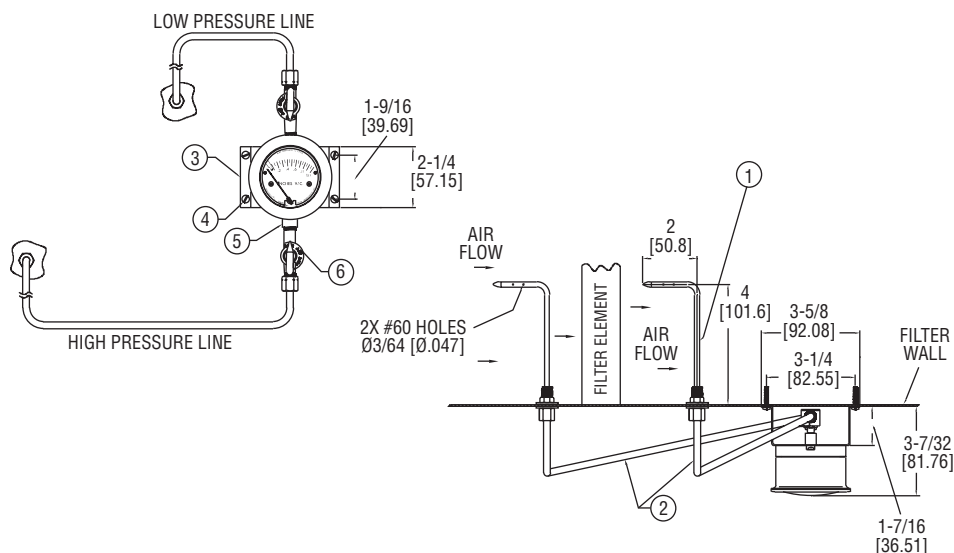


**Minihelic® II Air Filter Gages****Specifications - Installation and Operating Instructions****INSTALLATION PROCEDURE**

1. Drill two 7/16" diameter holes in duct, one on either side of filter and at least 12" upstream and downstream.* Install static pressure fittings as shown above with tips pointing into the air stream.

2. Attach Minihelic® II gage to mounting bracket using studs and nuts supplied with gage.

3. Thread two-way vent valves into adapter elbows. Handle of valve must align with remaining opening in elbow when tight. Press completed assemblies onto barbed connections at rear of gage as shown above.

4. Select a vertical plumb mounting surface for the gage within 5 ft of the static tips. Location should be reasonably free of vibration which can cause gage pointer to oscillate. Attach bracket to surface with 4 sheet metal screws supplied.

5. Cut aluminum tubing to length and connect between static pressure tips and gage. The tip on the upstream side of the filter is connected to the high pressure gage connection.

6. Turn handles of both valves to "vent" position and check gage for zero reading. Adjust if necessary following instructions in bulletin A-36. Turn valves to "line" or on position and read pressure drop. Periodically re-check zero point to assure accuracy.

Operating Instructions for Minihelic® II Differential Pressure Gages are included in Bulletin A-36 packed with each gage. This kit is designed for gages with standard barbed connections. If your gage has optional male pipe threads, purchase (2) 1/8" x 1/8" NPT elbows to replace fittings included.

PARTS LIST/A-609 KIT

Part Number	Description
1	Static Pressure Tip with integral 1/4" compression fitting. 2 included.
2	5' length 1/4" diameter aluminum tubing. 2 included.
3	Surface Mounting Bracket. 20 ga. steel with flat black finish.
4	#6 x 3/4" Pan Head sheet metal screw. 4 included.
5	1/8" NPT female adapter elbow. 2 included.
6	2 Way Vent Valve 1/8" NPT male x 1/4" compression fitting. 2 included

INSTALLATION CHECK AND TROUBLESHOOTING

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.

MAINTENANCE/REPAIR

Upon final installation of the Minihelic® II, no routine maintenance is required. The Minihelic® II is not field serviceable and should be returned if repair is needed. Field repair should not be attempted and may void warranty.

WARRANTY/RETURN

Refer to "Terms and Conditions of Sales" in our catalog and on our website. Contact customer service to receive a Return Goods Authorization number before shipping the product back for repair. Be sure to include a brief description of the problem plus any additional application notes.

*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 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.