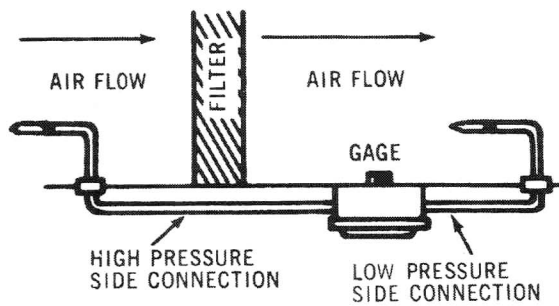


APPLICATIONS



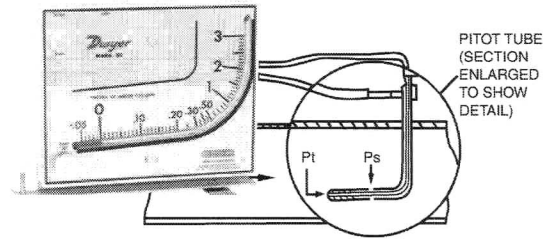
AIR FILTER GAGE

Mount gage within 3 ft. of filter bank. Install tubing adapters on each side of filter. Run tubing from clean side of filter to positive pressure side of gage (left fitting). Run downstream side to low pressure side of gage (right fitting). Install green and red arrows adjacent to indicating tube to indicate filter condition.

AIR VELOCITY METER

A pitot tube should be used for air velocity readings. Install the pitot tube and gage carefully to ensure accuracy. Select a location for the pitot tube with at least four diameters of smooth straight sections of duct both upstream and downstream. Install pitot tube in the center of duct with tip directed into air stream. Connect the right angle (leg parallel to tip) to negative (right fitting) and straight pitot tube connection to positive (left connection) of gage. The velocity reading shown on the gage is the center or maximum velocity. For average velocity across the full area, multiply by a factor of 0.9.

MARK II MANOMETER



PITOT TUBE SENSES TOTAL AND STATIC PRESSURES. MANOMETER MEASURES VELOCITY PRESSURE-(DIFFERENCE BETWEEN TOTAL AND STATIC PRESSURES).

No's. 27 and 28 require pitot tube at additional cost. See Bulletin F-41-F.

The velocity indicated is for dry air at 70°F, 29.9" barometric pressure and a resulting density of 0.075 lb/ft³. For variation from these standard conditions, corrections may be based upon the following data.

AIR VELOCITY CALCULATIONS:

$$\text{Air Velocity} = 1096.2 \sqrt{\frac{P_v}{D}}$$

where P_v = velocity pressure in inches of water

D = Air density in lb/ft³

$$\text{Air Density} = 1.325 \times \frac{P_B}{T}$$

where P_B = Barometric Pressure in inches of mercury

T = Absolute Temperature (indicated temperature °F plus 460)

Flow in cu. ft. per min. = Duct area in square feet x air velocity in ft. per min.

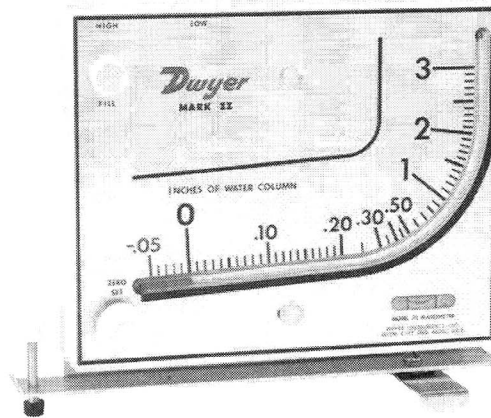
TEBAF COMPANY LIMITED

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10110, Thailand. Tel.02-661-2664-7 Fax.02-665-6155
Email : tebaf01@loxinfo.co.th



Mark II Series Molded Plastic Manometers

Specifications - Instructions and Operation



Mark II Model No. 25
inclined-vertical manometer,
(shown with optional A-612 portable stand)

Dwyer Mark II Manometers come in a variety of ranges. Make sure the oil being used is for the correct manometer.

Mark II #25, 27, MM-80 and M-700 Pa use red gage oil (specific gravity 0.826).

Mark II #26, 28 and MM180 use blue gage oil (specific gravity 1.9).

If additional oil is required, call or fax nearest Dwyer office listed at bottom of page.

INSTALLATION

Position manometer on a vertical surface. Drill two 1/8" or 9/64" holes on a vertical line 315/16" apart. Loosely mount manometer with self-tapping screws provided. Adjust gage until level bubble is centered in level vial, then secure the manometer tightly.

For portable use, order optional A-612 Portable Stand.

FILLING

Turn the zero set knob counterclockwise until it stops, then turn clockwise 3 full turns. This puts zero in approximately the middle of the travel adjustment in either direction. Remove the fill plug and fill with gage fluid until fluid reaches zero on scale. Minor adjustments can be made to adjust zero by adjusting zero knob. Replace fill plug. If gage is overfilled, remove excess by inserting pipe cleaner through the fill port to blot up excess oil.

MAINTENANCE

Check oil level regularly and adjust zero with zero adjust knob. Be sure tubing connections are disconnected and gage is open to atmosphere before adjusting zero.

Clean with mild soap and water. Avoid any cleaning fluids which may result in damaging the gage.

ACCESSORIES

Each Mark II manometer includes two tubing connectors for 1/8" pipe or sheet metal ducts, two mounting screws, 3/4 oz. bottle of indicating fluid, red and green pointer flags, 8' of double column tubing and instruc-

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10110, Thailand. Tel.02-661-2664-7 Fax.02-665-6155
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Quality design and construction 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.

Red tipped pointer of heat treated aluminum tubing is easy to see. It is rigidly mounted on the helix shaft.

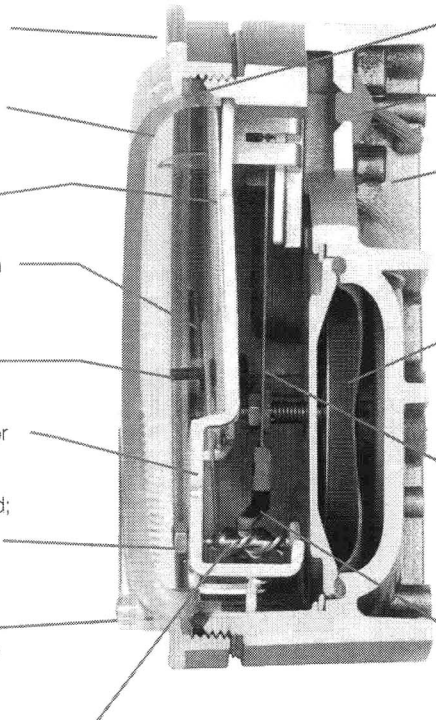
Pointer stops of molded rubber prevent pointer over-travel without damage.

"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 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.



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

Blowout plug of silicone rubber protects against overpressure on 15 psig rated models. Opens at approximately 25 psig.

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

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.

Samarium Cobalt magnet mounted at one end of range spring rotates helix without mechanical linkages.

SERIES 2000 MAGNEHELIC® — MODELS AND RANGES

The models below will fulfill most requirements. Page 11 also shows examples of special models built for OEM customers. For special scales furnished in ounces per square inch, inches of mercury, metric units, etc., contact the factory.

MODELS

Dual Scale English/Metric Models		
Model Number	Range, In. W.C.	Range, Pa or kPa
2000-0D	0-0.5	0-125 Pa
2001D	0-1.0	0-250 Pa
2002D	0-2.0	0-500 Pa
2003D	0-3.0	0-750 Pa
2004D	0-4.0	0-1.0 kPa
2006D	0-6.0	0-1.5 kPa
2008D	0-8.0	0-2.0 kPa
2010D	0-10	0-2.5 kPa

Model Number	Range Inches of Water	Model Number	Range Zero Center Inches of Water	Dual Scale Air Velocity Units		Model Number	Range, CM of Water	Model Number	Range, Pascals
				Model Number	Range in W.C. Velocity, F.P.M.				
2000-00† ••	0-.25	2300-0† •	.25-0-.25	2000-00AV† ••	0-.25/300-2000	2000-15CM	0-15	2000-60PA† ••	0-60
2000-0† •	0-.50	2301	.5-0-.5	2000-0AV† •	0-.50/500-2800	2000-20CM	0-20	2000-100PA† •	0-100
2001	0-1.0	2302	1-0-1	2001AV	0-1.0/500-4000	2000-25CM	0-25	2000-125PA† •	0-125
2002	0-2.0	2304	2-0-2	2002AV	0-2.0/1000-5600	2000-50CM	0-50	2000-250PA	0-250
2003	0-3.0	2310	5-0-5	2010AV	0-10/2000-12500	2000-80CM	0-80	2000-300PA	0-300
2004	0-4.0	2320	10-0-10	For use with pitot tube.		2000-100CM	0-100	2000-500PA	0-500
2005	0-5.0	2330	15-0-15	Model Number	Range MM of Water	2000-150CM	0-150	2000-750PA	0-750
2006	0-6.0			2000-6MM† ••	0-6	2000-200CM	0-200	Zero Center Ranges	
2008	0-8.0			2000-10MM† •	0-10	2000-250CM	0-250	2300-250PA	125-0-125
2010	0-10			2000-25MM† •	0-25	2000-300CM	0-300	2300-500PA	250-0-250
2015	0-15	2201	0-1	2000-50MM	0-50	Zero Center Ranges		Model Number	Range, Kilopascals
2020	0-20	2202	0-2	2000-80MM	0-80	2300-4CM	2-0-2	2000-1KPA	0-1
2025	0-25	2203	0-3	2000-100MM	0-100	2300-10CM	5-0-5	2000-1.5KPA	0-1.5
2030	0-30	2204	0-4	Zero Center Ranges		2300-30CM	15-0-15	2000-2KPA	0-2
2040	0-40	2205	0-5	2300-20MM†	10-0-10			2000-3KPA	0-3
2050	0-50	2210*	0-10					2000-4KPA	0-4
2060	0-60	2215*	0-15					2000-5KPA	0-5
2080	0-80	2220*	0-20					2000-8KPA	0-8
2100	0-100	2230**	0-30					2000-10KPA	0-10
2150	0-150							2000-15KPA	0-15
								2000-20KPA	0-20
								2000-25KPA	0-25
								2000-30KPA	0-30
								Zero Center Ranges	
								2300-1KPA	.5-0-.5
								2300-3KPA	1.5-0-1.5

Accessories

- A-299, Surface Mounting Bracket
- A-300, Flat Flush Mounting Bracket
- A-310A, 3-Way Vent Valve
- A-321, Safety Relief Valve
- A-432, Portable Kit
- A-605, Air Filter Kit
- A-610, Pipe Mount Kit

- 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

†These ranges calibrated for vertical scale position.

• Accuracy +/-3%. •• Accuracy +/-4%

No. 75 Auto-Vent®

1/2 inch female and 3/4 inch male connection, up to 150psi

Add to Shopping Cart

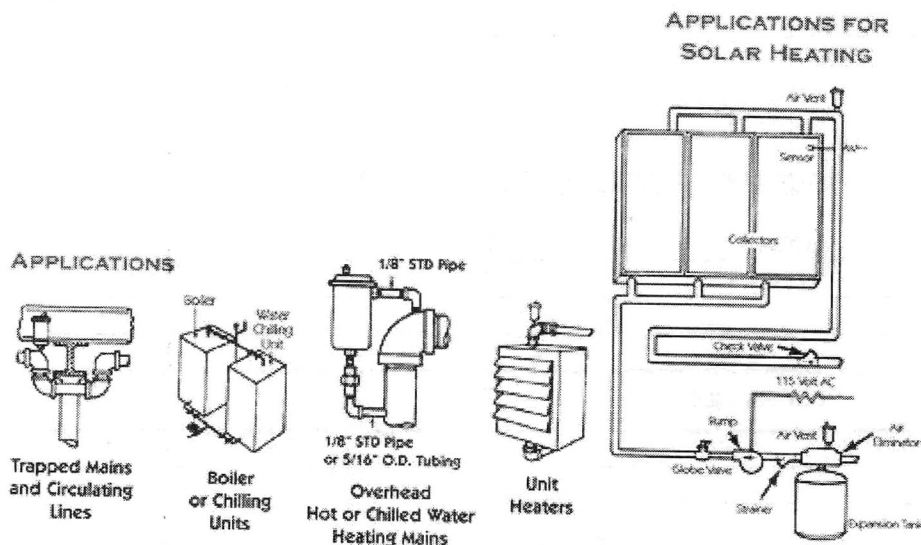
The No.7 Series Auto-Vents® Air eliminators for hot water heating and chilled water cooling systems.

For continuous venting of hot water heating systems and chilled water cooling systems. Install on mains, pipe lines, unit heaters, chillers, convectors, radiant panels and coils.

The No. 7 Series Auto-Vents are reliable, automatic air eliminating valves for concealed radiators, pipe lines, tanks and other devices where water or liquids are used for heating or cooling. They have proven to be the solution to problems that have confronted engineers and contractors in which air pockets or traps retard the free circulation of the liquids and reduce the efficiency of the system or appliance. The No.7 Series of Auto-Vent air eliminators are made of brass and equipped with a self-closing, float-operated valve. The valve is equipped with a Monel® metal spring and a Neoprene® valve seat which is unaffected by high temperatures, oil and anti-freeze. No air chamber is required. The vent is regularly fitted with a patented cap that may be used as a check in case of a leak caused by core sand or scale.



Combination connection
size: 4 3/8 inches x 2 1/4 inches
Bright brass finish.



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