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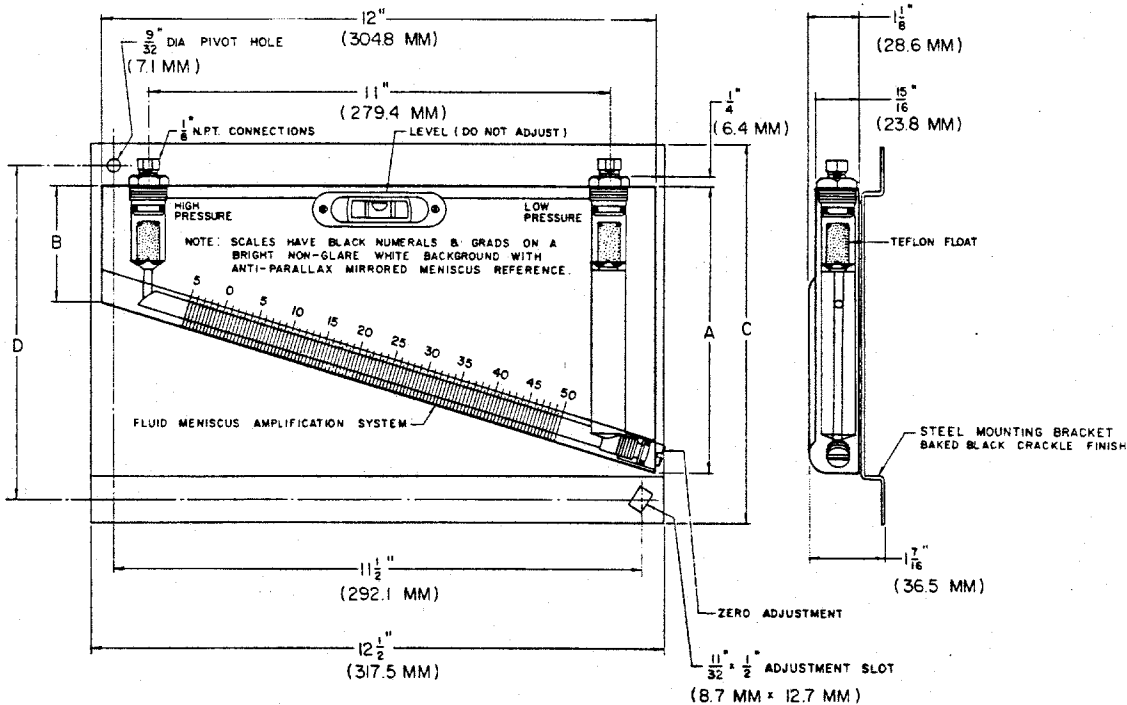
**INSTRUCTIONS FOR ACRYLIC INCLINED MANOMETERS**

(REFER TO THE SECOND PAGE FOR NOMENCLATURE CONFIGURATOR AND SPECIFICATIONS)

**1.1 MOUNTING**

The Inclined Acrylic Manometers are available in three mounting styles: Magnetic, Table Mount and Wall Mount (shown below). To use the magnetic mount simply remove the paper backing from the self-adhesive magnetic strip and mount to the back of the manometer scale. For the table mount and the wall mount, remove the scale screws and use these to attach the unit to the bracket. For all mounting styles, adjust the unit to the level position for proper operation.

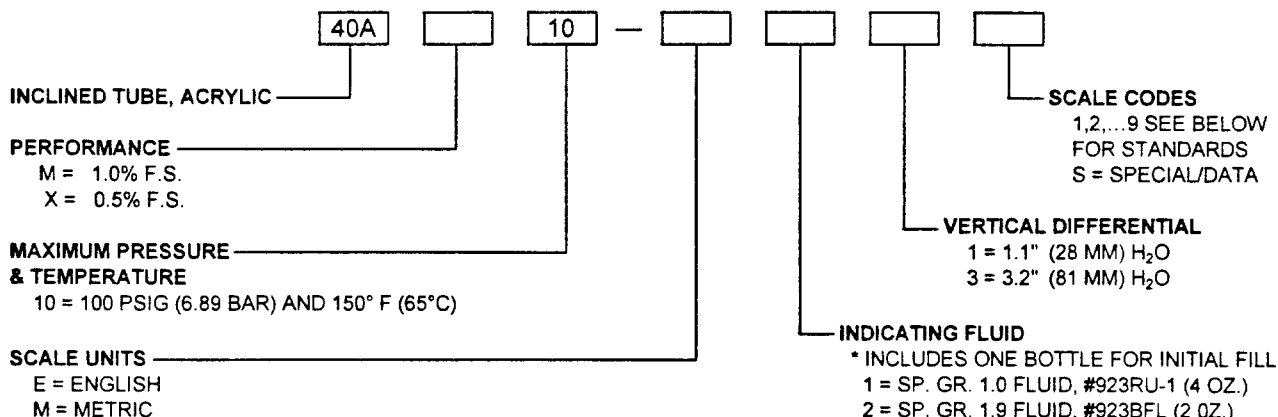
**DIMENSIONS**



MODEL NO.	VERTICAL DIFFERENTIAL*		MEASUREMENT RANGE USING 1.9 FLUID		A		B		C		D	
	INCHES	(MM)	INCHES	(MM)	INCHES	(MM)	INCHES	(MM)	INCHES	(MM)	INCHES	(MM)
40AM10	1.1	28	2.14	55	3 3/4	95.3	2 15/16	74.6	5 3/4	146.1	4 3/4	120.7
40AM10	3.2	81	6.25	155	6 3/16	157.1	2 1/2	63.5	8 3/16	208	7 3/16	182.5
40AX10	1.1	28	2.14	55	3 3/4	95.3	2 15/16	74.6	5 3/4	146.1	4 3/4	120.7
40AX10	3.2	81	6.25	155	6 3/16	157.1	2 1/2	63.5	8 3/16	208	7 3/16	182.5

\*Also is the measurement range when using 1.0 fluid.

**CONFIGURATOR**



**NOTE:** MEASUREMENT RANGE = VERTICAL DIFFERENTIAL x FLUID SPECIFIC GRAVITY

STANDARD SCALES			
MODEL SUFFIX	ACTUAL RANGE & UNITS	FLUID SP. GR.	VERTICAL DIFF.
- E111	- 0.1 to +1.0" H2O (Linear, grads @ .01")	1.0	1.1"
- E131	- 0.2 to +3.0" H2O (Linear, grads @ .02")	1.0	3.2"
- E211	- 0.14 to +2.0" H2O (Linear, grads @ .02")	1.9	1.1"
- E231	- 0.25 to +6.0" H2O (Linear, grads @ .05")	1.9	3.2"
- M111	- 3.0 to +25.0 MM H2O (Linear, grads @ .2 MM)	1.0	28 MM
- M131	- 5.0 to +75.0 MM H2O (Linear, grads @ .5 MM)	1.0	81 MM
- M211	- 5.0 to +50.0 MM H2O (Linear, grads @ .5 MM)	1.9	28 MM
- M231	- 5.0 to +150.0 MM H2O (Linear, grads @ 1.0 MM)	1.9	81 MM

**NOTE:** Above are mastered (traceable to NIST) scales for both the 40AM & 40AX models. Special scale units within the instrument measurement range are available.

**1.2 FLUID FILL**

Remove the plug, fitting and float from the high pressure side and remove the plug from the low pressure side. Pour manometer fluid into the high pressure side until the fluid is close to the scale zero. Use the zero adjustment plunger to bring the fluid level to the scale zero. Replace the float and the fitting on the high pressure side.

**1.3 PROCESS HOOK-UP**

Both the high and low pressure connections are 1/8" FNPT. Adapters and valves are available from Meriam Instrument (see sales literature or consult your local representative). All connections must be leak-free to insure proper operation.

#### 1.4 READING

It is necessary that the fluid meniscus always be observed in the same way. Readings should be taken from the lowest visible level of the meniscus as measured by a line parallel to the graduations of the scale and at a right angle to the tube bore. To aid in taking readings at a right angle, the scales come equipped with a reflective strip. When the fluid meniscus and its reflection, as seen on the reflective strip, are in alignment, parallax error is eliminated.

#### 1.5 MAINTENANCE

Maintenance consists of occasional cleaning of the tube and changing of the indicating fluid. The fluid should be changed if it becomes contaminated by the process. This may be indicated by a loss of fluid clarity, presence of sediment in the fluid or a change of color. The indicating tube may be cleaned by removing the zero adjustment and using Meriam 915D Manometer Cleaning Fluid with a bore brush.

#### 1.6 SPECIAL INSTRUCTIONS – Replacement of Meriam “200 Blue Fluid” with Meriam “190 Blue Fluid”

Meriam “200 Blue Fluid” is no longer available. The replacement fill fluid for a 40AM or 40AX Inclined Manometer in which “200 Blue Fluid” had been used will now be Meriam “190 Blue Fluid”. The type of fill fluid, which the instrument is currently calibrated for, will be listed on the scale. The procedure for replacing “200 Blue Fluid” in a 40AM or 40AX Inclined Manometer with the current “190 Blue Fluid” is as follows:

1. Drain and clean the instrument tube according to directions contained in Section 1.5 MAINTENANCE of this document.
2. Replace the old scale with the new scale, which is provided by Meriam Instrument with your “190 Blue Fluid”. Detach the old scale by removing the #8 - 32 x ½ Pan Head Screws that hold the scale in place. Install the new scale. Return the old scale to Meriam Instrument.
3. Refill and zero the instrument with Meriam “190 Blue Fluid” according to the directions contained in section 1.2 FLUID FILL

\* Please contact Meriam Instrument or your local Meriam representative if you need further assistance.