



# Models 34FB2TM (English Units) and 34MB2TM (Metric Units) Meriam Micromanometers

The Meriam Micromanometer is a sensitive manometer indicating pressures, vacuums, or differential pressures to 0.001" water pressure.

The unit is an accurate primary standard for checking and calibrating low pressure or vacuum gauges, draft gauges, inclined manometers and low pressure diaphragm or bellows controls. Although a calibrating standard, it may be used as a conventional manometer.

The Meriam Micromanometer is simple to operate, surpassing other precision pressure instruments. Readings on the micromanometer can be achieved quickly and accurately.

The true measurement of a given pressure, vacuum or differential pressure is the distance traveled by the instrument well from the initial calibrating position. All readings are taken with the meniscus positioned at the reference calibrating point. Because of this, the variation in the indicating tube inside diameter and indicating fluid level change in the well do not influence the accuracy of the instrument.

## Micromanometer Construction

The Meriam Micromanometer is a special well type manometer design incorporating a well movable in the vertical plane by means of a precision lead screw. The vertical distance traveled by the instrument well is measured by means of an indicator pointer attached to the well, moving along a uniformly graduated scale and a micrometer wheel attached directly to the lead screw.

The lead screw is rotated by means of an operating wheel at the base of the instrument through a gear mechanism. The gear mechanism provides only the necessary torque to rotate the lead screw, preventing gear wear or play from affecting the accuracy of the measurement.

The glass indicating tube is rigidly supported within the instrument frame. The inclined tube portion of the indicating tube is at a minimum slope angle to give a high degree of sensitivity for accurate reading of the indicating fluid meniscus. An etched hair line on the inclined tube provides a fixed reference point for all measurements. The indicating tube is connected to the instrument well by means of a flexible tube.

All metal parts of the instrument in contact with the indicating fluid are fabricated of stainless steel. The exterior surfaces are finished in a fine, black, baked crackle. A clear plastic cover in a detachable cover frame gives full vision of all scales and protects the unit from dust and moisture.

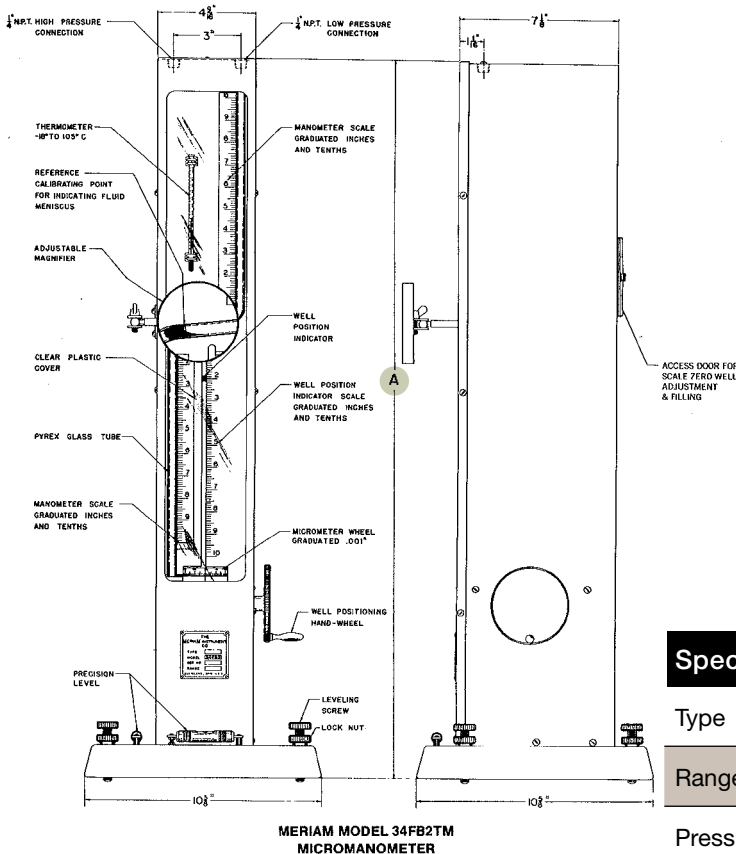
For the initial adjustment of the indicating fluid meniscus in the sloping portion of the indicating tube, the instrument well is adjustable vertically, independent of the operating lead screw. A locking screw is provided on the well adjustment mechanism to ensure the well setting after adjustment.

Standard ¼" N.P.T. pressure connections are provided at the top of the unit. Independent connections permit micromanometer operation under pressure, vacuum or differential pressure conditions.

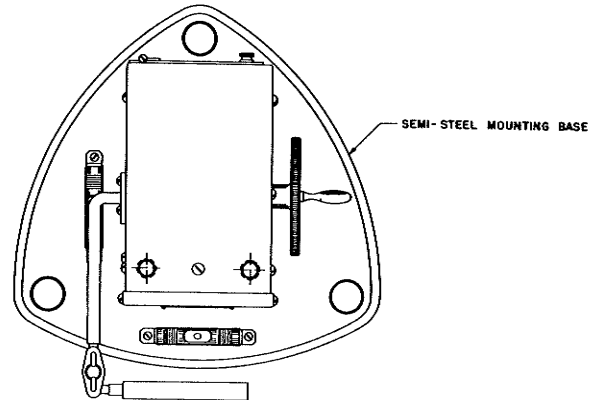
The instrument unit is assembled to a heavy cast iron base. Three leveling screws are provided in the base for leveling the unit, the level position being indicated by two individual levels.

# 34FB2™ & 34MB2™

## Meriam Micromanometers



MERIAM MODEL 34FB2™  
MICROMANOMETER



Range Inches of Water	A	Approx. Shipping Weight
10	36"	145 lbs.
20	60"	200 lbs.

Range mm	A	Approx. Shipping Weight
254	914 mm	65.8 kg
508	1524 mm	90.7 kg

### Specifications

Type	Micromanometer		
Range	10", 20"		
Pressure Rating	20 PSIG		
Mounting	Table stand with two levels and leveling screws		
Indicating Tube & Packing	Borosilicate glass and neoprene		
Body Construction	Aluminum Frame		
Wetted Parts Material	Stainless Steel		
Scale Finish	White non-glare, black graduations		
Finish	Baked Black Crackle		
Scale Graduations	<table border="0"> <tr> <td>Model 34FB2: English Units Scale: Inches &amp; Tenths Micrometer Wheel: .001"</td> <td>Model 34MB2: Metric Units Scale: Millimeters Micrometer Wheel: 0.01 mm</td> </tr> </table>	Model 34FB2: English Units Scale: Inches & Tenths Micrometer Wheel: .001"	Model 34MB2: Metric Units Scale: Millimeters Micrometer Wheel: 0.01 mm
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Special Features	Micrometer wheel for readings to .001" or 0.1 mm Magnifier for easy reading Thermometer mounted in case		
Weight	10" range – 145 lbs. 20" range – 200 lbs.		
Indicating fluid	Meriam 1000 Green Concentrate with water; 4 ounces required to fill (initial fill supplied with instrument)		

### Ordering Information

To order a Meriam micromanometer custom-made to your specifications, please contact your Meriam sales representative with the following information:

- Range
- Indicate English or Metric Units

### Accessories

Model Z971 A3 Pressure-Vacuum Variator