

# Manometers



Meriam Manometers have many advantages in this age of technology because of their inherent accuracy and simplicity. Manometers are unique in being both pressure measurement instruments and standards for calibration of other instruments. Once considered solely a laboratory instrument, the manometer is today commonly used in production applications to measure pressures ranging from as high as 100 inches to the lowest vacuums of space.

## *U-Tube Manometer*

The U-tube manometer is the basic and most widely used style of manometer. The Meriam U-tube manometer is a versatile, economical instrument for the measurement of pressures, vacuums or differential pressures.

Pressure measurements are accomplished by balancing a vertical head of indicating fluid with the pressure to be measured. There are no cams, gears, or levers to operate in the manometer. This allows the U-tube manometer to be recognized by NIST as a primary standard due to its inherent accuracy and simplicity of operation.

Meriam U-tube manometers are constructed of a ridged cast aluminum frame, aluminum indicating scale and hand bent glass U-tube. Mounting holes are provided in the frame for mounting to a wall, column or other suitable structure.

## *Well Type Manometer*

Well manometers are a direct reading device designed for process monitoring, general purpose production testing or laboratory measurement. Designed for a maximum line pressure of 250 PSI (500 PSI optional) these instruments may also be used for tank level, flow measurement and leak detection. Well manometers are constructed of aluminum channel, stainless steel end blocks and stainless steel manometer well. The 7/16" diameter glass tubing is yoke packed with viton gaskets at each end block and is supported at spaced intervals to prevent distortion.

In most cases, the uncertainty of a manometer reading is + 1/2 of the smallest scale graduation. This is due to the human eye's ability to interpolate between graduations.

## *Inclined Manometer*

Inclined manometers provide greater readability by stretching a vertical differential along an inclined indicating column, giving more graduations per unit of vertical height. This effectively increases the instrument's sensitivity and accuracy. Scales are typically graduated to the hundredth of an inch.

The Model 40HEX Inclined manometer is individually calibrated and the angle of inclination is set relative to the instrument level mounted above the channel. The unit is also capable of operating with 350-PSI line pressure. The construction of the 40HEX35 is similar to the well type manometer described above.

Additional inclined manometers are available depending on your requirements. Please review the manometer chart on the facing page or contact the factory for assistance.



# Meriam Manometers

## Quick Selection Chart

Manometer: “U” Tubes & Well Types & Inclines

MODEL	RANGES (In Inches)	WETTED PARTS	PRESSURE RATING	MOUNTING STYLES
“U” Tube <b>10AA25</b>	6, 10, 15, 20, 30, 50	Cast Iron 316 SS PVC	250 PSIG	Wall Table
Hi Pressure “U” Tube <b>20DAX40</b>	10, 20, 30, 40, 60, 80, 100	303 SS	400PSIG	Wall Table
General Purpose 30EBX25 30EBX50	6, 12, 20, 30, 35, 40, 50, 60, 80, 100	303 SS	250 PSIG 500 PSIG	Wall, Table Flush Front Pipe
Precision Vernier 30EFX25	20, 30, 40, 50, 60	303 SS	250 PSIG	Wall, Table Flush Front Pipe
Multiple Tube 33KBX35	12, 20, 30, 40, 50, 60, 80, 100	303 SS	350 PSIG	Wall, Table Flush Front
Micro Precision 34FB2TM 34MB2TM	10, 20	Stainless Steel	20 PSIG	Table
Acrylic Inclined 40AM10 40AX10	1, 2, 3, 6” 25, 50, 75, 150mm	Acrylic	100 PSIG	Wall Table
General Purpose Inclined 40HEX35	2, 4, 6, 8, 10, 12, 14, 16, 18, 20	Stainless Steel	350 PSIG	Wall
Draft Gauge Inclined 40GD10	½, 1, 1 ½, 2, 3, 4	Aluminum	100 PSIG	Wall

CONSULT FACTORY FOR OTHER AVAILABLE MODELS AND FLUIDS