

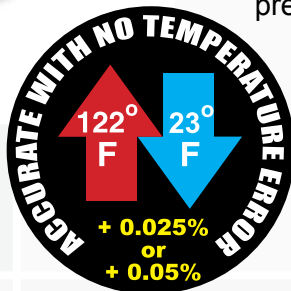


# M2 SERIES SMART MANOMETERS

Meriam's M2 Series Smart Manometers bring high precision and value to handheld, digital manometer users. The M2 features NIST traceable accuracy of  $\pm 0.025\%$  of F.S., independent of temperature effect, at the lowest prices available. Pressure ranges from 28" H<sub>2</sub>O F.S. to 2000 PSIG F.S. are available.

M2 pressure sensors are available to measure gauge, differential, absolute or vacuum pressure. The display can read out in any of eleven pressure units or can be linearly scaled for special user units. Differential models offer a square root flow function to display flow rate in user defined units.

An adjustable damping feature minimizes the effects of pulsating pressures. A Min/Max function captures the extremes of pulsating or varying pressure signals and a Hold function can freeze the display at any point of interest. Auto Record documents up to 240 readings for future recall.



BEST ACCURACY OVER THE  
**WIDEST**  
OPERATING TEMP. RANGE

## Accuracy

Accuracy:  $\pm 0.025\%$  FS or optional  $\pm 0.05\%$  F.S. No temperature effect from 23° to 122° F (-5° to +50° C).

## Certifications

Ex ia IIC T4  
Class I, Div.1 Groups A,B,C,D, T4

## Engineering Units

Inches of H<sub>2</sub>O (select 4° C, 20° C, or 60° F), PSI, mm of Hg, inches of Hg, mBars, Bars, kPa, kg/cm<sup>2</sup>, cm of H<sub>2</sub>O and user selectable scaling.

## Media Compatibility

DN: Non-isolated differential sensor for clean, dry, non-corrosive gases.  
GI & AI: Isolated Gauge or Absolute sensor for fluids compatible with 316L SS. See Meriam's M200-DI for wet/wet DP requirements.

## Pressure Limits

Twice range on Gauge and Absolute (GI and AI) units. Twice range on Differential (DN) units when pressurized on high side only and 150 PSI (10.5 Kg/cm<sup>2</sup>) static when applied to both sides of the sensor simultaneously.

## Leak Test

Allows users to view Min/Max pressure values and calculates leak rate per minute in pressure units. The feature is very handy when troubleshooting or pressure testing pneumatic systems.

## Auto Record

Document up to 240 readings (automatically or manually) to reduce paperwork and field time. Saved readings can be recalled at any time.

## Damping Rates

Exponential damping with user selectable time constant from 0.1 to 25 seconds.

## Min/Max Capture

Capture speed is equal to the selected damping rate.

## Field Re-cal

The M2 series can be recalibrated in the field for zero, span, and linearity. The user has the option to select a 1 point or 5 point calibration procedure. Enables users with accurate primary standards to calibrate their devices locally if desired.

## Auto Shut-Off

User selectable shut-off. Programmable at 10, 20, 30, 45, 60 minutes.

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Rely On The Trusted Leader In Measurement And Calibration

# M2 Series Smart Manometer

## Technical Specifications

### Base Unit

14 ounce (6.5" X 3.6" X 2.25") polycarbonate, permanently dissipative, ESD protection.

### Keypad

Sealed membrane type with 5 dome contact style buttons.

### Display

5 significant digit LCD (0.25" high) 2 line x 16 alphanumeric characters with contrast adjustment. Two stage backlight with visual overrange indication.

### Power

4 each AA batteries providing over 100 hours of continuous use.

### Wetted Parts

DN: 316L SS, brass, viton

GI: 316L SS

AI: 316L SS

### Connections

1/8" female NPT, 316L SS

### NIST Traceable Accuracy

Pressure:  $\pm 0.025\%$  of F.S. or  $\pm 0.05\%$  F.S. typical. DN0028  $\pm 0.1\%$  of F.S. Accuracy statement includes all affects of temperature over specified operating range.

### Temperature Specifications

Storage:  $-40^{\circ}\text{F}$  to  $140^{\circ}\text{F}$  ( $-40^{\circ}\text{C}$  to  $60^{\circ}\text{C}$ )

Operating:  $23^{\circ}\text{F}$  to  $122^{\circ}\text{F}$  ( $-5^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ ) I.S Models

$-4^{\circ}\text{F}$  to  $122^{\circ}\text{F}$  ( $-20^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ ) G.P Modles

### Pressure Ranges

DN0028	0-28" H <sub>2</sub> O	Differential	(0.1% F.S.)
DN0200	0-200" H <sub>2</sub> O	Differential	
DN2000	0-2000" H <sub>2</sub> O	Differential	
GI0015	0-15 PSI	Gauge	
GI0030	0-30 PSI	Gauge	
GI0200	0-200 PSI	Gauge	
GI2000	0-2000 PSI	Gauge	
AI0900	0-900 mm Hg	Absolute	
AI2000	0-2000 mm Hg	Absolute	

### Certifications

CE 0539 Ex II 1 G

Ex ia IIC T4

DEMKO 06 ATEX 0615699 IP 40

Class I, Div.1 Groups A,B,C,D, T4

Intrinsically Safe, Exia

Class I, Zone 0, AEx ia IIC T4

Class I, Zone 0, Ex ia IIC T4

$-5^{\circ}\text{C} < \text{Ta} < +50^{\circ}\text{C}$



## Ordering Information

### Model No & Description

M200 - (specify pressure range) - Smart Manometer

M201 - (specify pressure range) - Rotary Gas Meter Tester

(only available with DN0028 or DN0200 sensor range and includes integral push to read valve assembly)

### Optional Accessories

Z9P000107 Hard Carrying Case

Z9P000108 Hard Carrying Case with Vacuum Pump

Z9P000109 Hard Carrying Case with Pressure Pump

ZA34386 Connector Kit, brass

### All Models Include

- Protective Red Boot
- 4 AA Alkaline batteries
- Hard copy user's manual



### M200-DI FOR WET/WET DP APPLICATIONS

Meriam's M200-DI handheld Smart Manometer for liquids brings high accuracy to wet/wet differential pressure applications. Potentially corrosive or wet gasses are also handled by the M200-DI. NIST traceable accuracy of  $\pm 0.05\%$  FS ( $\pm 0.025\%$  FS optional) independent of temperature effect from  $23^{\circ}$  to  $122^{\circ}\text{F}$  for Intrinsically Safe models. The accuracy statement is good from  $-4^{\circ}$  to  $122^{\circ}\text{F}$  for general purpose models.



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