

M202



Precision Absolute Manometer

Meriam's model M202 Precision Absolute Manometer brings calibration bench accuracy to a portable, handheld unit. The pressure sensor is all 316SS allowing it to be used with liquids, gasses and corrosives compatible with 316SS. This combination of accuracy and fluid compatibility makes the M202 ideal for environmental, test or real-time process measurements of pressure relative to absolute zero.

The M202 includes features for minimum and maximum (Min/Max) value capture, tare readings and user selectable engineering units. A selectable altitude function allows users to enter site altitude above sea level in order to display local barometric pressure or barometric pressure corrected to sea level. User referenced altitude (referenced to map or trig markers) or altitude based on US Standard Atmosphere of 1962 can be selected for display. Using the altitude function with the Min/Max and Tare features makes the M202 very useful as a surveyor's tool to accurately measure changes in altitude.



Ordering Information & Model numbers:

M202-AI0017 0 - 17.403 PSIA (0 - 900 mm Hg Abs.) **M202-AI0038** 0 - 38.674 PSIA (0 - 2,000 mm Hg Abs.)

Approvals – CE compliant
Optional Intrinsically safe per ATEX and _CUL_{US}

Display -5 significant digit LCD (0.25" high) 2 line x 16 alphanumeric characters

NIST Traceability — NIST certificate supplied for all models

Power — 4 AA alkaline batteries with user enabled automatic shut-off

Temperature Specifications –

Storage: -40° F to 140° F (-40° C to 60° C) Operating: 23° F to 122° F (-5° C to 50° C)

Process Connections

1/8" female NPT, 316SS

Enclosure — 14 ounce (6.5" X 3.6" X 2.25") ABS plastic case

Media Compatibility - Isolated AI sensor for fluids compatible with 316SS

Pressure Limits – 77 PSIA (4,000 mm Hg Abs) for both AI0017 and AI0038

Tare — Nulls applied pressure to allow measurement of vacuum, gauge pressure or change in pressure or altitude from a reference point

Min/Max Capture – capture speed is equal to the selected damping rate

Damping Rates – user selectable from 0.1 to 25 seconds

Backlight – Green; changes to Red for over pressure

Engineering Unit Selection – mm Hg, PSI, in. Hg, mbar, bar, kPa, Torr, feet, meters

Altitude – displayed in feet or meters. Can be set by user based on map or trig marker information or standard altitude uses U.S. Standard Atmosphere of 1962 data

Contrast Adjustment – adjusts display for best viewing

Accuracy - M202-A10017

(FS = 17.403 PSIA or 900 mm Hg Abs.) $\pm 0.02\%$ F.S.

M202-AI0038

(FS = 38.674 PSIA or 2,000 mm Hg Abs.) $\pm 0.015\%$ F.S. from 0 - 19.337 PSIA (0-1,000 mm HgA) $\pm 0.025\%$ F.S. from 19.338 - 38.674 PSIA (0-1,000 - 2,000 mm Hg Abs.)

Field recalibration – supported through firmware feature



