



# M201 ROTARY GAS METER TESTER

The M201 Rotary Gas Meter Tester is specially programmed to measure the differential pressure, and display the true average of those measurements. The amount of time over which the averaging occurs is controlled by the user. This feature addresses the flow surge and pulsation concerns.

The M201 Rotary Gas Meter Tester has an accuracy of 0.1% FS (28" H<sub>2</sub>O range) or 0.05% FS (200" H<sub>2</sub>O range). This provides better accuracy in the low DP ranges as compared to mechanical gauges or manometers. The M201 Rotary Gas Meter Tester is well suited for use in the field, its accuracy is not affected by temperature over its calibrated range of 23° F to 122° F. This temperature effect on mechanical gauges, liquid manometers and some digital indicators can result in serious accuracy errors.

The digital display eliminates parallax errors, and depending on the range of the gauge, it can have a resolution of 0.01 or 0.001" H<sub>o</sub>O.

> A min/max feature also allows the user to see the minimum and maximum pressures recorded during the test. The unit is portable, and with the integral push to read manifold, the M201 Rotary Gas Meter Tester can safely be used with lines having a static pressure of up to 150 PSIG.







#### **Accuracy**

DN0028: + 0.1% FS 0-28" DN0200: + 0.05% FS 0-200" No temperature effect from 23° to 122° F (-5° to +50° C).

#### **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.

### Field Re-cal

The M201 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.

#### **Pressure Limits**

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.

#### Min/Max Capture

Capture speed is 10X per second.

#### Operation

A push-to-read valve keeps HI and LO sides equalized during connection across meter. Turn M201 "ON" to get message "Press Hold to Acquire Data." Press "Hold" key to start test. User determines test time, ending test by pressing the "Hold" key again. Display will show the averaged differential pressure across the meter from test start to test stop. Press the "Hold" key again to start a new test.

#### **Auto Shut-Off**

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

Meriam Process Technologies 10920 Madison Avenue, Cleveland, OH 44102

# Rely On The Trusted Leader In Measurement And Calibration

# M201Rotary Gas Meter Tester

# **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. Backlight included.

#### Power

4 each AA batteries providing over 100 hours of continuous

# **Wetted Parts**

DN: 316L SS, brass, viton

### Connections

1/8" female NPT, 316L SS

## **NIST Traceable Accuracy**

DN0028: + 0.1% FS 0-28"

DN0200:  $\pm$  0.05% FS 0-200" of F.S. See "Pressure

Ranges" table for full scale value.)

## Temperature Specifications

Storage: -40° F to 140° F (-40° C to 60° C)

Operating: 23° F to 122° F (-5° C to 50° C) I.S. Models

-4° F to 122° F (-20° C to 50° C) G.P. Models

# Pressure Ranges

DN0028 0-28"  $H_2O$  Differential (0.1% F.S.) DN0200 0-200"  $H_2O$  Differential (0.05% F.S.)

# Certifications



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 C < Ta < +50 C





# Also Available

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 ± 0.05% FS (± 0.025% FS optional) independent of temperature effect from 23° to 122 °F for Intrinsically Safe models. The accuracy statement is good from -4 ° to 122 °F for general purpose models.

# **Ordering Information**

# Model No & Description

M201 - (specify pressure range) - Rotary Gas Meter Tester (only available with DN0028 or DN0200 sensor range and includes integral push to read valve assembly)

#### All Models Include

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

# **Order Options**

Intrinsic Safety Certification

Z9P000107 Hard Carrying Case

Z9P000108 Hard Carrying Case with Vacuum Pump
Z9P000109 Hard Carrying Case with Pressure Pump

A34386 Connector Kit

A900016-90727 Pete's Plug Adapter Kit Y8" Needle A900016-90733 Pete's Plug Adapter Kit Y16" Needle



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