Push-to-Read EqualizingManifold



# M201 Enhanced ROTARYGASMETERTESTER

Meriam's M201 has new features to make drop testing Rotary (Natural) Gas Meters even easier! New hardware options protect the M201 from one sided overpressure. Options include a ¼ turn valve manifold and an integral push-to-read cartridge valve in addition to the traditional push-to-read valve manifold. More importantly, new operating features provide users with a live pressure display and more automation to make field use easier than ever before.

The new Measure Mode lets the M201 be used as a conventional differential pressure measurement device. Users will appreciate the live pressure display as they check the handheld's zero or observe DP across rotary gas meters. And when a drop test is made, the M201 uses an internal stop watch to measure the test length. The user only has to start and stop the test; the M201 reports both the test time and the average differential pressure measured during the test. Toggle the Min/Max key to see the minimum and maximum DP measured during the test.



With hundreds of original M201s at work in the field, Meriam recognizes that some customers will want to continue using the legacy software to stay consistent within their company. The new M201 includes a Mode Selection menu option for Legacy or Enhanced modes – the users chooses which mode is best for them!

#### Accuracy

 $\begin{array}{l} \mathsf{DN0028:} \pm 0.05\% \ \mathsf{FS} \ 0.28" \ \mathsf{H_2O} \\ \mathsf{DN0200:} \pm 0.05\% \ \mathsf{FS} \ 0.200" \ \mathsf{H_2O} \\ \mathsf{No \ temperature \ effect \ over \ the \ operating \\ temperature \ range. \end{array}$ 

Rotary Gas Meter

Tester

#### **Engineering Units**

Inches of  $H_2O$  (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  $H_2O$  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. Users with accurate primary standards can 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 or 1/4 valve assembly 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 test time and averaged differential pressure across the meter during the test. 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.

# Rely On The Trusted Leader In Measurement And Calibration

# M201Rotary Gas Meter Tester



Measure Mode has Live DP Display 0.41 inW60F

Test Mode Includes Live DP Readings



Test Results Display – Test Time over Average DP



Test Results Min/Max – Min/Max over Average DP

# **Technical Specifications**

#### Base Unit

14 ounce (6.9" X 3.8" X 2.3") 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 use.

## Wetted Parts

DN: 316L SS, brass, viton

Connections 1/8" female NPT, 316L SS

NIST Traceable Accuracy DN0028: ± 0.05% FS 0-28" H<sub>2</sub>O DN0200: ± 0.05% FS 0-200" H<sub>2</sub>O.

# **Ordering Information**

## Model No & Description

ZM201 - (specify pressure range) - Rotary Gas Meter Tester (available with DN0028 or DN0200 sensor range)

## All Models Include

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

### **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 Sensor Ranges

DN00280-28.000" H2ODifferentialDN02000-200.00" H2ODifferential

# **Order Options**

order option	0
Intrinsic Safety Certification (ATEX and <sub>c</sub> UL <sub>us</sub> )	
Z9P000107	Hard Carrying Case
ZA36853	Push-to-Read Valve Manifold
Z9A000001	Integral Push-to-Read Valve
Z9A156	1/4 Turn Valve Manifold
A900016-90727	Pete's Plug Adapter Kit Y8" Needle
A900016-90733	Pete's Plug Adapter Kit Y16" Needle
Intrinsic Safety Certification (ATEX and <sub>c</sub> UL <sub>us</sub> )	
Z9P000107	Hard Carrying Case
ZA36853	Push-to-Read Valve Manifold

ZA36853Push-to-Read Valve ManifoldZ9A000001Integral Push-to-Read ValveZ9A1561/4 Turn Valve ManifoldA900016-90727Pete's Plug Adapter Kit Y8" NeedleA900016-90733Pete's Plug Adapter Kit Y16" Needle

# Certificattions



Optional ATEX I.S. 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





Meriam Process Technologies 10920 Madison Avenue, Cleveland, OH 44102

WWW.Meriam.com Main Line: 216.281.1100 Fax: 216.281.0228 Email: sales@meriam.com