

# NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance for Weighing and Measuring Devices

For:

Meter Indicating Volume

Water Meter

Positive Displacement Domestic Style

Model: PD-Mag

Sizes: Max. Flow Rates:

5/8" x 3/4" 20 gpm 3/4" 30 gpm 1" 50 gpm **Submitted By:** 

**NMT** 

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# **Standard Features and Options**

# **Standard Features:**

- Sealed Six Wheel Odometer Type Register
- Unit of Measure: Gallons
- Maximum Operating Pressure: 150 psi
- Lead Free Brass Main Case and Polymer Register
- Magnetic Drive Register
- External Male Threaded Spuds 7.5" Length

### **Options:**

• Pulse Output Wires (Functions not Evaluated)

**Note:** Approved for use only when installed according to the manufacturer's instructions in a "horizontal" position with the register facing up.

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of "NIST Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages. \*Editorial changes, not affecting the type or metrological content, corrected this certificate.

Ronald Hayes

Chairman, NCWM, Inc.

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John Gaccione Committee Chair, National Type Evaluation Program Committee

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### **NMT**

# Meter Indicating Volume / PD-Mag

**Application:** Certified for use as a domestic water meter in legal sub-metering installations.

<u>Identification</u>: The NMT logo (d/b/a Norgas Metering Technologies, Inc.,), gallons unit of measure, maximum flow rates in gpm, serial number (S/N), and meter size are printed on the register face. The National Type Evaluation Program (NTEP) Certificate of Conformance (CC) number is permanently marked on the register face of the meter, but not displayed in the picture on the last page. The model PD-Mag is permanently marked on the outlet side of the case body. The flow direction indications are permanently marked into the body of the meter.

<u>Sealing</u>: The meter is sealed with a wire security seal threaded through a hole in the register ring and through two bolts securing the bottom freeze plate of the meter.

**Operation:** This is a positive displacement (PD) type water meter where in-flowing water displaces a piston of known volume and in turn rotates a magnetically coupled gear within the register to display the appropriate water usage. The meter's register represents total flow.

Test Conditions: Three PD-Mag meters were submitted for evaluation. The meters were mounted in line on a volumetric water meter test bench in the laboratory using city water for low flows and a pump for the intermediate and maximum flows. The meters were subjected to three tests each at the maximum, intermediate, and minimum flow rates as per NIST Handbook 44 requirements for the 3/4" meter size. After successful initial testing, throughput in excess of 205 000 gallons of water flowed through each of the meters between tests. All tests were then repeated. The emphasis of the evaluation was on the device design, marking requirements, accuracy, and repeatability of the meter.

Evaluated By: J. Roach (CA)

Type Evaluation Criteria Used: NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, 2015 Edition. NCWM Publication 14 Measuring Devices, 2015 Edition.

**Conclusion:** The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

**Information Reviewed By:** J. Truex (NCWM)

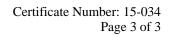
### **Examples of Device:**





Model and Serial Number Markings

Register Face





NMT Meter Indicating Volume / PD-Mag

