

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

**Standard Features and Options** 

For:

Hydrocarbon Gas Vapor Meter Positive Displacement Diaphragm Meters Model: NG4 Capacity: 211 cubic feet per hour (CFH) @ 7.0-inch water column Maximum Operating Pressure: 7.25 psig

Submitted By: Norgas Metering Technologies, Inc. 473 Commercial Drive Fairfield, OH 45014 Tel: 513-942-3600 ext. #221 Fax: 513-942-0096 Contact: Michael Dick Email: miked@norgas.com

Web site: www.norgas.com

- Aluminum Body
- Corrosion Resistant Internal Components and External Epoxy Coating
- Buna-N Diaphragm material
- Non-temperature Compensating
- Cubic Feet Registration
- 8-Digit Analog Register
- Top Arrow Indicating Flow Direction (Left to Right)

Temperature Range: -4 °F to +122 °F (-20 °C to 50 °C)

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.

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**Ronald Hayes** Chairman, NCWM, Inc.

John Gaccione Committee Chair, National Type Evaluation Program Committee Issued: February 19, 2015

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## **Norgas Metering Technologies, Inc.** Hydrocarbon Gas Vapor Meter / NG4

Application: Approved for commercial measurement of hydrocarbon gases in a legal sub-metering installation.

**Identification:** The NG4 will have an identification plate glued to the front of the meter. It will have the manufacturer's name, base capacity, the NTEP CC number, and the manufacturing serial number. Other information is also on the register face.

<u>Sealing</u>: Two lead/plastic security plugs are used to seal the index screws. A wire security seal through the index and pulse output screw is used to seal the index and pulse outputs from being able to be removed. Ten security screws are used to secure the top and bottom meter casing along with one front and one back lead wire seal.

**Inspection and Test Procedure Note:** It is suggested to do leak test on the meter for safety purposes prior to accuracy testing by pressurizing the meter with 5 psi using a soap solution bubble test such as a 50/50, dawn liquid soap/water mixture. The register does not have to be removed as would normally need to be done for a submersion leak test.

<u>Test Conditions</u>: This Certificate supersedes Certificate of Conformance number 12-087 and is issued without additional testing to clarify test procedures when a leak detection test is performed. Previous test conditions are listed below for reference.

<u>Certificate of Conformance Number 12-087</u>: Two NG4 non- temperature compensating meters were submitted for evaluation. Accuracy tests were performed at various flow rates using a five cubic foot bell prover. Also a low flame test was performed. The accuracy tests were repeated after over 170 000 cubic feet of air was passed through the devices.

Evaluated By: J. Roach (CA)

**Type Evaluation Criteria Used:** *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, 2012 Edition. NCWM Publication 14 Measuring Devices, 2012 Edition.* 

<u>Conclusion</u>: The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

Information Reviewed By: J. Truex (NCWM)12-087, 12-087A1

## **Example of Device:**

