



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance
for Weighing and Measuring Devices

For:

Register
Stationary Wholesale Liquid Register/Controller
Digital Electronic
Models: W40161 and W40201
Marketing Name: DL8000
Capacity: 99 999 999 units
Indicated Maximum: 8 whole units digits

Submitted By:

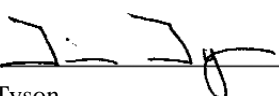
Emerson Process Management
301 South 1st Avenue
Marshalltown, IA 50158
Tel: 641-754-3425
Fax: 641-754-3630
Contact: Scott Szurek
Email: Scott.Szurek@emerson.com
Web site: www2.emersonprocess.com

Standard Features and Options


Standard Features:

- Category 2 Physical Seal Method of Sealing (see Sealing on Page 2)
- One Ethernet Port and up to Five RS232/RS422 Communication Ports
- May be Configured for Straight Product Delivery, Sequential Blending Up to Four Products, Ratio Blending with Up to Four Products or Side Stream Blending
- Electronic Temperature Compensation
- Single or Multi-point Linearity Calibration Factor Capability on Up to Four Products
- Programmable Low Flow and Two Step Decreasing Flow at End of Delivery
- Display for Percent of Load Delivered
- Metered Control for Up to Six Additives
- Dynamic Display for Flow Totals
- Volume Measurements, Units of Measure can be Selected During Configuration
- The Indicator is a Liquid Crystal Display (LCD)
- Capability to Interface with Serial Printer or Ethernet Printer to Generate Configuration and Transaction Reports

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.



Tim Tyson
Chairman, NCWM, Inc.



Randy Jennings
Chairman, National Type Evaluation Program Committee
Issued: December 22, 2010

1135 M Street, Suite 110 / Lincoln, Nebraska 68508

The National Conference on Weights and Measures (NCWM) does not approve, recommend or endorse any proprietary product or material, either as a single item or as a class or group. Results shall not be used in advertising or sales promotion to indicate explicit or implicit endorsement of the product or material by the NCWM.



Emerson Process Management

Register / W40161 and W40201

Application: For use as an indicating element and controller for loading rack metering applications. May be used with approved, compatible wholesale meters and associated equipment dispensing petroleum products.

Identification: The required identification badge is located on the exterior case housing.

Sealing: The housing cover may be sealed with a wire security seal using at least two bolts with holes drilled through the threaded portion of the bolts. The Model W40161 also has Category 2 remote configuration capability controlled by a physical seal switch and no event counters. The calibration/configuration button (physical seal switch) on the front panel has a hole drilled for applying a wire security seal to prevent undetected access to the calibration/configuration parameters. The display shows a locked icon when it is not in the calibration/configuration mode and shows an unlocked icon when the device is in the configuration/calibration mode. The device can print when in the locked or unlocked modes. The printout will state "yes" or "no" next to the word "configuration" ("yes" means in configuration mode and "no" means the normal operation mode).

The Model W40201 has Category 2 remote configuration capability controlled by a physical seal switch. The housing lid may be sealed with two wire security seals using one seal for each lid latch. The calibration/configuration button (physical seal switch) on the front panel has a hole drilled for applying a wire security seal to prevent undetected access to the calibration/configuration parameters. The display shows a locked icon when it is not in the calibration/configuration mode and shows an unlocked icon when the device is in the configuration/calibration mode. The device can print when in the locked or unlocked modes. The print out will state "yes" or "no" next to the word "configuration" ("yes" means in configuration mode and "no" means the normal operation mode).

Operation: The indicated values are displayed or recorded in units of volume. The flow computer can show the flow rate, temperature and accumulated net and gross totals. The device has automatic temperature compensation capabilities. The invoice can indicate that the volume delivered has been adjusted to the (net) volume at 15°C or 60°F. The invoice shall indicate the API gravity or specific gravity or coefficient of expansion for the product, product temperature and the gross reading.

Test Conditions: This Certificate supersedes Certificate of Conformance 08-056. Model W40201 electronic flow computer was evaluated in an NTEP laboratory interfaced to a simulator to analyze the programming features and functions. The emphasis of this evaluation was on temperature compensation, device design, operation, and performance.

Certificate of Conformance Number 08-056: Model W40161 electronic flow computer was initially evaluated in the California DMS laboratory interfaced to a simulator to analyze the programming features and functions. The model W40161 was also installed interfaced with a 4" Brooks series 1200 turbine meter measuring element in a field test location. Several tests were conducted with AV Gas fuel as the product. The emphasis of this evaluation was on temperature compensation, device design, operation, performance, permanence, and interaction with accessory equipment. The system was retested 35 days later and after 37 859 gallons of throughput.

Evaluated By: John Roach (CA), Martin Holmberg (AK) 08-056; Matt Stevens (CA), Van Thompson (CA) 08-056A1

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2010. NCWM, Publication 14: Measuring Devices, 2010.

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) 08-056, 08-056A1



Emerson Process Management

Register / W40161 and W40201

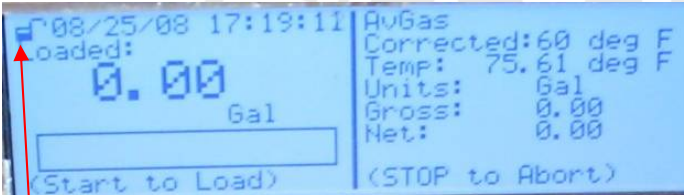
Examples of Device:



Model W40161 (Physical Seal)



Model W40201 (Physical Seal) (Wire Security Seals)



Unlocked and Locked Icons Showing Remote Configuration Status Conditions



Model W40161 Housing Cover Sealing Provision