

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For:

Meter Indicating Volume Multi-Jet Water Meter Model: DAEMJ Sizes: See Table Below

Maximum Flow Rate: See Table Below Minimum Flow Rate: See Table Below

Submitted By:

DAE Controls LLC. 35355 Beattie Dr.

Sterling Heights, MI 48312 Tel: (248) 635-3708

Fax: (586) 983 9490 Contact: JJ Liao

Email: jjliao@daecontrols.com Website: www.daecontrols.com

Standard Features and Options

Standard Features:

- Wheel odometer-type register
- Unit(s): U.S. gallons and cubic feet
- Lead-free bronze main case and Bronze or polymer housing register
- Magnetic drive register
- Flow direction arrow cast on the meter case
- Maximum operating pressure: 232 psi
- Minimum Resolution: 0.01 gal or 0.001 cu ft

Options:

• Automatic Meter Reading (AMR) pulse output or Integrated Radio Frequency (RF) (functions were not evaluated)

Meter Description:

| Model | Description (Inside x Outside Diameter x Length in Inches) | Flow Rate (USGPM) |
|-------|--|--|
| DAEMJ | 5/8" x 1/2" x 6.5" 5/8" x 3/4" x 7.5" 3/4" x 3/4" x 7.5" short 3/4" x 3/4" x 9" long 3/4" x 1" x 10.25" 1" x 10.25" 1.5" x 11.875" 2" x 11.875" | 1/4 - 20 1/4 - 20 1/2 - 30 1/2 - 30 1/2 - 30 3/4 - 50 1-1/2 - 100 2 - 160 |

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of *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.

Ivan Hankins

Chairman, NCWM, Inc.

Hal Funce

Hal Prince Chair, NTEP Committee Issued: September 8, 2021

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.





DAE Controls LLC.Meter Indicating Volume / DAEMJ

Application: This device is certified for use as a domestic water meter in a horizontal position for legal sub-metering installations.

<u>Identification</u>: All identification information (NTEP CC, Serial number, Model and Size) is located on the register face and the retaining ring which secures the register.

<u>Sealing</u>: The meter has a wire security sealing provision for securing the register to the meter body and to seal the adjustment mechanism.

Operation: This is a velocity type meter where in-flowing water, distributed by multiple jets, flows past an impeller in the measuring chamber, creating an impeller velocity directly proportional to water velocity. The meter's register interprets the flow velocity in volumetric U.S. gallons or cubic feet.

Test Conditions: The emphasis of the evaluation was on the device design, marking requirements, accuracy, and repeatability of the meter. Two 5/8 X ³/₄ and two 1 ¹/₂ meters were tested. The 5/8 x ³/₄ meters were tested at 15gpm, 2gpm, and .25gpm. The 1.5-inch meter was tested at 80gpm, 8gpm and 1.5gpm. After a throughput of 200000 plus gallons through each meter all tests were repeated. All results were within acceptance tolerance and repeatability requirements.

Evaluated By: A. Katalinic (NTEP)

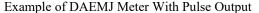
<u>Type Evaluation Criteria Used</u>: Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, 2020 Edition. NCWM Publication 14: Measuring Devices, 2021 Edition.

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

Information Reviewed By: D. Flocken (NCWM)

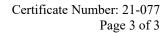
Example(s) of Device:







Example of DAEMJ Meter With Integrated Radio Frequency (RF)

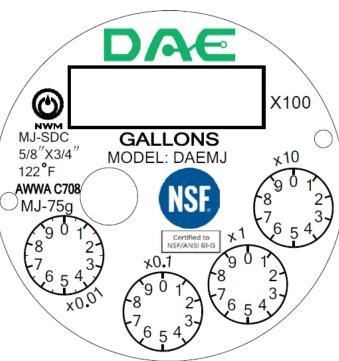








Example of DAEMJ Meter Measured in Cubic Feet



Example of DAEMJ Meter Measured in U.S. Gallons



Example of Flow Direction of DAEMJ Meter

Example of Wire Security Sealing Provision on DAEMJ Meter.