NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Meter Indicating Volume
Digital Electronic
Model: M7600

Submitted By:
Badger Meter, Inc.
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Standard Features and Options

- AISI 316 stainless steel flow tube with PTFE (Teflon) liner and alloy C electrodes
- ANSI 150 carbon steel flanges
- Amplifier/transmitter and internal firmware programming (used for calibration) (Category 1 method of sealing, physical seal) (see Sealing on Page 3) (Board part number 67527-001)
- Solid state relay (output 1)
- Opto-isolated open collector (output 2)
- Minimum liquid conductivity of 5 micromhos/cm
- Maximum working pressure: 150 PSI
- Flow Tube SST With PTFE Liner

Model	Size (inches)	Flow Rate (gallons per minute)
M7600	1	0.35m to 84
	2	1.57 to 375
	3	3.68 to 880
	4	5.52 to1320

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.

Marc Paquette
Chair, NCWM, Inc.

Gene Robertson
Chair, NTEP Committee
Issued: September 10, 2024

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Badger Meter, Inc.
Meter Indicating Volume / M7600

Application: For use in stationary batch plant applications. The magnetic flow meter is used to measure water and reclaimed concrete water for batch plant operations. May be used with certified and compatible batch controllers.

Identification: An identification badge is secured on the flow meter housing.

Sealing: The amplifier/transmitter cover has provisions to wire security seal two drilled head screws to prevent access to the internal programming. The amplifier/transmitter is mounted on the flow tube housing.

Operation: Two electromagnetic coils are located outside the flow tube, diametrically opposed to each other and protected by a carbon steel housing. Two electrodes, inserted into the flow tube, are positioned flush with the internal diameter of the tube and perpendicular to the coils. The coils are energized by a pulsed DC voltage provided by the electronic converter, and a magnetic field is generated across the flow tube section. The voltage is directly proportional to the velocity and to the actual volumetric flow rate of the liquid. The electronic converter measures the voltage, processes the signal, and provides two digital pulse outputs, scalable to the desired volumetric value.

Test Conditions: A two-inch M7600 and a three-inch M7600 were installed at the factory lab. Tests consisted of three maximum flows, three intermediate flows, and three minimum flows for each meter. All tests were within tolerance and repeatability requirements. Permanence was waived because the only change was an electronic package update. Refer to CTEP certificate 2000-05 for flow tube permanence testing.

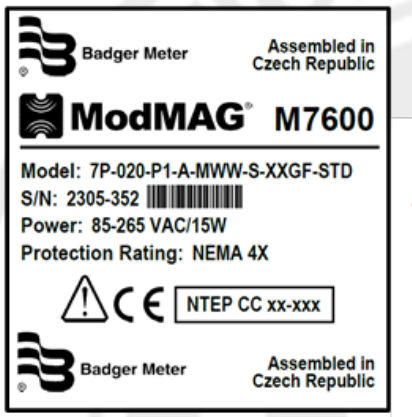
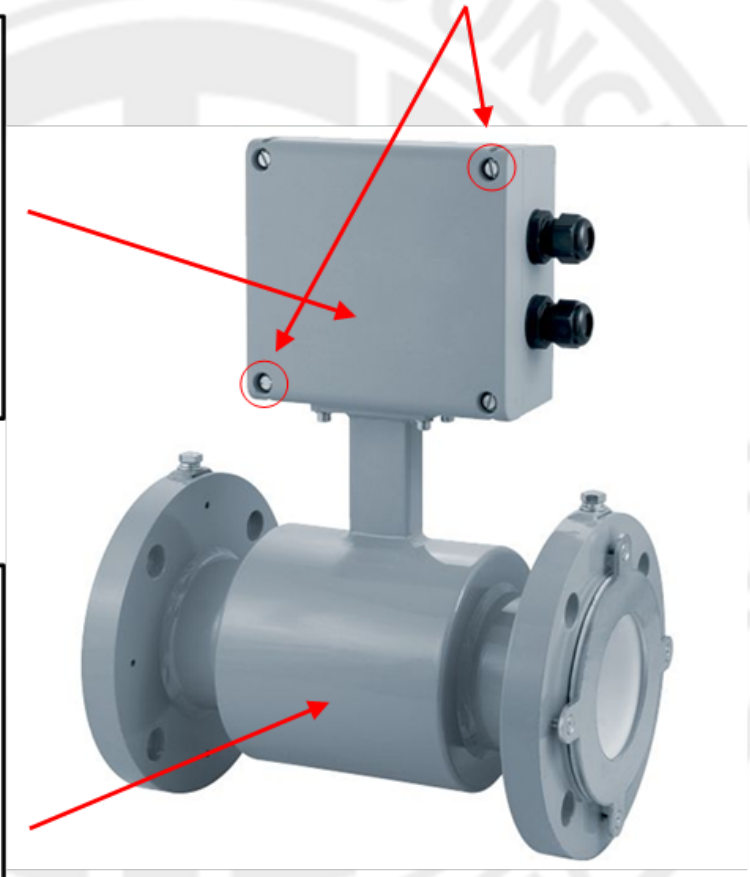
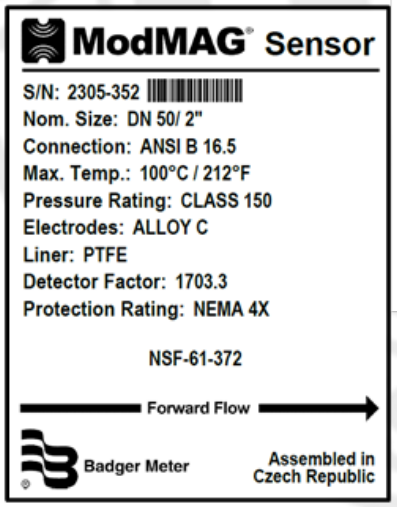
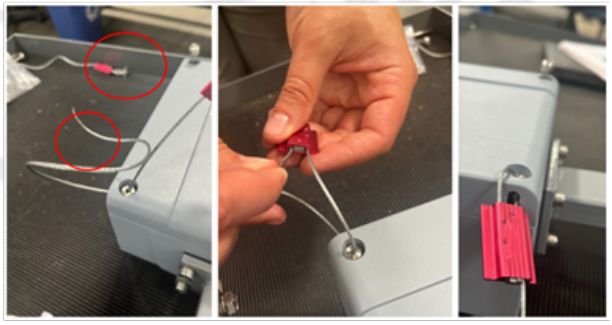
Evaluated By: A. Katalinic (NTEP) 24-091 (CN 11136)

Type Evaluation Criteria Used: *Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2024 Edition. *NCWM Publication 14: Measuring Devices*, 2024 Edition.

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

Information Reviewed By: D. Flocken (NCWM) 24-091

Badger Meter, Inc.
Meter Indicating Volume / M7600

Example(s) of Device:

Feed the security cable through the top hole of bolt and through the hole on the side of the cover as shown. Pull the cable through the hole in the bolt and through the slot on the side of the cover. Feed the end of the cable through the hole on the locking mechanism. Pull the cable tight against the meter. Wrap the excess cable up in the locking mechanism.