NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Meter Indicating Volume
Milk Meter, Electromagnetic Flow Meter, Digital Electronic
Model: IZMXQ-YY-XXXXXXXX

Submitted By:
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Standard Features and Options

Model	Size	Flow Rate (g/min)	Material
IZMXQ-50- XXXXXXXX	2.0	29 to 286	Stainless
IZMXQ-65- XXXXXXXX	2.5	44 to 440	Stainless
IZMXQ-80- XXXXXXXX	3.0	63 to 634	Stainless

- XXXXXXXX refers to non-metrological options for the electronic converter.

* The actual flow rate of the system is established by the operational characteristics of the pump and discharge head at the installation site.

System Components:
Electromagnetic flowmeter with electronic converter, with or without display, and optional remote printer
Air eliminator
For single ingredient system, the following printers with integral displays are interchangeable:

- Veeder Root printer number 7690 Model TP-769-T "X"
- Contrec 414 indicator with optional remote printer
- Contrec 424 indicator with optional remote printer
- Acculogger printer Model ACCU-9200-MOD2

For multi-ingredient system: The Model 93-1900 multi-ingredient operator station and remote label printer must be installed.

Options: Hand Held Programmer, Anderson-Negele P/N: MSD
Portable service display unit (SDU for IZMA Series and MSD for IZMS Series): The SDU or MSD is used during calibration for high-resolution read-out and adjustments.

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: June 11, 2025

Anderson-Negele Instruments

Meter Indicating Volume / IZMXQ-YY-XXXXXXXX

Application: Single Ingredient - This system is a stationary metering system for fluid milk based on an 8.6 lb/gal factor. Optionally, readings can be displayed/printed in any volumetric unit such as gallons, liters, etc.

Identification: All required identification is on the measuring element or sensor and the electronic indicator that may be mounted in a separate or remote location. The meter identification is located on the side of the meter housing. The air eliminator identification is located on a plate on the side of the unit. The scaler and electronic converter box identification is located on the side of the main housing. The printer and multi-ingredient operator station identification are located on the front panel.

Sealing: Single Ingredient - Calibration is performed using the one-unit increment display inside the scaler box. In installations where the scaler box is not required, calibration is performed using the high-resolution read-out on the portable SDU or MSD plugged into the flowmeter electronic converter. The calibration factor is also set using the portable SDU or MSD and this factor should be recorded on the inspection report for future reference. After calibration, the "cal/meas" switch inside the flowmeter electronic converter must be placed in the "meas" position to lock-out possible changes to the flowmeter parameters and the calibration factor. The SDU or MSD is removed, and the flowmeter electronic converter is sealed using a wire security seal through holes in two adjacent cover screws. The scaler box is sealed using a wire security seal through holes in the cover screws and the enclosure lip. Changes to parameters within the Contrec indicator are locked out by connecting an electrical jumper between terminals 1 and 2, attached to the rear of the indicator. Access to the jumper wire is prevented by threading a wire security seal through a hole in the enclosure cover screw or mounting screw for a vertical front panel holding the Contrec indicator and a hole in the surrounding enclosure.

Multi-Ingredient - Calibration is performed for each specific product by means of a designated thumb wheel multiplier for that product. The operator station visual display and the label printer are used to document the actual quantity delivered. After calibration is made, the internal enclosure for the multipliers is sealed with a wire security seal through a padlock tab on the top of the enclosure. The flowmeter electronic converter is sealed using a wire security seal through two adjacent cover screws. The flowmeter body and air eliminator are not sealed as they must be accessed for sanitary inspection. Both systems are the dry hose type and the first delivery must be adjusted to include the flood volume marked on the air eliminator.

Operation: For the stationary receival system, milk is pumped from a vehicle to a dairy bulk storage tank receival system. The flow rate and mass or volume measurements are displayed on the indicator. At the end of the transaction, the stationary indicator prints a receipt.

Test Conditions: Three different test sites were used for testing. Site one was a two-inch meter (IZMXQ-50-xxxxxxxx) with milk as the product. At this location five flow rates (14 gpm, 40 gpm, 60 gpm, 80 gpm, and 110 gpm) were tested four times each. All results were within tolerance and repeatability requirements. Site two was a three-inch meter (IZMXQ-80-xxxxxxxx) with milk as the product. At this location five flow rates (68 gpm, 138 gpm, 150 gpm, 186 gpm, and 260 gpm) were tested four times each. All results were within tolerance and repeatability requirements. After the required throughput for the various sized meters, the tests were repeated and met specified tolerance and repeatability requirements. Site three was needed to test the three-inch meter (IZMXQ-80-xxxxxxxx) to get the full range of flow rates that the meter could achieve with accuracy. This was performed at the manufacturer's facility. All results were within tolerance and repeatability requirements.

An updated batch controller/indicator, Contrec 424 Batch Controller for the TP-709 Batch Controller Ticket Printer system, was also tested at the manufacturer's facility. This controller/indicator may be used to retrofit existing metering systems.

Evaluated By: A. Katalinic (NTEP) 25-050 (CN 11099)

Type Evaluation Criteria Used: *Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2025 Edition. *NCWM Publication 14: Measuring Devices*, 2025 Edition.

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

Information Reviewed By: J. Gibson (NCWM) 25-050

Anderson-Negele Instruments
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Example(s) of Device:

Figure 1: IZM-Q Flow Meter

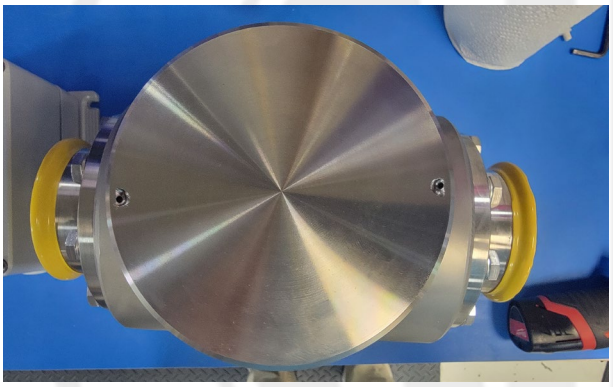

Figure 2: Cap Sealing Feature

Figure 3: Cap Sealing Installed

Figure 4: Transmitter Sealing Feature

Figure 5: Transmitter Sealing Installed