

State of California
Department of Food and Agriculture
Division of Measurement Standards

Certificate Number: 5398(b)-11
Page 1 of 2

California Type Evaluation Program
Certificate of Approval
for Weighing and Measuring Devices

For:

Hydrocarbon Gas Vapor Measuring Device
Models: Metris 250, Metris RM and Metris MB
Capacity: 250 cubic feet per hour @
0.5 inch H₂O Differential
Temperature or non-temperature compensation
Maximum Operating Pressure: 5 psig

Submitted by:

Itron Inc. (formerly Actaris US Gas Inc.)
970 Hwy 127 North
Owenton, KY 40359
Tel: 502-484-6269
Fax: 502-484-6224
Contact: Julie Ellington
Email: Julie.Ellington@itron.com
Website: www.itron.com

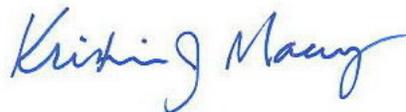
Standard Features and Options

Positive displacement diaphragm measuring module
Die cast aluminum (top and bottom) casing
Index register: 4 circle dial, 4 or 5 digit direct read
Tangent crank 14 revs per ft³
Temperature or non-temperature compensation

Option:

Remote index register interface cable (not tested)

This device was evaluated under the California Type Evaluation Program (CTEP) and was found to comply with the applicable technical requirements of California Code of Regulations for "Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.



Effective Date: February 1, 2011

Kristin J. Macey, Director

Itron Inc.
Hydrocarbon Gas Vapor Measuring Device
Models: Metris 250, Metris RM and Metris MB

Application: For commercial measurement of vaporized hydrocarbon gas.

Identification: The required information is on an identification badge riveted to the lower meter housing below the index face plate.

Sealing: The meter housing separates into two halves by removing the 10 housing screws holding it together. A drilled head housing screw is required under the index face plate. A second drilled head screw is required to attach the index face plate to the upper half of the meter. A third drilled head screw is required to attach the calibration access port to the top of the meter. All three drilled head screws must be connected with a wire security seal connecting the three points. A tamper evident seal covers the second screw on the calibration port.

Test Conditions: No additional tests were performed in updating the Metris RM, Metris 250 and the Metris MB certificate. The certificate was updated to add new contact information; add the option of the remote index register interface connection (not tested); update the identification badge location; update the picture and clarify the note for the sealing provision.

Certificate of Approval Number 5398(a)-10: The Metris RM and Metris 250 temperature compensated meters were evaluated. The emphasis of the evaluation was on the device design, operation, performance and repeatability. Several accuracy tests were performed at various flow rates ranging from 3 to 100% of flow capacity using a 5 ft³ bell prover standard. These tests were repeated after 250 000 ft³ of air was passed through one device and approximately 263 000 ft³ was passed through the other. The Metris MB is included in this certificate without additional testing due to identical designs as the Metris RM and 250 without the regulator.

Certificate of Approval Number 5398-04: Two types of Metris meters were submitted for testing (model Metris 250 and Metris RM). The third model (Metris MB) was not tested since it was identical to the RM model without the regulator. Accuracy tests were performed at various flow rates from 3 to 100% of flow capacity using a 5 ft³ bell prover standard. These tests were repeated after 207 000 ft³ of air was passed through the device. Additional tests were performed on a new redesigned version of Metris at flow rates from 3 to 100% of flow capacity and tests repeated after approximately 360 000 ft³ has passed through the device.

The results of the evaluation indicate the devices comply with applicable requirements.

Type Evaluation Criteria Used: Title 4, California Code of Regulations, 2011 Edition

Tested By: Charlie Nelson (5398-04), and Van Thompson (5398(a)-10, 5398(b)-11).

