

***National Type Evaluation Program
Certificate of Conformance
for Weighing and Measuring Devices***

For:

Positive Displacement
Wholesale Meter
Model: F4-PRIME UP-GRADE*
Flow Rate: 70-720 gpm
Meter Size: 4 inch

Submitted by:

FMC Smith Meter, Inc.
1602 Wagner Avenue
P.O. Box 10428
Erie, PA 16514-0428
Tel: (814) 898-5433
Fax: (814) 899-3414
Contact: Robert Fuller

Standard Features and Options

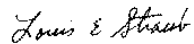
*The manufacturer's model number for the F4-PRIME UP-GRADE model series is designated with an alphanumeric prefix.

Prefix Descriptions: S = Straight type directional valve
A = Angle type directional valve
1 = 150 psi maximum working pressure of the meter

Options: Electronic pulser
Preset volume
Automatic temperature compensation
Ticket printer

This device was evaluated under the National Type Evaluation Program (NTEP) 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.

Effective Date: April 1, 1997



Louis E. Straub
Chairman, NCWM, Inc.



G. Weston Diggs
Chairman, National Type Evaluation Program Committee

Issue date: March 24, 1998

Note: The National Conference on Weights and Measures 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.

This is a reissuance by the NCWM of a Certificate of Conformance already issued by the National Institute of Standards and Technology.

FMC Smith Meter, Inc.
Positive Displacement
Model: F4-PRIME UP-GRADE

Application: For use in stationary wholesale applications to measure gasoline and diesel, and other petroleum products with similar viscosities and properties when interfaced with approved and compatible equipment. The device may be interfaced with a remote indicator.

Identification: The meter identification badge is riveted to the upper housing of the meter.

Sealing: Adjustments may be made at the pulse sensor junction box and a pulse sensor unit attached to the meter cover plate. Access to the pulse sensors is prevented by threading wire security seals through holes in the mounting screws on the junction box cover plate and sensor cover plate. The meter calibration is performed by entering multiple meter factors (4) in the pulse sensor unit for specified flow rates based on proving the meter with a reference standard.

Operation: The F4-PRIME UP-GRADE is a four-inch positive displacement type meter that measures the flow of product passing through a measuring chamber. The movement of the meter rotor is converted to electronic pulses detected by a sensor on the top of the meter. Pulses are transmitted to a register mounted on the meter or an optional separate indicating element. The meter pulse sensor is always positioned on the top of the meter. An optional ticket printer may be mounted on the meter register. A single ticket is inserted into the printer slot. A transaction is recorded by manually turning the printer knob one complete revolution and then withdrawing the ticket from the slot. The optional feature of a preset may be mounted between the upper housing and register of the meter. The preset is operated by depressing the SET button, then the appropriate quantity buttons. Product flow is begun by opening the preset start valve and is stopped after delivery of the selected quantity. The F4-PRIME UP-GRADE meter shall be installed in systems with an effective means to prevent vapor and air from entering the meter.

Test Conditions: This certificate is issued based on testing performed on the Model F4 meter (Certificate of Conformance Number 95-054A1), the PRIME 4 meter (Certificate of Conformance Number 96-099), and information provided by the manufacturer. The F4-PRIME-UP-GRADE meter measuring element is dimensionally identical to the F4; however, the system's components are fabricated of materials identical to those in the PRIME 4 measuring element.

The results of these evaluations indicate the device complies with the applicable requirements of NIST Handbook 44.

Type Evaluation Criteria Used: NIST Handbook 44, 1997 Edition

Information Reviewed By: J. Williams (NIST) 97-044