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ROTARY-TYPE GAS DISPLACEMENT METERS

Secretariat

400 North Capitol Street, NW, 4th Floor
Washington, DC 20001
U.S.A.

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PREFACE

This publication represents a basic standard for operation, substantial and durable construction, and acceptable performance for rotary-type gas displacement meters. This work is the result of years of experience that has been supplemented by extensive research. The standard is intended to meet the minimum design, material, performance and testing requirements for efficient use of rotary displacement meters

It is recognized that during any transition period to the metric system, sizes and dimensions need to be expressed in either the metric system or the inch-pound system or in both. In this document, both systems are used, with the inch-pound units given preference. In most cases, a soft conversion from existing inch-pound values is shown. Soft conversion implies a change in nomenclature only; in this document, the alternative nomenclatures (metric and inch-pound) are shown by using parentheses and can be used interchangeably. Hard conversion is used to express metric values in (closely equivalent) round inch-pound units. Bracketed values are not to be used interchangeably with the corresponding metric values.

Nothing in this standard is to be considered as in any way indicating a measure of quality beyond compliance with the provisions it contains. It is designed to allow the construction and performance of displacement meters that may exceed the various provisions specified in any respect. In its preparation, recognition was intended to be given to the possibility of improvement through ingenuity of design. As progress takes place, revisions may become necessary. When they are believed desirable, recommendations should be forwarded to the Chairman of ANSI B109 Committee, Operating and Engineering Section, American Gas Association, 400 North Capitol Street, NW, 4th Floor, Washington, DC 20001, U.S.A.

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HISTORY OF THE DEVELOPMENT OF THIS STANDARD

Following approval of the Standard for Gas Displacement Meters (Under 500 Cubic Feet per Hour Capacity), ANSI B109.1, in 1973, a subcommittee was appointed to develop a standard covering rotary-type gas displacement meters.

Five drafts of the standard were prepared and reviewed by the subcommittee before a final draft was prepared and submitted to American National Standards Committee B109 for its consideration on June 20, 1979. Subsequent to adoption by the committee, the first edition of the standard for rotary-type gas displacement meters was approved as American National Standard by the American National Standards Institute, Inc., on April 14, 1980.

The second edition was approved as American National Standard by the American National Standards Institute, Inc., on January 9, 1987. Major changes included the additions of: Part VI on Auxiliary Devices for Gas Meters; Part VII on Test Methods and Equipment; and informative Appendices for bar coding of meters and auxiliary devices, and prover calibration.

In the third edition, minor editorial changes were made. The third edition was approved on November 12,1992.

In the fourth edition of standard B109.3, several additions/deletions were made to avoid any ambiguity, to make it more consistent and to improve upon some requirements. The fourth edition was approved on April 13, 2000.

This is the fifth edition of standard B109.3, in which several additions/deletions have been made to avoid any ambiguity, to provide more consistency with other B109 standards, to improve upon some requirements and to allow more leeway for future innovation and developments. Substantive changes have been shown by a bar [|] in the margin.

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