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ANSI B109.2
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DIAPHRAGM-TYPE GAS DISPLACEMENT METERS (500 Cubic Feet Per Hour Capacity and Over)

Secretariat



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

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CONTENTS

CONTENTS	i
DISCLAIMER AND COPYRIGHT	iii
PREFACE	iv
HISTORY OF THE DEVELOPMENT OF THIS STANDARD	v
ACCREDITED STANDARDS COMMITTEE B109	vi
SCOPE	1
PART I	2
DEFINITIONS	2
PART II	7
CONSTRUCTION REQUIREMENTS FOR QUALIFYING NEW-TYPE METERS	7
2.1 SCOPE	7
2.2 DIMENSIONS	7
2.3 METER IDENTIFICATION	9
2.4 DIAPHRAGM IDENTIFICATION	10
2.5 INLET IDENTIFICATION	10
2.6 PROTECTION OF METERS	10
2.7 METER INDEX.....	10
2.8 CORROSION AND CHEMICAL RESISTANCE OF INTERNAL PARTS	11
2.9 CORROSION AND CHEMICAL RESISTANCE OF EXTERNAL PARTS	11
2.10 METER INDEX WINDOW IMPACT RESISTANCE	12
2.11 METER INDEX WINDOW CLEARNESS TEST	12
2.12 TEMPERATURE AND THERMAL SHOCK RESISTANCE	12
2.13 STRENGTH OF METER CONNECTIONS	13
PART III	14
PERFORMANCE REQUIREMENTS FOR QUALIFYING NEW-TYPE METERS	14
3.1 SCOPE	14
3.2 METER CLASSES	14
3.3 ACCURACY OF METERS	16
3.4 METER CASE PRESSURE TEST	17
3.5 PRESSURE AND LEAK TESTS.....	18
3.6 NOISE AND VIBRATION	18
PART IV	19
IN-SERVICE PERFORMANCE	19
4.1 SCOPE	19
4.2 TEST CONDITIONS	19
4.3 IN-SERVICE PERFORMANCE PROGRAMS	19
4.4 RECORDS	20
PART V	21
METER INSTALLATION	21
5.1 SCOPE	21
5.2 GENERAL	21
5.3 LOCATION	21
5.4 INSTALLATION	21
5.5 ON-SITE INSPECTION	22
5.6 SPECIAL SERVICE	22
PART VI	23
AUXILIARY DEVICES FOR GAS METERS	23
6.1 SCOPE	23
6.2 PRESSURE SYSTEM	24
6.3 TEMPERATURE SYSTEMS	25
6.4 VOLUME INDICATOR	27
6.5 INSTRUMENT CHART DRIVES	27
6.6 CIRCULAR CHARTS	27
6.7 RECORDERS	29

6.8 AUTOMATIC INTEGRATORS	31
6.9 CONSTANT-PRESSURE-COMPENSATING INDEX	31
6.10 REMOTE METER READING DEVICES	32
6.11 INSTRUMENT ADAPTOR PLATES	33
6.12 INSPECTION AND TESTING CLASSIFICATION	33
PART VII	35
TEST METHODS AND EQUIPMENT	35
7.1 SCOPE	35
7.2 MEASUREMENT REFERENCE BASE	35
7.3 UNITS OF MEASURE	35
7.4 BASE CONDITIONS	35
7.5 METER TESTING SYSTEMS	36
7.6 CALIBRATION OF METER TESTING SYSTEMS	38
APPENDIX A	41
CONNECTION DIMENSIONS, NOMINAL	41
APPENDIX B	42
THREAD SPECIFICATIONS	42
APPENDIX C	43
GENERAL SERVICE CAPACITY EQUATION	43
APPENDIX D	45
METER ACCURACY	45
APPENDIX E	46
PROVER BELL CALIBRATION BY PHYSICAL MEASUREMENT	46
APPENDIX F	49
BAR CODE FOR METERS AND AUXILIARY DEVICES	49

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PREFACE

This publication represents a basic standard for safe operation, and substantial and durable construction for diaphragm-type gas displacement meters having a gas flow rating of 500 cubic feet per hour capacity (14.16 m³/h) and over at 0.5 inch water column (125 Pa) differential pressure at standard conditions. This work is the result of years of experience, supplemented by extensive research. The standard is designed to help ensure efficient performance and substantial construction of equipment.

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 in 1973 of the Standard for Gas Displacement Meters (Under 500 Cubic Feet per Hour Capacity), ANSI B109.1, a subcommittee was appointed to develop a standard covering gas displacement meters with capacities of 500 cubic feet per hour and over.

Six 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 14, 1979. Subsequent to adoption by the committee, the first edition of the standard for gas displacement meters (500 cubic feet per hour capacity and over) was approved as an American National Standard by the American National Standards Institute, Inc., on April 14, 1980.

The second edition was approved on January 9, 1987, and included a new part on auxiliary devices for gas meters, plus an informative Appendix on bar coding.

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

This is the fourth edition of standard B109.2, in which several additions/deletions have been made to avoid any ambiguity, to make it more consistent and to improve upon some requirements. Substantive changes have been shown by a bar [|] in the margin.

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