AS 4647—2005

Australian Standard™

# Domestic diaphragm gas meters

STANDARDS AUSTRALIA

This Australian Standard was prepared by Committee AG-008, Gas Distribution. It was approved on behalf of the Council of Standards Australia on 16 February 2005. This Standard was published on 7 April 2005.

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The following are represented on Committee AG-008:

Australian Liquefied Petroleum Gas Association
Energy Networks Association
Energy Retailers Association of Australia
Gas Technical Regulators Committee
Welding Technology Institute of Australia

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Australian Standard™

# Domestic diaphragm gas meters

Originated as AG 702—1976.
Previous edition 1996.
Revised and redesignated as AS 4647—2005.



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# PREFACE

This Standard has been prepared by the Standards Australia Committee AG-008, Gas Distribution Committee, to supersede AG 702—1996, *Specification for Domestic Diaphragm Gas Meters*. The Standard is republished without technical alterations.

The Standard provides basic requirements for domestic diaphragm gas meters under tender, to—

(a) ensure optimum performance, both—

  (i) when purchased; and

  (ii) after extended service; and

(b) to satisfy the requirements of statutory authorities after due consideration is given to variations in accuracies of meter testing.

This Standard has no legal status in its own right but may acquire legal standing where—

(A) adopted by a purchaser under formal contract or purchase order for the supply of domestic meters;

(B) a meter manufacturer claims that a particular meter is made in accordance with the Standard; or

(C) adopted by a government or other authority having jurisdiction over meter specification.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of the Standard, whereas an ‘informative’ appendix is only for information and guidance.

Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements of the Standard.

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# Australian Standard
# Domestic diaphragm gas meters

## SECTION 1 SCOPE, REFERENCES AND DEFINITIONS

### 1.1 SCOPE

This Standard covers the working environment, materials of construction and performance required of domestic diaphragm meters of badge capacity up to 6 $m^{3/}$h when tested at standard conditions (MSC) on air. Materials used, methods of construction and finish shall be suitable to enable a working life of twenty years between repairs.

### 1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

| | |
|---|---|
| AS | |
| 1517 | Tinplate and blackplate |
| 1834 | Material for soldering |
| 1834.1 | Part 1: Solder alloys |
| 1834.2 | Part 2: Flux-cored solders |
| 1874 | Aluminium and aluminium alloys—Ingots and castings |
| 2551 | Steel sheet and strip—Cold-rolled, electrolytic zinc-coated |
| 2552 | Steel sheet and strip—Terne (lead-tin alloy) coated |
| AS/NZS | |
| 1865 | Aluminium and aluminium alloys—Drawn wire, rod, bar and strip |
| 1866 | Aluminium and aluminium alloys—Extruded rod, bar, solid and hollow shapes |
| 1867 | Aluminium and aluminium alloys—Drawn tubes |
| 2312 | Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings |
| AS/NZS ISO | |
| 9000 | Quality management systems (all Parts) |
| ASTM | |
| D 494-04 | D494-04 Standard Test Method for Acetone Extraction of Phenolic Molded or Laminated Products |
| BS | |
| 746 | Specification for gas meter unions and adaptors |
| 2782 | Methods of testing plastics |
| 2782-1 | Part 1: Method 140E. Thermal properties. Flammability of a small, inclined test piece exposed to an alcohol flame (laboratory method) |

 