



Gas appliance regulators

STANDARDS
Australia



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AS 4618:2019

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The following are represented on Committee AG-013:

- Association of Accredited Certification Bodies
- Australian Industry Group
- Energy Networks Australia
- Engineers Australia
- Gas Appliance Manufacturers Association of Australia
- Gas Energy Australia
- Gas Technical Regulators Committee
- Master Plumbers and Mechanical Services Association of Australia (Victorian)
- Master Plumbers Association of QLD

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Gas appliance regulators

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Preface

This Standard was prepared by the Standards Australia Committee, AG-013, Components used for Gas Appliances and Equipment, to supersede AS 4618—2004, *Gas appliance regulators*.

The objective of this Standard is to provide manufacturers, designers, regulatory authorities, testing laboratories and similar organizations with uniform minimum requirements for the safety, performance and use of gas appliance regulators.

This Standard should not be considered as a design specification or as an instruction manual.

In its preparation, consideration has been given to —

- (a) continuity of satisfactory operation;
- (b) prevention of fire hazards, and explosions;
- (c) prevention of injury to persons or property;
- (d) gas rules and regulations now in force; and
- (e) relevant International Standards.

The major changes in this edition are as follows:

- (i) Updated to current drafting rules for Australian Standards.
- (ii) Review of the defined terms.
- (iii) Inclusion for an alternate ammonia based testing for stress corrosion cracking.
- (iv) Alignment, where possible, to equivalent international standards.

Figures in [Appendix A](#) relate to the relevant test methods in [Appendix B](#).

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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Australian Standard®

Gas appliance regulators

1 Scope, references, definitions and classifications

1.1 Scope

This Standard specifies minimum requirements for the safety, performance and use of gas appliance regulators. These requirements apply to self-acting gas pressure regulators up to 50 mm in size for use on natural gas (NG), simulated natural gas (SNG), town gas (TG), tempered liquefied petroleum gas (TLP) and liquefied petroleum gas (LPG), for inlet gas pressures up to 7 kPa and outlet pressures above 0.25 kPa. They may be of the lock-up type.

NOTE 1 Conformance of a regulator to the requirements of this Standard does not imply that it is acceptable for use without supplemental tests in its intended application.

NOTE 2 For regulators incorporated within a combination control, refer to AS 4624.

1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS 2136, *Method for detecting the susceptibility of copper and its alloys to stress corrosion cracking using the mercurous nitrate test*

AS ISO 7.1, *Pipe threads where pressure-tight joints are made on the threads, Part 1: Dimensions, tolerances and designation*

AS/NZS 5601.1, *Gas installations, Part 1: General installations*

AS/NZS 5601.2, *Gas installations, Part 2: LP Gas installations in caravans and boats for non-propulsive purposes*

ISO 6957, *Copper alloys — Ammonia test for stress corrosion resistance*

1.3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

1.3.1

appliance regulator

device fitted to an appliance to control the gas pressure or gas volume delivered to that appliance

1.3.2

combination control

assembly of two or more different functions in a single body

Note 1 to entry: Requirements for combination controls can be found in AS 4624.

1.3.3

gas

combustible fuel gas, which may be liquefied petroleum gas, natural gas, simulated natural gas, tempered liquefied petroleum gas or town gas