AS 4618—2004

Australian Standard™

Gas appliance regulators

STANDARDS AUSTRALIA

This Australian Standard was prepared by Committee AG-011, Gas Components and Industrial Equipment. It was approved on behalf of the Council of Standards Australia on 8 October 2004.
This Standard was published on 24 November 2004.

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AGA (Network Operators)
AGA Certification Services
Appliance and Component Testing
Australian Liquefied Petroleum Gas Association
Gas Appliance Manufacturers Association of Australia
Gas Appliances and Services Association
Gas Technical Regulators Committee
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Originated as AG 202—1976.
Previous edition 1998.
Republished and designated AS 4618—2004.

Published by Standards Australia International Ltd GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 6362 6

PREFACE

This Standard was reviewed by the Standards Australia Committee, AG-011, Gas Components and Industrial Equipment**,** to supersede AG 202—1998, *Approval requirements for gas appliance regulators.* The Standard is republished without technical alterations.

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 regarded as a design specification or as an instruction manual.

In its preparation, consideration has been given to—

(a) continuity of satisfactory operation;

(b) the prevention of fire hazards, and explosions;

(c) the prevention of injury to persons or property;

(d) gas rules and regulations now in force; and

(e) relevant International Standards.

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 a 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 this Standard.

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SECTION 1 SCOPE, CLASSIFICATION AND DEFINITIONS

1.1 SCOPE

These requirements apply to self-acting gas pressure regulators up to 50 mm 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 or may not be of the lock-up type.

Compliance of a regulator with these requirements does not imply that it is acceptable for use without supplemental tests in its intended application.

Requirements for a regulator incorporated in a combination control is published in AG 209 (to be AS 4624).

1.2 CLASSIFICATION

Regulators shall be classified according to type, class, and grade.

1.2.1 Type

Two types of regulator shall be:

(a) Fixed outlet pressure regulator—A regulator having one non-adjustable nominal outlet pressure (P_n) as specified by the manufacturer.

(b) Adjustable outlet pressure type regulator—A regulator on which the outlet pressure can be adjusted between minimum and maximum nominal outlet pressure P_n(min) and P_n(max) as specified by the manufacturer.

1.2.2 Class

The range of flow rates for which a regulator readjustment is not necessary, as specified by the manufacturer. The classes shall be as listed in Table 1.1

TABLE 1.1

CLASS OF REGULATOR

Class	Range of flow rate
0	0.006 m^3/h – Q_m
1	0.025 Q_m – Q_m
2	0.1 Q_m – Q_m
3	0.5 Q_m – Q_m
4	Fixed rate

where Q_m is the maximum flow rate specified by the manufacturer

