AS 4621:2019

Australian STANDARD

Regulator for use with liquefied petroleum — Vapour phase

STANDARDS Australia

AS 4621:2019

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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)
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Second edition 2019.

Preface

This Standard was prepared by the Standards Australia Committee AG-013, Components used for Gas Appliances and Equipment, to supersede AS 4621—2004, *Regulators for use with liquefied petroleum—Vapour phase*.

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 regulators for use with liquefied petroleum gases (vapour phase).

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) 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) Inclussion 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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Section 1 Scope, references, definitions and classification

1.1 Scope

This Standard specifies the minimum safety and performance requirements for self-acting pressure regulators, installed independently or as part of a combination control, which are used to reduce the pressure of vapour phase liquefied petroleum gases to the maximum outlet pressures specified in Clause 1.4.

NOTE Requirements for gas appliance regulators are published in AS 4618.

Where a device is designed to combine the functions of two or more components it shall conform with the Standard for each component.

NOTE Conformance of a regulator or combination gas control with these requirements does not imply that it is acceptable for use without supplemental tests on the regulator installed in its intended application.

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 1881, *Zinc alloys — Casting ingots and castings — Quality requirement*

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

AS 2473.2, *Valves for compressed gas cylinders, Part 2: Outlet connections (threaded) and stem (inlet) threads*

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 purpose of this Standard, the following terms and definitions apply:

1.3.1
breather vent
orifice or opening designed to permit atmospheric pressure to act on one side of the diaphragm of a regulator

1.3.2
combination gas control
an assembly of two or more different control functions in a single body

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