AS 4632:2020

Australian STANDARD®

Over-pressure and under-pressure shut-off devices

STANDARDS Australia

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This Australian Standard® was prepared by AG-013, Components used for Gas Appliances and Equipment. It was approved on behalf of the Council of Standards Australia on 13 January 2020.

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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 Association of Qld

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Preface

This Standard was prepared by the Australian members of Joint Standards Australia/Standards New Zealand Committee, AG-013, Components Used for Gas Appliances and Equipment, to supersede AS 4632—2005, *Over-pressure and under-pressure cut off devices*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide manufacturers, designers, regulatory authorities, testing laboratories and similar organizations with uniform minimum requirements for the safety and performance of over-pressure and under-pressure shut-off devices.

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.

Principal changes to this standard relate to updates with regards to industry practice and updates to the format of the standard to conform to Standards Australia policies.

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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Over-pressure and under-pressure shut-off devices

Section 1 Scope and general

1.1 Scope

This Standard sets out requirements for over-pressure and under-pressure shut-off devices up to 150 mm nominal bore (DN 150) for use on natural gas (NG), simulated natural gas (SNG), town gas (TG), tempered liquefied petroleum gas (TLP) and liquefied petroleum gas (LPG), intended to be fitted in the gas supply downstream of the consumer billing meter or an LPG first stage pressure regulator.

The requirements apply to over-pressure and under-pressure shut-off devices intended for installation into consumer piping either directly or as part of a gas pressure regulator.

NOTE 1 Over-pressure shut-off devices generally serve to protect equipment downstream of regulators from being pressurized beyond its rated working pressure if the regulator fails.

This Standard does not cover devices incorporating automatic safety shut-off valves actuated by electrical pressure-sensing devices.

NOTE 2 The requirements for pressure-sensing devices are covered in AS 4628 and the requirements for automatic shut-off valves are covered in AS 4629.

Conformance to the requirements of this Standard does not imply acceptability for use without supplemental tests in an intended application.

NOTE 3 For over-pressure and under-pressure shut-off devices with flows greater than 200 m^3/h for natural gas and town gas refer to EN 14382.

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 tests*

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 document, the following terms and definitions apply.

1.3.1
consumer billing meter
measurement device that is used to measure the quantity of gas transported through the gas distribution network to a consumer (including other gas distribution network operator connections)

[SOURCE: AS/NZS 4645.1:2018]