AS 4627:2017
(Incorporating Amendments up to and including No. 3)
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Australian STANDARD®

STANDARDS Australia

Quick-connect devices for gas



AS 4627:2017

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Association of Accredited Certification Bodies
Australian Industry Group
Energy Networks Association
Engineers Australia
Gas Appliance Manufacturers Association of Australia
Gas Association of New Zealand
Gas Energy Australia
Gas Technical Regulators Committee
LPG Association of New Zealand
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National Association of Testing Authorities Australia

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RECONFIRMATION

OF
AS 4627:2017
Quick-connect devices for gas

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Technical Committee AG-013 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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Gas Energy Australia
Gas Technical Regulators Committee
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Master Plumbers and Mechanical Services Association of Australia (Victorian)
National Association of Testing Authorities Australia
Plumbing Products Industry Group

NOTES

AS 4627:2017
(Incorporating Amendments up to and including No. 3)

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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 4627—2005, *Quick-connect devices for gas*.

This Standard incorporates Amendment No. 1 (October 2021), Amendment No. 2 (October 2021) and Amendment No. 3 (March 2024). The changes made to Figure A5(B) by Amendment No. 1 have been overwritten by Amendment No. 3. The start and end of changes introduced by the Amendment are indicated in the text by tags including the amendment numbers.

Amendment No. 1 to this Standard was prepared by the Committee AG-013 to expand the scope of the Standard to include Type 27 quick-connect devices.

The principal changes from the 2005 edition are the following:

(a) Change in rated working pressure of type 1 quick-connect devices to 14 kPa to align with AS 1869 Class A and Class B hose assemblies.

(b) Marking requirements of quick-connect devices incorporated in a hose assembly.

(c) Definitions and general editorial changes.

The objective of this Standard is to provide uniform minimum requirements for the safety and performance of quick-connect devices.

This Standard should not be regarded as a design specification or as an instruction manual. Consideration has been given to—

(i) continuity of satisfactory operation;

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

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

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

(v) relevant International Standards.

AS/NZS 5601 (series), *Gas installations*, provides essential requirements and means of compliance for gas installations.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

Statements expressed in mandatory terms in notes to figures are deemed to be requirements of this Standard.

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Australian Standard®

Quick-connect devices for gas

1 Scope and general

1.1 Scope

This Standard specifies requirements and test methods for quick-connect devices 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 in vapour phase (LP Gas).

Appendix A sets out the figures that are referred to in this Standard.

Appendix B sets out the methods of tests (M.O.T.s) to demonstrate conformity with requirements of this Standard.

NOTE The test method titles include a M.O.T. number which indicates the Clause(s) in which the test criteria are located.

1.2 Classification

The quick-connect device shall be classified according to type.

〖A1〉Four〈A1〗 types of quick-connect device shall be as follows:

(a) *Type 1*—A quick-connect device permitting gas flow only when the mating parts are connected, with a rated working pressure of 14 kPa, consisting of a plug and socket which may be approved and used separately. The Type 1 plug shall conform to the dimensions shown in Figure A1. The Type 1 socket shall be compatible with the plug shown in Figure A1.

NOTE Commonly known as bayonet fitting.

(b) *Type 2*—A quick-connect device with safety shut off permitting gas flow only when the mating parts are connected, with a minimum rated working pressure of 14 kPa.

(c) *Type 3*—A quick-connect device without shut off, with a minimum rated working pressure of 14 kPa.

(d) 〖A1〉*Type 27*—A quick-connect device with a minimum working pressure of 2640 kPa, incorporating thermal protection and designed to connect to a cylinder valve fitted with outlet connection Type 27 from AS 2473.2.〈A1〗

1.3 Referenced documents

The following documents are referred to in this Standard:

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

AS 2473.1,*Valves for compressed gas cylinders, Part 1: Specifications, type testing, and manufacturing tests and inspections*

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

AS 3688,*Water supply and gas systems—Metallic fittings and end connectors*

〖A3〉AS 1869〈A3〗,*Hose and hose assemblies for liquefied petroleum gases (LP Gas), natural gas and town gas*

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

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