



Manually operated gas valves

STANDARDS
Australia

Currently in preview, click buy full version

This Australian Standard® was prepared by Committee AG-013, Components used for Gas Appliance and Equipment. It was approved on behalf of the Council of Standards Australia on 10 June 2018.

This Standard was published on 28 June 2018.

The following are represented on Committee AG-013:

- Association of Accredited Certification Bodies
 - 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
 - Master Plumbers and Mechanical Services Association of Australia, Vic.
 - National Association of Testing Authorities Australia
 - Australian Industry Group
 - Master Plumbers Association of Queensland
-

This Standard was issued in draft form for comment as **AS/D 4617:2017**.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting www.standards.org.au

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard[®]

Manually operated gas valves

Original as AG 201—1978.
Revised and redesignated AS 4617—2004.
Second edition 2018.

COPYRIGHT

© Standards Australia Limited

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 76072 123 7

PREFACE

This Standard was prepared by Standards Australia Committee, AG-013, Components used for Gas Appliances and Equipment, to supersede AS 4617—2004, *Manual shut of gas valves*.

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 manually operated valves.

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

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

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.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE, CLASSIFICATION AND DEFINITIONS	
1.1 SCOPE.....	4
1.2 APPLICATION	4
1.3 NORMATIVE REFERENCES	4
1.4 CLASSIFICATION	5
1.5 DEFINITIONS.....	5
SECTION 2 DESIGN AND CONSTRUCTION	
2.1 MATERIALS.....	7
2.2 CONSTRUCTION.....	7
2.3 DESIGN	8
2.4 MARKINGS.....	10
2.5 INSTRUCTIONS.....	11
SECTION 3 PERFORMANCE REQUIREMENTS	
3.1 GENERAL.....	12
3.2 OPERATING CONDITIONS	12
3.3 LEAKAGE	12
3.4 FLOW RATE.....	13
3.5 OPERATING EFFORT	13
3.6 MECHANICAL STRENGTH.....	14
3.7 DURABILITY	16
BIBLIOGRAPHY.....	39
APPENDICES	
A FIGURES A1–A5	18
B TEST METHODS.....	23
C UNITS OF PRESSURE MEASUREMENT.....	38

STANDARDS AUSTRALIA

Australian Standard
Manually operated gas valves

SECTION 1 SCOPE, CLASSIFICATION AND DEFINITIONS

1.1 SCOPE

This Standard specifies the minimum safety and performance requirements for manually operated valves up to 200 mm nominal size for use on—

- (a) natural gas (NG);
- (b) simulated natural gas (SNG);
- (c) town gas (TG);
- (d) tempered liquefied petroleum gas (TLP); and
- (e) liquefied petroleum gas (LPG) in vapour phase.

1.2 APPLICATION

Conformance of a manually operated valve with these requirements does not indicate that it is acceptable for use without supplemental tests in its intended application.

NOTE: Requirements for manual shut-off valves incorporated in a combination control are published in AS 4624. Requirements for cylinder valves are published in AS 2473 series.

1.3 NORMATIVE REFERENCES

The following documents are referenced in this Standard:

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

AS

2136 Method for determining the susceptibility of copper and its alloys to stress corrosion cracking using the mercurous nitrate test

AS/NZS

5601 Gas installations (series)

ISO

4437 Plastics piping systems for the supply of gaseous fuels—Polyethylene (PE)

4437-4 Part 4: Valves

EN

6057 Copper alloys—Ammonia test for stress corrosion resistance

EN

1555 Plastics piping systems for the supply of gaseous fuels—Polyethylene (PE)

1555-4 Part 4: Valves