Australian Standard[™]

Limited flexibility connectors for gas



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 15 April 2005.

This Standard was published on 8 June 2005.

The following are represented on Committee AG-011:

AGA Certification Services Appliance and Component Testing Energy Networks Association Engineers Australia Gas Appliance Manufacturers Association of Australia Gas Appliances and Services Association Gas Technical Regulators Committee LPG Australia Major Industrial Gas Installations

Keeping Standards up-to-date

Standards are living documents which 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 Standards may also be withdrawn.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 which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Web Shop at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian StandardsTM and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to the Chief Executive, Standards Australia, GPO Box 5420, Sydney, NSW 2001.

Australian Standard[™]

Limited flexibility connectors for gas

Originated as AG 216—1993. Previous edition 1998. Republished and designated AS 4631—2005.

COPYRIGHT

© Standards Australia

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.

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

PREFACE

This Standard was reviewed by the Standards Australia Committee, AG-011, Gas Components and Industrial Equipment, to supersede AG 216—1998, *Approval requirements for limited flexibility connectors for gas*. 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 limited flexibility connectors for gas.

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.

CONTENTS

SECTION 1 SCOPE AND DEFINITIONS 1.1 SCOPE

1.1	SCOPE	. 4
1.2	DEFINITIONS	. 4
SECTIO	N 2 DESIGN AND CONSTRUCTION	
2.1	MATERIALS	6
2.2	CONSTRUCTION	6
2.3	DIMENSIONS	. 7
2.4	MARKINGS	. 7
SECTIO	N 3 PERFORMANCE REOUIREMENTS	

S Q

3.1	BURST PRESSURE	8
3.2	PROOF PRESSURE	8
3.3	FLOW CAPACITY	8
3.4	RESISTANCE TO KINKING	8
3.5	RESISTANCE TO PULL	8
3.6	RESISTANCE TO CRUSHING	8
3.7	RESISTANCE TO TEMPERATURE	9
3.8	RESISTANCE TO BURNING	9
3.9	RESISTANCE TO GAS	9
3.10	FLEXIBILITY	9

APPENDICES

А	FIGURES A1—A5	10
В	METHODS OF TEST	16
С	LIST OF REFERENCED DOCUMENTS	31

Page

STANDARDS AUSTRALIA

Australian Standard Limited flexibility connectors for gas

SECTION 1 SCOPE AND DEFINITIONS

1.1 SCOPE

These requirements apply to limited flexibility connectors for use on natural gas (NG), simulated natural gas (SNG), town gas (TG), tempered liquefied petroleum gas (TLP) and liquefied petroleum gas (LPG).

Requirements for a quick-connect device incorporated in a metal connector are published as AS 4627.

1.2 DEFINITIONS

1.2.1 Authority

Means the authority having jurisdiction or such authority as delegated. (Technical Regulator).

1.2.2 Certified

Assessed by a Certifying Body, and having a certificate number to demonstrate compliance with a Standard.

1.2.3 Certifying body

A body acceptable to the Technical Regulator that provides assurance of compliance of appliances and components with nominated standards or other accepted safety criteria.

1.2.4 Gas

A combustible fuel gas which may be one of the following:

1.2.4.1 Natural gas (NG)

A hydrocarbon gas, consisting mainly of methane.

1.2.4.2 Simulated natural gas (SNG)

A gas comprising a mixture of LPG and air, in the approximate proportions of 55% gas and 45% air for commercial propane.

1.2.4.3 Town gas (TG)

A gas manufactured from coal or petroleum feedstocks.

1.2.4.4 Tempered liquefied petroleum gas (TLP)

A gas comprising a mixture of LPG and air, in the approximate proportions of 27% gas and 73% air for commercial propane.

1.2.4.5 Liquefied petroleum gas (LPG)

A gas composed predominantly of any of the following hydrocarbons, or any combination of them in the vapour phase; propane, propene (propylene), butane, butene (butylene).

1.2.5 Gas, high pressure

Gas supplied at pressures of over 200 kPa and not exceeding 1050 kPa.



This is a free preview. Purchase the entire publication at the link below:

- Looking for additional Standards? Visit <u>SAI Global Infostore</u>
- Subscribe to our Free Newsletters about Australian Standards® in Legislation; ISO, IEC, BSI and more
- Do you need to Manage Standards Collections Online?
- Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
- Do you want to know when a Standard has changed?
- Want to become an SAI Global Standards Sales Affiliate?

Learn about other SAI Global Services:

- LOGICOM Military Parts and Supplier Database
- Metals Infobase Database of Metal Grades, Standards and Manufacturers
- Materials Infobase Database of Materials, Standards and Suppliers
- Database of European Law, CELEX and Court Decisions

Need to speak with a Customer Service Representative - Contact Us