



CSA/ANSI Z21.101:22 • CSA 8.5:22
National Standard of Canada
American National Standard



Gas hose connectors for portable and moveable gas appliances



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Gas hose connectors for portable
and moveable gas appliances**



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Preface

This is the third edition of CSA/ANSI Z21.101 • CSA 8.5, *Gas hose connectors for portable and moveable gas appliances*. It supersedes previous editions published in 2018 and 2012.

The following are the major changes to this edition:

- a) manufactured, mixed, and LP gas references removed;
- b) Table [2](#) revised;
- c) the previous Annex A moved to Clause [7](#); and
- d) the previous Annex B removed.

This Standard was prepared by the ANSI/CSA Joint Technical Subcommittee on Standards on Connectors for Gas Appliances, under the jurisdiction of the Technical Committee on Performance and Installation of Gas Burning Appliances and Related Accessories and the Strategic Steering Committee on Standards for Gas Appliances and Related Accessories, and had been formally approved by the Z21/83 and CSA Technical Committees, American National Standards Institute, and the Interprovincial/Territorial Gas Advisory Council.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

This Standard has been approved by the American National Standards Institute (ANSI) as an American National Standard.

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

Interpretations: The Strategic Steering Committee on Standards for Standards for Gas Appliances and Related Accessories has provided the following direction for the interpretation of standards under its jurisdiction: “The literal text shall be used in judging compliance of products with the safety requirements of this Standard. When the literal text cannot be applied to the product, such as for new materials or construction, and when a relevant CSA committee interpretation has not already been published, CSA Group’s procedures for interpretation shall be followed to determine the intended safety principle.”

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CSA/ANSI Z21.101:22 • CSA 8.5:22

Gas hose connectors for portable and moveable gas appliances

1 Scope

1.1

This Standard applies to newly produced gas hose connectors for portable and moveable gas appliances constructed entirely of new, unused parts and materials, consisting of flexible tubing for gas leak resistance that:

- a) when used indoors, hose connectors are to be equipped with a male plug fitting, which complies with CSA/ANSI Z21.90 • CSA 6.24;
- b) are for use with indoor/outdoor gas-fired appliances;
- c) are for use on piping systems having fuel gas pressure not in excess of 5 psi (34.5 kPa);
- d) are capable of operation at temperatures between –40 °F (–40 °C) and 300 °F (149 °C);
- e) are of 1/4 in to 1-1/2 in nominal internal diameters;
- f) are of not more than 6 ft (1.83 m) nominal length for indoor use;
- g) are of not more than 15 ft (4.57 m) nominal length for outdoor use; and
- h) are equipped with standard taper pipe threads (conforming to the ASME B1.20.1 or ASME B1.20.3) on the end fittings attaching to the appliance and to the gas supply piping.

1.2

Connectors complying with this Standard are considered suitable for use with natural gas and propane.

1.3

If a value for measurement as given in this Standard is followed by an equivalent value in other units, the first stated value is to be regarded as the specification.

1.4

All references to psi throughout this Standard are to be considered gauge pressure unless otherwise specified.

1.5

Clause [7](#) contains provisions that are unique to Canada.

1.6

Clause [2](#) contains a list of standards specifically referenced in this Standard and sources from which these reference standards are obtained.

1.7

This Standard contains SI (Metric) equivalents to the yard/pound quantities, the purpose being to allow the Standard to be used in SI (Metric) units. (IEEE/ASTM SI 10 or ISO 80000-1 is used as a guide in making metric conversion from yard/pound quantities.) If a value for a measurement and a corresponding value in other units are stated, the first stated value is to be regarded as the