CSA 3.11:15
(reaffirmed 2020)

Lever operated pressure lubricated plug type gas shut-off valves

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Lever operated pressure lubricated plug type gas shut-off valves

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Contents

Preface

This is the third edition of CSA 3.11, *Lever operated pressure lubricated plug type gas shut-off valves*. It supersedes the previous editions published in 1985 and 1988.

This Standard was prepared by the Z21/CSA Joint Technical Subcommittee on Standards for Manually Operated Gas Valves, 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 CSA Technical Committee and Interprovincial Gas Advisory Council.

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 committee interpretation has not already been published, CSA Group's procedures for interpretation shall be followed to determine the intended safety principle."

Notes:

1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
2) *This Standard contains SI (Metric) units corresponding to the yard/pound quantities, the purpose being to allow the standard to be used in SI (Metric) units. (IEEE/ASTM SI 10,* American National Standard for Metric Practice*, or ISO 80000-1:2009,* Quantities and units – Part 1: General*, 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 requirement. The given corresponding value may be approximate. If a value for a measurement and a corresponding value in other units are both specified as a quoted marking requirement, the first stated unit, or both, are to be provided.*
3) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
4) *This publication was developed by consensus, which is defined by* CSA Policy governing standardization – Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity." It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this publication.*
5) *This Standard is subject to review five years from the date of publication, and suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to inquiries@csagroup.org and include "Proposal for change" in the subject line:*
   a) *Standard designation (number);*
   b) *relevant clause, table, and/or figure number;*
   c) *wording of the proposed change; and*
   d) *rationale for the change.*
6) *To submit a request for interpretation of this Standard, please send the following information to inquiries@csagroup.org and include "Request for interpretation" in the subject line:*
   a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
   b) *provide an explanation of circumstances surrounding the actual field condition; and*
   c) *where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.*

   Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at standardsactivities.csa.ca.

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Lever operated pressure lubricated plug type gas shut-off valves

1 Scope

1.1

This Standard applies to manual lever operated, pressure lubricated, straight way gas shut-off valves, sizes NPS ¼ inch to 8 inch, of metallic construction with welded, or flanged, or threaded ends, for use with natural gas, manufactured gas, and liquefied petroleum gases (distributed as vapour with or without the admixture of air), or mixtures thereof that are suitable for use between service temperatures of −60 °C (−76°F) to 180 °C (356°F) over a pressure range of zero to 862 kPa (125 psig) and withstand field pressure testing to a maximum pressure of 1290 kPa (187 psig).

Notes:

1) *Valves covered by this Standard may be used on "digester gas" (methane produced during sewage treatment), but because of entrained contaminants their use is to be subject to agreement between the manufacturer and the purchaser.*
2) *Valves covered by this Standard may not be used on "sour gas" (gas with entrained hydrogen sulphide) without additional modifications. Manufacturers should be consulted for their recommendation(s).*

1.2

A valve covered by this Standard will be limited to the service temperature and/or special provisions in accordance with Clauses 5 through 9.

Clause 5 −30 °C to 65 °C (−22°F to 149°F)

Clause 6 −40 °C to 65 °C (−40°F to 149°F)

Clause 7 −60 °C to 65 °C (−76°F to 149°F)

Clause 8 −30 °C to 120 °C (−22°F to 248°F)

Clause 9 −30 °C to 180 °C (−22°F to 356°F)

1.3

All references to kPa (psi) throughout this Standard are considered as gauge pressure unless otherwise specified.

1.4

This Standard contains SI (Metric) units corresponding to the yard/pound quantities, the purpose being to qualify the standard to be used in SI (Metric) units. (IEEE/ASTM SI 10, *American National Standard for Metric Practice*, or ISO 80000-1:2009, *Quantities and units – Part 1: General*, 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 requirement. The given corresponding value may be approximate. If a value for a measurement and a