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CSA B64 Series:21
National Standard of Canada

Backflow preventers and vacuum breakers

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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 to judge its suitability for their particular purpose.

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Preface

This is the seventh edition of the CSA B64 Series, *Backflow preventers and vacuum breakers*. It supersedes the previous editions, published in 2011, 2007, 2001, 1994, 1988, and 1976.

This edition consists of the following Standards:
- CSA B64.0, *Definitions, general requirements, and test methods for vacuum breakers and backflow preventers*;
- CSA B64.1.1, *Atmospheric vacuum breakers (AVB)*;
- CSA B64.1.2, *Pressure vacuum breakers (PVB)*;
- CSA B64.1.3, *Spill-resistant pressure vacuum breakers (SRPVB)*;
- CSA B64.1.4, *Vacuum breaker, air space type (ASVB)*;
- CSA B64.2, *Hose connection vacuum breakers (HCVB)*;
- CSA B64.2.1, *Hose connection vacuum breakers (HCVB) with manual draining feature*;
- CSA B64.2.1.1, *Hose connection dual check vacuum breakers (HCDVB)*;
- CSA B64.2.2, *Hose connection vacuum breakers (HCVB) with automatic draining feature*;
- CSA B64.3, *Dual check valve backflow preventers with atmospheric port (DCAP)*;
- CSA B64.3.1, *Dual check valve backflow preventers with atmospheric port for carbonators (DCAPC)*;
- CSA B64.4, *Reduced pressure principle (RP) backflow preventers*;
- CSA B64.4.1, R*educed pressure principle backflow preventers for fire protection systems (RPF)*;
- CSA B64.5, *Double check valve (DCVA) backflow preventers*;
- CSA B64.5.1, *Double check valve backflow preventers for fire protection systems (DCVAF)*;
- CSA B64.6, *Dual check valve (DuC) backflow preventers*;
- CSA B64.6.1, *Dual check valve backflow preventers for fire protection systems (DuCF)*;
- CSA B64.7, *Laboratory faucet vacuum breakers (LFVB)*;
- CSA B64.8, *Dual check valve backflow preventers with intermediate vent (DuCV)*; and
- CSA B64.9, *Single check valve backflow preventers for fire protection systems (SCVAF)*.

The major changes in this new edition are the following:
- addition of lead requirement in CSA B64.0;
- addition of test cock thread requirements to CSA B64.0;
- addition of test cock waterway requirement to CSA B64.0;
- removal of the dimensional requirement for support structures in CSA B64.1.4;
- removal of note from Figure 1 in CSA B64.1.4; and
- addition of note to Figure 2 in CSA B64.1.4.

These Standards are considered suitable for use for conformity assessment within the stated scopes of the Standards.

This Series of Standards was prepared by the Technical Committee on Backflow Preventers and Water Pressure Reducing Valves, under the jurisdiction of the Strategic Steering Committee on Construction and Civil Infrastructure, and has been formally approved by the Technical Committee.

These Standards have been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. They have been published as National Standards of Canada by CSA Group.

Notes:

1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*

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CSA B64.0:21

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1 Scope

1.1
The CSA B64 Series covers vacuum breakers and backflow preventers that are used in potable water supply systems to prevent cross-connections.

1.2
This Standard specifies definitions, general requirements, test methods, markings, and instructions that are common to some or all of the Standards in the CSA B64 Series.

1.3
This Standard is not a complete Standard in itself and is intended to be used in conjunction with one of the Standards in the CSA B64 Series to form a complete Standard for a particular type of vacuum breaker or backflow preventer.

1.4
In this Standard, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with each Standard in the Series; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the Standards in the Series.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

1.5
This Standard is written in SI units, which are the units of record for the purposes of this Standard.

For conversion tables, see Annex A. Vacuum is expressed in pressure below ambient. All pipe sizes are shown as nominal pipe sizes (NPS).