

American National Standard

ASSE 1022-2021



Performance Requirements for
**Backflow Preventer for Beverage
Dispensing Equipment**

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Foreword

This foreword shall not be considered a part of the standard; however, it is offered to provide background information.

The need for this standard arose from numerous requests by regulatory authorities, manufacturers of backflow prevention devices, consumers, and users of beverage dispensing equipment.

Concerns have been raised that a dual check valve alone will not show any visible indication of failure. ASSE Standard #1022, *Performance Requirements for Backflow Preventer for Beverage Dispensing Equipment*, includes two check valves and an atmospheric vent. If there is failure of the downstream check and the backpressure exceeds the supply pressure, the vent will discharge, giving a visual indication of the check valve's failure.

Although many of the material specifications are detailed within Section IV of this standard, it is the responsibility of the manufacturer and the installer to comply with the relevant jurisdictional requirements.

In February 2020, the Sample Section 2.0 was updated to remove sampling requirements language which is the purview of the testing and certification agencies. References to standards SAE J512 and SAE J513 added (previously removed in error).

This standard was promulgated in accordance with procedures developed by the American National Standards Institute (ANSI).

Compliance with this standard does not imply acceptance by any code group unless the standard has been adopted by the code.

This standard is dedicated to the memory of Dale Tripp, who was influential in backflow prevention product development and without whom this revision would not have been released.

2020 Product Standards Committee

Tsan-Liang Su, PhD, Chairperson

*Stevens Institute of Technology
Hoboken, NJ*

Karl Abrahamson

*Saint Paul Department of Safety
and Inspections
Cottage Grove, MN*

Brian Andersen

*Plumbers' JAC LU130, Chicago
Manhattan, IL*

William T. Briggs Jr.

*MGJ Associates
New York, NY*

Terry Burger (non-voting)

*ASSE International
Cleveland, OH*

William Chapin

*Professional Code Consulting, LLC
Cullman, AL*

Mark E. Fish

*Zurn Industries, LLC
Cary, NC*

Ron George

*Plumb-Tech Design & Consulting Services LLC
Newport, MI*

Mark Gibeault

*Kohler Company
Kohler, WI*

Daniel Gleiberman

*Sloan
Los Angeles, CA*

Brandon Gunnell

*Precision Plumbing Products
Portland, OR*

Chris Haldiman

*Watts Water Technologies
Springfield, MO*

John F. Higdon, P.E.

*Supply Source Solutions
Matthews, NC*

Jim Kendzel

*American Supply Association
Minneapolis, MN*

Ramiro Mata

*American Society of Plumbing
Engineers (ASPE)
Mentor, OH*

Robert Neff

*Delta Faucet
Pendleton, IN*

David Orton

*NSF International
Ann Arbor, MI*

Thomas Pitcherello

*State of New Jersey
Bordentown, NJ*

Daniel Rademacher

*Veiga, LLC
Butte, MT*

Shabbir Rawalpindiwala

*Kohler Company
Kohler, WI*

Billy Smith

*American Society of Plumbing
Engineers (ASPE)
Montgomery, AL*

ASSE 1022 Working Group (2017)

Dale Tripp, Chairperson

*Anderson Brass Co.
Hartsville, SC*

David Orton

*NSF International
Ann Arbor, MI*

John F. Higdon, P.E.

*Supply Source Solutions
Matthews, NC*

S. Scott Parkhurst

*SGS North America Inc.
Tulsa, OK*

Conrad L. Jahrling (non-voting)

*ASSE International
Chicago, IL*

George Thompson

*The Coca-Cola Co.
Atlanta, GA*

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Performance Requirements for Backflow Preventer for Beverage Dispensing Equipment

Section I

1.0 General

1.1 Application

Backflow Preventer for Beverage Dispensing Equipment (herein referred to as “device”) is engineered for installation in carbonated post-mix dispensing systems. This standard covers a backflow prevention device designed to protect the potable water supply serving beverage dispensing equipment. These devices are intended for use under continuous or intermittent pressure conditions.

1.2 Scope

1.2.1 Description

These devices shall consist of two independently acting check valves biased to a normally closed position. An atmospheric port shall be located between the check valves and shall be biased to a normally open position. The port shall vent liquids, gases, or both, under backflow conditions.

1.2.2 Minimum Flow

The device shall meet the minimum flow capacity as described in Table 1.

Table 1

Device Type	Minimum Flow Rate at a Maximum Pressure Drop of 15.0 psi (103.4 kPa)	
	GPM	L/s
A	1.00	0.06
B	2.00	0.13
C	3.00	0.19

Type indicates the flow capacity of the device and not the connection size of the device.

1.2.3 Inlet and Outlet Connections

Inlet and outlet connections shall include 1/4” (8 DN), 3/8” (10 DN), and 1/2” (15 DN) nominal pipe size.

1.2.4 Pressure Range

These devices shall function properly over the pressure range of 10.0 psi to 200.0 psi (68.9 kPa to 1379 kPa).

1.2.5 Temperature Range

These devices shall function properly over the temperature range of 40.0 °F to 130.0 °F (4.4 °C to 54.44 °C).