American National Standard

ASSE 1035-2020

Performance Requirements for

Laboratory Faucet Backflow Preventers

ASSE Board Approved: July 2020
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General Information

No product may be said to be ASSE listed unless the manufacturer has applied to ASSE International, has had the product tested by an official ASSE recognized independent laboratory, according to the applicable ASSE standard, passed the test, and has been reviewed and approved by the consensus ASSE International Seal Control Board. Having completed the aforementioned, the manufacturer may then display the ASSE Seal on the product.

Instructions for receiving the authorization to display the Seal are available from the ASSE International Office. Organizations wishing to adopt or list any ASSE standard should print the ASSE standard number on the cover page first and in equal or larger type to that of the adopting or listing organization.

ASSE International
Mokena, Illinois

Foreword

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

ASSE standards are developed in the interest of consumer safety. ASSE International is dedicated to the preservation of public health and safety through “Prevention Rather Than Cure."

Preventing potable water in plumbing systems from becoming contaminated or polluted is an important objective of ASSE’s standards program. The program addresses the development and promulgation of standards embracing performance criteria for manufactured plumbing components designed to safeguard public health and safety.

Recognizing the probable sources or causes of contamination or pollution of a potable water system that can cause it to become unfit or undesirable for human consumption is vital to the maintenance of its continued potability.

Backflow prevention is essential for all laboratory water outlets because of the serious contamination potential due to the real and/or potential cross connections present in laboratories. For this reason, this standard was developed to cover devices designed especially for this service.

This standard is one of a series of ASSE backflow prevention standards, each of which covers a different type of backflow protection device, tailored to the protective requirements essential to the specific system conditions in which it is installed and the degree of hazard involved.

Although many of the material specifications are detailed within this standard, it is the responsibility of the manufacturer to comply with the requirements of the Safe Drinking Water Act, United States Public Law 93-523.

Recognition is made of the time volunteered by members of this working group and of the support of manufacturers who also participated in meetings for this standard.

This standard does not imply ASSE International’s endorsement of a product that conforms to these requirements.

Compliance with this standard does not imply acceptance by any code body.

It is recommended that these devices be installed consistent with local codes by qualified and trained professionals.

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

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Performance Requirements for **Laboratory Faucet Backflow Preventers**

Section I

1.0 General

1.1 Application

Laboratory Faucet Backflow Preventers are designed to protect the potable water supply from pollutants or contaminants which enter the system by backflow due to backsiphonage or backpressure when faucets are connected via hose connection to various laboratory devices.

1.2 Scope

1.2.1 Description

This standard applies only to those devices classified as backflow preventers that are designed for installation on laboratory faucets on the discharge side of the last shut-off valve. These devices are not for use under constant pressure conditions. These devices consist of two independently acting check valves, force loaded or biased to a normally closed position, and between the check valves a means for automatically venting to atmosphere, force loaded or biased to normally open position.

1.2.2 Working Pressure

Devices shall be designed to operate within a working pressure of 0.0 psi (0.0 kPa) to a minimum of 125.0 psi (861.9 kPa).

1.2.3 Temperature Range

The devices shall be designed for a temperature range that includes 33.0 °F to 180.0 °F (0.6 °C to 82.2 °C).

1.2.4 Atmospheric Vent

a. The atmospheric vent shall be constructed so that it will open when the supply pressure is atmospheric or below.
b. The atmospheric vent shall be constructed so that under a backpressure condition it will open.
c. The atmospheric vent shall be constructed to provide vacuum breaking ability.

1.2.5 Repairability

a. The internal parts of the device shall be accessible for inspection, repairs or replacements.
b. All replaceable parts of the device of the same size and model shall be interchangeable with the original parts.