

**ASSE International
Product (Seal) Listing Program**

**ASSE 1011-2023
Performance Requirements for Hose Connection Vacuum Breakers**

Manufacturer: _____

Contact Person: _____ **E-mail:** _____

Address: _____

Laboratory: _____ **Laboratory File Number:** _____

Model # Tested: _____

Model Size: _____

Additional models report applies to: _____

Additional Model Information (i.e. orientation, series, end connections, shut-off valves)

Date models received by laboratory: _____ **Date testing began:** _____

Date testing was completed _____

If models were damaged during shipment, describe damages:

Prototype or production sample? _____

Were all tests performed at the selected laboratory? Yes No

If offsite, identify location: _____

General information and instructions for the testing engineer:

The results within this report apply only to the models listed above.

There may be items for which the judgment of the test engineer will be involved. Should there be a question of compliance with that provision of the standard, a conference with the manufacturer should be arranged to enable a satisfactory solution of the question.

Should disagreement persist and compliance remain in question by the test agency, the agency shall, if the product is in compliance with all other requirements of the standard, file a complete report on the questionable items together with the test report, for evaluation by the ASSE Seal Control Board. The Seal Control Board will then review and rule on the question of compliance with the intent of the standard then involved.

Documentation of material compliance must be furnished by the manufacturer. The manufacturer shall furnish to the testing agency, a bill of material which clearly identifies the material of each part included in the product construction. This identification must include any standards which relate thereto.

Section I

1.0 General

1.1 Application

Does the device meet the application?

Yes No Questionable

If questionable, explain: _____

1.2 Scope

1.2.1 Description

Does this device conform to the product described in the standard?

Yes No Questionable

If no or questionable, explain _____

1.2.2 Sizes

What is the size of the male hose threaded outlets? _____ NH

1.2.3 Pressure

Working pressure of the device: _____ psi (_____ kPa)

1.2.4 Temperature

What is the temperature range of the device? _____ °F to _____ °F (_____ °C to _____ °C)

1.2.5 Atmospheric Vent

Does this device conform to the atmospheric vent in the standard?

Yes No Questionable

If no or questionable, explain _____

Section II

2.0 Test specimens

2.1 Samples Submitted for Test

How many samples were submitted by the manufacturer? _____

2.2 Samples Tested

Which many models were selected for testing? _____

2.3 Drawings

Were assembly drawings, installation instructions, and other necessary data submitted with the device?

Yes No Questionable

If no or questionable, explain _____

Section III

3.0 Performance Requirements and Compliance Testing

3.1 Hydrostatic Pressure Tests

3.1.2 Procedure

What pressure was the device pressurized to? _____ psi (_____ kPa)

How long was the pressure held for? _____ minutes

3.1.3 Criteria

Was there any indication of external leakage?

Yes No Questionable

If yes or questionable, explain _____

Is the device in compliance with this section?

Yes No Questionable

If no or questionable, explain _____

3.2 Flow Rate and Pressure Loss

3.2.2 Procedure

What pressure differential was reached? _____ psi (_____ kPa)

What flow rate was achieved? _____ GPM (_____ L/s)

3.2.3 Criteria

Is the device in compliance with this section?

Yes No Questionable

If no or questionable, explain _____

3.3 Deterioration at Maximum Rate Temperature and Pressure

3.3.2 Procedure

What was the water temperature used for this test? _____ °F (_____ °C)

What was the pressure used for this test? _____ psi (_____ kPa)

How many total hours was water circulated through the device? _____ hours

3.3.3 Criteria

Was there any indication of external leakage?

Yes No Questionable

If yes or questionable, explain _____

Is the device in compliance with this section?

Yes No Questionable

If no or questionable, explain _____

3.4 Life Cycle Test

3.4.2 Procedure

What was the water temperature used for this test? _____ °F (_____ °C)

What was the pressure used for this test? _____ psi (_____ kPa)

How many cycles were completed? _____ cycles

How often was the solenoid valve cycled? _____ times per minute

3.4.3 Criteria

Did this affect the device's ability to comply with the remaining sections of the standard?

Yes No Questionable

If yes or questionable, explain _____

Is the device in compliance with this section?

Yes No Questionable

If no or questionable, explain _____

3.5 Resistance to Bending

3.5.2 Procedure

How long was the load applied for through the hose connections at the outlet of the device? _____ minutes

What was the torque created? _____ ft-lbf

What pressure was the device pressurized to? _____ psi (_____ kPa)

3.5.3 Criteria

Was there any indication of external leakage?

Yes No Questionable

If yes or questionable, explain _____

Is the device in compliance with this section?

Yes No Questionable

If no or questionable, explain _____

3.6 Low Head Backpressure

3.6.2 Procedure

in-H ₂ O (m-H ₂ O)	Minutes Held For
6 (0.15)	_____
24 (0.6)	_____
48 (1.2)	_____
72 (1.8)	_____
96 (2.4)	_____
120 (3.0)	_____

3.6.3 Criteria

Was there any appearance of water in the sight glass?

Yes No Questionable

If yes or questionable, explain _____

Is the device in compliance with this section?

Yes No Questionable

If no or questionable, explain _____

3.7 Atmospheric Vent Opening

3.7.2 Procedure

What was the size of the hose used? _____ NH

What was the length of the hose used? _____ feet (_____ m)

What pressure was the system pressurized to? _____ psi (_____ kPa)

What was the pressure at the inlet of the device after the quick-acting valve was opened?
_____ psi (_____ kPa)

3.7.3 Criteria

Did the device completely discharge the hose through the atmospheric vent to 0.0 psi (0.0 kPa)? Yes No Questionable

If no or questionable, explain _____

Is the device in compliance with this section?

Yes No Questionable

If no or questionable, explain _____

3.8 Leakage from Vent Ports

3.8.2 Procedure

At what inlet pressure is the highest rate of vent port leakage? _____ psi (_____ kPa)

What is the leakage flow rate? _____ oz/min (_____ mL/min)

At what inlet pressure does vent port leakage stop? _____ psi (_____ kPa)

3.8.3 Criteria

Is the device in compliance with this section?

Yes No Questionable

If no or questionable, explain _____

3.9 Backsiphonage

3.9.2 Procedure

What was the internal diameter of the sight glass used? _____ inches (_____ mm)

What was the fouling wire diameter? _____ inches (_____ mm)

a) What vacuum was applied? _____ in-Hg (_____ mm-Hg)

How long was the vacuum held for? _____ minutes

What was the vacuum slowly reduced to? _____ in-Hg (_____ mm-Hg)

b) What was the range of the vacuum during the created surge effect? _____ in-Hg (_____ mm-Hg) to _____ in-Hg (_____ mm-Hg)

3.9.3 Criteria

How much did the water rise in the sight glass? _____ inches (_____ mm)

Is the device in compliance with this section?

Yes No Questionable

If no or questionable, explain _____

3.10 Backflow Preventer Attachment Requirements

Was the device removed by applying a torque of _____ at the base of the hose bibb/device interface?

Yes No Questionable

If yes or questionable, explain _____

3.10.3 Criteria

Was the device removed with a torque less than 180 in-lb?

Yes No Questionable

If yes or questionable, explain _____

Once the backflow preventer is removed, could a garden hose thread be reattach to the device?

Yes No Questionable

If no or questionable, explain _____

Is the device in compliance with this section?

Yes No Questionable

If no or questionable, explain _____

Section IV

4.0 Detailed Requirements

4.1 Materials

Do Solder and fluxes containing lead in excess of 0.2% shall not be used in contact with potable Water?

Yes No Questionable N/A

If no or questionable, explain _____

4.1.1 Metallic Parts

Do the metal parts (except springs) in contact with the water flowing through the device have a corrosion resistance equal to a copper alloy of not less than fifty-eight percent (58%) copper?

Yes No Questionable N/A

If no or questionable, explain _____

4.1.2 Springs

Do the springs in contact with the water flowing through the device have a corrosion resistance at least equal to chrome nickel stainless steel, Series 300?

Yes No Questionable N/A

If no or questionable, explain _____

4.1.3 Seating

Is there metal to metal seating of check valves or relief means venting to atmosphere?

Yes No Questionable N/A

If yes or questionable, explain _____

4.1.4 Hose Threads

Do the hose connection threads conform to ASME B1.20.7?

Yes No Questionable N/A

If no or questionable, explain _____

Is the device in compliance with this section?

Yes No Questionable

If no or questionable, explain _____

4.2 Markings

4.2.1

Is the method of marking information on the product in compliance with the standard?

Yes No Questionable

If no or questionable, explain: _____

State the information given on the product:

Manufacturer's name or trademark: _____

Size or model number: _____

Maximum rated working pressure: _____

Maximum rated temperature: _____

4.2.2

How were the markings applied to the body of the device? _____

Is the device in compliance with this section?

Yes No Questionable

If no or questionable, explain _____

4.3 Installation Instructions

4.3.1

Were complete installation instructions packaged with the device?

Yes No Questionable

If no or questionable, explain: _____

LISTED LABORATORY: _____

ADDRESS: _____

PHONE: _____ FAX: _____

TEST ENGINEER(S): _____

If applicable:

OUTSOURCED LABORATORY: _____

ADDRESS: _____

PHONE: _____ FAX: _____

TEST ENGINEER(S): _____

Scope of outsourced testing: _____

We certify that the evaluations are based on our best judgments and that the test data recorded is an accurate record of the performance of the device on test.

Signature of the official of the listed laboratory: _____

Signature

Title of the official: _____ Date: _____