

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

**ASSE 1011-2017  
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)

**Section II**

2.0 Test specimens

2.1 Samples Submitted for Test

How many samples were submitted by the manufacturer? \_\_\_\_\_

2.2 Samples Tested

How 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 First Check Water Flow Capacity 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 Pull Test

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 <sub>2</sub> O (m-H <sub>2</sub> 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 Non-removable Feature

3.10.2 Procedure

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

- Yes  No  Questionable

If no or questionable, explain \_\_\_\_\_

Could the hose be reattached?

- Yes  No  Questionable

If yes or questionable, explain \_\_\_\_\_

3.10.3 Criteria

Was the device removed without doing damage to the hose threaded connection?

- Yes  No  Questionable

If yes 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

4.1.1 Corrosion of Interior 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: \_\_\_\_\_