# Installation, Maintenance, & Repair Series A200

Pressure Vacuum Breakers Sizes: ¾" – 2" (20 – 50mm)\*\*



### A WARNING

Read this Manual BEFORE using this equipment.

Failure to read and follow all safety and use information can result in death, serious personal injury, property damage, or damage to the equipment.

Keep this Manual for future reference.

#### A WARNING

SAFETY

FIRST

You are required to consult the local building and plumbing codes prior to installation. If the information in this manual is not consistent with local building or plumbing codes, the local codes should be followed. Inquire with governing authorities for additional local requirements.

### A WARNING

**Need for Periodic Inspection/Maintenance:** This product must be tested periodically in compliance with local codes, but at least once per year or more as service conditions warrant. If installed on a fire suppression system, all mechanical checks, such as alarms and backflow preventers, should be flow tested and inspected in accordance with NFPA 13 and/or NFPA 25. All products must be retested once maintenance has been performed. Corrosive water conditions, and/or unauthorized adjustments or repair could render the product ineffective for the service intended. Regular checking and cleaning of the product's internal components helps assure maximum life and proper product function.

### Testing

For field testing procedure, refer to Ames installation sheets IS-A-ATG-1 found on **www.amesfirewater.com.** 

For other repair kits and service parts, refer to our Backflow Prevention Products Repair Kits & Service Parts price list PL-A-RP-BPD found on **www.amesfirewater.com.** 

For technical assistance, contact your local Ames representative.

# **Installation Requirements**

- 1. Install 12" (300mm) above highest point of downstream piping.
- 2. Install bonnet side up and allow for accessibility for testing /service.
- 3. Install where discharge or spillage is not objectionable.
- 4. Do not undersize supply or oversize the valve in relation to demand.
- 5. Protect from freezing.
- 6. ASSE Standard 1020 requires that the atmospheric vent valve remains open until the valve body pressure exceeds 1lb. Until this pressure is reached, some amount of spillage will occur at the atmospheric vent. In order to minimize this leakage on startup close the downstream shutoff valve and open inlet valve quickly.



- Upstream (Inlet) Drain
- \*\* Metric Dimensions are nominal pipe diameter. This product is produced with NPT threaded end connections.



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## **Recommended Service**

- 1. Test periodically as required by local jurisdictional authorities.
- 2. Open test cocks to drain in cold climates if only operated seasonally.
- 3. Replace rubber goods every 5 years.

### Pressure — Temperature

Working Temp: 33°F – 140°F (0.5°C - 60.0°C) Max. Pressure: 150psi (10.3 bar) Min. Pressure: 15psi (103 kPa)

# **Freeze Protection Guidelines**

#### Purging of a PVB Assembly with Pressurized Air:

- 1. Close main shutoff valve.
- Open upstream drain, test cocks and isolation ball valves to depressurize line.
- 3. Purge with pressurized line

Vent Spring

Vent Seat

Vent Float

Check Spring

Check Disc

Check Disc Holder

**Outlet Shutoff Valve** 

Test Cock

**Check Spring Retainer** 

4. Leave test cocks and isolation ball valve handles in 45° angle to drain ball valves and prevent casting damage

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# Service, Replacement Parts and Maintenance

### A WARNING Depressurize valve before servicing

# Internal parts can be removed, repaired or inspected without removing the valve from the piping.

## Disassembly

- 1. Shut off the supply pressure and drain the valve.
- 2. Remove the two hood screws and the hood.
- 3. Place a wrench on the parallel flats of bonnet and stem assembly. Turn counterclockwise and remove.
- 4. Remove the vent assembly.
- 5. Press down on the spring retainer and disengage it from the retaining lugs. Then turn 90° and remove.
- Remove the spring retainer and spring. Note that the large diameter of the spring is down on the guide assembly.
- 7. Remove the check disc holder and guide assembly.
- 8. Disassemble the check disc holder assembly.

### Reassembly

Reassemble in thé reverse order utilizing the new parts from the repair kit.

#### NOTICE

Ames assemblies require minimum maintenance. All assemblies must be retested once maintenance has been performed prior to use.

For repair kits and parts, refer to our Backflow Prevention Products Repair Kits & Service Parts price list PL-A-RP-BPD found on **www.amesfirewater.com.**  WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information: www.watts.com/prop65

Limited Warranty: Ames Fire & Waterworks (the "Company") warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge.

THE WARRANTY SET FORTH HEREIN IS GIVEN EXPRESSLY AND IS THE ONLY WARRANTY GIVEN BY THE COMPANY WITH RESPECT TO THE PRODUCT. THE COMPANY MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE COMPANY HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The remedy described in the first paragraph of this warranty shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misapplication, improper installation or improper maintenance or alteration of the product.

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Hood Screws (2)

Hood

Bonnet

Seat

Body

Seat O-ring

Test Cock

Inlet Shutoff valve

Bonnet O-ring

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