Department of Safety and Professional Services
Division of Industry Services
Plumbing Product Review
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Madison, Wisconsin 53707-7162
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TTY: Contact Through Relay

October 25, 2022 Revised◊

Vista Water Group LLC
James Chandler
1244 County Road 1475
Ashland OH 44805

Re:
Description:	Dual Check Backflow Preventers
Manufacturer:	Vista Water Group LLC
Product Name:	VersaCheck and VistaCheck Dual Check Backflow Preventers: VC025-QC, VCB025, VC038-QC, VCB038, VC050, VC075, VC100, VC125, VC150 (“A” suffix = aluminum, “P” suffix = PVC) and Vistacheck Model VC250 (“A” suffix = ¼-in., “B” suffix = ⅜-in.)
Model Number(s):	VersaCheck and VistaCheck Dual Check Backflow Preventers: VC025-QC, VCB025, VC038-QC, VCB038, VC050, VC075, VC100, VC125, VC150 (“A” suffix = aluminum, “P” suffix = PVC) and Vistacheck Model VC250 (“A” suffix = ¼-in., “B” suffix = ⅜-in.)
eSLA PTO No.:	PP-102200019-PTOAA

The specifications and/or plans for these dual check backflow preventers have been reviewed and determined to comply with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an alternate approval to s. SPS 382.41 based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of October 2027.

This approval is contingent upon compliance with the following stipulation(s):

1. A copy of this approval letter shall be submitted with all plans using these dual check backflow preventers. Plans submitted without a copy of this approval letter may be denied.

2. These dual check backflow preventers shall be installed:
    a. , maintained and used in strict accordance with the manufacturer's published instructions, Chapters 381-386 Wis. Adm. Code and this product approval. If there is a conflict between the manufacturer's instructions and the Wis. Adm. Code or this Plumbing Product Approval, then the Wis. Adm. Code and this Plumbing Product Approval shall take precedence.
    b. by persons holding the proper license or registration in accordance with Wis. Stats. § 145.
    c. in any angle (e.g. vertical, horizontal) with the proper flow orientation.
    d. with pipe hangers on the inlets and outlets as specified by the manufacturer’s instructions.
    e. using water distribution piping that conforms to s. SPS 384.30(4)(e) or SPS 384.30(4)(e)3. Wis. Adm. Code up to the point of inlet connection.
    f. using fittings and connections that conform to s. SPS 384.40 Wis. Adm. Code.
    g. so the devices are accessible for cleaning and maintenance.
    h. so the maximum flow rates for specified in Table 1 of 3 are not exceeded.

3. These dual check backflow preventers shall be tested in accordance with the manufacturer’s test procedure after installation and at least once annually thereafter: https://vistawatergroup.com/docs/M2509-230104-VersaCheck-Testing-Procedures.pdf

4. The dual check backflow preventer models VCB-025 and VCB-038, shall be acceptable for use on post mix type carbonated and non- carbonated beverage dispensers, in lieu of an ASSE 1022 (“Backflow Preventer for Beverage Dispensing Equipment”) device currently specified in Table SPS 382.41-1 Wis. Adm. Code.

5. The push-fit fittings shall not be removed from these dual check backflow preventers.

6. Complete installation and maintenance instructions shall be provided to each owner and remain onsite. See attached documentation.

7. For the duration of his approval, the manufacturer shall maintain conformance of these dual check backflow preventers to ASME A112.18.1, ASME A112.18.3, ASSE 1024, ASSE 1032 (VCB models), NSF 61 and NSF 372. This approval is based upon the sum total of the aforementioned standards considered together and used within the parameters specified within Table 1 of 3.

Table 1 of 3

Model[a]	FNPT Size (in)	Max. Flow Rate (gpm)[b]	Max. Temp (f)	Max Pressure (psig)
VCB025	1/4	9.69	140	200
VCB038	3/8	12.34		
VC025-QC	1/4	2.0		150@70F 70@140F
VC038-QC	3/8			
VC050	1/2	11.84		160
VC075	3/4	17.54		
VC100	1	31.99		
VC125	1-1/4	48.81		
VC150	1-1/2	50.98		
VC250-A	1/4	2.0		150@70F 70@140F
VC250-B	3/8			

a = All models may have the suffix "A" (anodized aluminum) or "P" (PVC); except for Vistacheck models where "A" suffix = ¼-in., "B" suffix = ⅜-in.

b = flow rate at 10 psig ΔP

8. These dual check backflow preventers are approved for continuous or non-continuous pressure, under backpressure and back siphonage conditions as specified in Table 2 of 3.

Table 2 of 3

Model	Description	Specification
VC250-A	Dual check backflow preventer with 1/4" push-to-connect end connections.	ASME A112.18.1 / CSA B125.1, ASME A112.18.3 Compliant.[a]
VC250-B	Dual check backflow preventer with 3/8" push-to-connect end connections.	ASME A112.18.1 / CSA B125.1, ASME A112.18.3 Compliant.[a]
VC025-QC	Dual check backflow preventer with 1/4" push-to-connect end connections.	ASME A112.18.1 / CSA B125.1, ASME A112.18.3 Compliant.[a]
VC038-QC	Dual check backflow preventer with 3/8" push-to-connect end connections.	ASME A112.18.1 / CSA B125.1, ASME A112.18.3 Compliant.[a]
VC050-A to VC150-A[d]	Dual check backflow preventer with 1/2" to 1-1/2" valves - Aluminum	ASME A112.18.1 / CSA B125.1, ASME A112.18.3[a] and ASSE 1024[b] Compliant.
VC050-P to VC150-P[d]	Dual check backflow preventer with 1/2" to 1-1/2" valves - PVC	ASME A112.18.1 / CSA B125.1, ASME A112.18.3[a] and ASSE 1024[b] Compliant.
VCB025-A to VCB038-A[d]	Dual check backflow preventer with 1/4" and 3/8" valves for use with carbonated beverage dispensers – Aluminum	ASME A112.18.1 / CSA B125.1, ASME A112.18.3[a] , ASSE 1024[b] , and 1032[c] Compliant.
VCB025-P to VCB038-P[d]	Dual check backflow preventer with 1/4" and 3/8" valves for use with carbonated beverage dispensers – PVC	ASME A112.18.1 / CSA B125.1, ASME A112.18.3[a] , ASSE 1024[b] , and 1032[c] Compliant.

a = This standard covers plumbing supply fittings and accessories located between the supply stop and the terminal fitting, inclusive, as follows:

1. automatic compensating valves for individual wall-mounted showering systems;
2. bath and shower supply fittings;
3. bidet supply fittings;
4. clothes washer supply fittings;
5. commercial pre-rinse spray valves;
6. drinking fountain supply fittings;
7. humidifier supply stops;
8. kitchen, sink, and lavatory supply fittings;
9. laundry tub supply fittings;
10. lawn and sediment faucets;
11. low pressure water dispensers;
12. metering and self-closing supply fittings;
13. showerheads, handheld showers, and body sprays; and
14. supply stops.

b = This standard covers a device used to protect potable water supplies from low hazard pollution at residential services lines and individual outlets. These devices are intended for continuous or intermittent pressure conditions with cold water service. Usage of hot water is limited to the temperature specified by the manufacturer.

c = This standard covers a device used to protect carbonated beverage dispensers, post mix type, and non-carbonated beverage dispensers. These devices operate under continuous or intermittent pressure conditions.

9. These dual check backflow preventers shall be installed, maintained and used in strict accordance with the manufacturer's instructions, Chapters 382 - 384 Wis. Adm. Code and this Alternate Approval. If there is a conflict between the manufacturer's instructions and the Wis. Adm. Code or this Alternate Approval, then the Wis. Adm. Code and this Alternate Approval shall take precedence.

   The manufacturer has provided a list of acceptable and unacceptable applications for the VersaCheck Dual Check Backflow Preventers, which is itemized in Table 3 of 3:

Table 3 of 3

Representative Examples of Versacheck Applications[1]	
Acceptable Applications	**Unacceptable Applications**
Pedicure chairs (hot and cold-water supply stops)[2]	Irrigation systems
Hair salon shampoo sinks (hot and cold-water supply stops and sprayers)[2]	Commercial kitchen dishwashers with booster pumps and/or rinse chemical injectors
Dialysis systems (stationary and portable)	HVAC make-up water for cooling towers
Dental or medical tabletop sterilizers and accessories (with no toxic chemicals or feeders)	Commercial pressure cookers
Dental filtration systems	Laboratory sinks with waste trap
High purity water systems (e.g., RO, DI, distillation)	Coin-operated laundromats with chemical injection
All non-carbonated beverage dispensing applications (VC & VCB Series – ASSE 1024)	Fountains or reflecting pools
All carbonated beverage and espresso dispensing applications (VCB Series – ASSE 1024/1032)	Cooling condensers with closed-loop city water feed
Steam tables and food humidification cabinets	Apartment buildings/condominiums with pressure boosters feeding multiple units
Commercial ice machines	Rainwater harvesting systems with potable water backup
Residential boilers (with no toxic chemicals or feeders)	Any basin or tank with submerged inlets
Refrigerator with water and ice dispensers	Industrial chemical injection systems (e.g., plating, pesticide mixing, etc.)
Water softeners and filters	Car washes with chemical injection and/or reuse systems
Residential fire sprinkler systems (with no toxic chemicals or feeders)	Boiler systems using corrosion inhibitors, antifreeze and other chemical additives
Hose bibbs[2], pull out sprayers[2] and hose reel sprayers (without chemicals or feeders)[2]	Sewerage treatment facility containment
Automatic compensating valves for individual wall-mounted showering systems	Chemical feeder systems for water treatment plants and industrial processes
Bath and shower supply fittings[2]	Paint booths or spray equipment with direct municipal water connections
Bidet supply fittings[2]	Photo development labs with chemicals (e.g. silver nitrate, acetic acid, etc.)
Clothes washer supply fittings	Commercial fire sprinkler systems with antifreeze or foam injection
Commercial pre-rinse spray valves[2]	RV dump stations with municipal water connections
Drinking fountain supply fittings[2]	Commercial laundry systems with injection of bleach, acids or fabric softeners
Non-submerged humidifier supply stops	Chiller systems with glycol loops directly connected to potable water
Kitchen, sink and lavatory supply fittings[2]	Hospitals, mortuaries and autopsy sinks with aspirators or washdown systems, sterilizers (all other), endoscopes, etc.
Laundry tub fittings[2]	Farms or dairies with chemical feeders and/or booster pumps connected to potable water
Lawn and sediment faucets[2]	Marinas, wharves or docks containment
Low-pressure water dispensers[2]	Swimming pool make up water
Metering and self-closing supply fittings[2]	Water powered back up sump pumps
Showerheads, hand-held showers and body sprayers[2]	Potable water backup for reuse systems
Supply stops[2]	Sewage pump seal water lubrication

1 = The above list is not exhaustive but general recommendations. There may be installation scenarios that are not included. If a specific application falls outside of these examples or raises any questions, then consult with the Wisconsin Department of Safety and Professional Services directly.
2 = Existing installation where the fixture does not conform to ASME A112.18.1/CSA B125.1 or does not have an ASME A112.18.3 backflow prevention device.

Technical notations:

a. Manufacturer's website: https://vistawatergroup.com/versacheck

b. The standards that appear on the labeling of these dual check backflow preventers are based on the QAI laboratory test report, listings and the standard(s) a specific device was tested to: https://qai.org/directory/vista-water-group-llc-2/

c. This approval also recognizes the functional identicality of these dual check backflow preventers as displayed in Table 2 of 3 of this letter.

◊ = Revised September 11, 2025 to revise Table 2 of 2 (now 2 of 3), and create Table 3 of 3.

Revised May 9, 2025 to include the most recent QAI test report covering ASME A112.18.1/CSA B125.1, ASME A112.18.3, ASSE 1024 and ASSE 1032. See attached.

Revised January 24, 2025 to remove erroneous DWV language from stipulation #2; add a written statement representing the content displayed within Table 2 of 2 as stipulation number 8;

Revised March 16, 2023 to specify a test procedure and minimum frequency of testing and replace text with a table that specifies the cross-connection control attributes of each model and the standards they conform to.

Revised March 23, 2023 to clarify Table 2 of 2, resolve confusion between the standards and add footnote technical notation "b."

The department is in no way endorsing these dual check backflow preventers, or any advertising, and is not responsible for any situation which may result from their use.

Sincerely,

Michael D. McNally J.

Michael McNally – Section Chief
Department of Safety and Professional Services
Bureau of Technical Services
Division of Industry Services
Phone: 262-548-5861
Email: MichaelD.McNally@wisconsin.gov

QAI LABORATORIES
CERTIFICATION TESTING INSPECTION

VANCOUVER, BC: 877.461.8378 ph. | 604.527.8368 fx.
LOS ANGELES, CA: 909.483.0250 ph. | 909.483.0336 fx.
TULSA, OK: 918.437.8333 ph. | 918.437.8487 fx.
TORONTO, ON 905.605.5444
WEBSITE: WWW.QAI.ORG

PLUMBING PRODUCTS LISTING PROGRAM

Customer:	Vista Water Group, LLC
Class:	Dual Check Backflow Preventers
Location:	Ashland, OH
Website:	https://vistawatergroup.com
Listing No.	P379-2
Effective Date:	December 13, 2021
Last Revised Date:	August 5, 2025
Expires:	N/A

Standards:

ASME A112.18.1 / CSA B125.1	*Plumbing Supply Fittings.*
ASSE A112.18.3	*Performance Requirements for Backflow Protection Devices And Systems In Plumbing Fixture Fittings*
ASSE 1024	*Performance Requirements for Dual Check Backflow Preventers.*
ASSE 1032	*Performance Requirements for Dual Check Backflow Preventers for Carbonated Beverage Dispensers, Post Mix Type*.
NSF 61	*Drinking Water System Components – Health Effects*.
NSF 372	*Drinking Water System Components – Lead Content.*

Product: Vista Dual Check Backflow Preventers of the Following Types:

MODELS	
PVC	Anodized Aluminum
VCB025-P	VCB025-A
VCB038-P	VCB038-A
VC050-P	VC050-A
VC075-P	VC075-A
VC100-P	VC100-A
VC125-P	VC125-A
VC150-P	VC150-A
VC250-A	-
VC250-B	-
VC025-QC	-
VC038-QC	-

Markings: Products are marked in a permanent manner where it is readily visible after installation with the following:

a) Manufacturer's name or trademark

VANCOUVER, BC: 877.461.8378 ph. | 604.527.8368 fx.
LOS ANGELES, CA: 909.483.0250 ph. | 909.483.0336 fx.
TULSA, OK: 918.437.8333 ph. | 918.437.8487 fx.
TORONTO, ON 905.605.5444
WEBSITE: WWW.QAI.ORG

b) Model designation
c) The wording “ASME A112.18.1 / CSA B125.1”, ”ASME A112.18.3” or “ASME 1024”, or “ASSE 1032” as appropriate.
d) QAI logo with ‘c’ and ‘us’ or “us” identifier as outlined below as appropriate.
e) QAI file Number: P379-2

or

*cQAIus mark applied to products compliant with CSA B125.1 products.

Ratings: Vista Water Group Dual Check Backflow Preventers comply with the requirements as outlined below.

Table 1. Vista Water Group Dual Check Backflow Preventer Specifications

MODEL	DESCRIPTION	SPECIFICATION
VC250-A[1]	Dual check backflow preventer with ¼’’ push-to-connect end connections.	ASME A112.18.1 / CSA B125.1, ASME A112.18.3 Compliant.
VC250-B[1]	Dual check backflow preventer with 3/8’’ push-to-connect end connections.	ASME A112.18.1 / CSA B125.1 , ASME A112.18.3 Compliant.
VC025-QC[1]	Dual check backflow preventer with ¼’’ push-to-connect end connections.	ASME A112.18.1 / CSA B125.1, ASME A112.18.3 Compliant.
VC038-QC[1]	Dual check backflow preventer with 3/8’’ push-to-connect end connections.	ASME A112.18.1 / CSA B125.1, ASME A112.18.3 Compliant.
VC050-A to VC150-A[1]	Dual check backflow preventer with ½’’ to 1-1/2’’ valves – Aluminum	ASME A112.18.1 / CSA B125.1, ASME A112.18.3, and ASSE 1024 Compliant.
VC050-P to VC150-P[1]	Dual check backflow preventer with ½’’ to 1-1/2’’ valves - PVC	ASME A112.18.1 / CSA B125.1, ASME A112.18.3, and ASSE 1024 Compliant.
VCB025-A to VCB038-A[1]	Dual check backflow preventer with ¼’’ and 3/8’’ valves for use with carbonated beverage dispensers - Aluminum	ASME A112.18.1 / CSA B125.1, ASME A112.18.3, ASSE 1024, and ASSE 1032 Compliant.
VCB025-P to VCB038-P[1]	Dual check backflow preventer with ¼’’ and 3/8’’ valves for use with carbonated beverage dispensers - PVC	ASME A112.18.1 / CSA B125.1, ASME A112.18.3, ASSE 1024, and ASSE 1032 Compliant.

Note 1: Products have been found eligible for use in potable water systems based on evaluation to NSF 61 and NSF 372 requirements.

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The materials, products or systems listed herein have been qualified to bear the QAI Listing Mark under the conditions stated with each Listing. Only those products bearing the QAI Listing Mark are considered to be listed by QAI. No warranty is expressed or implied, and no guarantee is provided that any jurisdictional authority will accept the Listing found herein. The appropriate authorities should be contacted regarding the acceptability of any given Listing. Visit the QAI Online Listing Directory located at www.qai.org for the most up to date version of this Listing and to validate that this QAI Listing is active. Questions regarding this listing may be directed to info@qai.org. Please include the listing number in the request.

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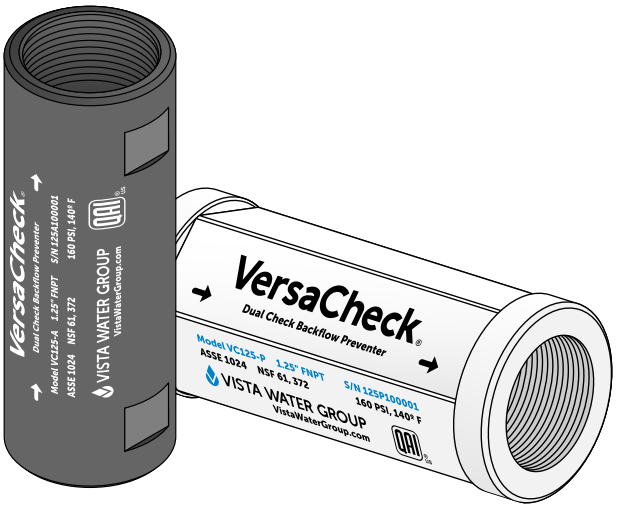
VersaCheck®

Dual Check Backflow Preventers

PATENTS PENDING



Specifications	
Max Operating Temperature	140º F
Max Operating Pressure	160 psi
Medium	Water
Spring Cracking Pressure	> 1.2 psi
Horizontal or Vertical Orientation	Yes
Continuous or Intermittent psi	Yes

Standards Certification & Compliance

✓ **QAI-Listed Product**

- ASSE 1024
- ASME A112.18.1 / CSA B125.1
- ASME A112.18.3
- NSF 61
- NSF 372
- Meets California Health & Safety Code 116875

Lead-Free

PVC Schedule 80 Models		
Model Number	FNPT Size	Max Flow Rate *
VC050-P	1/2"	11.84 Gpm
VC075-P	3/4"	17.54 Gpm
VC100-P	1"	31.99 Gpm
VC125-P	1-1/4"	48.81 Gpm
VC150-P	1-1/2"	50.98 Gpm

*** Maximum flow rate at 10 psi pressure drop**

Hardcoat Anodized 6061 Aluminum Models		
Model Number	FNPT Size	Max Flow Rate *
VC050-A	1/2"	11.84 Gpm
VC075-A	3/4"	17.54 Gpm
VC100-A	1"	31.99 Gpm
VC125-A	1-1/4"	48.81 Gpm
VC150-A	1-1/2"	50.98 Gpm

*** Maximum flow rate at 10 psi pressure drop**

See reverse side for installation details and drawings

Threaded Ports

All high-flow VersaCheck® backflow preventers feature female NPT inlet and outlet ports for maximum flexibility and inventory control. Hundreds of fittings can be used to suit various installation requirements. See detailed instructions on the reverse side of this page for proper installation of male NPT fittings into both PVC and Aluminum models.

Notices to Installer / Owner

- Always follow local plumbing/building codes
- Read all instructions prior to installing
- Keep these instructions for future reference
- Protect from freezing temperatures
- Install in an accessible location for servicing
- Flush debris from piping prior to installation
- Never solder on or near check valve assemblies
- Never overtighten fittings into valve ports
- Never install a VersaCheck without proper pipe supports on both the inlet and outlet sides. Suspending the VersaCheck in a long pipe run would create unwanted side loading that could potentially damage the VersaCheck, pipe, or fittings.

Warranty

Vista Water Group®, LLC (VWG) warrants VersaCheck Dual Check Backflow Preventers to be free of defects in materials and workmanship when properly installed for one (1) year from the date of installation. Covered product must be returned to the address below freight prepaid and, if found defective, will be repaired or replaced free of charge at VWG's sole discretion. VWG's liability shall be limited to the agreement to repair or replace the covered product.

M2502/250909

Installation Procedure

Specific installation steps will vary based on the application or use of VersaCheck Dual Check Backflow Preventers since they can be used for the following and more:

- Potable Water Mains
- Cold Supply Lines
- Hot Supply Lines
- Pull-Out Sprayer Lines
- R/O & D/I Systems
- Dialysis Systems
- Residential Fire Sprinklers
- Residential Applications
- Commercial Applications
- Industrial Applications
- Healthcare Applications
- Food Service Applications
- Hair Salons & Spas
- Specialty Applications

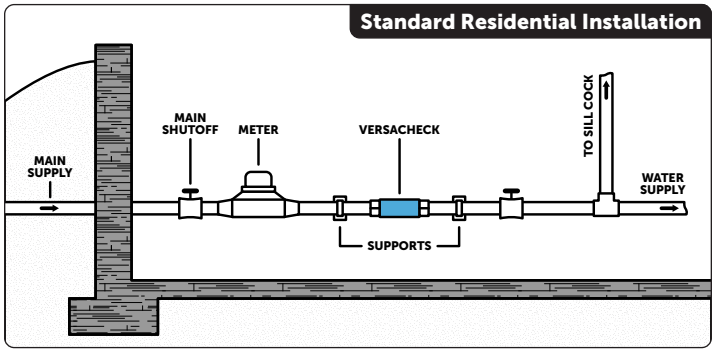
See the following typical installation diagrams for more details.

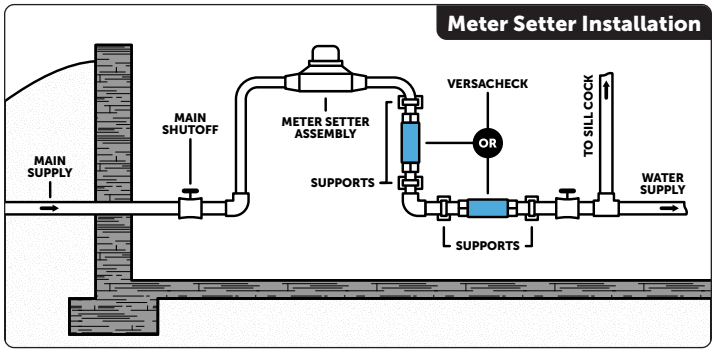
Proper Installation of Male NPT Fittings

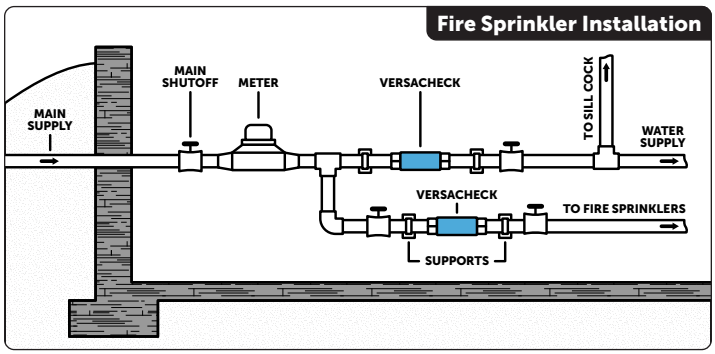
Tapered threads are "free running" until the male and female thread paths fully wedge to form a seal. Turning past "free running" will increase stress, especially on the female fitting. **Never over-tighten fittings.** The proper way to assemble an NPT joint (especially for PVC fittings) is to use a compatible thread sealant paste or tape then never tighten more than one or two full turns beyond "finger tight."

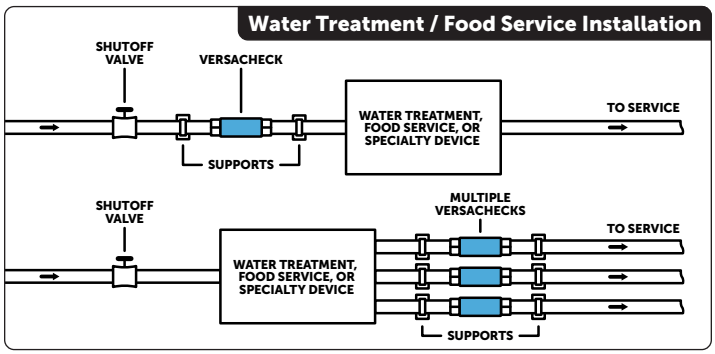
Please note: because connection requirements vary widely, the Male NPT fittings necessary for proper installation are not included with the VersaCheck body. Simply select the appropriate, commonly available Male NPT fittings appropriate for the installation.

Typical Installations





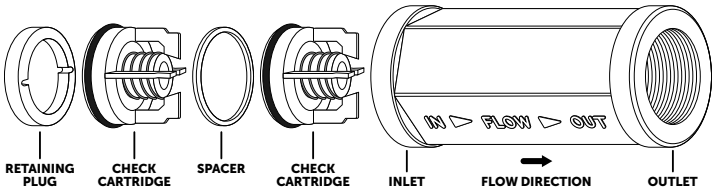




Cleaning or Replacing Internal Checking Components

To clean debris from backflow preventer, inspect or replace internal components:

1. Turn off water supply and depressurize system.
2. Remove VersaCheck body from the installation by unthreading MNPT connection fittings.
3. Unthread the retaining plug from the inlet with pliers.
4. Using a blunt tool, carefully push the check valves and spacer out of the body from the outlet end.
5. Rinse check valves and do NOT use solvents to clean.
6. Re-install cleaned/new checks and spacer using a blunt tool into the inlet. Push only on the perimeter of the check cartridges. NEVER push directly on the plunger of the check valve cartridge.
7. Re-install retaining plug by threading with finger or a tool and snug gently. Do not overtighten.
8. Re-install Male NPT connection fittings and reconnect to water line(s) following installation instructions above.



VISTA WATER GROUP
♦ VistaWaterGroup.com ♦ (419) 565-5702
♦ 1244 County Road 1475, Ashland, OH 44805

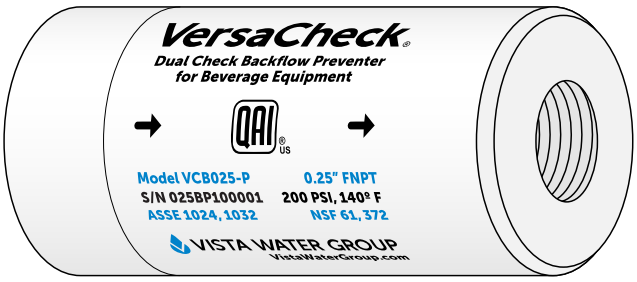
M2502/250909

VersaCheck®

Dual Check Backflow Preventers

PATENTS PENDING

For Beverage-Dispensing Equipment
INCLUDING POST-MIX SYSTEMS



Specifications	
Max Operating Temperature	140º F
Max Operating Pressure	200 psi
Medium	Water
Spring Cracking Pressure	> 1.35 psi
Horizontal or Vertical Orientation	Yes
Continuous or Intermittent psi	Yes

PVC Schedule 80 Models		
Model	**FNPT Size**	**Max Flow Rate ***
VCB025-P	1/4"	9.69 Gpm
VCB038-P	3/8"	12.34 Gpm

* Maximum flow rate at 10 psi pressure drop

Hardcoat Anodized 6061 Aluminum Models		
Model	**FNPT Size**	**Max Flow Rate ***
VCB025-A	1/4"	9.69 Gpm
VCB038-A	3/8"	12.34 Gpm

* Maximum flow rate at 10 psi pressure drop

Warranty

Vista Water Group®, LLC (VWG) warrants VersaCheck Dual Check Backflow Preventers to be free of defects in materials and workmanship when properly installed for one (1) year from the date of installation. Covered product must be returned to the address below freight prepaid and, if found defective, will be repaired or replaced free of charge at VWG's sole discretion. VWG's liability shall be limited to the agreement to repair or replace the covered product.

Standards Certification & Compliance

✓ **QAI-Listed Product**

- ASME A112.18.1 / CSA B125.1
- ASME A112.18.3
- ASSE 1024
- ASSE 1032
- NSF 61
- NSF 372
- Meets California Health & Safety Code 116875

Lead-Free

VersaCheck® Dual Check Backflow Preventers for beverage-dispensing equipment provide cost-effective backflow protection of the public water supply from carbon dioxide gas and carbonated water. These substances can flow backwards from post-mix beverage systems and, if they contact copper tubing, can cause leaching of copper salts into the main water supply and a potential health risks if ingested. VersaCheck prevents the reverse flow of this potentially contaminated water into the potable water supply. All models provide backsiphonage and backpressure protection when installed according to directions and in accordance with local plumbing requirements.

Threaded Ports

All high-flow VersaCheck backflow preventers feature female NPT inlet and outlet ports for maximum flexibility and inventory control. Hundreds of fittings can be used to suit various installation requirements. See detailed instructions on the reverse side of this page for proper installation of MNPT fittings.

Notices to Installer / Owner

- Always follow local plumbing/building codes
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- Install in an accessible location for servicing
- Flush debris from piping prior to installation
- Never solder on or near check valve assemblies
- Never overtighten fittings into valve ports

See reverse side for installation details and drawings

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Installation Procedure

Specific installation steps will vary based on application or use. See the following typical installation diagrams for more details.

Please note: because connection requirements vary widely, the Male NPT fittings necessary for proper installation are not included with the VersaCheck body. Simply select the appropriate, commonly available Male NPT fittings appropriate for the installation.

Proper Installation of Male NPT Fittings

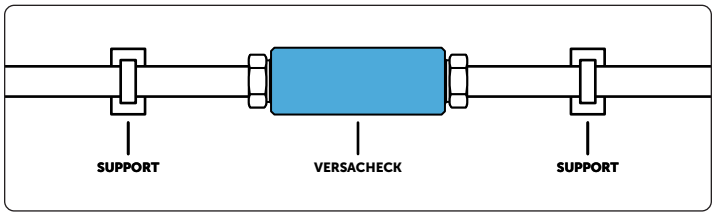
Tapered threads are "free running" until the male and female thread paths fully wedge to form a seal. Turning past "free running" will increase stress, especially on the female fitting. **Never over-tighten fittings.** The proper way to assemble an NPT joint (especially for PVC fittings) is to use a compatible thread sealant paste or tape then never tighten more than one or two full turns beyond "finger tight."

Installer Notes

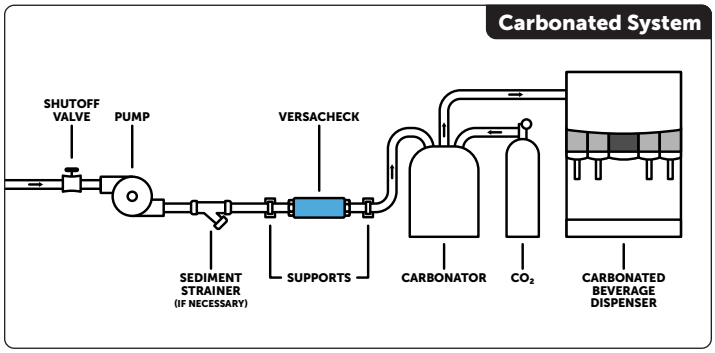
- Make certain to install VersaCheck in an area accessible for inspection and preventive maintenance, never in a concealed location.
- Copper tubing **can** be used on the downstream side of a **non-carbonated system**. Copper tubing should **not** be installed on the downstream side of a **carbonated system**.
- If the source water is known to contain debris, it is recommended to install a screened line strainer ahead of the VersaCheck to prevent plugging of the internal check valves. If a strainer is installed, it will need to be cleaned periodically to prevent flow restriction and/or pressure drop.

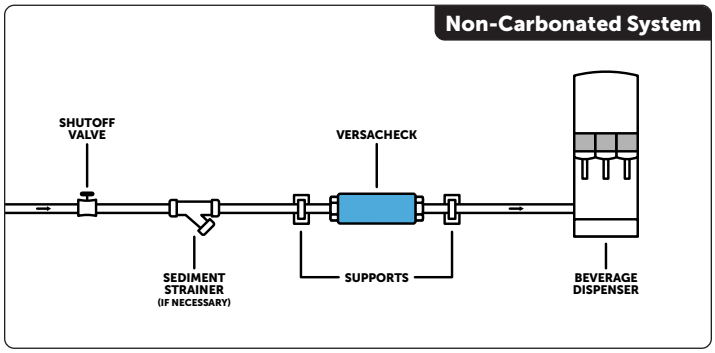
Proper Supports

Never install a VersaCheck without proper pipe supports on both the inlet and outlet sides. Suspending the VersaCheck in a long pipe run without proper supports could create unwanted side loading that could damage the VersaCheck, pipe or fittings.



Typical Installations

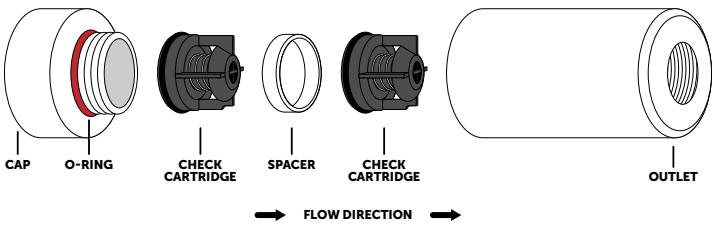




Cleaning or Replacing Internal Checking Components

To clean debris from backflow preventer, inspect or replace internal components:

1. Turn off water supply and depressurize system.
2. Remove VersaCheck body from the installation by unthreading MNPT connection fittings.
3. Unthread the inlet cap from the body by hand or plier.
4. Using a blunt tool, carefully push the check valves and spacer out of the body from the outlet end.
5. Rinse check valves and do NOT use solvents to clean.
6. Re-install cleaned/new checks and spacer using a blunt tool into the inlet. Push only on the perimeter of the check cartridges. NEVER push directly on the plunger of the check valve cartridge.
7. Re-install the inlet cap by threading by hand and snug gently. Do not overtighten.
8. Re-install Male NPT connection fittings and reconnect to water line(s) following installation instructions above.



VISTA WATER GROUP
♦ VistaWaterGroup.com ♦ (419) 565-5702
♦ 1244 County Road 1475, Ashland, OH 44805

M2503/250909

VersaCheck® QC

Dual Check Backflow Preventers for Low-Flow Applications

The VersaCheck® QC Dual Check Backflow Preventer, developed in 2004 for dental and medical water treatment, exceeds FDA medical device standards and is safe for potable water and food contact applications. QAI-listed, it meets most state and local plumbing codes for backflow and cross-connection protection in continuous pressure applications, such as sinks or sprayer-equipped fixtures that may contact non-potable liquids.

VersaCheck features two independently acting, normally closed check valve cartridges. These function under continuous or intermittent pressure in any flow direction, thanks to spring-loaded plunger assemblies. Each cartridge undergoes 100% factory testing for drip-tight operation.

With low head loss and cracking pressure, VersaCheck is compatible with municipal, filtered well, and high-purity water (RO, deionized, distilled). Its materials resist chemicals like chlorine, chlorine dioxide, and chloramines. Designed for up to ⅜" pipe size and 2.0 gpm flow, it includes ¼" or ⅜" push-to-connect fittings for easy installation in plumbing, water treatment, or medical applications.

NOTE: The installed push-to-connect fittings may not be removed and are designed to be used with ¼" or ⅜" O.D. plastic, copper, and brass tubing only.

Standards Certification & Compliance

- ASME A112.18.1 / CSA B125.1
- ASME A112.18.3
- NSF 61
- NSF 372
- 100% Lead-Free
- Meets California Health & Safety Code 116875

Warranty

Vista Water Group, LLC (VWG) warrants VersaCheck Dual Check Backflow Preventers to be free of defects in materials and workmanship when properly installed for one (1) year from the date of installation. Covered product must be returned freight prepaid and, if found defective, will be repaired or replaced free of charge at VWG's sole discretion. VWG's liability shall be limited to the agreement to repair or replace the covered product.

VISTA WATER GROUP

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Specifications	
Diameter	1.00″
Length (VC025-QC)	3.50″
Length (VC038-QC)	4.125″
Weight	1.3 oz / 1.5 oz
Max Operating Temp	140º F
Max Operating Pressure	150 psi @ 70º F
Max Flow Rate @ 10 psi Drop	2.0 gpm (7.57 Lpm)

Installation Procedure

1. Cut the tube squarely and, if using plastic tubing, ensure that the cut has not made the tube out of round. Also ensure that the tube has a smooth outside diameter without any burrs or score marks prior to inserting it into the fitting.

2. Insert the tube into the fitting by pushing it through the collet and o-ring until it bottoms out against the tube stop (plunge depth of approximately 11⁄16″). The collet holds the tube in place and the o-ring provides a leak-resistant seal.

3. Test and inspect the connection by pushing and pulling the tubing toward and away from the fitting to ensure that it has been installed properly and does not leak.

To remove the tubing from the fitting, relieve any water pressure from the tubing and fitting. Push the collet flange against the fitting body while pulling the tubing away from the fitting to release it.

NOTE: Make certain the VersaCheck is installed in the correct orientation for flow direction. Otherwise, it will block all flow.

In certain applications, VersaChecks may also be used on clean compressed air lines. However, it is recommended to use them with oil-less compressors only. Hydrocarbons from oil-type compressors could damage thermoplastic parts.

Adapter Fittings

IMPORTANT WARNING: Do not remove the push-in fittings from the body of a VersaCheck. Doing so will void the warranty and void the QAI certification. Always adapt to the ¼″ and ⅜″ push-in fittings with appropriate fittings as needed.

Testing Procedures

QAI-listed VersaChecks can be tested both prior to and after installation in several ways. For detailed instructions, visit VistaWaterGroup.com/testing.

M2605/250217

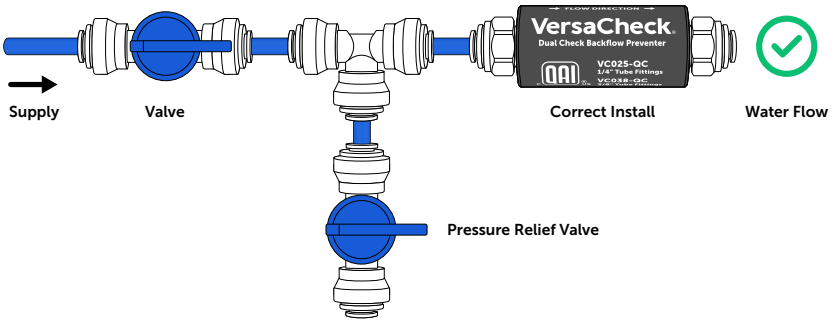
VersaCheck®

Testing Procedures

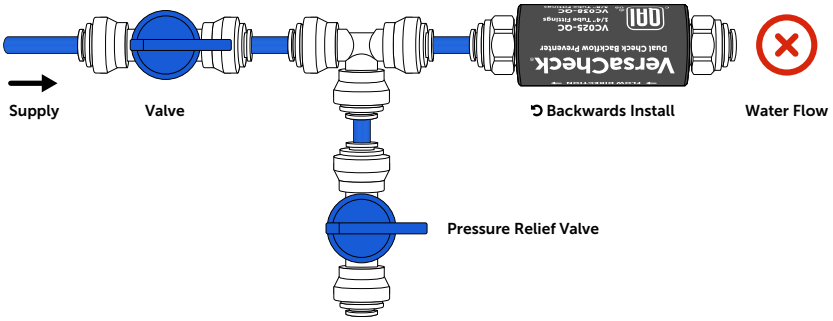
VersaCheck dual check backflow preventers are testable by two different methods. Some local code authorities or inspectors may require testing prior to installation and/or periodically.

Test Method 1 (Applies to all VersaCheck models)

1. Connect the water supply tubing to the inlet of the VersaCheck and turn on the water to make certain it flows correctly through the unit.



2. Now flip the VersaCheck and connect the water supply tubing to the outlet of the VersaCheck. In other words, intentionally install it backwards. Turn on the water to make certain the dual checks stop the flow of water. If no water passes through, that means the internal check valves are functioning properly.



Test Method 2 (Applies to any VersaCheck models with quick-connect fittings installed)

1. Start with the VersaCheck in the normal pressurized service position. This means that the source water is flowing and the outlet downstream of the VersaCheck is closed.

2. Shut off the inlet water supply and relieve the pressure on the inlet side of the VersaCheck. Examine the ends of the VersaCheck. It is designed with collets on each end that move away from the white fitting body when the fitting is under pressure. When there is no pressure in the fitting, the collets can be easily pushed against the fitting body. Please see the diagrams below that show the position of collets under various pressure conditions.

3. Attempt to push the collet on the outlet side of the VersaCheck (position B) back against the fitting body. If there is strong resistance or the collet cannot be moved, this indicates that the check valve is working properly since pressure from the line running to the service point is still present. If the collet can be pushed back against the fitting body at position B, that check valve is not working properly and should be examined for damage or an obstruction immediately then repaired or replaced.

No pressure on inlet or outlet
Collets can be easily pushed against fitting body

Pressurized inlet and outlet
Collets can not be easily pushed against fitting body

Pressurized outlet, depressurized inlet
Separation of collet and fitting at 3B means check valve is working

M2509/230328