

Backflow preventer with intermediate atmospheric vent

573 Series

Installation, commissioning and servicing instructions



Function

The backflow preventer with atmospheric vent is designed to protect drinking water systems from the return, caused by backsiphonage or backpressure, of contaminated fluids.

The Caleffi 573 series has been specifically certified to standards CSA B64.3 and ASSE 1012.



Product range

573 series backflow preventer with atmospheric vent
size 1/2" - 3/4" NPT female threaded connection with union
size 1/2" sweat connection with union



Technical characteristics

Connections:	1/2" - 3/4" NPT female with union 1/2" SWT with union
Materials:	Body: brass Filter: stainless steel Check valve: PSU Check valve stem: brass Diaphragm: EPDM Seals: EPDM
Maximum working pressure:	175 psi (12 bar)
Maximum working temperature:	210°F (99°C)
Emergency back pressure temperature:	250°F (121°C)
Medium:	water
Certified to:	CSA B64.3 and ASSE 1012



SAFETY INSTRUCTION

This safety alert symbol will be used in this manual to draw attention to safety related instructions. When used, the safety alert symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN A SAFETY HAZARD.**



CAUTION: All work must be performed by qualified personnel trained in the proper application, installation, and maintenance of systems in accordance with all applicable codes and ordinances.



CAUTION: If the backflow preventer is not installed, commissioned and maintained properly, according to the instructions contained in this manual, it may not operate correctly and may endanger the user.



CAUTION: Make sure that all the connecting pipework is water tight.



CAUTION: When making the water connections, make sure that the backflow preventer connecting pipework is not mechanically overstressed. Over time this could cause breakages, with consequent water losses which, in turn, could cause harm to property and/or people.

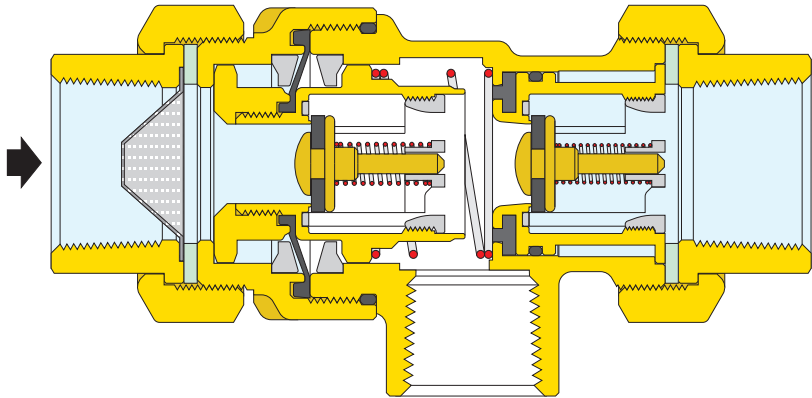


CAUTION: Water temperatures higher than 100°F can be dangerous. During the installation, commissioning and maintenance of the backflow preventer, take the necessary precautions to ensure that such temperatures do not endanger people.



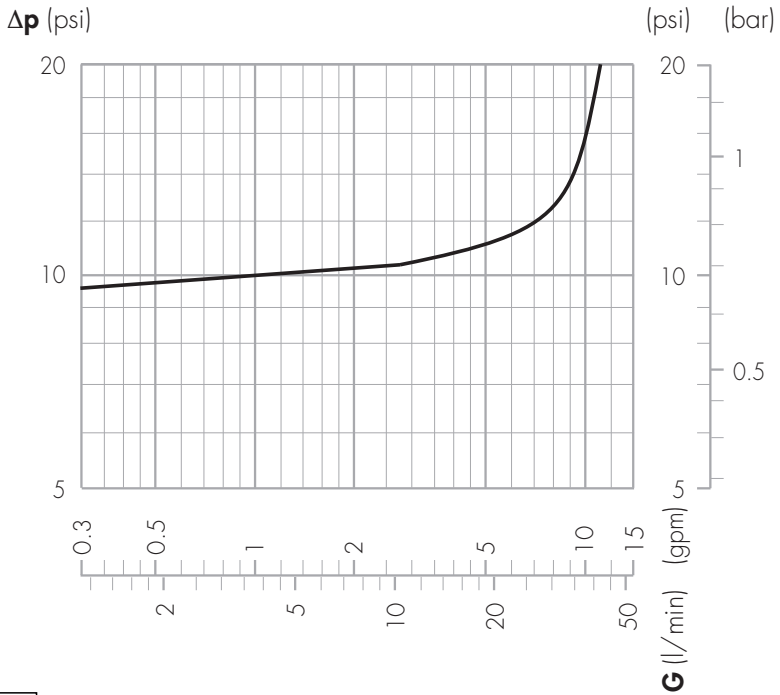
CAUTION: In the case of highly aggressive water, arrangements must be made to treat the water before it enters the backflow preventer, in accordance with current legislation. Otherwise the valve may be damaged and will not operate correctly.

Leave this manual for the user.



VENT

Flow rate graph



Cv = 0.7

Installation

The Caleffi 573 series backflow preventer with atmospheric vent must be installed in accordance with the diagrams contained in this instruction manual taking into account all the applicable Codes and Regulations.

Before installing a Caleffi 573 series backflow preventer, the system must be thoroughly flushed to remove impurities or any debris which may have accumulated during installation. Failure to remove dirt or debris may affect performance and the manufacturer's guarantee.

The Caleffi 573 series backflow preventer must be installed preferably horizontally and following the flow direction indicated by the arrow on the valve body.

The Caleffi 573 series backflow preventer must be installed with one isolating valve and a strainer upstream and one isolating valve downstream.

The Caleffi 573 series backflow preventer must be installed in an accessible location to facilitate testing and servicing.

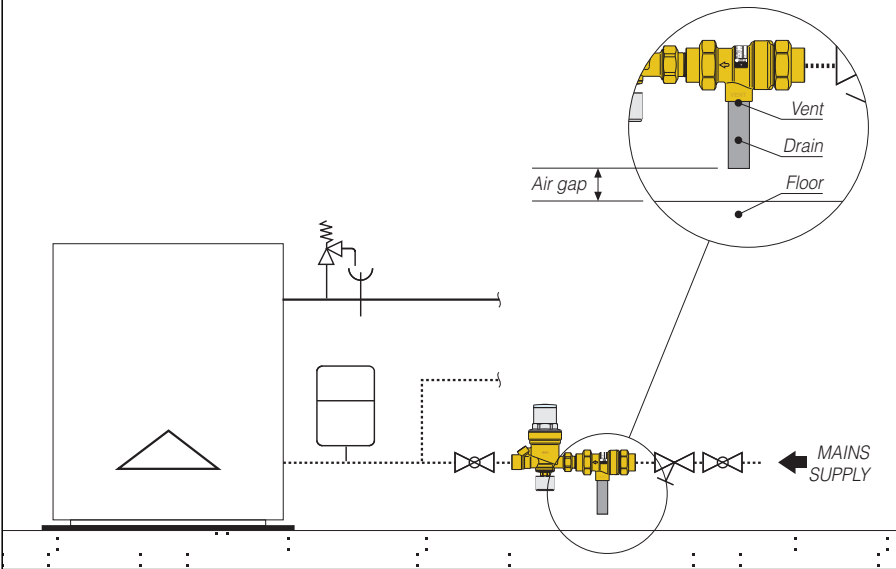
The Caleffi 573 series backflow preventer must be installed with the vent port connected via an air gap to a discharge line, in accordance with the plumbing code requirements and keeping a minimum distance of 12" from the floor.

Do not install where the discharge can could cause damage.

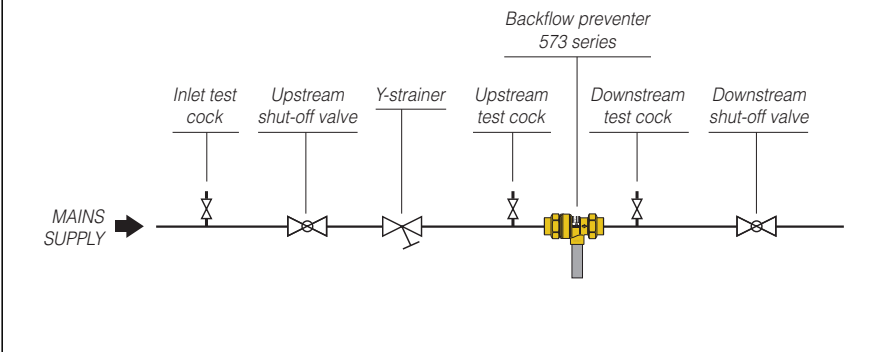
If field testing is required by code, it must be installed in accordance with the relevant diagram in this instruction manual.

Installation diagram

Heating system application



Field testing installation



Field testing procedure

1) Check operation of the discharge. When inlet water pressure drops to atmospheric, the valve must open the vent port and discharge the contained amount of water in the valve body.

- a. -close shutoff valves upstream and downstream.
- b. -open the upstream test cock

The water contained in the body must be discharged, indicating that the diaphragm has opened the vent port.

2) Check for tightness of the internal second check valve. When backpressure is applied to the downstream side of the valve, the internal second check valve must close back drip tight on its seat.

- a. -close shutoff valves upstream and downstream.
 - b. -open the upstream test cock
 - c. -install a removable bypass hose connecting inlet test cock to downstream test cock and open them for admitting pressure to the downstream side of the internal second check valve
- Water must not drip from the vent port indicating that the second check valve is not leaking.

Service

The internal parts of the backflow preventer are replaceable. Spare parts are available upon request.



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