

# **AQUAVENT** REFILL VALVE FOR PRESSURE BOOSTED WATER SUPPLY SYSTEMS



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## **REFILL VALVE FOR PRESSURE BOOSTED WATER SUPPLY SYSTEMS**

#### **Overview**

### Automatic Combined Air Release, Anti Vacuum & Surge Protection Valve.

The Aquatech Pressmain AquaVent valve is designed to help assist with the draining down and refilling of pressure boosted water supply pipework by helping to prevent damaging pressure shocks from occurring. Whether a system pipework is drained down intentionally for maintenance or unintentionally as a result of the pressure booster set stopping, either by power interruption or a low water condition there is the potential of pressure shocks when the pressure booster restarts. The AquaVent works to help prevent these shock conditions developing by allowing the system to be properly vented at all times and without wasting water.

During filling the vent will provide controlled discharge air release from the empty pipework, resulting in an effective deceleration of the water column as it rises to the top of the system. When all air is evacuated the valve will close, as it is of a balanced design it will seal the system with very little or no loss of water. Should the system require draining the valve ensures that a vacuum break can occur eliminating the possibility of a negative pressure within the draining riser.

The AquaVent should be used in conjunction with either the REPRESS power restoration electronic safety system included with our 2020+ microprocessor controllers or our REPRESS FS system for fixed speed pumpsets.

#### Construction

The AquaVent is manufactured entirely from Brass and Stainless Steel with VITON and PTFE seals and as such is suitable for potable water use. In order to prevent system borne debris (swarf, rust fragments etc.) from hindering the operation of the valve a fine mesh strainer is employed as part of the upper valve assembly.

#### Installation

The AquaVent must be installed at the top most point of the pipework to be at its most effective in protecting the whole system. Where a site has multiple risers an AquaVent should be installed at the top of each riser. Connection to the system is via a 3/4" female connection with isolating valve, which is provided to allow servicing.

A 3/8" female exhaust port is provided, allowing any released water to be discharged externally to the building or to a drain via a suitable tundish. The maximum pressure at the valve should not exceed 6 bar in order to ensure correct operation. A PRV fitted at the bottom of the riser may be required in order to achieve this.

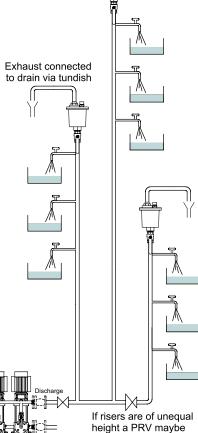
#### **Design and Operating Conditions**

Operating temperature range: Maximum operating pressure: Maximum allowable pressure: System / Exhaust Connections: 3/4" Female System

5-60°C 6 Bar 13.5 Bar 3/8" Female Exhaust 4kg

Weight of valve:

**Typical Installation** 



required here to limit the pressure at the top of each riser to 6 Bar



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The information in this specification is correct at time of issue; as Aquatech Pressmain design and development programmes are continuous, we reserve the right to make any changes to this specification without prior notice.