



INSTALLATION INSTRUCTIONS

Model No. 720 AIR ELIMINATOR

The Model 720 Air Eliminator is a unique high capacity, air elimination valve.

A level sensing mechanism (a float and lever assembly) in the air collection chamber controls the elimination mechanism which operates the valve.

In the shut position, the positive sealing action is created by a float style system.

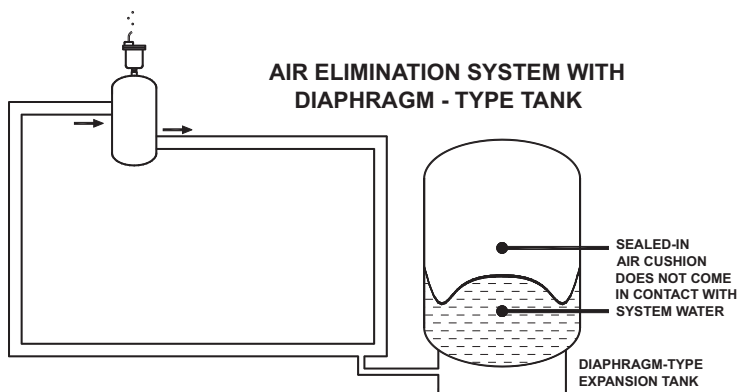
An unusually large exit orifice is possible because of this design feature and the result is a high rate of air elimination - an important factor with lower pressures at the top of the piping system (performance curves are available).

The No. 720 air elimination valve should be installed at high points in the piping system to eliminate air as the system is filled or, as part of the air separation and elimination package, at the top of risers and on the suction side of the system pump.

PRESSURIZATION AND AIR ELIMINATION SYSTEM

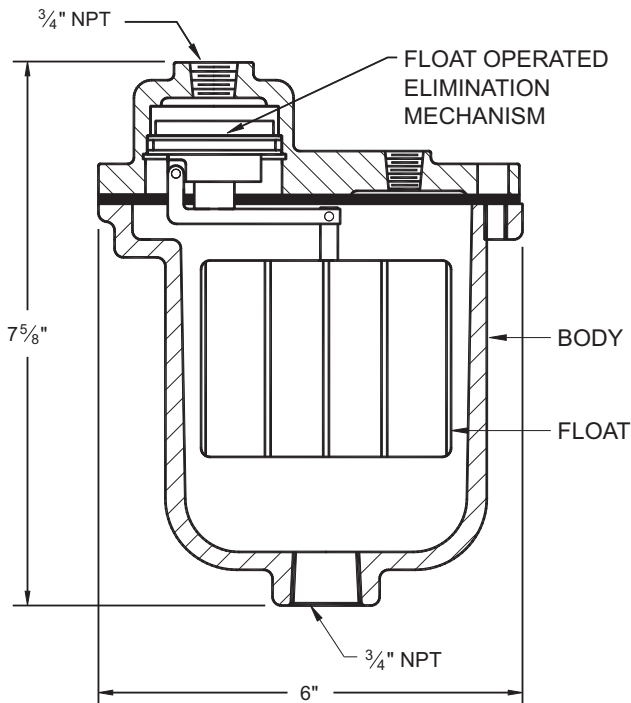
The valve is also an essential component in the pressurization and air elimination system.

This system includes the bladder or diaphragm - type tank which controls system pressure within a desired range. Its operation depends on a properly sized pre-charged air cushion.



The third essential component in the air elimination system is the tangential-type air separator which separates entrained air from flowing system water by the creation of a vortex which will allow free air to rise in the center, the point of lowest velocity, to the air collection chamber in the body of the air elimination valve.

The air separator and air elimination valve can be combined and become the air separation and elimination package.

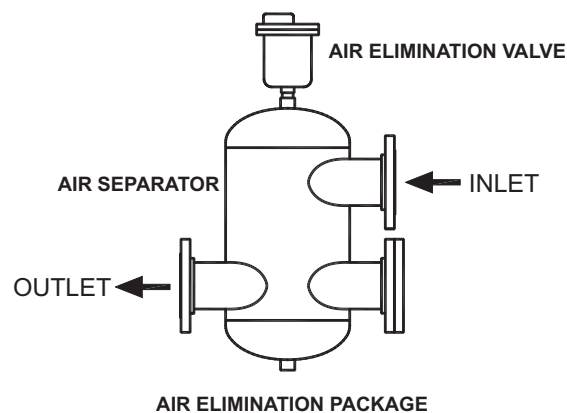


Operating pressure range - 0 psig to 150 psig
Vent will not open if negative pressures occur.

Maximum operating temperature - 250°F

Material:

Body and cover - cast iron
Bolts and nuts - stainless steel
Vent Mechanism - bronze





AIR SEPARATORS

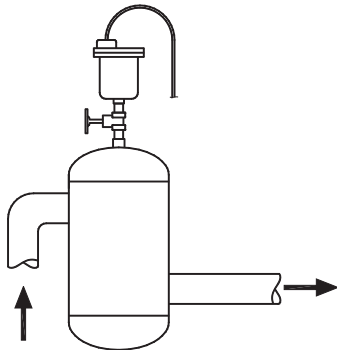
INSTALLATION

The air separation and elimination package should be installed at the top of risers to protect the system and on the suction side of the system pump to protect the pump.

The No. 720 Air Elimination valve should be installed at high points in the piping and components in the system where air could accumulate. The location should be accessible for inspection and maintenance.

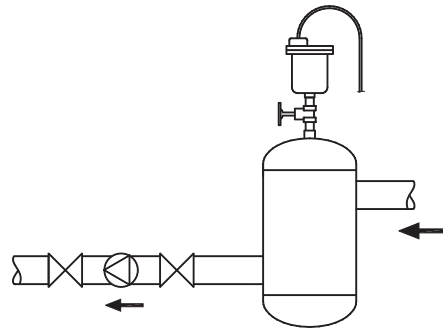
Shut off valves should be provided to facilitate cleaning and replacement of the float and pilot assembly if necessary.

Because vapor many times escapes with system air and can condense, good practice indicates that a line should be piped to drain, sink or container which could be readily checked by maintenance personnel.



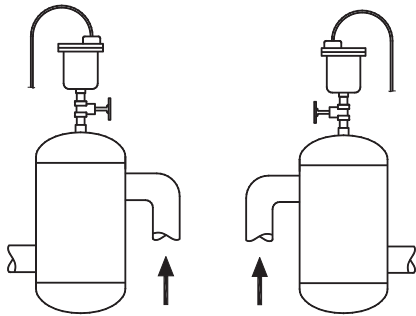
Step 1

The air separator and air elimination valve installed at the top of the supply riser where most air bubbles will form.



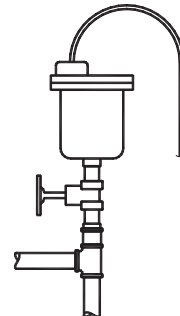
Step 3

An air separator and air elimination valve should be installed on the suction side of the pump to prevent entrained air bubbles from causing cavitation.



Step 2

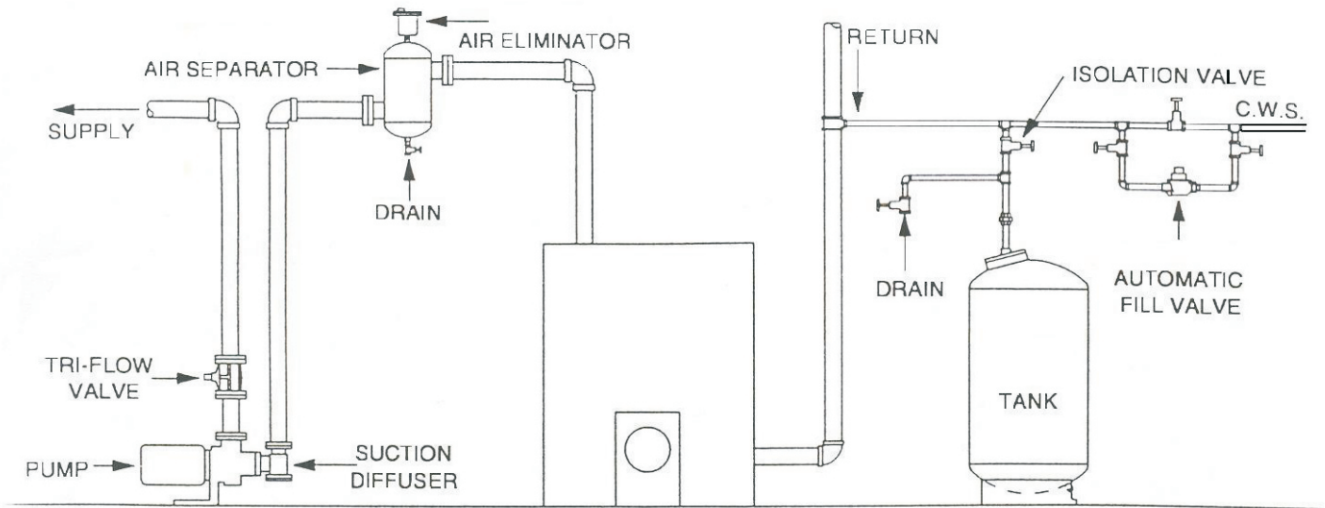
Where two or more supply risers are used, an air separator and air elimination valve should be installed at the top of each to protect lateral piping and components fed by that riser.



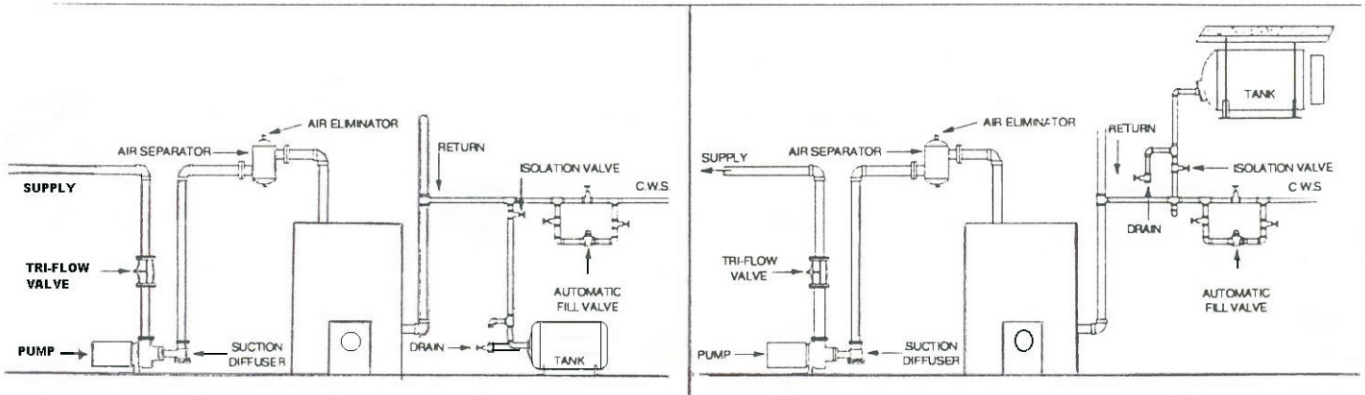
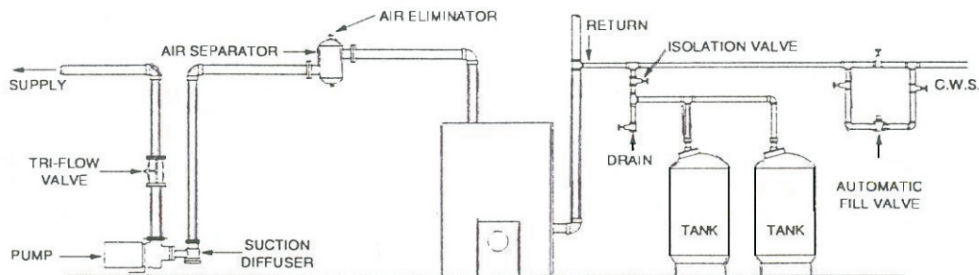
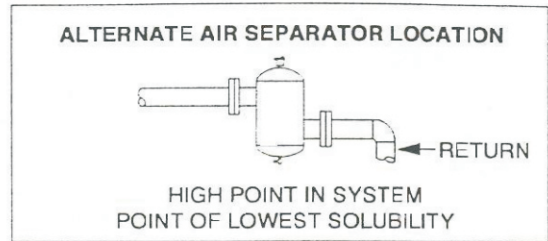
Step 4

An air elimination valve should be installed at high points in piping and on all components in the system where air could accumulate.

SUGGESTED PIPING DIAGRAM



ALTERNATE PIPING DIAGRAMS



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