

Hydraulic Backup Valve

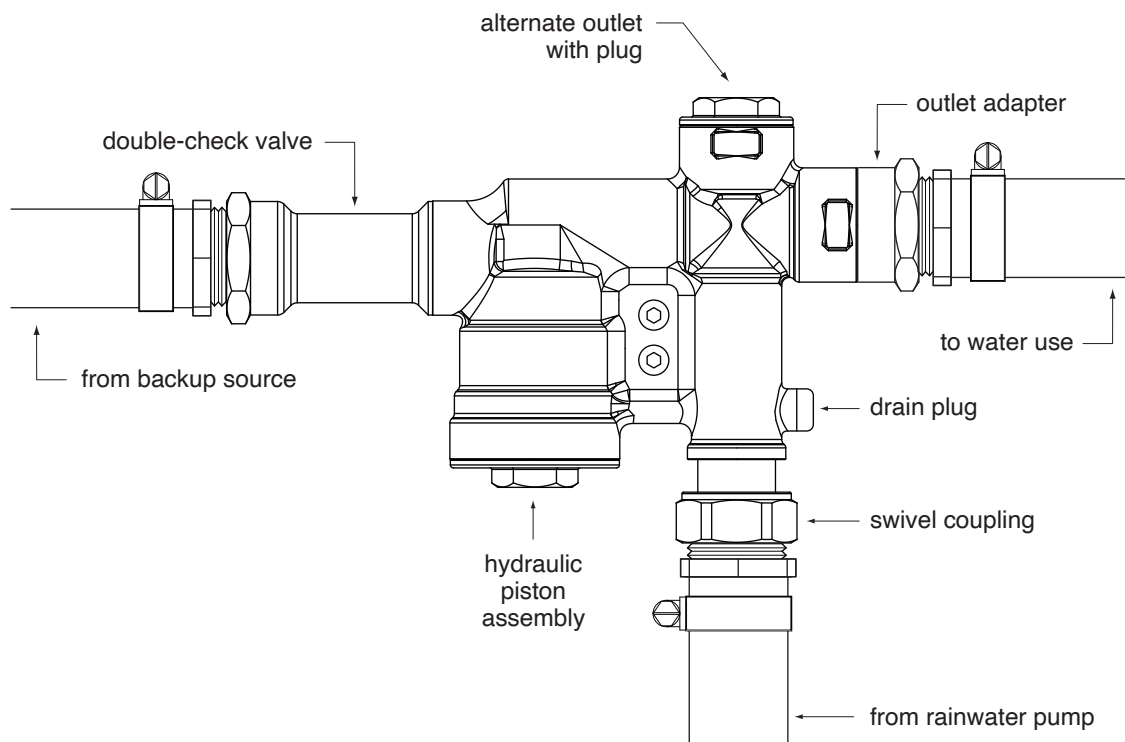
When rainwater is not available, the Hydraulic Backup Valve automatically switches from a rainwater pump to a backup water source. It does not require electricity, is fully waterproof, is unaffected by sunlight, and can be mounted in any position. It is made of heavy-duty chrome-plated solid brass and all ports are one-inch female threaded NPT.

The valve must be used with a rainwater pump that provides a minimum of 50 psi continuous pressure at the valve inlet. The incoming water pressure slides an internal hydraulic piston assembly that blocks the backup water supply and allows the rainwater flows directly to the outlet port. If the rainwater pump cannot deliver pressurized water because there is no rainwater in the cistern (or during a power outage) the piston slides back and allows the backup water to flow to the outlet port.



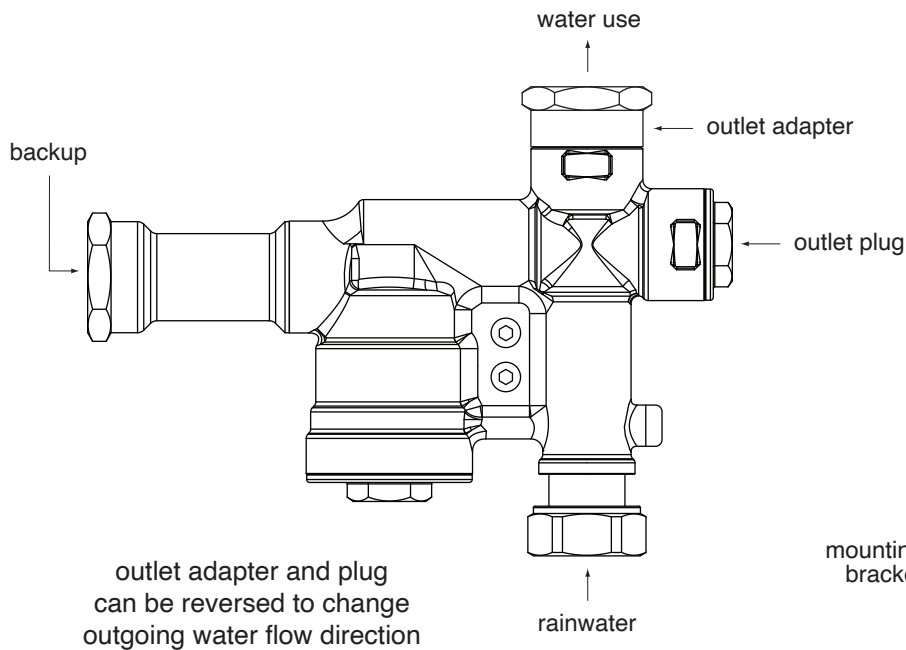
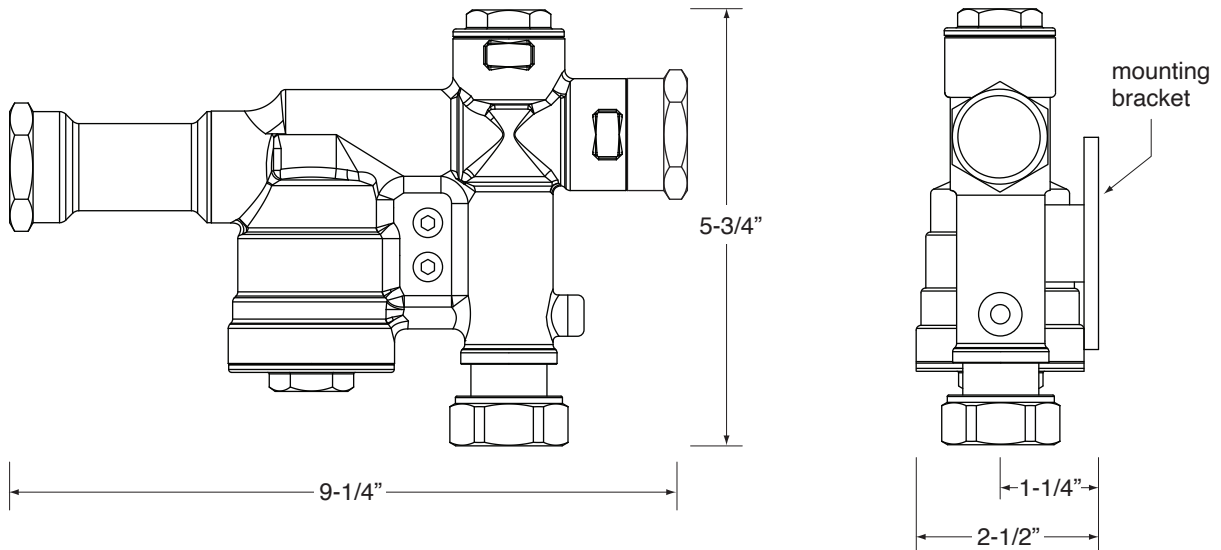
A check valve built into the rainwater inlet prevents reverse flow of backup water to the rainwater pump, and a double-check valve at the backup water inlet prevents reverse flow of rainwater to the backup water source. For additional protection, an external reduced-pressure backflow preventer may be required for the backup supply by local codes.

A reversible mounting bracket can be used to mount the heavy valve to a wall or to the side of a tank riser for use with flexible piping or hoses, or the bracket can be removed and the valve can supported by rigid piping. By simply switching the outlet adapter with the outlet plug, the outlet direction can be rotated in line with the pump inlet.

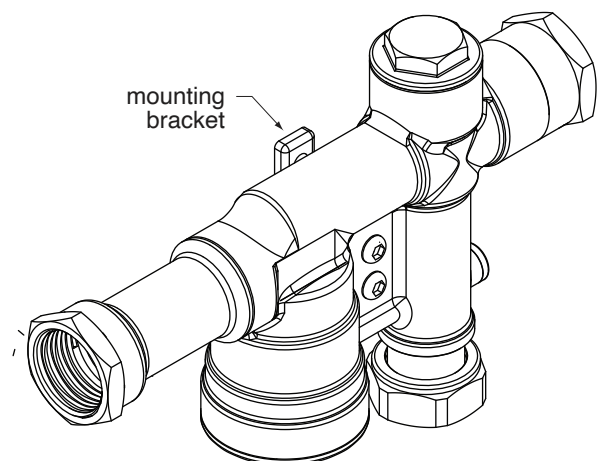


PHYSICAL CHARACTERISTICS

Inlets	Outlets	Max Flow	Min Pressure	Max Pressure	Max Temp	Weight
1" npt	1" npt	25 gpm	50 psi	145 psi	120°F	4 lb

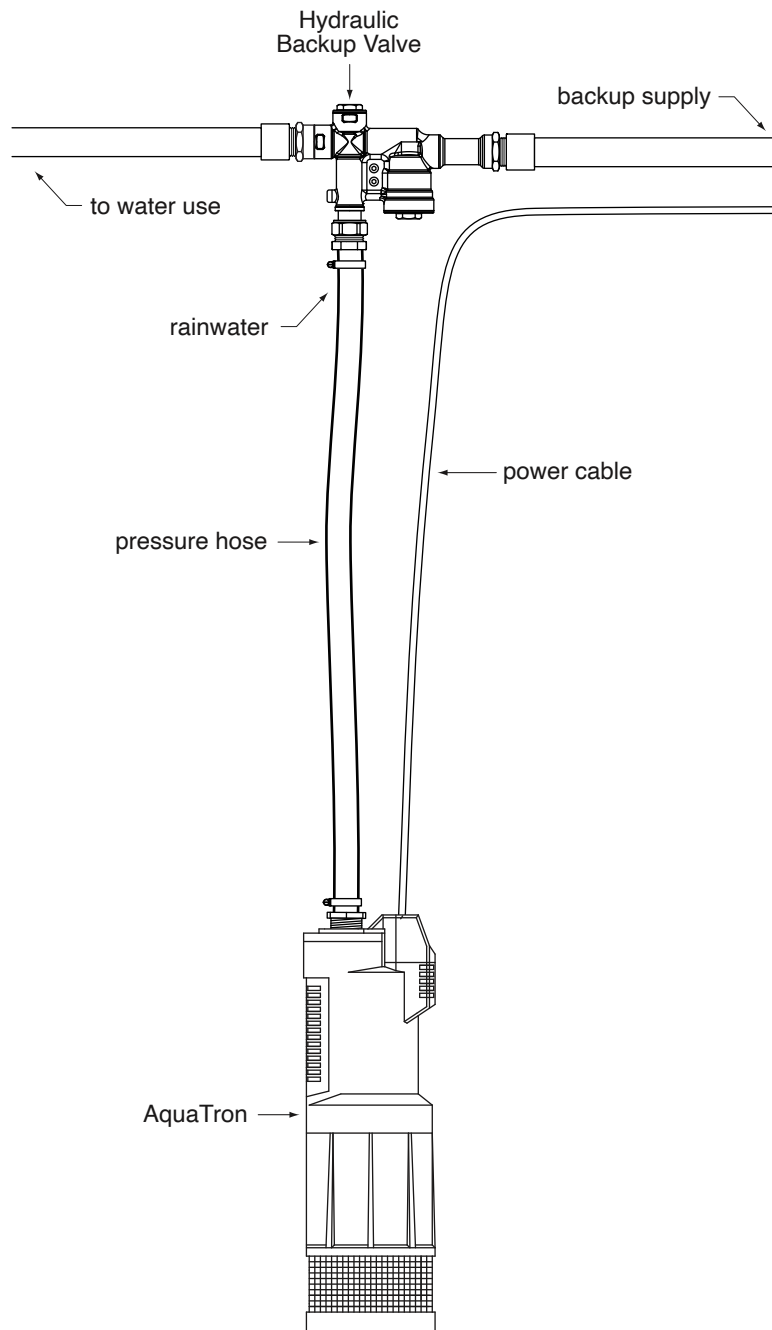


mounting bracket can be installed on either face or can be removed



INSTALLATION WITH SUBMERSIBLE PUMPS

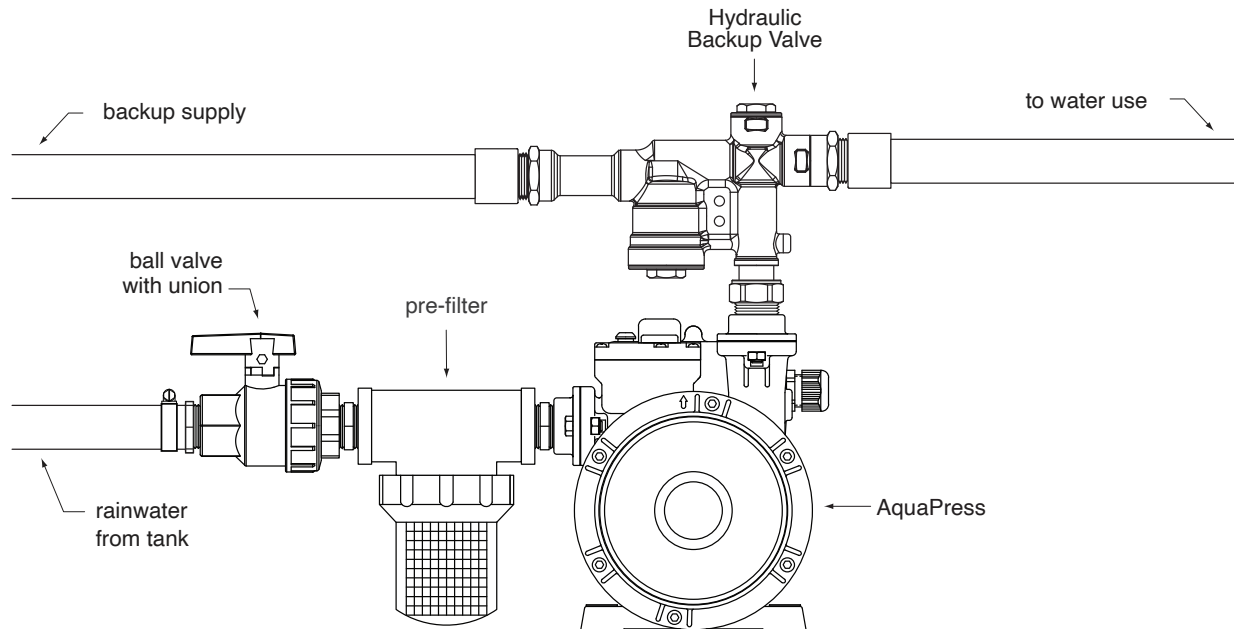
The Hydraulic Backup Valve can be used with any submersible pump that delivers a minimum of 50 psi continuous pressure at the valve inlet, typically a pump that is controlled by an internal or external electronic pump controller. If the pump is deactivated by a dry-run protection system, the Hydraulic Backup Valve will not revert to the rainwater supply until pump pressure is restored, which means the pump controller must automatically attempt to re-prime until the next rainfall. If the pump controller does not provide this feature, a low-water float switch must be installed to disconnect power to the pump before it can run dry.



automatic submersible pump with Hydraulic Backup Valve

INSTALLATION WITH SURFACE PUMPS

The Hydraulic Backup Valve can be used with any surface pump that delivers a minimum of 50 psi continuous pressure at the valve inlet, typically a pump that is controlled by an internal or external electronic pump controller. If the pump is deactivated by a dry-run protection system, the Hydraulic Backup Valve will not revert to the rainwater supply until pump pressure is restored, which means the pump controller must automatically attempt to re-prime until the next rainfall. If the pump controller does not provide this feature, a low-water float switch must be installed to disconnect power to the pump before it can run dry.



automatic surface pump with Hydraulic Backup Valve