

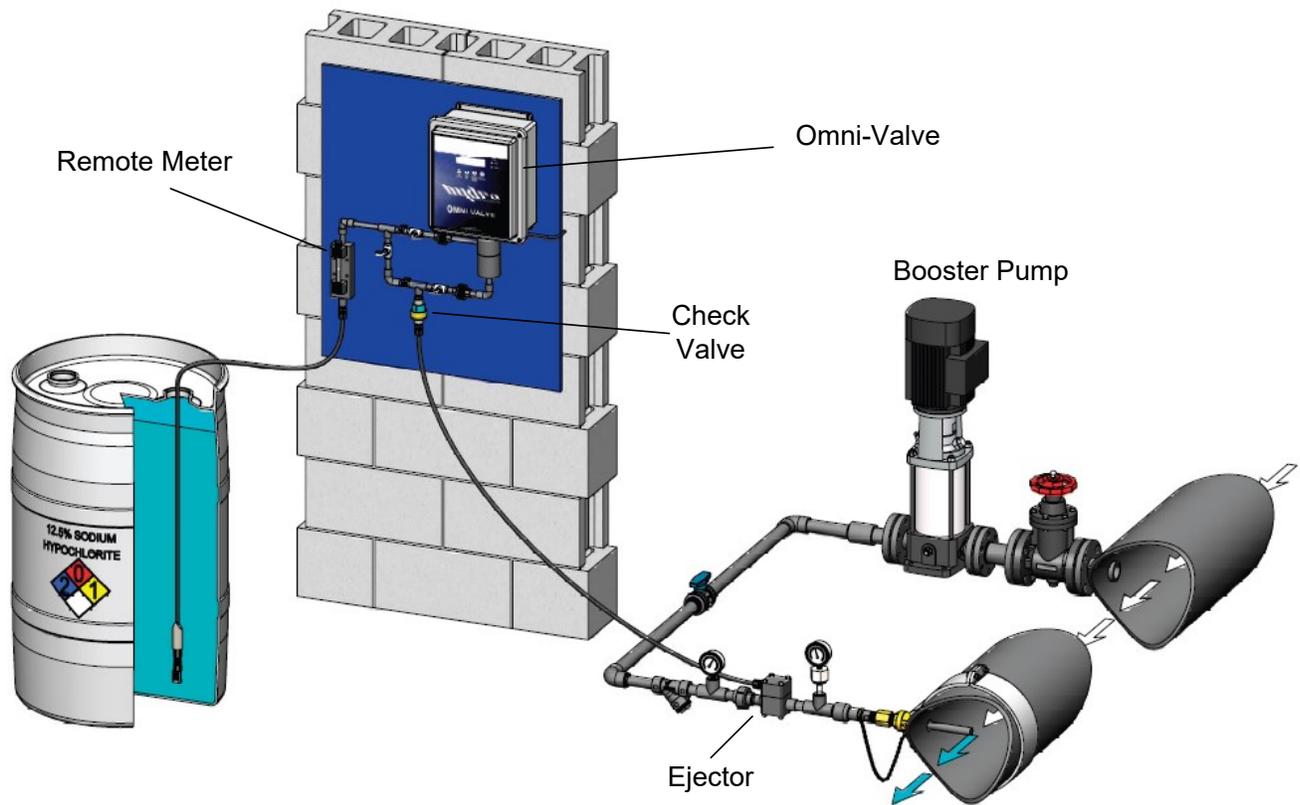


Series LF Liquid Chemical Feed Systems

The Series LF Liquid Chemical Feeders are a family of fully vacuum operated, chemical solution feed systems, consisting of the following components: a chemical flow meter tube, fully automatic feed rate control valve with optional bypass piping arrangement, ejector and back flow prevention device.

The Omni-Valve includes a self flushing feature where it can be set to periodically move to full open position and return to feeding position. This helps to prevent clogging of the v-notch.

**Feed Rates
0.5 GPH to 600 GPH**



Switching From a Gas System?

If an existing gas system is being switched to liquid feed, then installation of a Hydro Instruments liquid vacuum feed system is relatively simple. The operation principle is identical to a gas feed system and so the existing booster pump and ejector can often be reused allowing relocation to minimize solution lines. Note that each system is unique and system specific considerations may need to be made. Please consult Hydro Instruments for assistance with your application requirements.



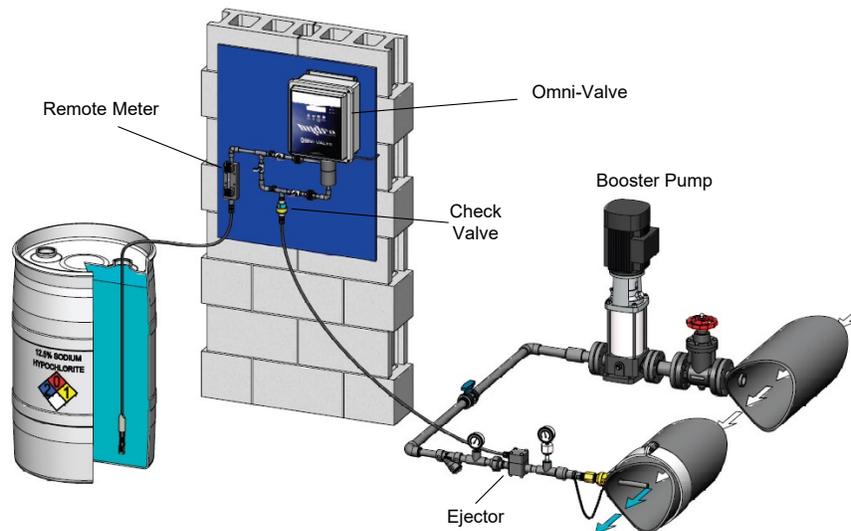
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Operation

Water flow supplied to a Venturi nozzle in the Hydro Instruments ejector assembly creates a vacuum which draws the chemical from the storage drum. Feed rate is visually monitored with a chemical flow meter tube and controlled with a valve. Vacuum is required to open a spring loaded, normally closed check valve in the ejector assembly. This prevents backflow of water into the storage drum. A secondary check valve is recommended for additional protection.

The Omni-Valve includes a self flushing feature where it can be set to periodically move to full open position and return to feeding position. This helps to prevent clogging of the v-notch.



Safety of Vacuum Systems

Hydro Instruments' liquid feed systems offer an all vacuum design for the injection of liquid chemicals. Traditional metering pumps pressurize the chemical feed lines which presents the risk of a pressurized chemical leak. The Hydro Instruments Series LF draws the chemical through the line under vacuum; therefore breakage of the tubing or connections will not cause a chemical leak.

Durability

The component parts of the Hydro Instruments Series LF equipment have been field proven for more than 35 years. Solid machined parts are precision made of only the highest quality and most chemically resistant materials. The innovative design and minimal number of moving parts guarantee simple operation, maximum durability and minimal maintenance.

Reliability

- System will not vapor lock
- Provides visual indication of actual chemical feed rate
- Automatic feed rate control and self flushing feature for stable feed rate control

