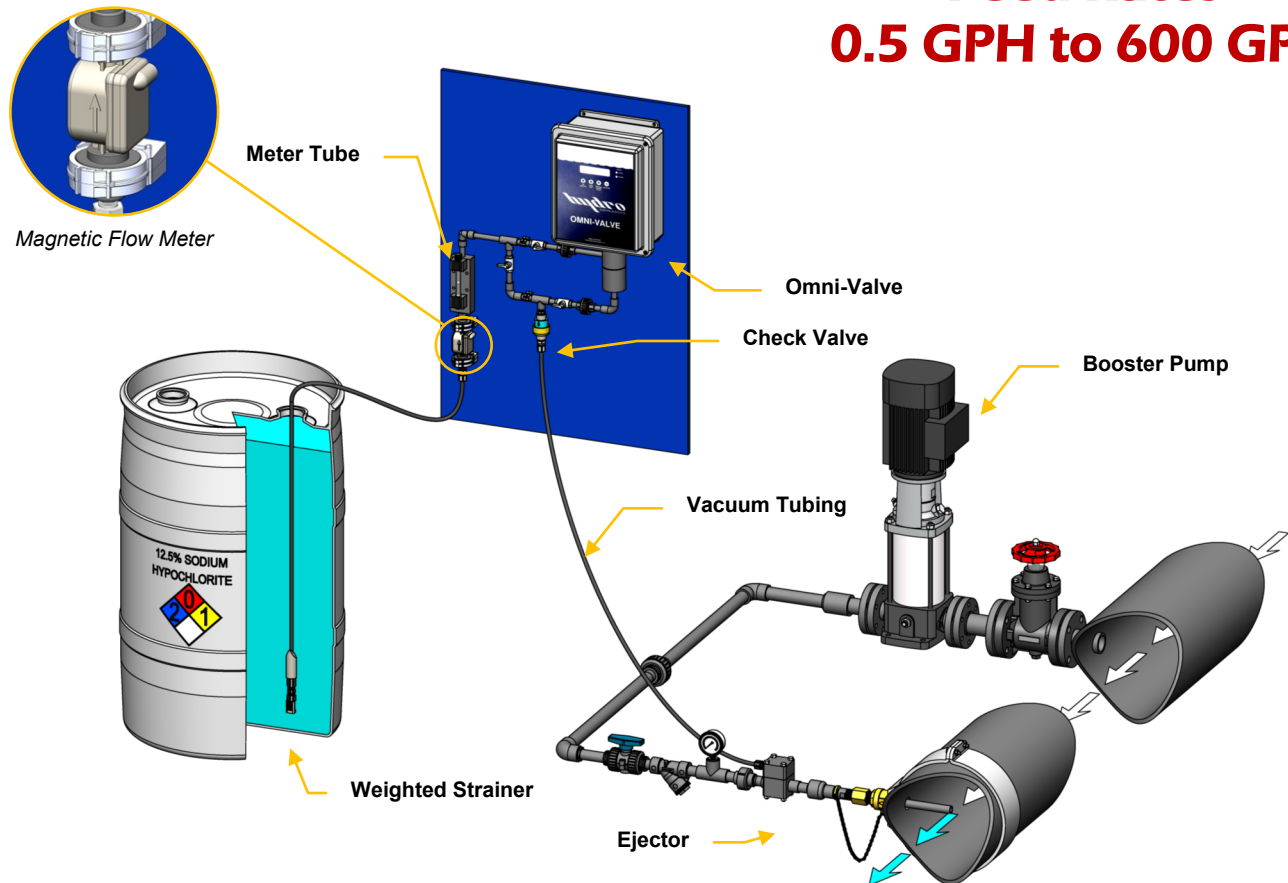


The Series LF Liquid Chemical Feeders are a family of fully vacuum operated, chemical solution feed systems, consisting of the following components: a glass flow meter tube, fully automatic feed rate control valve with optional bypass piping arrangement, inline magnetic chemical flow meter, ejector and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

These systems incorporate a magnetic flow meter in the chemical line for direct feedback of chemical feed rate. This magnetic flow meter is used by the automatic control valve to maintain the desired chemical feed rate at all times.

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. Bear in mind that each system is unique and system specific considerations may need to be made. Please consult Hydro Instruments for assistance with your application requirements.

Series LF Liquid Chemical Feed Systems

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 glass 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 Series LF systems are available with a magnetic flow meter in the chemical line for direct feedback of chemical feed rate that is used by the automatic control valve to maintain the desired chemical feed rate at all times.

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
- With an inline magnetic flow meter chemical feed rate is directly measured and controlled

Hydro Instruments Series LFOV

