Hypochlorite Chemical Metering Pump - Detailed Specifications

FMI Chloritrol® CL, CL-1 or Equal

The metering pump system should a duplex design, consisting of two positive displacement ceramic piston and liner pumps controlled by a single variable speed drive motor. The primary pressure pump will meter hypochlorite solution, while a secondary pump will function to purge gas from the inlet side of the pressure pump. The pump system must be self-priming against system pressure.

A. The hypochlorite solution can be either liquid sodium hypochlorite or calcium hypochlorite solution derived from tablets.

B. The primary pump will be a valveless rotating and reciprocating design, capable of metering up to 18 gallons per hour of up to 15% hypochlorite solution, against a discharge pressure of up to 125 PSI.

C. The pressure pump should be capable of manual displacement adjustment from 0-100% of stroke by hand without the use of tools while the pump is operating. The primary pump shall include a scale for calibration to ensure accurate, repeatable displacement settings.

D. The common drive motor for the primary and secondary pumps shall be a variable speed, 0-90 VDC Permanent Magnet, controlled by a 120 VAC 50/60 Hz, 1 phase Variable Speed Controller - FMI C100A or equal.

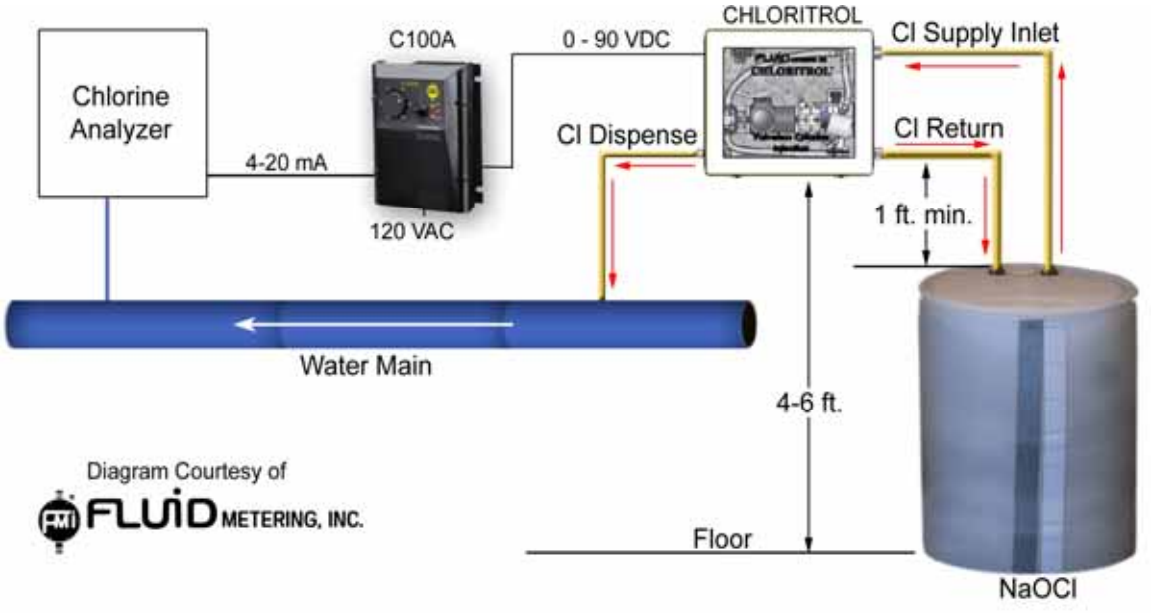
E. The Automatic Rate Controller should provide for selectable manual and automatic flow adjustment modes. Automatic adjustment should accept 4-20 mA electronic control inputs over a 20:1 range for integration with compatible process controllers.

F. The secondary pump shall be a positive displacement ceramic piston and liner, reciprocating and oscillating design. It shall be operated by the common drive of the pressure pump and will purge gas during priming or gas generated by chlorine out gassing.

G. During the pump suction strokes, the secondary pump shall pull any gas plus any small quantity of liquid and return it to the hypochlorite source container. Manual air-bleed/degassing pumps shall NOT be accepted.

H. Low power consumption of 0.5 Amp @ 120 VAC or less for economic operation.

I. Acceptable Pumps: Fluid Metering, Inc. (FMI) Chloritrol® CL Valveless Chlorine Injection System, or approved equal.



Typical System Configuration

H.J. Werner 5/24/10