

## 1.01 VACUUM INDUCTION SODIUM HYPOCHLORITE, HYDROCHLORIC ACID AND SULFURIC ACID FEEDER

- A. Manufacturer: SureWater Technologies, Inc., model number MD22152-02.
- B. Type: NSF Standard 50 Listed flow through chemical feed system manufactured for the purpose with output adjustable while in operation to maximum capacity of 198 gallons per day sodium hypochlorite, hydrochloric acid, or sulfuric acid solution.
- C. Adjustment: Equipment controls with readily accessible metering valve located on flow meter, feed rate control by dialing valve to desired gallon per hour setting marked on flow meter.
- D. Vacuum: Provide NSF Standard 61 listed 3/4" venturi of Kynar (PVDF) supplied with (2) 3/4" ball type union valves of schedule 80 polyvinyl chloride (PVC) with Viton (FKM) seal rings and (1) 0 – 30 PSI pressure gauge to be installed in chemical by-pass loop.
- E. Solenoid Valve: Equip feeder with 1/4" Teflon (PTFE) Bellows type solenoid valve of polyvinyl chloride (PVC) body with Viton (FKM) seal and Fail-Dry safety feature. Attached 11 watt with 110 volt AC at 60 Hz electrical coil shall be capable of continuous and intermittent duty up to 2 million cycles and equipped with NEMA - 4 water and dust proof housing. Equip with 6', 16-gauge/3 wire power cord.
- F. Feeder Materials: All parts and fittings shall be manufactured of chemical resistant materials [polyvinyl chloride (PVC) and, or Teflon (PTFE)]. Housing shall be of polyvinyl chloride (PVC). Mounting devices shall be of fiberglass and, or PVC (clamps, nuts and bolts, channel and clicks). All other fasteners shall be of stainless steel (screws and lock nuts). All pipe fittings shall be of schedule 80 polyvinyl chloride (PVC).
  - 1. Metering Valve: Shall be integral needle type within flow meter with Teflon (PTFE) and Viton (FKM) seals and Viton (FKM) seal rings.
  - 2. Chlorine Shut Off Valve: Shall be 1/4" ball type valve of schedule 80 polyvinyl chloride (PVC) with Viton (FKM) seal rings.
  - 3. Labcock Cleanout Valve: Equip feeder with 1/4" ball type labcock valve of schedule 80 polyvinyl chloride (PVC) with Viton (FKM) seal rings.
  - 4. Tubing: Provide 3/8" x 1/2" x 2' polyvinyl chloride (PVC) flexible tubing with each feeder for attachment to labcock cleanout valve. Integral unit tubing shall be .375" OD x .250" ID Teflon (PTFE) and .375" OD x .312" ID Teflon (PTFE).
  - 5. Strainer: Equip feeder with 1/4" t-strainer of polyethylene and Viton (FKM) seal ring. Equip chemical supply line with 1/4" foot valve ball check strainer of PVDF, ceramic ball and Viton (FKM) seat and seal.
  - 6. Flow Meter: Equip feeder with 1/4" meter tube of Borosilicate glass (marked in gallons per hour from 0.0 – 8.25) with glass ball float and polycarbonate shields, polyvinyl chloride (PVC) connectors and Viton (FKM) seal rings.
- G. Installation: Install material and equipment as complete, convenient, and economical systems, in conformance with drawings, approved submittals, and requirements specified.