

SECTION 15118CORROSION RESISTANT VALVES AND SPECIALTIES  
FOR USE IN PVC PIPING SYSTEMSPART 1 - GENERAL1.1 DESCRIPTION

- A. Work Included: Furnish and install corrosion resistant valves and specialties of the type(s) and size(s) and in the location(s) shown on the Drawings and as specified herein.
- B. Related Work Specified Elsewhere: "Valves and Specialties - General" is specified in this Division.

1.2 QUALITY ASSURANCE

- A. Qualifications of Manufacturer: Products have proven reliable in similar installations over a period of 5 years.
- B. Acceptable Manufacturers:
  - 1. Hayward Industrial Products, Inc.
  - 2. Plast-o-matic Valves, Inc.
  - 3. Walworth Co.
  - 4. Tube Turns Plastics Inc.
  - 5. Spears.
  - 6. Harvel.
  - 7. Cabot.
  - 8. Or approved equal.
- C. Valves and specialties for use on hypochlorite piping system shall have no metal parts in contact with fluid. Valves for use on hypochlorite piping system shall be vented so as to prevent gas build-up inside the valves. Materials of construction shall be completely suitable for intended service.
- D. Electric Motor Actuators shall be of same manufacturer as the valve operated.

PART 2 - PRODUCTS2.1 MATERIALS (WHEN APPLICABLE)

- A. Ball Valves, Multiport and Regular
  - 1. Material: Type I, Grade I Polyvinyl chloride.
  - 2. Operators: Lever, T-handle or Actuator Ready.
  - 3. Seals: Ball seal of teflon.
  - 4. Pressure Ratings: 150 PSI @ 70°F.
  - 5. Three-way valves shall balls that allow flow in any direction.
  - 6. Ends: Flanged or threaded as required.
- B. Ball Valve Electric Motor Actuator (for three way ball valve)
  - 1. NEMA 4X housing.
  - 2. 120 VAC Operation with motor thermal overload.

3. Motor is to be UL Approved.
  4. Torque rating: 150 in-lbs. at Start.
  5. Provide with manual override.
  6. Provide auxillary limit switches as needed to provide valve position feedback indication. These shall be input to the PLC for remote position indication.
- C. Ball Check Valves
1. Materials: PVC (normal impact).
  2. Seals: Vitron seals with teflon seat rings.
  3. Vertical or horizontal installation requiring one ounce of pressure to seal or unseat.
  4. Replaceable ball and seals.
  5. Ends: Threaded or flanged.
  6. Rating: 125 PSI @ 75°F.
- D. Gate Valves
1. Material: Polyvinyl chloride, Type 1.
  2. Rating:  
½" through 2": 200 PSI  
2 ½" through 3": 150 PSI  
4": 235 PSI
  3. Gate Valve Wedge: Polypropylene Wedge.
  4. O-ring Seals: Viton.
  5. Operators: Non-Rising Stem, Polypropylene handwheel
  6. Ends: Socket or threaded as required.
  7. Replacement components shall be accessible without removing valve from line.
  8. Manufacturer: Spears Manufacturing Company.
- E. Y-Sediment Strainers
1. Materials: Translucent PVC I, Grade I.
  2. Cylindrical Screen: 8, 12, 20 or 30 mesh size.
  3. Screens shall be removable for cleaning.
  4. Rating: 140 PSI @ 70°F.
  5. Ends: Flanged or threaded type as required.
- F. Duplex Strainer Baskets
1. Provide 2" All Plastic Duplex Basket Strainers constructed of PVC with PVC strainer baskets.
  2. Seals shall be viton.
  3. Strainer baskets shall have 1/32" perforations.
  3. Duplex strainer baskets shall be as manufactured by Hayward Industrial Manufacturing Corporation, Inc., Elizabeth, NJ, or equivalent.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install valves and accessories in strict accordance with manufacturer's instructions and recommendations.
- B. Carefully erect all valves and support them in their respective positions free from distortion and strain.
- C. Independently support all valves connected to pumps and equipment.
- D. Install in accordance with the "Valves and Specialties-General" Section in this Division.
- E. Special care shall be taken when orienting ball check valves so as to ensure proper operation.

END OF SECTION