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Sample Specification for Plastic Ball Valve, Ball Check Valves and Butterfly Valves

True Union Ball Valves shall be produced of PVC Type I, cell classification 12454, or CPVC Type IV, cell classification 23447, or PP or PVDF material. Valves shall be full port Schedule 80 (equal or greater to the minimum inside diameter of Sch 80 pipe). Valve o-rings shall be made of EPDM or Viton (FKM) material. Valve stem shall have two o-rings. Valve body shall have two stem stops. Valve seat-carrier shall have a full block polymeric locking strip, which can be removed to dis-assemble the valve for service. Valves shall allow for external-adjustment for seat wear with the valve in-line. Valve seats shall be produced of Teflon material. 1/2 - 4" valves shall be full port. 6" valves shall be a venturied 4" valve. End connectors shall be of socket, female-NPT, or flange type. PVC & CPVC Valves shall meet the requirements of ASTM F-1970 for pressure rating (1/2 - 2" 235 psi), (2-1/2 - 6" 150 psi), non-shock water at 73 degrees F. PP & PVDF Valves shall be rated (1/2 - 2" 150 psi) non-shock water at 73 degrees F. Valves shall be operated manually or pneumatically or electrically by an actuator. Valves may be retro-fitted with Colonial's actuator mounting kit. Provide OSHA Lockout for Manual Valves where required. **Colonial Full Block 101N Series.**

Single Union Ball Check Valves 1/2 - 3" shall be produced of PVC Type I, cell classification 12454, or CPVC Type IV, cell classification 23447, or PP or PVDF material. Valves shall be full port Schedule 80 (equal or greater to the minimum inside diameter of Sch 80 pipe). Valve o-rings and Seat/Seal shall be made of EPDM or Viton (FKM) material. End connectors shall be of socket, female-NPT, or flange type. PVC & CPVC Valves shall meet the requirements of ASTM F-1970 for pressure rating (1/2 - 2" 235 psi), (3" 150 psi), non-shock water at 73 degrees F. PP & PVDF Valves shall be rated (1/2 - 3" 150 psi) non-shock water at 73 degrees F. System pressure will unseat the ball, allowing flow. 30" of back-flow head pressure (1 - 2 psi) will properly seat the ball to stop backflow. **Colonial 222B Series**

True Union Ball Check Valves 1/2 - 2" shall be produced of PVC Type I, cell classification 12454, or CPVC Type IV, cell classification 23447 material. Valves shall be full port Schedule 80 (equal or greater to the minimum inside diameter of Sch 80 pipe). Valve o-rings and Seat/Seal shall be made of EPDM or Viton (FKM) material. End connectors shall be of socket, female-NPT, or flange type. PVC & CPVC Valves shall meet the requirements of ASTM F-1970 for pressure rating (1/2 - 2" 235 psi) non-shock water at 73 degrees F. System pressure will unseat the ball, allowing flow. 30" of back-flow head pressure (1 - 2 psi) will properly seat the ball to stop backflow. **Colonial 271N Series**

Butterfly Valve with Plastic Handle and a variety of body & seal materials. Colonial 411N series

Butterfly Valves 2 - 12", shall be lever or gear actuated. Valve body and disc shall be produced of PVC Type I, cell classification 12454, or CPVC Type IV, cell classification 23447 or PP or PVDF material. Valve boot/seal and o-rings shall be made of EPDM or Viton (FKM) material. Valves shall be full port Schedule 80 (equal or greater to the minimum inside diameter of Sch 80 pipe). Valve stem shall be 410 stainless steel. Boot/seal and disc shall be the only wetted parts of the valve. Seven-position locking lever handle shall be produced of PP material. Bolt pattern shall conform to ANSI/ASME B 16.5, class 150 standard. Valves shall be pressure rated at 150 psi, non-shock water at 73 degrees F. **Colonial 411N series.**

Butterfly Valve with Coated Metal Handle, limited size and materials, but a full face flange design, heavier duty construction. Colonial 311N series.

Butterfly Valves 3 - 8", shall be lever or gear actuated. Valve body and disc shall be produced of PVC Type I, cell classification 12454 material. Valves shall be full port Schedule 80 (equal or greater to the minimum inside diameter of Sch 80 pipe). Valve boot/seal and o-rings shall be made of EPDM. Valve stem shall be 410 stainless steel. Boot/seal and disc shall be the only wetted parts of the valve. Ten-position lever handle shall be coated metal. Bolt pattern shall conform to ANSI/ASME B 16.5, class 150 standard. 3 - 6" valves have a full boot seal and require no flange gaskets. 8" valve has a replaceable single side seal, and a single offset disc, and requires flange gaskets. Valves shall be pressure rated at 150 psi, non-shock water at 73 degrees F. **Colonial 311N series.**