

Ball Check Valves Specification

1.1 Scope

All requirements are for PVC, CPVC, polypropylene & PVDF true union and single union ball check valves and accessories.

2.1 Materials

U-PVC – Conforming to ASTM D1784 Cell Classification 12454 A

CPVC – Conforming to ASTM D1784 Cell Classification 23567A

Polypropylene – Conforming to ASTM D4101 Cell Classification PP0210B67272

PVDF – Conforming to ASTM D3222-91A Cell Classification Type II

FKM – Viton® fluorocarbon rubber

EPDM – Ethylene propylene diene terpolymer rubber

PTFE – Teflon® polytetrafluoroethylene

3.1 Valves

Ball check valves shall be PVC, CPVC, PP or PVDF body with EPDM, FKM or PTFE seals. Valves shall be of solid thermoplastic construction, and be designed with an elastomeric uniseat/seal for tight shut-off under pressure. Sizes 1/2" – 2" shall be true union, and sizes 3" & 4" shall be single union.

3.2 Approved Manufacturer

Valves shall be provided by Asahi/America, Inc. of Lawrence, MA with no approved equals. Manufacturer must be ISO-9001 certified.

3.3 Pressure Vs. Temperature

Valves shall have a pressure rating of:

Sizes 1/2" – 2": 150psi at 70° F

Sizes 3" & 4": 100psi at 70° F

4.1 Accessories

4.2 Stainless Steel Spring

Valves shall be capable of being machined to accept a 316 stainless steel spring or coated 316 stainless steel spring where required. A minimum 10psi inlet pressure is required to "crack" open the valve with this option.

4.3 Foot Valve Screen

Valves shall accept the option of a PVC foot valve screen on the inlet side of the valve for use in applications where the valve is in a tank on the suction side of the pump to protect against foreign material entering the system.

5.1 Certifications

5.2 NSF-61

PVC/EPDM and PVC/FKM models shall have NSF-61 certification for use in drinking water applications.

6.1 Installation Procedures

All valve joints shall be prepared using the preferred joining method for the valve material and installation type in accordance with all requirements put forth in the ball check valve operation & maintenance manual. All accessories should be installed in accordance with the manufacturer's requirements as well as any facility requirements.