

Type-23 True-Union Multiport Ball Valve Specification

1.0 SCOPE

All requirements are for PVC, CPVC, Polypropylene & PVDF Type-23 True-Union Multiport Ball Valves and accessories.

2.0 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

AFLAS – Tetrafluoroethylene / Propylene Dipolymer

PTFE – Teflon® Polytetrafluoroethylene

3.0 VALVES

Ball valves shall be PVC, CPVC, PP or PVDF body with EPDM, FKM or AFLAS seals and PTFE seats. Valves shall be of blowout proof design by having double O-ring stem seals, and have elastomeric backing cushions behind the PTFE seats for low stem torque, and to compensate for wear. The valve lever handle shall double as the spanner wrench for valve disassembly and maintenance. Valves sizes 1/2" – 6" shall feature a molded ISO bolt pattern for accessory mounting.

3.1 Operators

Type-23 1/2" – 6" (Lever Type standard)

Lever handle to be Asahi standard valve handle red color.

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

PVC, CPVC, & PVDF Socket, Threaded, Butt or Flanged Valves shall have a pressure rating of:

- 150 psi at 70° F sizes 1/2" – 6"

4.0 ACCESSORIES

4.1 Available Flow Patterns

L-Port: Standard ball supplied permits 180° rotation from Left port to Right port with "OFF" Position when handle is cycled to the center 90° position.

Double L-Port: Optional ball typically used for pneumatic actuation. Permits 90° rotation from Left port to Right port with no "OFF" position.

T-Port: Optional ball permits straight thru flow straight from left port to right port with the bottom port as the inlet, 90° rotation of handle will give "OFF" position.

Cross Port: Available 1/2" – 2" only. Permits straight thru flow same as T-port, with the option to isolate and shut off bottom port leaving straight thru flow like 2-way ball valve eliminating the need for a 2-way shut off valve off bottom port of valve. 90° rotation of the handle will allow for L-port flow pattern.

4.2 Stem Extensions

Stem extensions where required should be designed, built, and provided by the Asahi/America, Inc., and be 1 of 3 styles:

- Style BV-A two piece extension with outer housing 100% sealed either free standing or supported design.
- Style BV-B single piece extension either free standing or supported design.
- Style BV-P single piece Panel Mount Extension made of PVC.
 - Minimum length = 4"

- Maximum length = 12"
- Not available for 4" or 6" valves

4.3 Actuation

Actuation where required should be designed, built, and provided by Asahi/America, Inc., and be either pneumatic (Series 79P) or electric (Series 19, 94, or 92) type. All actuation accessories to be provided and installed by Asahi/America, Inc. in accordance with manufacturer's requirements.

4.4 Locking Devices

Where required, locking devices can be installed over the valve handle to prevent unauthorized operation of the valve.

4.5 Operating Nuts

Where required, 2" square operating nuts can be installed in place of valve handle.
Materials of construction – Anodized Aluminum.

5.0 CERTIFICATIONS

5.1 NSF-61

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

6.0 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 Type-23 Operation & Maintenance manual. All accessories should be installed in accordance with the manufacturer's requirements as well as any facility requirements.