

Type-57P Butterfly Valve Specification

1.0 SCOPE

All requirements are for Type-57P Butterfly Valves and accessories.

2.0 MATERIALS

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

CPVC – Conforming to ASTM D1784 Cell Classification 23567 A

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

FKM-F - Fluorocarbon Rubber

Nitrile – Nitrile Butadiene Rubber

3.0 VALVES

Butterfly valves shall be Type-57P PVC, CPVC, PP or PVDF body with PVC, CPVC, PP or PVDF disc and either EPDM, Nitrile FKM or FKM-F seat & seals. The liner shall be full seat design fully molded around the body whereas only the disc and seat are wetted parts, feature raised convex rings on the face and is intended to be utilized as the mating flange gaskets. Valve shall have a spherical disc design with disc bushings with double O-ring seals for a high cycle life and ultimate sealing. Valve body shall have integral molded body stops and seat relief area to prevent over-tightening of the mating flanges from influencing valve operating torque. Valves shall accept flat faced flanges in accordance with ANSI B16.5 bolt pattern for 150 lb. flanges. Valve stem shall be 316 SS, have PP stem retainer for valve stem retention, be non-wetted, and have engagement over the full length of the spherically designed disc. Valves shall be equipped with either Lever handle or Plasgear™ operator for manual operation. For lockout applications, the valve lever handle (sizes 1-1/2" – 8") shall have a molded provision for a padlock. The valve body shall feature 2 molded tag holes for the user. Valves sizes 1-1/2" – 14" shall feature a molded ISO 5211 bolt pattern for accessory mounting. PVC shall conform to ASTM D1784, Cell Classification 12454A, CPVC to ASTM D1784, Cell Classification 23567A, PP to ASTM D4101 Cell Classification PP0210B67272, and PVDF to ASTM D3222-91A, Cell Classification Type II.

3.1 Operators

Type-57P 1-1/2" – 14" (Lever Type standard sizes 1-1/2" – 8")

(Gear Type standard sizes 1-1/2" – 14")

Lever handle to be Asahi standard valve handle red color.

Gear operator to be Asahi Plasgear™ all plastic construction with SS trim submersible type.

Gear operator for valves sizes 1-1/2" – 14".

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:

- 150 psi at 70° F sizes 1-1/2" – 10"
- 150 psi at 70° F sizes 12" & 14"

4.0 ACCESSORIES

4.1 Stem Extensions

Stem extensions where required should be designed, built, and provided by the Asahi/America, Inc., and be 1 of 5 styles:

- Style LBF-A two piece extension with outer housing 100% sealed either free standing or supported design.
- Style GBF-A two piece extension with outer housing 100% sealed either free standing or supported design.
- Style LBF-B single piece extension either free standing or supported design

- Style GBF-B single piece extension either free standing or supported design.
- Style GBF-C single piece extension for the gear handwheel only either free standing or supported design.

4.2 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, 92, or 10) type. All actuation accessories to be provided and installed by Asahi/America, Inc. in accordance with manufacturer's requirements.

4.3 Lugs

Lugs where required should be factory installed by Asahi/America, Inc. Materials of construction shall be 316 SS. Sizes 3" – 12" PVC body shall be Type-57IL.

4.4 Operating Nuts

Where required, 2" square operating nuts can be installed on Lever type or Gear type Butterfly valves. On Gear type valves, the gear operator must remain on top of valve body and only the handwheel from gear-operator is replaced by 2" square operating nut. Materials of construction – Anodized Aluminum.

4.5 Chain Operators

Where required for overhead applications, chain operators manufactured by Babbitt Steam may be installed on Gear-operated butterfly valves. Chain must be weldless loop style chain supplied from Babbitt Steam.

Materials of construction – Chain Operator – Cast Iron

Chain – Hot Galvanized Steel, others by request

5.0 INSTALLATION PROCEDURES

All valve joints shall be prepared using flanged connections to accept either wafer style or lugged butterfly valves. The bolt diameters and torque values should be according to manufacturer's standard and requirements put forth in Type-57P Butterfly valve Operation and Maintenance manuals. All accessories should be installed in accordance with the manufacturer's requirements as well as any facility requirements.