

Type-57 Butterfly Valves

1.0 Scope:

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

2.0 Materials:

U-PVC – Conforming to ASTM D1784 Cell Classification 12454 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

Nitrile – Nitrile Butadiene Rubber

3.0 Valves:

Type-57 Butterfly valves shall be PVC, PP or PVDF body with either PP, PVC, or PVDF disc and either EPDM, Nitrile, or FKM seat & seals. The liner shall be full seat design fully molded around the body where as only the Disc and Seat are wetted parts and feature raised convex rings on the face and be utilized as the mating flange gaskets. Valve shall have spherical disc design for increased CV, 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. 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. The valve lever handle (sizes 1-1/2" – 8") shall have a molded provision for a padlock. Valves sizes 1-1/2" – 14" shall feature a molded ISO bolt pattern for accessory mounting. Type-57 Sizes 1-1/2" – 14".

3.1 Operators

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

(Gear Type standard sizes 8" – 14", optional for sizes smaller than 8")

Lever Handle to be Asahi Standard valve handle color Red

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"

100 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 94, 92, or 87) type. All actuation accessories to be provided and installed by Asahi/America, Inc. in accordance with manufacturers requirements.

4.3 Lugs

Lugs where required should be factory installed by Asahi/America, Inc. Materials of construction shall be 304 SS or 316 SS. All welded lugs to be passivated to prevent corrosion. 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-57 Butterfly valve Operation and Maintenance manuals. All accessories should be installed in accordance with the manufacturer's requirements as well as any facility requirements.