Type-57IL Isolator Lug Butterfly Valves

1.0 Scope:

All requirements are for Type-57IL Isolator Lug 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-57IL Butterfly valves shall be PVC, body with PP, PVC, or PVDF disc and EPDM, Nitrile, or FKM liner & seals. The liner shall be full seat design fully molded around the body where only the disc and seat are wetted parts and feature raised convex rings on the seat 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, non-wetted by the media, and have engagement over the full length of the spherically designed disc. A PP stem retainer shall prevent stem pull-out when removing gear-operator. The valve lever handle (sizes 3" – 8") shall have a molded provision for a padlock. Valves sizes 3" – 12" shall feature a molded ISO bolt pattern for accessory mounting. Valves shall be non-directional, feature factory molded inserts of 316 SS conforming to an ANSI B16.5 bolt pattern and permit downstream flange removal. The Type-57IL is ideally suited for end of line applications where full pressure rating is required on the upstream side of the valve.

3.1 Operators

Type-57IL 3" – 12" (Lever Type standard sizes 3" – 8")

(Gear Type standard sizes 8" – 12", optional for sizes smaller than 8")

Lever Handle to be Asahi Standard valve handle Red color

Gear-operator for valves sizes 3" – 12".

Gear-Operator to be Asahi Plasgear[™] all plastic construction with SS trim submersible type

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 3" – 10" 100 psi at 70° F size 12"

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

4.3 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 – Annodized Aluminum.

4.4 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-57IL Lug Butterfly valve Operation and Maintenance manuals. All accessories should be installed in accordance with the manufacturer's requirements as well as any facility requirements.