

Landfill Butterfly Valves

1.0 Scope:

All requirements are for Asahi/America Thermoplastic-Butterfly Valves and accessories, applicable to installations in Landfill Applications

2.0 Materials:

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

Polypropylene – Conforming to ASTM D4101 Cell Classification PP0210B67272

PDCPD – High Impact Resistance, Chemical Resistance, and heat deflection temperature

FKM – Viton® Fluorocarbon Rubber

EPDM – Ethylene Propylene Diene Terpolymer Rubber

Nitrile – Nitrile Butadiene Rubber

3.0 Valves:

Butterfly valves shall be PVC or PP body with PP 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. Valves shall accept flat-faced flanges in accordance with ANSI B16.5 bolt pattern for 150 lb flanges. Valve stem shall be either 316 SS (sizes 12" – 14"), or 403 SS (sizes 16" – 24"), be non-wetted, and have engagement over the full length of the disc. The valve lever handle (sizes 1-1/2" – 8") shall have a molded provision for a padlock. Valves sizes 1-1/2" – 16" shall feature a molded ISO bolt pattern for accessory mounting.

Additionally 28" – 48" Butterfly valves shall be PDCPD body with PDCPD disc and either EPDM or FKM seat and seals. Valve stem shall be 304SS. These too shall feature a full seat design liner with only the disc and liner as wetted parts, and shall accept flat faced ANSI B16.5 bolt pattern mating flanges.

3.1 Operators

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

Lever Handle to be Asahi Standard valve handle

(Gear Type sizes 1-1/2" – 14")

Type-57 1-1/2" – 14" Mastergear Metal Gear (Die-Cast Aluminum) or Plasgear™ all plastic construction with SS trim submersible type

Type-56 16" Mastergear Metal Gear (Die-Cast Aluminum) or Plasgear™ all plastic construction with SS trim submersible type

Type-75 18" – 24" Rotork Metal Gear (Cast Iron with Epoxy coating)

Large Diameter 28" – 48" Rotork Metal Gear (Cast Iron with Epoxy coating)

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

3.3 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"

85 psi at 70° F size 16"

75 psi at 70° F sizes 18" - 24"

110 psi at 70°F sizes 28" – 48"

4.0 Accessories:

4.1 Stem Extensions

Stem extensions where required must be designed, built and provided by the Asahi/America, Inc., and be Landfill style

Lever Handle Valves - Style LBF-A Two-piece extension with outer housing 100% sealed either free standing or supported design. Both outer housing and inner stem extension are made from Carbon Steel with baked powdercoat finish

Gear-Operator Valves - Style GBF-A Two piece extension with outer housing 100% sealed either free standing or supported design. Both outer housing and inner stem extension are made from Carbon Steel with baked powdercoat finish. All top and bottom housing flanges shall feature full gasket seals, all fasteners shall be SS.

4.2 Actuation

Actuation where required should be designed, built and provided by the Asahi/America, Inc., and be either pneumatic (Series 79P) or electric (Series 94, 92, Series 10, or other specified and approved OEM actuator) type. All actuation accessories to be provided and installed by Asahi/America, Inc. in accordance with manufacturer's requirements.

5.0 Installation Procedures:

All valve joints shall be prepared using flanged connections. The bolt diameters and torque values should be according to manufacturer's standard. All accessories should be installed in accordance with the manufacturer's requirements as well as any facility requirements.