

Product Specification for Lined Centric Butterfly Valves

Valve Type: Series 42 Wafer or Series 43 Lugged

Body:

- Heavy-duty, two-piece body with extended neck for 2" piping insulation. Standard coating is two coats of hard, zinc-rich epoxy primer and polyurethane top coat for excellent corrosion resistance.
- Flange locating holes shall be provided on wafer bodies to allow for quick and precise alignment during valve installation.
- Flange hole drilling as per international flange standard as specified.
- The live loaded stem seal system is uniformly loaded by a set of Belleville spring washers on the upper and lower stem. This system maintains an active sealing force on the disc hub which remains tight under the most extreme cyclic conditions.
- Heavy-duty acetal bushing absorbs the forces acting on the stem/disc assembly due to line pressure.

Disc / Stem:

- One-piece disc/stem in high strength design. Available in options such as stainless steel (thin profile, with polished edge and hubs) and PTFE / PFA / UHMWPE (minimum 3 mm thick) encapsulated one piece disc-stem.
- Disc to stem connection shall be and internal double "D" design with no possible leak paths in the disc-to-stem connection. External disc-to-stem connections such as disc screws or pins are not allowed.
- Stem shall be mechanically retained in the body neck and no part of the stem shall be exposed to the line media. The high strength, stainless steel one-piece stem provides maximum strength for high torque applications.

Seat and Seat Energizer:

- Precision machined PTFE / PFA / UHMWPE (minimum 3 mm thick) seat provides maximum resistance to the permeation of the application media. The wide sealing face guarantees a leak free face sealing.
- The seat shall totally encapsulate the body isolating it from the line media and no flange gaskets shall



Bi-directional Service: (With downstream flanges and disc in closed position)

2"-24" (DN 50 – DN 600) 150 psi (10.0 barg)

Dead-End Service: (No downstream flanges and disc in closed position)

2"-24" (DN 50 – DN 600) 150 psi (10.0 barg)

Design: BS EN 593

Testing: BS EN 12266-1 & ISO 5208

Approvals & Certifications:

- CE/PED Certification
- ATEX
- UL
- NSF/ANSI 61-2008 Certification

be required.

- A resilient seat energizer extends completely around the seat, including the disc hub area. This provides uniform pressure onto the circumference of the disc ensuring a bubble tight valve available in all operating conditions.

Material of Construction:

- **Body:** ASTM A395 Gr 60-40-18 / ASTM A216 Gr WCB / ASTM A351 Gr CF8M.
- **Disc / STEM:**
 - a) Stainless Steel / Duplex Steel
 - 2"-12" (DN50-DN300) One Piece Investment Cast
 - 14"-24" (DN350-DN600) Fabricated.
 - b) PTFE /PFA/UHMWPE
 - 2"-12"(DN50-DN300) with PTFE /PFA/UHMWPE material molded over CB7CU-1 (17-4 PH) One Piece Disc / Stem.
 - 14"-24"(DN350-DN600) with PTFE /PFA/UHMWPE material molded over SS304 +17-4 PH One Piece Disc / Stem (Fabricated).
- **Seat:** PTFE /PFA/UHMWPE.
- **Seat Energizer:** Silicone/Viton (FKM)/EPDM

Seat Temperature Range:

Seat	Energizer	Temperature Range	
		Min.	Max.
PTFE	Silicone	-58° F (-50° C)	392° F (200° C)
	Viton / FKM	0° F (-18° C)	392° F (200° C)
	EPDM	-20° F (-29° C)	302° F (150° C)
PFA	Silicone	-58° F (-50° C)	392° F (200° C)
	Viton / FKM	0° F (-18° C)	392° F (200° C)
	EPDM	-20° F (-29° C)	302° F (150° C)
UHMWPE	Silicone	-58° F (-50° C)	185° F (85° C)
	Viton / FKM	0° F (-18° C)	185° F (85° C)
	EPDM	-20° F (-29° C)	185° F (85° C)