

Product Specification for Resilient Seated Butterfly Valves for Higher Pressure Applications

Valve Type: Series 56 Wafer and Series 57 Lugged

Body:

- The top flange is drilled as per ISO 5211 to accommodate direct mounting of a wide range of actuators and manual operators.
- Ribbed wafer body from 2" to 12" and four locating holes on wafer bodies from sizes 12" and larger. Standard construction ensures installation between ASME Class 150/Class 125 flanges.
- A non-corrosive bushing and a self-adjusting stem seal shall be provided. No field adjustment necessary to maintain optimum field performance.

Disc:

- High strength disc with polished edge and hubs. Nylon PA 12 coated disc option ensures excellent resistance to several chemical media. The hard, non-porous sintered polymer has very low hygroscopicity and resistance to greases, oils, fuels, hydraulic fluids, water, alkalis, and many organic solvents.

Stem:

- Disc to stem connection with close tolerance square/double-D drive, eliminates the need of disc screws and taper pins.
- Dry stem journal no potential leakage path through disc/stem connection.
- 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 stem provides maximum strength for high torque applications.

Seat:

- 2" to 24" valves are constructed with cartridge seat by permanently bonding a resilient elastomer to a rigid metal backing ring. This gives advantages of bonded seat while also replaceable. Seat is slip-fitted into the body, no need of special tools.
- For sizes larger than 26" and onward valve seat is in-situ molded which provides complete isolation of flowing media from the body.
- The seat also features face O-ring which eliminates the use of flange gaskets.



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

2" to 24" (DN 50 to DN 600) 285 psi (20 barg)
 26" to 48" (DN 650 to DN 1200) 230 psi (16 barg)

Dead-End Service (Lugged with tapped hole): (No downstream flanges and disc in closed position)

2" to 24" (DN 50 to DN 600) 150 psi (10 barg)
 26" to 48" (DN 650 to DN 1200) 230 psi (16 barg)

Design: API 609, BS EN 593.

Testing: API 598, BS EN 12666-1.

Approvals & Certifications:

- CE / PED Certification
- API 609 CAT A

Standard Material of Construction:

- **Body:** ASTM A126 Class B, ASTM A395 60-40-18, ASTM A216 WCB, ASTM A351 CF8M/CF3M.
- **Disc:** ASTM A536 65-45-12 + NYLON 12 COATED, ASTM A536 65-45-12 + AROXY COATED, ASTM A351 CF8M/CF3M, NAB ASTM B148 C95800.
- **Seat:** EPDM / NBR (BUNA – N) / VITON® (FKM) / SILICONE / PTFE+EPDM.
- **Stem:** ASTM A479 SS410-L2 / SS316, ASTM A564 TYPE 630 (17-4-PH), ASTM A182 F51/F55

Seat Temperature Limits:

Seat Type	*Temperature Limits	
	Lower Limit	Upper Limit
EPDM	-20° F (-29° C)	302° F (150° C)
NBR (BUNA – N)	0° F (-18° C)	212° F (100° C)
Viton® (FKM)	0° F (-18° C)	390° F (200° C)
# Silicone	-58° F (-50° C)	390° F (200° C)
^PTFE + EPDM	-20° F (-29° C)	266° F (130° C)

*Temperature range shall be the lesser of the seat temperature or disc coating temperature.

Silicone seat configuration applicable up to PN6 rating only.

^ PTFE+EPDM seat configuration is available up to NPS 12" / DN300 and applicable rating up to PN16.