

INTRODUCING

Butterfly Valves

The Supreme is an acknowledged leader of India's plastic industry. With a portfolio of over 7500 diverse products, the most comprehensive range in the industry, we cater to almost every conceivable need and application of the customer in piping. In line with the tradition of pioneering many innovative products, The Supreme is pleased to introduce yet another useful, value added quality product "Butterfly valves." Butterfly valves is a very specialty product wherein precision is a mandatory requirement. Keeping in mind these precision and functional requirements, like smooth operation, water tightness, strength and durability, Supreme has designed a much superior product. These innovative, versatile, high performance valves stand much superior against alternative products available in the market and offer many outstanding features as enlisted. These valves are made available in 2½", 3" and 4" (75, 90 and 110mm) sizes in PN10 pressure class.



Unique features

- Designed and manufactured to have optimal mix of structural stability, flow efficiency and effective seating coupled with advantage of light weight, compact design and ease of operation.
- Only a quarter turn is needed to fully open or close the valve.
- Provided with integrally moulded elastomeric body liner to provide perfect seating and complete isolation of body material from fluid to prevent it from any corrosive and abrasive impact offluid.
- Easy to install in any position either in horizontal or vertical piping. No separate gaskets are required as the body liner acts as a seal between the body of valve and the mating pipe flanges.
- Excellent flow control and throttling stop handle.
- Compact, space saving design.
- Bi-directional, 100% tight shut off.
- Need low operation torque.
- High impact & UV stabilized. Stands up to the most demanding applications.
- POM Lever has extremely high resistance to fatigue failure from - 40° to 80°C.
- Working pressure at 20°C (73°F) is 10 bar (150 PSI).
- Suitable for mounting between all standard flanges ISO/DIN, ANSI/ASTM, British Standard, JIS.
- Rigid PVC disk with high abrasion resistance is enclosed with EPDM liner which is compressed to create the sealing mechanism.
- Provision to lock the valve in the off position or at eight different positions of opening.
- Ideally suitable for piping systems carrying fluids at high speed or fluids with suspended particles.

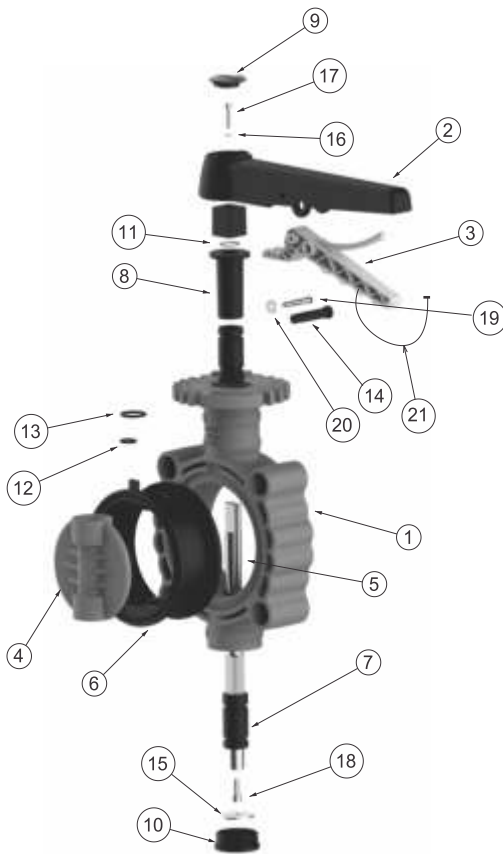
Applications: • Ideally suitable for industrial application, water treatment or distribution and irrigation application • Can be used to handle mild acidic solutions and medium concentrations of alkaline solutions • Can be used in water lines receiving chlorine gas or bleach.

Components of Butterfly Valve

1	Body
2	Handle
3	Lever
4	Valve disc
5	Shaft
6	Rubber Seal
7	Bearing

8	Top Bearing
9	Top cap
10	Bottom Cap
11	Circlip
12	Shaft 'O' ring
13	Bearing 'O' ring
14	Handle lock pin

15	Bottom Washer
16	Top washer
17	Top allen Bolt
18	Bottom allen bolt
19	Pivot Pin
20	Rivet Washer
21	Lock Pin Cord



Installation

Mount valve between DIN or ANSI (Supreme aqua Gold series flange recommended). A valve is supplied with the self sealing rubber seal and requires no additional rubber seal material. Follow flange standard bolt torque guideline during fit-up.

Operating instructions

To operate the valve, first withdraw the locking pin (14), then squeeze the lever (3) and handle (2) together. The handle (2) The lever will disengage from the throttle teeth. Rotate the handle (2) to desire position and release the lever (3) to fix the valve in to desire position. To lock the valve, put the handle locking pin (14).

Installation procedure

1. Attach connecting flange adaptors to the piping system as required
2. Check flange adaptor face alignment and spacing with the butterfly valve. Faces of flange adaptors should be parallel and spaced apart just enough to allow insertion of the butterfly valve body.
3. Using the handle, turn (clockwise) to ensure valve is in closed position. Disc should be aligned parallel to the ends.
4. Ensure that the pipe flange faces are clean of any foreign material
5. With disc in the closed position, carefully place the valve between the flanges, line up, and centre. Note that accurate centering between upstream and downstream pipe ends is essential for trouble-free operation of the valves.
6. Verifying that the valve is centered to the flanges, secure flange bolts by tightening by hand.
7. Open the valve slowly to the full open position to ensure free unobstructed disc movement and also ensure that there is no contact with the piping or mating flanges. Suitable corrective measures must be taken to remove these obstructions such as taper boring the pipe or installing a spacer or spool piece.
9. After proper operation is verified, flange bolts should then be tightened using a star or crisscross pattern to evenly load the bolts to the torque values.
10. Pressurize piping to inspect the valve for leakage. If any leakage is observed, tighten bolts using cross-over pattern, increasing torque until leak stops. Note that recommended torques is just for guideline purpose. Installer must verify proper strength of bolts for applications. Bolts should be clean and un-lubricated

Caution- Excessive bolt torque may damage flanges.

Torque graph

