

# Butterfly Valve

The Supreme Industries Ltd., is an acknowledged leader of India's plastic industry. Its customer centric approach fuels its research for designing unmatched quality products to meet the aspirations of its quality conscious customers. The innovative product portfolio offered by Supreme is extensive in range and application and comprises variety of pipes and vast spectrum of fittings totaling over 8000 diverse products.

Supreme has recently introduced yet another useful, value added quality product '**Butterfly valve**'. It is ideally suitable for piping systems carrying fluids at high speed or fluids with suspended particles. This valve is a very specialty product and used wherein precision is a mandatory requirement. Designed keeping in mind precision and functional requirements, Supreme Butterfly valve stands much superior to metal valves or any other alternative products available in the market. This useful valve is having many distinguishing features which makes it an ideal choice for water supply, irrigation and industrial as well as variety of different applications.



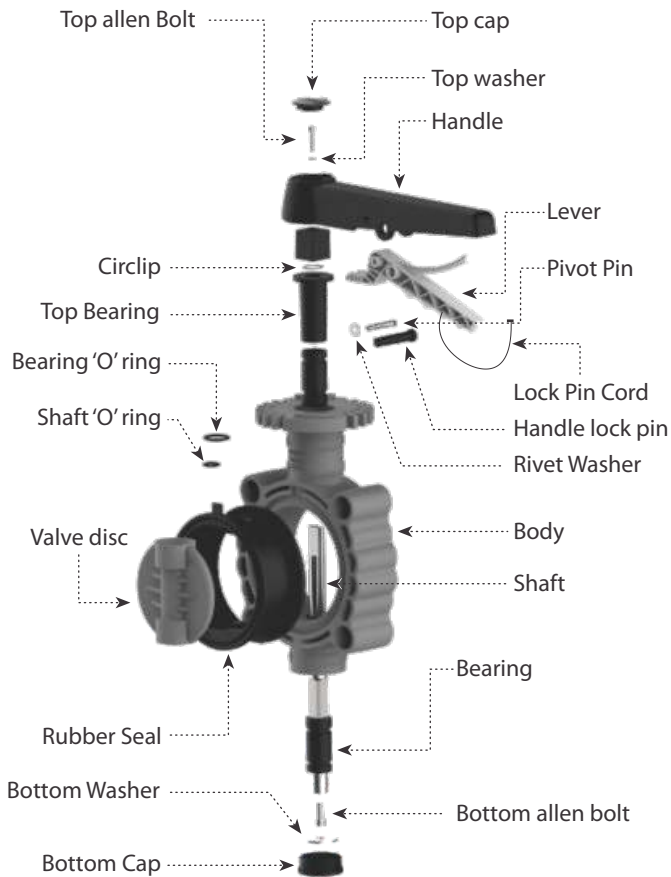
## Unique Features

- 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 of fluid.
- 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 and 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.

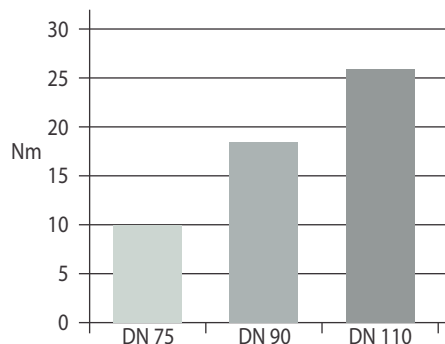
## Applications

- Ideally suitable for industrial application, water treatment, distribution and irrigation applications
- 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



## Torque Graph



## Installation

Mount the valve between DIN or ANSI (Supreme aqua Gold series flanges are recommended). A valve is supplied with the self sealing rubber seal and requires no additional rubber seal material. Follow flange standard bolt torque guidelines while installation.

## Operating Instructions

To operate the valve, first withdraw the locking pin, then lift the lever which is fitted close to the handle. The handle and the lever will disengage from the throttle teeth. Rotate the handle together with the lever to desired position. Release the lever to fix the valve position. Put the handle locking pin to lock the valve.

## Installation Procedure

1. Attach suitable connecting flange adapters to the piping system
2. Check pipe flange adapter, face alignment and spacing with the butterfly valve, face of flange adapters should be parallel and spaced apart just enough to allow insertion of the butterfly valve body.
3. Ensure the required gap between two flange adapters i.e. matching faces to prevent distortion and or damage to the rubber seal fitted on the face of the valve body
4. Ensure the valve is in closed position by turning the handle (clockwise), disc should be aligned parallel to the ends.
5. Ensure that the pipe flange faces are clean of any foreign material
6. With disc in the closed position, carefully place the valve between the flanges, line up and centre. Accurate centering between upstream and downstream pipe ends is essential for trouble-free operation of the valve and secure flange bolts by tightening with hands.
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.
8. After verifying proper operation, flange bolts should then be tightened using a star or crisscross pattern to evenly load the bolts to the torque values.
9. Pressurize the piping and check for any leakage, in case of any leakage, tighten bolts using cross-over pattern by increasing torque until leak stops.

Note : recommended torque is just for guideline purpose. However installer must verify proper strength of bolts for application. Bolts should be clean and un-lubricated

Caution: Excessive bolt torque may damage the flanges.