

# Triple Offset Butterfly Valve Manufacturers in USA



Valvesonly are the best [Triple Offset Butterfly Valve Manufacturers in USA](#). Triple offset butterfly valves are advanced types of butterfly valves designed to provide reliable sealing and high-performance control in various industrial applications. Unlike traditional butterfly valves, which typically have a single offset or double offset design, triple offset butterfly valves feature three different offsets in their design:

**Shaft Offset:** The shaft is positioned slightly off-center from the centerline of the valve's disc. This offset allows the disc to rotate freely without interference from the valve body, reducing wear and friction during operation.

**Cone Offset:** The sealing surface of the valve seat is machined in the shape of a cone, rather than a flat surface. This cone shape, combined with the offset of the shaft, allows the sealing surface to make contact with the disc only at the final closing point. This minimizes wear and ensures a tight seal even after repeated cycles of operation.

**Geometry Offset:** The disc's geometry is also offset from the centerline of the valve body. This offset, combined with the other two offsets, results in a cam-like action during operation, which allows the disc to move smoothly and achieve a bubble-tight seal with minimal torque.

**How does a Triple Offset Butterfly Valve work?**

A triple offset butterfly valve operates by using three different offsets in its design to achieve a tight and reliable seal. When the valve is in the open position, the disc is rotated away from the flow path, allowing fluid to pass through the valve with minimal obstruction. As the valve is closed, the first offset, the shaft offset, ensures that the disc rotates smoothly without rubbing against the valve body, reducing wear and torque. The second offset, the cone offset, comes into play as the disc approaches the seat. This offset causes the disc to make contact with the seat only at the final closing point, ensuring a tight seal without excessive friction or wear. Finally, the geometry offset provides a cam-like action during closure, enabling the disc to press tightly against the seat, creating a bubble-tight seal. As [Triple Offset Butterfly Valve Manufacturers in USA](#), our valves are able to provide precise control over flow rates and pressure while minimizing leakage and ensuring long-term reliability in various industrial applications.

### **Advantages:**

- The triple offset design ensures a bubble-tight seal even in high-pressure and high-temperature applications, reducing the risk of leakage and providing enhanced safety.
- The three offsets reduce friction and wear between the sealing surfaces, resulting in a longer service life compared to traditional butterfly valves.
- This reduces maintenance requirements and extends the intervals between valve replacements.
- Triple offset butterfly valves provide precise control over flow rates and pressure due to their advanced design, making them suitable for critical applications where accuracy and reliability are paramount.
- Unlike some other types of valves, triple offset butterfly valves offer bi-directional sealing capability, meaning they can effectively seal flow in both directions.
- They can handle a wide range of fluids, including corrosive and abrasive media, making them suitable for use in various industries.
- The triple offset design reduces the torque required to operate the valve, making it easier to open and close, especially in larger sizes or high-pressure applications.
- Triple offset butterfly valves typically have a more compact design compared to other types of valves, resulting in lower installation costs and requiring less space.
- With fewer moving parts and minimal wear, triple offset butterfly valves require less maintenance over their lifespan, reducing downtime and associated costs.

### **Industries:**

- Oil and Gas
- Petrochemical
- Power Generation
- Water Treatment and Distribution

- Chemical Processing
- Marine and Shipbuilding
- Pulp and Paper
- Mining and Minerals
- Wastewater Treatment
- Aerospace

### **Description**

- Available materials: Cast iron, Ductile iron, SS304, SS316, Carbon steel (WCB, WCC, WC9, WC6), SS316L, Duplex Steel (F51, F53, 5A, 4A, 6A)
- Size: 2" to 72"
- Class: 150 to 300
- Nominal Pressure: PN6 to PN25
- Ends: Wafer, Lug, Flanged
- Operations: Gear Operated, Electric and Pneumatic Actuated, Lever

**Our Website: <https://valvesonly.com/product-category/triple-offset-butterfly-valve/>**

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