



Butterfly Valves Series SuperAlloy Valves

Triple Offset Butterfly Valves

General Highlights

Applicable Seat Materials

- Metal with Graphite
- Metal with PTFE
- · Other materials can be supplied upon request

Specifications

- Anti-static
- Blowout-proof stem
- Fire-safe API 607
- V type packing, reliable packing seals
- Zero leakage
- Ends: Wafer, Lug, Double flanged
- Uni-directional/Bi-directional sealing
- Operation: Lever, Gear, Electric, Pneumatic actuator
- Bare shaft with ISO 5211 top mounting flange (when specified)



| ASME Butterfly valve as citing | | |
|--------------------------------|-------------------------------------|--|
| Design | API 609 | |
| Testing | API 598 | |
| Face to face dimension | API 609 | |
| Flange ends | ASME B16.5, ASME B16.47 Series A | |
| Pressure temperature rating | ASME B16.34 | |
| Visual Inspection of casting | MSS-SP-55 | |

| Size/Pressure Produce Range | | Operator | |
|--------------------------------|----------------|-----------------------------|--|
| Pressure | Wafer/Lug | Operator | |
| 150LB | 3" up to 80" | 3"~4" Lever: 5"~80" Gear | |
| 300LB | 3" up to 40" | 3"~4" Lever: 5"~40" Gear | |
| 600LB | On Application | | |

Notes:

^{*}Other unspecified standards and sizes available





Triple Offset Butterfly Valves

Design Features

Triple Offset Design

1st Offset: It is accomplished by moving the centerline of the shaft away from the seat surface.

 2^{nd} Offset: It is accomplished by moving the centerline of the shaft offset from the centerline bore of the valve.

3rd Offset: It is accomplished by adjusting the cone angle created by the 1st and 2nd offset angles at some point downstream of the valve in the center of the piping to the adjacent piping wall.

By incorporating the 3 offset into one design it eliminates any risk of friction and jamming of the disc on the seat. This increases valve lifetime, the driving torque is very low, in comparison with other type of valves (gate valves, ball valves...).

Blowout-Proof Stem

The stem is a split ring to protect the stem from blowout.

Whether the valve with or without pressure, release the packing bolts, stem will not blowout.

Fire Safe Design

The fire test is conducted according to API 607 Section 5. (Fig 1.)

V Type Gland Flange

It can prevent packing shift under pressure.

Packing Design

Packing is online adjustment.

Wedge shaped packing, the sealing will be more reliable.

Fig 1 Metal Graphite Metal Graphite

Double Belleville Spring Design

Belleville spring enhances packing sealing.

Seat Design

Laminated seat design are Uni-directional or Bi-directional.

The seat is retained by the seat retainer, which prevents the seat from blowing out during operation.

Pin Design

With a pin to eliminate gaps between disc and stem, so that the disc will not be moved after pressure.

Locking Device

Level operation with locking device to avoid misuse.

(Fig. 2)

Gear operation with the locking device is also available upon request.

Others

Short pattern length, low cost and light weight. Easy installation.

