



Ultimate Craft Cast Advanced Industry

BUTTERFLY VALVE OVERVIEW

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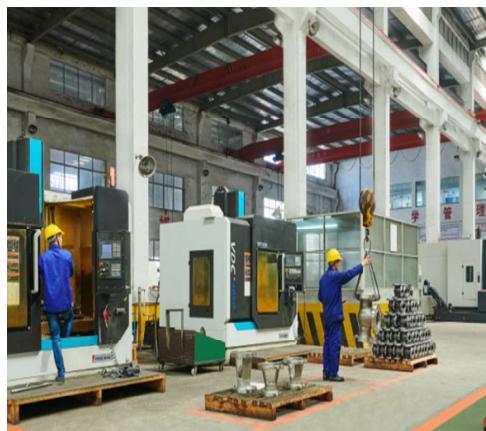
Web Site: www.kftevalves.com

ABOUT US

KFTE VALVE is an ISO 9001 & CE certified company specializing in manufacturing industrial valves including ball valves, gate valves, globe valves, check valves, plug valves and butterfly valves in carbon steel, stainless steel, duplex stainless and alloy materials. Our products conform to the latest industry standards in accordance to ANSI, ASME and API.

KFTE today has over 400,000 square feet of manufacturing facilities. Through its conviction to provide only the finest quality products and services to match the need of our customers, KFTE has now established itself as a serious player in the valve business.

KFTE VALVE has sold worldwide in North America, Europe, South America, South Asia, Africa and the Middle East. We consider product quality and customer satisfaction as our highest priority. We look forward to new customer relationships by providing value, quality, customer service, honesty, integrity and the commitment to maintain product consistency with each and every order.





Offset Metal Sealing Butterfly Valve

KFTE Offset metal sealing butterfly valve uses the three eccentric structure with multi-layer metal seal or pure metal sealing ring, different sealing materials are being used according to the different temperature request from end user.

The structure of valve sealing ring that was formed after machining for triple eccentric butterfly valve is oblique cone type, the purpose of which is to let the disc open in a subtle angle and seat sealing surface can be completely separated from the sealing surface of disc, thus to reduce the friction of sealing surface during the open and close.

INTRODUCTION

Butterfly valve uses a stem through an approximate circular plate of the disc and the valve stem rotation to drive the rotation of the disc, in order to control the effect of fluid switch.

KFTE produces triple offset metal sealing and concentric Lining butterfly valve.

Concentric Lining Butterfly Valve

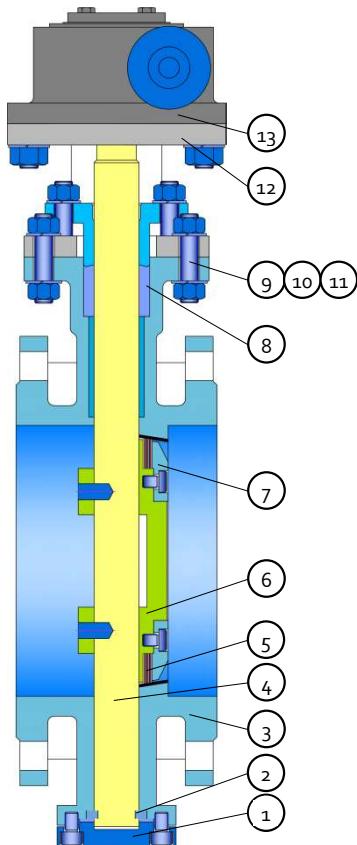
Concentric Lining butterfly valve adopts lining on all the parts that contact with medium inside of body, the stainless steel which is resistance of corrosion is used as stem and disc to ensure the corrosion resistance of different strong corrosive medium.

The valve body and disc materials can be made of cast iron, carbon steel or stainless steel to ensure the bearing strength. Many kinds of soft sealing material such as NBR, EPDM or PTFE etc can be used as lining material to adapt to different corrosive medium or working temperature.



BUTTERFLY VALVE

OVERVIEW (Triple Offset Type)



Part List

- 1 Cover
- 2 Segment
- 3 Body
- 4 Stem
- 5 Seal Ring
- 6 Disc
- 7 Plate
- 8 Packing
- 9 Stud
- 10 Nut
- 11 Washer
- 12 Yoke
- 13 Gear

STANDARDS

Design & Manufacture	API 609, ASME b16.34
Face-to-face	API 609, ASME B16.10
End Dimension	ASME B16.5 (RF, RTJ), ASME B16.47 (RF, RTJ) MSS SP-44 (NPS 22 Only) ASME B16.25 (BW)
Test & inspection	API 598

TYPICAL MATERIALS

Body, Disc A216 WCB, A217 WC6, WC9,
A351 CF3, CF8, CF3M, CF8M,
A995 4A, 5A, A352 LCB, LCC, LC2,
Monel, Inconel, Hastelloy (Casting)

Seat	13Cr/SS304/SS316+Composite materials, P+
Stem	A276 410, 304, 316, F51, AISI 4140+ENP, 17-4PH
Packing	Graphite, PTFE
O-ring	NBR, HNBR, FKM

Typical Triple Offset Butterfly Valve



Wafer Type



Lug Type



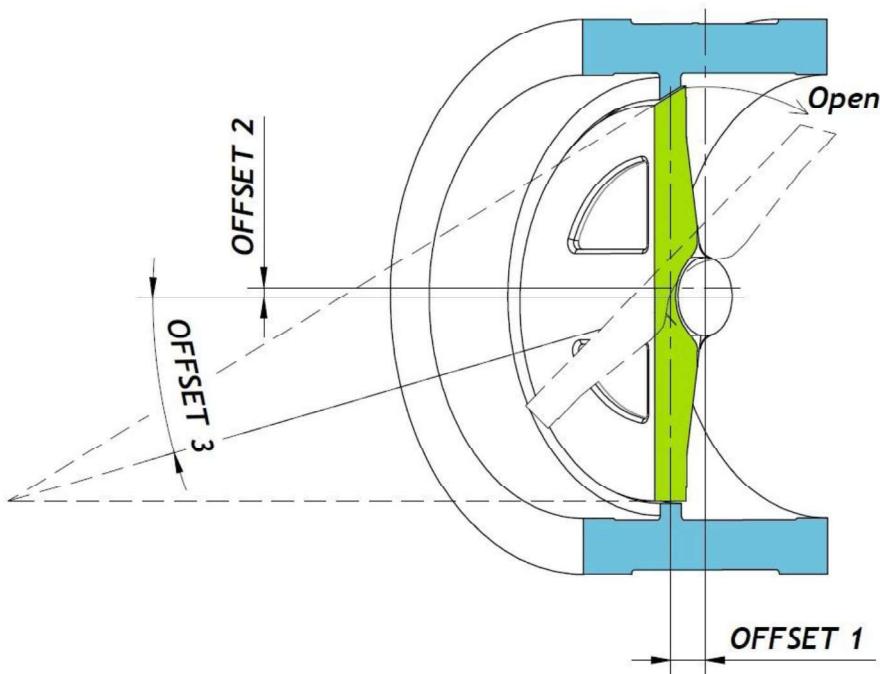
Flange Type



Butt Welding Type

BUTTERFLY VALVE

OVERVIEW (Triple Offset Type)



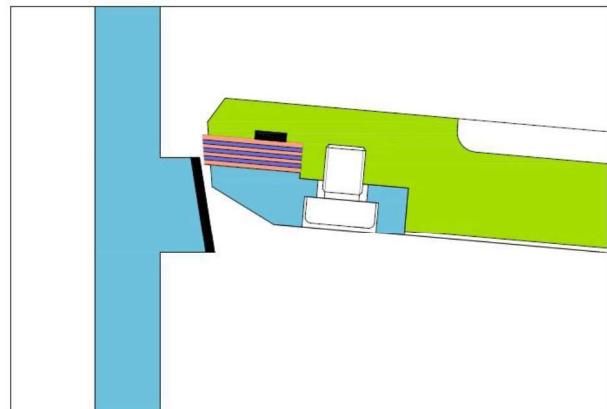
Offset 1: Offset for seat seal and the rotation center of stem.

Offset 2: Center of pipe and disc.

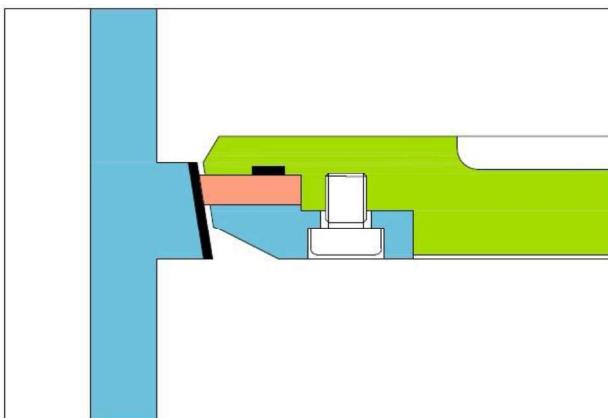
Offset 3: Seat sealing angle center line and flow passage center.

The triple offset of butterfly valve ensures the valve disc is completely separated from seat sealing surface while open in a slightly angle which could reduce the friction of sealing surface during open and close and opening torque as well as prolong the service life of the sealing surface.

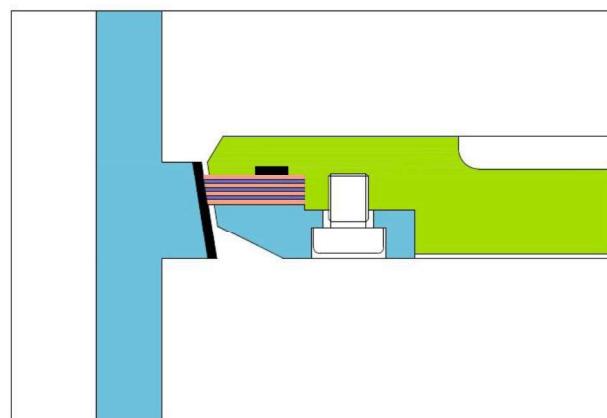
KFTE metal sealing butterfly valve adopts multi-layer sealing ring to achieve the valve seal, the multi-layer seal ring is generally made of stainless steel and graphite combination. The pure metal sealing can be used for special medium or high temperature.



Disc Slightly open



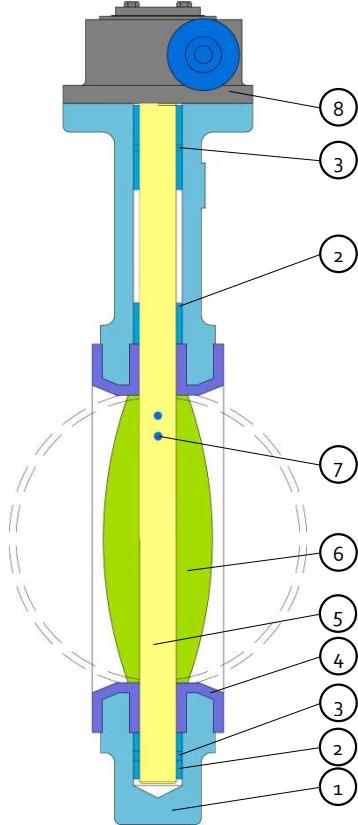
Disc closed: Pure metal seat ring



Disc closed: Multi-layer metal seat ring

BUTTERFLY VALVE

OVERVIEW (Concentric Lining Type)



Part List	
1	Body
2	Bushing
3	O-ring
4	Lining
5	Stem
6	Disc
7	Pin
8	Gear

STANDARDS

Design & Manufacture	API 609, AWWA C504, ASME b16.34
Face-to-face	API 609, ASME B16.10
End Dimension	ASME B16.5 (RF) ASME B16.47 (RF) MSS SP-44 (NPS 22 Only) AWWA A207
Test & inspection	API 598

TYPICAL MATERIALS

Body	Cast iron, A216 WCB, A351 CF ₃ , CF8, CF ₃ M, CF8M, A995 4A, 5A, Monel, Inconel, Hastelloy
Disc	Cast Iron+ENP, Carbon steel +ENP, A351 CF ₃ , CF8, CF ₃ M, CF8M, A995 4A, 5A, Monel, Inconel, Hastelloy
Lining	NBR, HNBR, EPDM, FKM, PTFE
Stem	A276 410, 304, 316, F51, AISI 4140+ENP, 17-4PH
Packing	NBR, HNBR, PTFE
O-ring	NBR, HNBR, FKM

Typical Concentric Lining Type Butterfly Valve



Wafer Type,
Rubber Liner

Wafer Type,
PTFE Liner

Lug Type,
Rubber Liner

Double Flange Type, Rubber Liner

Mono-Flange Type Rubber Liner

Rubber Concentric lined valve can be Bonded or Replaceable Liner.