

INTRODUCTION: -

Butterfly valves are rotary valves in which a disc-shaped closure member is rotated through 90 degree to open or close the flow passage. Tracing back the history of butterfly valve, butterfly valve was initially a simple pipeline damper that was not intended for tight shut off. However, over the years as industrial requirement evolved, the advent of elastomers has initiated the rapid development of tight shut off butterfly valves in which elastomer serves as the sealing element between the rim of the disc and the valve body.

As the sealing material advances, so does the usage of butterfly valve being adopt throughout the process industries. The sealing elastomers must carry the properties such as resistance to corrosion, abrasion, and stay in shape in a range of temperature and pressure, and must not harden during usage. These efforts lead to the development of PTFE, EPDM sealed tight shut off butterfly valve and elevated working temperature and pressure leads to metal seated isolation.

There are 2 major categories in today's butterfly valve design principles, namely concentric and eccentric butterfly valves. For low pressure sealing, such as the water industries, concentric butterfly valve with resilient sealing are commonly used. It's not only reliable but also more economical. When the process medium, pressure and temperature become crucial part of the process, a more sophisticated design of sealing for the butterfly valve is required, this is where the eccentric butterfly valve comes to play. It can either be double eccentric or triple eccentric depending on the applications.

GICOB™ range of API 609 and ISO standard butterfly valves offer both concentric and eccentric design to cater for client's requirement. Our valves are stringently tested for the best in quality prior delivery to our customers. Our products are manufactured using the latest technology and strictly coherent with client's expectation.

Our mission is to provide the right solution with exceptional quality valves.

GICOB™ butterfly valve comply with the pre-qualified material identified in NACE MR0175/ISO 15156 as optional requirement specified by client. Body material ranging from Carbon steel, Stainless steel, Aluminium bronze, Duplex and rubber lined ductile iron.



PRODUCT DETAILS: -

GICOB™ Concentric Butterfly valve SB Model

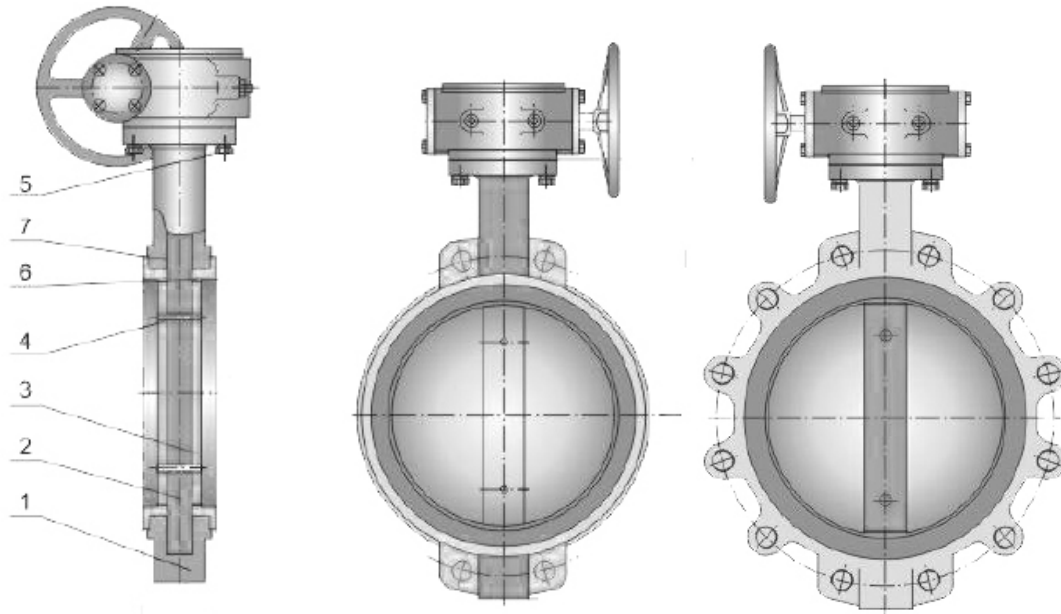


Figure 1. Concentric Butterfly Valve

Item	Parts	Available Materials
1	Body	A216 WCB, A351 CF8M, B148 C95400, A890 4A, Ductile iron
2	Stem	17-4PH, SS304, SS316, MONEL
3	Disc	A216 WCB, A351 CF8M, A890 4A, B148
4	Hinge pin	SS410, SS304, SS316
5	Operator	Lever, Worm Gear, Pneumatic actuator, Electric Actuator
6	Seat Ring	NBR, EPDM, PTFE
7	Bushing	Al-Br, SS304+PTFE, SS316+PTFE
	Stem Packing	Flexible Graphite

Features

- ◆ Design standard: API609, API607, ASME B16.34
- ◆ Pressure Ratings: ANSI125/150, PN6, 10, 16, 150psi
- ◆ Testing & Inspection: API 598
- ◆ End Design: ASME B16.5
- ◆ End Connection: Available in Flange, RF, FF, Wafer, Full lug, Butt weld
- ◆ Available in metal and soft sealing
- ◆ Other body material such as Titanium, Platinum etc available upon request.
- ◆ Size up to 48"

GICOB™ Eccentric Butterfly valve DB Model

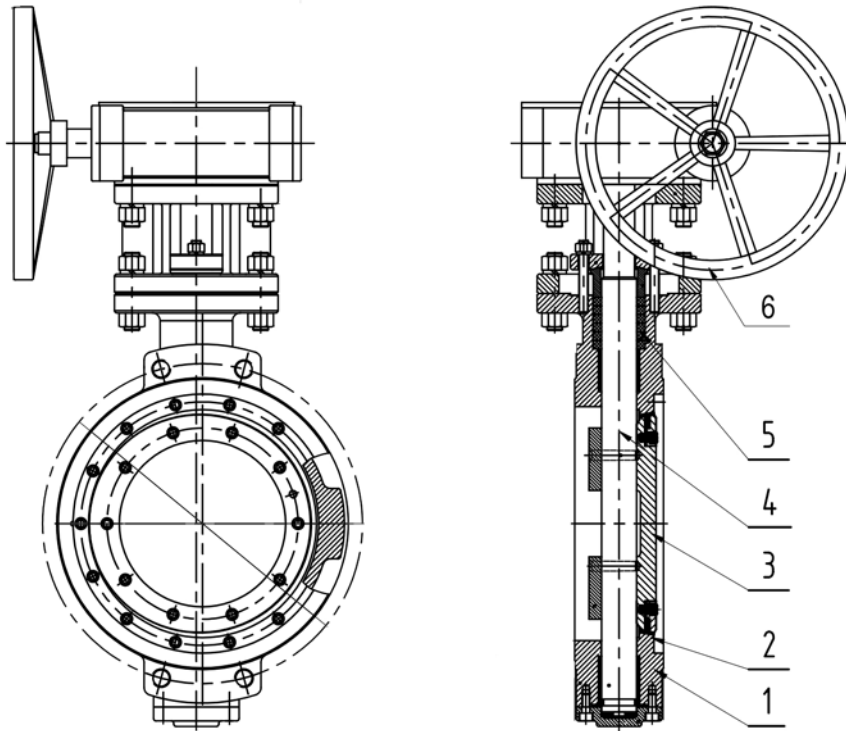


Figure 2. Eccentric Butterfly Valve

Item	Parts	Available Materials/Description
1	Body	A216 WCB, A351 CF8M, B148 C95400, A890 4A, Ductile iron
2	Seat	EPDM, RPTFE
3	Disc	A216 WCB, A351 CF8M, A890 4A, B148
4	Stem	17-4PH, SS304, SS316, MONEL
5	Packing	Flexible Graphite
6	Operator	Lever, Worm Gear, Pneumatic actuator, Electric Actuator

Features

- ◆ Design standard: API609, API607, ASME B16.34, AWWA
- ◆ Pressure Ratings: ANSI125/150, 300, 600, PN6, 10, 15, 25, 150~350psi
- ◆ Testing & Inspection: API 598
- ◆ End Design: ASME B16.5
- ◆ End Connection: Available in Flange, RF, FF, Wafer, Full lug, Butt weld
- ◆ Available in metal and soft sealing
- ◆ Other body material such as Titanium, Platinum etc available upon request
- ◆ Size up to 72"

HOW TO ORDER: -

GBU – 02 – 03 – 04 – 05 – 06 – 07 – 08 – 09

02 Model	
Code	Desc
SB	Concentric
DB	Eccentric

03 Size	
Code	Desc
50	2"
80	3"
100	4"
125	5"
150	6"
200	8"
250	10"
300	12"
350	14"
400	16"
450	18"
500	20"
550	22"
600	24"
650	26"
700	28"
750	30"
800	32"
850	34"
900	36"
950	38"
1000	40"
1050	42"
1100	44"
1150	46"
1200	48"
1300	52"

04 End Connection	
Code	Desc
RF	Raised Face
FF	Flat Face
RJ	Ring Type Joint
BW	Butt Weld
WF	Wafer
LG	Lug

05 Class	
Code	Desc
00	ANSI125
01	ANSI150
02	ANSI300
03	ANSI600
P1	PN6
P2	PN10
P3	PN15
P4	PN25

06 Body Material	
Code	Desc
A	A216 WCB
I	A351 CF8M
J	A351 CF8
K	A890 4A
AB	B148
AD	Ductile Iron

07 Trim Material	
Code	Desc
TA	A216 WCB
TI	A351 CF8M
TJ	A351 CF8
TK	A890 4A
TAB	B148

08 Seat/Seal	
Code	Desc
S20	PTFE
S21	NBR
S22	EPDM
S2M	METAL

09 Operator	
Code	Desc
LO	Lever Operated
GO	Gear Operated
EA	Electric Actuated
PO	Pneumatic Operated
HA	Hydraulic Actuated
BS	Bare Stem