



**Wafer Butterfly Valves**  
Hard sealing face  
Soft sealing face

**STANDARDS**

Flange Butterfly Valves: MSS SP-67  
 Wafer Butterfly Valves: MSS SP-68 or API 609  
 Face to face dimensions: ANSI B16.10 MSS SP-67 and MSS SP-68 or API 609  
 Test: API 598

**End flange dimensions**

NPS 1 1/2-24: ANSI B16.5,  
 NPS 30-72: MSS SP-44. or API 605

**Type of construction**

Flange Butterfly Valves (Hard face and soft face)  
 Wafer Butterfly Valves (Hard face and soft face)

**Type of connection**

RF and RTJ flange ends to ANSI B16.5 or API 605 and MSS SP-44 standard.

**Type of operation**

Lever  
 Worm Gear actuator, Electric actuator, Pneumatic actuator.  
 Actuator dimensions to ISO 5211 standard.

CLASS 300												
DN	40	50	65	80	100	125	150	200	250	300	350	400
NPS	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14	16
L	-	-	-	127	127	127	127	152.4	203.2	203.2	203.2	203.2
	-	-	-	5	5	5	5	6	8	8	8	8
L <sub>1</sub>	38.1	46	50.8	48	54	57.2	59	73	82.5	92	117.5	133.5
	1.5	1.81	2.0	1.88	2.12	2.25	2.31	2.88	3.25	3.62	4.62	5.25
H	185	190	220	229	248	258	301	318	365	415	458	510
	7.28	7.48	8.7	9	9.8	10.2	11.9	12.5	14.4	16.3	18	20
Do	160	160	160	160	160	160	200	200	250	300	400	450
	6.3	6.3	6.3	6.3	6.3	6.3	7.9	7.9	9.8	11.8	15.8	17.7
F(kg) W(kg)	-	-	-	14	15.7	19.8	42	97	167	182	268	287
	9	10.5	11.5	12.5	13.2	17.6	39.8	88	143	157	222	253

# MATERIAL LIST

NO.	Part Name	Carbon Steel		Alloy Steel			Stainless Steel			
		WCB	LCB	WC6	WC9	C5	CF8	CF8M	CF3	CF3M
1	Body	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
2	Butterfly plate	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
3	Seat Ring	PTFE or Stainless steel and graphite spiral wound								
4	Axle	A182 F6	A182 F6	A182 F304	A182 F304	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L
5	Below Axle bush	A439 D2 or A436 Austenite iron								
6	Top Axle bush	A439 D2 or A436 Austenite iron								
7	Lock Ring	A105	A182 F6	A182 F22	A182 F22	A182 F22	A182 F304	A182 F304	A182 F304L	A182 F316L
8	Axle packing	PTFE or Graphite								
9	Gland	A182 F6	A182 F6	A182 F304	A182 F304	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L
10	Gland flange	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
11	York	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
12	Bolt	A193 B7		A302 L7	A193 B16	A320 B8	A193 B8M			
13	Below Cap	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
14	Bolt	A193 B7		A302 L7	A193 B16	A320 B8	A193 B8M			
15	Pin	Carbon steel or Alloy steel								
16	Sealing-face overlay	Soft face(PTFE)Hard face(13Cr and 18Cr-8Ni or Co-Cr-A)								

The material is according to ASTM standard.