



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 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.

**MATERIAL LIST**

Part Name	Carbon Steel		Alloy Steel			Stainless Steel			
	WCB	LCB	WC6	WC9	C5	CF8	CF8M	CF3	CF3M
Body	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
Butterfly Plate	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
Seat Ring	PTFE or Stainless steel and graphite spiral wound								
Axle	A182 F6	A182 F6	A182 F304	A182 F304	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L
Below Axle bush	A439 D2 or A436 Austenite iron								
Top Axle bush	A439 D2 or A436 Austenite iron								
Lock Ring	A105	A182 F6	A182 F22	A182 F22	A182 F22	A182 F304	A182 F304	A182 F304L	A182 F316L
Axle packing									
Gland	A182 F6	A182 F6	A182 F304	A182 F304	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L
Gland flange	A216 WCB	A352 LCB	A217 W C6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
York	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
Bolt	PTFE or Graphite								
Below Cap	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
Bolt	A193 B7 A302 L7 A193 B16 A320 B8 A193 B8M								
Pin	Carbon steel or Alloy steel								
Sealing-face overlay	Soft face (PTFE) Hard face (13Cr and 18Cr-8Ni or Co-Cr-a)								

The material is according to ASTM standard.