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Butterfly

- Available in sizes 2" to 48".
- Available in Wafer (42) or Lug (44) style body (2" to 30").
- Double flange style body for 28" to 48" valves.
- Wafer body features four alignment holes.
- Pressure ratings for tight shut-off at temperatures up to the maximum limit of the seat material:
 - 2" to 12" 200 psi, 125 psi for PTFE seat.
 - 14" to 48" 150 psi.
- Ideal for on-off or throttling services.
- Available with handles (2" to 12"), manual gear operators (2" to 48"), and electric or pneumatic actuators (2" to 48").
- Refer to Crane automation bulletin for details of pneumatic and electric actuators.
- Designed to comply with MSS SP-67.

- Compatible with ASME B16.1 and ASME B16.5 flanges.
- Valves 2" to 20" meet the intent and have passed the AWWA C-504-87 Section 5 proof of design tests.
- Type approval certification from ABS for marine applications (2" to 48").
- Bi-directional dead-end capability to 200 psi (2" to 12") and 150 psi (14" to 24") is standard on lug valves.
- Operators mounted perpendicular to pipe.
- For bolting information, consult the Crane Butterfly Installation and Maintenance Manual.
- Vacuum Service Rating: zero leakage at 24" of mercury.
- Commercial cleaning available for non-silicone and Oxygen level 2.
- PED Certification available for sizes 2" to 24".

Valve Seating Torques (In-Lbs.) 2" to 30"

Valve	Standard Disc Differential Pressure				
Size	50 PSI ∆P Bushing	100 PSI ∆P Bushing	150 PSI ∆P Bushing	200 PSI ∆P Bushing	
2"	100	106	111	117	
2 1/2"	150	163	176	189	
3"	207	220	232	244	
4"	290	323	357	390	
5"	423	481	540	598	
6"	599	691	783	875	
8"	1,060	1,183	1,307	1,430	
10"	1,671	1,872	2,074	2,275	
12"	2,568	2,795	3,023	3,250	
14"	2,640	3,070	3,500	-	
16"	4,260	4,880	5,500	-	
18"	6,287	7,243	8,200	-	
20"	8,360	9,180	10,000	-	
24"	15,427	16,813	18,200	-	
30"	27,313	29,407	31,500	-	

Valve Seating Torques (In-Lbs.) 28" to 48" Double Flanged

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	Standard Disc Differential Pressure				
Valve Size	50 PSI Wet / Dry	100 PSI Wet / Dry	150 PSI Wet / Dry		
28"	23,718	26,639	28,957		
30"	28,320	30,860	33,338		
32"	32,418	35,073	38,126		
36"	40,622	43,480	46,524		
40"	68,924	74,048	78,995		
42"	69,747	74,632	79,862		
48"	96,598	103,837	111,112		

All torques shown in these charts were derived from test data using water at 60°F. For torques using dry gases, multiply these numbers by 2.0. For torques involving other media, please consult the factory.

There is no safety factor included in the numbers shown on these charts. For actuator sizing, Crane recommends that these values be multiplied by 1.5 for single valve applications, or 2.0 for 3-way ("tee") applications.

For PTFE seats multiply the numbers shown by 2.0.

Under certain conditions, hydrodynamic torque can meet or exceed seating and unseating torques. When designing valve systems, hydrodynamic torque must be considered to help assure correct selection for the application.

