

DOUBLE OFFSET DESIGN

Double offset design ensures a minimum seating and unseating torque. This will help to save the cost of actuators and provide easier reliable operating of the valve.

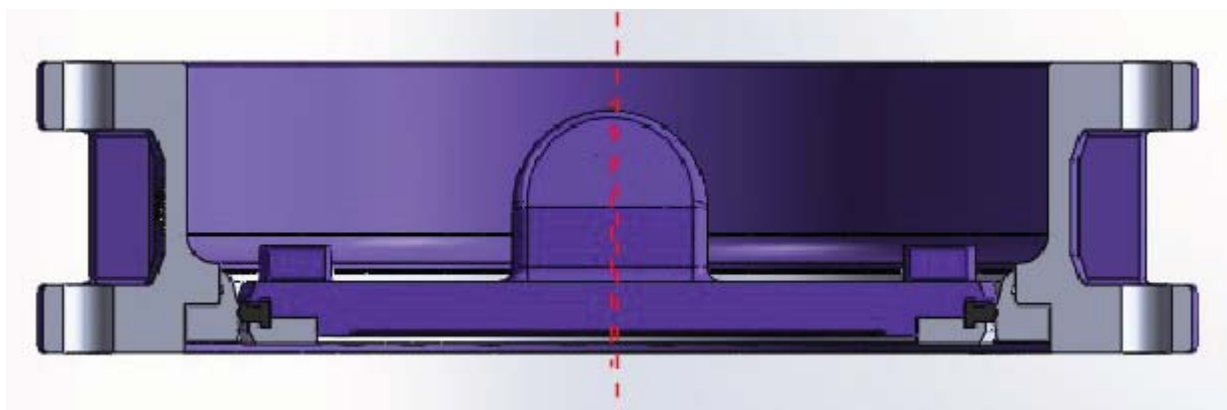
The first offset is the shaft offset from the seating plane. This offset ensures the disc seal only contact or move into the seat when valve closing hits the final seating range to avoid wear caused by constantly contact between seat and seal. The second offset is the shaft centerline offset from the center of the



Double Offset Design Provides a Minimum Seating/unseating Torque.

pipeline. When the disc is rotating CCW to open, the bigger side of the disc moves away from the seat and the smaller side

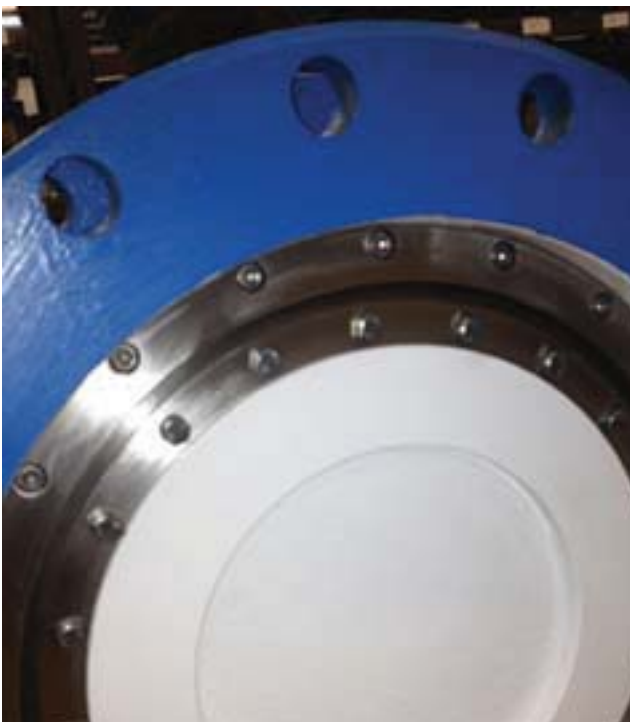
of the disc needs less torque to jump out of the seat. The operating torque will be significantly reduced.



FEATURES

Field Replaceable Seat Ring

All of our HP series butterfly valves are equipped with a replaceable corrosion resistant body mounted seat. This seat is secured to the body with standard bolting practices, allowing easy field replacement by maintenance personnel with no additional training. The design of the seat allows for more accurate machining operations than standard weld-in-body seats, producing higher final tolerances units.



Field Replaceable Seat Ring Ensures Valve Seat Replacing on Site Without Replacing the Whole Valve.

Rugged Valve Disc



Discs are constructed of the highest strength-to-weight ratio materials available.

Heavy duty constructed discs provide the highest strength to ensure longer life and maintenance free operation. On valves 24 inches and greater, a flow through disc design is employed to minimize line turbulence and lower head loss. The greater free flow area provides less pressure drop in the full-open position than other disc shapes. This design of disc distributes material where it is needed to resist loads, achieving more strength at less weight. The flow thru disc has a greater free flow area than conventional lens-shaped designs, resulting in lower pumping costs.



Standardized bonnet allows direct mounting of actuators without the need for adapters.

Standardized Bonnet

We provide standardized bonnet use ISO or MSS mount dimensions which allows for the attachment of standard actuators without the need for adapters. The bonnet also has windows which allows on site packing adjustment without removing the actuator and ensures a better sealing function of the packing rings.

Corrosion Resistant Shafts

304 type Stainless Steel is used for shaft to prevent corrosion of this vital structural component.

V-type Packing

Field adjustable V-type packing rings ensure a reliable seal and maintenance free for most applications.

Bearings

Self-lubricated sleeve-type bearings are used to support the shaft and provide minimum friction during shaft rotation.

Sealed Bushings

Sealing rings have been placed between line-flow and all friction reducing and drive support components. This design increases the valve service life and reduces leakage possibilities.

Coatings and Rubber Linings

Various corrosion resistant coatings are available upon request. Coating thickness can be determined by applications. To prevent corrosion of valve inside, rubber lining is available for special application use.



NSF certified drinking water safety coatings are available.

WIDE RANGE OF SIZES, PRESSURES, MATERIALS

We offer from 4inch (DN100) to 144inch (DN3600) double offset butterfly valves in pressure rating 150/250 class (PN10/PN16) and various materials to choose upon customers' requests or application needs.



VSI 72inch (DN1800) Double Offset Butterfly Valve

SUITABLE FOR VARIOUS APPLICATIONS



1 Water Treatment Plant



2 Water Distribution System



3 Mining



4 Sewage Treatment Plant

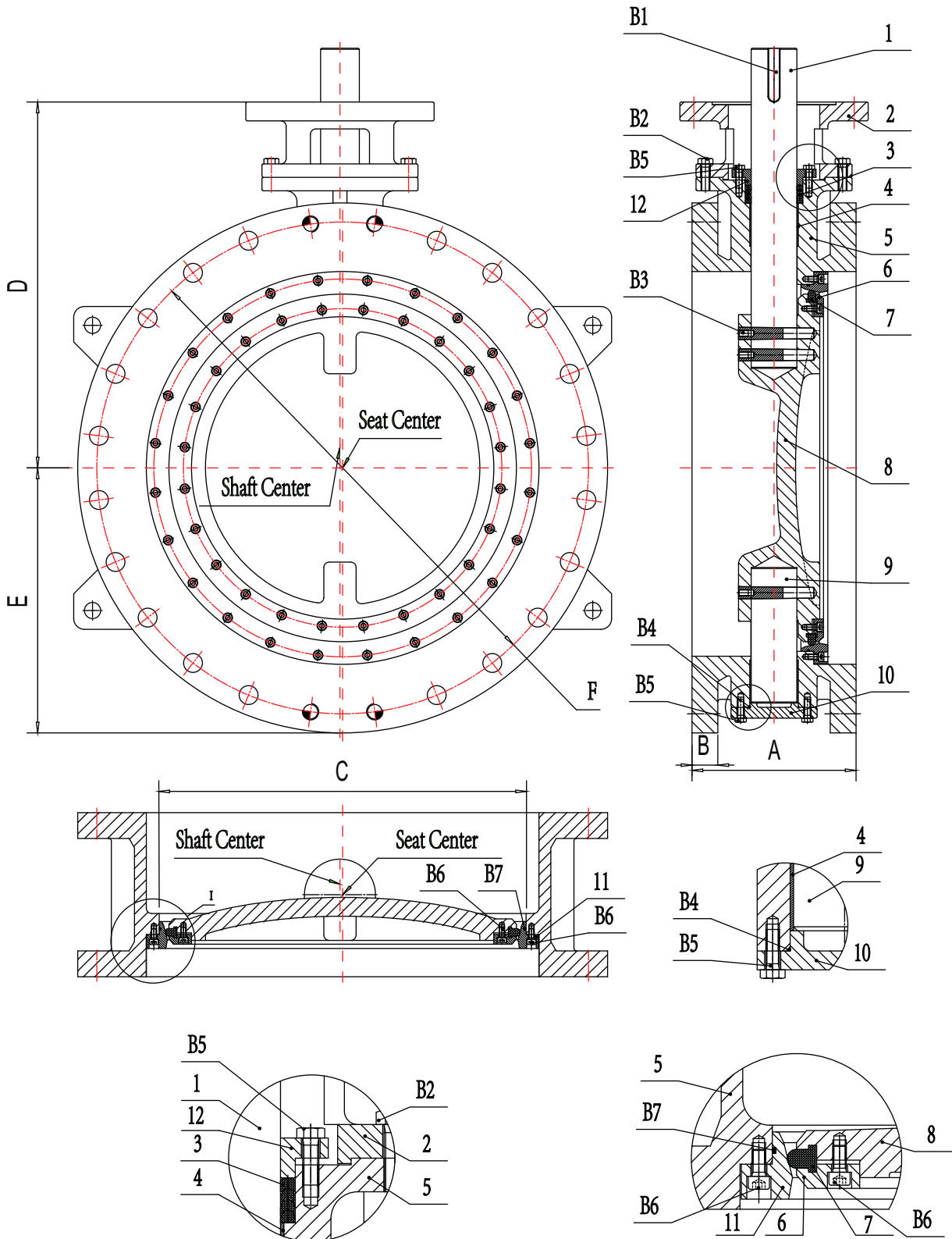


5 Petro-Chemical



6 Power Plant

PRODUCT DRAWING



DIMENSIONS

Main Dimensions (inch)								
Valve Sizes	A		B		D	E	F	
	Flange	MJ	Flange	MJ				
4"	5	7.5	0.94	1	7.56	6	7.5	
6"	5	8	1	1.06	8.25	7	9.5	
8"	6	8.25	1.12	1.13	9.2	8	11.75	
10"	8	8.88	1.18	1.19	11.7	10	14.25	
12"	8	10	1.25	1.25	12.75	11	17	
14"	8	13	1.38	1.31	15.7	13.5	18.75	
16"	8	14	1.44	1.38	16.7	14.62	21.25	
18"	8	14.13	1.56	1.44	18.15	15.5	22.75	
20"	8	14	1.69	1.5	20.15	17.5	25	
24"	8	15.63	1.88	1.63	23.15	20.5	29.5	
30"	12	18.12	2.12	1.81	29.15	27.38	36	
36"	12	19.25	2.38	2	31.9	29.5	42.75	
42"	12	19.75	2.62	2	35.88	35.25	49.5	
48"	15	21.31	2.75	2	41.44	39.31	56	
54"	15	-	3	-	45.44	44.25	62.75	
60"	15	-	3.12	-	53.12	48.25	69.25	
66"	18	-	3.38	-	59.38	53.31	76	
72"	18	-	3.5	-	61	59	82.5	
78"	18	-	2.75	-	73.65	54.5	89	
84"	19	-	2.88	-	76.4	59.75	95.5	
90"	20	-	3	-	82.5	62.88	102	
96"	21	-	3.25	-	72	68.5	108.5	
102"	24	-	3.25	-	76.5	71.7	114.5	
108"	24	-	3.38	-	80	75.38	120.75	
For other sizes, please contact factory for information.								

MATERIAL OF CONSTRUCTION

Bill of Material		
Item	Description	Material
1	Upper Shaft	Stainless Steel Type 304
2	Yoke	Ductile Iron ASTM A536 Grade 65-45-12
3	Packing	EPDM
4	Bushing	Nylon+PTFE
5	Body	Ductile Iron ASTM A536 Grade 65-45-12
6	Retaining Ring	Ductile Iron ASTM A536 Grade 65-45-12
7	Seat	EPDM
8	Disc	Ductile Iron ASTM A536 Grade 65-45-12
9	Lower Shaft	Stainless Steel Type 304
10	Bottom Cover	Ductile Iron ASTM A536 Grade 65-45-12
11	Seat Ring	Stainless Steel Type 304
12	Packing Gland	Ductile Iron ASTM A536 Grade 65-45-12
B1	Key	Steel
B2	Hex Bolt	Stainless Steel Type 304
B3	Pin	Stainless Steel Type 304
B4	O ring	EPDM
B5	Hex Bolt	Stainless Steel Type 304
B6	Inner Hex Bolt	Stainless Steel Type 304
B7	O ring	EPDM

Note: Other materials are available upon request.