

Giant Butterfly Valves



SERIES: PD

SIZES: 28" – 48"

BODY TYPE: Wafer Style

MATERIALS: Body: PDCPD
Disc: PDCPD
Seat & O-Rings: EPDM

Full Bolt Circle
for easy
installation



The Chemline **PD Series** Giant Butterfly valve has a full elastomeric seat with bubble tight seal. Only the seat (liner) and disc are wetted parts. The disc and seat are spherically designed for long cycle life. The liner is a full seat requiring low bolt torques to seal against piping flanges.

PDCPD (Polydicyclopentadiene) is a polyolefin thermoset plastic. Valve parts are manufactured by a process called reaction injection moulding (RIM). PDCPD has excellent corrosion resistance and temperature ratings, very similar to those of polypropylene. It is durable material offering high impact strength and a fraction of the weight of cast iron.

Features

Sizes from 28" to 48"

High Working Pressures

- 110 psi for all sizes

ISO Actuator Mounting Dimensions

- Top flange and shaft have ISO 5211 standard dimensions for easy actuator mounting

Light Weight

- Less than half the weight of cast iron
- Significantly lower cost of installation and removal for maintenance

Easily Installed

- Full bolt hole circle makes installation and alignment easy
- No flange gaskets are necessary

Easily Maintained

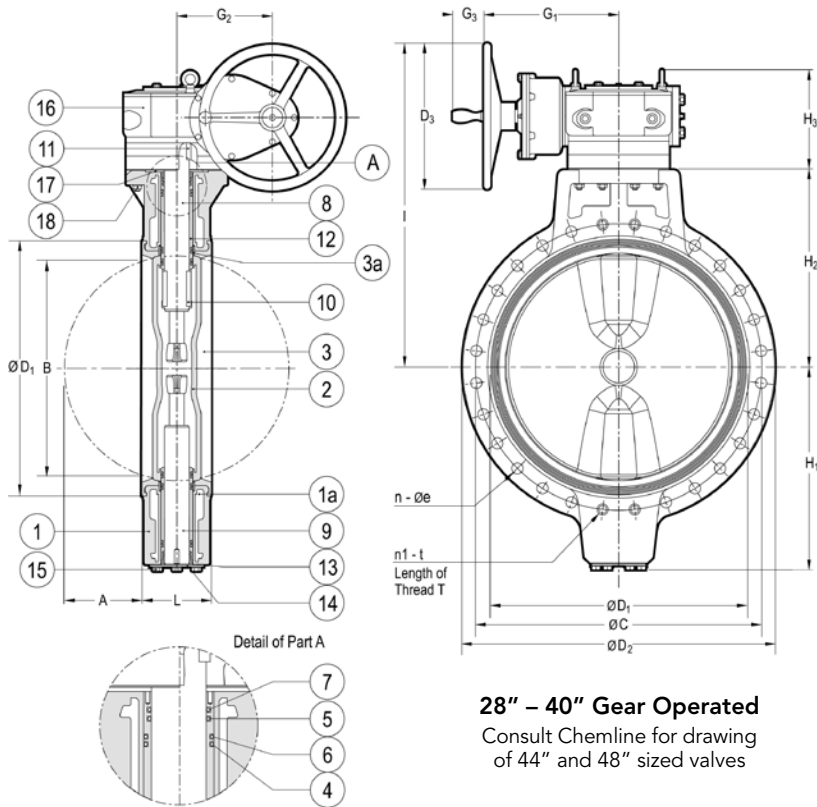
- Seat is easily replaceable

Non-Wetted Metal Parts

- No metal components ever come in contact with the media
- Metal inserts inside body and disc add strength

¹PDCPD=Polydicyclopentadiene

Giant Butterfly Valves



28" – 40" Gear Operated
Consult Chemline for drawing of 44" and 48" sized valves

PARTS

▲ Recommended Spare Parts

No.	Part	Pcs.	Materials
1	Body	1	PDCPD
1a	Inserted Metal of Body	1	Cast Iron (FCD450)
2	Disc	1	PDCPD
3▲	Seat	1	EPDM
3a	Stabilization Ring	2	304 SS
4▲	O-Ring (A)	11	EPDM
5▲	O-Ring (B)	3	EPDM
6▲	O-Ring (C)	1	NBR
7▲	O-Ring (D)	1	NBR
8	Stem (A)	1	304 SS
9	Stem (B)	1	304 SS
10	Key (A)	1	Carbon Steel
11	Key (B)	1	Carbon Steel
12	Bushing	2	Bronze Casting
13	Gasket (A)	1	Nonas Sheet
14	Stem Holder	1	304 SS
15	Bolt (A)	6	304 SS
16	Gear Box	1	Cast Iron ¹
17	Gasket (B)	1	Nonas Sheet
18	Bolt (B)	8	304 SS

¹Cast Iron (FC200 with epoxy coating).

DIMENSIONS INCHES

Size	L	A	B*	C	n	n ₁	t	T	e	D	D ₁	D ₂	D ₃	G ₁	G ₂	G ₃	H ₁	H ₂	H ₃	I
28"	8.1	9.1	25.1	34.0	24	4	1-1/4	1.38	1.38	26.4	29.9	36.5	17.1	15.8	11.2	3.6	23.2	23.2	11.65	38.0
32"	9.5	10.4	28.8	38.5	24	4	1-1/2	1.38	1.62	30.3	34.2	41.3	17.1	15.8	11.2	3.6	24.4	24.4	11.65	39.2
36"	9.5	12.4	32.9	42.8	28	4	1-1/2	1.38	1.62	34.3	38.5	46.0	25.0	15.8	11.2	3.6	27.7	27.8	11.65	46.5
40"	11.8	13.2	36.3	47.3	32	4	1-1/2	1.38	1.62	38.2	42.5	50.0	25.0	22.2	9.5	3.6	29.5	39.5	12.72	48.8
44"	11.8	15.4	40.8	51.8	36	4	1-1/2	1.77	1.62	42.5	47.0	54.3	25.0	22.2	9.5	3.6	30.7	33.1	12.72	52.4
48"	13.8	16.1	44.0	56.0	40	4	1-1/2	1.77	1.62	46.1	51.2	58.6	25.0	22.2	9.5	3.6	33.5	35.0	12.72	54.3

* B=Minimum inside diameter (I.D.) of mating pipe. If I.D. of pipe is B dimension or less, the inside of pipe and must be chamfered or spacers provided. Consult Chemline.

Cv VALUES VS. DISC ANGLE

WORKING PRESSURES PSI

WEIGHT LB.

Size	Cv			Working Pressure (PSI)			Weight (Lb.)
	30°	60°	90°	0-50°C 32-122°F	60°C 140°F	80°C 176°F	
28"	3,600	13,000	32,000	110	95	70	838
32"	4,200	17,000	43,000	110	95	70	1,014
36"	5,600	22,000	55,000	110	95	70	1,213
40"	7,000	26,000	70,000	110	95	70	1,830
44"	23,000	32,000	86,000	110	95	-	2,205
48"	27,000	37,000	100,000	110	95	-	2,426

ORDERING EXAMPLE

Chemline Giant Butterfly Valves		PD	D	280	D	E	G
Body	D – PDCPD (Polydicyclopentadiene)						
Size	280 – 28"	320 – 32"	360 – 36"	400 – 40"	440 – 44"	480 – 48"	
Disc	D – PDCPD (Polydicyclopentadiene)						
Seat	E – EPDM						
Operator	G – Gear Operator						

Example: Chemline Giant Butterfly Valve, PDCPD body, 28", with EPDM seat, gear operator.