

PDCPD Large Size Butterfly Valve (Manual Type)

Features

- The use of PDCPD plastic provides excellent resistance to corrosion (Including electric corrosion).
- Light weight valve using PDCPD plastic whose specific gravity is 1/7 of cast iron.
- Superior watertight characteristics due to flanged seat (EPDM).
- Excellent flow characteristics due to reduced thickness of valve element.
- Higher abrasion resistance than cast iron.



Basic specifications

- Valve Type : PDCPD Large Size Butterfly Valve
- Size : 700 mm - 1,200 mm (28 inch - 48 inch)
- Body Material : PDCPD
- Seal Material / Seat : EPDM
- Connection / Wafer : JIS B2220 10K, DIN/EN1092-1, ANSI B16.5

		FLUID TEMPERATURE °C {°F}	MAXIMUM WORKING PRESSURE (NORMAL TEMPERATURE) MPa {psi}
			FOR WAFER
PDCPD	(700mm - 1,000mm)	0 ~ 80 { 30~175 }	0.75 {110}
PDCPD	(1,100mm - 1,200mm)	0 ~ 60 { 30~140 }	0.75 {110}

Note: The maximum working pressure is the value including the water hammer pressure.
Be careful that the maximum working pressure is not exceeded during use.

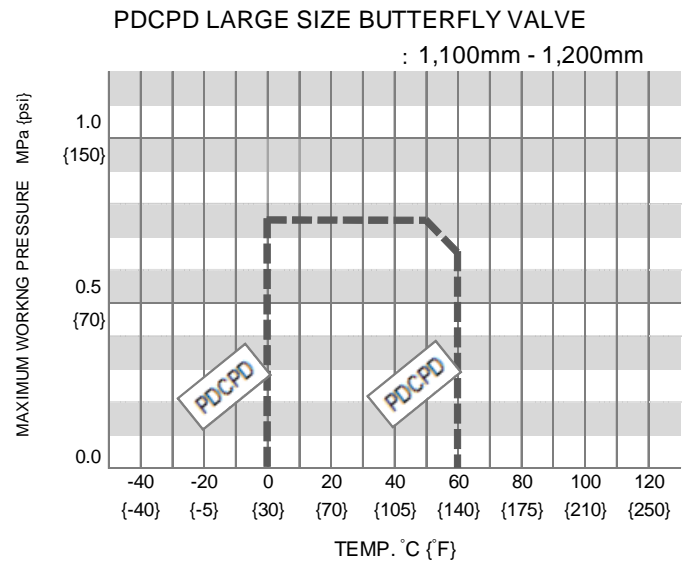
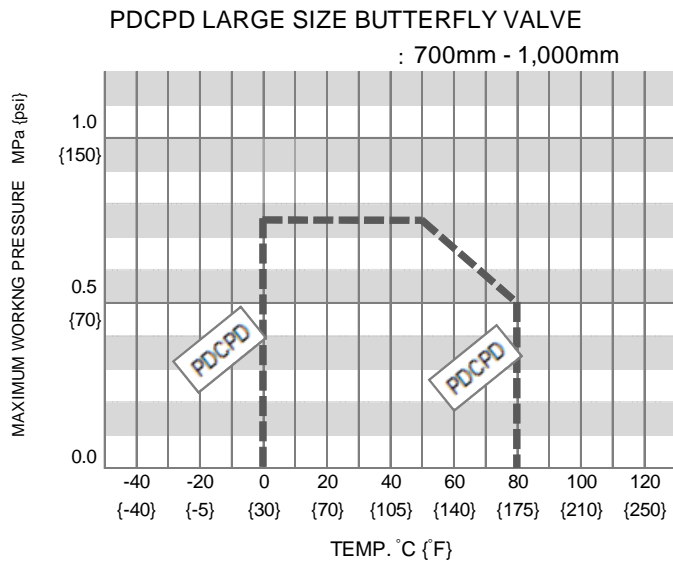
* Concerning the allowable pressure for each temperature and material, see the technical documents at the next page of this sheet.

Certificate / Approval

PED

“For details of applicable products, please consult us.”

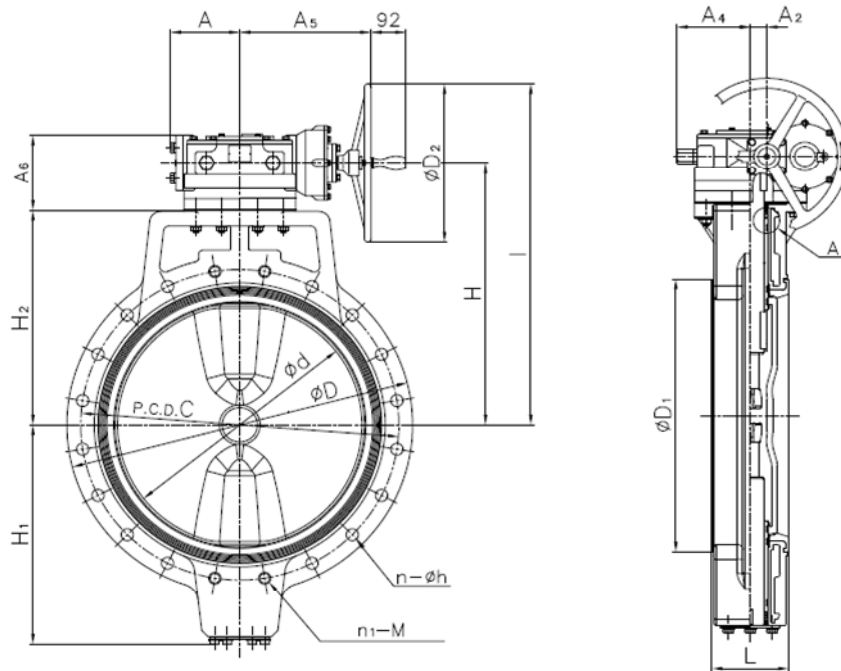
Working pressure vs. Temperature



Note: Make sure that the temperature and pressure are within the working range during operation.
(If the tolerance range is exceeded during use, the valve may be damaged.)

Product dimension

[GEAR TYPE]
[700-1,000 mm]



■ JIS, DIN (Unit: mm)

mm	inch	d	D	D ₁	D ₂	L	H	I	H ₁	H ₂	A	A ₂	A ₄	A ₅	A ₆
700	28	670	928	760	435	206	720	938	589	590	186	44	193	354	206
800	32	770	1034	870	435	240	750	968	619	620	186	44	193	354	206
900	36	870	1168	978	635	240	835	1153	704	705	186	44	193	354	206
1000	40	970	1262	1080	635	300	916	1234	749	750	220	181	236	451	258

JIS 10K								DIN PN10							
C	h	N Number of Bolt Holes	n Through hole	n1 screw holes		M	B	C	h	N Number of Bolt Holes	n Through hole	n1 screw holes		M	B
				/side	/total							/side	/total		
840	33	24	20	4	8	M30	45	840	33	24	20	4	8	M30	45
950	33	28	24	4	8	M30	50	950	33	28	24	4	8	M30	50
1050	33	28	24	4	8	M30	50	1050	33	28	24	4	8	M30	50
1160	39	28	24	4	8	M36	70	1160	36	28	24	4	8	M33	70

■ ANSI (Unit: inch)

inch	mm	d	D	D ₁	D ₂	L	H	I	H ₁	H ₂	A	A ₂	A ₄	A ₅	A ₆
28	700	26.38	36.54	29.92	17.13	8.11	28.35	36.93	23.19	23.23	7.32	1.73	7.60	13.94	8.11
32	800	30.31	41.34	34.25	17.13	9.45	29.53	38.11	24.37	24.41	7.32	1.73	7.60	13.94	8.11
36	900	34.25	45.98	38.50	25.00	9.45	32.87	45.40	27.72	27.76	7.32	1.73	7.60	13.94	8.11
40	1000	38.19	50.00	42.52	25.00	11.81	36.06	45.58	29.49	29.53	8.66	7.13	9.29	17.76	10.16

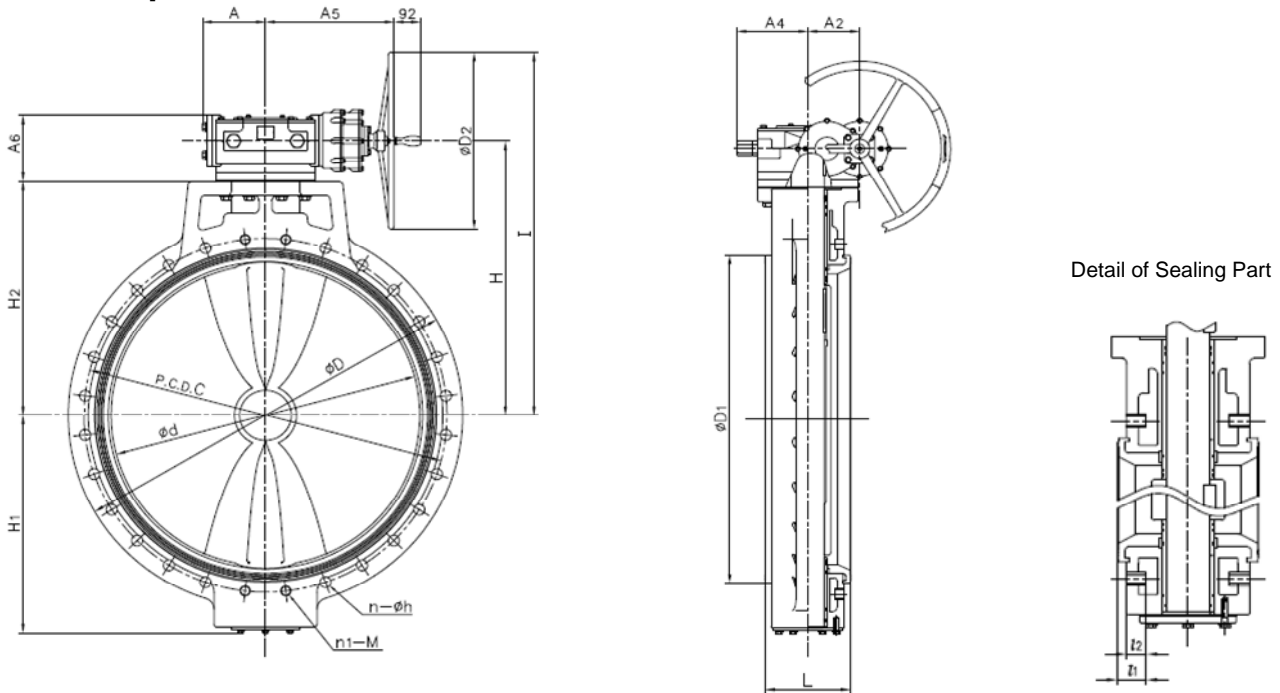
■ JIS, DIN, ANSI

mm	inch	Number of handle rotation	GEAR BOX Model No.
700	28	45	BRM-10-1SH
800	32	45	BRM-10-1SH
900	36	45	BRM-10-1SH
1000	40	135	BRM-18-2SH

ANSI Class 125								ANSI Class 150							
C	h	N Number of Bolt Holes	n Through hole	n1 screw holes		M	B	C	h	N Number of Bolt Holes	n Through hole	n1 screw holes		M	B
				/side	/total							/side	/total		
—	—	—	—	—	—	—	—	34.00	1.38	28	24	4	8	1 1/4	1.57
—	—	—	—	—	—	—	—	38.50	1.62	28	24	4	8	1 1/2	1.97
42.75	1.62	32	28	4	8	1 1/2	1.77	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	47.25	1.62	36	32	4	8	1 1/2	2.56

The shape and appearance of assembly differ a little with nominal size compared to this drawing.

[GEAR TYPE]
[1,100-1,200 mm]



■ JIS, DIN (Unit: mm)

mm	inch	d	D	D ₁	D ₂	L	H	I	H ₁	H ₂	A	A ₂	A ₄	A ₅	A ₆
1,100	44	1080	1380	1195	635	300	1006	1324	780	840	220	181	236	451	258
1,000	48	1170	1488	1300	635	350	1056	1374	850	890	220	181	236	451	258

JIS 10K									DIN PN10								
C	h	N Number of Bolt Holes	n Through hole	n1 screw holes		M	l ₁	l ₂	C	h	N Number of Bolt Holes	n Through hole	n1 screw holes		M	l ₁	l ₂
				/side	/total								/side	/total			
1270	39	28	24	4	8	M36	77	55	—	—	—	—	—	—	—	—	—
1380	39	32	28	4	8	M36	92	70	1380	39	32	28	4	8	M36	92	70

■ JIS, DIN, ANSI

mm	inch	Number of handle rotation	GEAR BOX Model No.
1,100	44	135	BRM-18-2SH
1,200	48	135	BRM-18-2SH

■ ANSI (Unit: inch)

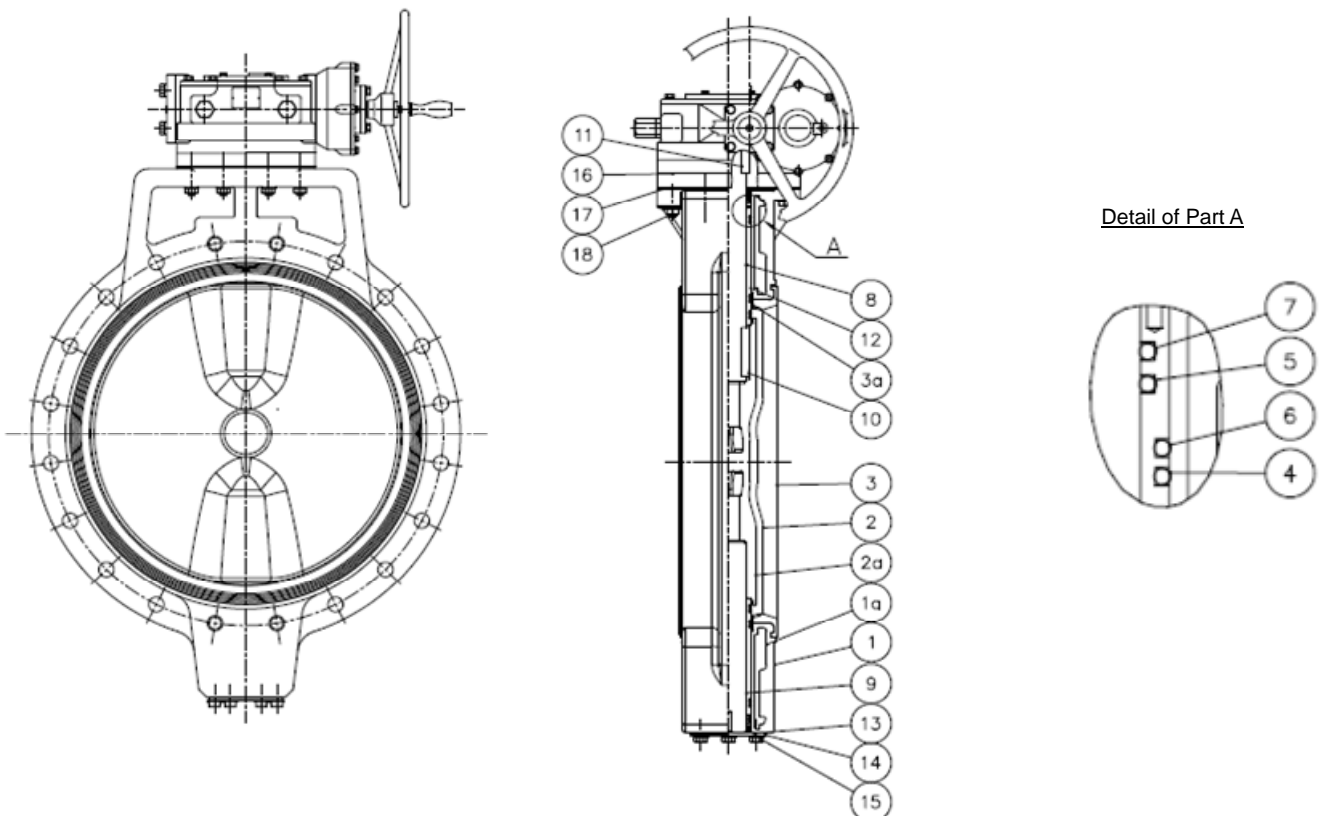
inch	mm	d	D	D ₁	D ₂	L	H	I	H ₁	H ₂	A	A ₂	A ₄	A ₅	A ₆
44	1,100	42.52	54.33	47.05	25.00	11.81	39.61	52.13	30.71	33.07	8.66	7.13	9.29	17.76	10.16
48	1,000	46.06	58.58	51.18	25.00	13.78	41.57	54.09	33.46	35.04	8.66	7.13	9.29	17.76	10.16

ANSI Class 125									ANSI Class 150								
C	h	N Number of Bolt Holes	n Through hole	n1 screw holes		M	l ₁	l ₂	C	h	N Number of Bolt Holes	n Through hole	n1 screw holes		M	l ₁	l ₂
				/side	/total								/side	/total			
—	—	—	—	—	—	—	—	—	51.75	1.62	40	36	4	8	1 1/2	2.80	1.93
56.00	1.62	44	40	4	8	1 1/2	3.43	2.56	56.00	1.62	44	40	4	8	1 1/2	3.43	2.56

The shape and appearance of assembly differ a little with nominal size compared to this drawing.

Parts list

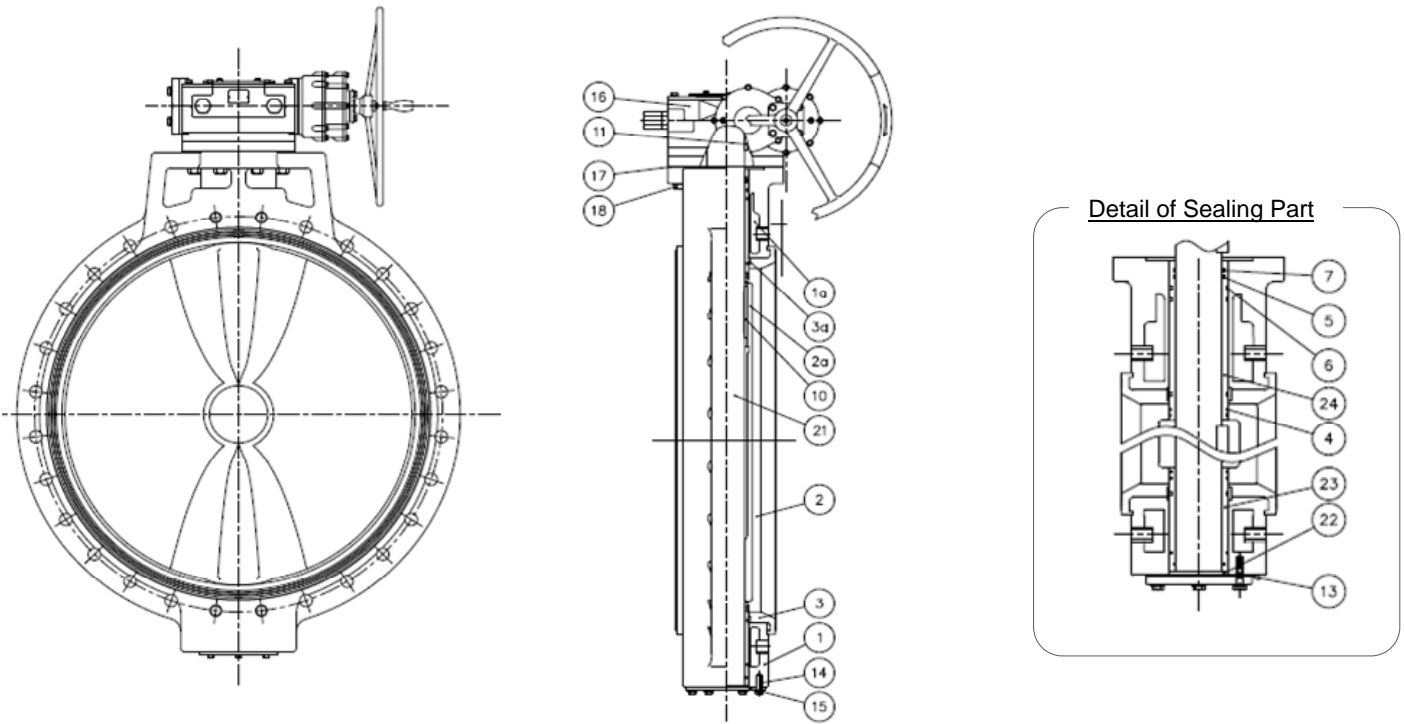
[GEAR TYPE]
[700-1,000mm]



DATASHEET

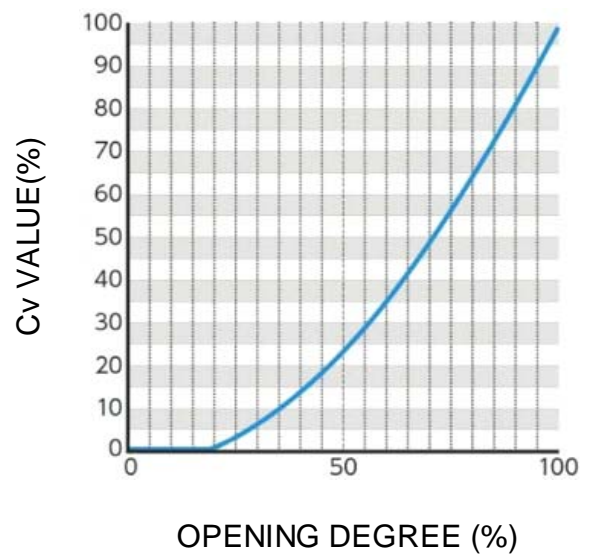
PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL
1	1	PDCPD	8	1	STAINLESS STEEL	16	1	CAST IRON
2	1	PDCPD	9	1	STAINLESS STEEL			Tar Epoxy Spray Coat.
3	1	EPDM	10	1	CARBON STEEL	17	1	NONAS SHEET
4	11	EPDM	11	1	CARBON STEEL	18	8	STAINLESS STEEL
5	3	EPDM	12	2	BRONZE CAST	1a	1	CAST IRON
6	1	NBR	13	1	NONAS SHEET	2a	1	CAST IRON
7	1	NBR	14	1	STAINLESS STEEL	3a	2	STAINLESS STEEL
			15	6	STAINLESS STEEL			

[GEAR TYPE]
[1,100-1,200mm]



PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL
1	1	PDCPD	10	1	CARBON STEEL	18	8	STAINLESS STEEL
2	1	PDCPD	11	1	CARBON STEEL	21	1	STAINLESS STEEL
3	1	EPDM	13	1	NONAS SHEET	22	1	BRONZE CAST
4	8	EPDM	14	1	STAINLESS STEEL	23	1	BRONZE CAST
5	2	EPDM	15	6	STAINLESS STEEL	24	1	BRONZE CAST
6	1	NBR	16	1	CAST IRON	1a	1	CAST IRON
7	1	NBR			Tar Epoxy Spray Coat.	2a	1	CAST IRON
8	1	STAINLESS STEEL	17	1	NONAS SHEET	3a	2	STAINLESS STEEL
9	1	STAINLESS STEEL						

Cv value for each opening degree



mm	700	800	900	1,000	1,100	1,200
inch	28	32	36	40	44	48
PDCPD LARGE SIZE BUTTERFLY VALVE	32,000	43,000	55,000	70,000	86,000	100,000

Handle rotation [Full open (rotation/lift) Full close]

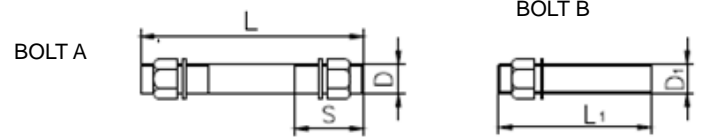
mm	700	800	900	1,000	1,100	1,200
inch	28	32	36	40	44	48
Number of Handle Rotation	57			137		

Stem torque

UNIT : N · m

mm	700	800	900	1,000	1,100	1,200
inch	28	32	36	40	44	48
Stem torque (O→S)	3,500	4,000	6,700	9,000	13,000	15,000

Dimension of bolt length (reference:recommended data)



PDCPD LARGE SIZE BUTTERFLY VALVE

■ JIS 10K

UNIT : mm

mm	inch	BOLT A			BOLT B		QTY		
		d	L	S	d ₁	L ₁	BOLT A	BOLT B	NUT / WASHER
700	28	M30	370	70	M30	130	20	8	48
800	32		410	80		140	24		56
900	36		420			150			
1000	40	M36	500	90	M36	180	28	64	
1100	44		520	100		190			
1200	48		570			200			

The bolt dimension when a JIS B2238 "steel pipe flange" (nominal pressure 10K, corrugated) is used.
 The quantity of nuts and washers for Bolt A indicates the number of 2 sets (1 bolt / 2 nuts, 2 washers).
 The quantity for Bolt B indicate the number of 1 set (1 bolt / 1 nut, 1 washer).

Product weight list (reference)

PDCPD LARGE SIZE BUTTERFLY VALVE

[MANUAL]

Unit: kg

mm	inch	PDCPD
700	28	380
800	32	460
900	36	550
1,000	40	830
1,100	44	1,000
1,200	48	1,100

Product model code list

ACTUATION	TYPE	OPERATING SYSTEM	BODY MATERIAL	SEAL MATERIAL	CONNECTION	STANDARD	SIZE
V	PD	SG	D	E	W	*	* * *
: V MANUAL VALVE	: PD LARGE SIZE	: SG GEAR TYPE	: D PDCPD	: E EPDM	: W WAFER	: 1 JIS 10K D DIN A ANSI	: 700 700mm ? 1200 1200mm

Installation, Operation and Maintenance Manual

"For details of Installation, Operation and Maintenance, please refer IOM at below link"

http://www.asahi-yukizai.co.jp/en/product/mt_pdf/a_automatic_valve_8_04.pdf