

# Butterfly Valve Type 56D, 75D (Manual Type)

## Features

- Use of PDCPD body improved pressure resistance performance.



## Basic specifications

- Valve Type	:	Butterfly Valve Type 56D,75D
- Size	:	400 mm - 600 mm ( 16 inch - 24 inch)
- Body Material	:	PDCPD
- Seal Material / Seat	:	EPDM, FKM
- Connection / Wafer	:	JIS B2220 10K, DIN/EN1092-1 PN10, ANSI B16.5 CLASS150

			FLUID TEMPERATURE °C {°F}	WORKING PRESSURE (NORMAL TEMPERATURE) MPa {psi}	DESIGN PRESSURE (NORMAL TEMPERATURE) MPa {psi}
				FOR WAFER	FOR WAFER
PDCPD	( DISC MATERIAL-	PP )	-20 ~ 90 { -5~195 }	0.75 {110}	1.3 {185}
PDCPD	( DISC MATERIAL-	PVDF )	-20 ~ 100 { -5~210 }	0.75 {110}	1.3 {185}

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.

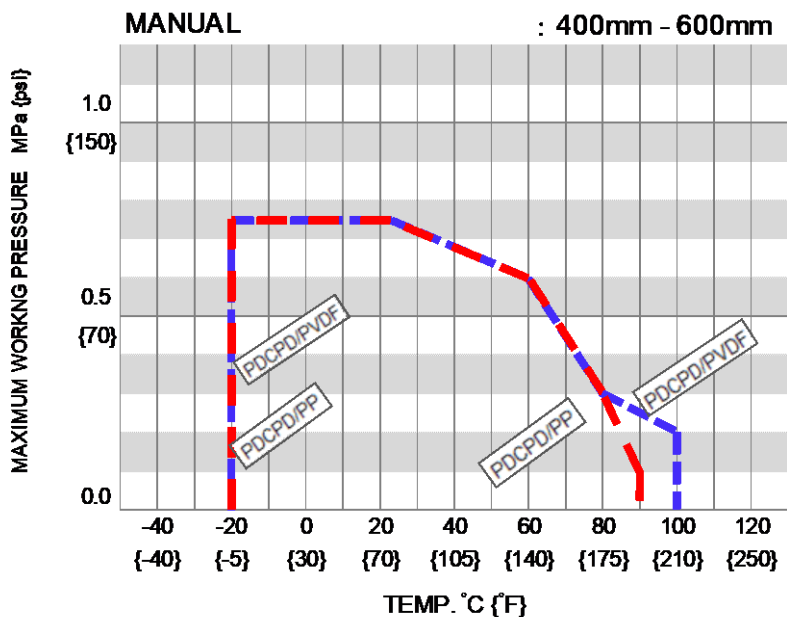
\* Concerning the allowable pressure for each temperature and material, see the technical documents at the next page of this sheet.

## Certificate / Approval

### PED

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

### Working pressure vs. Temperature

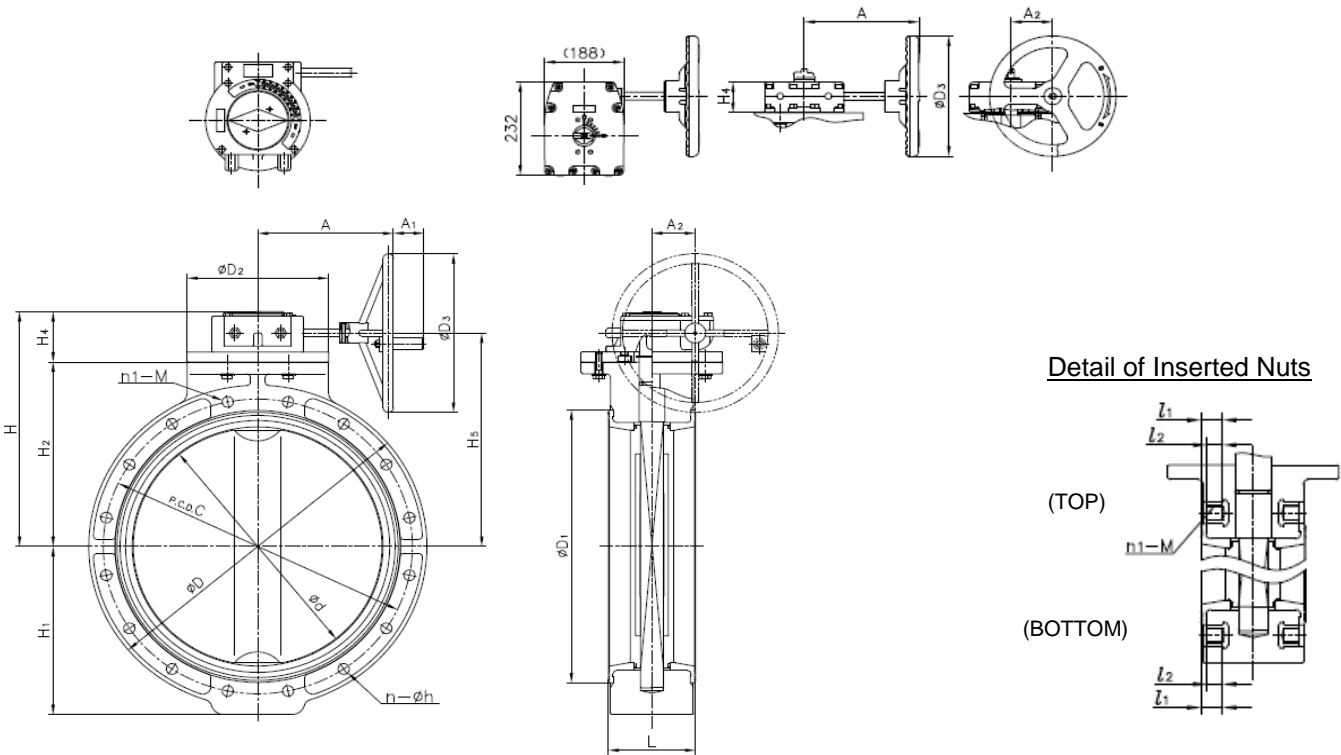


Note: Make sure that the temperature and pressure are within the working range during operation.  
 (If the tolerance range is exceeded during use, the valve may be damaged.)

**Product dimension**

[GEAR TYPE]

GEAR BOX 400mm



■ JIS, DIN (Unit: mm)

mm	inch	d	D	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	L	H	H <sub>1</sub>	H <sub>2</sub>	H <sub>4</sub>	H <sub>5</sub>	A	A <sub>1</sub>	A <sub>2</sub>
400	16	406	620	470	235	300	169	458	315	350	108	390	272	-	99.2
450	18	452	665	525	340	400	179	497	335	370	127	443	326	75.5	104.5
500	20	502	720	575	340	400	190	527	365	400	127	473	326	75.5	104.5
600	24	603	813	686	340	400	209	592	424	465	127	538	326	75.5	104.5

JIS 10K					DIN PN10		
C	n	h	n <sub>1</sub>	M	C	n	h
510	14	27	2	M24	515	16	26
565	16	27	4	M24	565	20	26
620	16	27	4	M24	620	20	26
730	20	33	4	M30	725	20	30

■ ANSI (Unit: inch)

ANSI Class 150																		
inch	mm	d	D	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	L	H	H <sub>1</sub>	H <sub>2</sub>	H <sub>4</sub>	H <sub>5</sub>	A	A <sub>1</sub>	A <sub>2</sub>	C	n	h
16	400	15.98	24.41	18.50	9.25	11.81	6.65	18.03	12.40	13.78	4.25	15.35	10.71	-	3.91	21.26	16	1.12
18	450	17.80	26.18	20.67	13.39	15.75	7.05	19.57	13.19	14.57	5.00	17.44	12.83	2.97	4.11	22.76	20	1.26
20	500	19.76	28.35	22.64	13.39	15.75	7.48	20.75	14.37	15.75	5.00	18.62	12.83	2.97	4.11	25.00	20	1.26
24	600	23.74	32.01	27.01	13.39	15.75	8.23	23.31	16.69	18.31	5.00	21.18	12.83	2.97	4.11	29.53	20	1.38

■ JIS, DIN, ANSI

mm	inch	Number of handle rotation	GEAR BOX TYPE
400	16	9.5	TYPE 3
450	18	13.75	AB1250N
500	20	13.75	AB1250N
600	24	13.75	AB1250N

Detail of Insertde Nuts

※ Only used for JIS 10K standard.

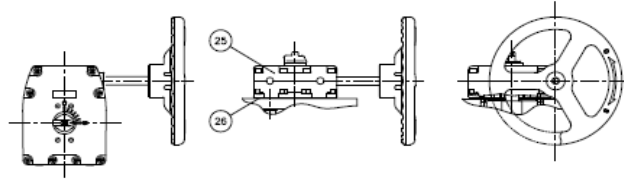
mm	inch	M	n	Q'TY OF INSERTED METAL			l <sub>1</sub>	l <sub>2</sub>
				TOP	BOTTOM	TOTAL (2Xn1)		
400	16	M24	14	2X2	-	4	36	24
450	18	M24	16	2X2	2X2	8	36	24
500	20	M24	16	2X2	2X2	8	36	24
600	24	M30	20	2X2	2X2	8	43	30

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

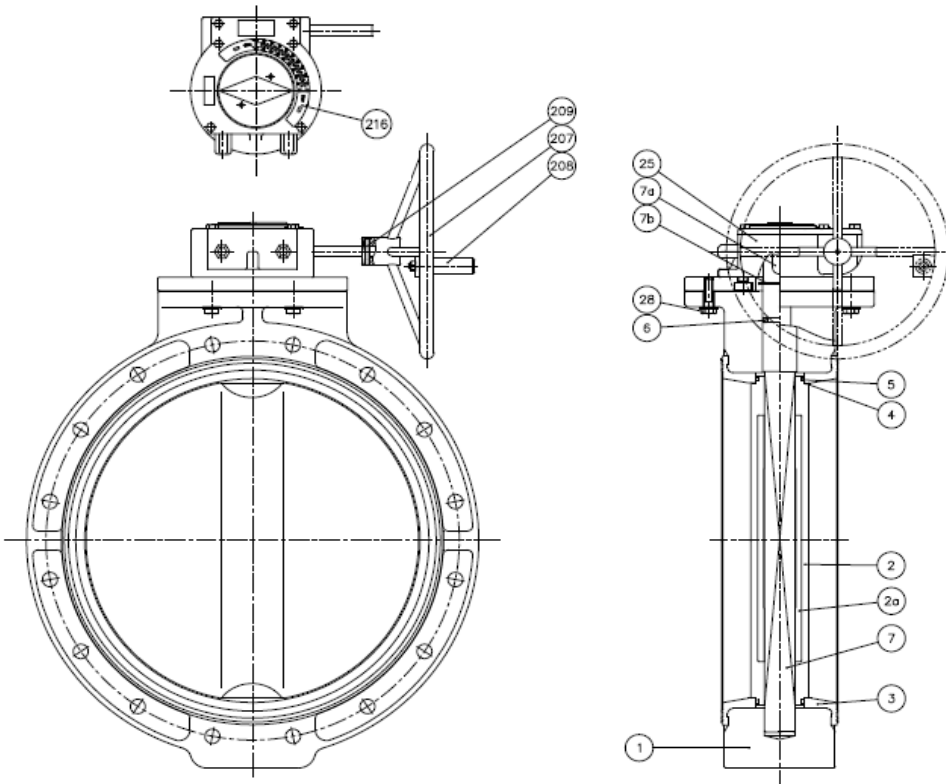
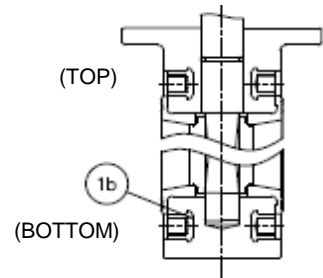
Parts list

[GEAR TYPE]

GEAR BOX 400mm



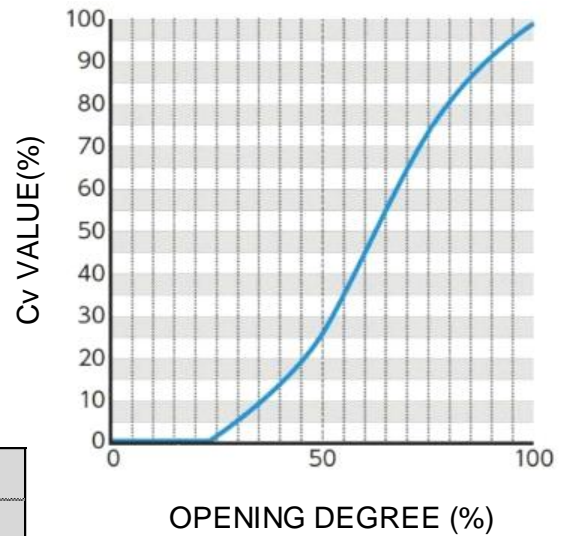
Detail of Inserted Nuts



PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL
1 BODY	1	PDCPD	7a KEY (A)	1	CARBON STEEL	207 HANDLE (C)	1	CAST IRON etc. (Polyurethane Coat)
2 DISC	1	PP, PVDF	7b SNAP RING	1	STAINLESS STEEL	208 HANDLE GRIP	1	NYLON etc.
2a DISC INSERT	1	CAST ALUMINIUM ALLOY 450mm - 600mm	25 GEAR BOX	1	PLASTIC etc. 400mm CAST IRON etc. (Polyurethane Coat) (ROTORK) 450mm - 600mm	209 SPRING PIN	1	STAINLESS STEEL
3 SEAT	1	EPDM, FKM	28 BOLT (C)	4	STAINLESS STEEL	216 SCALE PLATE	1	STAINLESS STEEL
4 O-RING (A)	2	EPDM, FKM				1b INSERTED METAL OF BODY <sup>(1)</sup>	4	COPPER ALLOY 400mm
5 O-RING (B)	2	EPDM, FKM					8	COPPER ALLOY 450mm - 600mm
6 O-RING (C)	1	EPDM, FKM						
7 STEM	1	STAINLESS STEEL						

(1) Only used for JIS 10K standard.

### Cv value for each opening degree



mm	400	450	500	600
inch	16	18	20	24
BUTTERFLY VALVE TYPE 56D,75D	8,340	10,890	14,060	18,500

The values shown are reference values, not guaranteed values.

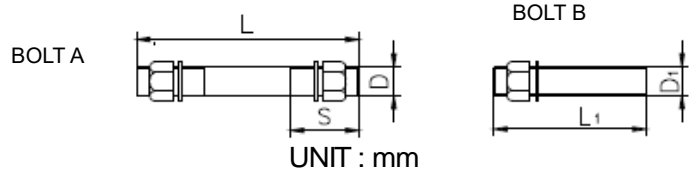
### Stem torque

UNIT : N · m

mm	inch	Operation torque (O→S)	
		EPDM	FKM, FKM-F/C
400	16	1,300	2,100
450	18	1,500	2,475
500	20	1,800	3,000
600	24	1,900	3,075

The values shown are reference values, not guaranteed values.

### Dimension of bolt length (reference:recommended data)



BUTTERFLY VALVE TYPE 56D, 75D

■ JIS 10K

UNIT : mm

mm	inch	BOLT A			BOLT B		QTY		
		d	L	S	d <sub>1</sub>	L <sub>1</sub>	BOLT A	BOLT B	NUT / WASHER
400	16	M24	290	60	M24	120	14	4	32
450	18		310	65		120	16	8	40
500	20		320			120			
600	24	M30	350	75	M30	140	20		48

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)

TYPE 56D,75D GEAR TYPE

[MANUAL]

Unit: kg

mm	inch	PDCPD
400	16	47
450	18	100
500	20	114
600	24	140

### Product model code list

ACTUATION	TYPE	OPERATING SYSTEM	BODY MATERIAL	SEAL MATERIAL	CONNECTION	STANDARD	SIZE	DISC PDVD
<b>V</b>	<b>**</b>	<b>SG</b>	<b>D</b>	<b>*</b>	<b>W</b>	<b>*</b>	<b>***</b>	<b>00Q*</b>
: V MANUAL VALVE	: 56 TYPE 56D 75 TYPE 75D	: SG GEAR TYPE	: D PDCPD	: E EPDM V FKM	: W WAFER	: 1 JIS 10K D DIN A ANSI	: 400 400mm ∅ 600 600mm	: *Used when the disc material is PVDF.

### Installation, Operation and Maintenance Manual

"For details of Installation, Operation and Maintenance, please contact our nearest distribution agent or sales office.