

Type 57P/56/75 Wafer Elastomer Seated Butterfly Valves



BODY TYPE: Type 57P: 1-1/2" – 14"
 Type 56: 16"
 Type 75: 18" – 24"

MATERIALS: Body: PVC, CPVC, PP, PVDF, PDCPD¹
 Disc: PP (standard), PVC, CPVC, PVDF

SEAT & O-RINGS: EPDM, FKM (Viton®)²



Gear Operated
 • 8" to 24"



Lever Operated
 • 1-1/2" to 8"

Elastomer seated butterfly valves have a successful history of over 40 years and have replaced metal valves in many difficult process applications. Type 57P body, disc and seat are designed to offer excellent flow characteristics and low closing torques. Stem torques are unaffected by excessive flange bolt torques. Valves up to 16" have corrosion resistant FRP gear operators. Top flange and shaft dimensions are to ISO 5211 standard for easy mounting of actuators. A large selection of body, disc and seat materials permit these valves into a wide range of on/off and throttling control applications in lines up to 24" size.

Features

Compact and Light Weight

316 Stainless Steel Stem

Moulded valve body tag holes

Lever Position Indicator

- Highly visible 0° to 90° position indicator with 10° intervals
- 19 fine adjustment locking positions for lever type valves

High Corrosion Resistance

- Solid plastic body and disc
- Polypropylene hand levers up to 8"
- FRP gear operators up to 16"

Abrasion Resistant

- Solid plastic disc
- PVDF disc available for high abrasion resistance

Easy Actuator Mounting

- Valves up to 16" have standard ISO 5211 top flange and shaft dimensions

Easily Installed

- Full bolt hole circle makes installation and alignment easy

Better Sealing

- Spherical disc/seat seal design offers effective sealing at lower stem torques, and long life for the seat
- Increased internal sealing performance
- Full seat design eliminates gasket

Better Flow

- Streamlined disc offers higher C_v values

Protection against Flange Bolt Over Tightening

- Body gussets and new seat design prevent excessive flange bolt torques from affecting valve stem torques

CRN Registration numbers by province

- Ontario: OC11045.5
- Newfoundland: OC11045.50
- Saskatchewan/Manitoba/Quebec: OC11045.56
- New Brunswick: OC11045.57
- Nova Scotia: OC11045.58
- P.E.I.: OC11045.59
- British Columbia: not required
- Alberta: not required⁴

¹ PDCPD=Polydicyclopentadiene.

² Other materials are available.

³ Type 57P PVC valves are certified under NSF/ANSI Standard 61 for contact with drinking water.

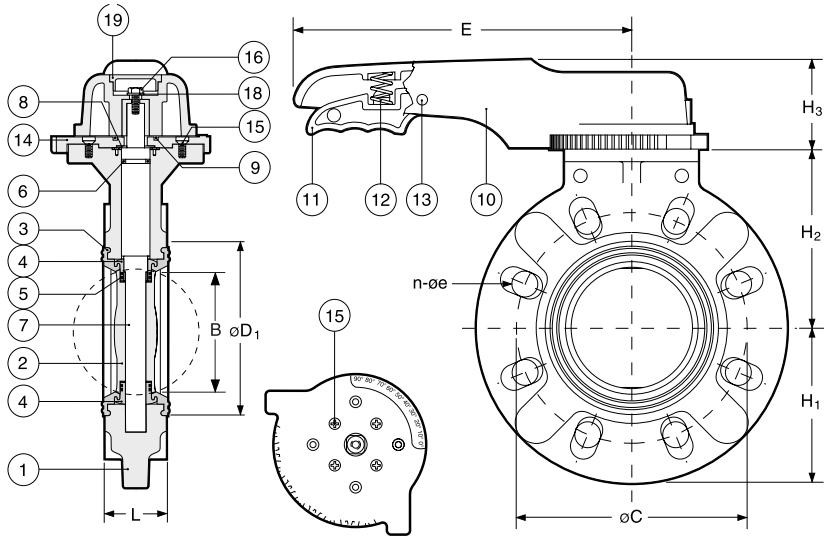
⁴ Not required for non-expandable fluids.

Type 57P Butterfly Valves 1-1/2" to 14"

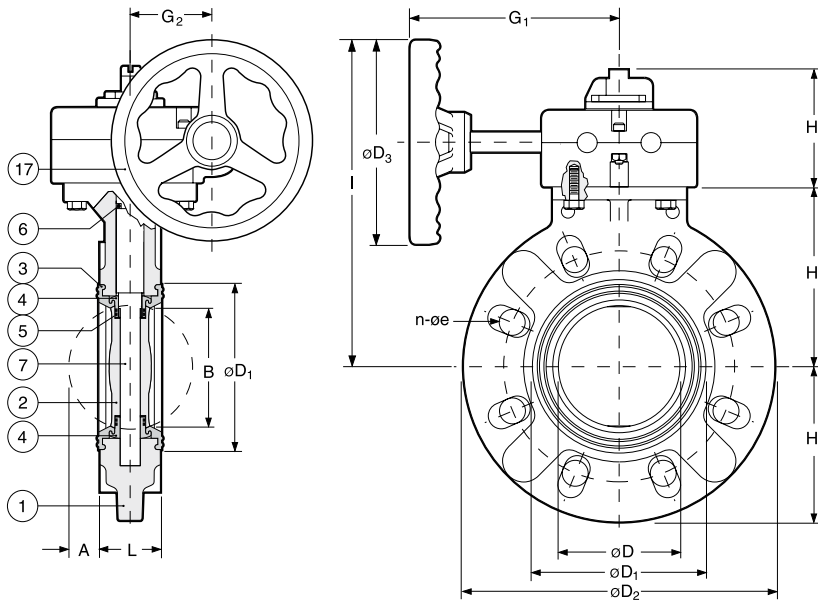
engineered for superior performance



Type 57P Butterfly Valves 1-1/2" to 14"



1-1/2" – 8" Lever Operated



8" to 14" Gear Operated

PARTS

▲ Recommended Spare Parts

No.	Part	Pcs.	Materials
1	Body	1	PVC, CPVC, PP, PVDF, PDCPD ¹
2	Disc	1	PP, PVC, CPVC, PVDF
3▲	Seat	1	EPDM, FKM (Viton®)
4	Seat Bushing	2	PP, PVC, PVDF
5▲	Bushing O-Ring	4	EPDM, FKM (Viton®)
6▲	Shaft O-Ring	1	EPDM, FKM (Viton®)
7	Shaft	1	316 SS
8	Shaft Retainer	1	PP
9▲	Plate O-Ring	1	EPDM, FKM (Viton®)
10	Hand Lever	1	PP
11	Trigger	1	PPG
12	Spring	1	304 SS
13	Pin	1	PPG
14	Position Lock Plate	1	PPG
15	Plate Screw	4	304 SS
16	Hand Lever Bolt	1	304 SS
17	Gear Operator	1	FRP housing, PP handwheel & 304 SS shaft
18	Handle Lever Washer	1	304 SS
19	Hand Lever Cap	1	PPG

¹ PDCPD=Polydicyclopentadiene.

Lever Position Indicator

- Highly visible 0° to 90° position indicator with 10° intervals



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DIMENSIONS INCHES

Size	L	A	B*	C	n	e	D	D ₁	D ₂	D ₃	E/G ₁	G ₂	H ₁	H ₂	H ₃	I
1-1/2"	1.54	0.12	0.87	3.88	4	0.62	1.77	2.80	5.91	-	8.7	-	3.0	3.9	2.2	-
2"	1.65	0.28	1.46	4.75	4	0.75	2.20	3.19	6.50	-	8.7	-	3.3	4.3	2.2	-
2-1/2"	1.81	0.46	2.03	5.50	4	0.75	2.72	3.74	7.28	-	8.7	-	3.6	4.7	2.2	-
3"	1.81	0.61	2.43	6.00	4	0.75	3.03	4.13	8.31	-	9.8	-	4.2	5.3	2.2	-
4"	2.20	0.91	3.36	7.50	8	0.75	4.02	5.28	9.37	-	9.8	-	4.7	5.9	2.2	-
5"	2.60	1.24	4.36	8.50	8	0.88	5.08	6.65	10.35	-	12.6	-	5.2	6.6	2.7	-
6"	2.80	1.56	5.20	9.51	8	0.88	5.91	7.48	11.22	-	12.6	-	5.6	7.2	2.7	-
8" Lever	3.43	2.13	6.87	11.75	8	0.88	7.68	9.53	13.39	-	15.8	-	6.7	8.4	2.7	-
8" Gear	3.43	2.13	6.87	11.75	8	0.88	7.68	9.53	13.39	6.3	6.6	2.5	6.7	8.1	3.6	12.64
10"	4.41	2.72	8.80	14.25	12	1.00	9.84	11.89	16.57	6.3	6.6	2.5	8.3	9.5	3.6	14.02
12"	5.08	3.43	10.79	17.00	12	1.00	11.93	14.17	19.21	11.8	9.5	3.9	9.6	11.7	4.3	19.29
14"	5.08	4.37	12.85	18.75	12	1.12	13.82	15.47	21.22	11.8	9.5	3.9	10.6	12.8	4.3	20.35

*B=Minimum inside diameter (I.D.) of mating pipe. If I.D. of pipe is B dimension or less, the inside of pipe must be chamfered or spacers provided. Consult JJ DOWNS INDUSTRIAL PLASTICS INC.

Type 56/75 Series Butterfly Valves 16" to 24"



New PDCPD bodies have full thickness design

- Prevents excessive compression of seat if flange bolts are over torqued



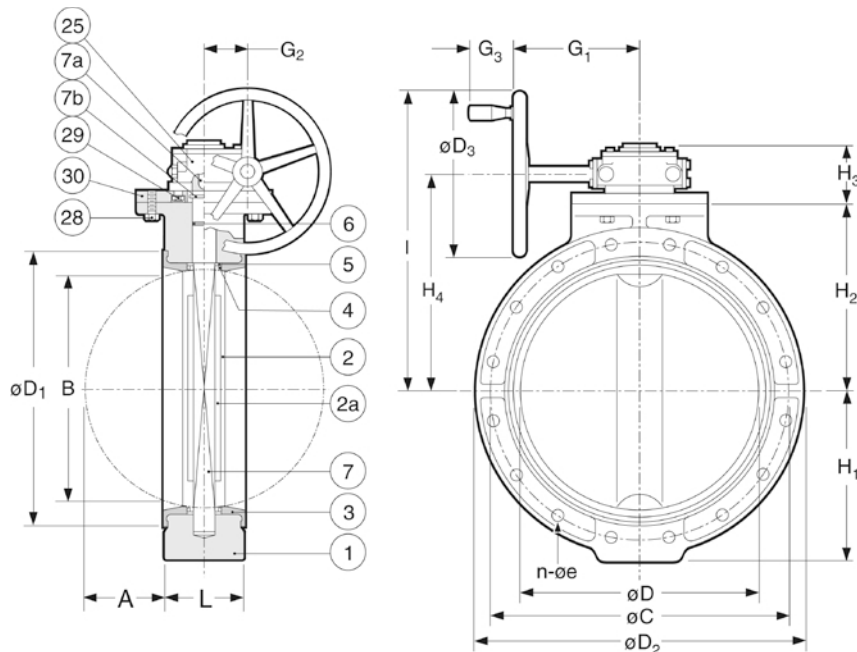
16" Type 56
with PDCPD body, PP disc



18" to 24" Type 75
with PDCPD body, PP disc



18" to 24" Type 75
with PVDF body, PVDF disc



Drawing body detail is for PDCPD version. Detail for PP and PVDF body versions are slightly different. Consult JJ DOWN'S INDUSTRIAL PLASTICS INC.

PARTS

▲ Recommended Spare Parts

No.	Part	Pcs.	Materials
1	Body	1	PDCPD1, PP, PVDF
2	Disc	1	PP, PVDF
2a	Disc Insert	1	Carbon Steel
3▲	Seat	1	EPDM, FKM (Viton®)
4▲	Large Disc O-Ring	2	EPDM, FKM (Viton®)
5▲	Small Disc O-Ring	2	EPDM, FKM (Viton®)
6▲	Shaft O-Ring	1	EPDM, FKM (Viton®)
7	Shaft	1	403 SS
7a	Shaft Key	1	Carbon Steel
7b	Snap Ring	1	304 SS
17	Gear Operator ²	1	Cast Aluminum Epoxy Coated
28	Bolt	4	304 SS
29	Bolt	4	304 SS
30	Gear Operator Stand	1	400 SS

¹ PDCPD=Polydicyclopentadiene.

² Gear Operator for 16" only is FRP with PP hand wheel and 304 SS shaft.

DIMENSIONS INCHES

Size	Type	L	A	B*	C	n	e	D	D ₁	D ₂	D ₃	G ₁	G ₂	G ₃	H ₁	H ₂	H ₃	H ₄	I
16"	56	6.65	4.67	14.53	21.25	16	1.12	15.98	18.50	24.41	11.81	10.7	3.9	-	12.4	13.8	4.3	15.35	21.3
18"	75	7.05	5.38	16.34	22.75	16	1.26	17.80	20.67	26.18	16.14	12.6	4.3	3.4	13.2	14.6	5.5	17.44	25.6
20"	75	7.48	6.15	18.29	25.00	20	1.26	19.76	22.64	28.35	16.14	12.6	4.3	3.4	14.4	15.8	5.5	18.62	26.8
24"	75	8.23	7.76	22.27	29.50	20	1.38	23.74	27.01	32.01	16.14	12.6	4.3	3.4	16.7	18.3	5.5	21.18	29.3

*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 JJ DOWN'S INDUSTRIAL PLASTICS INC. **Note:** Type 75 was formerly referred to as TB Series.

Elastomer Seated Butterfly Valves

WORKING PRESSURES PSI

NET WEIGHTS LB.

Size	Valve Type	PVC Body/PP Disc		PP Body/PP Disc		PVDF Body/PVDF Disc/FKM (Viton®)				Body/Disc		
		0-50°C 32-122°F	60°C 140°F	-20-60°C -4-140°F	80°C 176°F	-20-60°C -4-140°F	79°C 175°F	100°C 212°F	121°C 250°F	PVC/ PP	PP/ PP	PVDF/ PVDF
1-1/2"	57P	150	70	150	105	150	105	90	75	2.9	2.4	3.1
2"	57P	150	70	150	105	150	105	90	75	3.3	2.6	3.7
2-1/2"	57P	150	70	150	105	150	105	90	75	3.7	3.1	4.2
3"	57P	150	70	150	105	150	105	90	75	4.2	3.5	4.9
4"	57P	150	45	150	105	150	105	90	75	5.5	4.4	6.4
5"	57P	150	45	150	105	150	105	90	75	10.8	8.8	12.6
6"	57P	150	45	150	105	150	105	90	75	12.8	10.1	15.2
8" Lever	57P	150	40	150	90	150	90	75	60	20.5	16.3	24.3
8" Gear	57P	150	40	150	90	150	90	75	60	23.6	19.6	27.6
10"	57P	150	40	150	90	150	90	75	60	32.4	26.9	41.0
12"	57P	112	30	112	60	112	60	45	30	61.7	52.9	76.1
14"	57P	112	30	112	60	112	60	45	30	66.6	58.0	81.1

WORKING PRESSURES PSI

NET WEIGHTS¹ LB.

Size	Valve Type	PDCPD Body/ PP Disc			PDCPD Body/ PVDF Disc/FKM(Viton®)				PP Body/ PP Disc		PVDF Body/ PVDF Disc/FKM(Viton®)				Body/Disc		
		0-50°C 32-122°F	60°C 140°F	83°C 181°F	0-30°C 32-86°F	60°C 140°F	80°C 176°F	100°C 212°F	-20-60°C -4-140°F	80°C 176°F	-20-60°C -4-140°F	79°C 175°F	100°C 212°F	121°C 250°F	PDCPD/ PP	PDCPD/ PVDF	PVDF/ PVDF
16"	56	110	90	15	110	90	45	30	90	45	90	45	30	15	79.4	103	101
18"	75	110	90	15	110	90	45	30	75	45	70	45	30	15	140.	221	227
20"	75	110	90	15	110	90	45	30	50	45	50	30	20	15	170.	252	273
24"	75	110	90	15	110	90	45	30	50	45	50	30	20	15	251.	309	346

Note: Type 75 was formerly referred to as TB Series.

¹Weights are for valves excluding lugs.

Cv VALUES VS. DISC ANGLE

BOLT TORQUES

Size	15°	30°	45°	60°	75°	90°	Recommended Flange Bolt Torques Foot-Lbs.
1-1/2"	0	3.6	14.2	30.5	49.7	71.	15
2"	0	6.0	24.	51.6	84.	120.	17
2-1/2"	0	12.5	50.	108.	175.	250.	17
3"	0	15.0	60.	129.	210.	300.	22
4"	0	23.5	94.	202.	329.	470.	22
5"	0	41.5	166.	357.	581.	830.	30
6"	0	55.	220.	473.	770.	1,100.	30
8"	0	125.	500.	1,075.	1,750.	2,500.	41
10"	0	193.	772.	1,660.	2,702.	3,860.	41
12"	0	285.	1,140.	2,451.	3,990.	5,700.	44
14"	0	322.	1,288.	2,769.	4,508.	6,440.	44
16"	0	300.	2,277.	4929.	6,822.	8,340.	58
18"	0	392.	2,973.	6436.	8,908.	10,890.	58
20"	0	506.	3,838.	8309.	11,501.	14,060.	72
24"	0	666.	5,051.	10,934.	15,133.	18,500.	72





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Elastomer Seated Butterfly Valves

options + accessories



Shaft Extensions

- Different materials and lengths are available
- Several designs:
 - with no housing for indoors
 - with waterproofed PVC housing for indoors or outdoors
 - with stainless steel housing for buried services



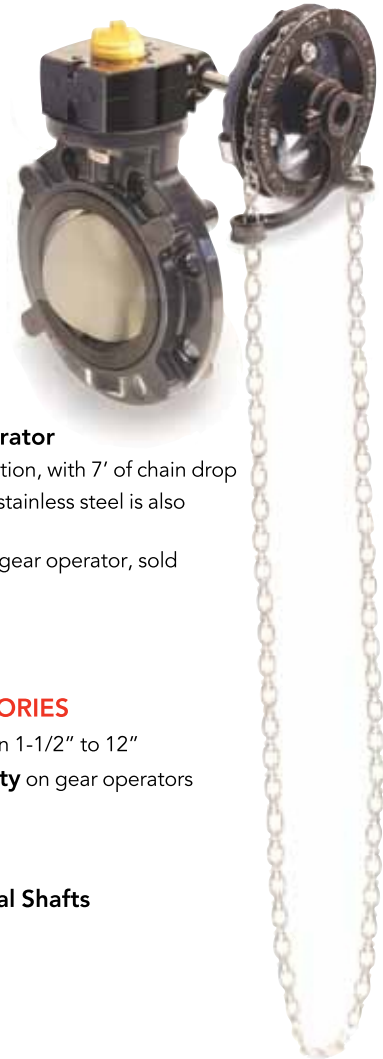
Optional Lock-out Handle & Hasp

- To prevent unauthorized operation of the valve during maintenance shut-downs
- Padlocks go through holes in hasp



Limit Switches

- Available for lever and gear operated valves
- Electrical feedback of manual valve position
- NEMA 4X enclosure, position indicator beacon, 2x SPDT switches, stainless steel hardware



Chain Wheel Operator

- For overhead operation, with 7' of chain drop
- Cast iron standard, stainless steel is also available
- Requires the use of gear operator, sold separately

OTHER ACCESSORIES

- Gear Operator on 1-1/2" to 12"
- Locking Capability on gear operators

OPTIONS

- Different Seats
- Different Material Shafts



Municipal Operating Nut

- For buried service



Elastomer Seated Butterfly Valves

electric + pneumatic actuation

Pneumatic and Electric Actuators

- A complete range of actuators and control accessories are available, mounted to valves using PPG plastic brackets and 304 stainless steel couplings. Refer to separate data sheets.
- All actuators are CSA approved, have NEMA 4S enclosures, stainless steel hardware and permanently lubricated gear train



A Series Electric

- butterfly valves up to 6"
- up to 2000 in-lbs torque
- On-Off (3 wire) adjustable travel, optional On-Off (2 wire), failsafe multi-turn, 3 position modulating, BUS
- Visual feedback, optional 2 feedback switches, feedback potentiometer and feedback transmitter



Q Series Electric

- butterfly valves up to 3"
- 300 in-lbs torque
- On-Off (3 wire) adjustable travel, optional On-Off (2 wire), failsafe 3-position, modulating
- Visual feedback, optional 2 feedback switches, feedback potentiometer and feedback transmitter



V Series Electric

- butterfly valves up to 20"
- up to 8850 in-lbs torque
- On-Off (2/3 wire) adjustable travel, optional failsafe, modulating, BUS
- Visual feedback, 2 feedback switches, optional 2 extra feedback switches, feedback potentiometer and feedback transmitter



Pneumatic Actuators

PA Series

- butterfly valves up to 24"
- up to 40,660 in-lbs torque
- industrial process, submerged
- bleach/water washdown
- Rilsan-coated aluminum

PP Series

- butterfly valves up to 6"
- up to 1,335 in-lbs torque
- industrial process with minimal use of metal
- Glass-filled Polyamide

P3 Series

- butterfly valves up to 10"
- up to 8,850 in-lbs torque
- corrosive, submerged and off-shore applications
- 316 stainless steel





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ORDERING EXAMPLE

Butterfly Valves	57		A		060		B	E	L	-P
Type 57P	1-1/2" to 14":	57								
Type 56	16":	56								
Type 75	18" to 24":	75								
Body	A - PVC	C - CPVC	B - PP	K - PVDF	D - PDCPD ¹					
Size	015 - 1-1/2"	020 - 2"	025 - 2-1/2"	030 - 3"	040 - 4"	050 - 5"	060 - 6"	080 - 8"		
	100 - 10"	120 - 12"	140 - 14"	160 - 16"	180 - 18"	200 - 20"	240 - 24"			
Disc	B - PP	K - PVDF		A - PVC		C - CPVC				
Seat	E - EPDM	V - FKM (Viton [®])		N - Nitrile		F - FKM-F (Viton [®]) ²		C - FKM-C (Viton [®]) ²		
Operator	L - Hand Lever		G - Gear Operator							
Valve Type	57 - P		56 - Blank		75 - Blank					

Example: Type 57P Butterfly Valve, PVC body, 6", with PP disc, EPDM seat, hand lever.

¹PDCPD=Polydicyclopentadiene. ²FKM-F is special "Viton[®]" for concentrated acids and FKM-C is special "Viton[®]" for chlorines.