

Type 57P Elastomer Seated Butterfly Valves

 **CHEMLINE PLASTICS**
SUPERIOR FLOW SOLUTIONS



SIZES: Type 57P: 1-1/2" to 14"
Type 56: 16"
Type 75: 18" to 24"

MATERIALS: Body: PVC, PP or PVDF
Disc: PVC, CPVC, PP or PVDF

SEAT & O-RINGS: EPDM or FKM (Viton®)



Chemline **Type 57P** Butterfly Valves 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 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

Hand Lever Position Indicator

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

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

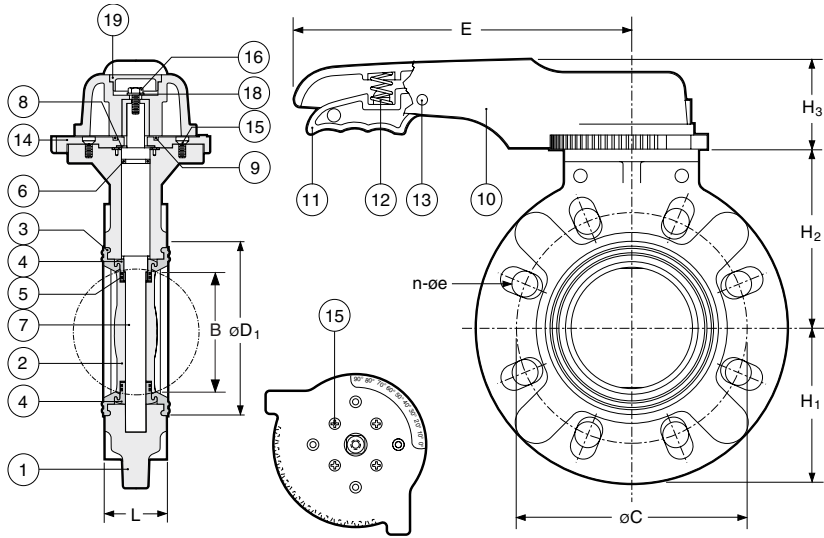
Type 57P Butterfly Valves 1-1/2" to 14"



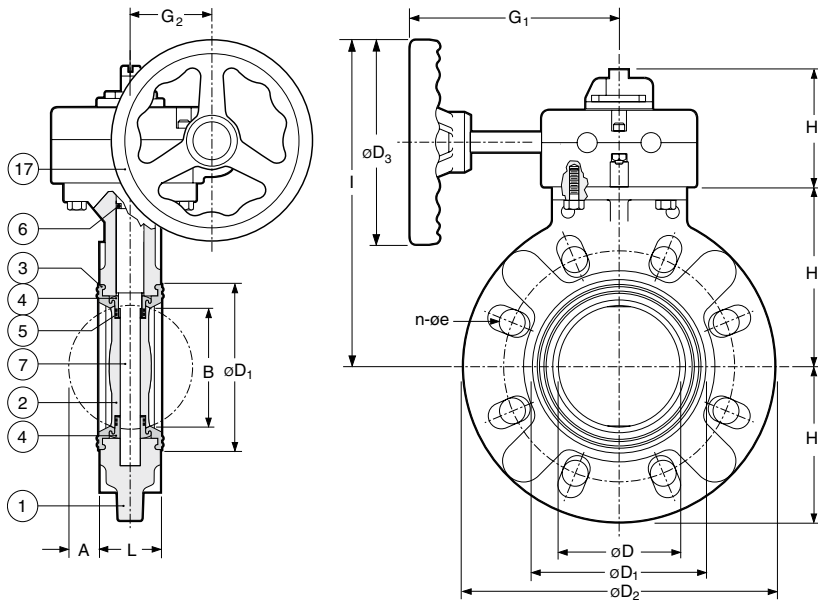
Engineered for Superior Performance



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, PP, PVDF
2	Disc	1	PVC, CPVC ¹ , PP, 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

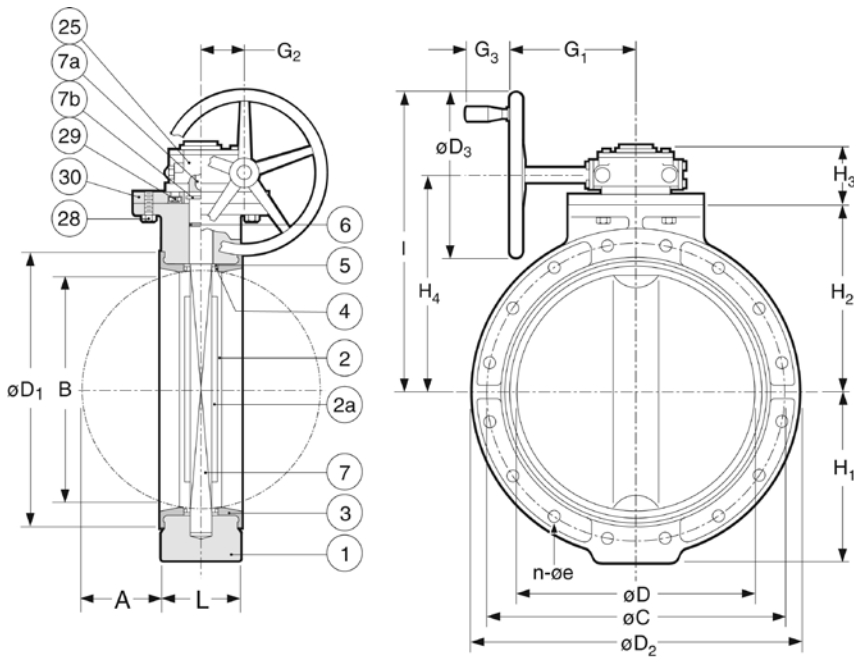
¹ CPVC only available up to 8"

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 Chemline.

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



Drawing body detail is for PDCPD version. Detail for PP and PVDF body versions are slightly different. Consult Chemline

PARTS

▲ Recommended Spare Parts

No.	Part	Pcs.	Materials
1	Body	1	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 ¹	1	Cast Aluminum Epoxy Coated
28	Bolt	4	304 SS
29	Bolt	4	304 SS
30	Gear Operator Stand	1	400 SS

¹ 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 Chemline. **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/Disc		PP Body/CPVC Disc				PVDF Body/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	-1-60°C 30-140°F	71°C 160°F	80°C 176°F	90°C 195°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	120	100	55	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	120	100	55	150	105	90	75	4.2	3.5	4.9
4"	57P	150	45	150	105	150	120	100	55	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	120	100	55	150	105	90	75	12.8	10.1	15.2
8" Lever	57P	150	40	150	90	150	120	100	55	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 WEIGHTS LB.

Size	Valve Type	PP Body/ PP Disc		PVDF Body/ PVDF Disc/FKM(Viton®)				Body/Disc		
		-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	PP/ PP	PP/ PVDF	PVDF/ PVDF
16"	56	90	45	90	45	30	15	79.4	103	101
18"	75	75	45	70	45	30	15	140.	221	227
20"	75	50	45	50	30	20	15	170.	252	273
24"	75	50	45	50	30	20	15	251.	309	346

VACUUM RATING: TYPE 57P: 29.92 inches mercury for valves up to 10"

TYPE 57P: 23.62 inches mercury for 12" and 14" valves

TYPE 56: 23.62 inches mercury for 16" valves

TYPE 75: 19.69 inches mercury for valves 18" to 24"

C_v 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

Options and Accessories



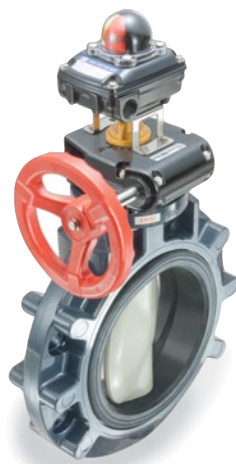
Shaft Extensions

- 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



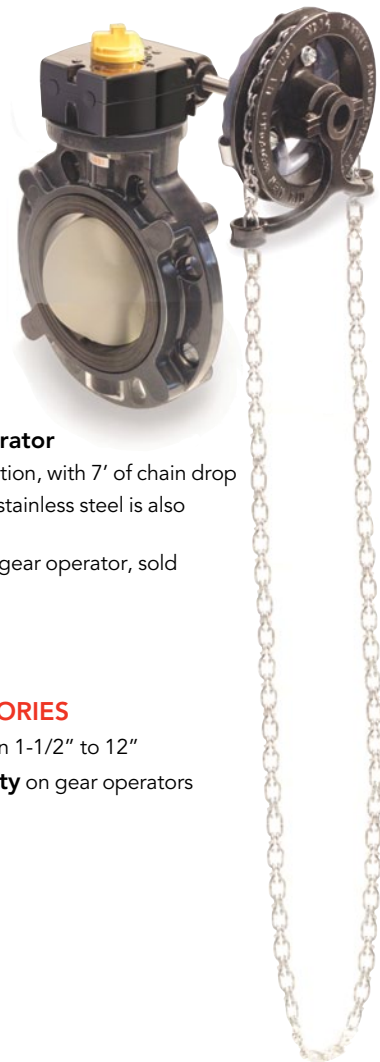
Municipal Operating Nut

- For buried service



Optional Valve Tags

- Stainless steel or plastic



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



Electric and 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 or special inspection labelled, have NEMA 4X enclosures and stainless steel hardware



E Series Electric Actuators

- butterfly valves up to 4"
- Plug-In electrical connections
- Actuator is pre-wired inside



V Series Electric Actuators

- butterfly valves up to 24"
- Epicyclic gear train
- Handwheel manual override
- Adjustable mechanical travel stops



Pneumatic Actuators

PA Series

- butterfly valves up to 24"
- Epoxy-Rilsan-coated aluminum

PP Series

- butterfly valves up to 4"
- Glass-filled Polyamide

P3 Series

- butterfly valves up to 18"
- 316 stainless steel

ORDERING EXAMPLE

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

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

Type 57P.DS.01.10.23