

Type 57IL Lug Elastomer Seated Butterfly Valves

PVC

BODY TYPE: Type 57IL Lug

SIZES: 3" – 12"

MATERIALS: Body: PVC

Disc: PP (standard), PVC, PVDF

SEAT & O-RINGS: EPDM, FKM (Viton®)¹

Gear Operated

- 8" to 12"



Lever Operated

- 3" 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 57IL plastic butterfly valves are quarter turn valves designed for use in applications where 1-side flange removal may be periodically required. They feature a PVC body with fully molded in 316SS threaded lug inserts for connection to the mating flanges. Type 57IL butterfly valves permit one side flange removal, while maintaining full line pressure on the opposite side. They provide moderate flow control and therefore can be used for both on/off and modulating service.

Features

Over Moulded 316 Stainless Steel Factory Lug

- Allows for bidirectional installation

Compact and Light Weight

High Corrosion Resistance

- Solid plastic body and disc
- Polypropylene hand levers up to 8"
- FRP gear operators up to 12"

Abrasion Resistant

- Solid plastic disc
- PVDF disc available for high abrasion resistance
- Moulded in 316 stainless steel factory lugs

Easy Actuator Mounting

- Valves up to 12" 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
- 316 stainless steel stem has full engagement over the entire length of the disc and is a non-wetted part, totally isolated from the media

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

Stem Retainer

- PP retainer to prevent stem removal

Good Tolerance to Suspended Solids

- But not recommended for use with slurries or debris

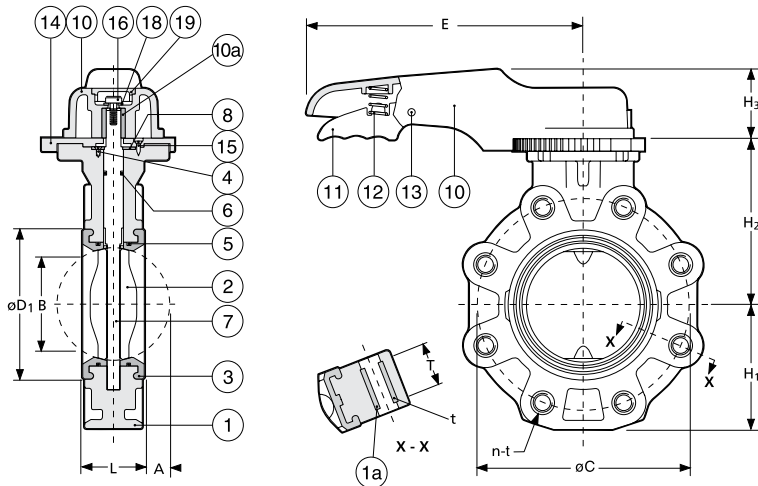
¹ Other materials are available

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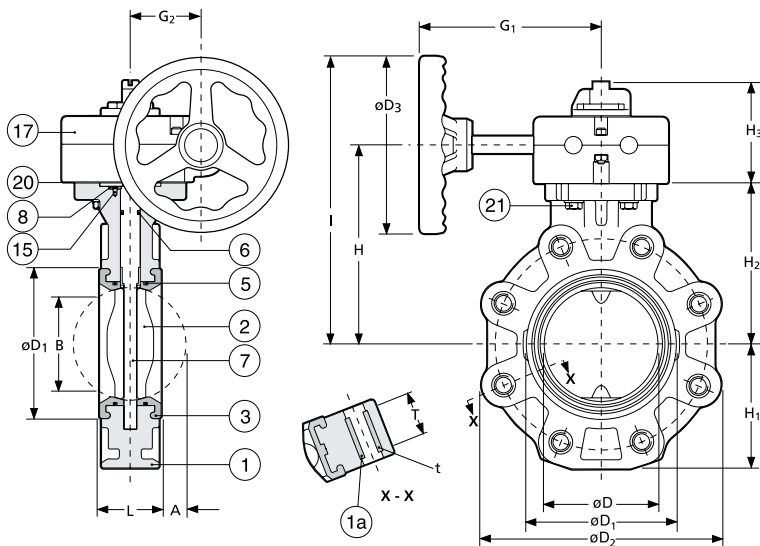
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Type 57IL Lug Body Butterfly Valves 3" to 12"



3" to 8" Lever Operated



8" to 12" Gear Operated

PARTS

▲ Recommended Spare Parts

No.	Part	Pcs.	Materials
1	Body	1	PVC
1a	Lug	4/8 ²	316SS
2	Disc	1	PP, PVC, PVDF
3▲	Seat	1	EPDM FKM (Viton®), Nitrile
4	Retaining Screw	4	304 SS
5▲	Retaining Ring	2	Stainless Steel
6▲	Shaft O-Ring	1	EPDM FKM (Viton®), Nitrile
7	Shaft	1	403 SS
8	Shaft Retainer	1	PP
10	Hand Lever	1	PP
10a	Hand Lever Insert	1	316 SS
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 & 304SS shaft
18	Handle Lever Washer	1	304 SS
19	Hand Lever Cap	1	PP
20	Gasket	1	EPDM
21	Gear Operator Bolt	4	304 SS



DIMENSIONS INCHES

Size	L	A	B*	C	n	D	D ₁	D ₂	D ₃	E	G ₁	G ₂	H ₁	H ₂	H ₃	T	t Thread
3"	1.81	0.65	2.80	6.00	4	3.03	4.13	7.09	6.3	9.84	6.57	2.52	3.82	5.12	3.62	1.37	5/8-11 UNC
4"	2.20	1.00	3.46	7.50	8	4.02	5.28	8.50	6.3	9.84	6.57	2.52	4.41	5.71	3.62	1.37	5/8-11 UNC
6"	2.80	1.86	5.49	9.51	8	5.91	7.48	10.67	6.3	12.60	5.67	2.52	5.55	6.89	3.62	2.15	3/4-10 UNC
8" Lever	3.43	2.66	7.31	11.75	8	7.68	9.53	12.76	6.3	15.75	6.57	2.52	6.61	8.11	3.62	2.15	3/4-10 UNC
8" Gear	3.43	2.66	7.31	11.75	8	7.68	9.53	12.76	6.3	-	6.57	2.52	6.61	8.11	3.62	2.15	3/4-10 UNC
10"	4.41	2.72	8.80	14.25	12	9.84	11.89	15.91	6.3	-	6.57	2.52	7.95	9.49	3.62	3.14	7/8-9 UNC
12"	5.08	3.42	10.80	17.01	12	11.93	14.17	18.54	11.8	-	10.71	3.90	9.29	11.73	4.25	3.14	7/8-9 UNC

* 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.

WORKING PRESSURES PSI NET WEIGHTS¹ LB. Cv VALUES VS. DISC ANGLE BOLT TORQUES

Size	Valve Type	PVC Body/PP Disc			All Materials		Type 57IL			Recommended Flange Bolt Torques Foot-Lbs.
		0-50°C 32-122°F	60°C 140°F	83°C 181°F	Lever Operated	Gear Operated	30°	60°	90°	
3"	57IL	150	70	30	5.0	10.0	18.	183.	300.	22
4"	57IL	150	45	30	7.0	12.0	28.	287.	470.	22
6"	57IL	150	45	20	15.0	20.0	66.	671.	1,100.	30
8"	57IL	150	40	20	25.0	30.0	150.	1,525.	2,500.	41
10"	57IL	150	40	20	-	41.0	232.	2,355.	3,860.	41
12"	57IL	112	30	15	-	78.0	342.	3,477.	5,700.	44

Type 57IL Lug Body Butterfly Valves 3" to 12"

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



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



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

electric + pneumatic actuation

- 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"
- 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



V Series Electric

- butterfly valves up to 12"
- 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 12"
 - industrial process, submerged
 - bleach/water washdown
 - Rilsan-coated aluminum
- PP Series**
 - butterfly valves up to 6"
 - industrial process with minimal use of metal
 - Glass-filled Polyamide
- P3 Series**
 - butterfly valves up to 10"
 - corrosive, submerged and off-shore applications
 - 316 stainless steel



Municipal Operating Nut

- For buried service

OTHER ACCESSORIES

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

OPTIONS

- **Different seats**
- **Different material shafts**

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ORDERING EXAMPLE

Type 57IL Butterfly Valves	57	A	060	B	E	L	-IL
Body	A – PVC						
Size	030 – 3"	040 – 4"	060 – 6"	080 – 8"	100 – 10"	120 – 12"	
Disc	B – PP	K – PVDF	A – PVC	C – CPVC			
Seat	E – EPDM	V – FKM (Viton®)	N – Nitrile				
Operator	L – Hand Lever		G – Gear Operator				
Style	IL – Lug						

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