

Swing Check Valve

STANDARD FEATURES (SIZES 3/4" - 8")

- Minimum flow resistance - Low pressure drop
- Horizontal or vertical installation
- All sizes rated for full vacuum service
- Minimum back pressure to seat disc tightly
- Top access cover facilitates maintenance without body removal from pipeline
- All thermoplastic body
- All PVC parts made of high impact PVC
- PVC and PP valves come with EPDM seals (part numbers 5j, 5k, 6 and 7) as standard
- PVDF valves, part numbers 5j and 7 of PTFE and 8 of PTFE/PFA
- 3/4" PP valves supplied with Ring 1a

OPTIONS

- External lever and weight to assist disc in closing faster
- External spring to assist disc in closing faster
- PTFE or FKM seat and O-Rings



SPECIFICATIONS

Sizes: 3/4" – 8"

Models: Flanged (ANSI) Connection Only
Lever and Weight or Spring Assist Option

Bodies: HI-PVC, PP and PVDF

Seats: EPDM, FKM, PTFE

Seal: EPDM, FKM, PTFE

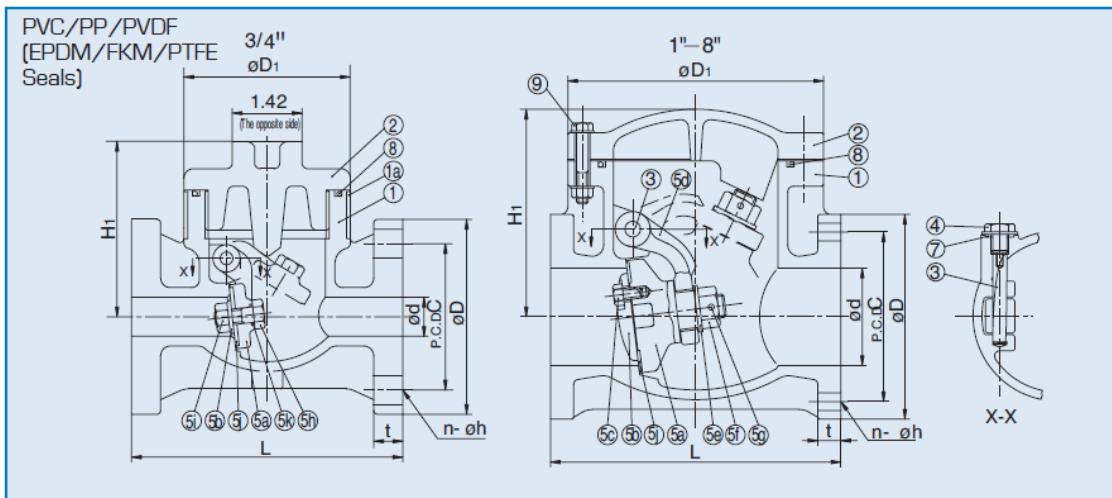
PARTS LIST (SIZES 3/4" – 8")

Parts			
NO.	DESCRIPTION	PCS.	MATERIAL
1	Body	1	HI-PVC, PP, PVDF
2	Bonnet	1	HI-PVC, PP, PVDF
3	Shaft	1	HI-PVC, PP, PVDF
4	Bolt	1	HI-PVC, PP, PVDF
5a	Disc	1	HI-PVC, PVDF
5b	Seat Holder	1	HI-PVC, PP, PVDF
5c	Bolt (A)	-	HI-PVC, PP, PVDF
5d	Arm	1	HI-PVC, PP, PVDF
5e	Washer	1	HI-PVC, PP, PVDF
5f	Nut (A)	1	HI-PVC, PVDF
5g	Pin	1	HI-PVC, PVDF
5h	Bolt (B)	1	HI-PVC, PP, PVDF
5i	Nut (B)	1	HI-PVC, PP, PVDF
5j	Seat	1	EPDM, PTFE, FKM
5k	O-Ring (A)	1	EPDM, PTFE, FKM
6	Gasket (A)	1	EPDM, PTFE, FKM
7	Gasket (B)	1	EPDM, PTFE, FKM
8	O-Ring (B)	Set	EPDM, PTFE, FKM
9	Bolt, Nut, Washer	Set	Stainless Steel 304
1a	Ring	1	Stainless Steel 304

PARTS LIST (LEVER AND WEIGHT)

PARTS			
NO.	DESCRIPTION	PCS.	MATERIAL
1	Fitting	1	PVC, PP, PVDF
2	Nut	1	PVC, PP, PVDF
3	Shaft	1	Stainless Steel 316
4	Counter Weight	1	PVC
5	Spacer	1	PVC, PP, PVDF
6	O-Ring	1	EPDM, FKM
7	Hex Cap Bolt	Set	Stainless Steel 316
8	Set Screw	1	Stainless Steel 316

Swing Check Valve



DIMENSIONS (SIZES 3/4" – 8") (IN.)

NOMINAL SIZE		ANSI CLASS 150							t		H1	H
INCHES	mm	d	C	D	h	n	D1	L	PVC	PP, PVDF		
3/4	20	0.79	2.75	3.88	0.62	4	3.39	5.51	0.59	0.59	3.43	3.54
1	25	0.98	3.12	4.25	0.62	4	5.12	6.30	0.63	0.63	4.61	4.72
1-1/2	40	1.57	3.88	5.00	0.62	4	5.71	7.09	0.71	0.71	5.31	5.43
2	50	1.97	4.75	6.00	0.75	4	7.09	7.87	0.79	0.83	6.34	6.46
2-1/2	65	2.56	5.50	7.00	0.75	4	7.87	9.45	0.87	0.91	6.50	6.61
3	80	3.15	6.00	7.50	0.75	4	8.07	10.24	0.87	0.98	6.61	6.73
4	100	3.94	7.50	9.00	0.75	8	10.43	11.81	0.94	1.02	8.27	8.39
5	125	4.92	8.50	10.00	0.88	8	12.99	13.78	0.94	1.06	9.65	9.76
6	150	5.91	9.50	11.00	0.88	8	14.57	15.75	0.98	1.06	11.02	11.14
8	200	7.87	11.75	13.50	0.88	8	16.73	19.69	1.18	1.34	13.11	13.23

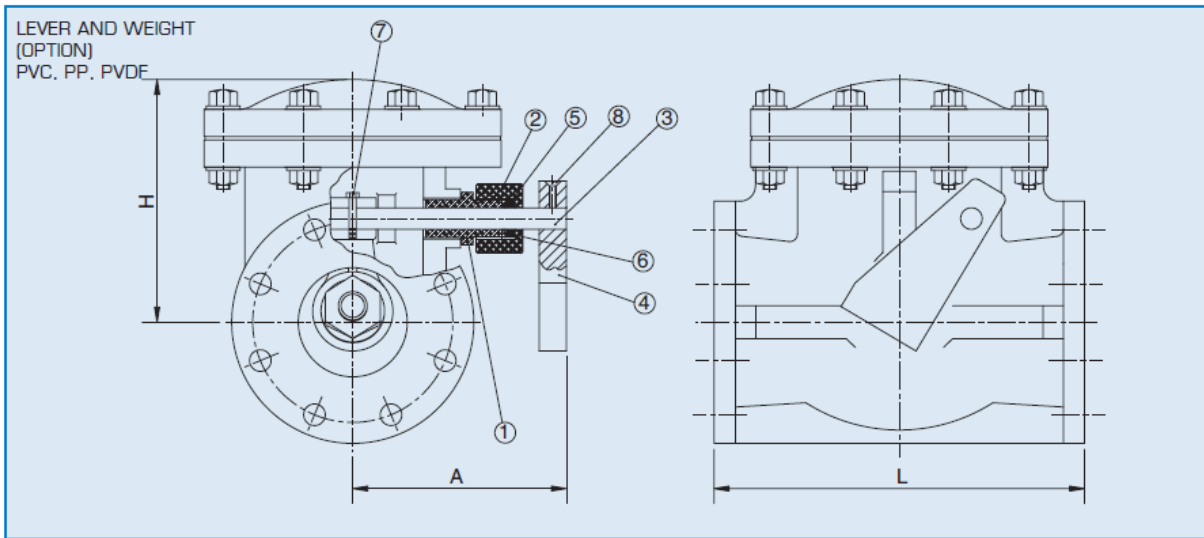
EL-PVDF SWING CHECK VALVE FOR CHLOR-ALKALI APPLICATIONS

STANDARD FEATURES (SIZES 2", 3", 4")

- Body (1), Bonnet (2), Disc (5a), Seat Holder (5b), and Arm (5d) in EL-PVDF material
- Better performance to prevent blistering due to high temperature brine, sodium hypochlorite, hydrofluoric acid, CL2 gas, etc.
- 2 to 5 times longer life vs PVDF

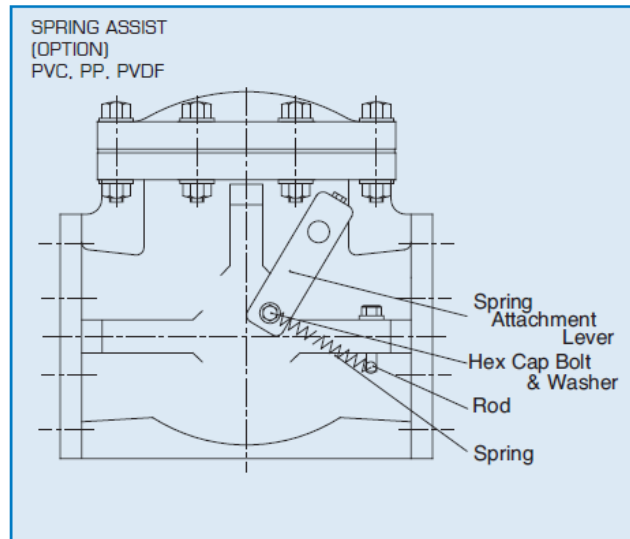


Swing Check Valve



(LEVER & WEIGHT/EXTERNAL SPRING) (IN.)

NOMINAL SIZE		H		
INCHES	mm	A	PVC, PP	PVDF
3/4	20	4.0	3.43	3.54
1	25	4.5	4.72	4.72
1-1/2	40	5.0	5.43	5.43
2	50	5.5	6.46	6.46
2-1/2	65	6.0	6.61	6.61
3	80	6.5	6.73	6.73
4	100	8.0	8.39	8.39
5	125	10.0	9.76	9.76
6	150	10.5	11.14	11.14
8	200	12.0	13.23	13.23



SAMPLE SPECIFICATION

All swing check valves shall be of solid thermoplastic construction, having no metal that comes in contact with media, (except when lever & weight or stainless steel spring option is installed). Valves shall incorporate a single disc design suitable for either horizontal or vertical installations. Valves shall be of top entry bonnet design for maintenance purposes with O-ring top bonnet seal.

PVC shall conform to ASTM D1784 Cell Classification 12454A, PP conforming to ASTM D4101 Cell Classification PP0210B67272 and PVDF conforming to ASTM D3222 Cell Classification Type II. Valves shall be rated to 150psi sizes 3/4" through 3", 100psi sizes 4" through 6", and 70psi size 8" at 70° F, as manufactured by Asahi/America, Inc.

PRESSURE VS. TEMPERATURE (PSI, WATER, NON-SHOCK)

NOMINAL SIZE		PVC	PP	PVDF
		EPDM/FKM/PTFE	EPDM/FKM/PTFE	EPDM/FKM/PTFE
INCHES	mm	30° F 120° F	-5° F 175° F	-5° F 210° F
		3/4	20	150
1	25	150	150	150
1-1/2	40	150	150	150
2	50	150	150	150
2-1/2	65	150	150	150
3	80	150	150	150
4	100	100	100	100
5	125	100	100	100
6	150	100	100	100
8	200	70	70	70

MINIMUM BACK PRESSURE TO CLOSE VALVE (PSI)

NOMINAL SIZE		SEAT	
INCHES	mm	ELASTOMERS	PTFE
3/4	20	2.8	5.0
1	25	5.0	8.5
1-1/2	40	5.0	8.5
2	50	5.0	8.5
2-1/2	65	5.0	8.5
3	80	5.7	8.5
4	100	5.7	9.2
5	125	5.7	9.2
6	150	6.4	10.00
8	200	6.4	10.00

TROUBLESHOOTING

What if valve leaks through the seat?

1. Sediment build-up around disc and seat.
Clean disc and seat.
2. Disc or seat broken or damaged.
Replace disc or seat.

WEIGHT (LBS.)

NOMINAL SIZE		WT (LBS.)
INCHES	mm	
3/4	20	2.20
1	25	4.40
1-1/2	40	6.61
2	50	10.14
2-1/2	65	14.33
3	80	16.53
4	100	26.45
5	125	44.00
6	150	59.52
8	200	92.59

CV VALUES

NOMINAL SIZE		Cv
INCHES	mm	
3/4	20	14
1	25	24
1-1/2	40	81
2	50	140
2-1/2	65	250
3	80	280
4	100	510
5	125	750
6	150	1100
8	200	1900

Insufficient back pressure. Check the pressure.

What if valve leaks between bonnet and body?

1. Bolts not tightened properly.
Tighten firmly perspecified torque.
2. Seal chemically attacked or worn.
Replace seal.
3. Exceeds maximum allowable
pressure rating.