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Swing Check Valves

CHEMLINE PLASTICS
SUPERIOR FLOW SOLUTIONS

The Chemline **SC Series** Swing Check Valve is the heaviest duty solid plastic non-return valve available. The strong one piece flanged body is suitable for installation in any type of piping, horizontally or vertically. A large choice of body materials and seals including PVDF and PTFE allow its use in the most aggressive chemical services. Pressure drop is low due to full flow design.

PVC[1] PP PVDF CRN Registered Consult Chemline

SERIES: SC
SIZES: 3/4" – 8"
ENDS: Flanged
SEALS:[2] EPDM, PTFE

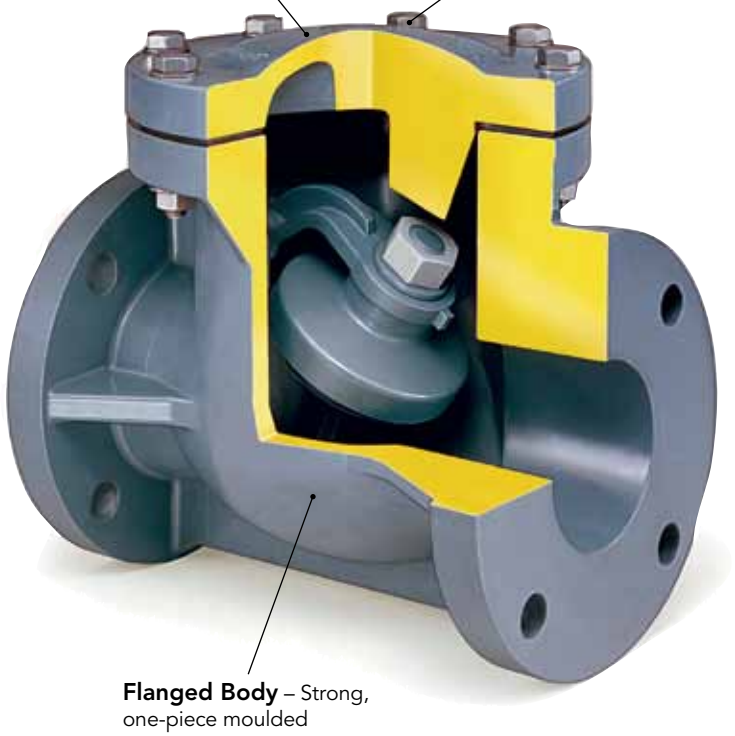
features

- **Low Pressure Loss**
- **Light Weight**
- **Horizontal or Vertical Operation**

Strong, One-Piece Moulded Flanged Body
- Suitable for installation in metal piping

Large Flow Capacity
- Low pressure drop

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 required[3]



Optional Adjustable External Weighted Swing Arm – for quicker and quieter operation in low flow services

[1] All PVC valve parts are now made of High Impact PVC material.
[2] Standard seals are EPDM in PVC, PP valves, PTFE and PVDF coated EPDM in PVDF valves.
[3] Not required for non-expandable fluids.

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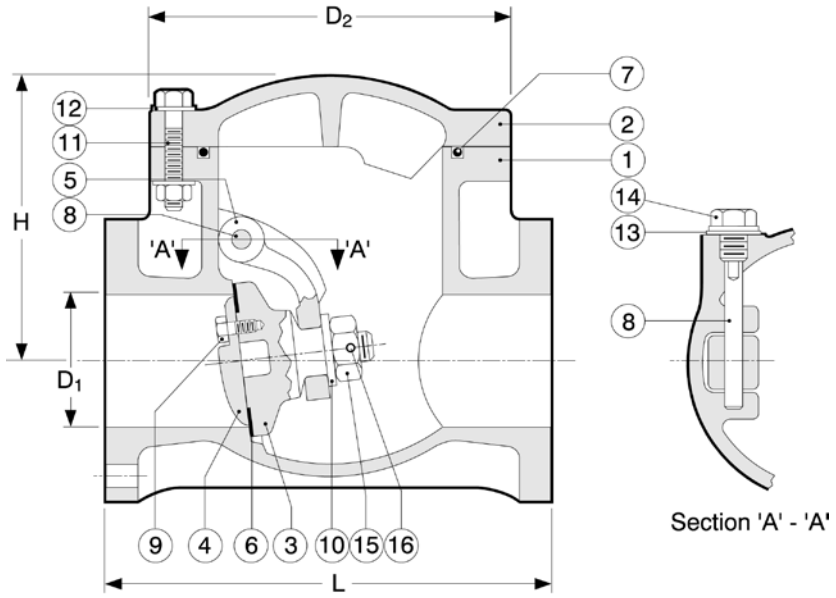

PARTS

No.	Part	Pcs.	Materials
1	Body	1	PVC, PP, PVDF
2	Bonnet	1	PVC, PP, PVDF
3	Disc	1	PVC, PVDF[1]
4	Seat Holder	1	PVC, PP, PVDF
5	Swing Arm	1	PVC, PP, PVDF
6	Seat[2]	1	EPDM, PTFE[2]
7	Bonnet O-Ring	1	EPDM, PVDF coated EPDM[2]
8	Hinge Pin	1	PVC, PP, PVDF
9	Disc Bolt	Set	PVC, PP, PVDF
10	Washer	1	PVC, PP, PVDF
11	Bolt & Nut	Set	304 SS
12	Washer	Set	304 SS
13	Sheet Gasket	1	EPDM, PTFE[2]
14	Side Plug	1	PVC, PP, PVDF
15	Disc Lock Nut	1	PVC, PP, PVDF
16	Set Pin	1	PVC, PP, PVDF

[1] PP valve has PVDF disc.

[2] PVC, PP valves are fitted with EPDM seals as standard (parts 6, 7, 13). PVDF valves have parts 6 & 13 of PTFE and No. 7 of PVDF coated EPDM as standard.

All PVC valve parts are now made of High Impact PVC.

WORKING PRESSURES PSI — NET WEIGHTS LB. — DIMENSIONS INCHES — Cv VALUES

	PVC		Polypropylene			PVDF								
	0-25°C	50°C	–20-25°C	60°C	80°C	–20-25°C	100°C							USGPM Flow at
Size	32-77°F	122°F	–4-77°F	140°F	176°F	–4-77°F	212°F	PVC	PP	PVDF	D_1	L	D_2	H	1 psi △P
3/4″	150	100	150	100	85	150	90	1.7	1.3	2.2	0.79	5.51	3.39	3.54	14
1″	150	100	150	100	85	150	90	3.5	2.4	4.4	0.98	6.30	5.12	4.72	24
1-1/2″	150	100	150	100	85	150	90	5.9	3.7	6.2	1.57	7.09	5.71	5.43	81
2″	150	100	150	100	85	150	90	8.8	6.2	10.	1.97	7.87	7.09	6.46	140
2-1/2″	150	100	150	100	85	150	90	11.	7.7	13.	2.56	9.45	7.87	6.61	250
3″	150	100	150	100	85	150	90	13.	8.4	15.	3.15	10.24	8.07	6.73	280
4″	100	75	100	75	60	100	70	21.	15.	25.	3.94	11.81	10.43	8.39	510
5″	100	75	100	75	60	100	70	36.	25.	43.	4.92	13.78	12.99	9.76	750
6″	100	75	100	75	60	100	70	46.	32.	56.	5.91	15.75	14.57	11.14	1,100
8″	70	50	70	50	30	70	50	75.	52.	90.	7.87	19.69	16.73	13.23	1,900

Working pressures of PVC and PP valves fitted with PTFE seals are lower than above. Consult Chemline.
Temperature Ranges: PVC 0 to 60°C (32 to 140°F), **PP** –20 to 90°C (–4 to 194°F), **PVDF** –20 to 100°C (–4 to 212°F).

OPTIONS

- Alternate seat and seals of PTFE or FKM (Viton®)
- External lever and weight or spring to assist disc to close faster

VACUUM RATING

- 29.9 inches mercury
- Maximum recommended velocity 5 m/s

ORDERING EXAMPLE

Chemline Swing Check Valves					SC	K	015	P
Valve Material	**A** – PVC	**B** – PP	**K** – PVDF					
Size	**007** – 3/4″	**010** – 1″	**015** – 1-1/2″	**020** – 2″	**025** – 2-1/2″			
	030 – 3″	**040** – 4″	**050** – 5″	**060** – 6″	**080** – 8″			
Seals	**E** – EPDM	**P** – PTFE & PVDF						

Example: Flanged Swing Check Valve, PVDF, 1-1/2″, with PTFE & PVDF seals.

PRESSURE TO OPEN/CLOSE PSI

	Minimum △P to Open		Minimum △P to Close	
Size	Horizontal	Vertical	Horizontal	Vertical
1″– 2-1/2″	1.4	1.4	3.6	2.8
3″– 5″	1.4	1.4	4.3	3.6
6″	1.4	2.1	5.0	4.3
8″	2.1	2.8	5.0	4.3

Above data is from tests using water on valves with EPDM disc facing. Consult Chemline for Open/Close pressures for alternate materials.

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