

# SC Series Swing Check Valves



SERIES: SC

SIZES: 3/4" to 8"

ENDS: Flanged

SEALS<sup>1</sup>: EPDM or PTFE

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 the full port design.

## Features

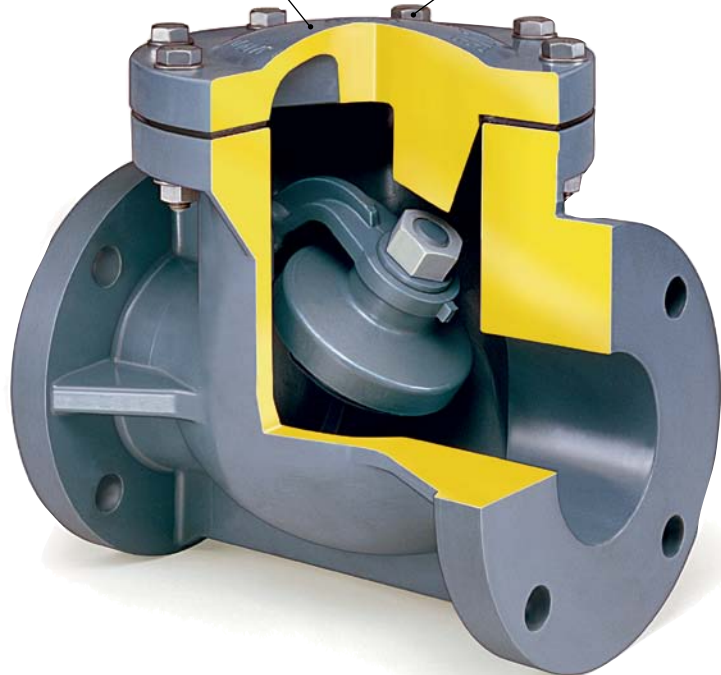
- **Low Pressure Loss**
  - **Light Weight**
  - **Horizontal or Vertical Operation**
- Strong, One-Piece Moulded Flanged Body**
- Suitable for installation in metal piping
- Large Flow Capacity**
- Low pressure drop

### Large Access Cover

– Allows easy maintenance without removal of valve from line

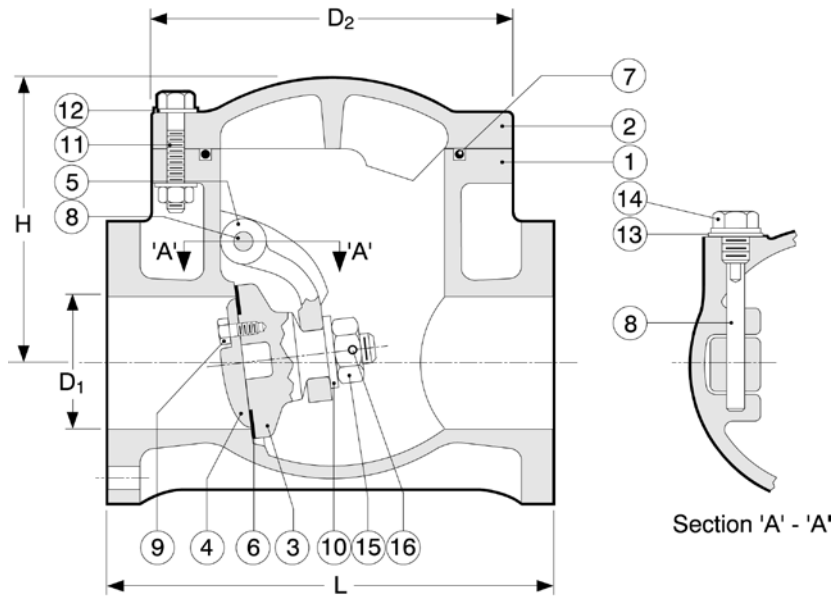
### SS Cover Bolts

are only metal parts



<sup>1</sup> Standard seals are EPDM in PVC, PP valves, PTFE and PVDF coated EPDM in PVDF valves

# SC Series Swing Check Valves



## PARTS

No.	Part	Pcs.	Materials
1	Body	1	PVC, PP, PVDF
2	Bonnet	1	PVC, PP, PVDF
3	Disc	1	PVC, PVDF <sup>1</sup>
4	Seat Holder	1	PVC, PP, PVDF
5	Swing Arm	1	PVC, PP, PVDF
6	Seat <sup>2</sup>	1	EPDM, PTFE <sup>2</sup>
7	Bonnet O-Ring	1	EPDM, PVDF coated EPDM <sup>2</sup>
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 <sup>2</sup>
14	Side Plug	1	PVC, PP, PVDF
15	Disc Lock Nut	1	PVC, PP, PVDF
16	Set Pin	1	PVC, PP, PVDF

<sup>1</sup> PP valve has PVDF disc.

<sup>2</sup> 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

Size	PVC		Polypropylene			PVDF		PVC	PP	PVDF	D <sub>1</sub>	L	D <sub>2</sub>	H	USGPM Flow at 1 psi ΔP
	0-25°C 32-77°F	50°C 122°F	-20-25°C -4-77°F	60°C 140°F	80°C 176°F	-20-25°C -4-77°F	100°C 212°F								
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®)

## VACUUM RATING

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

## ORDERING EXAMPLE

Chemline SC Series 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: Chemline SC Series Swing Check Valve, PVDF, 1-1/2", with PTFE & PVDF seals.

## PRESSURE TO OPEN/CLOSE PSI

Size	Minimum ΔP to Open		Minimum ΔP to Close	
	Horizontal	Vertical	Horizontal	Vertical
1" to 2-1/2"	1.4	1.4	3.6	2.8
3" to 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.

SC Series 09/22