

# Cavity Free Ball Valves



SERIES: SL

SIZES: PVC, PP: 1/2" – 2"

ENDS: Flanged, Socket, Butt<sup>2</sup>, Threaded

SEATS: PTFE

SEALS: FPM (Viton<sup>®</sup>), EPDM



Chemline **SL Series** Cavity Free Ball Valves are molded-in-place full port 1/2" to 2", available in PVC and PP with a polyethylene ball.

## Features

### No Cavity between Body and Ball

- The low dead volume eliminates sediment build-up and prevents larger particles from being trapped behind the ball

### Abrasion Resistant<sup>3</sup>

- PE ball provides superior abrasion resistance

### Full Port up to 2"

- No Obstruction to Flow – No possible hang-up of debris – Suitable for lines where "pigging" is required

### Compact Dimensions

- Will fit where other ball valves will not

### Light Weight

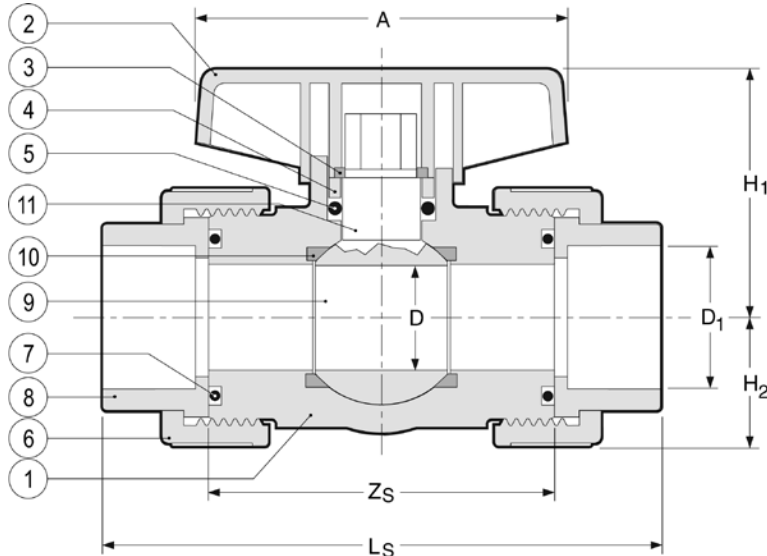
- Easy installation
- Minimal stress on piping system

<sup>1</sup> All valves have PE ball

<sup>2</sup> Butt ends for fusion to Chemline metric PP piping

<sup>3</sup> Valve performance on slurries or abrasive services will depend on the particle size and hardness, pipe configuration and fluid velocity

# SL Series Cavity Free Ball Valves



## PARTS

▲ Recommended Spare Parts

No.	Part	Pcs.	Materials
1	Body <sup>1</sup>	1	PVC, PP
2	Handle	1	PVC
3	Clip	1	PVDF
4	O-Ring Retainer	1	PP
5▲	Stem O-Ring	1	EPDM, FPM (Viton®)
6	Union Nut	2	PVC, PP
7	Face O-Ring	2	EPDM, FPM (Viton®)
8	End Connector	2	PVC, PP
9	Ball <sup>1</sup>	1	PE
10	Ball Seat <sup>1</sup>	1	PTFE
11	Stem <sup>1</sup>	1	PVC, PP

<sup>1</sup>Parts are for identification only and cannot be replaced.

## VACUUM RATING

• 29.9 inches mercury

## DIMENSIONS INCHES

Size	D Bore	A	D <sub>1</sub>	H <sub>1</sub>	H <sub>2</sub>		Z <sub>s</sub>	L <sub>s</sub>	
					PVC	PP		PVC	PP
1/2"	0.53	2.36	0.79	1.65	0.81	0.90	2.52	4.02	3.90
3/4"	0.73	3.35	0.98	2.17	1.00	1.10	2.99	4.72	4.49
1"	0.93	3.35	1.26	2.17	1.14	1.30	3.19	5.16	4.84
1-1/4"	1.20	4.72	1.57	2.76	1.42	1.56	3.62	5.91	5.47
1-1/2"	1.52	4.72	1.97	2.76	1.57	1.71	3.74	6.42	5.83
2"	1.91	5.71	2.48	3.31	1.97	2.11	4.53	7.76	6.89

## NET WEIGHTS LB.

## C<sub>v</sub> VALUES

Size	Socket Valves		USGPM Flow at 1 psi ΔP
	PVC	PP	
1/2"	0.29	0.24	13
3/4"	0.53	0.46	25
1"	0.64	0.60	49
1-1/4"	1.21	1.06	70
1-1/2"	1.35	1.17	119
2"	2.32	1.90	217

## WORKING PRESSURES PSI

Material	20°C	30°C	40°C	50°C	60°C	80°C
	68°F	86°F	104°F	102°F	140°F	176°F
PVC	145	101	58	29	14.5	–
PP	145	116	101	78	58.0	29

Temperature Ranges: PVC –10 to 60°C (14 to 140°F), PP 10 to 80°C (50 to 176°F)

## ORDERING EXAMPLE

Chemline SL Series Cavity Free Ball Valves	SL	A	020	E	F
Body Material	A – PVC B – PP				
Size	005 – 1/2" 007 – 3/4" 010 – 1" 012 – 1-1/4" 015 – 1-1/2" 020 – 2"				
Seals	E – EPDM V – FPM (Viton®) (Standard)				
Ends	S – Socket T – Threaded F – Flanged B – Butt <sup>1</sup>				

**Example:** Chemline SL Series Cavity Free Ball Valve, PVC, 2" with EPDM seals, DIN flanged ends, PTFE seats.

<sup>1</sup>Butt ends for fusion to Chemline metric PP piping.