

Cavity Free Compact Ball Valves

Chemline SL Series Compact Ball Valves are molded-in-place full port 1/2" to 6", available in PVC with a polyethylene ball. The 6" size is a full port alternative to a 4" ball valve with ends increased to 6".

Full Port

Compact Dimensions

Abrasion Resistant

Features

Large Port

- **Low Pressure Loss** – 6" has C_v value of 1,878
- **No Obstruction to Flow** – No possible hangup of debris – Suitable for lines where "pigging" is required

Compact Dimensions – Minimal flange face-to-face dimensions: 6" has 10-1/2" face-to-face length

- Will fit where other ball valves will not
- The most compact 1/2" to 6" flanged ball valves available

Light Weight

- Easy installation
- Minimal stress on piping system

No Cavity between Body and Ball

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

Teflon® Ball Seats

- Provide long life and low stem torques

Abrasion Resistant²

- PE ball provides superior abrasion resistance

No Flange Gaskets Required for 2-1/2" to 6" sizes

- Flange face O-rings are included



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Your Pipeline To Quality

PVC, PP with PE Ball

SERIES: SL

SIZES: PVC, PP: 1/2" – 2"
PVC: 2-1/2" – 6"

ENDS: Flanged, Socket, Butt, Threaded

SEATS: Teflon® PTFE¹

SEALS: FPM (Viton®), EPDM



1/2" to 2" Sizes

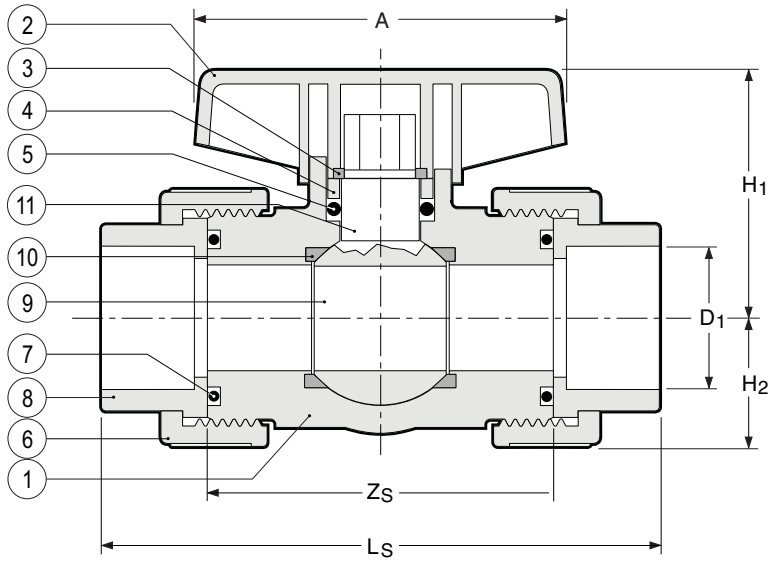


4" & 6" Sizes

¹ Standard seats are Teflon®.

² Valve performance on slurries or abrasive services will depend on the particle size and hardness, pipe configuration and fluid velocity.

Cavity Free Compact Ball Valves – 1/2" - 2"



PARTS

▲ Recommended Spare Parts

No.	Part	Pcs.	Materials
1	Body ¹	1	PVC, PP
2	T-Handle	1	PVC
3	Circlip	1	PVDF
4	Back-up Ring	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 ¹	1	PE
10	Ball Seat ¹	1	PTFE
11	Stem ¹	1	PVC, PP

¹ Replaceable as a complete part.

VACUUM RATING

• 29.9 inches mercury

DIMENSIONS INCHES

Size	D Bore	D ₁		d	E	H	L ₁	L ₂	L ₃	L ₄	
		PVC	PP							PVC	PP
1/2"	0.53	1.61	1.81	0.79	2.36	1.65	10.00	2.52	2.76	4.02	3.90
3/4"	0.73	2.01	2.20	0.98	3.35	2.17	7.40	2.99	3.23	4.72	4.49
1"	0.93	2.28	2.60	1.26	3.35	2.17	8.31	3.19	3.43	5.16	4.84
1-1/4"	1.20	2.83	3.11	1.57	4.72	2.76	9.21	3.62	3.86	5.91	5.47
1-1/2"	1.52	3.15	3.43	1.97	4.72	2.76	10.12	3.74	3.98	6.42	5.83
2"	1.91	3.94	4.21	2.48	5.71	3.31	11.54	4.53	4.76	7.76	6.89

NET WEIGHTS LB.

C_v VALUES

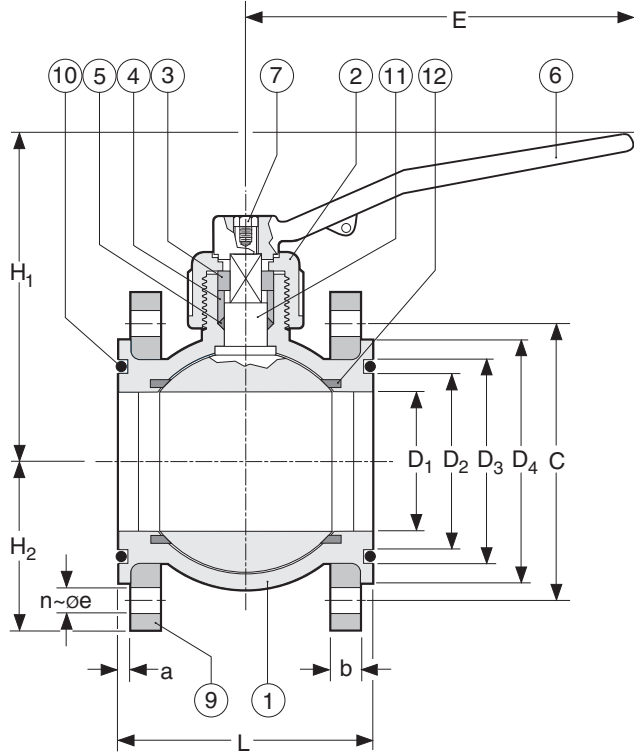
Size	Socket Lbs.		USGPM Flow at 1 psi ΔP
	PVC	PP	
1/2"	0.29	0.24	13
3/4"	0.53	0.46	25
1"	0.64	0.60	49
1-1/4"	1.21	1.06	70
1-1/2"	1.35	1.17	119
2"	2.32	1.90	217

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 Range: 0 to 80°C (32 to 176°F).

Cavity Free Compact Ball Valves – 2-1/2" - 6"



PARTS

▲ Recommended Spare Parts

No.	Part	Pcs.	Materials
1	Body	1	PVC
2	Gland Nut	1	PVC
3	Travel Stop	1	PVDF
4	Gland	1	PVC
5▲	Stem O-Ring	1	FPM (Viton®), EPDM ¹
6a	Hand Lever	1	Alum Alloy
6b	HL Tightening Bolt/Nut	1 set	304 SS
7	HL Retaining Hex Bolt	1	304 SS
9	Flange	2	GRP ²
10	Face O-Ring	2	FPM (Viton®), EPDM ¹
11	Ball/Stem	1	PE/304 SS
12	Ball Seat	2	PTFE

¹ FPM (Viton®) is supplied standard

² GRP = Glass reinforced polyester

VACUUM RATING

- 29.9 inches mercury

DIMENSIONS INCHES

Size	D ₁ Bore	D ₂	D ₃	D ₄	C	E	H ₁	H ₂	L	a	b	e	n
2-1/2"	2.5	3.1	3.6	4.8	5.7	12.6	7.5	3.6	5.4	0.2	0.7	0.7	4
3"	3.1	3.8	4.4	5.4	6.3	12.6	7.5	3.9	5.7	0.3	0.8	0.7	8
4"	3.7	4.5	6.2	5.2	7.1	12.6	8.7	4.3	6.6	0.3	0.8	0.7	8
6"	5.9	6.8	7.5	7.9	9.4	18.9	11.2	5.6	10.5	0.4	1.1	0.9	8

NET WEIGHTS LB.

WORKING PRESSURES PSI

C_v VALUES

Size	Lbs.	20°C 68°F	30°C 86°F	40°C 104°F	50°C 102°F	60°C 140°F	USGPM Flow at 1 psi ΔP
2-1/2"	7.9	145	116	87	58	29	357
3"	9.3	145	116	87	58	29	498
4"	12.1	145	116	87	58	29	1,250
6"	25.6	87	72.5	58	43.5	29	1,878

Temperature Range: 0 to 60°C (32 to 140°F).

ORDERING EXAMPLE

Chemline Cavity Free Compact Ball Valves		SL	A		060	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"	025 – 2-1/2"	030 – 6"	040 – 4"	060 – 6"		
Seals	E – EPDM V – FPM (Viton®) (Standard)						
Ends	S – Socket (1/2" to 2")		T – Threaded (1/2" to 2")		B – Butt ¹ (1/2" to 2")		F – Flanged (2-1/2" to 6")

Example: Chemline Cavity Free Compact Ball Valve, PVC, 6" with EPDM seals, flanged ends, PTFE seats.

¹ PP metric butt fusion ends (1/2" to 2") to connect to Chemline PP piping systems.



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