

EC Series Ball Check Valves



PVC

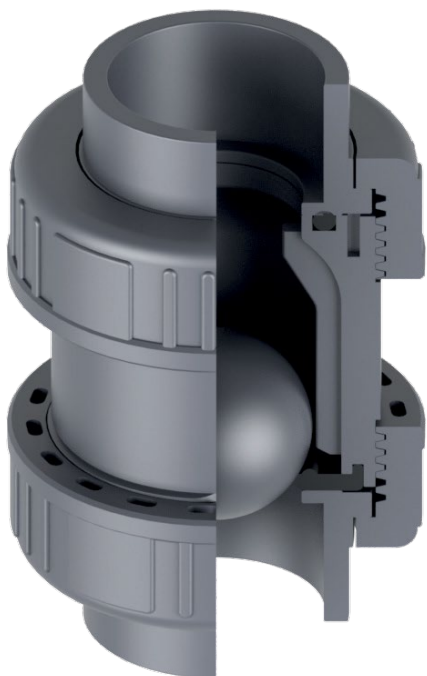
SERIES: EC

SIZES: 1/2" to 2"

ENDS: Socket, Threaded, Flanged or ChemFlare™

SEALS: EPDM or FKM (Viton®)

CRN
Registered
Consult Chemline



Chemline **EC Series** PVC True Union Ball Check valve is a popular type of non-return valve for smaller pipe sizes. It has good flow capacity and will handle many slurry and suspended solid services. This valve works in both horizontal and vertical lines.

Features

True Union Design

- Easy installation and maintenance

Moulded Elastomer Seat and High Surface Finish Ball

- For a secure seal even with low pressure

Self Cleaning Internals

- Suitable for many unclean services



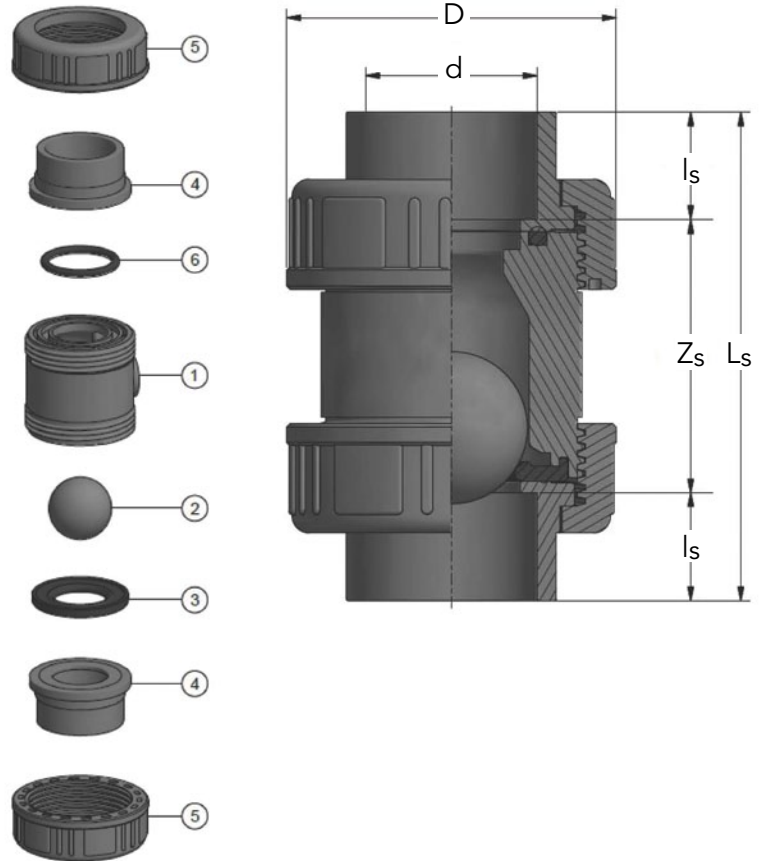
EC Series Ball Check Valves



PARTS

▲ Recommended Spare Parts

No.	Part	Pcs.	Materials
1	Body	1	PVC
2	Ball	1	PVC
3▲	Seat	1	EPDM, FKM (Viton®)
4	End Connector	2	PVC
5	Union Nut	2	PVC
6▲	Face O-Ring	1	EPDM, FKM (Viton®)



DIMENSIONS INCHES

Size	D	d	Socket			Threaded			Flanged ²	ChemFlare™
			L _S	Z _S	l _S	L _T	Z _T	l _T	L _F	L _{CF}
1/2"	1.9	0.50	3.7	1.9	0.9	3.0	2.0	0.5	5.8	5.31
3/4"	2.4	0.75	4.2	2.1	1.0	3.4	2.3	0.6	6.5	5.55
1"	2.7	1.00	4.7	2.4	1.1	4.0	2.6	0.7	7.3	6.20
1-1/4"	3.1	1.25	5.2	2.7	1.3	4.4	3.1	0.7	8.0	7.08
1-1/2"	3.8	1.50	6.1	3.2	1.4	4.8	3.4	0.7	9.4	-
2"	4.6	2.00	6.3	3.3	1.5	5.3	3.9	0.7	9.7	-

²Flanged valves have cemented-on flanges. Dimension L_F is approximate. Before ordering, please specify a specific L_F if required.

EC Series Ball Check Valves



NET WEIGHTS LBS.

Cv VALUES

WORKING PRESSURES PSI

Size	Lbs.	USGPM flow @ 1 psi ΔP	20°C 68°F	30°C 94°F	40°C 105°F	50°C 120°F	60°C 140°F
1/2"	0.2	10	230	190	150	100	45
3/4"	0.4	16	230	190	150	100	45
1"	0.6	27	230	190	150	100	45
1-1/4"	0.9	41	230	190	150	100	45
1-1/2"	1.4	59	230	190	150	100	45
2"	2.4	85	230	190	150	100	45

Maximum Temperature: 60°C (140°F)

PRESSURE TO OPEN/CLOSE PSI

Size	Minimum ΔP to Open		Minimum ΔP to Close	
	Horizontal	Vertical	Horizontal	Vertical
1/2"	0.1	0.7	2.9	2.9
3/4"	0.1	0.7	2.9	2.9
1"	0.1	0.7	2.9	2.9
1-1/4"	0.3	1.4	2.9	2.9
1-1/2"	0.3	1.4	2.9	2.9
2"	0.3	1.4	2.9	2.9

SAMPLE SPECIFICATION

1. All PVC Ball Check valves 1/2" to 2", will be Chemline EC Series or equal, slip-out true union design, with EPDM (or FKM (Viton®) seals. Valves are to have 230 psi maximum pressure rating.
2. Socket ends shall be Schedule 80 and conform to ASTM D-2467.
3. Threaded ends shall be Schedule 80 and conform to ASTM D-2464.
4. Flanged ends shall be ANSI Class 150.

VACUUM RATING

- 29.9 inches mercury

INSTALLATION RECOMMENDATIONS

- Install at least 5 pipe diameters from fittings or valves
- Install at least 10 pipe diameters from pump outlet
- Maximum recommended fluid velocity 5 m/s (16 ft/sec.)

ORDERING EXAMPLE

Chemline EC Series True Union Ball Check	EC	A	015	E	S
Material A – PVC					
Size 005 – 1/2" 007 – 3/4" 010 – 1" 012 – 1-1/4" 015 – 1-1/2" 020 – 2"					
Seals E – EPDM V – FKM (Viton®)					
Ends S – Socket T – Threaded F – Flanged ChemFlare™ – Use Item Numbers below					

Example: Chemline EC Series Ball Check, 1-1/2", with EPDM seals, socket ends

CHEMFLARE™ ITEM NUMBERS

Valve Size	Tube O.D.	End Connector	Nut	Item Number
1/2"	1/4"	PVC	PVDF	A4N-1
1/2"	3/8"	PVC	PVDF	A6N-1
1/2"	1/2"	PVC	PVC	A8N-1
3/4"	3/4"	PVC	PVDF	A12N-1
1"	1"	PVC	PVDF	A16N-1

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