

True Union Ball Check Valve



Material:	PVC, CPVC,, PP, PVDF
Size:	½" - 4" (2½" -4" Single Union)
Pressure Rating:	150 psi
Seals/Seat:	EPDM, FPM
Connections:	IPS Socket Metric Socket NPT Threaded ANSI 150 Flanged Metric Butt Fusion

ISO 9002 CERTIFIED

Materials of Construction:

- PVC:** Type 1, Class 12454B, ASTM D1784
- CPVC:** Type 4, Class 23447, ASTM D1970
- PP:** Class PP 110B76383, ASTM D4101
- PVDF:** Type 1, ASTM D3222
- Seals:** EPDM or FPM

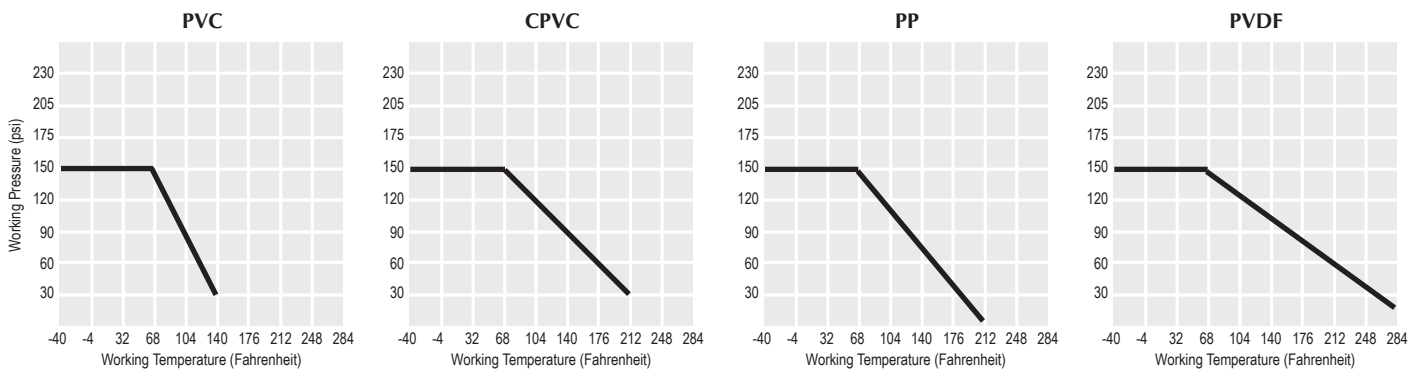
Guide Specification: Ball Check valves shall be True Union Design ½ - 2" and single union 2½ - 4". Materials of construction shall be as specified above. Ball shall be machined and tumbled to insure roundness. Seat/Seal shall be as specified above and shall work in conjunction with a gland ring to insure positive sealing without damage to the seat, as manufactured by SIMTECH.

Features

- True union end connectors allow easy maintenance
- Round machined and tumbled ball for perfect seating
- Internal splines provide very large open area around ball minimizing pressure drop
- Combination seat/seal provides effective seal with minimum back pressure
- Internal gland prevents damage to seat/seal in the event of excessive back pressure

Pressure/Temperature Graph: Working PSI/Fahrenheit

Pressure Rating Correction Based on Operating Temperature of Media.



Flow Rate in Gallons Per Minute

ND	½	¾	1	1¼	1½	2	2½	3	4
Bore Size	.630	.787	.984	1.57	1.57	1.97	2.76	3.03	4.02
C _v	10	26	37	80	80	152	210	320	390

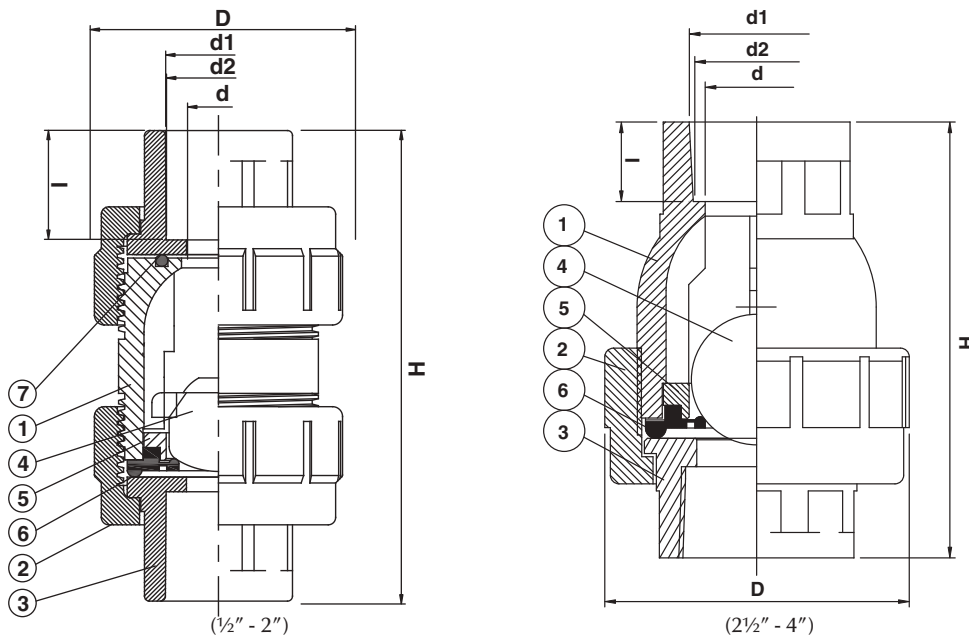
C_v is the number of gallons per minute of water at a temperature of 68°F that will flow through a valve with a 1 psi pressure drop.

Dimensional Data

Nom.	PVC & CPVC			PP & PVDF				
	d1	d2	l	d1	d2	l	d	D
½"	0.85	0.84	0.87	0.80	0.80	0.59	0.51	1.97
¾"	1.06	1.05	1.00	0.80	1.00	0.63	0.79	2.44
1"	1.32	1.31	1.01	1.00	1.27	0.71	0.98	2.83
1¼"	1.67	1.66	1.25	1.27	1.59	0.83	0.98	3.82
1½"	1.91	1.89	1.38	1.59	1.98	0.94	1.57	3.82
2"	2.39	2.37	1.50	1.98	2.49	1.06	1.97	4.21
2½"	2.89	2.87	1.75	2.49	2.96	1.22	2.76	6.42
3"	3.52	3.49	1.88	2.96	3.56	1.42	3.03	6.42
4"	4.52	4.49	2.25	3.56	4.34	1.61	4.02	8.86

Socket / Threaded	Socket	Flanged	Flanged
PVC & CPVC	PP & PVDF	PVC & CPVC	PP & PVDF
H	H	H	H
3.78	3.21	5.00	5.14
4.41	3.67	6.50	5.62
5.00	4.40	7.22	6.59
6.26	5.41	8.60	7.85
6.26	5.40	8.98	8.19
7.28	6.41	10.14	9.54
10.31	9.26	13.03	12.27
10.31	9.40	13.35	13.08
12.64	11.37	16.05	15.22

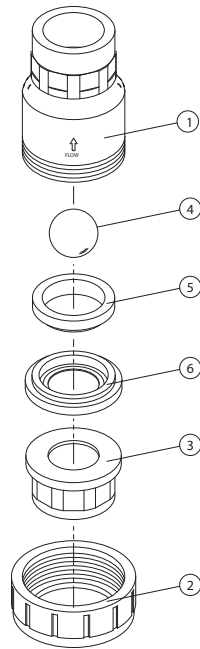
* For metric spigot dimensions, contact factory





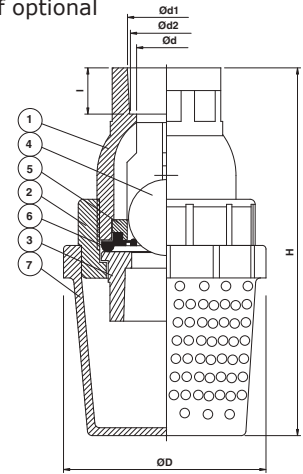
Parts Listing

1. Body
2. Union Nut
3. Connector
4. Ball
5. Gland
6. Seal
7. O-ring

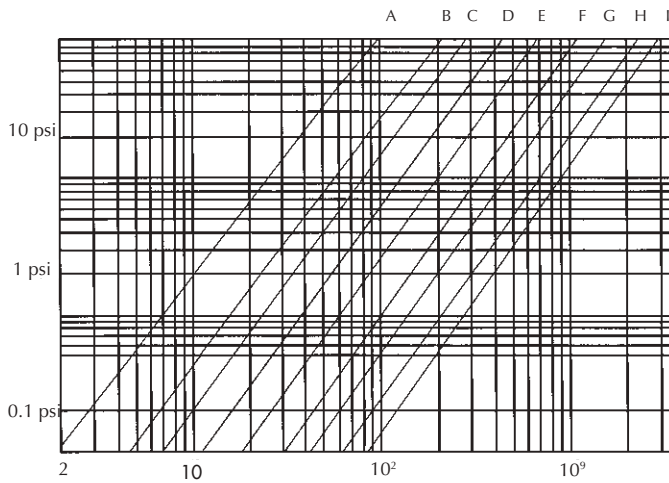


Foot Valve Screen Option

Easily converted to a foot valve by addition of optional plastic screen.



Pressure Loss—Flow Diagram



- A = 1/2"
- B = 3/4"
- C = 1"
- D = 1 1/4"
- E = 1 1/2"
- F = 2"
- G = 2 1/2"
- H = 3"
- I = 4"