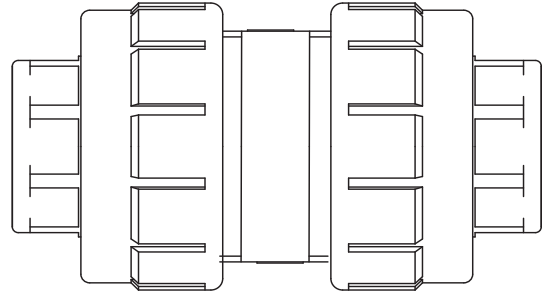


VQ Series

True Union Ball Check Valve

- Material:** PVC, CPVC (Corzan™), PP, PVDF
Size: ½" - 4" (2 ½" -4" Single Union)
Pressure Rating: 150 psi
Seals/Seat: EPDM or Viton
Connections: IPS Socket
 Metric Socket
 NPT Threaded
 ANSI 150 Flanged
 Metric Butt Fusion



ISO 9002 CERTIFIED

Engineering Guide Specification

Materials of Construction:

- PP:** Class PP 110B76383 per ASTM D4101
PVDF: Type I per ASTM D3222
PVC: Class 12454B per ASTM D1784
CPVC: Class 23447B per ASTM D1784
Seals: EPDM or Viton

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.

Special 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

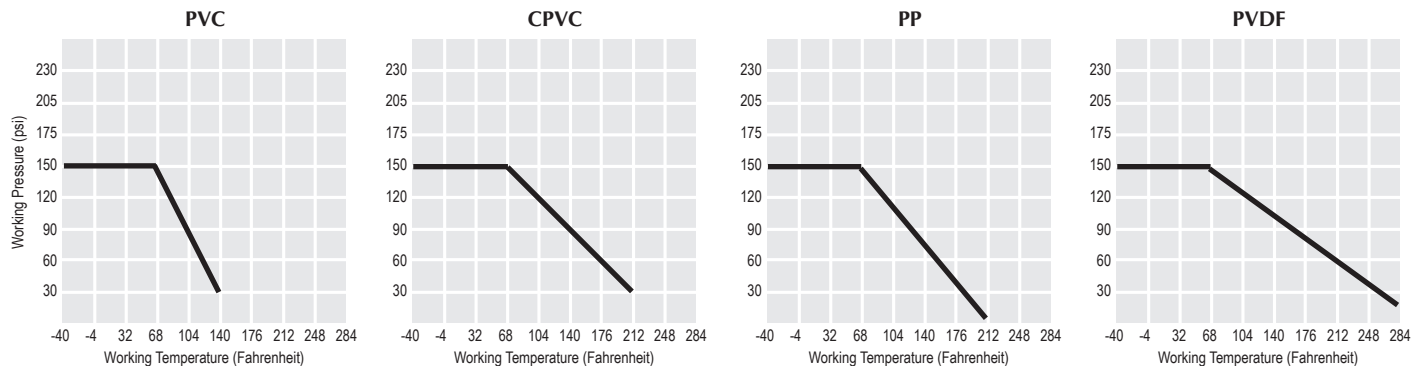
Flow Rate in Gallons Per Minute

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.

Pressure/Temperature Graph: Working PSI/Fahrenheit

Pressure Rating Correction Based on Operating Temperature of Media.



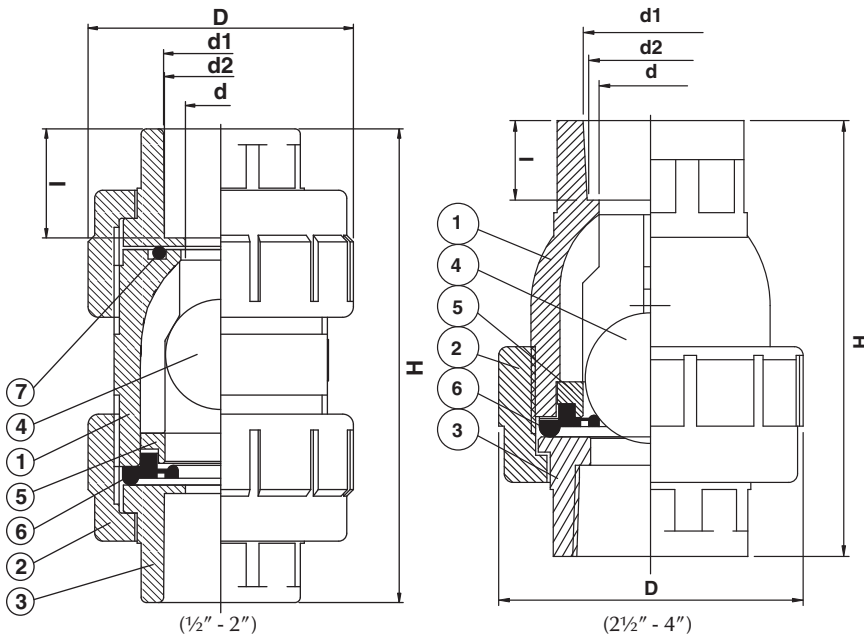
VQ Series

Dimensional Data

Nom. Size	PVC & CPVC			PP & PVDF			d	D
	d1	d2	l	d1	d2	l		
1/2"	0.85	0.84	0.87	0.76	0.75	0.58	0.52	2.20
3/4"	1.06	1.05	1.00	0.94	0.94	0.64	0.79	2.44
1"	1.32	1.31	1.01	1.23	1.22	0.74	0.98	2.83
1 1/4"	1.67	1.66	1.25	1.53	1.53	0.85	0.98	3.82
1 1/2"	1.91	1.89	1.38	1.92	1.91	0.96	1.57	3.82
2"	2.39	2.37	1.50	2.44	2.43	1.12	1.97	4.21
2 1/2"	2.89	2.87	1.75	2.90	2.90	1.22	2.76	6.42
3"	3.52	3.49	1.88	3.50	3.50	1.41	3.03	6.42
4"	4.52	4.49	2.25	4.29	4.28	1.63	4.02	8.86

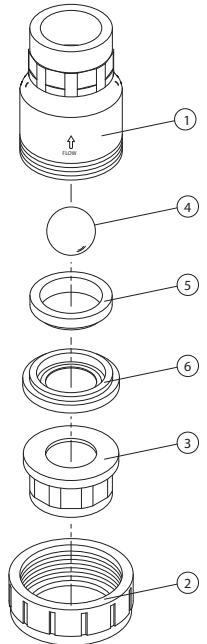
Socket / Threaded All Materials	Flanged PVC & CPVC	Flanged PP & PVDF
H	H	H
3.74	4.80	5.67
4.33	6.27	6.28
4.73	6.79	6.91
6.16	8.35	8.60
6.16	8.72	8.96
7.20	9.90	10.33
10.31	12.88	13.33
10.31	13.19	14.00
12.64	15.89	16.50

* For metric spigot dimensions, contact factory

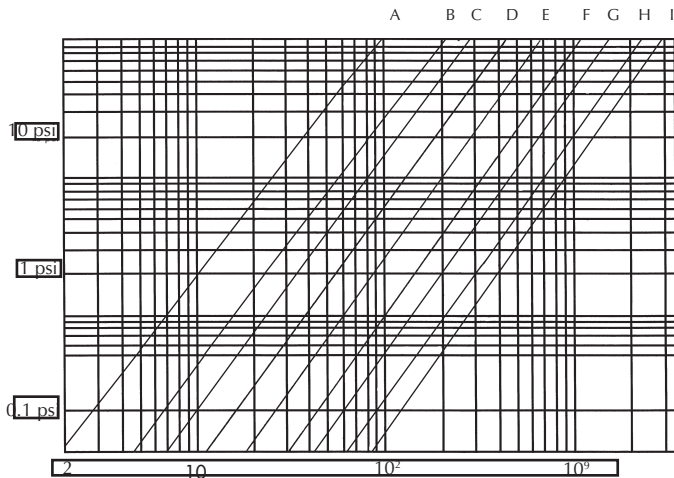


Parts Listing

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



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"

Foot Valve Screen Option

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

