

PW Series Wafer Check Valves



SERIES: PW

SIZES: 3" – 10"²

SEALS: EPDM, FPM (Viton®)

SPRING: 304 Stainless Steel



The Chemline **PW Series** Wafer Check Valve offers high end features at reasonable cost. This wafer check does not require a separate spacer or flange gaskets. The large orifice and full flow design means low pressure drop. Spring assisted disc closure is standard as well as an optical indication of disc open/close position. A selection of body materials and elastomers allow for a wide range of applications.

Features

Large Flow Capacity – Low pressure drop

High Pressure Ratings

- 150 psi rated up to 10"

NSF 61 Approved Materials

- PVC/EPDM and PVDF/EPDM valves are made of NSF approved materials

Can be Mounted Vertically or Horizontally

Spring Assisted Valve Closing

- Field installed springs assist disc closing for silent operation and to lower hammer on closing
- Two different springs installed in three configurations provide proper disc closing at 45 psi, 100 psi and 150 psi
- Springs are external, isolated from the fluid media

Optional Drain Plug

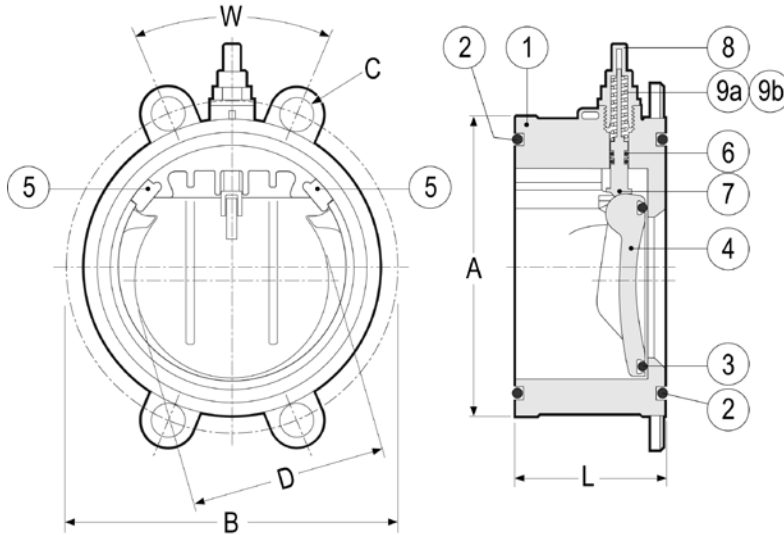
- Moulded boss may be tapped for drainage plug



¹ PPG=Glass Filled Polypropylene

² 10" valve is only available in PVC with either EPDM or FPM (Viton®) seals.

PW Series Wafer Check Valves



PARTS

▲ Recommended Spare Parts

No.	Part	Pcs.	Materials
1	Body	1	PVC, PP, PVDF, PPG
2▲	Body O-Ring	2	EPDM, FPM (Viton®)
3▲	Disc O-Ring	1	EPDM, FPM (Viton®)
4	Disc	1	PVC, PP, PVDF, PPG
5	Disc Retainer	2	PVC, PP, PVDF, PPG
6▲	Stem O-Ring	2	EPDM, FPM (Viton®)
7	Indicator Stem	1	PVDF
8	Indicator Cover	1	Clear ABS
9a	Spring (Inner)	1	304 SS
9b	Spring (Outer)	1	304 SS

VACUUM RATING

• Full Vacuum

DIMENSIONS INCHES

WEIGHTS LB.

Cv VALUES

Size	L	A	B	C	D	W	PVC	PP	PPG	PVDF	Cv Value
3"	2.8	4.9	5.8 – 6.3	0.8	2.1	45°	1.26	0.84	1.00	1.57	180
4"	3.2	6.1	6.9 – 7.5	0.8	3.0	45°	1.87	1.26	1.48	2.36	400
6"	4.2	8.4	9.2 – 9.5	0.9	4.5	45°	5.40	3.62	4.25	6.77	1,000
8"	5.5	10.4	11.4 – 11.8	0.9	5.9	45°	6.61	5.29	6.39	8.82	2,500
10"	5.5	12.8	13.8 – 14.3	1.1	7.3	45°	11.60	9.28	11.20	15.40	3,500

WORKING PRESSURES PSI

Size	PVC			PP			PPG				PVDF			
	20°C 68°F	40°C 104°F	60°C 140°F	40°C 104°F	60°C 140°F	80°C 176°F	40°C 104°F	60°C 140°F	80°C 176°F	105°C 220°F	40°C 104°F	60°C 140°F	80°C 176°F	100°C 212°F
3"	150	130	70	90	70	58	150	130	90	45	150	130	90	60
4"	150	130	70	90	70	58	150	130	90	45	150	130	90	60
6"	150	130	70	90	70	58	150	130	90	45	150	130	90	60
8"	150	130	70	90	70	58	150	130	90	45	150	130	90	60
10"	150	130	70	90	70	58	150	130	90	45	150	130	90	60

Temperature Ranges: PVC 0 to 60°C (32 to 140°F), PP -20 to 90°C (-4 to 194°F), PPG -20 to 115°C (-4 to 240°F), PVDF -40 to 140°C (-40 to 284°F)

PRESSURES TO OPEN PSI

SEALING PRESSURES PSI

MAXIMUM ALLOWABLE FLOW RATES USGPM

Size	Spring Type			Maximum Back Pressure Required to Seal (psi)	at Start-Up and Shut-Down	Running State
	45 psi (Inner)	100 psi (Outer)	150 psi (Both)			
3"	0.1	0.25	0.5	1.5	125	200
4"	0.1	0.25	0.5	1.5	225	300
6"	0.1	0.25	0.5	1.5	500	600
8"	0.1	0.25	0.5	1.5	650	900
10"	0.1	0.25	0.5	1.5	800	1,300

Above data is from tests using water on valves with EPDM disc facing.

ORDERING EXAMPLE

Chemline Wafer Check Valves	PW	A	030	E
Valve Material	A – PVC G – PPG	B – PP K – PVDF		
Size	030 – 3" 080 – 8"	040 – 4" 100 – 10"	060 – 6"	
Seals	E – EPDM	V – FPM (Viton®)		

Example: PW Series Wafer Check Valve, PVC, 3", with EPDM seals.

INSTALLATION PRECAUTIONS:

- Never install the valve directly to a pump
- Never install the valve directly to a bend or elbow
- Install all wafer check valves a minimum distance of 5 to 10 times the nominal pipe diameter **downstream** of pumps, elbows or valves