



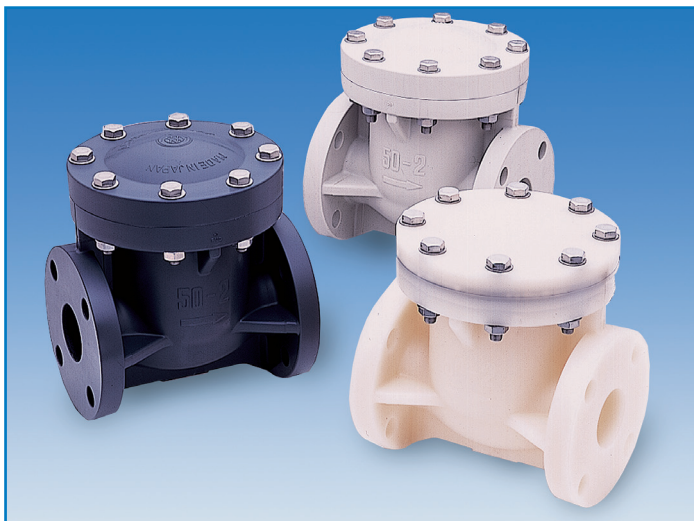
Swing Check Valve

Standard Features (Sizes 3/4" - 8")

- Minimum flow resistance - Low pressure drop
- Horizontal or vertical installation
- All sizes rated for full vacuum service
- Minimum back pressure to seat disc tightly
- Top access cover facilitates maintenance without body removal from pipeline
- All thermoplastic body
- All PVC parts made of high impact PVC
- PVC and PP valves come with EPDM seals (part numbers 5j, 5k, 6 and 7) as standard
- PVDF valves, part numbers 5j and 7 of PTFE and 8 of PTFE/PFA
- 3/4" PP valves supplied with Ring 1a

Options:

- External lever and weight to assist disc in closing faster
- External spring to assist disc in closing faster
- PTFE or FKM seat and O-Rings



Specifications

- Sizes:** 3/4" - 8"
Models: Flanged (ANSI) Connection Only
 Lever and Weight or Spring Assist
 Option
Bodies: HI-PVC, PP and PVDF
Seats: EPDM, FKM, PTFE
Seal: EPDM, FKM, PTFE

Parts List (Sizes 3/4" - 8")

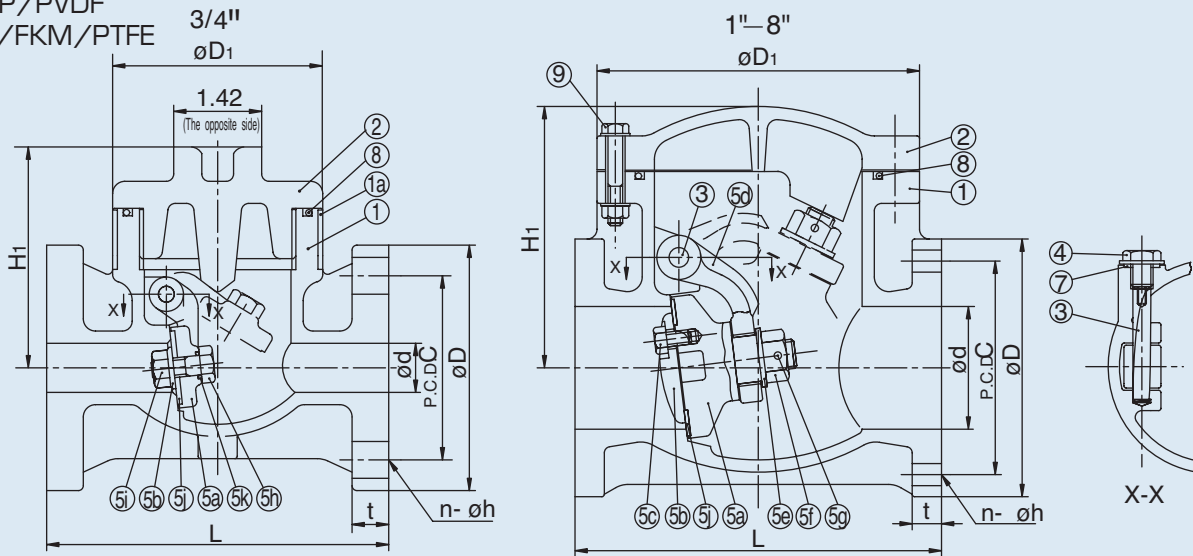
| Parts | | | |
|-------|-------------------|------|---------------------|
| NO. | DESCRIPTION | PCS. | MATERIAL |
| 1 | Body | 1 | HI-PVC, PP, PVDF |
| 2 | Bonnet | 1 | HI-PVC, PP, PVDF |
| 3 | Shaft | 1 | HI-PVC, PP, PVDF |
| 4 | Bolt | 1 | HI-PVC, PP, PVDF |
| 5a | Disc | 1 | HI-PVC, PVDF |
| 5b | Seat Holder | 1 | HI-PVC, PP, PVDF |
| 5c | Bolt (A) | - | HI-PVC, PP, PVDF |
| 5d | Arm | 1 | HI-PVC, PP, PVDF |
| 5e | Washer | 1 | HI-PVC, PP, PVDF |
| 5f | Nut (A) | 1 | HI-PVC, PVDF |
| 5g | Pin | 1 | HI-PVC, PVDF |
| 5h | Bolt (B) | 1 | HI-PVC, PP, PVDF |
| 5i | Nut (B) | 1 | HI-PVC, PP, PVDF |
| 5j | Seat | 1 | EPDM, PTFE, FKM |
| 5k | O-Ring (A) | 1 | EPDM, PTFE, FKM |
| 6 | Gasket (A) | 1 | EPDM, PTFE, FKM |
| 7 | Gasket (B) | 1 | EPDM, PTFE, FKM |
| 8 | O-Ring (B) | Set | EPDM, PTFE, FKM |
| 9 | Bolt, Nut, Washer | Set | Stainless Steel 304 |
| 1a | Ring | 1 | Stainless Steel 304 |

Parts List (Lever and Weight)

| PARTS | | | |
|-------|----------------|------|---------------------|
| NO. | DESCRIPTION | PCS. | MATERIAL |
| 1 | Fitting | 1 | PVC, PP, PVDF |
| 2 | Nut | 1 | PVC, PP, PVDF |
| 3 | Shaft | 1 | Stainless Steel 316 |
| 4 | Counter Weight | 1 | PVC |
| 5 | Spacer | 1 | PVC, PP, PVDF |
| 6 | O-Ring | 1 | EPDM, FKM |
| 7 | Hex Cap Bolt | Set | Stainless Steel 316 |
| 8 | Set Screw | 1 | Stainless Steel 316 |

Swing Check Valves

PVC/PP/PVDF
(EPDM/FKM/PTFE
Seals)

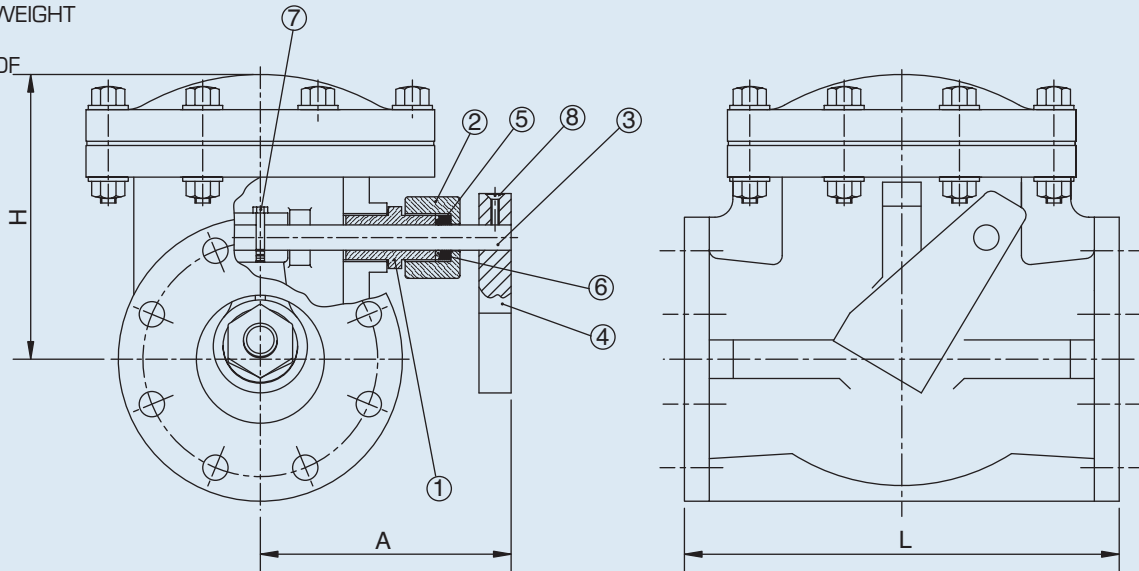


Dimensions (Sizes 3/4" – 8") (in.)

| NOMINAL SIZE | | ANSI CLASS 150 | | | | | D1 | L | t | | H1 | H |
|--------------|-----|----------------|-------|-------|------|---|-------|-------|------|----------|-------|-------|
| INCHES | mm | d | C | D | h | n | | | PVC | PP, PVDF | | |
| 3/4 | 20 | 0.79 | 2.75 | 3.88 | 0.62 | 4 | 3.39 | 5.51 | 0.59 | 0.59 | 3.43 | 3.54 |
| 1 | 25 | 0.98 | 3.12 | 4.25 | 0.62 | 4 | 5.12 | 6.30 | 0.63 | 0.63 | 4.61 | 4.72 |
| 1-1/2 | 40 | 1.57 | 3.88 | 5.00 | 0.62 | 4 | 5.71 | 7.09 | 0.71 | 0.71 | 5.31 | 5.43 |
| 2 | 50 | 1.97 | 4.75 | 6.00 | 0.75 | 4 | 7.09 | 7.87 | 0.79 | 0.83 | 6.34 | 6.46 |
| 2-1/2 | 65 | 2.56 | 5.50 | 7.00 | 0.75 | 4 | 7.87 | 9.45 | 0.87 | 0.91 | 6.50 | 6.61 |
| 3 | 80 | 3.15 | 6.00 | 7.50 | 0.75 | 4 | 8.07 | 10.24 | 0.87 | 0.98 | 6.61 | 6.73 |
| 4 | 100 | 3.94 | 7.50 | 9.00 | 0.75 | 8 | 10.43 | 11.81 | 0.94 | 1.02 | 8.27 | 8.39 |
| 5 | 125 | 4.92 | 8.50 | 10.00 | 0.88 | 8 | 12.99 | 13.78 | 0.94 | 1.06 | 9.65 | 9.76 |
| 6 | 150 | 5.91 | 9.50 | 11.00 | 0.88 | 8 | 14.57 | 15.75 | 0.98 | 1.06 | 11.02 | 11.14 |
| 8 | 200 | 7.87 | 11.75 | 13.50 | 0.88 | 8 | 16.73 | 19.69 | 1.18 | 1.34 | 13.11 | 13.23 |

Swing Check Valves

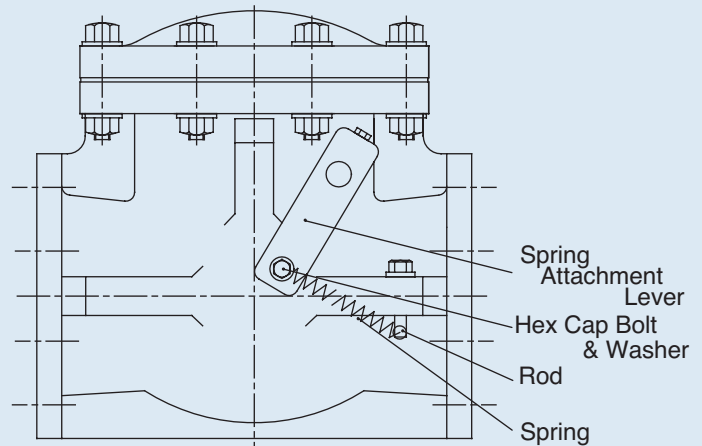
LEVER AND WEIGHT
(OPTION)
PVC, PP, PVDF



Dimensions (Lever & Weight/External Spring) (in.)

| NOMINAL SIZE | | A | H | |
|--------------|-----|------|---------|-------|
| INCHES | mm | | PVC, PP | PVDF |
| 3/4 | 20 | 4.0 | 3.43 | 3.54 |
| 1 | 25 | 4.5 | 4.72 | 4.72 |
| 1-1/2 | 40 | 5.0 | 5.43 | 5.43 |
| 2 | 50 | 5.5 | 6.46 | 6.46 |
| 2-1/2 | 65 | 6.0 | 6.61 | 6.61 |
| 3 | 80 | 6.5 | 6.73 | 6.73 |
| 4 | 100 | 8.0 | 8.39 | 8.39 |
| 5 | 125 | 10.0 | 9.76 | 9.76 |
| 6 | 150 | 10.5 | 11.14 | 11.14 |
| 8 | 200 | 12.0 | 13.23 | 13.23 |

SPRING ASSIST
(OPTION)
PVC, PP, PVDF



Sample Specification

All swing check valves shall be of solid thermoplastic construction, having no metal that comes in contact with media, (except when lever & weight or stainless steel spring option is installed). Valves shall incorporate a single disc design suitable for either horizontal or vertical installations. Valves shall be of top entry bonnet design for maintenance purposes with O-ring top bonnet seal. PVC shall conform to ASTM D1784 Cell Classification 12454A, PP conforming to ASTM D4101 Cell Classification PPO210B67272 and PVDF conforming to ASTM D3222 Cell Classification Type II. Valves shall be rated to 150psi sizes 3/4" through 3", 100psi sizes 4" through 6", and 70psi size 8" at 70° F, as manufactured by Asahi/America, Inc.

Swing Check Valves

Pressure vs. Temperature (psi, water, non-shock)

| NOMINAL SIZE | | PVC | PP | PVDF |
|--------------|-----|-----------------|-----------------|------------------|
| | | EPDM/FKM/PTFE | EPDM/FKM/PRFE | EPDM/FKM/PTFE |
| INCHES | mm | 30° F 120° F | -5° F 175° F | - 5° F 210° F |
| | | 3/4 | 20 | 150 |
| 1 | 25 | 150 | 150 | 150 |
| 1-1/2 | 40 | 150 | 150 | 150 |
| 2 | 50 | 150 | 150 | 150 |
| 2-1/2 | 65 | 150 | 150 | 150 |
| 3 | 80 | 150 | 150 | 150 |
| 4 | 100 | 100 | 100 | 100 |
| 5 | 125 | 100 | 100 | 100 |
| 6 | 150 | 100 | 100 | 100 |
| 8 | 200 | 70 | 70 | 70 |

Minimum Back Pressure to Close Valve (psi)

| NOMINAL SIZE | | SEAT | |
|--------------|-----|------------|-------|
| INCHES | mm | ELASTOMERS | PTFE |
| 3/4 | 20 | 2.8 | 5.0 |
| 1 | 25 | 5.0 | 8.5 |
| 1-1/2 | 40 | 5.0 | 8.5 |
| 2 | 50 | 5.0 | 8.5 |
| 2-1/2 | 65 | 5.0 | 8.5 |
| 3 | 80 | 5.7 | 8.5 |
| 4 | 100 | 5.7 | 9.2 |
| 5 | 125 | 5.7 | 9.2 |
| 6 | 150 | 6.4 | 10.00 |
| 8 | 200 | 6.4 | 10.00 |

Weight (lbs.)

| NOMINAL SIZE | | WT (LBS.) |
|--------------|-----|--------------|
| INCHES | mm | |
| 3/4 | 20 | 2.20 |
| 1 | 25 | 4.40 |
| 1-1/2 | 40 | 6.61 |
| 2 | 50 | 10.14 |
| 2-1/2 | 65 | 14.33 |
| 3 | 80 | 16.53 |
| 4 | 100 | 26.45 |
| 5 | 125 | 44.00 |
| 6 | 150 | 59.52 |
| 8 | 200 | 92.59 |

Cv Values

| NOMINAL SIZE | | Cv |
|--------------|-----|------|
| INCHES | mm | |
| 3/4 | 20 | 14 |
| 1 | 25 | 24 |
| 1-1/2 | 40 | 81 |
| 2 | 50 | 140 |
| 2-1/2 | 65 | 250 |
| 3 | 80 | 280 |
| 4 | 100 | 510 |
| 5 | 125 | 750 |
| 6 | 150 | 1100 |
| 8 | 200 | 1900 |

Troubleshooting

What if valve leaks through the seat?

1. Sediment build-up around disc and seat. Clean disc and seat.
2. Disc or seat broken or damaged. Replace disc or seat.
3. Insufficient back pressure. Check the pressure.

What if valve leaks between bonnet and body?

1. Bolts not tightened properly. Tighten firmly per specified torque.
2. Seal chemically attacked or worn. Replace seal.
3. Exceeds maximum allowable pressure rating.