

# Type A Pressure Relief Valve

# Standard Features (Sizes 1/2" - 2")

- Most extensive size range in the industry
- U-cup seals protect spring chamber while maintaining sensitive operation
- Designed for fewer flow restrictions and excellent flow capacity
- Repaired in line, easy maintenance
- Stainless steel adjustment feature provides convenient relief pressure setting in the field (Factory set at no additional charge)

### Sample Specification

All pressure relief valves shall be of thermoplastic construction, (PVC or PP) and have no metal part that comes in contact with media. PVC shall conform to ASTM D1784 Cell Classification 12454A and PP conforming to ASTM D4101 Cell Classification PPO210B67272. PVC valves shall be rated to 110psi sizes 1/2" through 2". PP rated to 75psi sizes 1/2" through 2" at 70° F, as manufactured by Asahi/ America, Inc.

### Troubleshooting

### What if valve does not open fully?

1. Not enough overpressure is being applied to valve. Reset.

### What if valve does not seat fully?

- 1. Foreign particles may be caught between the seat and plug. Clean seat and plug area.
- 2. Plug and seat may be damaged or worn. Replace plug and seat.
- 3. Line pressure is not below set pressure. Check line pressure and reset.

Sizes: Materials: Models:	Specifications        1/2" - 2"        PVC and PP        1) Threaded      PVC 1/2" - 2"        PP      1/2" - 1"        2) Flanged      PVC 1/2" - 2"        PP      1/2" - 2"
Seals:	EPDM, FKM
Max.Line Pres:	PVC 110psi
	PP 85psi
Setting Range:	PVC 5 - 100psi
	PP 5 - 75psi

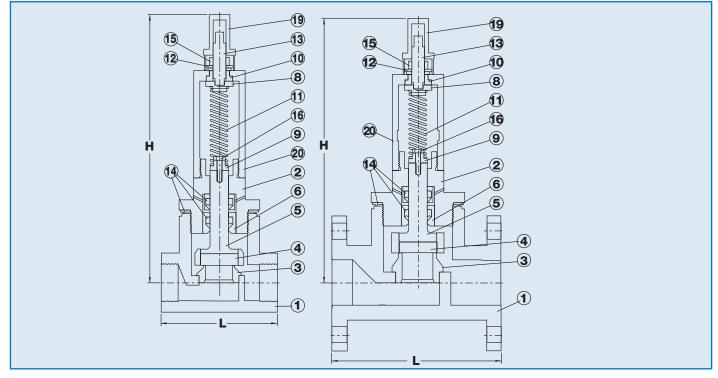
# Parts List (Sizes 1/2" - 2")

	PARTS				
NO.	DESCRIPTION	MATERIAL			
1	Body	PVC, PP			
2	Bonnet	PVC, PP			
З	Seat	PVC, PP			
4	Orifice Seal	EPDM, FKM			
5	Piston	PVC, PP			
6	Guide Bushing	PVC, PP			
7	Bonnet Spacer	PVC, PP			
8	Upper Spring Keeper	PVC, PP			
9	Lower Spring Keeper	PVC, PP			
10	Adjustment Screw Guide	300 SS			
11	Spring	Stainless Steel			
12	5/8 Washer	316 SS			
13	Adjustment Screw	EPDM, FKM			
14	Seal Kit	316 SS			
15	5/8 Hex Nut	316 SS			
16	1⁄4 Hex Screw	316 SS			
17	5/16 Hex Screw	316 SS			
18	Seat Spacer	316 SS			
19	Сар	PVC, PP			
20	Spring Housing	PVC, PP			

# Caution

- The valves are not safety devices and must not be substituted for code approved safety relief valves or rupture discs.
- Never remove valve from pipeline under pressure.
- Always wear protective gloves and goggles.

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### Dimensions (Thr'd 1/2" - 2")

NOMINAL SIZE			
INCHES	mm	L	н
1/2	15	3.36	9.30
3/4	20	3.74	9.40
1	25	4.33	9.40
1 -1/2	40	5.51	12.70
2	50	7.09	13.00

### Dimensions (Flange 1/2" – 2")

NOMINAL SIZE			
INCHES	mm	L	н
1/2	15	3.36	9.30
3/4	20	3.74	9.40
1	25	4.33	9.40
1 -1/2	40	7.48	12.70
2	50	7.87	13.00

# Pressure vs. Temperature (psi)

NOMINAL SIZE		PVC			PP		
		30° F	71° F	106° F	- 5°F	71° F	141° F
INCHES	mm	70° F	105° F	120° F	70° F	140° F	175° F
1/2-1-1/2	15-40	110	75	75	85	65	45
2	50	110	75	65	85	50	30

### Ordering Information

### Step 1. Determine Set Pressure

- (110 psi: Max. pres. rating for PVC valve) (85 psi: Max. pres. rating for PP valve)
- 1. Max. allowable working pressure (MAWP<sup>1</sup>) for system \_\_\_\_\_ psi:
- 2. Overpressure<sup>2</sup> \_\_\_\_\_ psi:
- 3. Set pressure (normally 15psi over operating pressure) \_\_\_\_\_ psi:
- 4. Normal operating pressure \_\_\_\_\_ psi:
  - MAWP: Max. safe system pressure
    <sup>2</sup> Overpressure: Amount of additional
  - pressure required for disc to attain full lift, and, therefore, full flow capacity. The Asahi/America design attains full lift at 25 percent overpressure.

### Step 2. Service Conditions

- 1. Media: \_\_\_\_\_ % Concentration: \_\_\_\_\_ Temp: \_\_\_\_(°F or °C)
- 2. Ambient Temperature: \_\_\_\_\_(°F or °C)
- 3. Pipe Size: \_\_\_\_\_Material: \_\_\_\_\_
- 4. Body Material: PVC \_\_\_\_ Polypropylene \_\_\_\_
- 5. End Connections: NPT Threaded \_\_\_\_\_ 150# ANSI Flat Faced Flanges \_\_\_\_\_
- 6. Downstream Pressure: \_\_\_\_\_ psi
- 7. Flow Rate (gpm): Normal \_\_\_\_\_or Cv
- Required \_\_\_\_\_ Max \_\_\_\_\_ Mini \_\_\_\_\_

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