



## Type E Pressure Relief Valve

### Standard Features

- High valve coefficient (CV)
- Solid thermoplastic valve body provides excellent corrosion and chemical resistance
- PTFE bellows stem seal eliminates old style packing glands and minimizes maintenance
- Positive bubble tight shut-off
- No metal to media contact
- In-line repairs
- Lightweight for ease of installation
- Valves can be installed in piping system of any material
- Pressure setting is field adjustable
- Type E Pressure Relief Valves are virtually maintenance free

### Sample Specification

All Type E Pressure Relief Valves shall be of the Globe Valve design, have a PTFE stem seal of the bellows design, and have no metal to media contact. Valves shall be field adjustable and be rated to 90 psi. PVC shall conform to ASTM D1784 Cell Classification 12454-A, PP shall conform to ASTM D4101 Cell Classification PPO210B67272, PVDF shall conform to ASTM D3222 Cell Classification Type II, and PTFE shall conform to PTFE TFE 1600, as manufactured by Asahi/America, Inc.

*ASAHI/ AMERICA RECOMMENDS THE USE OF A/V GASKETS FOR THIS PRODUCT LINE*

### Specifications

**Sizes:** 1/2" - 1 1/4"  
**Materials:** PVC, PP, PVDF and PTFE  
**Model:** 1) Threaded 1/2" -1 1/4" PVC  
 1/2" -1" PP  
 2) Flanged 1/2" -1"PP  
 1/2" -1 1/4" PVC,  
 PVDF,PTFE  
**Seals:** EPDM,FKM  
**Max. Line Pressure:** 90 psi  
**Max. Temp:** PVC 32-140° F, PP -5-175°F  
 PVDF -40-266° F, PTFE -5- 284°F  
**Setting Range:** 7-90 psi

### Parts List (Sizes 1/2" – 1 1/4")

PARTS			
NO.	DESCRIPTION	PCS.	MATERIAL
1	Adjuster Nut	1	PVC/PP
2	Spring	1	Coated Steel
4	Valve Stem	1	Stainless Steel
5	Spring Housing	1	PVC/PP
6	Bellows Housing	1	PVC,PP,PVDF,PTFE
7	Body O-Ring	1	EPDM, FKM
8	Bellows	1	PTFE
9	Valve Seat	1	PVC, PP, PVDF, PTFE
10	Valve Body	1	PVC, PP, PVDF, PTFE

PTFE Encapsulated FKM

### Caution

- These 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.

# Type E Pressure Relief Valve w/PTFE Bellows Seal

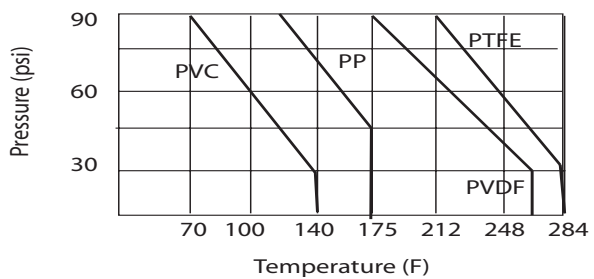
## Dimensions (INCHES)

Nominal Size		PVC,PP			PVDF,PTFE	
inches	mm	L (Flg)	L (Thd)	H	L (Flg)	H
1/2	15	3.3	3.3	8.3	5.1	8.3
3/4	20	3.7	3.7	8.7	5.9	8.7
1	25	4.3	4.3	9.8	6.3	9.8
1 1/4	32	5.3	5.3	12.2	7.0	12.2

## CV Values

CV Values			
1/2"	3/4"	1"	1 1/4"
4.7	7	9	18

## Pressure vs Temperature



## Troubleshooting

### What if fluid flows even when fully closed?

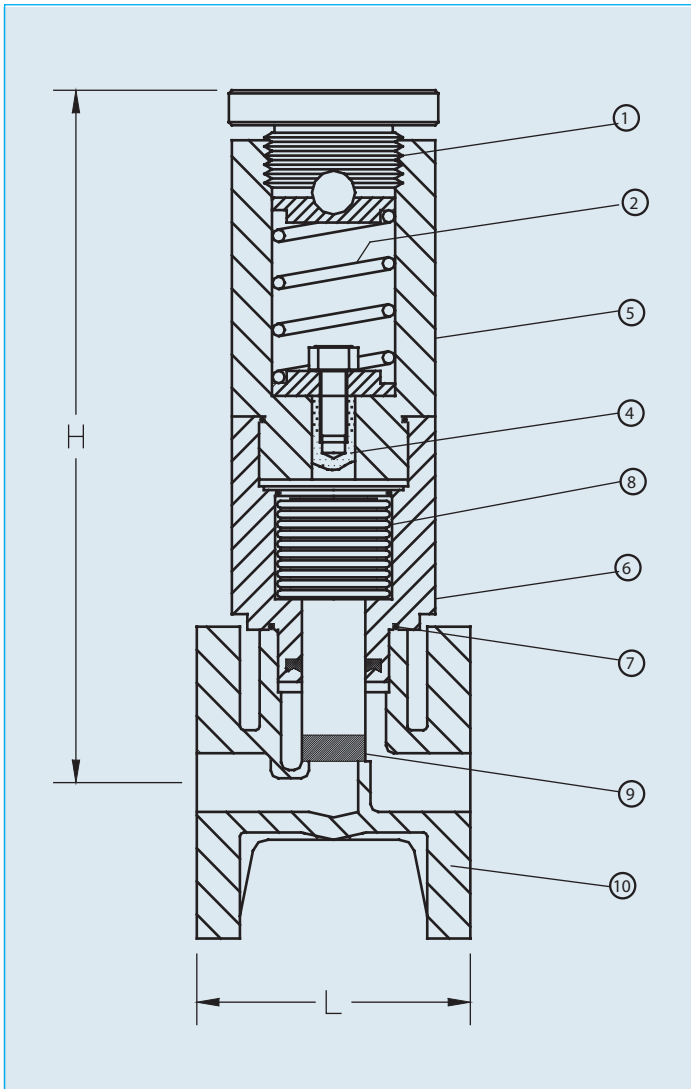
1. Plug or seat is damage. Change plug or seat.
2. Foreign matter caught or formed at plug and seat.

### What if the valve does not open?

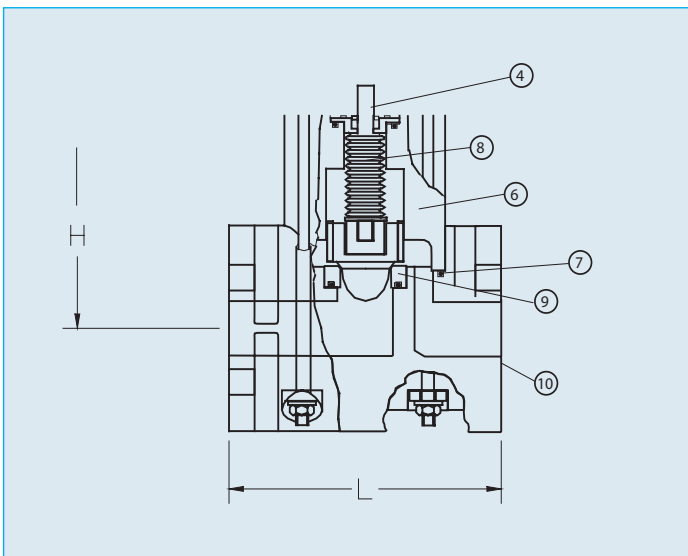
1. No system pressure.
2. Set pressure set too high for system.

### What if fluid leaks from body?

1. Line pressure not below set pressure.



**PVDF/PTFE**





**Type E Pressure Relief Valve  
w/PTFE Bellows Seal**

### Standard Feature

- High valve coefficient (CV)
- Solid thermoplastic valve body provides excellent corrosion and chemical resistance
- PTFE bellows stem seal eliminates old style packing glands and minimizes maintenance
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### Specifications

**Sizes:** 1 1/2" - 4"  
**Materials:** PVC, PP, PVDF and PTFE  
**Model:** 1) Threaded 1 1/2"-2" PVC,PP  
 2) Flanged 1 1/2"-4" PVC,PP,  
 PVDF,PTFE  
**Seals:** EPDM,FKM  
**Max. Line Pressure:** 90 psi  
**Max. Temp:** PVC 32- 140° F, PP -5 - 175° F  
 PVDF -40 - 266° F, PTFE -5 - 284° F  
**Setting Range:** 1 1/2"-2" 7-90 psi  
 2 1/2"-4 7-50 psi  
 50-90 psi

PTFE Encapsulated FKM

### Parts List (Sizes 1 1/2" - 4")

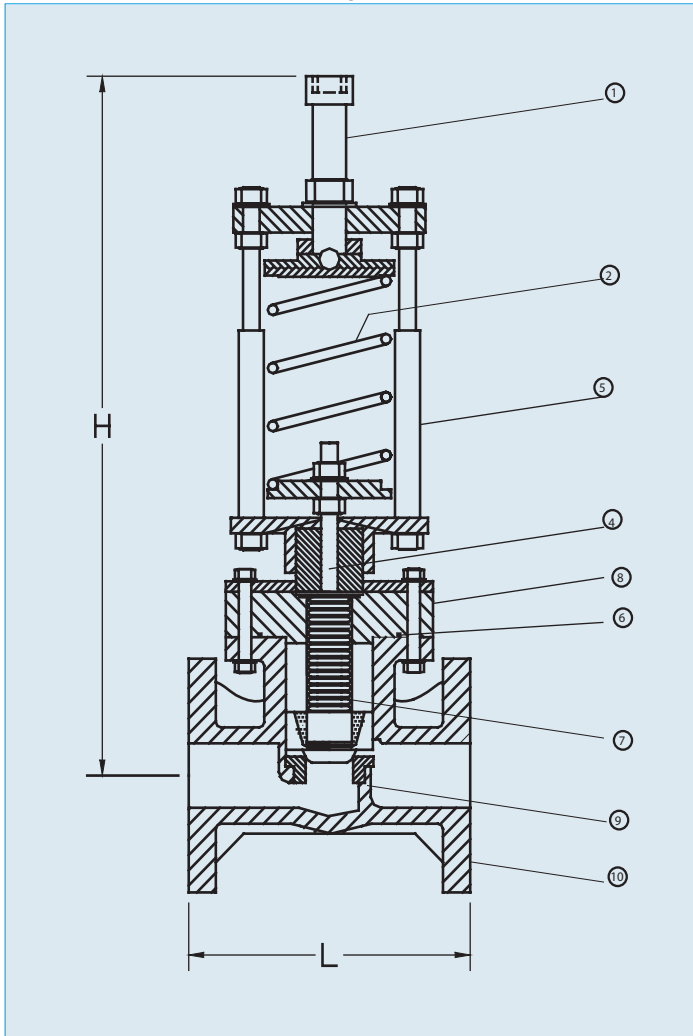
PARTS			
NO.	DESCRIPTION	PCS.	MATERIAL
1	Adjuster Nut	1	Stainless Steel
2	Spring	1	Stainless Steel
3	Posts	2	Stainless Steel
4	Valve Stem	1	Stainless Steel
6	Bellows Housing	1	PVC,PP,PVDF,PTFE
7	Body O-Ring	1	EPDM, FKM, PTFE Encapsulated FKM
8	Bellows	1	PTFE
9	Valve Plug & Seat	1	PVC, PP, PVDF, PTFE
10	Valve Body	1	PVC, PP, PVDF, PTFE

### Caution

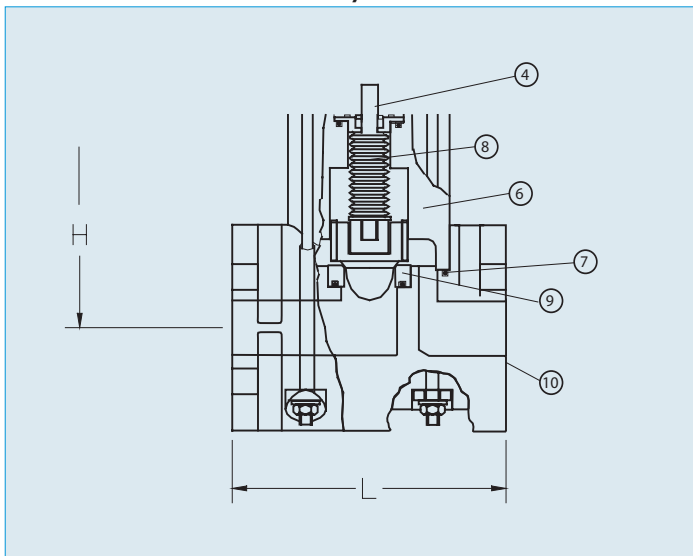
- These valves are not safety devices and must not be substituted for code approved safety relief valves or rupture discs.
- Never remove valve from pipeline under pressure.
- Always wear protective gloves and goggles.

# Type E Pressure Relief Valve w/PTFE Bellows Seal

## PVC/PP



## PVDF/PTFE



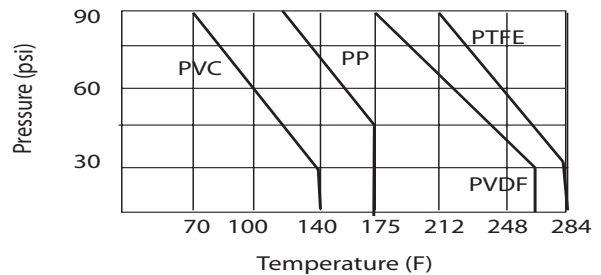
## Dimensions (INCHES)

Nominal Size		PVC,PP			PVDF,PTFE	
inches	mm	L (Flg)	L (Thd)	H	L (Flg)	H (Max)
1 1/2	40	7.5	7.5	18.2	7.9	18.2
2	50	7.8	7.8	23.5	9.0	23.5
2 1/2	65	8.6	N/A	22.8	11.4	22.8
3	80	9.4	N/A	26.4	12.2	26.4
4	100	11.5	N/A	26.4	13.7	26.4

## CV Values

CV Values				
1 1/2"	2"	2 1/2"	3"	4"
29	47	56	74	93

## Pressure vs Temperature



## Troubleshooting

### What if fluid flows even when fully closed?

1. Plug or seat is damage. Change plug or seat.
2. Foreign matter caught or formed at plug and seat.

### What if the valve does not open?

1. No system pressure.
2. Set pressure set too high for system.

### What if fluid leaks from body?

1. Line pressure not below set pressure.