



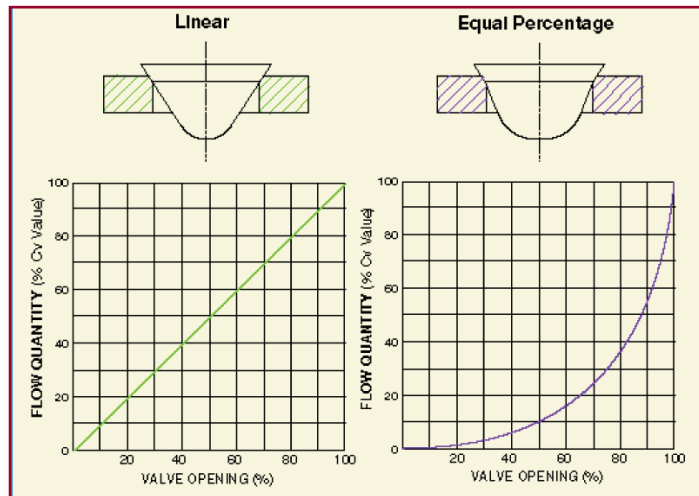
Electric Globe Control Valve

Standard Features (Sizes 1/2" - 4")

- Precise flow control
- Solid thermoplastic valve body provides excellent corrosion resistance
- PTFE bellows stem seal eliminates old style packing glands and minimizes maintenance
- Positive bubble-tight shut-off
- Plug and seat can be changed to accommodate a variety of valve coefficients (Cv)
- Plug (trim) can be characterized (linear or equal percentage) per requirements. (See below)
- No metal to media contact
- Extremely corrosion resistant actuator constructed of glass-filled polyester (PEG) with stainless steel trim
- 120 VAC/1ph supply voltage
- On/off or modulation
- 4-20 mA positioner and 4-20 mA output signal transmitter

Options

- Supply voltages
- Extra (auxiliary) limit switches



Specifications

- Sizes:** 1/2" - 4"
- Materials:** PVC, PP, PVDF and PTFE
- Model:** Flanged (ANSI)
- Stem Seal:** PTFE Bellows
- Valve Seal:** FKM, EPDM, PTFE encapsulated FKM
- Flow Char.:** Linear or equal percentage
- Temp. Range:** PVC 32 - 140° F, PP -5 - 175° F
PVDF -5 - 265° F, PTFE -5 - 300° F

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

PARTS			
NO.	DESCRIPTION	PCS.	MATERIAL
1	Electric Actuator	1	PEG
2	Manual Override	1	PEG
4	Actuator Valve Stem	1	Stainless Steel
6	Actuator Standoffs	2	Stainless Steel
7	Position Indicator	1	Stainless Steel
8	Bellows Seal O-Ring	1	EPDM, FKM, PTFE Encapsulated FKM
9	Bellows Housing	1	PVC, PP, PVDF, PTFE
10	Body O-Ring	1	EPDM, FKM, PTFE Encapsulated FKM
11	Bellows	1	PTFE
12	Seat O-Ring	1	EPDM, FKM, PTFE Encapsulated FKM
13	Valve Seat	1	PVC, PP, PVDF, PTFE
14	Valve Plug	1	PVC, PP, PVDF, PTFE
15	Valve Body	1	PVC, PP, PVDF, PTFE

Sample Specification

All thermoplastic modulating control valves shall be of the globe valve design. Valves shall have interchangeable seat and plugs to accommodate various flow coefficients (Cv) and flow characteristics shall be either linear or equal percentage. Stem seal shall be PTFE and of the bellows design. Electric actuator shall be constructed of glass-filled polyester (PEG) with stainless steel trim. Actuator shall operate with 120 VAC/1ph supply voltage, have a visual position indicator and be capable of on/off or modulating operation. PVC shall conform to ASTM D1784 Cell Classification 12454-A, PP conforming to ASTM D4101 Cell Classification PPO210B67272, and PVDF conforming 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 AV GASKETS FOR THIS PRODUCT LINE

Caution

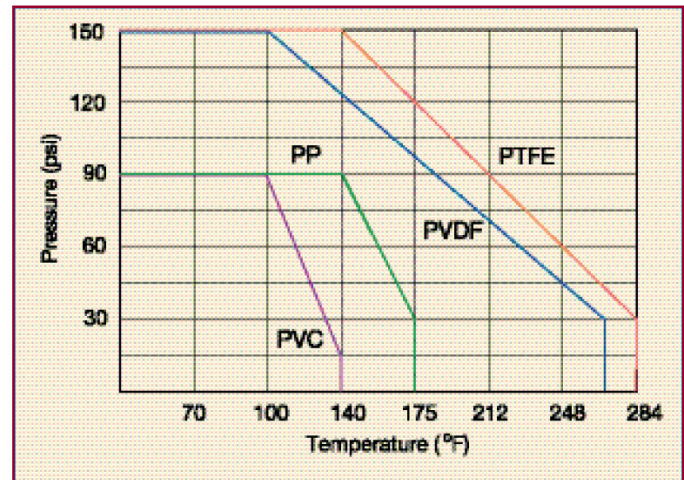
- Never remove valve from pipeline under pressure.
- Always wear protective gloves and goggles.

Globe Control Valves

Dimensions (in.)

NOMINAL SIZE		PVC, PP		PVDF, PTFE	
INCHES	mm	L	H	L	H
1/2	15	3.35	21.57	5.12	22.52
3/4	20	3.74	21.65	5.91	22.80
1	25	4.33	21.69	6.30	22.80
1-1/4	32	5.31	21.93	7.09	22.91
1-1/2	40	7.48	21.81	7.87	23.11
2	50	7.87	21.81	9.06	23.39
2-1/2	65	8.66	24.41	11.42	25.87
3	80	9.45	24.37	12.20	26.18
4	100	11.42	24.72	13.78	26.18

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



Troubleshooting

What if fluid flows even when fully closed?

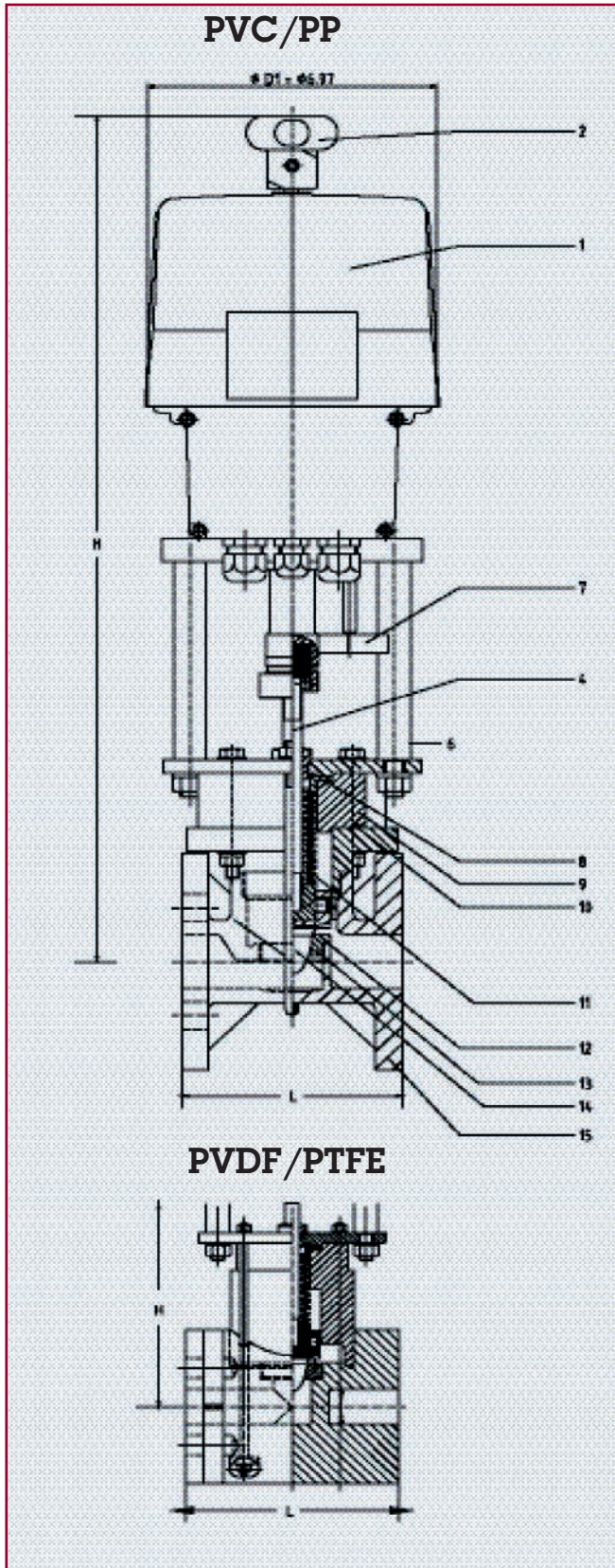
1. Plug or seat is damaged.
2. Foreign matter caught or formed at plug and seat.

What if it does not open?

1. No supply voltage.
2. No instrument signal.
3. Blown fuse in supply voltage line.

What if fluid leaks from body?

1. Bolts for bellows housing are not tight.
2. O-ring(s) chemically attacked.



Globe Control Valves

Cv Values for PVC and PP

SEAT DIA.	VALVE SIZE (INCHES)								
INCHES	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
.106	.23	-	-	-	-	-	-	-	-
.149	.46	-	-	-	-	-	-	-	-
.185	.70	-	-	-	-	-	-	-	-
.236	1.20	-	-	-	-	-	-	-	-
.299	1.75	1.75	-	-	-	-	-	-	-
.374	2.60	2.60	2.6	-	-	-	-	-	-
.404	-	4.00	4.0	4.0	-	-	-	-	-
.578	-	6.10	6.1	6.1	6.1	-	-	-	-
.748	-	-	-	9.5	9.5	9.5	-	-	-
.944	-	-	-	10.5	10.5	10.5	10.5	-	-
1.181	-	-	-	-	16.0	16.0	16.0	16.0	-
1.496	-	-	-	-	-	25.0	25.0	25.0	25.0
1.909	-	-	-	-	-	-	40.0	40.0	40.0
2.047	-	-	-	-	-	-	46.0	46.0	46.0
2.244	-	-	-	-	-	-	-	64.0	64.0
2.696	-	-	-	-	-	-	-	-	81.0
2.897	-	-	-	-	-	-	-	-	93.0

Cv Values for PVDF and PTFE

SEAT DIA.	VALVE SIZE (INCHES)								
INCHES	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
.106	.23	-	-	-	-	-	-	-	-
.149	.46	-	-	-	-	-	-	-	-
.185	.70	-	-	-	-	-	-	-	-
.236	1.20	-	-	-	-	-	-	-	-
.299	1.75	1.75	-	-	-	-	-	-	-
.374	2.60	2.60	2.6	-	-	-	-	-	-
.404	-	4.00	4.0	4.0	-	-	-	-	-
.578	-	6.10	6.1	6.1	6.1	-	-	-	-
.748	-	-	-	10.5	10.5	10.5	10.5	-	-
.944	-	-	-	14.0	14.0	14.0	14.0	-	-
1.181	-	-	-	18.0	18.0	18.0	16.0	16.0	-
1.496	-	-	-	-	29.0	29.0	29.0	29.0	29.0
1.909	-	-	-	-	-	40.0	40.0	40.0	40.0
2.047	-	-	-	-	-	-	52.0	52.0	52.0
2.244	-	-	-	-	-	-	-	70.0	70.0
2.696	-	-	-	-	-	-	-	-	93.0
2.897	-	-	-	-	-	-	-	-	105.0

Required Data for Control Valve Sizing

SERVICE CONDITIONS			
1. Media			Concentration %
2. Temperature	°F	or	°C Specify
3. Flow Required (gpm):	Max.:	Normal	Min.
4. Line Pressure (psi):	Upstream:	Downstream:	(Max. Flow)
5	Upstream:	Downstream:	(Norm. Flow)
6	Upstream:	Downstream:	(Min. Flow)
VALVE SPECS			
7. Line Size:			
8. Valve Characteristics	Equal % or Linear:		Specify
9. Valve Material:			Valve Seals:
10. Cv Value Required	Max.:	Norm.:	Min.:
ACTUATOR SPECS			
11. Actuator Type:	Electric or Pneumatic		Specify
12. Supply Voltage for Electric:			Specify
13. Electric Control Signal:		mA or Volts	
14. Pneumatic Control Signal:		PSI	
15. Position Feedback:			Specify