

## Two-Way Flanged PICV

NEW!

*Control Valve, Adjustable Flow Limiter,  
and Automatic Pressure Regulator*

*2-1/2 to 3"*

*ANSI Class 125 or 250*

*Normally Open*



Flanged PICV Valve.

### Description

Pressure Independent Control Valves automatically adjust to differential pressure changes, providing constant flow in HVAC systems. This reduces “hunting” for the right setting, and results in better control and increased comfort. Overall system performance can be optimized with PICV, requiring less pumping energy and contributing to more efficient loading of boilers and chillers.

Siemens Pressure Independent Control Valves integrate three functions into a single device: control valve, adjustable flow limiter, and automatic pressure regulator. The 2-1/2 and 3 inch valves have a 20 mm stroke and use the SAX non-spring return electronic valve actuators and the new SQV spring return electronic valve actuators.

### Features

- 3-in-1 device includes a control valve, field adjustable flow limiter, and automatic pressure regulator.
- Full stroke regardless of maximum flow setting.
- Maximum flow preset is easily field adjustable.
- Choice of low flow (up to 110 gpm for 2.5 inch and 150 gpm for 3 inch) or high flow (up to 154 gpm for 2.5 inch and 190 gpm for 3 inch) versions
- Available in both ANSI 125 and ANSI 250 pressure classes.
- Both SQV actuators (normally open and normally closed) can be wired for floating, 0-10V or 4-20 mA control signals

### Applications

Typical applications include control of hot or chilled water or water-glycol solutions up to 50% in closed loop systems.

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Valves



## Flanged PICV Specifications



Body Material	Cast Iron
Plug	Brass
Seat	Stainless Steel
Stem	Stainless Steel
Line size	2-1/2-inch (65 mm) 3-inch (80 mm)
Action	2-way
Valve Body Rating	ANSI 125/ANSI 250
Close-off	100 psi (700 kPa)
Leakage Rate	< ANSI Class IV (0.01%)
Medium Temperature Range	34°F to 250°F (1°C to 120°C)
Flow Characteristic	Linear
Connection	ANSI Flanged
<b>Actuator Specifications</b>	
<b>Operating Voltage</b>	
SAX, SQV	24 Vac/dc
Frequency	50/60 Hz

<b>Power consumption (normal operation)</b>	
SAX	8 VA/3.75W
SQV	20 VA/7.5W
<b>Control Signal</b>	
SAX81.03U	Floating
SAX61.03U	0 to 10 Vdc
SQV	Selectable (Floating, 0 to 10 Vdc, 4 to 20 mA)
<b>Run time</b>	
SAX	30 seconds
SQV	40 to 120 seconds (adjustable)
<b>Force</b>	
SAX	180 lb (800 N)
SQV	250 lb (1100 N)
<b>Weight</b>	
SAX	4 lbs (1.8 kg)
SQV	14 lbs (6.2 kg)
<b>Agency Certification</b>	
UL	Meets UL 873
cUL	Certified to Canadian Standard C22.2 No. 24.93

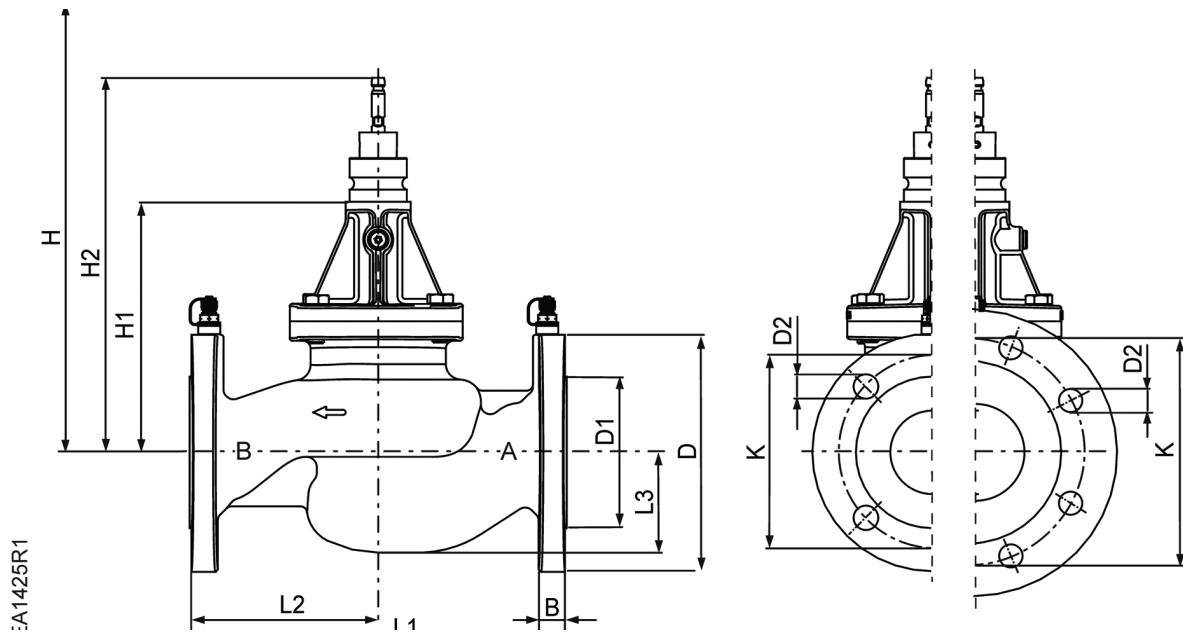
## Flanged PICV Product Ordering

Valve Size in. (mm)	Maximum Flow Range GPM (m³/h)	ANSI Class 125		ANSI Class 250	
		Part No.		Part No.	
2-1/2 (65)	19 to 110 (4.4 to 25)	599-07310		—	
	26 to 154 (6 to 35)	599-07315		—	
	19 to 110 (4.4 to 25)	—		599-07320	
	26 to 154 (6 to 35)	—		599-07325	
3 (80)	24 to 150 (5.3 to 34)	599-07311		—	
	31 to 190 (7 to 43)	599-07316		—	
	24 to 150 (5.3 to 34)	—		599-07321	
	31 to 190 (7 to 43)	—		599-07326	

## PICV Actuator Product Ordering

Description		Part No.	Actuator Prefix Code
 Electro-Mechanical	Floating, 0-10V or 4 to 20mA, Spring Return, Normally Open	SQV91P30U	238
	Floating, 0-10V or 4 to 20mA, Spring Return, Normally Closed	SQV91P40U	239
 Electro-Mechanical	Floating, 3P, Non-Spring Return	SAX81.03U	373
	24 Vac, Proportional Non-Spring Return	SAX61.03U	371

## Dimensions



Dimensions shown in inches (mm).

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Valves

Valve Size in.	ANSI Class	Dimensions										H		Weight	
		B	Ø D	Ø D1	Ø D2	L1	L2	L3	Ø K	H1	H2	SAX	SQV	lb.	(kg)
2-1/2	125	.69 (17.5)	7.01 (178)	N/A	.75 (19)	10.87 (276)	5.43 (138)	3.11 (79)	5.5 (139.7)	7.68 (195)	11.42 (290)	25.08 (637)	26.93 (684)	42	(19)
	250	1.00 (25.4)	7.48 (190)	4.96 (126)	.88 (22.4)	11.5 (292)	5.75 (146)	3.31 (84)	5.88 (149.4)	7.68 (195)	11.42 (290)	25.08 (637)	26.93 (684)	56	(25.4)
3	125	.75 (19)	7.50 (191)	N/A	.75 (19)	11.75 (298)	5.87 (149)	3.75 (95.3)	6.0 (152)	8.52 (216.5)	12.32 (313)	25.95 (659)	23.86 (606)	62	(28.1)
	250	1.12 (28.5)	8.25 (210)	5.69 (145)	.88 (22.4)	12.5 (318)	6.26 (159)	3.88 (98.4)	6.62 (168)	8.52 (216.5)	12.32 (313)	25.95 (659)	23.86 (606)	82	(37.2)