

**Siemens Pressure Independent Control Series (PICV)
 Two-Way, Brass Valve Bodies, 1/2" to 2",
 ANSI 250**



WARNING:		Personal injury or loss of life may occur if you do not perform a procedure as specified.
CAUTION:		Equipment damage may occur if you do not perform a procedure as specified.

Description:

Siemens Pressure Independent Control Valves integrate three functions into a single device: control valve, adjustable flow limiter, and automatic pressure regulator. The 1/2" to 1-1/4" Normally Open and 1/2" to 1-1/4" Normally Closed Valves have a 2.5, 5 or 5.5 mm stroke, and a threaded valve bonnet for use with SSD Electronic Valve Actuators. The 1-1/2" and 2" Normally Open Valves have a 15 mm stroke and use the SAY Electronic Valve Actuators.

Features:

- *Control valve with integrated pressure regulator and adjustable flow limiter.
- *ANSI Class 250 valve body.
- *200 psi close-off with ANSI Class IV leakage (1/2" to 1-1/4" Normally Open).
- *100 psi close-off with ANSI Class IV leakage (1-1/2" and 2" Normally Open).
- *45 psi close-off with ANSI Class IV leakage (1/2" to 1-1/4" Normally Closed).
- *Linear Flow Characteristic
- *Stainless Steel Stem.
- *1-1/2" and 2" Normally Open Valves include P/T ports.
- *SAY actuators for 1-1/2" and 2" Normally Open Valves can also be set for Normally Closed operation (reverse acting).

Application:

For use in HVAC applications with Press Independent Control SSD, or SAY Electronic Actuators, to control hot or chilled water or 50% water-glycol solution in closed loop systems.

P/T Ports Installation

For 1/2 and 1-1/4" Normally Open Valves

The low-pressure PT port (blue indicator ring) should be located on the downstream side of the valve. The high-pressure P/T port (red indicator ring) will be located on the upstream or inlet side of the valve.

For 1/2" to 1-1/4" Normally Closed Valves

The low-pressure P/T port (blue indicator ring) should be located on the side of the valve with the raised lettering and label. The high-pressure P/T port (red indicator ring) will be located on the opposite side.

Presetting Adjustment

Prior to mounting the actuator, verify the valve is set to ordered flow setting (suffix of part number).

To change the valve flow setting, see steps 2, and 3 below. (Flow setting scales are in gallons per minute [gpm] on all valves):

1. On 1/2" to 1-1/4" valves, loosen the brass knurled nut. On 1-1/2" and 2" valves, loosen the valve stem.



2. Adjust the desired dial Setting with the white knob.
3. Retighten the brass Knurled nut or valve Stem by hand.

NOTE:

When tightening the knurled nut on 1/2" to 1-1/4" valves, some force is required to reach the required physical stop; approximately an additional 1/2 to 3/4 extra turn after initial "finger tight" resistance is felt.



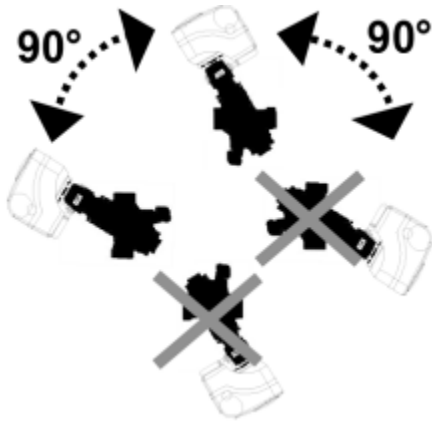
CAUTION: On 1-1/2" and 2" valves, do NOT use tools to tighten the valve stem. High-tighten only or damage will occur.
CAUTION: Do NOT rotate the actuator on the valve once the actuator and valve stem are connected. Doing so will inadvertently adjust the flow setting of the valve or damage the stem.

Mounting and Installation:

Install the valve so the flow follows the direction of the arrow indicated on the valve body.

For best performance, install the valve assembly with the actuator above the valve body. The valve and actuator can be installed in any position between the vertical and horizontal. (see picture below)

Do not install the valve assembly with the actuator below horizontal or upside down.



Recommended Installation Orientations

NOTE:

Allow sufficient space for servicing the valve and actuator.

Commissioning Notes:



CAUTION:

The Pressure Independent Control Valves must be open when flushing or pressure testing the system. Strong pressure impacts can damage closed Pressure Independent Control Valves.



CAUTION:

Differential pressure across the valve greater than 58 psi will result in damage to the pressure regulator.