Get the flow right and efficiency follows.

VP140 SERIES PRESSURE INDEPENDENT CONTROL VALVES

Johnson Controls

Right in your comfort zone.

HVAC efficiency starts here.

System efficiency starts with the control valve. Getting the correct flow under varying load conditions means a more comfortable environment and a more efficient system. The new VP140 Series of Pressure Independent Control Valves (PICVs) from Johnson Controls delivers stable flow regardless of pressure fluctuations. Because traditional systems are balanced at full-flow positions in actual conditions, you get either too much or not enough flow through the coils, affecting comfort and overall efficiency. Automatic balancing properties deliver the correct flow. It's just one more way we continue to provide innovative technology to improve efficiency in building systems.

More value, end-to-end.

Including a PICV simplifies your selection process. No need for Cv or pressure drop calculations. Simply select the valve based on the design flow rate of the coil. PICVs deliver the appropriate flow given the load requirement of the coil, determined by the actuator position and not the pressure differential seen by the valve. This means a coil is not over or under supplied, better managing comfort and energy efficiency. The Johnson Controls PICV also reduces installation and upfront equipment costs by enabling the right-sizing of equipment within the HVAC system. The PICV combines the function of a control and an automatic balancing valve. No need to spec a balancing valve, eliminating the need for intensive system balancing, saving time and money. As additional zones are added, the system can be commissioned zone-by-zone, reducing lifecycle costs by minimizing re-commissioning expense.

Whatever your application, wherever you are, we're there.

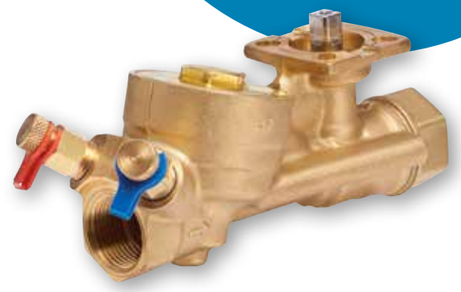
You can count on the backing of the world's largest portfolio of HVAC equipment and controls. No matter where you are in the world, you can rely on Johnson Controls to help meet your efficiency, comfort and application requirements.

The VP140 PICV vs. a pressure dependent valve.

Compared to a pressure dependent valve, the automatic balancing action of the PICV regulates pressure to reduce temperature variations caused by changing load conditions in other temperature zones. This reduces pumping requirements and lowers demand on the heating or cooling system.

VP140 Axial (Globe) Valve:

Ideal for applications where you need a compact valve and actuator footprint and manual maximum flow setting. It maintains full stroke regardless of whether the valve's maximum flow is set to 100%, or any other percentage, providing better control resolution. Plus, you can set it and forget it. Flow rates can be adjusted and valves locked in position without removing the actuator. Of course, you have the option to leave the manual setting at 100% and limit the maximum flow available with a characterized control signal to the actuator. Available in 1/2" to 1-1/4" sizes.



VP140 Rotary (Ball) Valve:

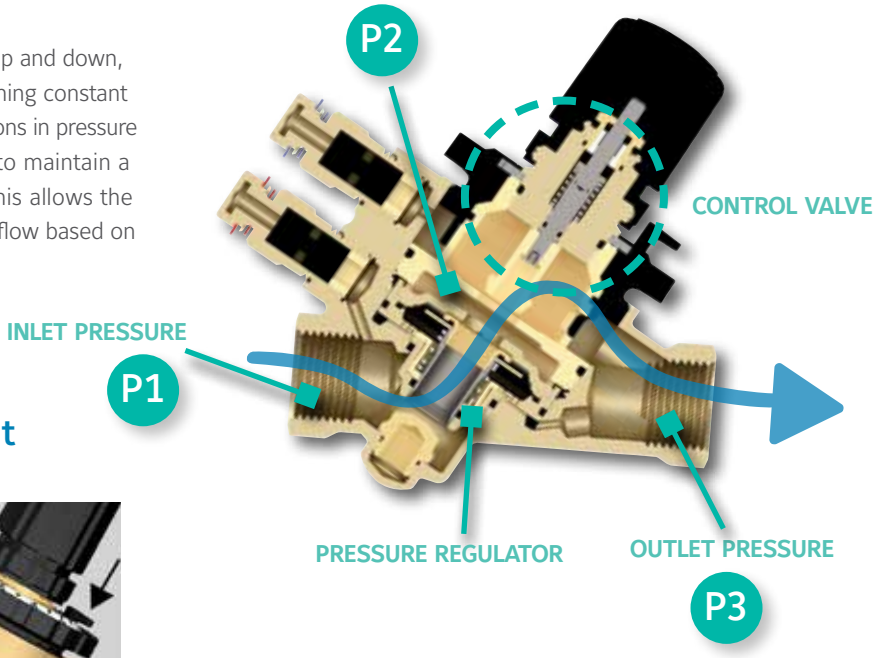
Ideal for applications that require enhanced flexibility for seasonal commissioning and different room layouts. It provides intrinsic equal percentage control and the maximum flow setting can be set by the building automation system via a characterized control signal. The valve will modulate the flow between close-off and the maximum setting based on the control signal input. Available in brass (1/2" to 1-1/4") or iron (1-1/4" to 2") construction.

130 years of experience. Five-year warranty. Ships in three days.

The PICV series valves come with a long history of high performance in HVAC applications. Also, count on our unsurpassed warranty coverage. And perhaps best of all, your order will ship within three days.

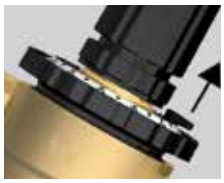
VP140 Axial Flow Modulation

The Axial PICV modulates flow as the valve stem moves up and down, maintaining a full stroke at any setting. The key in maintaining constant flow at a given valve plug position, regardless of the variations in pressure at the inlet (P1), is the ability of the pressure regulator to maintain a constant differential pressure between (P2) and (P3). This allows the control valve portion of the PICV to modulate the correct flow based on the position of the valve plug in relation to the seat.



Axial Max Flow Setting Adjustment

No need to remove the actuator.



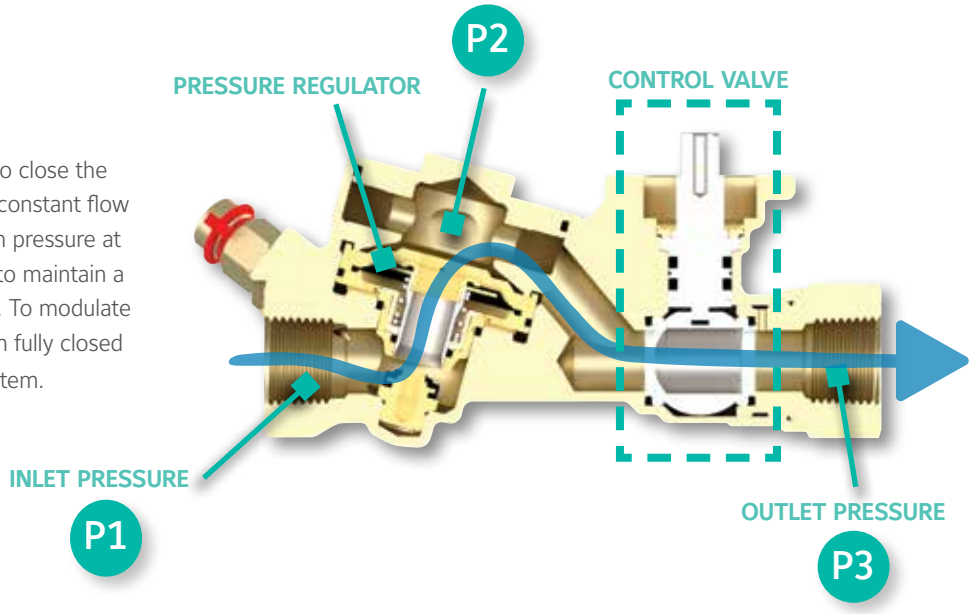
Lift pin to unlock

Turn selector to desired position

Press pin down to lock

VP140 Rotary Flow Modulation

The Rotary PICV modulates flow as the ball rotates to close the valve. As with the axial PICV, the key in maintaining constant flow at a given ball rotation, regardless of the variations in pressure at the inlet (P1), is the ability of the pressure regulator to maintain a constant differential pressure between (P2) and (P3). To modulate the flow rate, the actuator positions the ball between fully closed and open, controlled via the building automation system.



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