



# DIFFERENTIAL PRESSURE BY-PASS VALVE

## INSTALLATION & SETUP INSTRUCTIONS

The Webstone Differential Pressure By-Pass Valve eliminates the noise, inadequate boiler flow, and stress on system components caused by excess pressure in a zoned hydronic system with a fixed-speed primary circulator pump, or other system configuration where flow rates may widely vary. The Differential Pressure By-Pass Valve does not require periodic maintenance. This unit is not designed for potable water applications.

**IMPORTANT:** Follow all federal/national, state and local codes when installing, testing or performing work on systems. All parts are covered by a warranty against manufacturing defects provided they are installed by a licensed plumber and operated under normal working conditions. If you have any questions or comments, please contact us at (800) 225-9529 or visit us on the web at [www.webstonevalves.com](http://www.webstonevalves.com).

### INSTALLATION

The Webstone Differential Pressure By-Pass Valve should be installed between the boiler supply and return lines, after the circulator pump. It may be installed in any orientation, provided the flow arrow indicates fluid flowing from the hot line (boiler outlet/system supply) to cold line (boiler inlet/system return). Piping must be aligned to prevent side loading of the union joints.

For installations that require multiple Differential Pressure By-Pass Valves, installation between the supply and return of each secondary circuit is recommended.

Before installation, ensure all union gaskets are in good condition. DO NOT OVER-TIGHTEN UNIONS! Verify the correct flow direction and leak check the unit after installation.

### SETUP

To set the pressure, system should be in full operating condition with all zones active.

1. Pull up and remove the clear locking sleeve to release DPBV knob.
2. If the required differential pressure set point is known, turn the adjustment knob clockwise to increase or counterclockwise to decrease the pressure setting to the desired pressure. The knob is marked with +/- arrows for reference.
3. Otherwise, turn the yellow adjustment knob clockwise to the highest pressure setting.
4. Slowly reduce by-pass valve set pressure by turning the adjustment knob counter-clockwise until flow passes through the by-pass line.
5. Once achieved, turn the adjustment knob clockwise to slightly increase the set pressure and stop the by-pass flow. (1/2 to 1 PSI increase or approx. 1-2 turns should be sufficient)
6. Return the locking sleeve to the valve, ensuring that it's fully seated in the locked position

