

**Package includes:**

- 1 - Pressure Diaphragm
- 2 - 1/4" OD barb connectors
- 1 - wiring harness
- 1 - Mounting bracket
- 1 - Bolt / washer
- 2 - Pitot tubes
- 2 - 8' lengths pressure tubing
- 2 - wire connectors
- 6 -1/4" screws

The PS4 is normally factory mounted to an ND or URD style damper to create a model EBD by-pass damper. The PS4 can also be retro-fitted to a model ND or URD damper to create a model EBD in the field. The completed assembly (EBD) can sense the total static pressure of the HVAC system and modulate, to control the static pressure of the HVAC system during zoned operations.

*The PS4 has an adjustable range of 0.1" - 4.0" W.C. (3 - 102 mm W.C.)  
The factory setting is 0.5" W.C.*

**PS4 Diaphragm Switch**

In order to measure the total static pressure of the HVAC system, reference the supply duct pressure along with the return duct pressure. Mount the pitot tubes on the supply and return ducts and mount the PS4 in a suitable location. The PS4 *must* be mounted with the graduated stem in a vertical position. It cannot be oriented sideways or upside-down. (Reference Submittal sheet #090377A0061 Rev. N). Connect the tubing from each pitot tube, to the barbed pressure taps on the PS4. Wire the PS4 to the bypass damper as shown on page 2. Remove the cover plate from PS4 to make your field wiring connections. Make sure the zoned HVAC system is operating properly, the air filter is clean and all zone dampers are in the open position. Power up the bypass damper assembly. Observe that the bypass damper should be fully closed when all zone dampers are open. If the bypass damper is open or partially open, adjust the set point to a higher static pressure value. Unscrew and remove the cap on the PS4 diaphragm. Turn the static pressure adjusting screw up or down until the top of the screw lines up with the static pressure scale setting you require. (Factory setting is 0.5" W.C.) Then, start to close off one or more zone dampers and observe the bypass damper as the static pressure control senses the increased static pressure and modulates the bypass damper to maintain the static pressure set point you desire.

**Note:** Reference the EBD Submittal sheet #090377A0061 Rev. N for additional bypass duct setup information.



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**SUBMITTAL FORM**

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JOB: \_\_\_\_\_  
ARCHITECT: \_\_\_\_\_  
ENGINEER: \_\_\_\_\_  
CONTRACTOR: \_\_\_\_\_  
LOCATION: \_\_\_\_\_

### Field Wiring

