

RPN

PCU ACCESSORIES: RELATIVE PRESSURE NODE

Product Highlights

The Price RPN provides a means for measuring the relative pressure between the pressurized underfloor plenum and the room. The RPN is designed to fit inside any style of mounting ring underneath any 8 in. Price modular floor diffuser. The advantage to the RPN is that it maintains a uniform look with other Price underfloor diffusers. Its ability to be hidden and yet maintain less than 1% error in its pressure measurements makes the RPN a very useful product for UFAD applications with plenum pressure control. The RPN comes with an integral pressure transducer that is highly accurate at the very low static pressures normally present in pressurized underfloor plenums.

Features

- + 1/4 in. (6mm) integrated pressure tap.
- + Keyed edge to prevent spinning of diffuser under load.
- + Shallow profile allows for use in underfloor plenums as shallow as 2 in.
- + Black finish allows the RPN to be visually hidden from the room side.
- + Integral 24 V_{AC} pressure transducer with 0-10 V_{DC} output.
- + Monitor relative plenum pressure through a floor diffuser for consistent look.

Construction

- + Black fire-rated polymer

Available Sizes

- + 8 in. (203mm) Diameter

Finish

- + Black

Installation

The relative pressure node (RPN) uses its integral pressure transducer to sense the pressure differential between the plenum and the room air. The signal is sent to the underfloor pressure controller (PCU). The PCU regulates one or more supply air damper to maintain the pressure set-point, which may be adjusted via a thermostat located in the room. The PCU can also be used to send a modulating 0-10VDC signal to a variable frequency drive (VFD) attached to an air column that is pressurizing the plenum similar to the Price Fan Column Unit.

