

PRODUCT COMPARISON

DVD vs. VPQ VAV DIFFUSER



Maintaining uniform temperatures at reduced, varying loads has been a long time challenge to diffuser design and layout. With VAV diffusers, there is the opportunity to efficiently control the airflow in a space at both maximum and minimum capacity while still meeting ASHRAE 55 comfort criteria and ASHRAE 62.1 ventilation requirements.

Krueger HVAC offers two types of VAV diffusers that can enhance traditional system design by providing individual control to specific zones in a building. While they both provide the ability to adjust air volume for temperature control, there are some key differences that are important to note. See below for a detailed comparison of the Krueger DVD and VPQ VAV diffusers.

DVD



BENEFITS

- Primary diffusers can be daisy chained to secondary diffusers for synchronized zone control
- Room-side adjustment through wall mounted thermostat
- Optional BACnet connection capability

ACTUATOR

Electronically Actuated: Wired electronic actuator that continually regulates volume of supply air in response to thermostat by rotating a neck mounted damper.

CONTROLS

Digital / SmartStat Thermostat

- Adjustable min/max damper position (0% - 100%)
- Adjustable room set point for heating and cooling
- Auto changeover sensor included for heating and cooling
- Control up to 20 diffusers per thermostat
- SmartStat used in BACnet applications



SmartStat Thermostat



Digital Thermostat

VPQ



BENEFITS

- Self contained, individually adjustable
- No external wiring or power supply required

ACTUATOR

Thermally Actuated:

Integral thermal wax element that senses room temperature and regulates volume of supply air by modulating an integral disk up and down.



CONTROLS

Cooling

- Adjustable room temperature setpoint
- Maximum CFM determined by upstream damper that is provided by others
- Minimum CFM adjustable from 0 - 30%

Heating

- Cooling dependant setpoint temperature offset (-4° to +4°)
- Changeover sensor included, switches to heating at 88°F
- Action of the actuator will be reversed (e.g. the opposite of "cooling mode")

*See VPQ IOM for more details.