

Technical Data Sheet

Modulating and On/Off Vent Damper

VBD

Product Line

VBD – Modulating and On/Off Vent Damper System



Description

The VBD Vent Damper System consists of a single blade damper. It can be used as an on/off damper to prevent airflow through the appliance in an off cycle as well as to maintain a constant negative or positive pressure in the vent exhaust connector.



Applications

Motor actuated on/off and modulating gas vent damper for gas vents serving gas or liquid burning appliances such as Category I, II, III & IV appliances or Building Heating Appliances.

Essential for common venting Condensing or Category II/IV Appliances – will not allow any possibility of flue gas recirculation and to maintain constant exhaust pressure for each appliance at all times.

Reduction of cycle venting losses through boilers and draft hoods.

Function

Open/close damper with appliance on/off.
Pressure sensor reads internal vent pressure.
Sensor is interlocked with controller to maintain constant pressure.
Controller interlocked with actuator, which turns the external damper rod.
The rod is connected to a damper blade that rotates to restrict or relieve exhaust flow.

Listings and Ratings

- Listed to UL-378 Standard for Draft Equipment
- 0.85" WC max. static pressure
- Maximum 550F continuous flue gas temperature
- 24V DC/AC power supply

Construction

- 20 Gauge 316L stainless steel housing and blade
- ½" graphite sealed bearings
- Viton seal on damper blade

Connection / Installation Details

- ½" flanged connections
- Positioning: horizontally or vertically – shaft must remain horizontal

Advantages

- Includes a capacitor return safety mechanism
- Condensate tight shaft
- Two auxiliary switches
- Bi-directional pressure transducer
- Fast acting actuator, 2 or 4 second 0-90 span

Integrated Components

- Damper housing, blade, and shaft
- 0-10 VDC fast acting actuator
- Constant pressure controller
- LP4 bi-directional pressure transducer
- Vent probe and silicone tubing

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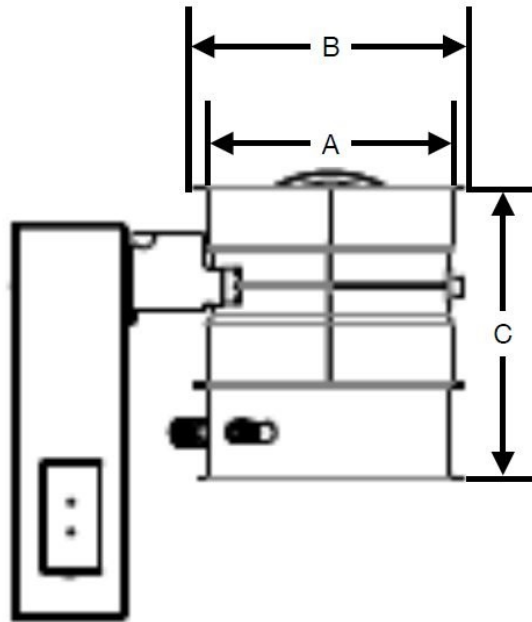
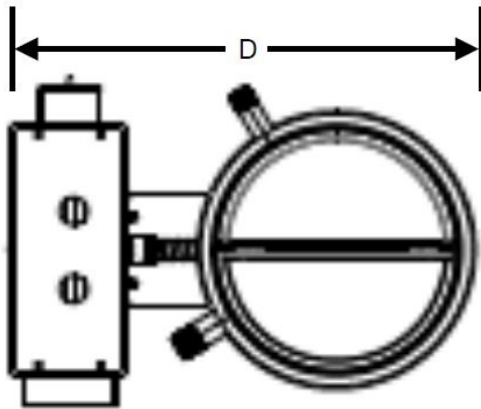
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Product Specifications

VBD Dimensions – Modulating and On/Off Vent Damper System

Dimensional Data - Damper & Actuator				
Model	A	B	C	D
VDS-04	4"	4.875"	10.625"	11.25"
VDS-06	6"	6.875"	10.625"	12.875"
VDS-08	8"	8.875"	10.625"	14.875"
VDS-10	10"	10.875"	10.625"	16.875"
VDS-12	12"	12.875"	10.625"	19"
VDS-14	14"	14.875"	10.625"	21"
VDS-16	16"	16.875"	15.875"	23"



Controller (attached to Actuator Housing)			
A	B	C	
4.375"	3.125"	1.25"	
Power Supply		Power Consumption	
24V DC/AC (12V-30V Class 2)		100 mA max @ 12V DC	
Relay Output Contact Rating			
2A @ 24VDC/AC			

