



VSD

Connector Draft System



Description

The Connector Draft System consists of a Single Blade Damper (SB), a modulating actuator, combined with a single VSD controller, test port, tubing and bi-directional pressure transducer to maintain a constant negative or positive pressure in the connector or vent.

Includes a capacitor return safety mechanism

'G' model includes Viton seal on damper blade to create positive seal in off position, ensuring no air movement through an off appliance

Available in sizes from 4" ID to 16" ID

Application

Connectors or gas vents serving gas or liquid burning appliances such as Category I, II, III & IV appliances or Building Heating Appliances

Function

Restrict the flow of flue gas to maintain desired outlet pressure at the appliance

Listing and Ratings

UL378, Standard for Draft Equipment
 Standard 'G' model listed up to 550°F for continuous operation
 (Optional listed up to 1,000°F for continuous operation)

Construction

20 gauge 316L stainless steel housing and blade
 1/2" graphite sealed bearings
 'G' model includes Viton seal on damper blade
 'G' model Leakage Rate .15 CFM @ .5" WC
 Standard 7/16" flange connection

Standard Features & Equipment

316L stainless steel construction with graphite bearings
 0-10VDC fast acting 2s modulating actuator
 Feedback signal to verify damper position

Optional 24VDC power supply
 Optional Gas Flow Switch (GFS)

Ordering Matrix

VSDxx-*.yz
 xx = size - 04-16
 * = G (550°F); no letter (1,000°F)
 y = input voltage - 0 (24VDC Field Supplied)
 y = input voltage - 1 (120VAC with factory mounted 120VAC to 24VDC power supply)
 z = 0 (no option); 1 (GFS option)

Warranty

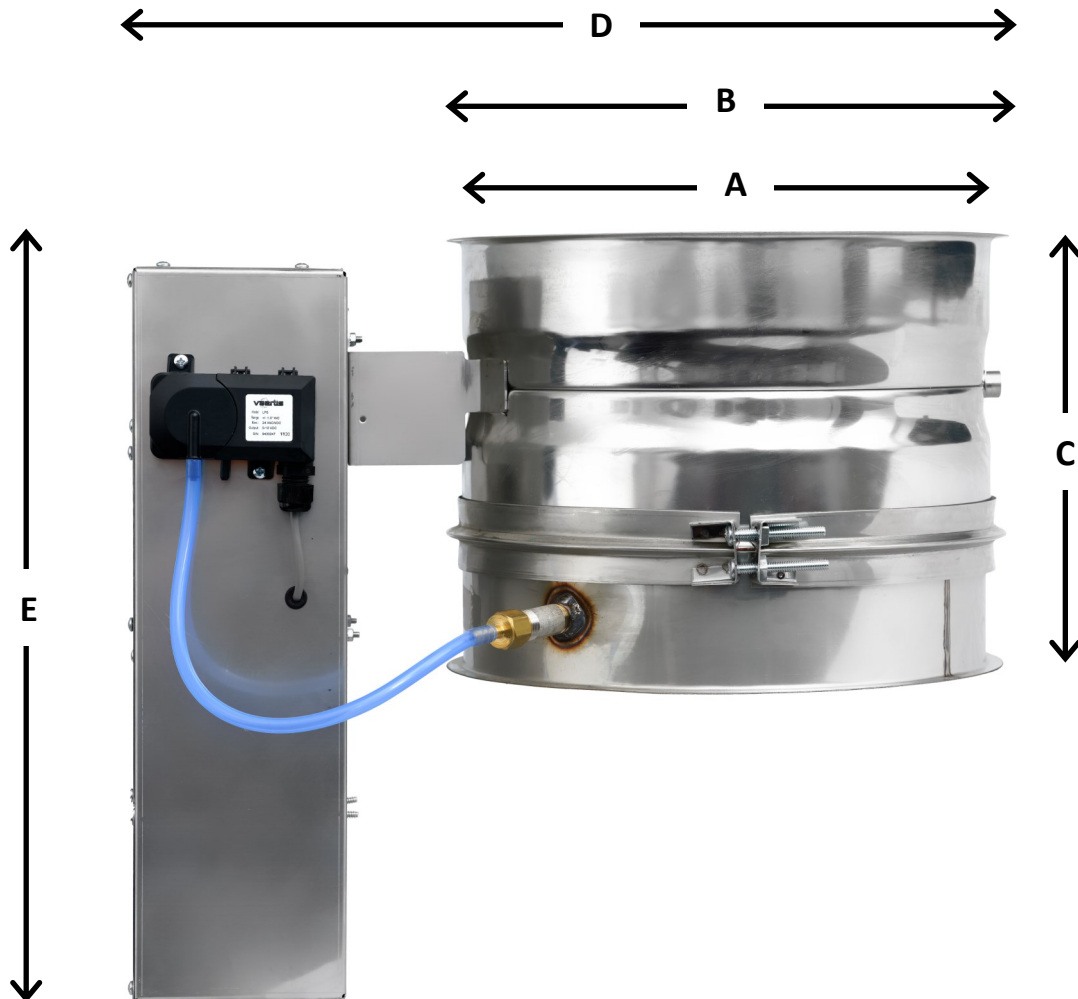
Two (2) year warranty

| VSD Controller | |
|--------------------------|--------------------|
| Power Input | Power Consumption |
| 24VDC (16V-30V) Class 2 | 112 mA max @ 24VDC |
| Relay Output Ratings | |
| 3A @ 30VDC / 3A @ 250VAC | |



Dimensional Information

| Model | A | B | C | D | E |
|-------|-----|---------|---------|---------|---------|
| VSD04 | 4" | 4-7/8" | 10-5/8" | 11-1/4" | 17-1/4" |
| VSD06 | 6" | 6-7/8" | 10-5/8" | 12-7/8" | 17-1/4" |
| VSD08 | 8" | 8-7/8" | 10-5/8" | 14-7/8" | 17-1/4" |
| VSD10 | 10" | 10-7/8" | 10-5/8" | 16-7/8" | 17-1/4" |
| VSD12 | 12" | 12-7/8" | 10-5/8" | 19" | 17-1/4" |
| VSD14 | 14" | 14-7/8" | 10-5/8" | 21" | 17-1/4" |
| VSD16 | 16" | 16-7/8" | 14-7/8" | 23" | 19-1/2" |



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Optional Factory Mounted Accessories



Ordering Matrix: VSDxx-G.1z 24VDC Power Supply

This optional 24VDC Power Supply is factory mounted and wired. It converts 120VAC to provide 24VDC to the VSD system.

| Input | Output | Current | Rating |
|--------------------------|------------------------|---------------------------------|----------------------|
| 85-256VAC, 1 50/60 Hz | 24VDC (+/-10%), 30W | 0.58A @ 115VAC, 0.36A@230VAC | Class 2, Class II |



Ordering Matrix: VSDxx-G.y1 Gas Flow Switch (GFS)

The GFS is used to verify the operation of the VSD damper. The switch includes a SPDT relay rated to 5 amps at 120VAC. The switch setting is adjustable from 0.08" to 1.8" w.c. Includes high temperature silicone tubing and a high temperature plastic wye to connect VSD Controller to GFS and Pressure Transducer.



Ordering Matrix: VSDxx-G.11 24VDC Power Supply & Gas Flow Switch (GFS)

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ZF VSD Rev 1125.1

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