



ZONE DAMPERS

Model ZD

The ZD series are extruded aluminum parallel blade dampers compete with a 24 Volt, spring return motor actuator. These dampers are shipped complete and ready for installation. The lightweight ZD can be installed in any position in any properly sized duct. All ZD dampers are rated for duct systems less than 1.0" W.C.

Dampers are available all in even sizes from 8"x8" to 36"x24". All dampers are 1/8" undersized from their listed size. Dampers are ordered as ZDS for side mount, width by height, as the motor and end plate will be on the smaller dimension, for typical insertion into the side/shorter dimension of the duct. The ZDB denotes bottom mount and is ordered height by width. The motor and end plate are on the longer dimension for typical insertion into either the bottom or top of the duct. Dampers are ordered as ZDSwwh or ZDBhhww, using 2 digits for each dimension.

All ZD dampers are typically shipped as Normally Open dampers that are powered closed and spring returned opened. To order a Normally Closed damper that is powered open and spring return closed, specify the suffix C following ZDS or ZDB. Examples are ZDSC1208 or ZDBC0816.

A 24 Volt AC, 50/60 Hz, spring return damper motor, powers the ZD. The motor powers the damper closed and spring returns the damper open for fail-safe operation. Providing power to the damper drives the damper closed. Removing power from the motor allows the motor to spring back to the open position.

The 24 Volt, hysteresis, synchronous motor has been tested to over 250,000 cycles to provide long life. Even replacing the motor is a simple less than one (1) minute change by loosening the setscrew holding the motor onto the damper.

The ZD motor also has a simple adjustment for setting the damper to a minimum position. A minimum position allows for excess by-pass air. To set a minimum position, loosen the setscrew, align the setscrew to the minimum position label and re-tighten.

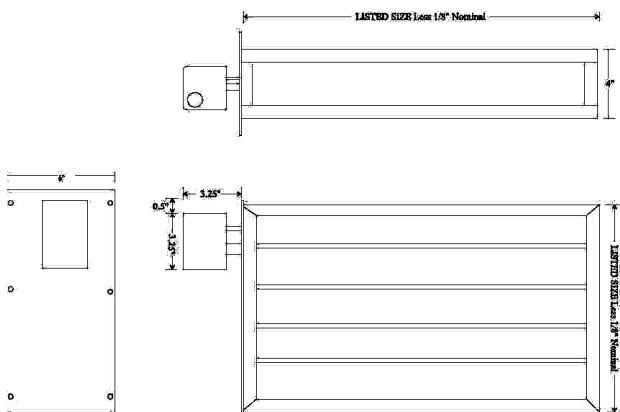


Minimum Position Adjustment

The minimum position screw can also be used to determine the damper position. The setscrew is aligned with the position of the damper blades. When the setscrew is in line with the duct, pointed at the Closed on the minimum position label, the damper is actually open. When it is hidden behind the motor and stopped against the anti-rotation post on the motor, it is Closed or at the minimum position.



Dimensional Drawing



Damper Specifications

Construction – Aluminum Mill Finish, Mitre Angles

Linkage – Zinc plated linkage arms, Delran bushings

Dimensions – 8"x8" to 36"x24" in 2" increments, 1/8" undersized.

Motor Voltage – 24 Volts AC, 50/60 Hz, 6.5 Watts, 7VA

Torque – 35 in-oz to 55 in-oz

Temperature Rating - 0°F to 120°F Operating, -20°F to 140°F Storage

Humidity – 5% to 95% Non-Condensing

Damper Timing – Nominal 30 Sec. Powered, 8 Sec. Spring Return

Connection: 4" Wire Leads

Static Pressure – Maximum 1"W.C.

WIRING

