



# Air Control Dampers

## Back Draught Damper ADB01-SS



- Stainless Steel 1.2mm thick casing 160mm Deep
- Low weight 0.7mm stainless steel blades for minimum lift off pressure
- Low air flow resistance when fully open
- Full length 12mm stainless steel shafts minimise blade deflection at high pressures
- Nylon bearings ensure maintenance free long life
- linkage system provides uniform blade operation

### ADB-01

Type ADB-01 back draught shutters are specifically designed to prevent reverse flow or circulation of air in ducts for both HVAC and process applications. They are particularly useful in preventing reverse flow through an idling fan in applications where dual fan, duty and standby systems are used.

The ADB-01 is ideal for use in heating ventilating and air conditioning applications where high performance and long maintenance free service life is essential.

The unit is suitable for mounting horizontally or vertically, having a self closing mechanism which will operate efficiently in either plane.

### Casing

The damper frame of 1.2mm 316 stainless steel is extremely rigid to prevent distortion which can result in binding blades. The maximum single unit size for the ADB-01 is 1200mm wide x 1400mm high, above this multi-module units may be supplied.

### Blades

Low weight 316 stainless steel blades ensure minimum resistance to opening with a consequential reduction in energy wastage in operation. The blade is formed around the support shaft to ensure maximum strength under high velocity conditions, and minimum deflection under pressure.

### Shafts

For high strength the blades are mounted on 12mm 304 stainless steel shafts running the full length of the blade. The corrosion resistant material ensures that the shafts run freely in their bearings for the life of the units.

### Linkage

Internal linkages join each blade of the damper, this provides uniform operation and prevents blade oscillation under turbulent conditions, a potential problem with back draught dampers in close proximity to fans or changes in duct direction or cross section.

## Bearings

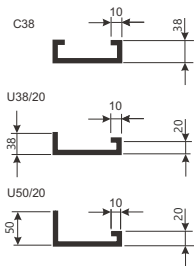
The support shafts of ADB-01 back draught dampers run in high density nylon bearings. These units are designed to operate for the life of the damper without the need for lubrication or any other form of maintenance. The standard bearings are suitable for working temperatures up to 100°C, alternative brass or Teflon bearings are available for higher operating temperatures.

## Seals

Neoprene seals are fitted to each blade edge to minimise reverse flow under high-pressure conditions. Each shaft bearing is fitted with an external nylon cap to provide an airtight seal through the damper casing and prevent the entry of dust into the bearing.

## Flanges

Three standard flange profiles are available as follows:



In addition flanges may be formed and drilled to match proprietary systems such as Mez or Ductmate. Non standard profiles are available.

## Performance

**Size** The maximum single module size is 1200mm wide x 1400mm high. For larger openings multiple modules may be supplied pre-assembled or for very large units in sections for site assembly.

**Pressure** Maximum static pressure of 2000Pa.

**Velocity** Maximum duct air velocity of 15m/sec.

**Options** For applications outside of the standard operating parameters, purpose built units are available to suit a wide range of operating pressures, temperatures or corrosive conditions..

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