



Air Control Dampers

Back Draught Damper ADB-01

Pressure Relief Damper ADR-01

- Galvanized Steel 1.2mm high strength casing 160mm deep.
- Low weight 0.7mm galvanized steel blades for minimum lift off pressures.
- Low air flow resistance in fully open position
- Full length 12mm stainless steel shafts minimise blade deflection under high differential pressures.
- Nylon bearings for long service life.

ADB-01

Type ADB-01 back draught shutters are designed to prevent reverse flow or circulation of air in ducts for both HVAC and process applications.

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

Pressure Relief ADR-01

For pressure relief applications ADR-01 dampers are supplied with a counter balance mechanism (as illustrated) which may be adjusted at site to suit changes in operating conditions. Internal linkages ensure that the counter weight loading is evenly distributed over all blades of the damper.



Casing

The damper frame of 1.2mm galvanised 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 galvanised 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 stainless steel shafts. 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.

Materials

For high temperature or corrosive conditions ADB-02 dampers are available in aluminium or stainless steel with the options of bronze or PTFE bearings. mechanism (as illustrated) which may be adjusted at site to suit changes in operating conditions. Internal and external linkages ensure

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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 90°C, alternative brass or Teflon bearings are available for higher operating temperatures.

Sealing

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

The units are supplied as standard with 38mm un-drilled flanges having a 10mm return. Special sizes or to suit proprietary flange types are available to order at no extra cost.

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 20m/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.

