



Air Control Dampers

Smoke Control Dampers ADS-01

- Aerodynamic double skin blade for minimum flow resistance
- Designed to withstand 300°C for 2 hours
- High temperature silicon blade edge seals and stainless steel side seals for low leakage
- Linkage system operation with brass bearings.
- Galvanised Steel 1.2mm high strength casing 185mm deep
- Opposed blade operation for progressive air control.
- Conforms to EN12101-3 - Specification for powered smoke and heat exhaust ventilators.



ADS-01

Type ADS-01 Smoke Control Dampers are designed for use in Smoke Ventilation Systems. They incorporate seals for minimum blade leakage and will withstand a temperature of 300°C for a period of 2 hours.

The ADS-01 is available with a variety of control options to match the wide requirements of smoke ventilation. The units may be configured to spring open or closed dependant on their location. They may be duct mounted in a fan extract system for dispersal of smoke and redirection of air or installed as an inlet or outlet in a natural ventilation system.

The units are maintenance free in service and designed for long operating life to withstand the frequent system testing requirements of smoke control systems.



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 ADS-01 is 1200mm wide x 1500mm high, above this multi-module units may be supplied.

Blades

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Shafts

The blades are supported by 12mm diameter zinc plated steel shafts running in brass bearings giving great strength with low turning resistance.

Linkage

Opposed blade operation is achieved using external linkages. These assemblies are outside of the air stream to ensure maximum free area of the damper and will allow for expansion under heat conditions to prevent possible buckling and binding in operation. The opposed blade operation ensures that maximum closing force is applied to the blade seals for positive shut off.

...Fresh thinking in the air

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Bearings

The support shafts of ADS-01 smoke control dampers run in brass bearings suitable for operation at temperatures of 300°C. The bearings do not require lubrication and are maintenance free in operation.

Seals

Blades

Blade edge seals are in high temperature silicon rubber capable of withstanding a temperature of 300°C. The unique lip profile of the seal ensures a negligible level of leakage through the blades when closed.

Frame

Each internal side of the damper is fitted with a sprung stainless steel strip, preventing leakage at the ends of the blades and allowing expansion of the blades at higher temperatures, preventing buckling. Top and bottom stops are fixed to the frame.

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.

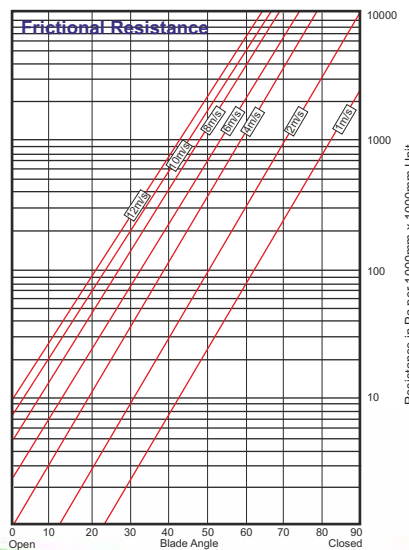
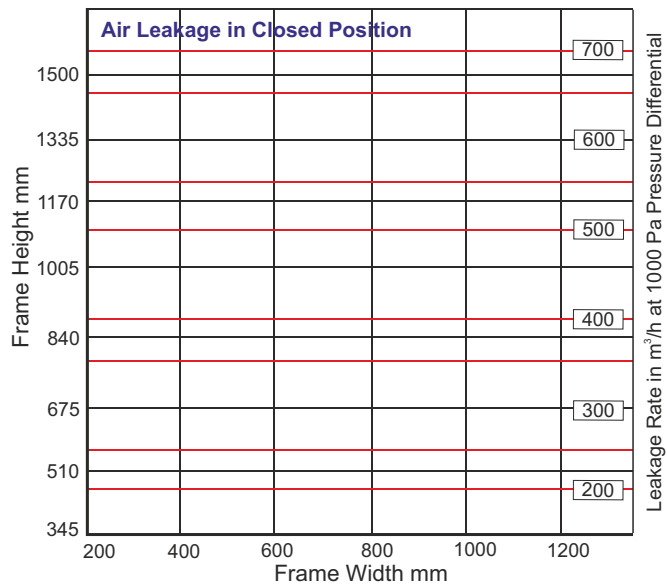
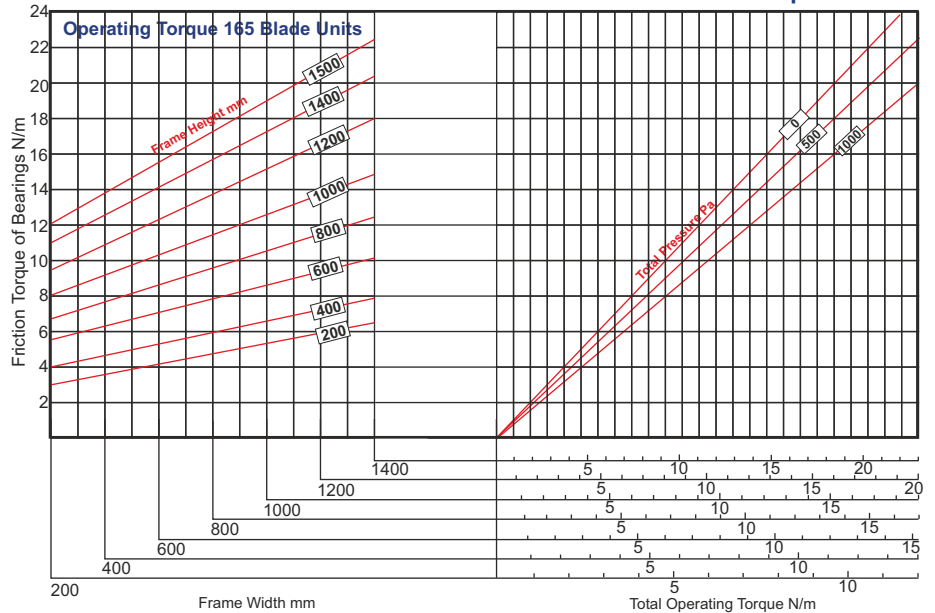
Performance

Size: The maximum single module size is 1200mm wide x 1500mm high. For larger openings multiple modules with joining sections ready for site assembly.

Pressure: Maximum static pressure of 2000Pa.

Velocity Maximum duct air velocity of 15m/sec.

Actuation: A wide range of manual, electric and pneumatic operators are available. We can advise on the most suitable method to meet performance requirements or supply to customers specification.



ΔP (Pa)	Factor
50	0.22
100	0.32
250	0.50
500	0.71
750	0.87
1000	1.00
1250	1.12
1500	1.22
1750	1.32
2000	1.41

Pressure Correction Factor For Leakage

