

Lindab Volume Control Dampers



- Manufactured from corrosion resistant materials throughout.
- Positive linkage provides accurate control.
- Low leakage models available.
- Flange or spigot mounting.
- Heavy duty dampers complete the range.
- Complies with the requirements of DW144.

Description

The Lindab series of balancing dampers were formulated to provide accurate control of airflow within ventilating and air conditioning systems combined with low torque operation.

Careful design coupled with up to date manufacturing techniques enables us to offer a quality product at pricing levels which acknowledge today's competitive environment.

Damper units are available in single modules from 100 x 100 up to 1000 x 1000mm, with larger sizes available in our heavy duty model. Within these limits we offer a virtually infinite sizing capability. The comprehensive range of flange and spigot mounting options available allow for ease of installation within any system.

Manually operated dampers are supplied as standard with a lockable control knob to provide infinite adjustment between the fully open and closed positions. Damper units for power operation may be ordered 'bare shaft' or complete with motor to clients' requirements.

Construction

Dampers are supplied, as standard, with 1.2mm thick aerofoil section double skin roll formed galvanised steel blades. Blades are fitted with polypropylene end caps to minimise noise generation and friction. Damper cases are manufactured from 1.2mm thick corrosion resistant galvanised mild steel throughout.

Drive linkage is to our own low torque design and is constructed from high impact nylon (Delrin) and steel zinc plated components to provide a low friction assembly requiring no maintenance.

Maximum operating temperature 70°C.

Options

In addition to the various damper case configurations one of the following options may be selected:

Blade Options:

- Galvanised Mild Steel, Standard
- Grade 304 Stainless Steel
- Extruded Aluminium

Standard Balancing Damper

Suitable for all applications where a balancing damper is required. This specification is suitable for most applications and can incorporate any of the blade materials (galvanised mild steel is standard) complete with end caps which provides a low friction assembly that minimises noise generation.

Semi-Sealed Damper

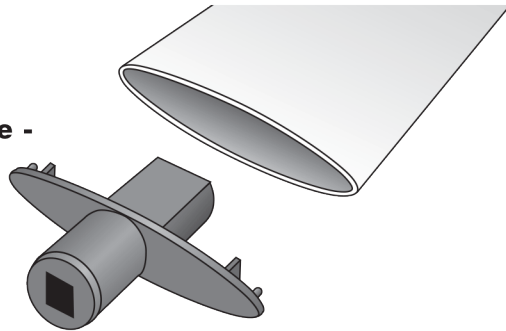
As above but complete with sprung stainless steel side seals between the blade edges and damper casing.

Fully Sealed Damper

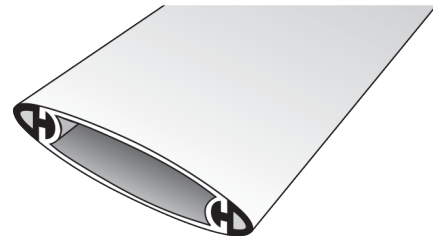
Only suitable for special extruded aluminium low leakage blades which incorporate composite flexible pvc seals on damper blade edges, whilst still retaining an aerofoil profile.

Damper Blade Sections

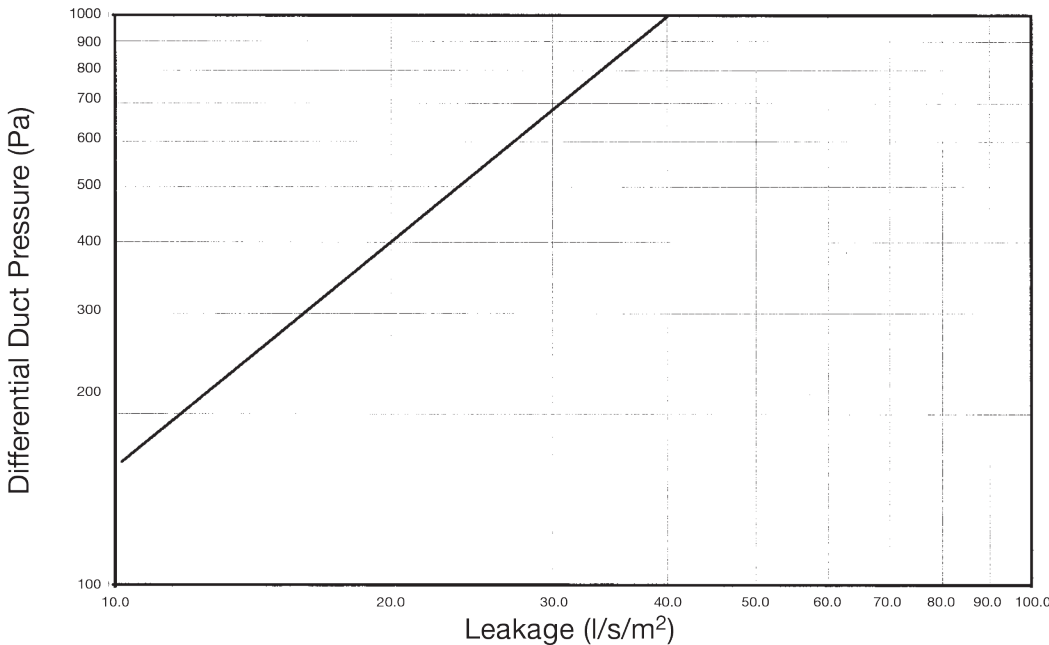
Standard blade -
Balancing applications.



Sealed blade -
Low leakage applications



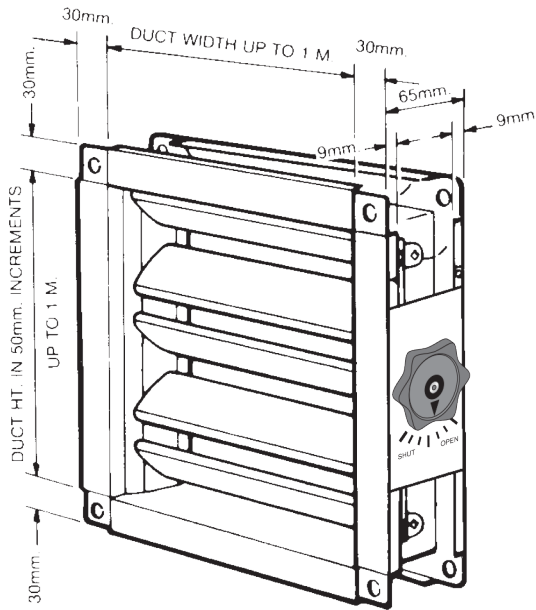
Seal Effectiveness (fully sealed version)



The graph shown on the left indicates the loss of air through the blade system within the duct at various pressure differentials for the fully sealed damper pattern.

Product Selection

Flanged Case

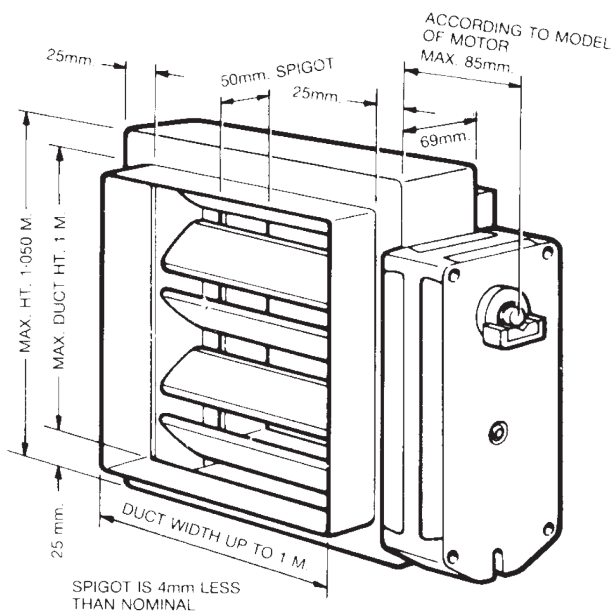


Flanged dampers may be ordered with 25mm, 30mm and 35mm flanges to match the various proprietary flange systems available.

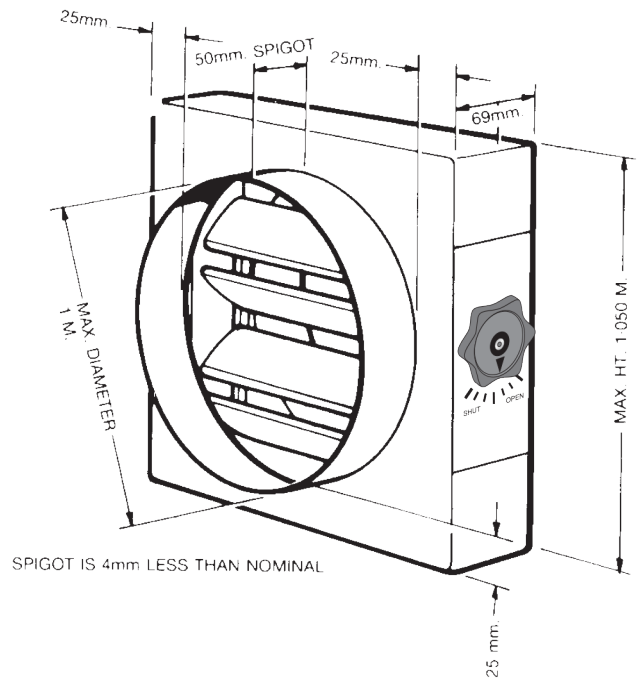
25mm flange has 11mm diameter fixing holes in corners

30/35mm flange has 17mm x 11mm ob-round holes in corners.

Rectangular Spigoted Case

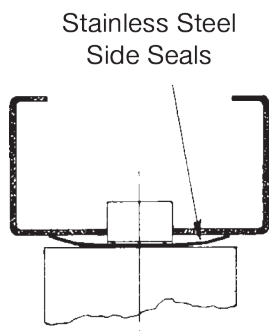


Circular Spigoted Case



N.B. Dampers with flat-oval spigots also available.

Side Seals

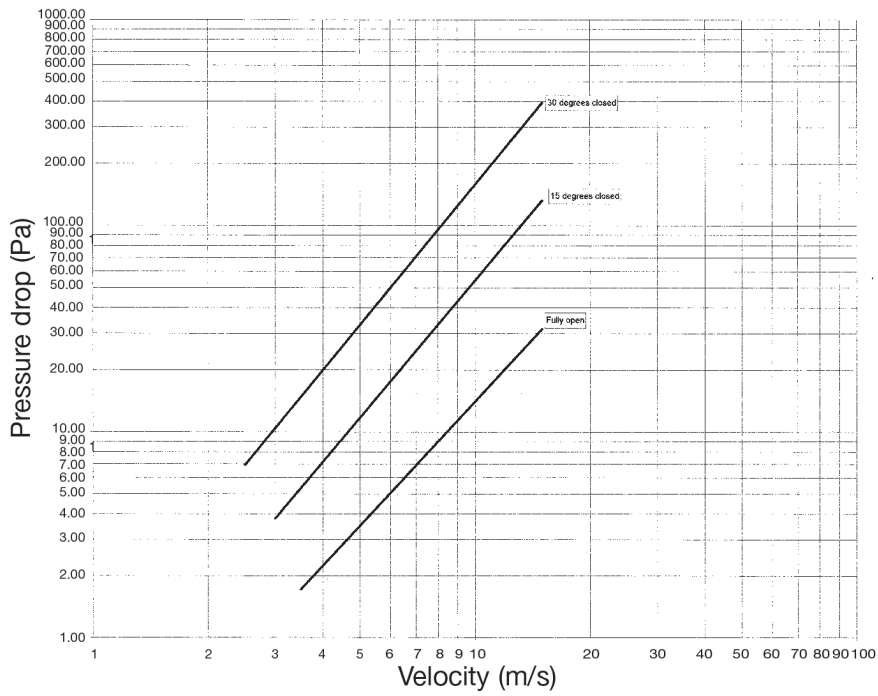


Manufactured from 301 grade.
Fitted to semi and fully sealed models.

Technical Data

- Torque ratings available for a cross sectional range of sizes.
- Single flanged units can be supplied to any width dimension between 100mm to 1000mm with height dimensions in 50mm increments from 100mm to 1000mm.
- Single spigoted units can be supplied to any width x height dimension from 100mm to 1000mm.

Pressure Drop Data

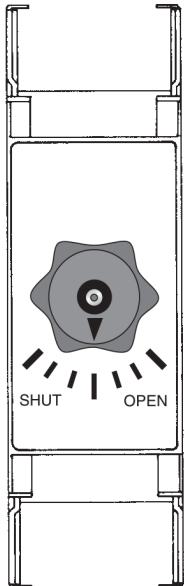


The data shown on the left is based upon results obtained for both standard, semi-sealed and sealed units having a duct size of 300 x 300mm.

The pressure drop is measured across the blade system from flange to flange.

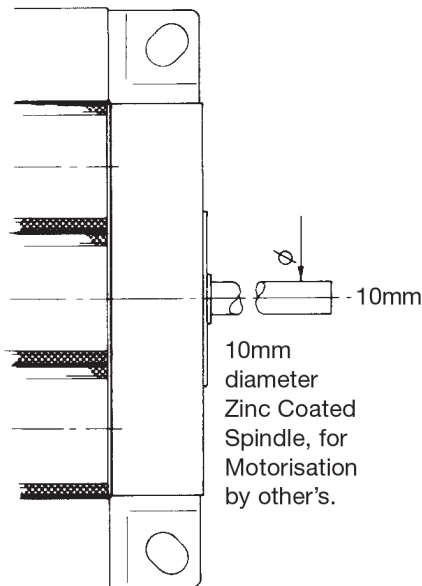
Control Options

Standard
(Hand Locking
Control)



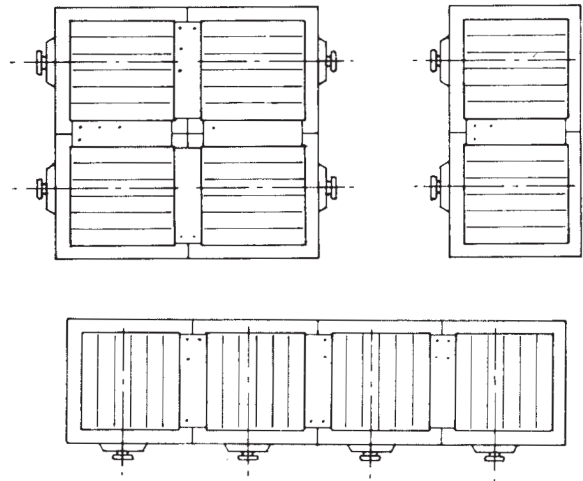
Tamper Proof
Lock, fitted as
standard

Special
(Extended Spindle)



Multiple Assemblies

Multiple assemblies for units larger than 1 metre on either dimension can be provided to special order.



The above illustrates some possible arrangements.

Note: We also offer a heavy duty damper. These are available in both galvanised and stainless steel.