

BACKDRAUGHT DAMPERS

Mech-Elec®



BD
SERIES

REGULATING DAMPERS

Product Description and Features

Introduction

The BD Series Back Draught Damper is self-opening subject to air velocity and is designed to restrict air back flow.

The damper can be fitted to partitions or brick walls, on plenums or duct mounted.

Features

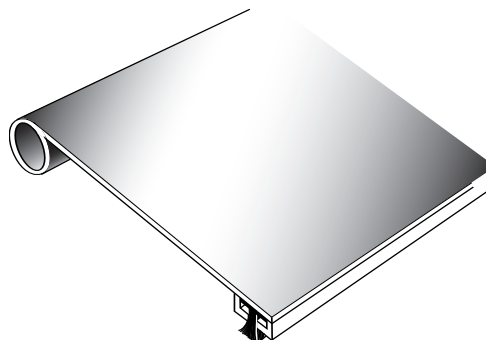
- Q Standard case construction is galvanised mild steel
- Q Extruded aluminium blades
- Q Flange or spigot casing options
- Q Infinite sizing capability
- Q Unique blade end seal and stop (see chart)
- Q Variable blade position for alternate airflow direction

Specifications & Testing

- Q Unless stated otherwise, flange models are suitable for classes A & B of DW144, with spigot models being suitable for classes A, B & C of DW144.
- Q Conforms to HVCA specification DW144 classes A and B, and Eurovent as relevant
- Q Independent performance tests for pressure drop. Test report 165 refers.

Blades

Standard extruded aluminium blade



Material Specification

Casing

1.2mm (18swg) galvanised mild steel to BS EN 10142 1991. Coating Class Fe P02g.

Blade Bushes

Injection moulded nylon engineered Nylon 66.

Jamb Seals (Optional)

Punched aluminium strip to BS1747 1987. 3.0mm (10swg) thick, that is also a combination blade stop in the open and closed position.

Blades

Extruded aluminium to BS1747 1987. Wall thickness 1.0mm (20swg).

Blade Spindles

IXEF semi-crystalline polymer polyarylamide.

Blade Limiting Angle

15 x 15 x 18 gauge galvanised steel running full length to one side only.

Paint

Aluminium primer is applied to all welds and ground surfaces.

Edge Seal

Nylon brush seal.

Performance and Application

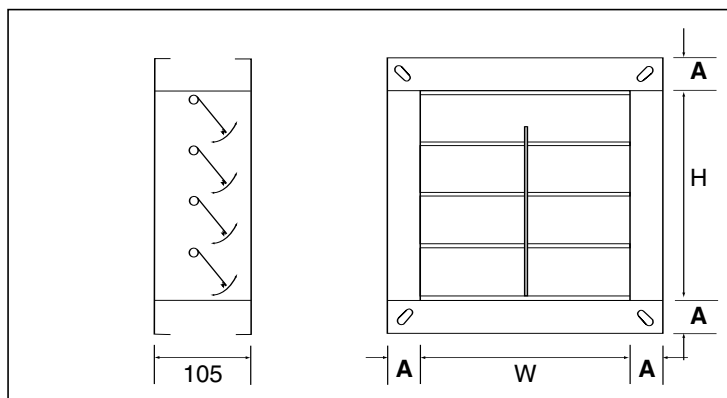
Temperature: -10°C to + 100°C.
Velocity: 1m/s to 12m/s, horizontal airflow.

Dimensions

Flangefit

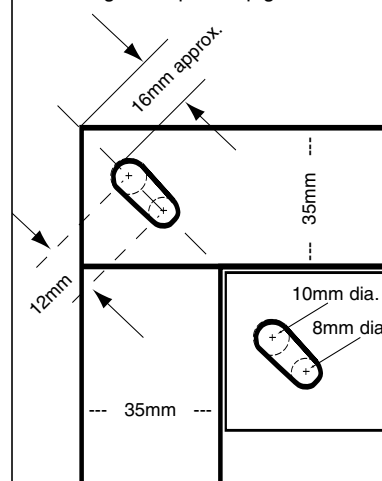
W = 100mm to 600mm
H = 100mm to 1000mm

A = 25, 30 or 35mm
Please specify



Flange Detail

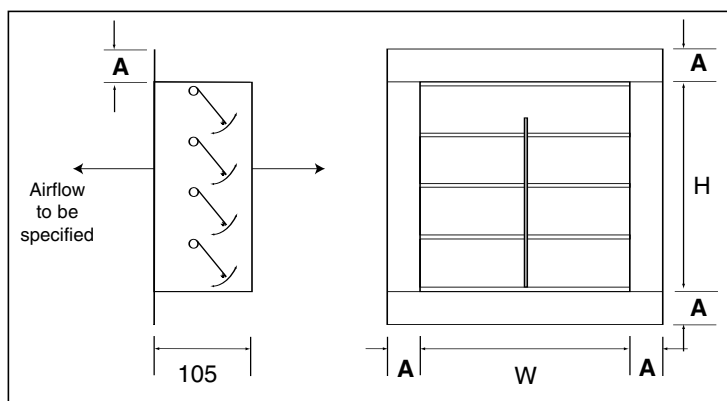
Flangefit and
Rectangular/Square Spigotfit



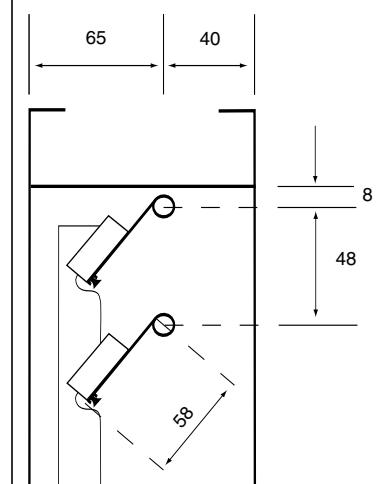
Framefit

W = 100mm to 600mm
H = 100mm to 1000mm

A = 25, 30 or 35mm
Please specify



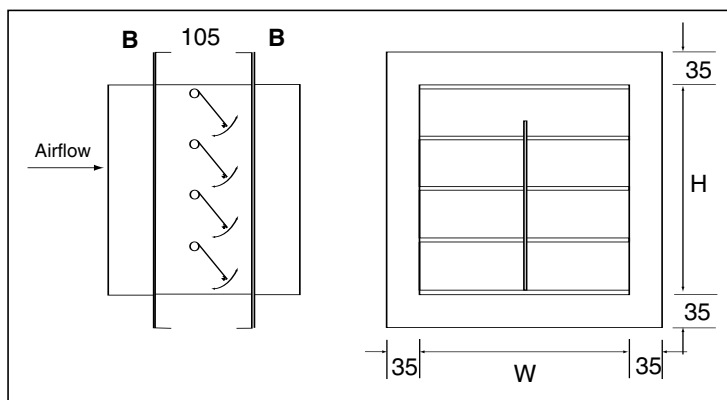
Blade Dimensions and Position



Spigotfit

W = 100mm to 600mm
H = 100mm to 1000mm

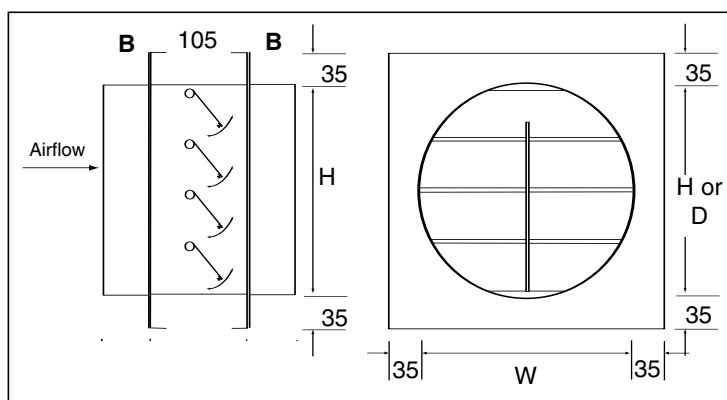
100-354mm: B = 40mm
355-600mm: B = 55mm



Circular Spigotfit

Dia. = 100mm to 600mm

100-354mm: B = 40mm
355-600mm: B = 55mm

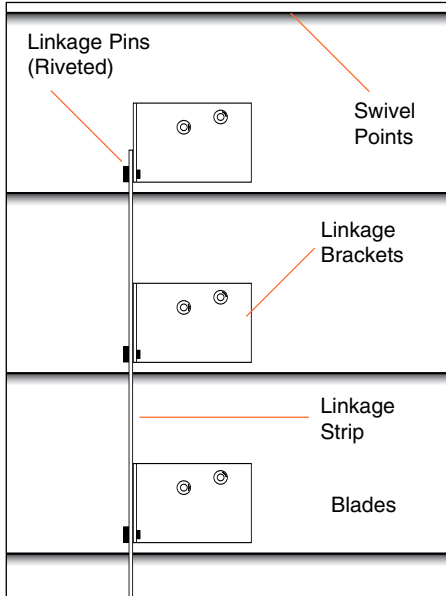


Special Note:

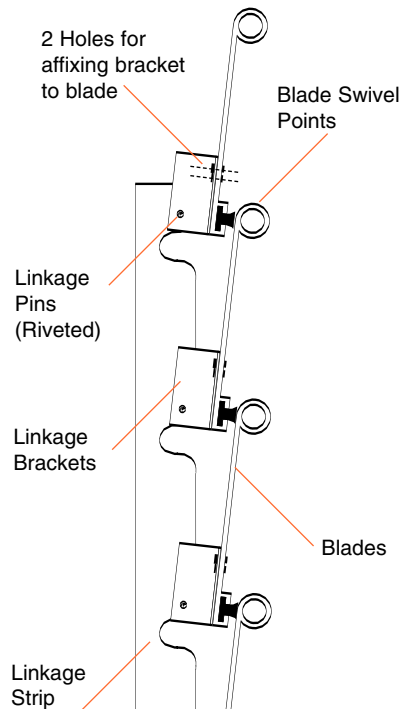
For horizontal installations, please advise our sales office, as blade linkage may not be required.

Circular Spigotfit Dimensions

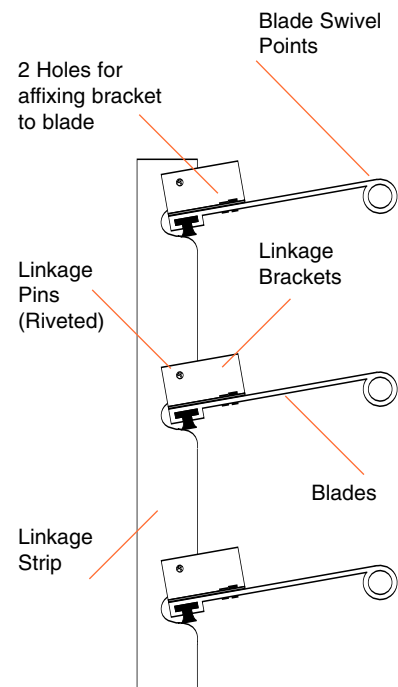
As standard, blades are linked as illustrated with galvanised mild steel connection bars, to control evenly the opening and closing of the blades.



BLADES CLOSED



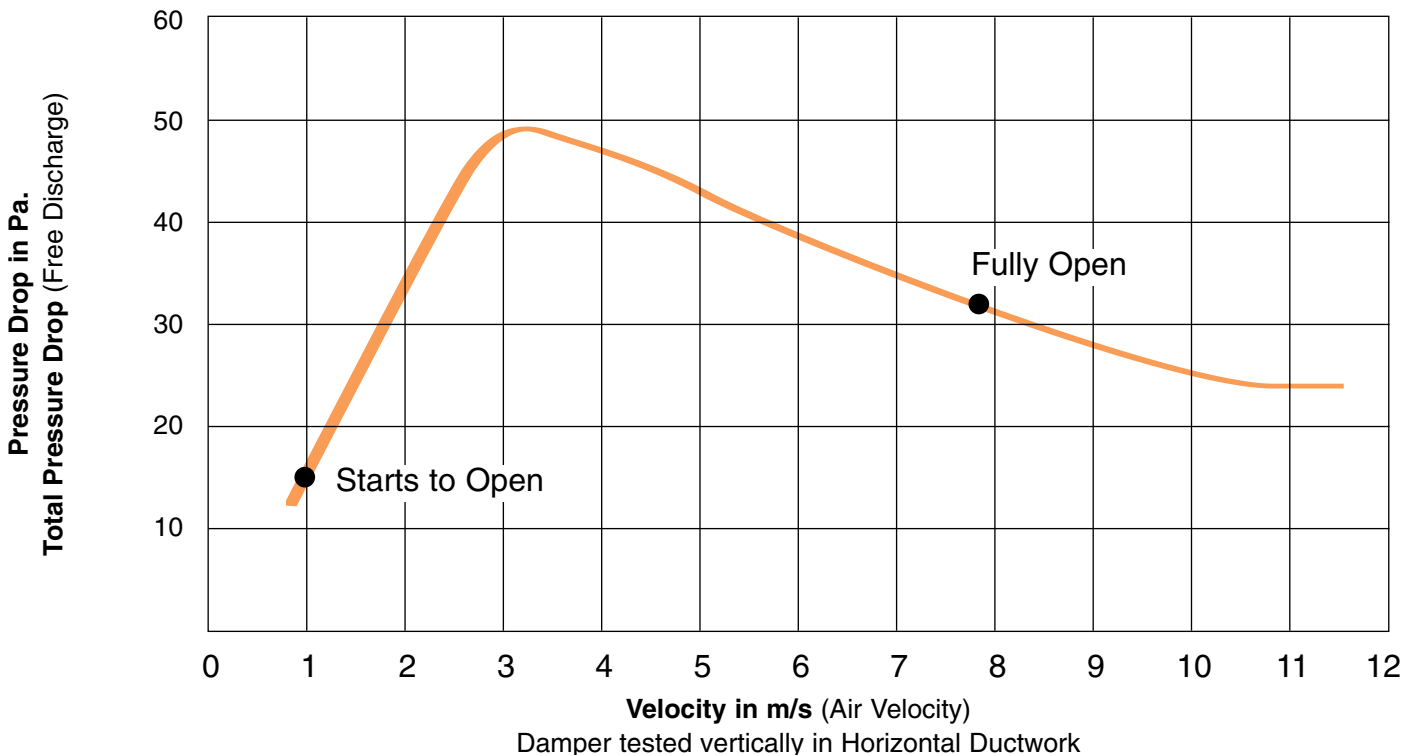
BLADES OPEN



Performance Characteristics

Pressure Loss (Report Ref. 165) Vertical installation only

Figures based on 600mm x 600mm sized unit. Tolerance $\pm 10\%$



Control Options

Weight Chart (kg)

Damper Height (mm)	Damper Width (mm)								
	200	300	400	500	600	700	800	900	1000
100	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5
200	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	7.0
300	3.0	4.0	4.5	5.5	6.0	6.5	7.0	8.0	9.0
400	4.0	5.0	6.0	6.5	7.5	8.5	9.0	10.0	10.5
500	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.0	12.0
600	5.5	6.5	7.5	9.0	10.0	11.0	12.0	13.0	14.0
700	6.0	7.5	9.0	10.5	12.0	13.0	14.0	15.0	15.5
800	7.0	8.5	9.5	11.0	12.5	13.5	15.0	16.5	17.5
900	7.5	9.0	11.0	12.5	13.5	15.0	15.5	17.0	19.0
1000	8.0	10.0	12.0	13.5	15.5	17.0	17.5	19.0	21.0

These values have been rounded up and down to whole numbers and are illustrated for estimation purposes only.

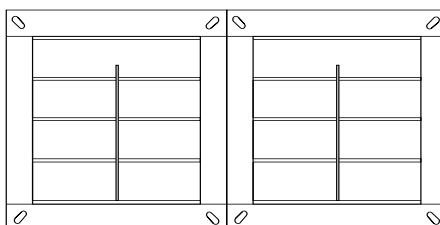
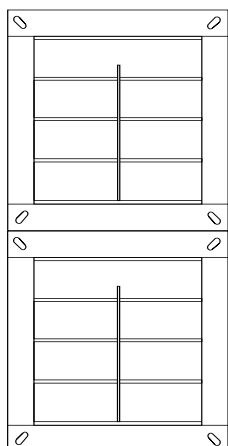
Damper Details Case Depth and Flange sizes standard (see illustrations Page 2))

Ordered Duct Height	Actual Height "H" or "D"	No. of Blades	Ordered Duct Height	Actual Height "H" or "D"	No. of Blades	Ordered Duct Height	Actual Height "H" or "D"	No. of Blades
100	108*	2	400	400	8	700	700	14
125	125	2	425	425	8	725	725	14
150	156*	3	450	450	9	750	750	15
175	175	3	475	475	9	775	775	15
200	205*	4	500	500	10	800	800	16
225	225	4	525	525	10	825	825	16
250	253*	5	550	550	11	850	850	17
275	275	5	575	575	11	875	875	17
300	302*	6	600	600	12	900	900	18
325	325	6	625	625	12	925	925	18
350	350	7	650	650	13	975	975	19
375	375	7	675	675	13	1000	1000	19

* Actual Height differs slightly from specified nominal height

Multiple Assemblies

For assemblies greater than sizes detailed, multiple sections can be supplied for on-site assembly as illustrated.

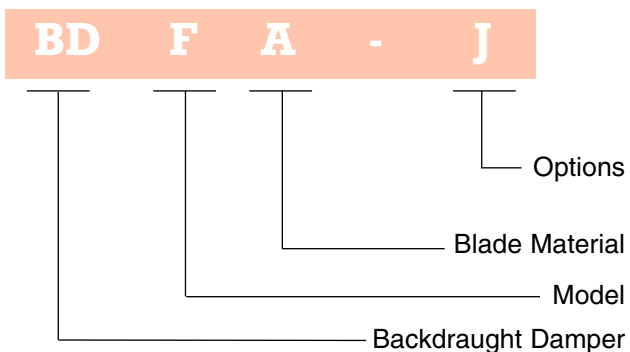


When there are transportation restrictions, large multiple units will be broken down and shipped as individual sections for on-site assembly.

Unless requested, joining strips would not normally be supplied fully drilled.

Ordering Codes

Example:



BD Backdraught Regulating Damper

Model:

- F** Flangefit
- FF** Framefit
- R** Rectangular/Square Spigotfit
- C** Circular Spigotfit

Blade Material:

- A** Aluminium (standard)

Options:

- J** Jamb Seals



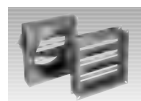
BD Series
Backdraught
Damper



Control Panel
Electro-
Mechanical



Control Panel
Fully
Addressable



DD Series
Duct
Damper



EF Series
Easifit
Damper



FD Series
Fire
Damper



FSD Series
Fire/Smoke
Damper



HD Series
Heavy Duty
Control Damper



IF Series
Intumescent
Fire Damper



SB Series
Single Blade
Regulating
Damper



SC Series
Smoke
Control
Damper



SF Series
Slimfit
Regulating
Damper