



## Back Pressure Dampers

### BPD(S) BPD(E)

#### Introduction

The Waterloo back pressure dampers, series BPD, may be used for room-to-room pressure control or as basic non return valves. Units are suitable for partition, wall, plenum, or duct mounting for projects requiring coarse control of differential pressure. The damper blades modulate automatically with increasing pressure and produce a flat pressure response which is useful for regulation purposes.

#### Manufacture

All dampers are constructed from aluminium alloy extrusions with mitred and welded/cleated frames. The blades are supported on plastic moulded bearing surfaces and blade weights are provided to vary control pressure.

#### Product Description

BPD(S) Supply back pressure damper (duct to room)  
 BPD(E) Exhaust back pressure damper (room to duct)  
 SF Screw through flange fixing  
 No Fix No fixing holes or method are supplied

#### Sizes

Only standard sizes are available as per the selection nomogram opposite. Multiple assemblies are available to special detail.

#### Finishes

PPM9006 (RAL 9006 Matt Silver)  
 PPM9010 (RAL 9010 Matt White)  
 PPG9010 (RAL 9010 Gloss White)  
 Other colours available on request

#### Installation

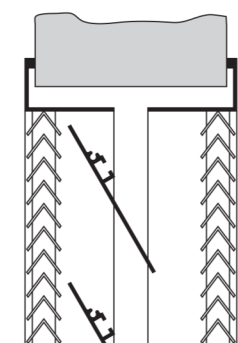
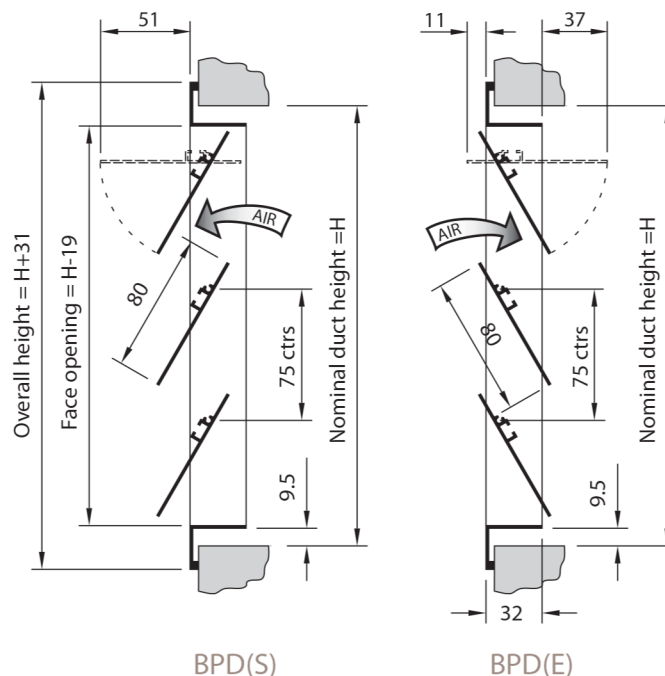
Standard fixing is screw through flange (SF).

#### Accessories

Special assemblies of grille and damper combinations are available to special detail.

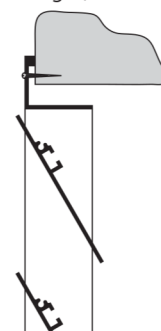
#### Weight

14 kg/m<sup>2</sup> face area



Transfer grilles with internal back pressure damper blades

Screw through flange (standard)



To ensure satisfactory operation the damper pivots and blades must not be obstructed within the opening. Openings and ducting must also be square across the face to prevent distortion of the frame.

#### Order Example

BPD(S)/400/175/SF/PPG9010  
 Type \_\_\_\_\_  
 Nominal width \_\_\_\_\_  
 Nominal height \_\_\_\_\_  
 Fixing \_\_\_\_\_  
 Finish \_\_\_\_\_



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BPD(S) BPD(E)



Selection nomogram

### Performance Criteria

Performance is for supply or extract applications and is based on unweighted blades. Units should be selected for a given air flow rate and pressure differential. The preferred operating range is 10-50Pa. For special applications it is possible to increase the pressure differential for any given size and air flow rate by adding blade weights.

### Selection example

For an air flow rate of 200 l/s and a required pressure differential of 23 Pa across a partition, select a 400mm x 400mm back pressure damper.

