



Advanced Air (UK) Ltd

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Product Specification: 1000 Series Control and Balancing Dampers

Description

The universal 1000 series range is robustly constructed and include models suitable for low, medium, and high pressure applications with a variety of sealing options.

Dampers are supplied flanged, spigotted, wall or sleeve mounting and either manual or motorised control is available.

Standard Construction

Blades:

Width: 136.0mm standard
Centres: 125.0mm
Material: 1.6mm galvanised mild steel – standard
1.6mm grade 430 stainless steel – optional
Protrusion: Blades will protrude on some frame heights, refer to ES-144.

Frame:

Flange Width: 50mm Standard
25mm, 40mm or sleeve optional
Frame width: 110mm Standard
160mm, 200mm or sleeve optional
Material: 1.6mm galvanised mild steel – standard
1.6mm grade 430 stainless steel – optional
Corners: Die formed corner channels "Button Locked" for strength and rigidity.

Casing (Spigotted units only):

Case Width: 200mm (Under 300mm high, case width = 300mm)
Material: 1.2mm galvanised mild steel – standard
1.2mm grade 430 stainless steel – optional
Corners: Welded mitre corners finished with aluminium aerosol

Linkage: External, enclosed within the frame, out of airstream, fixed for 90 deg operation, zinc electroplated mild steel.

Bearings: 12.7mm dia.
Selcon up to 80 deg C – Standard
Oil filled sintered bronze up to 70 deg C – Optional
Oil filled sintered bronze up to 200 deg C – Optional
Stainless Steel up to 400 deg C – Optional
Stainless Steel up to 600 deg C – Optional

Axels: 12.7mm dia. Electroplated mild steel bolted directly to

Side Jamb: Cambered grade 302 stainless steel – Optional

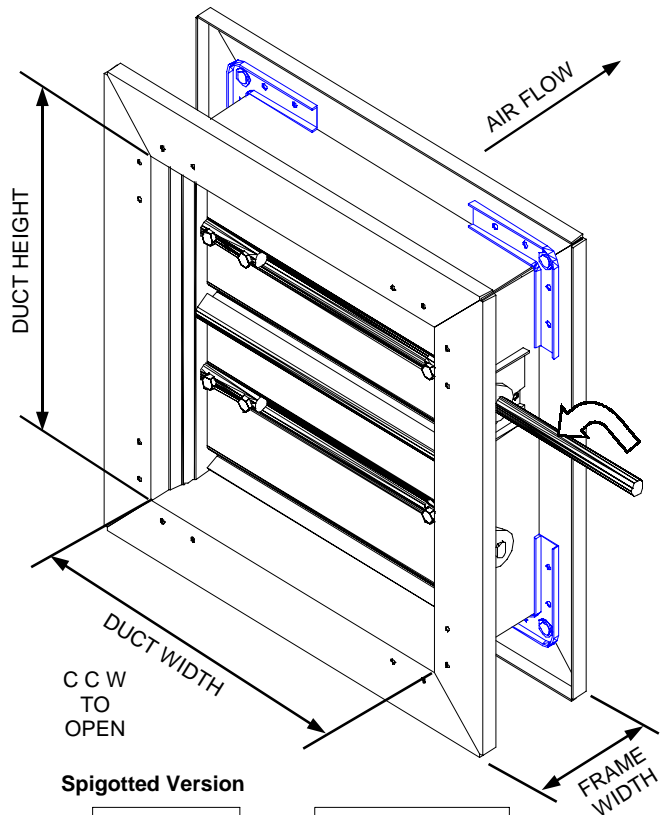
Blade Seals: PVC, up to 80 deg C – Optional
Santoprene, up to 120 deg C – Optional
Silicon, up to 175 deg C – Optional

Minimum and Maximum Sizes:

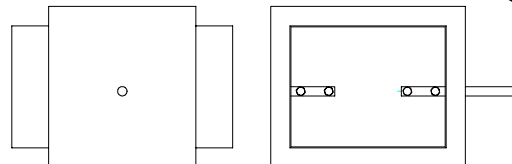
Flanged: 100mm x 100mm min, 1200mm x 1800mm max
Rectangular: 100mm x 100mm min, 1200mm x 1800mm max
Circular: 100mm dia. Min, 1150mm dia. Max
Flat Oval: 100mm x 100mm min, 1150mm x 1750mm max

Performance:

Maximum duct velocity: 15m/s
Maximum system pressure: 1500Pa (This can be strengthened up to 2000Pa or 2500Pa)



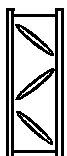
Spigotted Version



Model 1031
Parallel Blade
Flanged



Model 1041
Opposed Blade
Flanged



Actuator Options:

- 230V Actuator
- 24V Actuator
- Actuator externally mounted
- LF 230 – max damper 500mm
- LF 24 – Max damper 500mm
- AF230
- AF24
- AF230 c/w microswitches
- AF24 c/w microswitches
- Honeywell RHD
- Honeywell LHD
- Pneumatic actuator – options available
- Hand Locking Quadrant
- 4" Diameter Handle

Wiring Details And Assembly Drawings Are Available On Re-

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Date	Issue	Spec Number
23-05-02	A	ES - 140

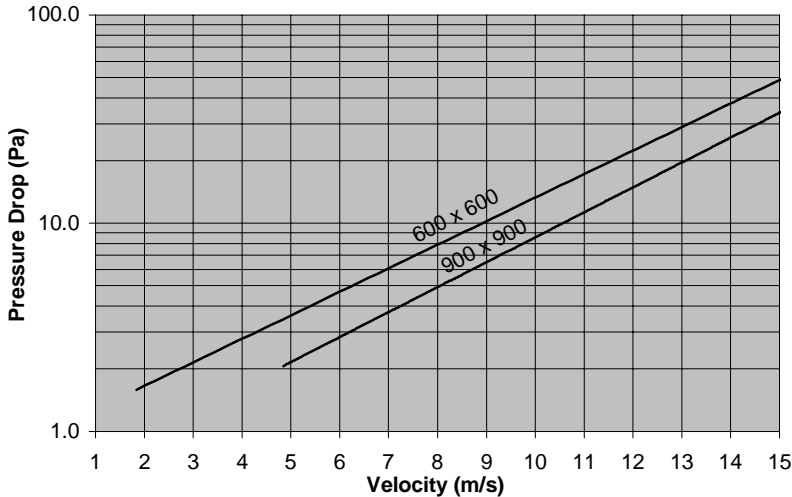


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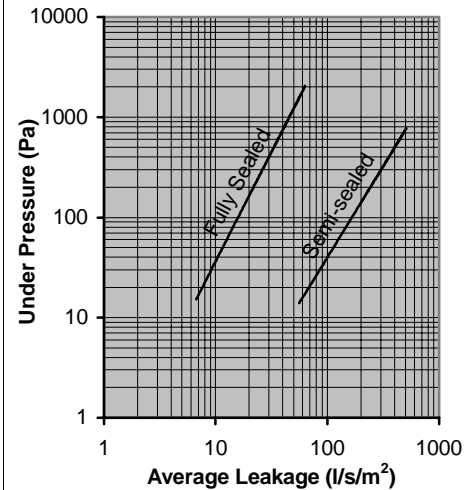
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1000 Series Pressure Drop - Fully Open Standard Units (No Sills or Seals)



Note: For units with sills and seals add 20%

Average Blade Leakage For 1000 Series Control Dampers.



Nominal Damper Size (mm)	1000 Series - Nett Weights (Kg)							
	Width (mm)							
	200	300	400	600	800	1000	1200	
Height (mm)	150	6	7	9	10	12	15	18
	300	7	9	10	13	16	20	22
	450	9	10	12	16	21	24	30
	600	10	13	15	21	25	30	35
	750	12	15	18	24	30	35	40
	900	15	18	21	27	33	39	45
	1050	16	21	24	31	37	45	50
	1200	20	22	27	35	42	49	57
	1350	21	25	30	37	46	54	63
	1500	22	30	33	42	50	60	69
1650	25	30	35	45	54	64	75	
1800	27	33	37	48	60	70	80	

All weights are approximate and in Kilograms

- Weights stated are for non-spigotted models.
- Spigotted + 20%
- Please note extra weight has to be added for drive options.

Torque Chart - 1000 Series Control Dampers - Torque To Open (Nm)

Duct Velocity m/s	300 x 300		600 x 600		900 x 900	
	Parallel	Opposed	Parallel	Opposed	Parallel	Opposed
5	2.5	2.5	10	5	10	7
10	2.5	2.5	13	6	14	11.5
15	2.5	2.5	13	7.5	14	12.5

The above results were determined by experimentation on side linkage dampers with side jamb seals. The tests were performed in a clean air system at 2000 Pa corrected pressure and are for guidance only.

Multipliers:

- No Side Seals **Multiply By 0.9**
- Side Seals and Blade Seals **Multiply By 1.1**
- For Multisection (Joined) Units **Multiply By A Further 1.2**

1000 Series VCD Approvals Certifications

Test House Authority	Leakage	Results
BSRIA Report No.3870 NO 3/4/5 Jun-84 (Ref: 3870/ALF/AN Oct 1988)	To AS.1682 UL.555s	Approved
Marconi Radar Systems Shock Test To DEF STAN 07-55 Test A3 Shock Apr-88	-	Approved

Damper Options:

- Right Hand Drive – Standard
- Left Hand Drive
- Multisection Units
- Drive Both Sides

Casing (Ductwork) Leakage:

- Flange Type – Classes A and B DW142
- Casing Type – Classes A, B and C DW142

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Additional Information Request:

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