

Volume Control Dampers

NCA Series 900
Standard VCDs and shut-off dampers

- Volume control dampers and low leakage shut-off dampers for general applications
- Double skin aerofoil blades
- Square, circular and flat oval connections for all types of ductwork
- Galvanised steel, stainless steel or aluminium construction
- Full range of actuators



NCA Series 900 dampers

Series 900 dampers are multi-leaf, opposed blade dampers available in two configurations:

S900B: Standard volume control dampers

Designed for balancing applications where a high level of shut-off is not required.

Fitted with a lockable plastic handle as standard.

S900C: Shut-off dampers

Fitted with additional seals, shut-off dampers have a far lower leakage than regular volume control dampers.

Supplied with an extended spindle as standard, facilitating motor fitment by others.



Design features

Material S900B: Galvanised steel throughout

Stainless steel frame/case/blades or aluminium blades optional

S900C: Galvanised steel frame and case, aluminium blades, stainless steel side seals, silicone rubber blade seal

Stainless steel case and frame optional

Sizes Minimum: 100mm x 100mm nominal

S900B: Maximum single unit: 1000mm width, 1000mm height or 1000mm diameter S900C: Maximum single unit: 1000mm width, 800mm height or 800mm diameter Above any of these, units would be made in sections or with mullions

Frame 30mm wide flange

65mm overall depth

Finish Bare metal

Mass/m² face area 16 kg (S900BAG - 1000mm x 1000mm nominal size). Smaller units will be proportionally heavier.

Models B, C and D will be approximately 50% heavier due to the case.

Free area 80% maximum

Quality assurance

HVC Supplies (Stourbridge) Ltd is an ISO 9001 certified company.



Assessed to ISO 9001 Cert/Ref No. 1186

Product testing

DW144 - Leakage through case

NCA Series 900 volume control and shut-off dampers have been tested against:

DW144

HVCA sheet metal ductwork

This test measures leakage through the damper case at pressures from 100 Pa to 2000 Pa.

Model A units were not tested since they do not have a case.

The testing was carried out in August 2009 by Building Testing Ltd in Surrey, England.

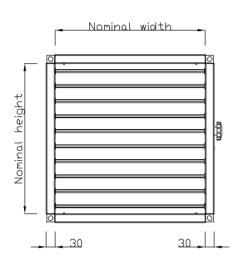
Copies of the test report are available on request.

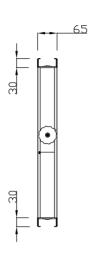
	Pressure (Pa)	Class acheived
Model B	100 - 500	A & B
	600 - 1000	B & C
	1100 - 2000	С
Model C	100 - 500	Α
	600 - 2000	N/A
Model D	100	Α
	200	A & B
	300 - 500	Α
	600 - 2000	N/A

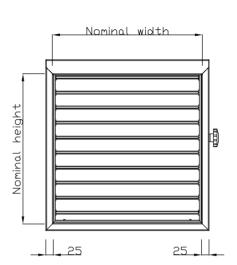
Technical drawings

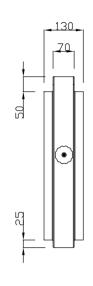
Model A: Square flanged (no case)

Model B: Square spigotted



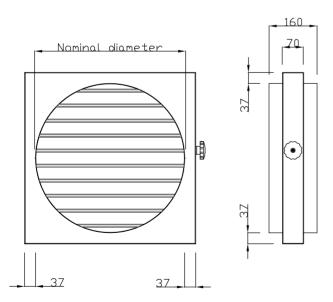


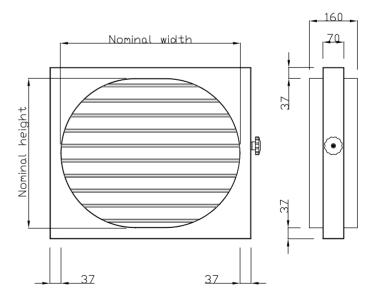




Model C: Circular spigotted

Model D: Flat oval spigotted





Spigots: Model B spigots supplied 6mm under nominal size. Model C and D spigots supplied 3mm under nominal size.

Manufacturing tolerance: + or - 1.5mm

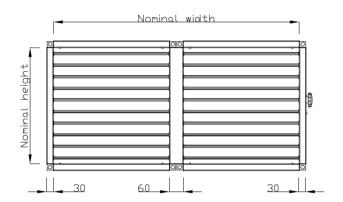
Technical drawings

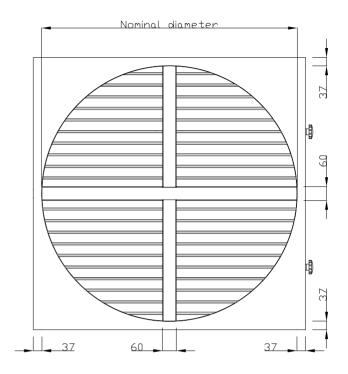
Multiple units

If nominal width, height or diameter exceed that stated on page 2, units will be manufactured with mullions. If stated nominal height or diameter are exceeded, two control devices will be required.

Very large units may need to be made in separate sections for joining together on site.

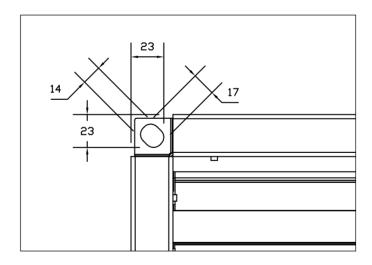
Alternatively, Series HVC-VCD aluminium volume control dampers are more suitable for sizes above 1m x 1m, and also do not require two control devices for dampers with nominal height over 1m.





Model A fixing holes

All Model A Series 900 volume control and shut-off dampers have prepunched fixing holes at each corner to facilitate easy connection to flanged ductwork.



Control options

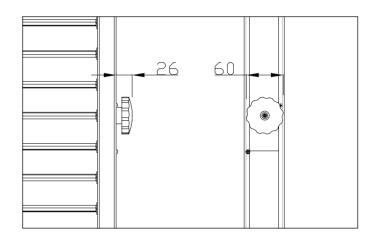
Manual plastic handles

Standard control method on Series 900B models.

The blue nylon handle is ergonomically designed for ease of use. An embossed arrow on the handle, and a sticker on the handle mounting plate show blade position without needing to look inside the duct.

Lockable with a single pozidrive screw in the handle centre (supplied).





Extended spindles

Standard control method on Series 900C models.

Allows fitting of an actuator by others.

- Galvanised steel
- 10mm diameter
- Extends 115mm from damper case

