



**AMS DUCTING
SUPPLIES**

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. 3186



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.

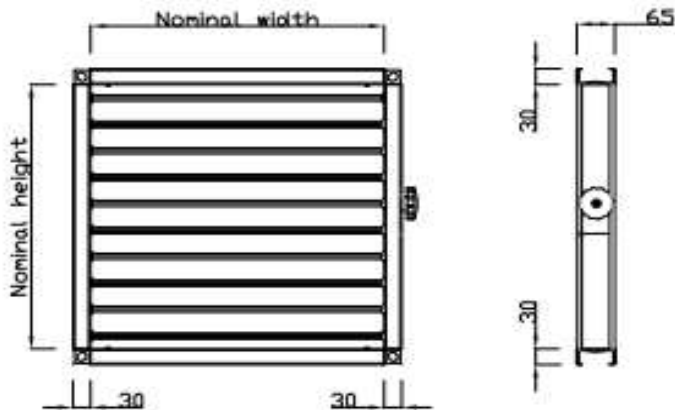
Copies of the test report are available on request.

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

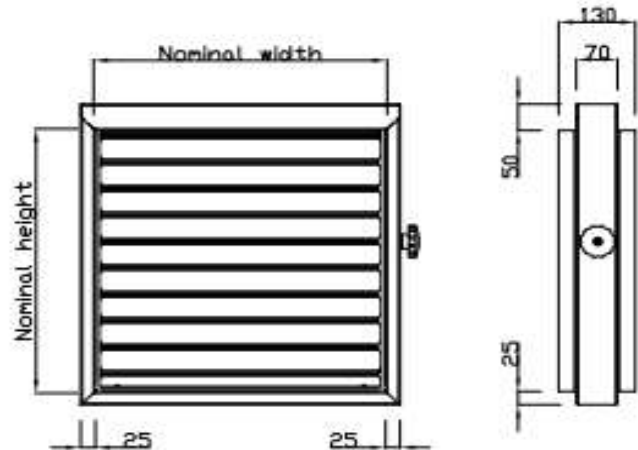


Technical drawings

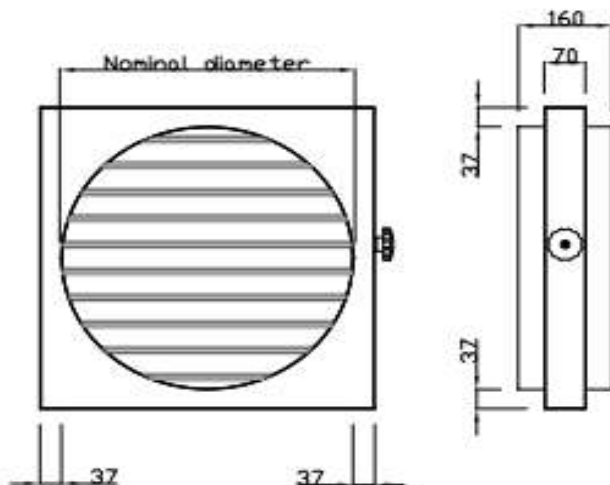
Model A: Square flanged (no case)



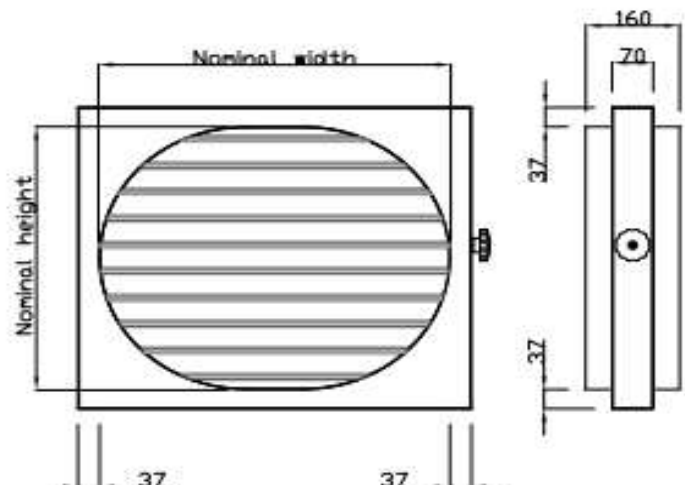
Model B: Square spigotted



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



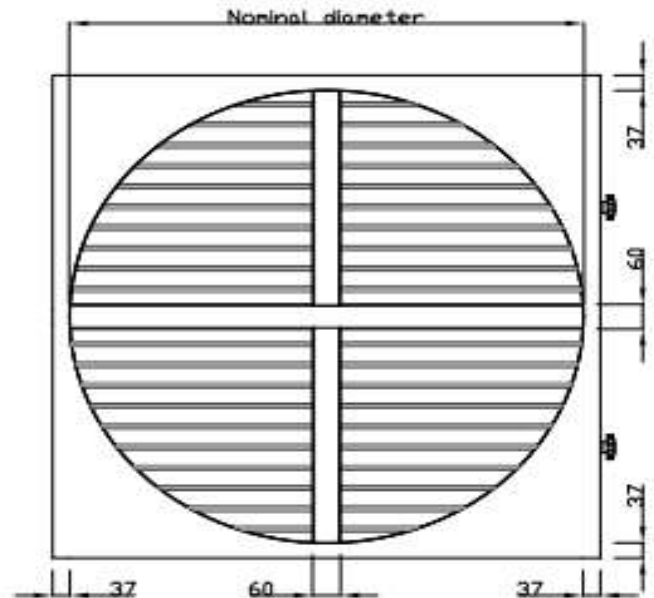
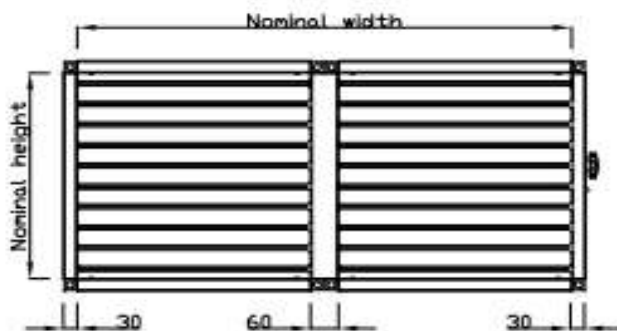
Technical drawings

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.

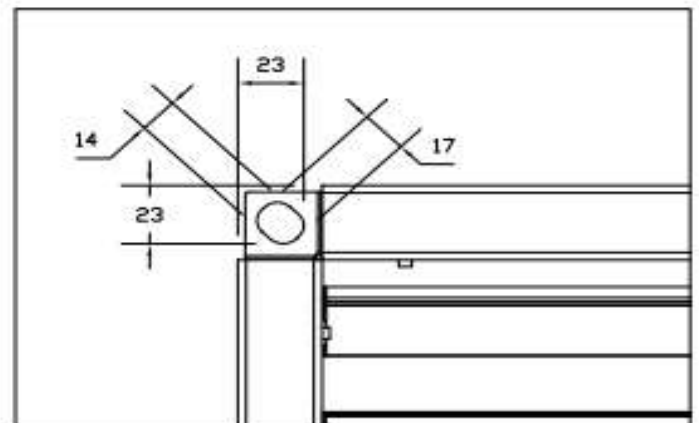
Very large units may need to be made in separate sections for joining together on site.

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.





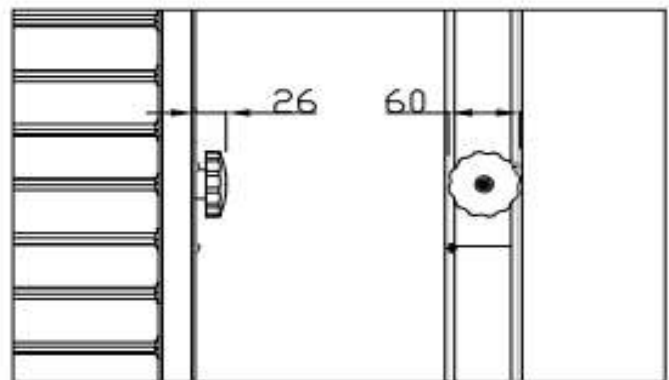
Control options

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

