



*Incorporating*



## Volume Control Dampers

### **NCA Series 500** Single blade volume control dampers

- Low leakage single blade volume control dampers
- Integrated case sealing rings remove the need for duct to damper sealing during installation
- Locking quadrant as standard for manual operation
- Fitted Belimo actuators available in power open/power close and spring return variants



## NCA Series 500 dampers

The NCA Series 500 is a low leakage single blade volume control damper comprising many of the same high quality construction features as our S400 single blade fire dampers, along with a specialist neoprene fabric blade seal which balances low leakage levels with low torque operation.

The case, formed from seam welded 0.7mm galvanised steel includes swages and safe edges which facilitate safe and easy installation, whilst integrated EPDM sealing rings remove the need for mastic in the duct to damper joint.

Available with the following control options:

- **Manual locking quadrant**  
Folded steel locking quadrant with blue PVC sleeve. Laser cut 'open' and 'closed' markers in base plate show position of blade.
- **Belimo CM series actuators**  
Power open, power close electronic actuators
- **Belimo TF series actuators**  
Spring return electronic actuators



## Design features

<b>Materials</b>	Case and blade - Galvanised steel Blade seal - Neoprene fabric Drive system - BZP steel throughout Locking quadrant (if fitted) - BZP steel and PVC sleeve
<b>Nominal diameters</b>	100, 125, 150, 160, 200, 250, 300 and 315mm
<b>Operation</b>	Directly driven single blade
<b>Controls</b>	Standard: Locking quadrant Optional: Factory fitted electronic actuator (Belimo CM or TF series)
	Please see page 4 for more information on controls

## Quality assurance

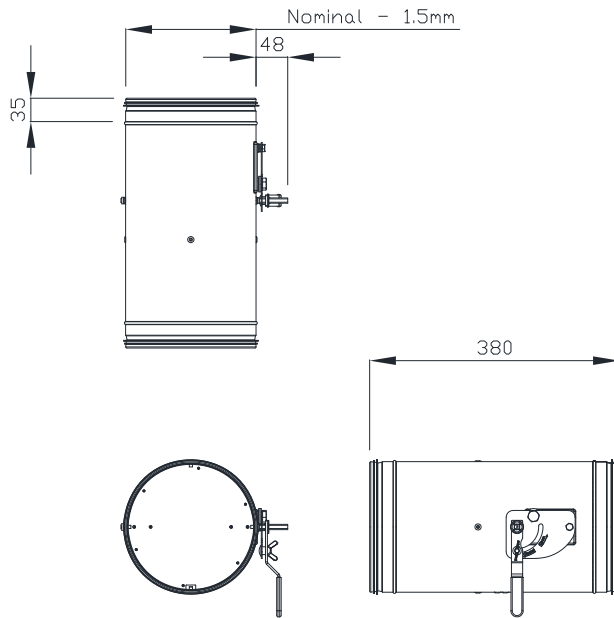
HVC Supplies (Stourbridge) Ltd is an ISO 9001 certified company.



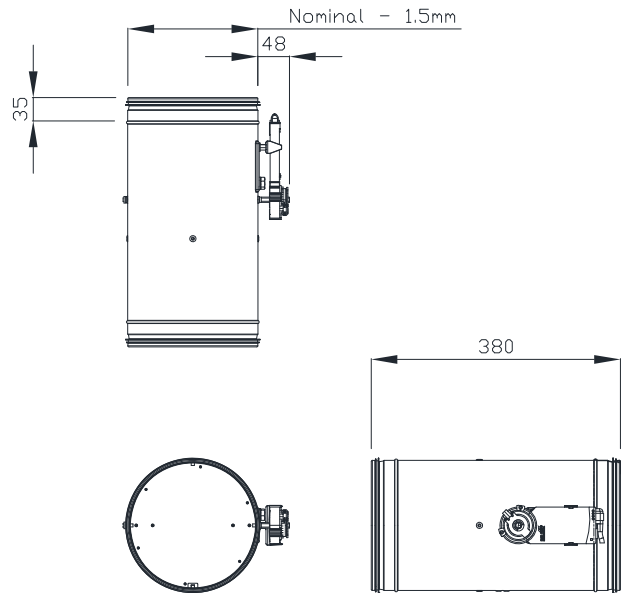
Assessed to ISO 9001  
Cert/Ref No. 1186

## Technical drawings

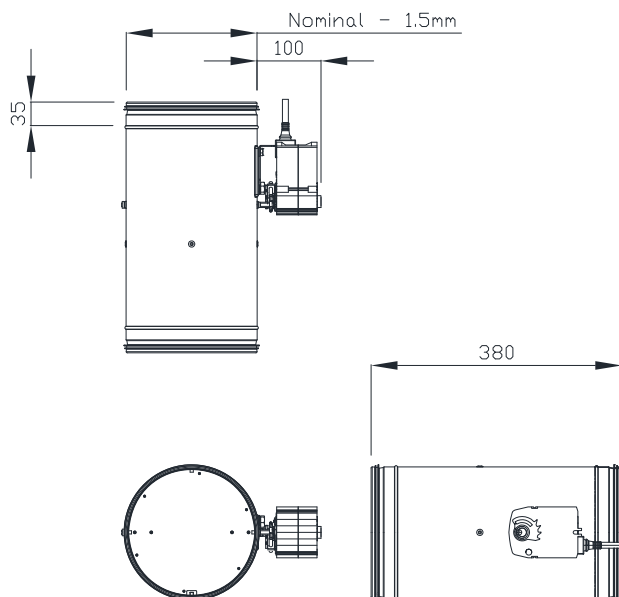
### S500-LQ - Locking quadrant operated



### S500 c/w Belimo CM actuator (power open, power close)



### S500 c/w Belimo TF actuator (spring return)



### Belimo actuators

Belimo electronic actuators can be fitted to S500 dampers.

All actuators are factory fitted and tested to confirm good operation. Other than connection to wiring, no alteration to the actuator is required on site.

Please see the below table to find the series of Belimo actuator you require for your application.



Series	Voltage		Action			
	24V	230V	Power open	power close	Spring return	Modulating
CM24-R	✓			✓		
CM24-SR-R	✓			✓		✓
CM230-R		✓		✓		
TF24	✓				✓	
TF24-SR	✓				✓	✓
TF230		✓			✓	
TF230-SR		✓			✓	✓

The above does not detail all available CM and TF series actuators. Please refer to the Belimo website for the full range.

### Weight charts

Nominal diameter (mm)							
100	125	150	160	200	250	300	315
1	2	2	2	2	3	4	5

Weights are in kg.

## Maintenance

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We recommend all NCA Series 500 dampers are inspected to ensure good operation at least annually. This may need to be performed more frequently should local conditions dictate it.

An operation and maintenance manual (O & M) for NCA Series 500 dampers is available via:

**[www.h-v-c.com](http://www.h-v-c.com)**

Finish

Bare metal only



Ordering codes

Example

1 - 150 - S500 - LQ

Codes

1)	Quantity		
2)	Size (mm)	(Diameter)	Nominal diameter (100, 125, 150, 160, 200, 250, 300, 315mm)
3)	Series	S500	Series 500 single blade volume control damper
4)	Control	LQ EX (Actuator)	Locking quadrant Extended spindle State actuator code When ordering a spring return actuator, please specify whether you require spring open or spring close operation.

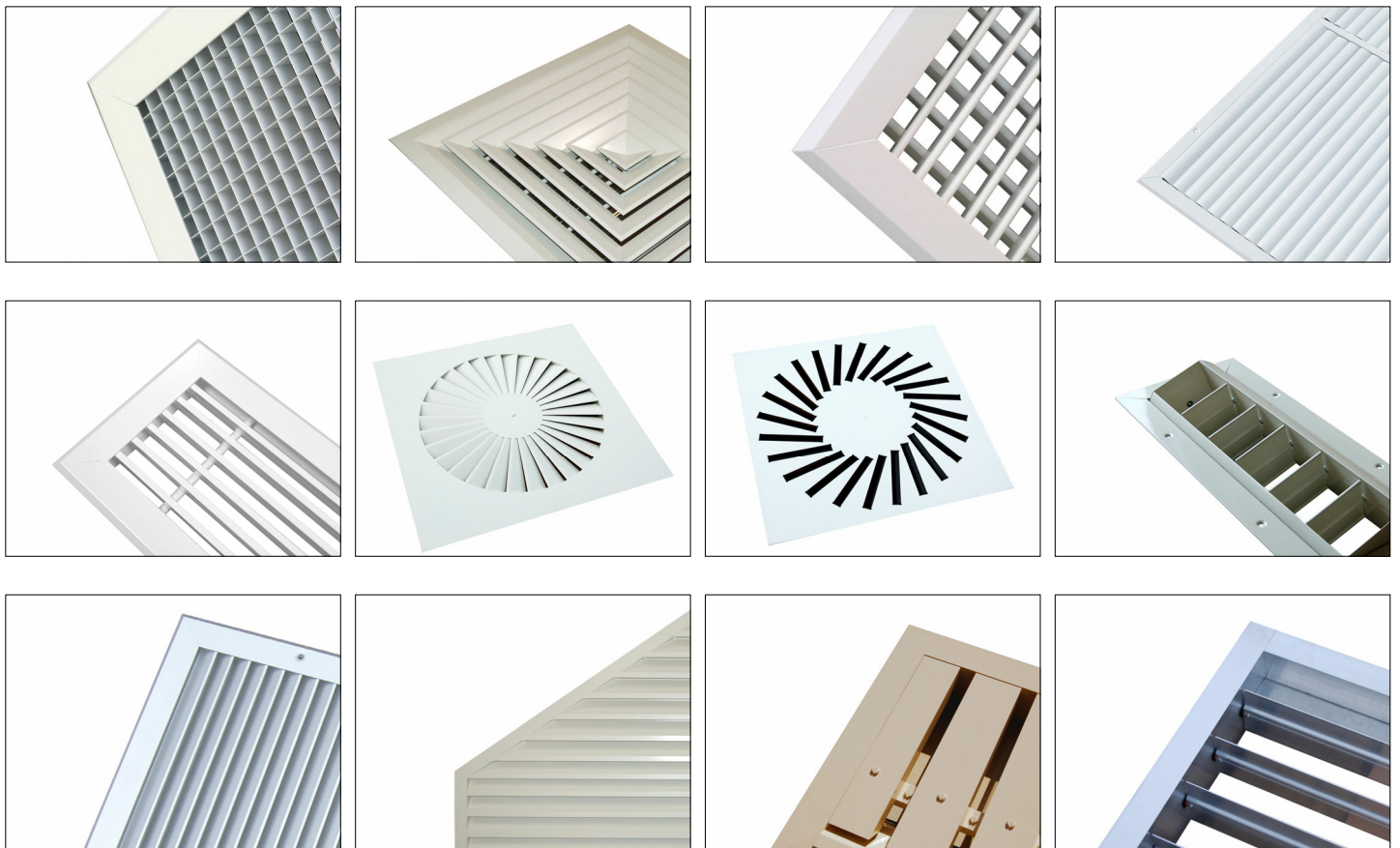
Please note: Actuator fitment requires HVC bespoke parts.

## HVC & NCA products

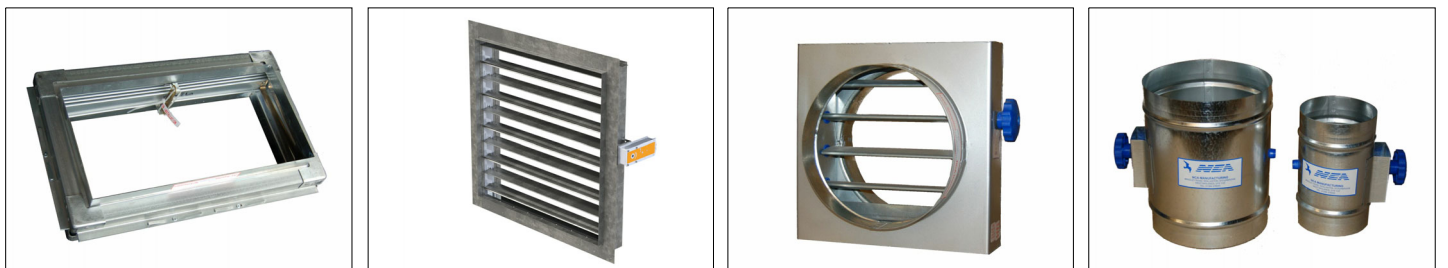
HVC offer the significant advantage of manufacturing both in duct and duct terminal equipment, making us a one stop shop for all your HVAC needs.

The products shown below are a selection, not an exhaustive list. Go to [www.h-v-c.com](http://www.h-v-c.com) for details on all HVC and NCA products.

### HVC: Grilles, Diffusers, Louvres and Volume Control Dampers



### NCA: Fire and volume control dampers





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Cert/Ref No. 1186

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