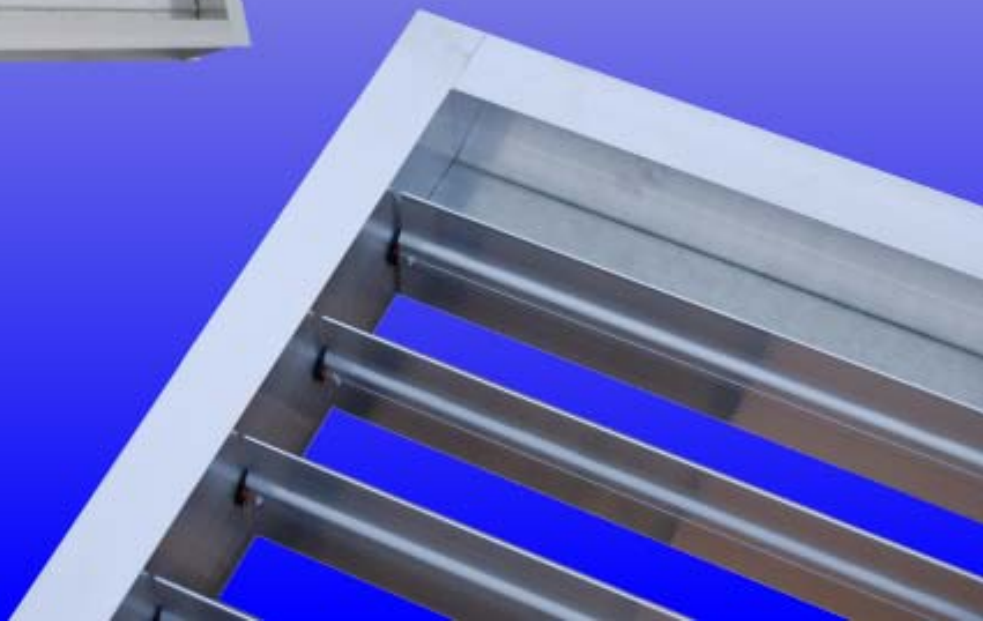




Volume Control Damper Series HVC-VCD



Volume control damper

Model

HVC-VCD

Overview

Designed to meet the needs of air control in low and medium velocity air systems, HVC Series VCD Volume control dampers offer a low leakage, low maintenance and easily adjustable unit, with a wide range of accessories to suit a myriad of applications.

Full shut off capability is also offered as part of the HVC VCD range. Specifically designed for applications where a much higher degree of shut off is needed than that provided by a volume control damper.



Model A – Square flanged

Model B – Square spigotted

Model C – Circular spigotted

Model D – Flat oval spigotted

Construction

- Extruded aluminium or roll formed steel frames.
- Extruded aluminium blade profiles.
- Nylon bushes standard, brass optional.
- Blades linked via connecting rods, enabling both parallel and opposed motion.
- Mullion needed above 1200mm wide, entire unit up to 2900mm wide in one section.
- Aluminium framed units no fixing holes as standard, can be specified.
- Galvanised units have teardrop fixing holes in corners as standard, can be specified without.

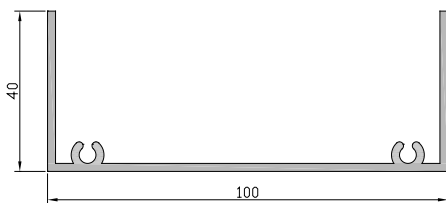


Options and accessories

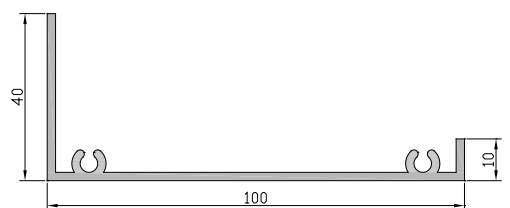
HVC can supply you a standard volume control damper, or a customised unit made to your exact specifications. Please see our list of options and accessories below for an overview of what we can do.

- **Louvres & Grilles** – Combination units with VCDs, grilles, or louvres can be manufactured to order.
- **Brass bushes** – Replacing the standard nylon bushes, brass bushes are recommended if the VCD is to be used to control airflow of elevated temperatures.
- **Side and blade edge seals** – To increase shut off capabilities past those of a standard Volume control damper, side and blade edge seals can be fitted.
- **Adjuster handle / spindle** – A choice of injection moulded handle (Std), locking quadrant or extended spindle for use with actuators is available to best suit application needs.
- **Actuators** – A full range of open/close, modulating, spring return, explosion proof and pneumatic actuators are available to enable remote adjustment of dampers.
- **Blades** – Four blade types can be used on a HVC VCD, please see next page for more information.
- **Spigot** – To allow easy fitment to a duct, spigots can be made in both square and circular formats.
- **Frame type** – 100mm deep standard frames available in both extruded aluminium and roll formed steel, 100mm extruded aluminium offset frame for mounting into a wall also available.

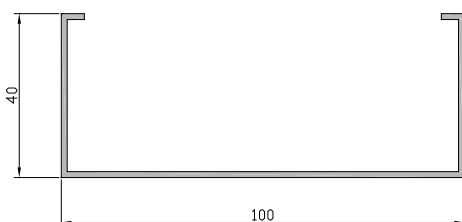
Frame types



- Standard 40:40 channel



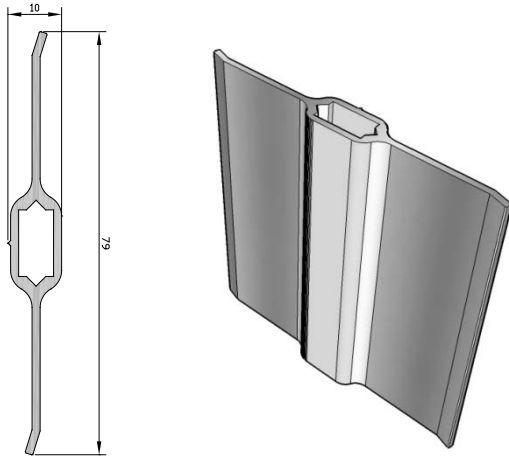
- 40:10 offset channel
- Designed for wall mounting



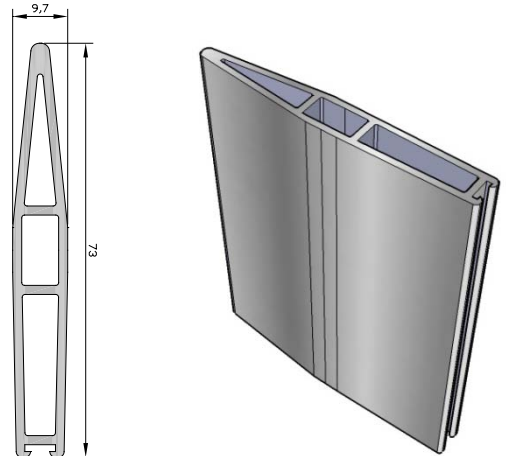
- Roll formed galvanised steel 40:40 channel



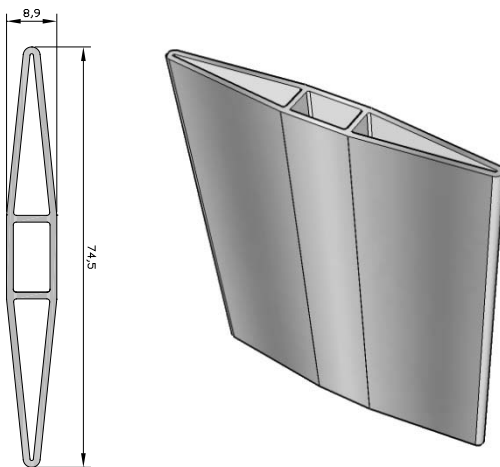
Blade profiles & possible motion



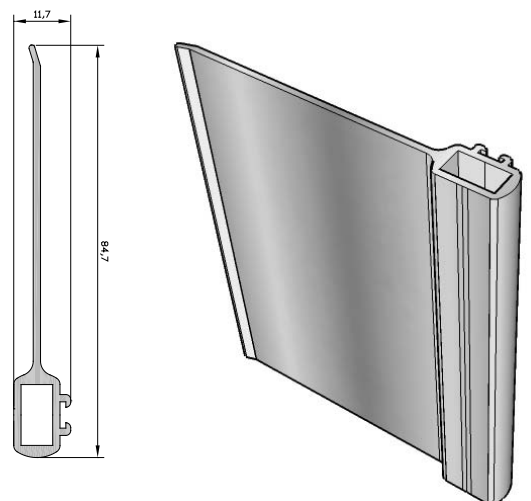
- Standard VCD blade.
- Parallel or opposed motion.
- No edge seals.



- Aerofoil blade.
- Parallel or opposed motion.
- Edge seals standard.



- Aerofoil blade
- Parallel or opposed motion.
- No edge seals.



- Back-draught shutter blade
- Parallel motion only.
- Edge seals standard.

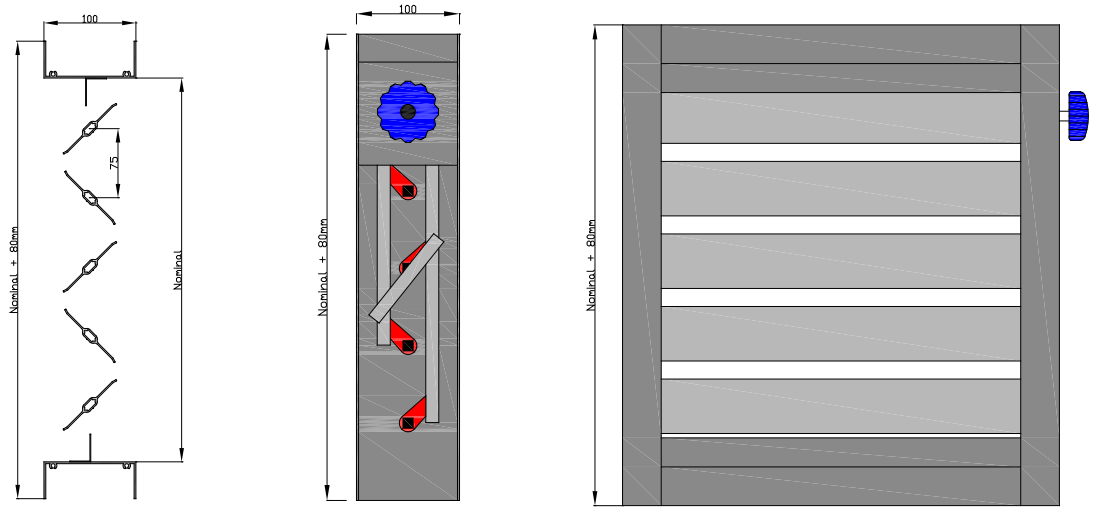
Please note: Edge seals will not be fitted if brass bushes are specified due to likely exposure to high temperatures.



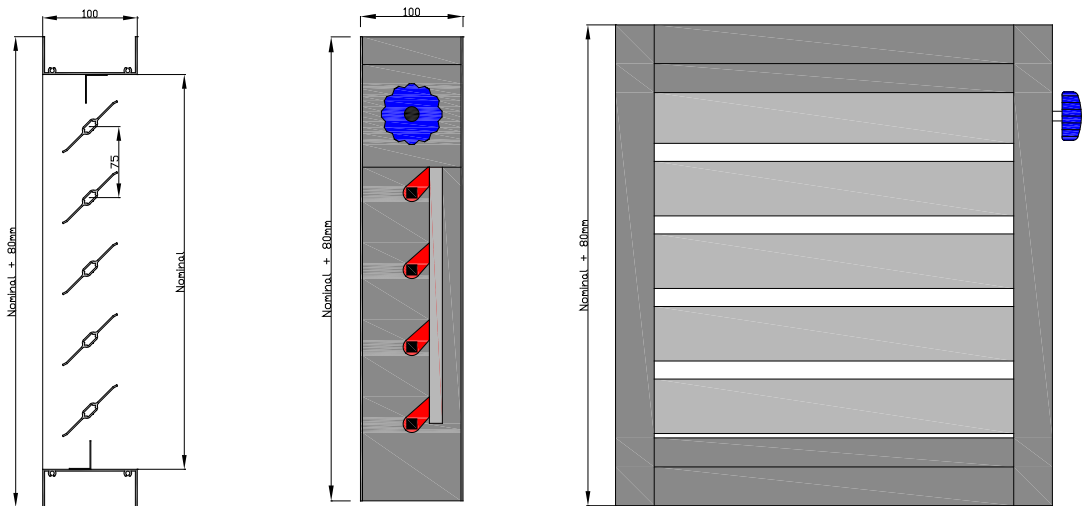
- HVC-VCD Mass/M² face area = 14KG

The drawings below are only designed to show a selection of possible sets ups, therefore not every possible spec is shown. Please note that only standard blades and frame have been shown. Whilst the pitch remains the same in all cases, blade position will change if back draught shutter blade is selected to ensure the blade always remains within the extremities of the unit.

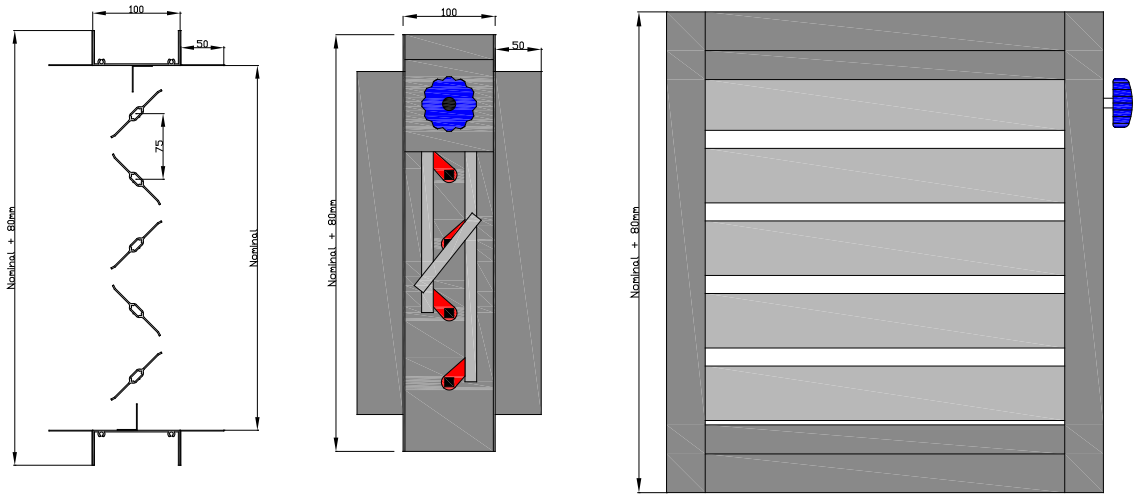
- (___ x ___) – HVC VCD Model A – Std Opposed – Std



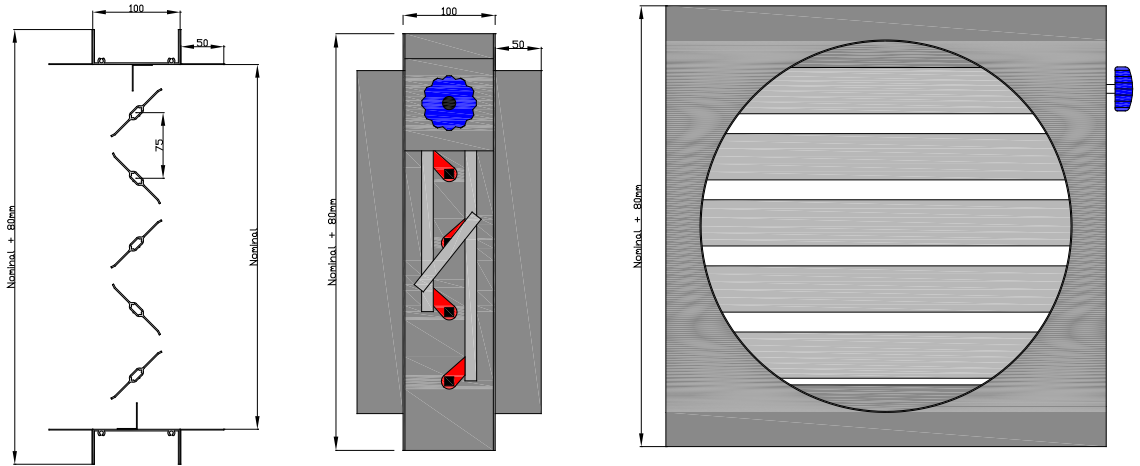
- (___ x ___) – HVC VCD Model A – Std Parallel – Std



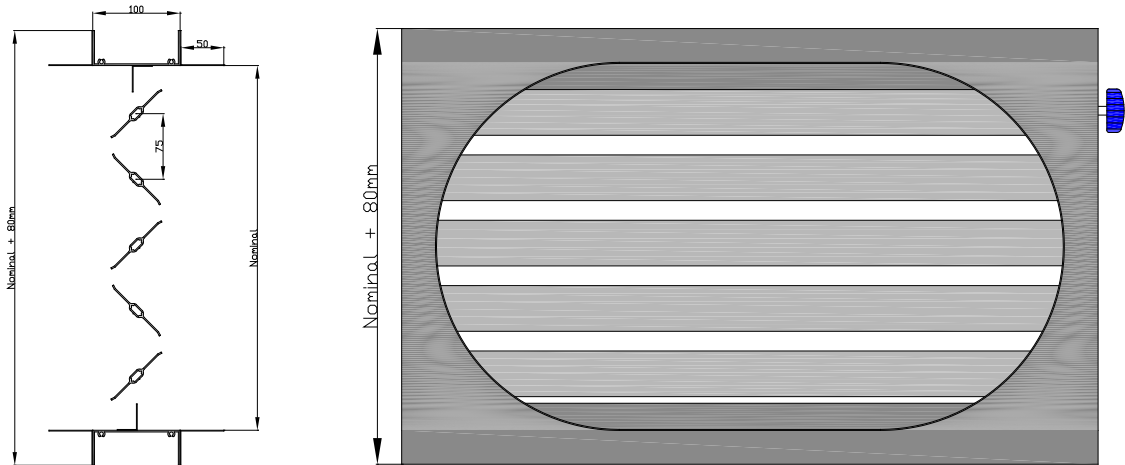
• (___ x ___) – HVC VCD Model B – Std Parallel – Std



• (___ x ___) – HVC VCD Model C – Std Parallel – Std



• (___ x ___) – HVC VCD Model D – Std Parallel – Std

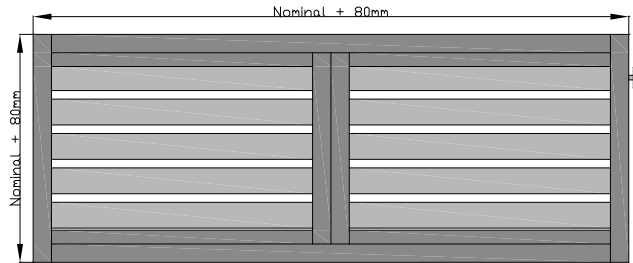


Multiple sectioned units

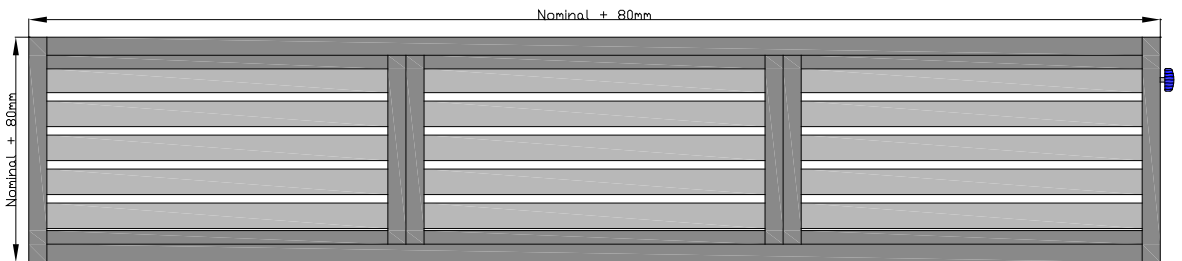
Mullions are used when units exceed any multiple of 1200mm wide.

For example, a 1300mm wide VCD would have a single mullion, whilst a 2500mm wide unit would have two, giving 3 equally sized sections. This is done to prevent blades sagging, and does not impede the performance of the damper in any way as the blades remain linked through the mullion.

The maximum width a VCD can be made to in a single unit is 2900mm. Should larger sizes be required they will be made in multiple sections.



VCD with single mullion, width between 1200mm and 2400mm.

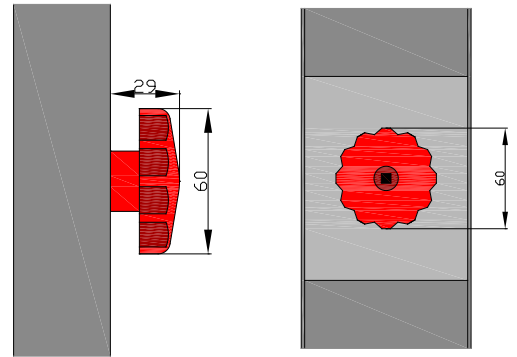


VCD with double mullion, width between 2400mm and 2900mm.



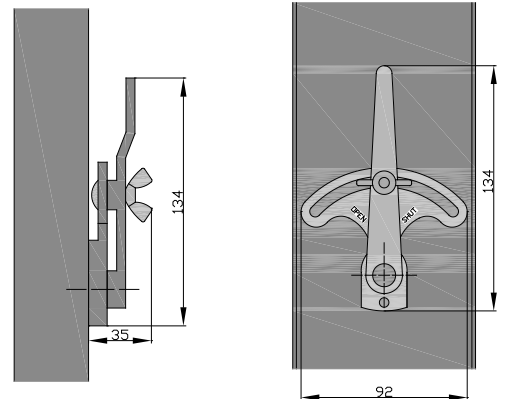
Injection moulded plastic handle:

This is the standard adjustment method fitted to HVC Volume control dampers. Consisting of an ergonomic plastic handle and integrated visual blade position indicator this operation does require access to the unit to enable adjustment. This method also enables the unit to be locked with a grub screw housed in the centre of the handle.



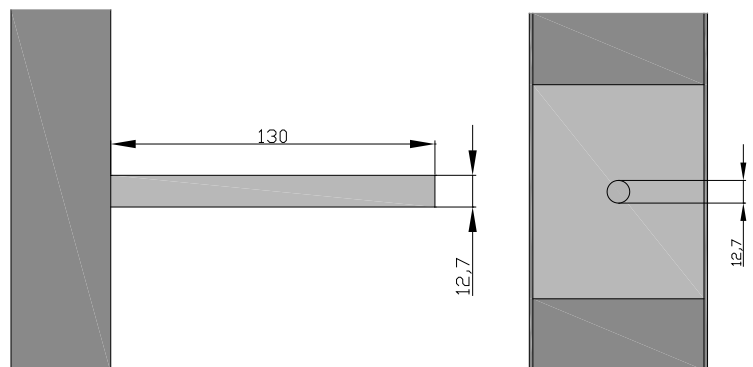
Aluminium locking quadrant:

For even easier adjustment a steel locking quadrant is available. Using the lever the damper blades can be adjusted easily. Just like the standard plastic handle, this method also incorporates a visual position indicator and locking mechanism.



Extended spindle:

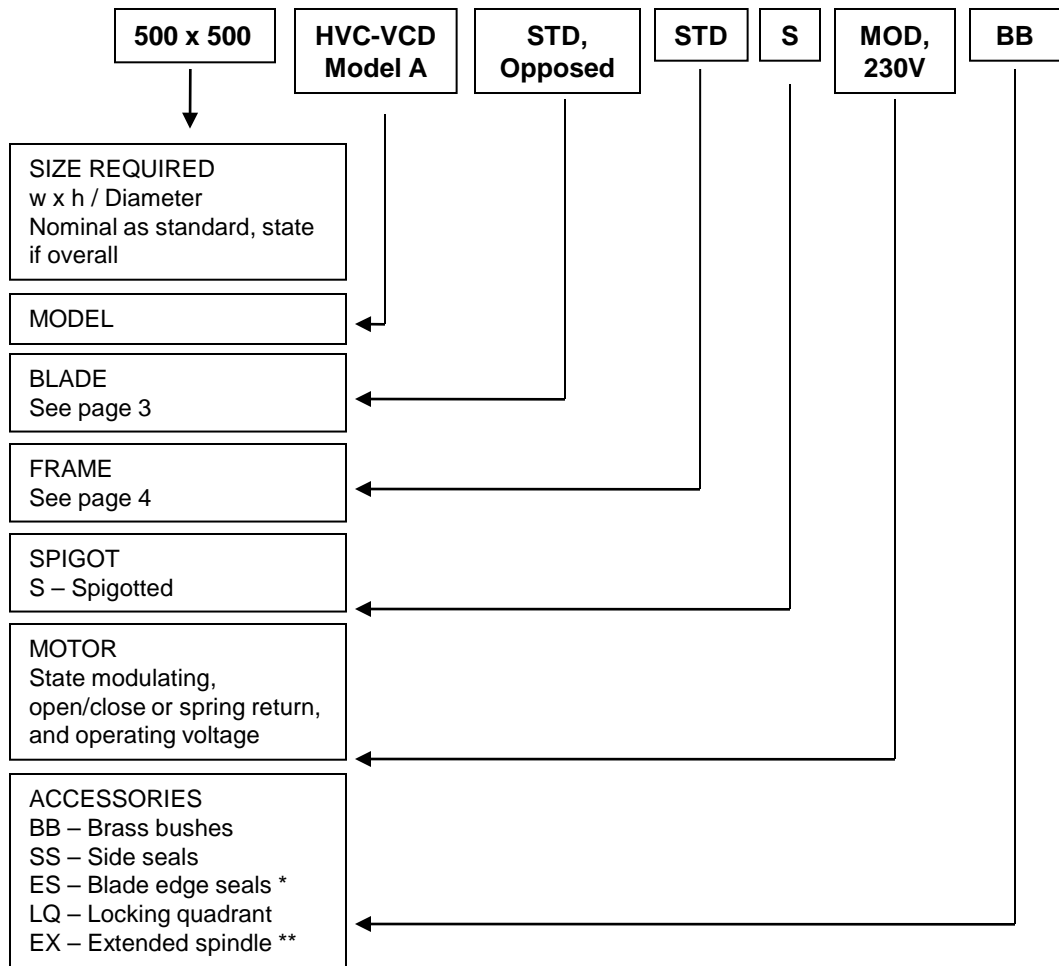
Should you wish to fit your own motor, VCDs can be supplied with an extended steel spindle. Held in place by a mounting plate as used with all control options, the spindle protrudes approximately 130mm from the damper body and 12.7mm diameter.



Actuators:

HVC can supply a wide range of both electrical and pneumatic actuators ready-fitted to your VCD. For specialised situations explosion proof motors suitable for volatile atmospheres like petrol stations and distilleries can also be supplied.

Ordering codes



* A unit specified with brass bushes cannot also have blade edge seals due to likely exposure to high temperatures. This also applies to plastic moulded handles which will be replaced with locking quadrants as standard.

** Should a motor be specified, extended spindles will be fitted as standard.

HVC Supplies (Stourbridge) Ltd reserves the right to alter, without notice, any specifications issued. Any alterations made will appear on www.h-v-c.com as soon as possible.

