

AirTech

HVAC Solutions

Better Air, Brighter Future

Air Control Devices

Volume Control Dampers



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Circular Volume Control Damper

ATVCD-R



GENERAL CHARACTERISTICS

The Volume control dampers of AirTech Model ATVCD-R series manufactured as per DW144/SMACNA standards are used in ducts at the connections between flexible ducts and in the inlets and outlets of air plenums to regulate air flow and pressure. The regulating blade is mounted on a pivot seated in GI housing. Frame is constructed from galvanized steel sheet with joints welded and protected.

SPECIFICATIONS

Frame :	0.80mm/1.0mm Thick Galvanized Metal
Bushings:	High quality nylon bushings
Connecting Rods:	10mm Galvanized Rod
Quadrant:	Galvanized sheet metal quadrant with hand locking device and blade position indicator

ATVCD-RF



CONSTRUCTION DETAILS

Frame is constructed from Galvanized sheets with joints welded and protected by coating of zinc rich aluminum paint. The Damper Blade is fixed on galvanized MS rod and can be rotated in vertical to open or closed position. The quadrant with blade position indication helps to position the blades accurately from outside. For complete air sealing at closed position high quality gaskets are provided.

These dampers are designed to be used in heating, ventilating and air conditioning systems.

The dampers are also available in Stainless steel construction on request.

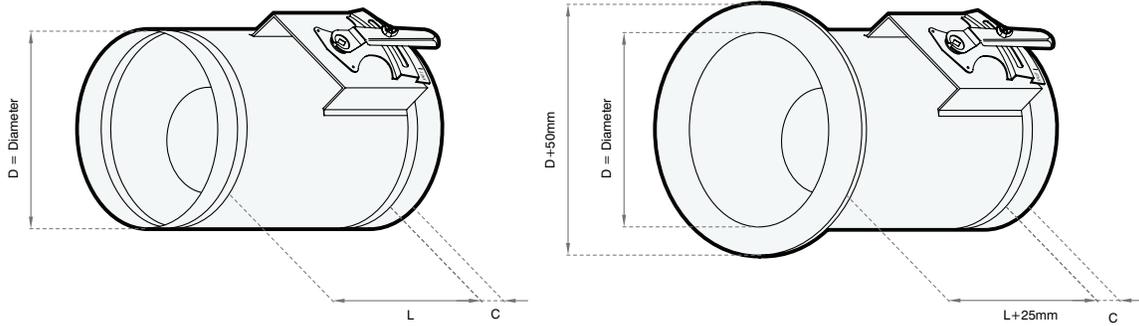
STANDARD SIZES IN DIAMETER

100mm	150mm	200mm	250mm	300mm	350mm
400mm	450mm	500mm	550mm	600mm	

Non-standard sizes are also available.

Circular Volume Control Damper

DIMENSIONS

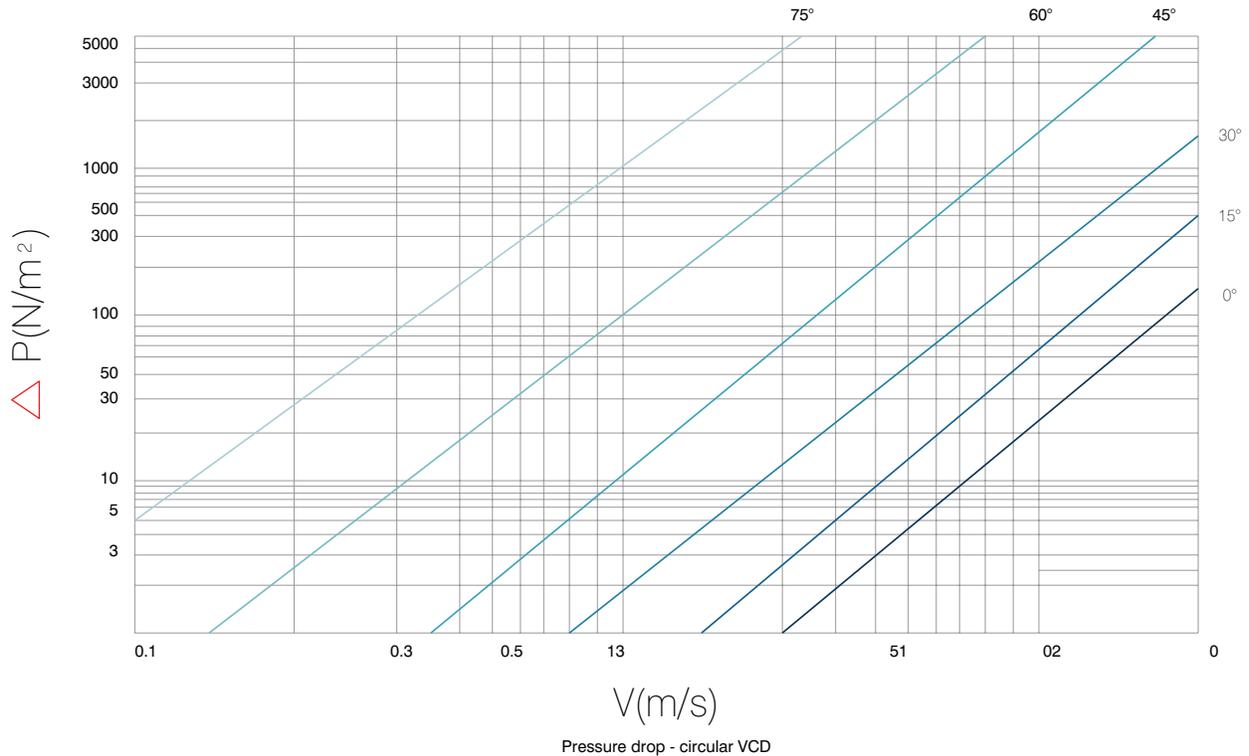


ATVCD-R

ATVCD-RF

Diameter (D)	Length (L)	C
Up to 150mm	200mm	25mm
Above 150mm	D + 50mm	

PRESSURE DROP/VELOCITY GRAPH



Square Volume Control Damper

GENERAL CHARACTERISTICS

The model ATVCD-SQ series control dampers or balancing dampers (CS/BS) are manufactured as per DW144/SMACNA standards. This series of dampers are used in HVAC ducting system to regulate air flow and pressure. Multiple regulating aerofoil blades are mounted in GI housing and are controlled through gears from one point. A unique control handle made out of high impact strength plastic with position indicator and locking screw is provided as standard option. All drive gears and spindles are of nylon to deliver years of fool-proof operation. All dampers are manufactured and inspected before dispatch as per the companies quality assurance and quality control procedures.

SPECIFICATIONS

Frame: 0.80mm /1.0mm Thick Galvanized Metal

Gears/spindles: High Quality Nylon

Blades: Extruded Aluminum Profiles (CS/BS)

Control knob: High impact resistant Plastic



MODEL: ATVCD-SQ-TYPE SF (CS/BS)

Connection Type: Rectangular / Square Flanges Connections

Mounting: Horizontal or Vertical

Air Velocity: Medium /Low subject to the position and size of product

Flange options: Two type of Flange options 25mm/35mm are available



MODEL: ATVCD-SQ-TYPE SS (CS/BS)

Connection Type: Rectangular / Square Spigot Connections

Mounting: Horizontal or Vertical

Air Velocity: Medium /Low subject to the position and size of product

Flange options: Add on Flange options of 25mm/35mm are available on request.

Square Volume Control Damper



MODEL: ATVCD-SQ-TYPE RS (CS/BS)

Connection Type: Spigot Connection - Circular

Mounting: Horizontal or Vertical

Air Velocity: Medium /Low subject to the position and size of product



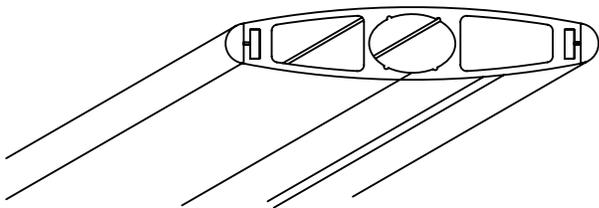
MODEL: ATVCD-SQ-TYPE OS (CS/BS)

Connection Type: Spigot Connection—Oval

Mounting: Horizontal or Vertical

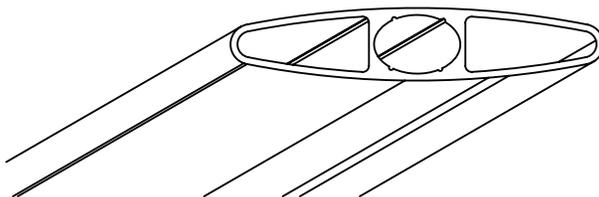
Air Velocity: Medium /Low subject to the position and size of product

DAMPER BLADE SPECIFICATIONS



CS TYPE

CS Type - These extruded aluminum aerofoil blades are generally used in CS series control dampers. The high quality bulb seals inserts on the aerofoil blades gives excellent volume control performance by virtually eliminating the possibilities of air leakage through blade gaps.



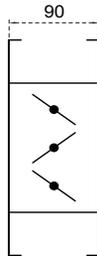
BS TYPE

BS Type - These extruded aluminum aerofoil blades are generally used in BS series balancing dampers. All other characteristics for BS type are the same except the bulb seals.

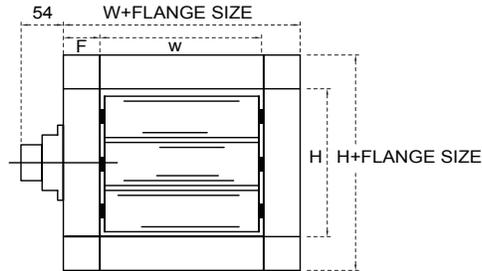
Square Volume Control Damper

RECTANGULAR - SQUARE FLANGE

MODEL: ATVCD-SQ-TYPE SF (CS/BS)

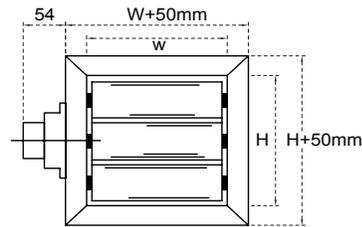
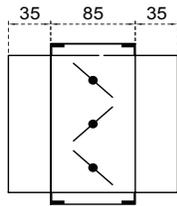


E
25mm
35mm



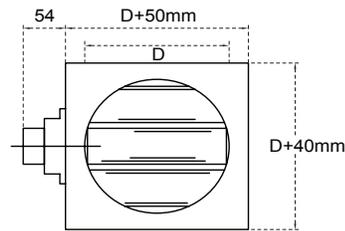
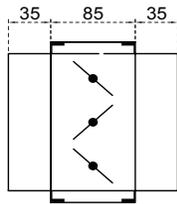
RECTANGULAR - SQUARE SPIGOT

MODEL: ATVCD-SQ-TYPE SS (CS/BS)



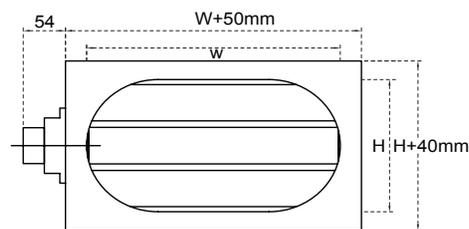
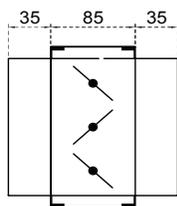
ROUND SPIGOT

MODEL: ATVCD-SQ-TYPE RS (CS/BS)



OVAL SPIGOT

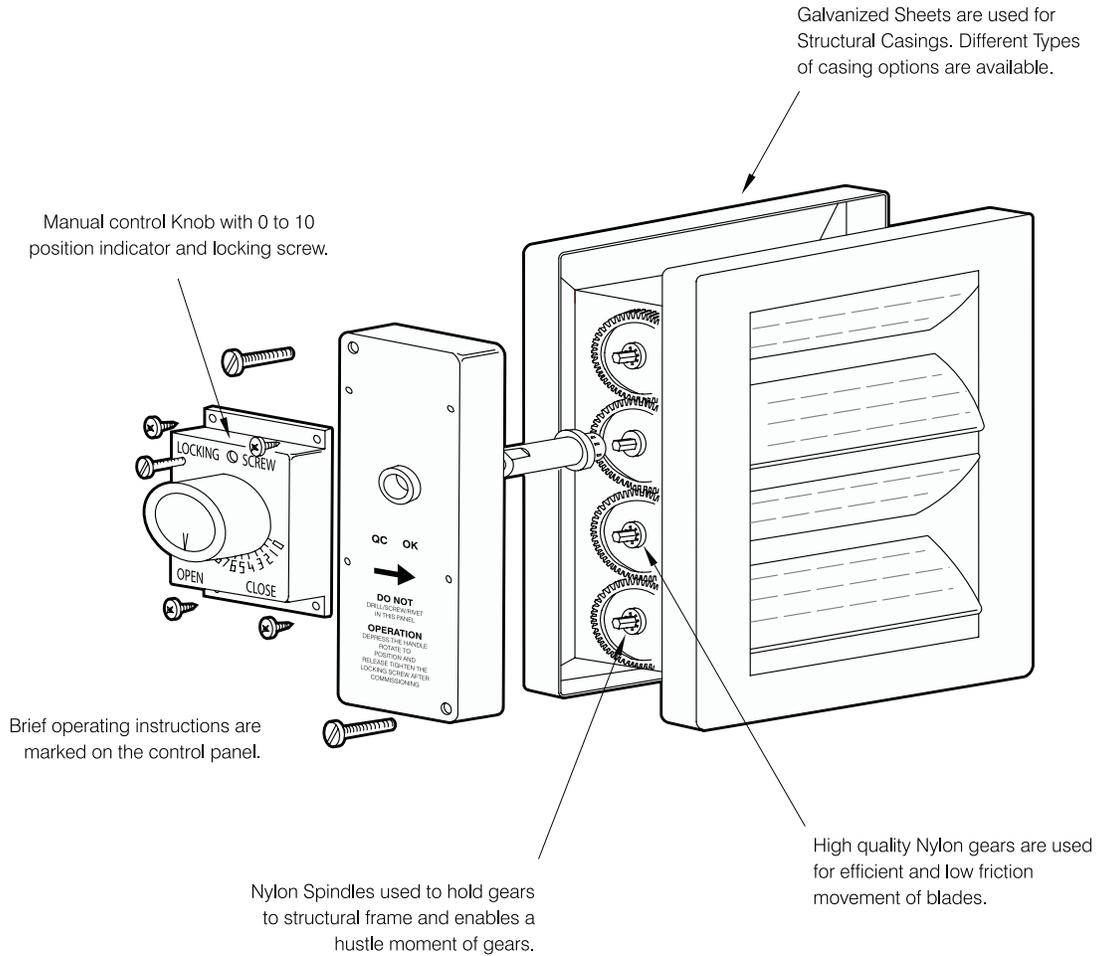
MODEL: ATVCD-SQ-TYPE OS (CS/BS)



- Notes :**
1. All dimensions are in Millimeters.
 2. Actual Spigot dimensions will be 3mm less than the listed size.
 3. Up to 1000mm width and height will be supplied as single unit and above 1000 in multiple units with one casing.
 4. For multiple units one actuator will be provided for each unit.

Square Volume Control Damper

OPERATIONAL MECHANISM

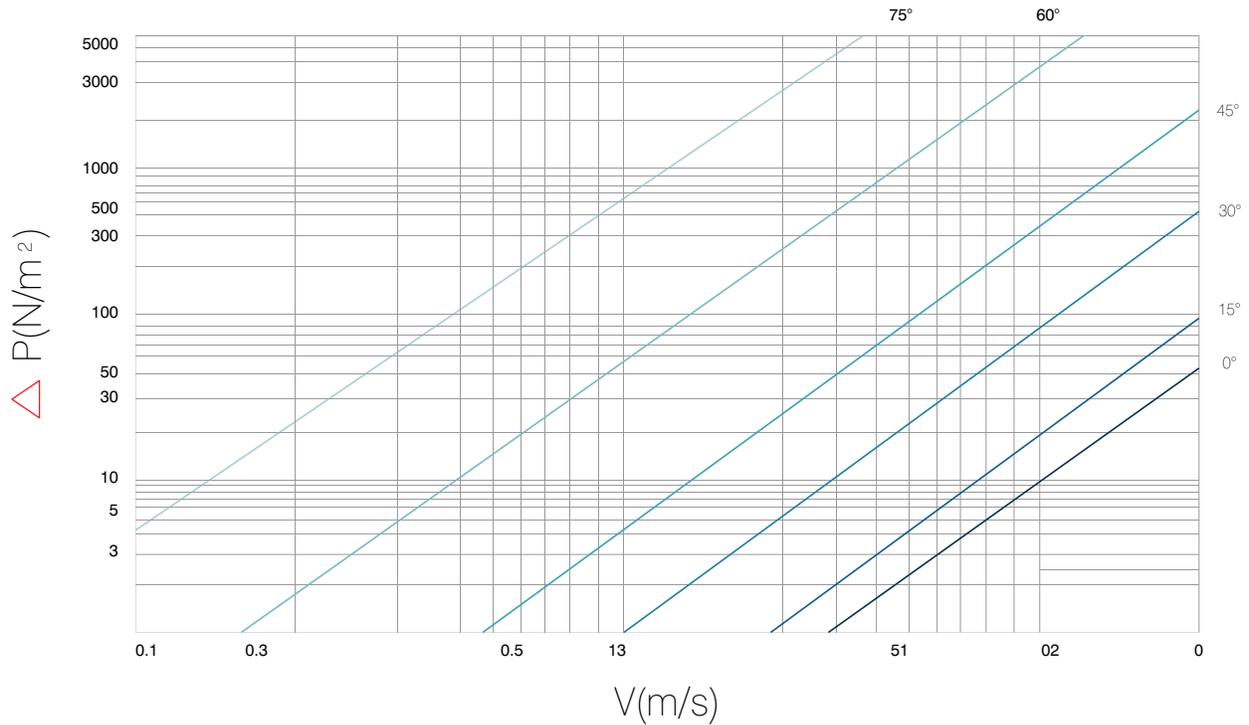


MATERIAL SPECIFICATIONS

Structural Casing	0.80mm/1.00mm thick galvanized Sheets ASTM 643 with G90 zinc coating.	Gears	Injection moulded Nylon
Aerofoil blades	MadeSSVss of 1.20mm either plain or bulb sealed.	Control Knob	Injection moulded high impact resistant plastic.
Bulb Seals	Extruded Synthetic Seal with 1.00mm wall thickness (applicable for CS type only)	Paints	Zinc rich aluminum paint for weld joints.
Spindle & Bush	Injection Moulded Nylon	Sealants	High quality Grey Silicone

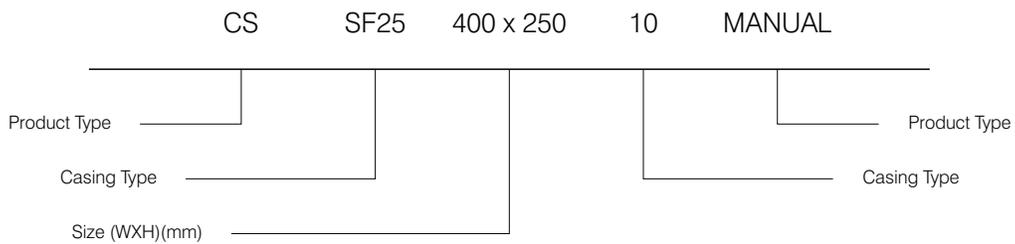
Square Volume Control Damper

PRESSURE DROP/VELOCITY GRAPH



Pressure drop - rectangular VCD aerofoil type blades

ORDERING SPECIFICATIONS



PRODUCT TYPE	CS	CONTROL DAMPER
	BS	BALANCING DAMPER
CASING TYPE	SF25	25MM SELF FLANGE
	SF35	35MM SELF FLANGE
	SS	RECTANGLE SQUARE SPIGOT ROUND SPIGOT
	RS	ROUND SPIGOT
	OS	OVAL SPIGOT

Contact

GENERAL ENQUIRIES

Phone 00973 - 17675599
Facsimile 00973 - 17675800

Email info@airtech.com.bh
Web www.airtech.com.bh

CUSTOMER SERVICE

Our success to date is as a direct result of combining a total commitment to customer service with expertise in all aspects of HVAC products and services.

When you choose highly engineered AirTech products for your HVAC needs, you gain an expert partner for the life of your system. From getting new copies of your product guides and manuals to reviewing the warranty, the experts at AirTech have made it easy to find the information you need. Plus, we're always available to answer your questions. In the HVAC industry, good customer service skills make all of the the difference.

For more information you can contact us at:
support@airtech.com.bh

TECHNICAL SERVICES

AirTech HVAC Technical Services can help, with system specification, preventive maintenance, component replacement and 24-hour service.

We are committed to helping you define your HVAC needs as they apply to our product line. We believe making the best products is only half the job; supplying our customers with technical support is the other half. Our Engineering Department is always ready to review your requirements, ensuring the solutions we recommend comply with current industry standards.

Please send your company's general specifications for HVAC to us via email, fax or surface mail. Our engineers will review the information and recommend complete solutions for your project.

To send us your specifications or for more information you can contact us at: technical@airtech.com.bh

LITERATURE & SAMPLES

We develop custom HVAC components and accessories and can fabricate ducts according to your specifications. For the latest AirTech Literature, Material and Product samples please contact us at: info@airtech.com.bh

DESIGN ADVISORY SERVICE

AirTech supports all of its products with a comprehensive Design Advisory Service for specifiers and contractors. Calculations can be carried out to provide heat losses / gains, condensation / dew point risk, required insulation thicknesses etc... Thereafter any number of permutations can be provided to help you achieve your desired targets.

AirTech can also give general application advice and advice on design detailing and fixing etc... Site surveys are also undertaken as appropriate.

For more information you can contact us at:
advisory@airtech.com.bh

SALES

AirTech offer engineered products, custom application designs, standard manufactured equipment, and materials from our new 7000SqM Manufacturing plant allotted by the Ministry of Industry and Finance and located in the Bahrain Industrial Investment Park in Hidd. We can satisfy all your Commercial HVAC sales requirements.

We accept purchase orders on open account (with approved credit), personal and business checks, International payments (Bank routing and wire transfers).

For information and quotes for your next project complete contact our Sales Manager at: sales@airtech.com.bh

LOGISTICS

Supplying quality products is important to us, but this is worthless if we can't get the products to you in a timely, safe manner.

Our warehouse team work hard to ensure goods are quality checked on arrival at our warehouse and that when you place an order your items are carefully packed to ensure transit damage is kept to a minimum.

Please contact our logistics department regarding our warehouse and distribution, we can arrange carriage and delivery worldwide:
logistics@airtech.com.bh

DISCLAIMER

AirTech reserves the right to amend product specifications without prior notice. The information, technical details and fixing instructions etc. included are given in good faith and apply to uses described. Recommendations for use should be verified as to the suitability and compliance with actual requirements, specifications and any applicable laws and regulations. For other applications or conditions of use, AirTech W.L.L offers a Design Advisory Service the advice of which should be sought for uses of AirTech W.L.L products that are not specifically described herein.

Please check that your copy of the literature is current by contacting AirTech WLL.

SPECIFICATION COMPLIANCE

All AirTech's products comply with the following:

DW 144, Class B
SMACNA leakage, Class 6



ISO 9001:2008 CERT NO.:682592