

VENTILO VCD 100 SERIES

VOLUME CONTROL DAMPER

Model: GV 151 G-G-F - Single Skin Blade (Flange type)
Model: GV 152 G-G-F - Double Skin Blade (Flange type)

Description

High quality single and multi blade Volume Control Dampers are designed for quiet, efficient and reliable air volume control in ventilation systems. **VENTILO** GV151 Damper allows even distribution and control of airflow under conditions of high duct pressures.

The frame is a robust weld assembly of formed channels. Special Frame & Blade construction is undertaken for various types of site applications, light, medium and heavy duty. Blade action is standard as parallel but can be supplied as opposed action. Blades are fitted with blade tip seals to ensure for minimum air leakage for a standard construction.

For low leakage (less than 1%), as per international standards DW142 Class, Stainless Steel jamb seals are provided between blade and frame. This is optional. All Dampers are silicone sealed and manufactured as per international standards conforming to NFPA 90 A for erosion.



Standard Construction

Frame

- 1.2 mm thick (18G) GI sheet, coating class Z-275
- Frame is a welded construction, in flange shape, undrilled, Mill finish standard supply.

Blade

- Single skin: 1.2mm thick (18G) in 3'V' shape,
- Double skin: 1mm thick (20G) GI sheet, 2 blades joined to form one aerofoil blade equivalent to 14G.

Bearings

- Nylon bush/Brass bush as standard.

Axles

- Blades are coupled with frame by means of Zinc plated spindles - 12 mm diameter.
- Spindles are either welded or riveted.

Drive Shaft

12mm diameter zinc plated mild steel.

Linkage

- 3mm x 12mm zinc plated steel flat
- Concealed linkage on one side
- 250 mm is maximum with blade

Quadrant

- For manual operation, locking type quadrant made of GI with "full open" and "full shut" markings.
- Quadrant handle and drive shaft are coupled to allow opening/closing of VCD at any position.

Gasket

- Black foam gasket at the blade tips to prevent air leakage in "shut off" position.

Size

- Minimum size - 100mm x 100mm
- Maximum - 1000mm x 1000mm
- Damper up to 250mm high are single blade construction.
- Bigger sizes can be supplied as Multiple sections.
- Also available in motorized version.

Also available

Model GV 152 G-AL-F: Construction same as above blades are AL aerofoil shape.

Model GV151 G-S-F/GV 152 G-S-F: Construction same as above blades are SS.

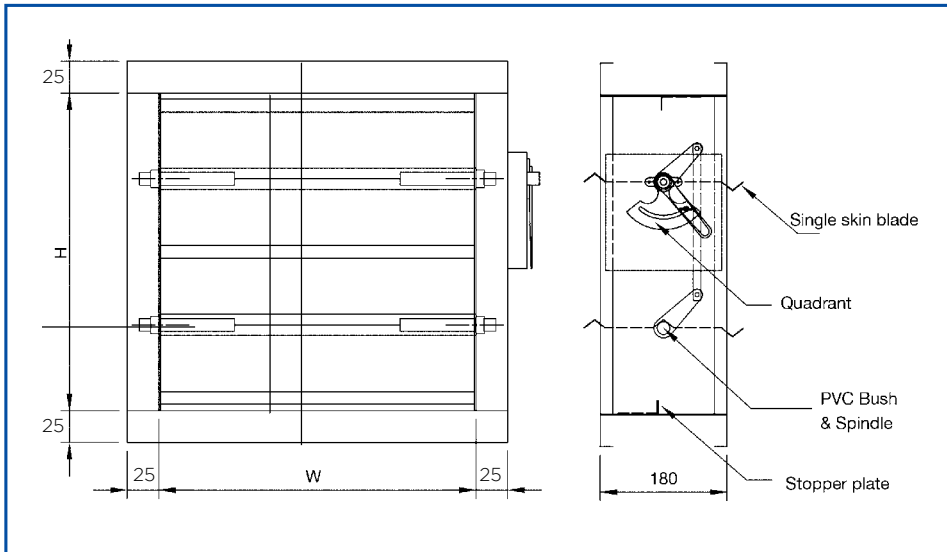
Model GV151 S-S-F/GV 152 S-S-F: Construction same as above Frame, Blades, Shafts are SS.

See overleaf for product sketches.

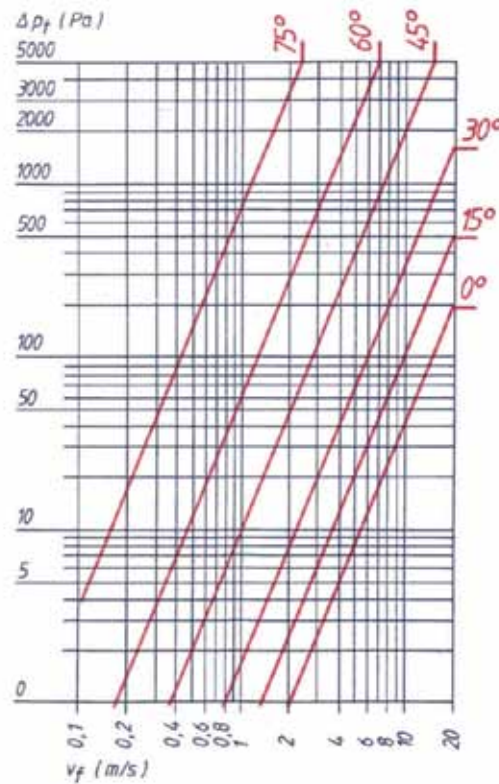
VENTILO VCD 100 SERIES

VOLUME CONTROL DAMPER

DIMENSIONS (mm)



GV 150, PRESSURE LOSS



PRESSURE DROP

For sizes, please contact Geo Global Sales Team.

VENTILO VCD 100 SERIES

VOLUME CONTROL DAMPER

Model: GV 151 G-G-SL - Single Skin Blade (Sleeve type)
Model: GV 152 G-G-SL- Double Skin Blade (Sleeve type)

Description

High quality single and multi blade Volume Control Dampers are designed for quiet, efficient and reliable air volume control in ventilation systems. **VENTILO** GV151 Damper allows even distribution and control of airflow under conditions of high duct pressures.

The frame is a robust weld assembly of formed channels. Special Frame & Blade construction is undertaken for various types of site applications, light, medium and heavy duty. Blade action is standard as parallel but can be supplied as opposed action. Blades are fitted with blade tip seals to ensure for minimum air leakage for a standard construction.

For low leakage (less than 1%), as per international standards DW142 Class, Stainless Steel jamb seals are provided between blade and frame. This is optional. All Dampers are silicone sealed and manufactured as per international standards conforming to NFPA 90 A for erosion.



Standard Construction

Frame

- 1.2 mm thick (18G) GI sheet, coating class Z-275
- Frame is a welded construction, in flange shape, undrilled, Mill finish standard supply.

Blade

- Single skin: 1.2mm thick (18G) in 3'V' shape,
- Double skin: 1mm thick (20G) GI sheet, 2 blades joined to form one aerofoil blade equivalent to 14G.

Bearings

- Nylon bush/Brass bush as standard.

Axles

- Blades are coupled with frame by means of Zinc plated spindles - 12 mm diameter.
- Spindles are either welded or riveted.

Drive Shaft

12mm diameter zinc plated mild steel.

Linkage

- 3mm x 12mm zinc plated steel flat
- Concealed linkage on one side
- 250 mm is maximum with blade

Quadrant

- For manual operation, locking type quadrant made of GI with "full open" and "full shut" markings.
- Quadrant handle and drive shaft are coupled to allow opening/closing of VCD at any position.

Gasket

- Black foam gasket at the blade tips to prevent air leakage in "shut off" position.

Size

- Minimum size - 100mm x 100mm
- Maximum - 1000mm x 1000mm
- Damper up to 250mm high are single blade construction.
- Bigger sizes can be supplied as Multiple sections.
- Also available in motorized version.

Also available

Model GV 152 G-AL-SL: Construction same as above blades are AL aerofoil shape.

Model GV151 G-S-SL/GV 152 G-S-SL: Construction same as above blades are SS.

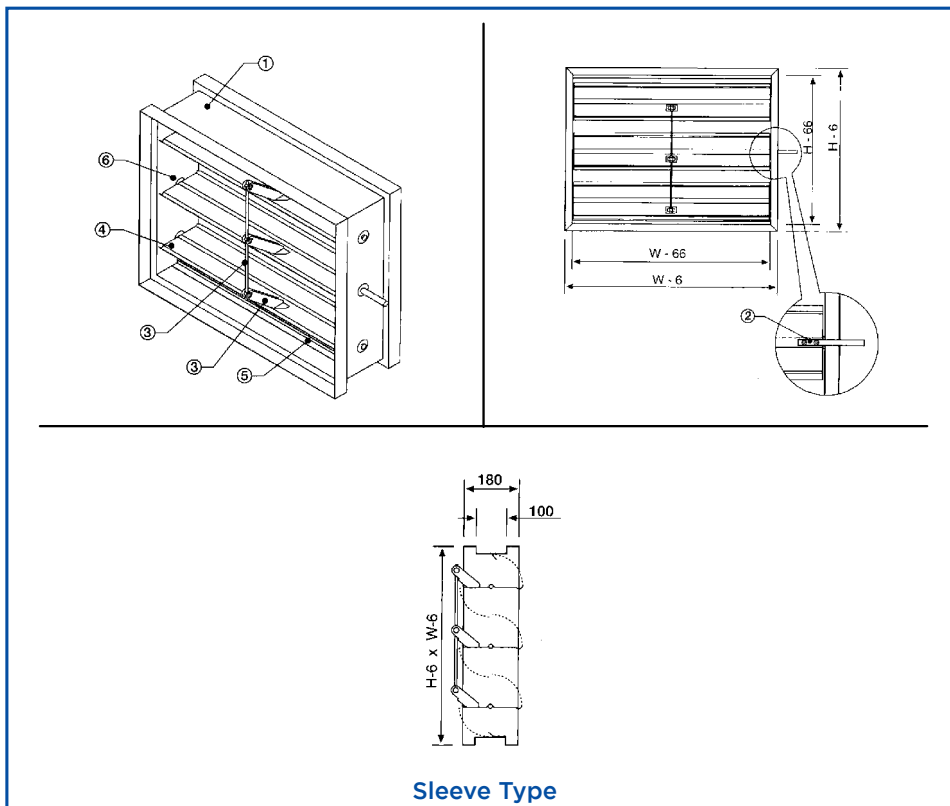
Model GV151 S-S-SL/GV 152 S-S-SL: Construction same as above Frame, Blades, Shafts are SS.

See overleaf for product sketches.

VENTILO VCD 100 SERIES

VOLUME CONTROL DAMPER

DIMENSIONS (mm)



SIZES (mm)

W (in mm)	H (in mm)	Number of Blades
100	100	1
150	150	1
200	200	1
250	250	1
300	300	2
350	350	2
400	400	2
450	450	2
500	500	2
550	600	3
600	700	4
650	800	4
700	900	5
750	1000	6
800	1100	6
850	1200	7
900	1300	8
950	1400	8
1000	1500	9
1050	1600	10
1100	1700	11
1200	1800	12

For other sizes, please contact Geo Global Sales Team.

VENTILO VCD 100 SERIES

VOLUME CONTROL DAMPER

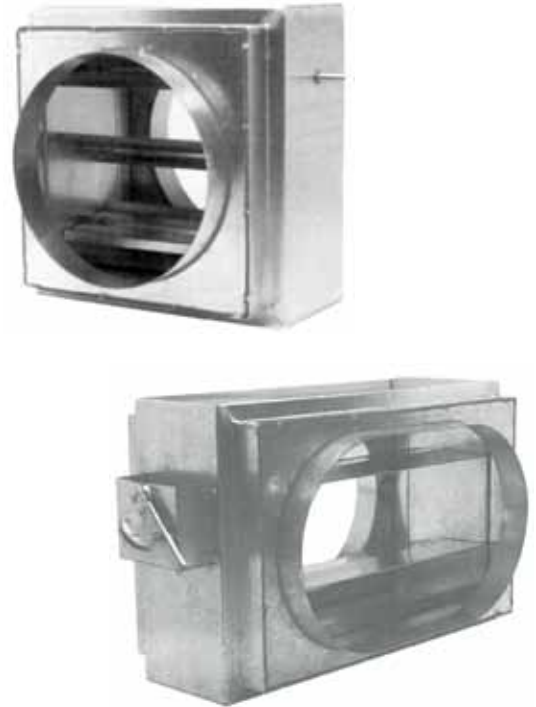
Model: GV 151 G-G-C/OV - Single Skin Blade
Model: GV 152 G-G-C/OV - Double Skin Blade

Description

High quality single and multi blade Volume Control Dampers are designed for quiet, efficient and reliable air volume control in ventilation systems. **VENTILO** GV151 Damper allows even distribution and control of airflow under conditions of high duct pressures.

The frame is a robust weld assembly of formed channels. Special Frame & Blade construction is undertaken for various types of site applications, light, medium and heavy duty. Blade action is standard as parallel but can be supplied as opposed action. Blades are fitted with blade tip seals to ensure for minimum air leakage for a standard construction.

For low leakage (less than 1%), as per international standards DW142 Class, Stainless Steel jamb seals are provided between blade and frame. This is optional. All Dampers are silicone sealed and manufactured as per international standards conforming to NFPA 90 A for erosion.



Standard Construction

Frame

- 1.2 mm thick (18G) GI sheet, coating class Z-275
- Frame is a welded construction, in flange shape, undrilled, Mill finish standard supply.

Blade

- Single skin: 1.2mm thick (18G) in 3'V' shape,
- Double skin: 1mm thick (20G) GI sheet, 2 blades joined to form one aerofoil blade equivalent to 14G.

Bearings

- Brass bush as standard.

Axles

- Blades are coupled with frame by means of Zinc plated spindles - 12 mm diameter.
- Spindles are either welded or riveted.

Drive Shaft

12mm diameter zinc plated mild steel.

Linkage

- 3mm x 12mm zinc plated steel flat
- Concealed linkage on one side
- 250 mm is maximum with blade

Quadrant

- For manual operation, locking type quadrant made of GI with "full open" and "full shut" markings.
- Quadrant handle and drive shaft are coupled to allow opening/closing of VCD at any position.

Gasket

- Black foam gasket at the blade tips to prevent air leakage in "shut off" position.

Size

- Minimum size - 100mm x 100mm
- Maximum - 1000mm x 1000mm
- Damper up to 250mm high are single blade construction.
- Bigger sizes can be supplied as Multiple sections.

Also available

Model GV 152 G-AL-C/OV: Construction same as above blades are AL aerofoil shape.

Model GV151 G-S-C/OV-GV 152 G-C/OV: Construction same as above blades are SS.

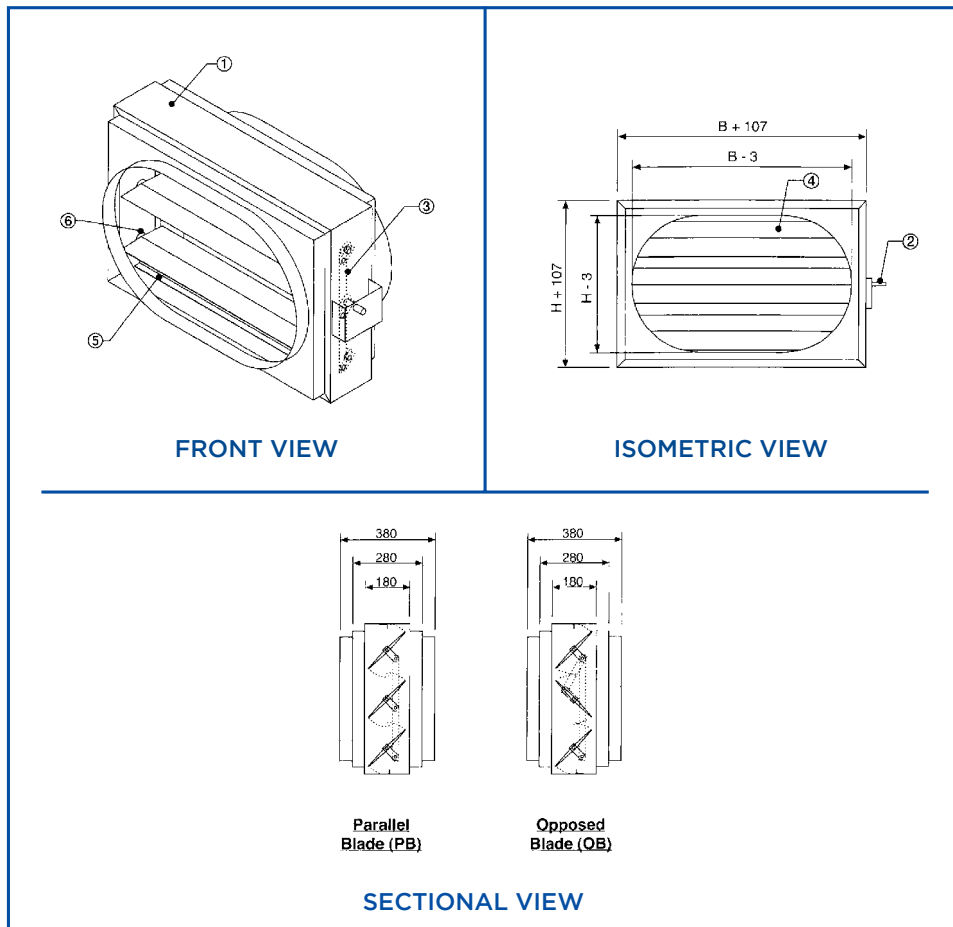
Model GV151 S-S-C/OV-GV 152 S-C/OV: Construction same as above Frame, Blades, Shafts are SS.

See overleaf for product sketches.

VENTILO VCD 100 SERIES

VOLUME CONTROL DAMPER

DIMENSIONS (mm)



SIZES (mm)

W (in mm)	H (in mm)	Number of Blades
150	150	1
200	200	1
250	250	1
300	300	2
350	450	3
400	600	4
450	750	5
500	900	6
550	1050	7
600	1200	8
650	1350	9
700	1500	10
750	1650	11
800	1800	12
850		
900		
950		
1000		
1100		
1150		
1200		

For other sizes, please contact Geo Global Sales Team.

VENTILO VCD 100 SERIES

ROUND VOLUME CONTROL DAMPER

Model: GV 155 G-G-R - Single Skin Blade

Description

High quality single blade Round Volume Control Dampers are designed for quiet, efficient and reliable operation.

Ventilo GV 155 Round Damper allows even distribution and control of airflow under conditions of high duct pressures. The round casing is manufactured by rolling suitable size GI steel sheet and swaging at both ends to accommodate ductwork connections.

The blades are single skin cut to round shape, reinforced at center to accommodate spindle assembly and provide toughness. Blades are fitted with tip seals to ensure for minimum air leakage for a standard construction.

Dampers can be manual with locking quadrant and position indicator or motorized with a wide range of electrical actuators.



Standard Construction

Casing

- Rolled casing 22G (for sizes upto diameter 350mm) and 20G (for sizes more than 350mm diameter) from GI steel sheet coating Z-22 to Z-27.
- Frame is a spot weld construction with swaging at both ends to suit ductwork connections.

Blade

- High quality, single skin blades, GI steel sheet, 1.2mm (18G) thick, for diameters 80mm to 500mm and 2mm (14G) thick, for diameters above 500mm.
- Optional : Damper with AIRTIGHT blade or Perforated GI steel sheet blade.

Bearings

- Brass bush as standard.
- Sintered Bronze oil impregnated bushes are optional.

Drive Shaft

- 12mm diameter zinc plated mild steel.

Axles

- Blades are coupled with frame by means of Zinc plated spindles - 12 mm diameter.
- Spindles are either welded or riveted as per specification.

Quadrant

- For manual operation, locking type quadrant made of galvanized steel with "full open" and "full shut" markings.

Gasket

- Black foam gasket at the blade tips to prevent air leakage in "shut off" position.

Size

- Minimum size - 80mm diameter
- Maximum - 600mm diameter
- Damper up to 600mm diameter are single blade construction.

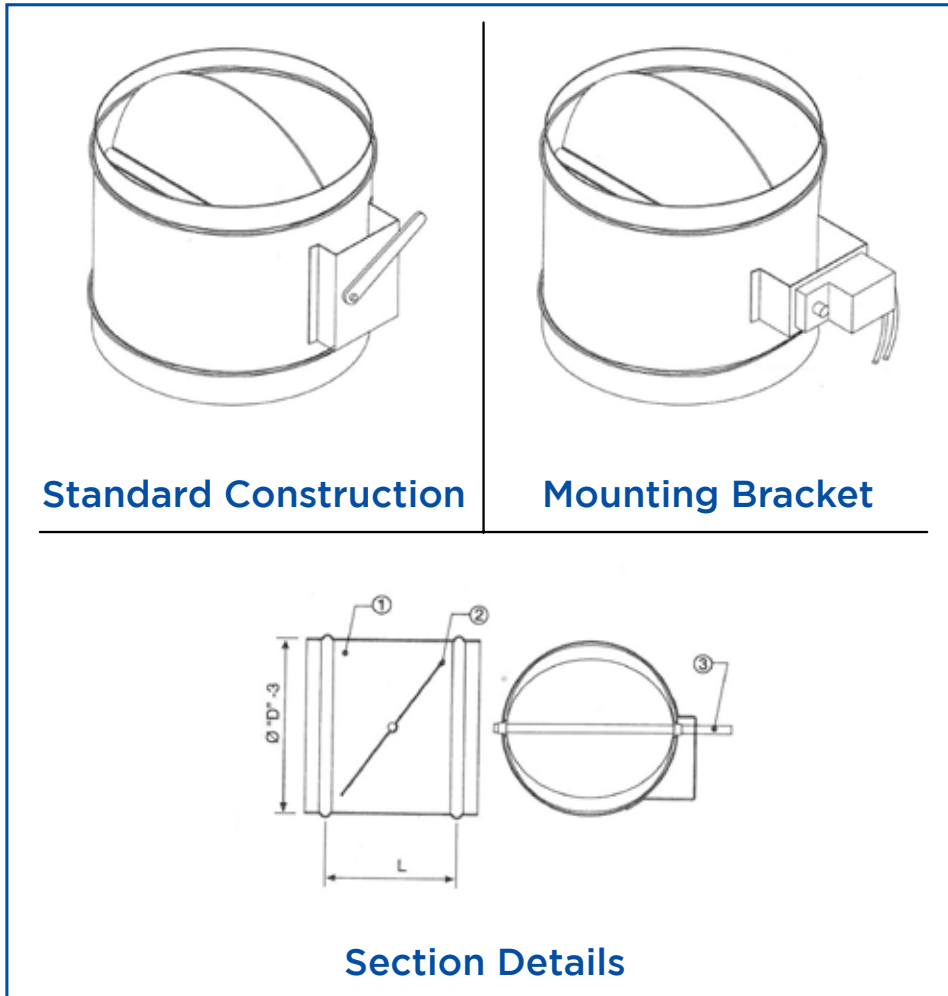
Also available

Model GV155 G-S-R: General construction same as above but blades are SS.

Model GV155 S-S-R: General construction same as above but Frame, Blades, Shafts are SS.

See overleaf for product sketches.

DIMENSIONS (mm)



SIZES (mm)

Dia (mm)	Dia (mm)
80	305
100	315
125	350
140	400
150	450
160	500
180	550
200	600
224	610
250	
280	

For other sizes, please contact Geo Global Sales Team.

VENTILO VCD 100 SERIES

VOLUME CONTROL DAMPER

Model: GV 161 G-G-SC (Single skin, Slip and Clip type)
Model: GV 162 G-G-SC (double skin blade, Slip and Clip type)

Description

The S&C series multi-leaf volume control damper have been specially designed for installation in systems where medium/low velocity and pressure are experienced.

These dampers are generally used on air condition ducts with S&C cleats in view of their sustainability. In some cases these dampers are designed plain box type to allow easy jointing with ducts.



Standard Construction

Frame

- Frame is manufactured in plain sleeve form with 1.2mm (18G) GI steel sheet, coating Z-22 to Z-27.
- Frame is a spot welded construction.

Blade

- High quality, Aerofoil shape blades formed by joining two blades each 1mm (20G) thick GI steel
- Aluminium Aerofoil extruded profile blades are standard supply.

Bearings

- Brass bush in round shape is standard supply.

Axles

- Blades are coupled with frame by means of Zinc plated spindles - 12 mm diameter.
- Spindles are either welded or riveted as per specification.

Drive Shaft

- 12mm round shaft zinc plated mild steel.

Linkage

- 3mm x 12mm zinc plated rolled steel bar linkage for blades operation.
- Linkage is external and on one side, concealed as standard supply.

Quadrant

- For manual operation, locking type Quadrant made of GI with markings.
- Quadrant handle and drive jack-shaft are coupled to allow opening/closing of VCD at any suitable position.

Size

- Minimum size - 100mm x 100mm
- Maximum - 500mm x 500mm, single section.

Paint

- Aluminium Primer is applied for all welds and ground surfaces.

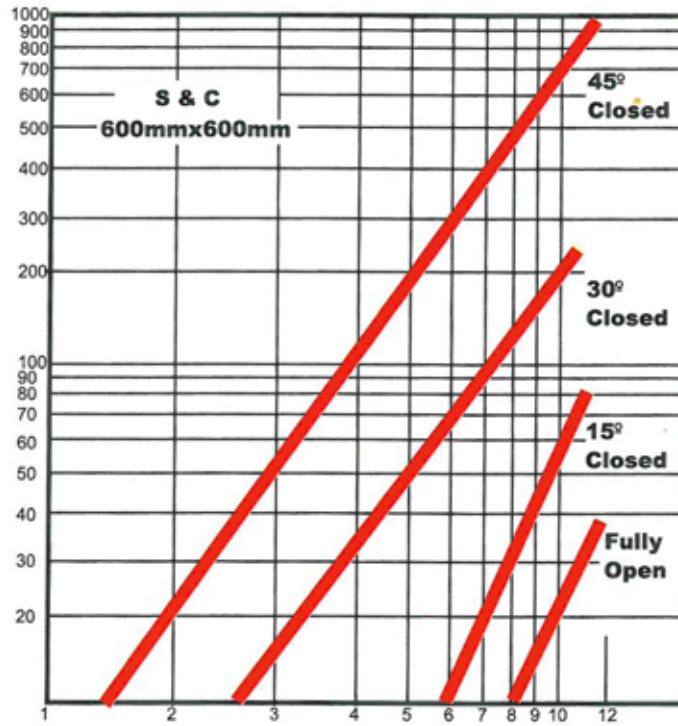
Also available

Model GV162 G-AL-SC: General construction same as above except extruded Aluminium aerofoil shape blades, Nylon square bushes, spindle and shaft size 12mm square.

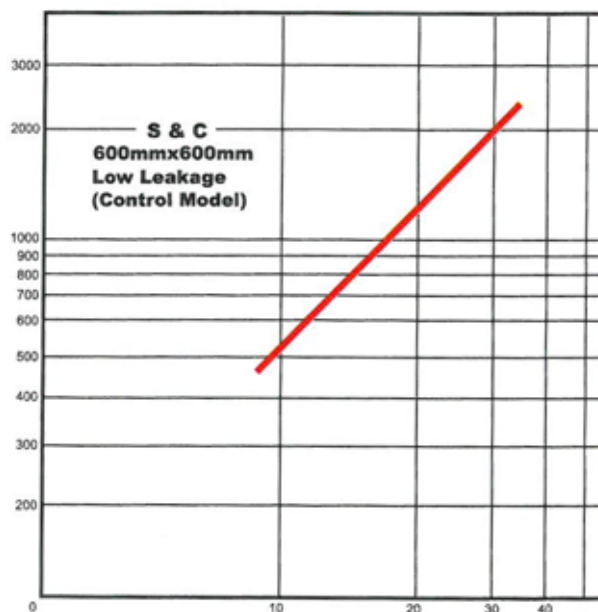
Model GV162 G-S-SC: General construction same as above except blades are SS.

See overleaf for product sketches.

PRESSURE LOSS



LEAKAGE



VENTILO VCD 100 SERIES

VOLUME CONTROL DAMPER

Model: GV 171 G-G-SP (Single skin, Plain type)
Model: GV 172 G-G-SP (double skin blade, Plain type)

Description

The S&C series multi-leaf volume control damper have been specially designed for installation in systems where medium/low velocity and pressure are experienced.

These dampers are generally used on air condition ducts with S&C cleats in view of their sustainability. In some cases these dampers are designed plain box type to allow easy jointing with ducts.



Standard Construction

Frame

- Frame is manufactured in plain sleeve form with 1.2mm (18G) GI steel sheet, coating Z-22 to Z-27.
- Frame is a spot welded construction.

Blade

- High quality, Aerofoil shape blades formed by joining two blades each 1mm (20G) thick GI steel
- Aluminium Aerofoil extruded profile blades are standard supply.

Bearings

- Brass bush in round shape is standard supply.

Axles

- Blades are coupled with frame by means of Zinc plated spindles - 12 mm diameter.
- Spindles are either welded or riveted as per specification.

Drive Shaft

- 12mm round shaft zinc plated mild steel.

Linkage

- 3mm x 12mm zinc plated rolled steel bar linkage for blades operation.
- Linkage is external and on one side, concealed as standard supply.

Quadrant

- For manual operation, locking type Quadrant made of GI with markings.
- Quadrant handle and drive jack-shaft are coupled to allow opening/closing of VCD at any suitable position.

Size

- Minimum size - 100mm x 100mm
- Maximum - 500mm x 500mm, single section.

Paint

- Aluminium Primer is applied for all welds and ground surfaces.

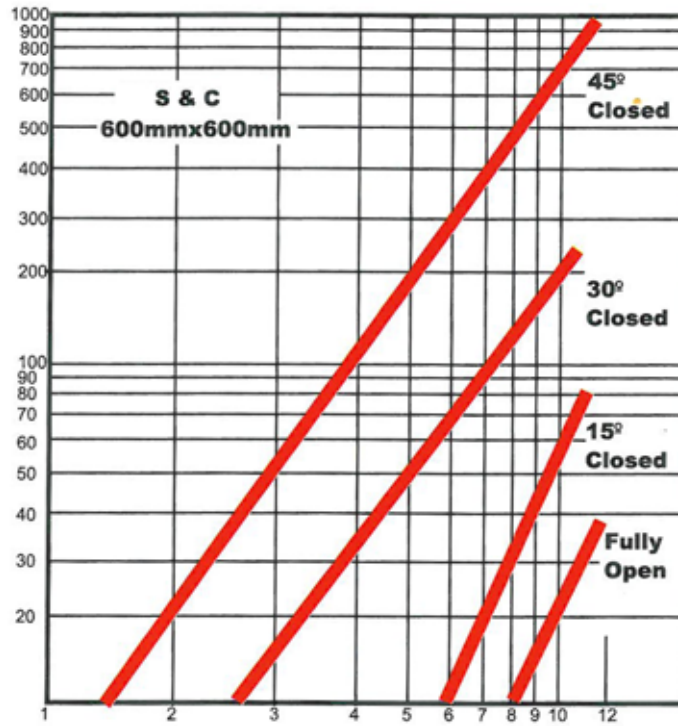
Also available

Model GV172 G-AL-SP: General construction same as above but blades are Aluminium aerofoil shape.

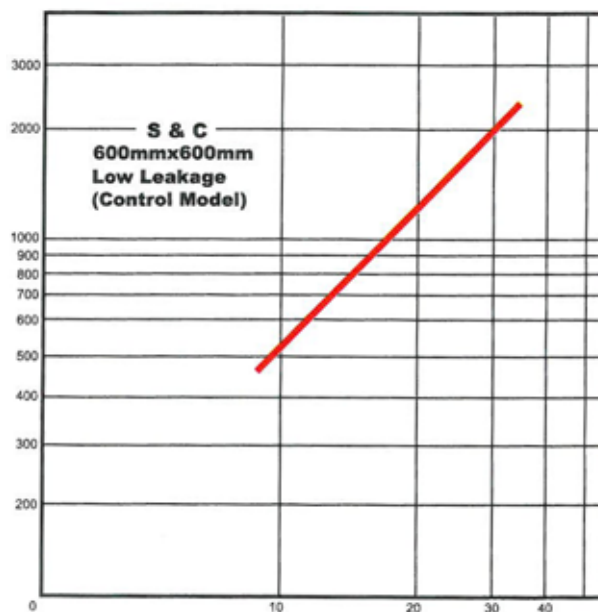
Model GV172 G-S-SP: General construction same as above but Blades are SS.

See overleaf for product sketches.

PRESSURE LOSS



LEAKAGE



Model: GV 180 NRD

Description

VENTILO Non Return Dampers are designed for automatic shut off of individual sections of the air conditioning system. With the fan running, the degree of blade opening is a function of air velocity. If the fan is turned off, the blade will close automatically. In a multi fan installation this prevents back draught through non operating fan.

VENTILO NRD type model are also called Self Closing Dampers or Gravity Dampers or Pressure Relief Dampers. The blades are smooth, reliable and designed for energy saving. These are air operated, opening or closing dampers for intake, discharge and pressure relief vents in air conditioning systems. Designed to maintain a constant air pressure level inside pressurized rooms.



Construction

- Smooth and maintenance free blade operation.
- The frame is manufactured from high quality aluminium/SS/GI sheet steel of 18 gauge thickness.
- Blades are made of 0.5 / 0.7 mm thick GI/ AL sheet and supported by MS rod diameter 6mm.
- Blades are fitted with nylon bushes for rattle free and smooth operation.

- Blades are sealed with foam / rubber gasket at the bottom edge to avoid rattling noise and provide air tight operation.
- Frame is fitted with aluminium/GI stopper to prevent the over movement of blades.
- Additional centre partition shall be provided if height or length is more than 900mm

Standard Models

VENTILO NRD IW: internal wall mounted

VENTILO NRD RD: round duct mounted

VENTILO NRD SD: rectangular duct mounted

VENTILO NRD EW: external wall mounted

See overleaf for product sketches.

DIMENSIONS (mm)

