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VOLUME CONTROL DAMPERS



FLOWTECH VOLUME CONTROL DAMPER MODELS

Flange Type

GA -VCD Flange type Galvanized steel frame with aluminum blade and hand-operated quadrant

GG -VCD Flange type Galvanized steel frame with Galvanized steel blade and hand-operated quadrant

GAM -VCD Flange type Galvanized steel frame with Aluminum blade and control electric motor

Application: Generally used for application in GI ducts and pre-insulated ducts.



Box Type

GAB -VCD Box type Galvanized steel frame with aluminum blade and hand-operated quadrant

Application: Generally used for application in GI ducts and pre-insulated ducts. Sizes are limited to 600mm (width) x 400mm (height) only



Slip & Clip Type

GAS -VCD Slip & Clip type Galvanized steel frame with aluminum blade and hand-operated quadrant

GGs -VCD Slip & Clip type Galvanized steel frame with Galvanized steel blade and hand-operated quadrant

Application: Generally used for majority applications in GI ducts. Sizes are limited to 600mm (width) x 400mm (height) only



Pre-Insulated Type

PA -VCD Pal Sandwich panel frame with aluminum blade and hand-operated quadrant

PAM -VCD Pal Sandwich panel frame with aluminum blade and control electric motor

Application: Generally used for majority applications in pre-insulated ducts



Round Type

GGR -VCD Round type Galvanized steel frame with Galvanized blade and hand-operated quadrant

Application: Generally used for applications in GI ducts and pre-insulated ducts. Sizes are limited to 400mm diameter

Flange Type - GA - VCD



Material Specifications

Casing

1.2mm thickness (18 gauge) GI sheet

Blades

Airfoil blades made of 1.1mm thick Aluminum extruded

Bushes

PVC bushes 12mm x 12mm sq w/ drive

Linkage

Linkages are made of 3mm thick Galvanized steel

Handle

Handle is made of 1.2mm thick (18 gauge) Galvanized steel with integral rotation slot indicating blade open & close position

Spindle

Spindles are made of 12mm x 12mm square Galvanized steel

Operating Temperature

-10°C to 110°C as standard

Application

The Flange Type Volume Control Damper has been specially designed for installation in system where high/medium/low pressure are experienced. These dampers are designed to operate from one control point. The damper's blade opening is controlled by hand locking quadrant.

Dimensions of Dampers

Minimum size of 100mm (width) x 100mm (height) and maximum size of 2000mm (width) x 2000mm (height)

Standard size of the flange is 20mm

Standard length is 170mm



Flange Type - GG - VCD

Application

The Flange Type Volume Control Damper has been specially designed for installation in system where high/medium/low pressure are experienced. These dampers are designed to operate from one control point. The damper's blade opening is controlled by hand locking quadrant.

Dimensions of Dampers

Minimum size of 100mm (width) x 100mm (height) and maximum size of 2000mm (width) x 2000mm (height)

Standard size of the flange is 20mm

Standard length is 170mm



Material Specifications

- Casing
1.2mm thickness (18 gauge) GI sheet
- Blades
Blades made of 0.9mm thickness (21 gauge) GI sheet
- Bushes
PVC bushes 12mm x 12mm sq w/ drive
- Linkage
Linkages are made of 3mm thick Galvanized steel
- Handle
Handle is made of 1.2mm thick (18 gauge) Galvanized steel with integral rotation slot indicating blade open & close position
- Spindle
Spindles are made of 12mm x 12mm square Galvanized steel
- Operating Temperature
-10°C to 110°C as standard

Flange Type - GAM - VCD

Application

The Flange Type Volume Control Damper has been specially designed for installation in system where high/medium/low pressure are experienced. These dampers are designed to operate from one control point. The damper's blade opening is controlled by electric motor.

Dimensions of Dampers

Minimum size of 100mm (width) x 100mm (height) and maximum size of 2000mm (width) x 2000mm (height)

Standard size of the flange is 20mm

Standard length is 170mm



Material Specifications

Casing
1.2mm thickness (18 gauge) GI sheet

Blades
Airfoil Blades made of 1.1mm thick aluminum extruded

Bushes
Brass bush with 12mm diameter

Linkage
Linkages are made of 3mm thick Galvanized steel

Spindle
Spindles are made of 12mm x 12mm square Galvanized steel

Operating Temperature
-10°C to 110°C as standard

Selection of Motors

Motors are selected by torque requirement and application type in relation to the size of the damper.

Size of Damper (mm)	Torque of Motor (Nm)	Type of Motor
From 100 x 100 to 500 x 500	5	On/Off or Modulating
From 550 x 550 to 1000 x 1000	10	On/Off or Modulating
From 1050 x 2000 to 1050 x 2000	20	On/Off or Modulating

Box Type - GAB - VCD

Application

The Box Type Volume Control Damper has been specially designed for installation in system where medium/low pressure are experienced. These dampers are designed to operate from one control point. The damper's blade opening is controlled by hand locking quadrant.



Dimensions of Dampers

Minimum size of 100mm (width) x 100mm (height) and maximum size of 600mm (width) x 400mm (height)

Standard length is 170mm

Material Specifications

- Casing
0.9mm thickness (21 gauge) GI sheet
- Blades
Airfoil Blades made of 1.1mm thick aluminum extruded
- Bushes
PVC bushes 12mm x 12mm sq w/ drive
- Linkage
Linkages are made of 3mm thick Galvanized steel

- Handle
Handle is made of 1.2mm thick (18 gauge) Galvanized steel with integral rotation slot indicating blade open & close position
- Spindle
Spindles are made of 12mm x 12mm square Galvanized steel
- Operating Temperature
-10°C to 110°C as standard

Slip & Clip Type - GAS - VCD

Application

The Slip & Clip Type Volume Control Damper has been specially designed for installation in system where medium/low pressure are experienced. These dampers are designed to operate from one control point. The damper's blade opening is controlled by hand locking quadrant.



Slip & Clip Type - GAS - VCD



Material Specifications

Casing
0.7mm thickness (23 gauge) GI sheet

Blades
Airfoil Blades made of 1.1mm thick aluminum extruded

Bushes
PVC bushes 12mm x 12mm square with drive

Linkage
Linkages are made of 3mm thick Galvanized steel

Handle
Handle is made of 1.2mm thick (18 gauge) Galvanized steel with integral rotation slot indicating blade open and close position

Spindle
Spindles are made of 12mm x 12mm square Galvanized steel

Operating Temperature
-10°C to 110°C as standard

Dimensions of Dampers

Minimum size of 100mm (width) x 100mm (height) and maximum size of 600mm (width) x 400mm (height)

Standard length is 170mm

Slip & Clip Type - GGS - VCD



Application

The Slip & Clip Type Volume Control Damper has been specially designed for installation in system where medium/low pressure are experienced. These dampers are designed to operate from one control point. The damper's blade opening is controlled by hand locking quadrant.

Material Specifications

- Casing
0.7mm thickness (23 gauge) GI sheet
- Blades
Blades made of 0.7mm thickness (23 gauge) GI sheet
- Bushes
PVC bushes 12mm x 12mm square with drive
- Linkage
Linkages are made of 3mm thick Galvanized steel
- Handle
Handle is made of 1.2mm thick (18 gauge) Galvanized steel with integral rotation slot indicating blade open and close position
- Spindle
Spindles are made of 12mm x 12mm square Galvanized steel
- Operating Temperature
-10°C to 110°C as standard

Dimensions of Dampers

Minimum size of 100mm (width) x 100mm (height) and maximum size of 600mm (width) x 400mm (height)
Standard length is 170mm



Pre-Insulated Type - PA - VCD



Material Specifications

Casing

Pal Sandwich Panel 20mm/30mm thickness 80/80 micron / 80/200mm micron

Blades

Airfoil blades made of 1.1mm thick aluminum extruded

Bushes

PVC bushes 12mm x 12mm square with drive

Linkage

Linkages are made of 3mm thick Galvanized steel

Handle

Handle is made of 1.2mm thick (18 gauge) Galvanized steel with integral rotation slot indicating blade open and close position

Spindle

Spindles are made of 12mm x 12mm square Galvanized steel

Operating Temperature

-10°C to 110°C as standard

Application

The Pre-Insulated Type Volume Control Damper has been specially designed for installation in system where high/medium/low pressure are experienced. These dampers are designed to operate from one control point. The damper's blade opening is controlled by hand locking quadrant.

Dimensions of Dampers

Minimum size of 100mm (width) x 100mm (height) and maximum size of 2000mm (width) x 2000mm (height)

Standard thickness of the flange is 20mm

Standard length is 170mm

Pre-Insulated Type - PAM - VCD



Material Specifications

Casing

Pal Sandwich Panel 20mm/30mm thickness, 80/80 micron / 80mm/200mm micron

Blades

Airfoil blades made of 1.1mm thick aluminum extruded

Bushes

Brass bushes with 12mm diameter

Linkage

Linkages are made of 3mm thick Galvanized steel

Spindle

Spindles are made of 12mm x 12mm square Galvanized steel

Operating Temperature

-10°C to 110°C as standard



Application

The Pre-Insulated Type Volume Control Damper has been specially designed for installation in system where high/medium/low pressure are experienced. These dampers are designed to operate from one control point. The damper's blade opening is controlled by electric motor.

Dimensions of Dampers

Minimum size of 100mm (width) x 100mm (height) and maximum size of 2000mm (width) x 2000mm (height)

Standard thickness of the flange is 20mm

Standard length is 170mm



Selection of Motors

Motors are selected by torque requirement and application type in relation to the size of the damper.

Size of Damper (mm)	Torque of Motor (Nm)	Type of Motor
From 100 x 100 to 500 x 500	5	On/Off or Modulating
From 550 x 550 to 1000 x 1000	10	On/Off or Modulating
From 1050 x 2000 to 1050 x 2000	20	On/Off or Modulating

Round Type - GGR - VCD

Material Specifications

Casing

0.9mm thickness (21 gauge) GI sheet

Blades

Blades made of 0.9mm thickness (21 gauge) GI sheet

Bushes

PVC bushes 8mm x 8mm square with drive

Handle

Handle is made of 1.2mm thick (18 gauge) Galvanized steel with integral rotation slot indicating blade open and close position

Spindle

Spindles are made of 8mm x 8mm square Galvanized steel

Operating Temperature

-10°C to 110°C as standard

Application

The Round Type Volume Control Damper has been specially designed for installation in systems where high/medium/low pressure are experienced. These dampers are designed to operate from one control point. The damper's blade opening is controlled by hand locking quadrant.



Dimensions of Dampers

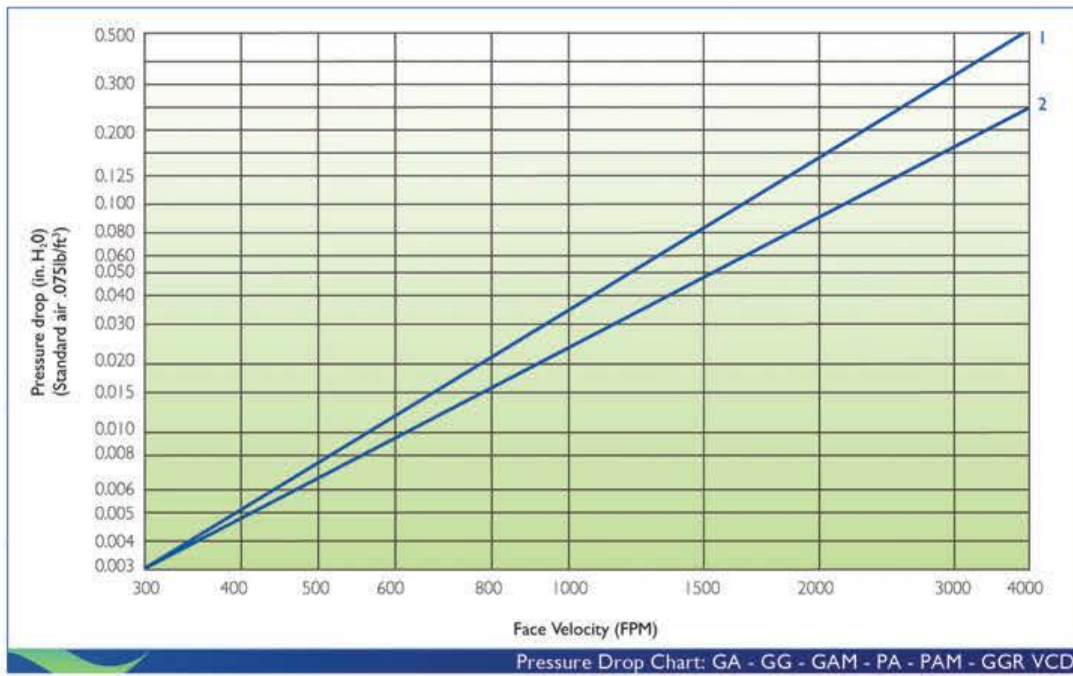
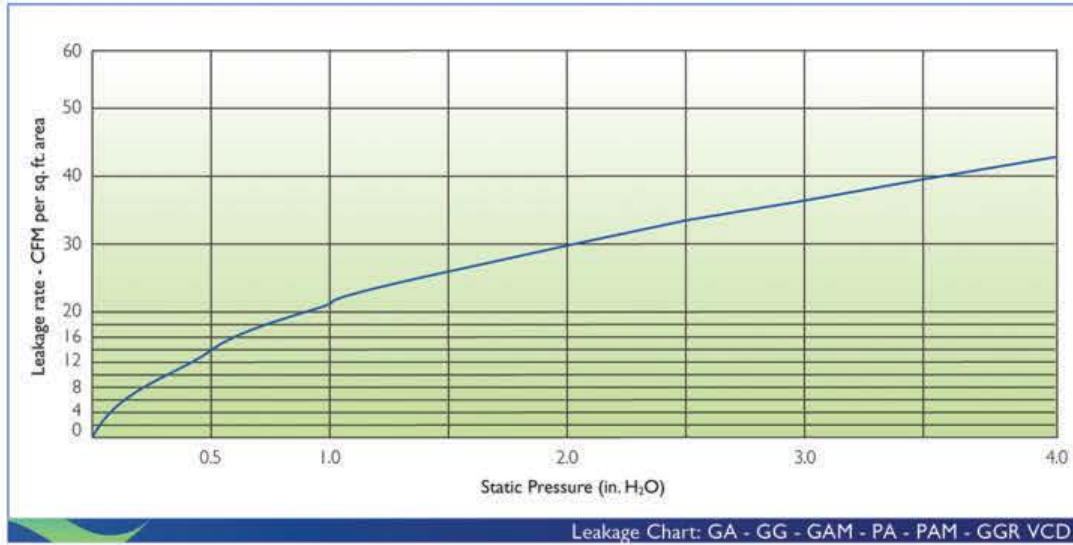
Minimum size of VCD is 100mm Ø and maximum size is 400mm Ø

Standard length is as follows (see Table 1)

Dia	Length
100	150
150	200
200	250
250	300
300	350
350	400
400	450

Table 1

GA - GG - GAM - PA - PAM - GGR VCD Performance Data



Pressure Drop vs. face velocity with damper in open position.
 1. Volume Control Damper opposed blades
 2. Volume Control Damper parallel blades

ORDERING SYSTEM

VCD - W x H
 (Model) - (Width) x (Height)



<p>GA VCD Flange type galvanized steel frame with aluminum blade and hand-operated quadrant</p> <p>GG VCD Flange type galvanized steel frame with galvanized steel blade and hand-operated quadrant</p> <p>GAM VCD Flange type galvanized steel frame with aluminum blade and control electric motor</p> <p>GAB VCD Box type galvanized steel frame with aluminum blade and hand-operated quadrant</p> <p>GAS VCD Slip & clip type galvanized steel frame with aluminum blade and hand-operated quadrant</p>	<p>GGGS VCD Slip & clip type galvanized steel frame with galvanized steel blade and hand-operated quadrant</p> <p>PA VCD Pal sandwich panel frame with aluminum blade and hand-operated quadrant</p> <p>PAM VCD Pal sandwich panel frame with aluminum blade and control electric motor</p> <p>GGR VCD Round type galvanized steel frame with galvanized steel blade and hand-operated quadrant</p>
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ORDERING EXAMPLE

GA VCD - 40" x 16"

Refers to flange type galvanized steel frame with aluminum blade and hand-operated quadrant. Size 40" (width) x 16" (height)