

RIGID

VOLUME CONTROL DAMPERS



BRAVO MIDDLE EAST FZC

VCD-F (Flange type)

Application:

The F Series Volume control dampers are designed for use in high, medium and low velocity and pressure applications. This flange type volume control damper is popularly used in 90% of air handling applications in view of their robust construction. These dampers come with multi leaf Aluminium extruded profile or multi leaf G I blades. These dampers facilitate the opening of damper minimum to maximum through a hand operated quadrant to adjust the air flow in the duct. Jamb seals are provided in the damper for very low air leakage applications. Blade opening is controlled by hand operated quadrant or by electric motor.

Material specification:

Outer frame or casing

G I Sheet gauge 18 (1.2mm thk). GI coating class Z22/Z27
SS casing may be supplied as per customer's request

Blades

Extruded aluminium aerofoil blades
G I blades V grooved made of GI sheet
SS blades V grooved made of SS sheet

Bushes

Nylon 66 bushes for smooth operation of damper

Spindles (Blade and drive)

12.5mm(1/2") dia galvanized steel rod

Linkage

Zinc coated steel links are provided outside the air stream

Quadrant

GI sheet with integral rotation slot indicating blade open and close position.

Flange width

VCD-F Standard

Paint and finish

If necessary duct sealant is applied and all welds and ground surfaces are coated with aluminium primer.

Jamb seals(side seals)

Stainless steel side seals are provided for low air leakage damper applications.

Electric motor

All MVCD (motorized volume control dampers) are supplied with electric motor fixed.



Fig. 3-1

F series (Flange type)

Selection of motors

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

Area of damper m ²	Torque of motor Nm	Type of motor
upto 0.8 m ²	5	on / off
upto 1.5 m ²	10	on / off
upto 3.0 m ²	15	on / off
upto 6.0 m ²	30	on / off
upto 3.0 m ²	15	modulating

Sizes and multiple assemblies

Single section damper minimum size 100mm width x100mm height
Maximum size may be decided based on the site application. For special applications or transportation restrictions multiple dampers may be assembled at site.

Special note

For the products which are not covered in catalogue or for further technical clarifications technical department may be contacted.

Performance characteristics

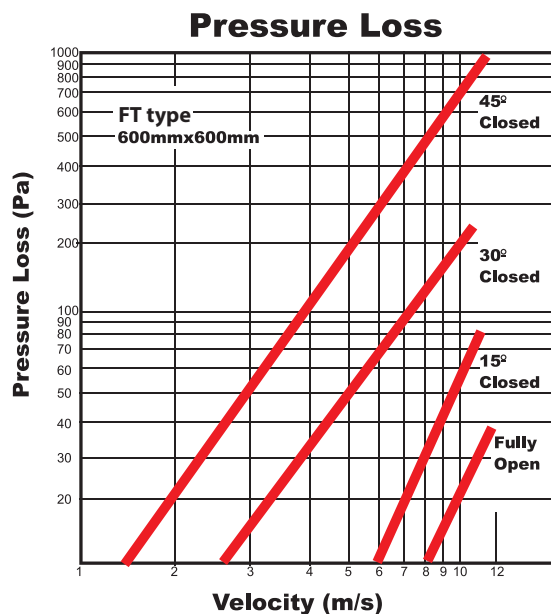


Fig. 3-2

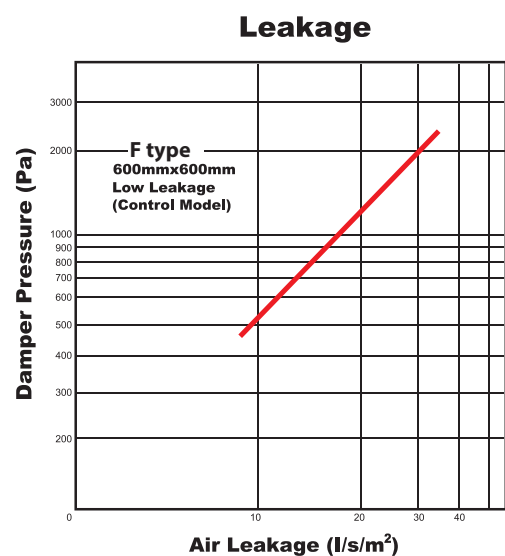


Fig. 3-3

S series(Slip type)

Application:

The S series Volume control dampers are designed for use in medium and low velocity and pressure applications. These dampers are used in air condition ducts with S&C cleats in view of their suitability.

Material specification:

Outer frame or casing

G I Sheet. GI coating class Z22/Z27

SS casing may be supplied as per customer's request

Blades

Extruded aluminium aerofoil blades

G I blades V grooved made of GI sheet

SS blades V grooved made of SS sheet

Bushes

Nylon 66 bushes for smooth operation of damper

Spindles (Blade and drive)

12.5mm(1/2")dia galvanized steel rod

Linkage

Zinc coated steel links are provided outside the air stream

Quadrant

GI sheet with integral rotation slot indicating blade open and close position.

Paint and finish

If necessary duct sealant is applied and all welds and ground surfaces are coated with aluminium primer.

Jamb seals(side seals)

Stainless steel side seals are provided for low air leakage damper applications.



Fig. 3-4

Dimensions of dampers

Sizes of single section dampers

Minimum size of 100mm width x 100mm height (4" width x 4" height)

Maximum size of 500mm width x 500mm height (20" width x 20" height)

S series (slip & clip type)

Performance characteristics

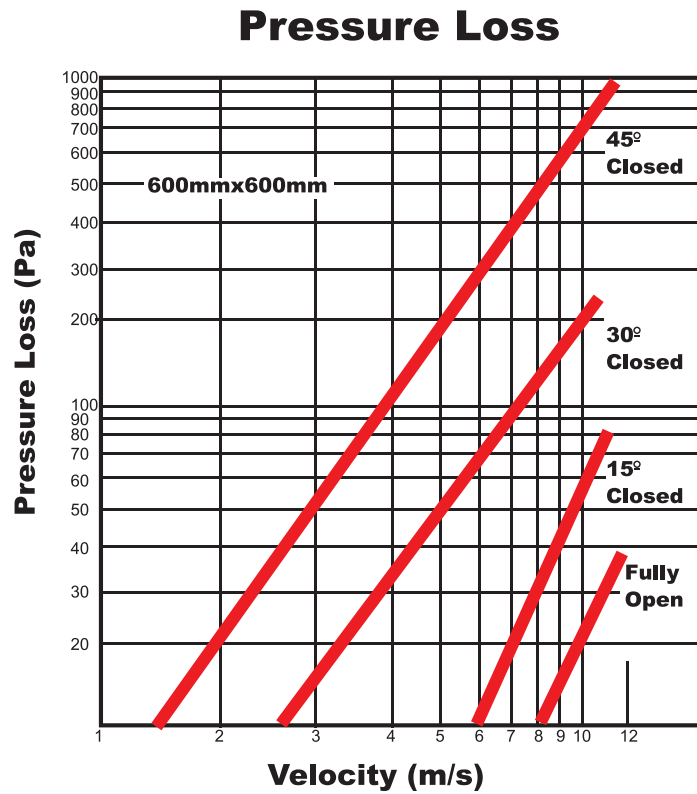


Fig. 3-5

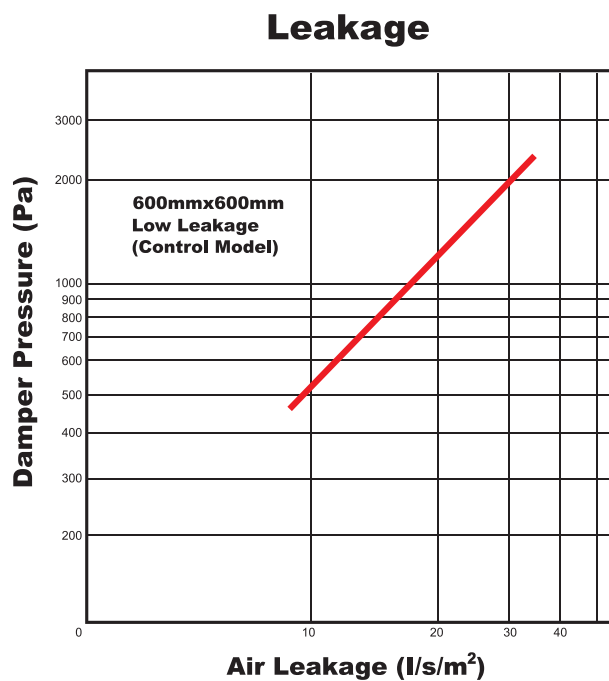


Fig. 3-6

VCD-R - Round Damper (Butterfly type)

Application

This kind of Round dampers are used in circular ducts and low pressure applications

Size of dampers

Minimum size - 100mm (4") diameter
Maximum size - 400mm (16") diameter

Material specifications

Outer frame or casing

0.7mm thickness (22 gauge) G I sheet. G I coating class Z 27/ Z 22

Blades

G I blades made of G I sheet.

Bushes

Bushes are made of Nylon66 for smooth operation.

Spindles (blade and drive)

Spindles are made of 12.5mm galvanised steel rod.

Linkage

Linkage is provided outside the air stream.

Quadrant

Quadrant is made of G I sheet with integral rotation slot indicating blade open and close position.

Paint

Aluminium primer is applied for all welds and ground surfaces



Fig. 3-7

Control options

Option H -Hand control

Unless otherwise specified all dampers are provided with hand lockable quadrants (with open /close position indication) in the factory.