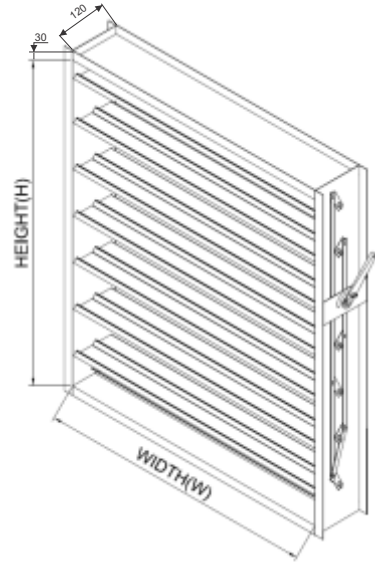


Volume Control Damper Model CD2020-A

Application

Model CD2020-A is an opposed blade volume control damper with 3V style Blades. It regulates the flow of air inside a duct or air handler or other air handling equipments. It may be used to cut off the air to an unused room or to regulate the air in different parts of the building depending upon temperature, climate control, occupancy etc. Its operation can be manual or motorized. Manual dampers are operated by a handle on the outside of a duct. motorized dampers are used to regulate air flow constantly and are operated by actuators which in turn are controlled by a thermostat or building management system.



Standard Constructional Details*	
Frame Type	C- Channel – 120mm deep with 30mm Flanges
Frame MOC	Galvanized Steel, 20G 120 GSM
Blade Type	Triple V Type
Blade MOC	Galvanized Steel, 20G 120 GSM
Axle Bush	Lexan Bush, pressed into Frame
Blade Axle (Shaft) MOC	Zinc Plated Steel 9.5mm round Bar
Linkage	In Frame
Linkage MOC	2mm Galvanized steel sheet
* Variations available	

Dimensional Limitations	
Single Section 1200 mm. (H) x 1200 mm. (W) (Maximum) 150 mm.(H) x 200 mm.(W) (Minimum)	Multiple Section 2400 mm.(H) x 2400 mm.(W) (Maximum)

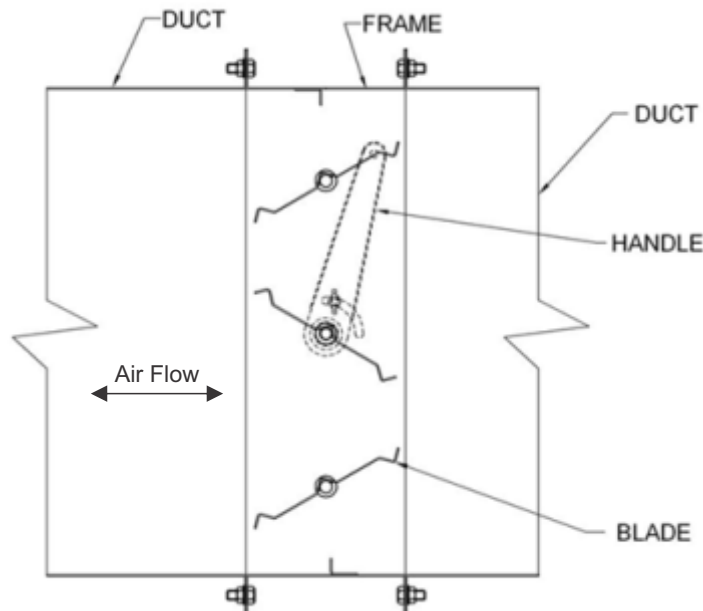
Product Information

Features

Model CD2020-A is a multiblade sturdy steel construction damper made with a 20G Frame of 120mm depth with 30mm flanges suitable for duct connection. It features 20G Single skin blades which are reinforced with 3 longitudinal structurally designed “Vees” . The Blades are arranged in opposed manner in order to provide the minimum turbulence in partially open conditions. Axles are welded to the blades and non-corrosive bush bearing assure long life and ease of operation. The Damper can be operated with a manual handle (standard) or using an Actuator.

When needed, an optional Blade Position indication is available. The Electronic type switch package is linked directly to the Damper blade/axle to provide accurate “fully open” and “fully closed” positions. It is able to interface with the HVAC control system and provide remote damper blade open/close position status. Accessory OCS-M is used for this option.

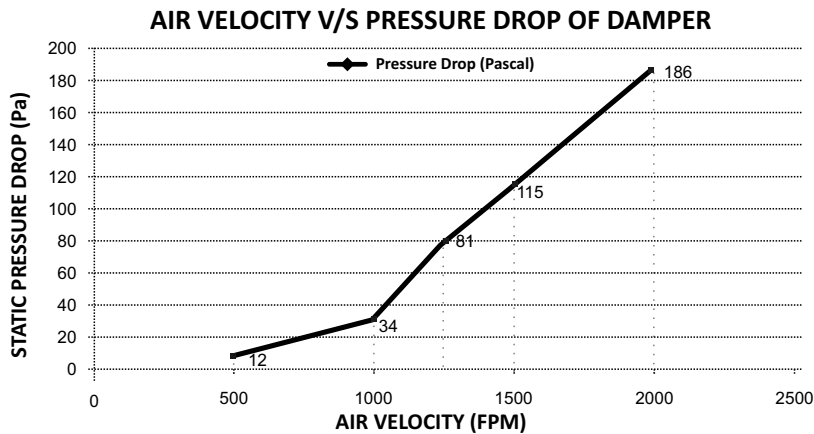
Installation Detail



Note : Caryaire dampers are designed for the lowest possible pressure drop. Our engineering team processes each order individually and provides blade width for the desired heights and ensures that the damper has the highest free area, in open condition, and hence the lowest pressure drop. In order to do this, our blade widths and bladestop heights may differ.

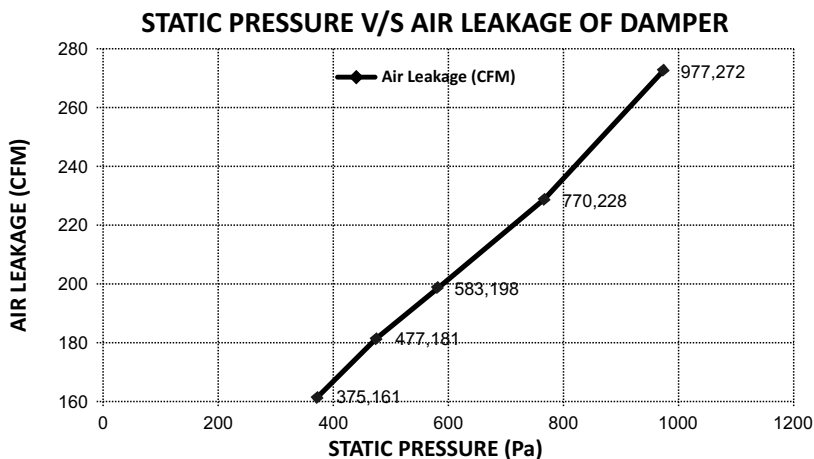
Pressure Drop

AIR VELOCITY (FPM)	500	1000	1250	1500	2000
Pressure Drop (Pascal)	12	34	81	115	186
Air Flow (CFM)	2000	4000	5000	6000	8000



Air Leakage

AIR Leakage (CFM)	161	181	198	228	272
Static Pressure (Pascal)	375	477	583	770	977



Pressure drop testing was conducted in accordance with AMCA Standard 500-D. Specimen size was 610mm x 610mm.

Actual pressure drop found in any HVAC system is a combination of many factors. This pressure drop information along with an analysis of other system influences should be used to estimate actual pressure losses for a damper installed in a given HVAC system.

Product Information



Specifications

Control Damper frame is galvanized steel of 20Ga thickness, formed into a C channel in 4-piece construction. Frame is 120mm width with 30mm Flanges suitable for duct connection. Damper Blades are single skin galvanized steel of 20Ga thickness and have 3 accurately roll formed longitudinal grooves for reinforcement and proper closure and operation.

The blades are arranged for opposed motion to provide least turbulence when in partially open condition. Each Blade has axles, supported on both sides with corrosion resistant bearings turning in an extruded hole in the frame. All Blades are Interconnected using linkage in the frame section, out of the airstream.