



**GALVA BAHİ**

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Duct & Air Outlets

# Volume-Damper



# Volume-Damper



## APPLICATION

Volume Control Damper has been specially designed to control air flow in HVAC 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 or motor.

## Specifications

### Material

Extruded Aluminum or galvanized steel

### Casing

Extruded Aluminum or galvanized steel for upper and side frames with different case depth

### Blade

Aero foil blade made from Extruded Aluminum or 3-Groove bended blade for Galvanized steel construction.

### Quadrant Hand

Steel or plastic handle in different sizes to obtain the required momentum suitable for the volume size.

### Gears

Made from specific plastic temperature resistance 70° c to drive opposed blade mechanism  
FREE AREA: max 80%

### Fixing Systems

The frame of the damper has been designed in order to be flanged connection in ducts or other flat surface .

### Finish

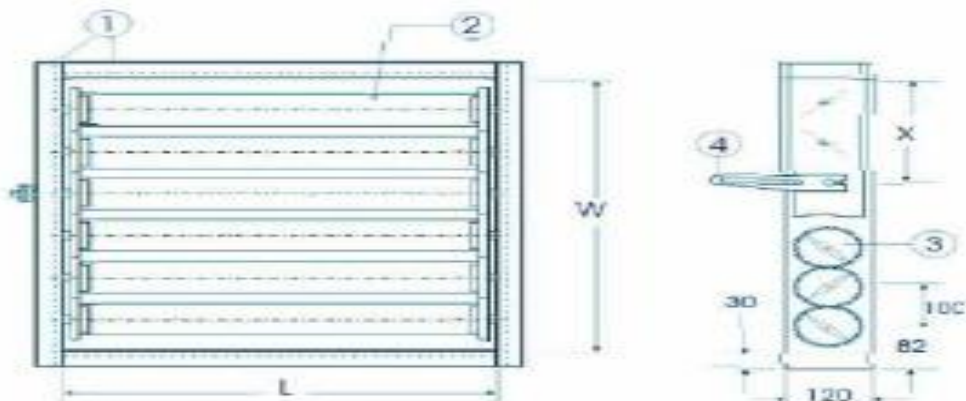
Standard mill finish or powder coated.

# ALUMINUM TYPES

## AIROFOIL 102

Aluminum volume damper opposed blade damper gear operating involving air foil blade with the motional dimensions

- 1.Casing (UPPER &SIDE FRAMES)
- 2.Blade
- 3.plastic Gear
- 4.Drive Arm



1. Casing (UPPER &SIDE FRAMES)
2. Blade
3. plastic Gear
4. Drive Arm

FRAME



Side frame wall thickness of ( )



Upper frame wall thickness of ( )

BLADE



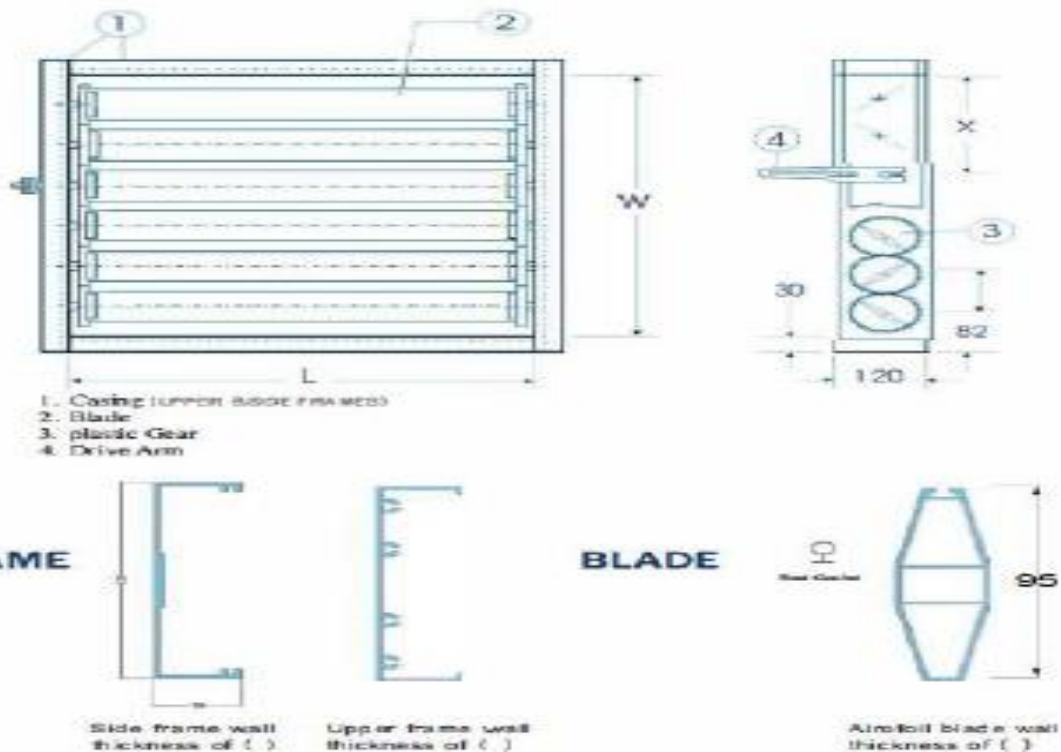
Airofoil blade wall thickness of ( )

# ALUMINUM TYPES

## AIROFOIL 95

Aluminum volume damper opposed blade damper gear operating involving air foil blade with the motional dimensions and with rubber sealing in order to reduce leakage .

- 1.Casing (UPPER &SIDE FRAMES)
- 2.Blade
- 3.plastic Gear
- 4.Drive Arm



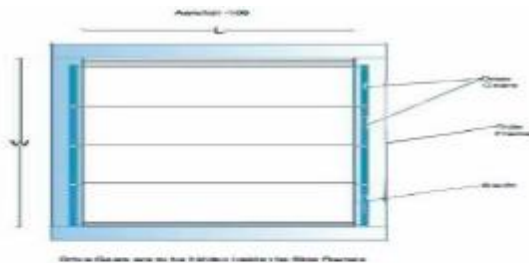
# ALUMINUM TYPES



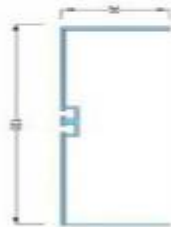
## AIROFOIL 108

Aluminum volume damper opposed blade damper gear operating involving air foil blade with the motional dimensions and with rubber sealing in order to reduce leakage put the difference between this type and the other types is that the drive gear mechanism is hide inside the frame which providing a maximum free area of 85%

- 1.Casing (UPPER &SIDE FRAMES)
- 2.Blade
- 3.plastic Gear
- 4.Drive Arm



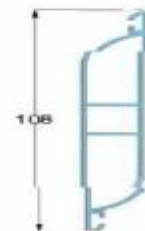
**FRAME**



Side frame wall thickness of ( )

Upper frame wall thickness of ( )

**BLADE**



Airofoil blade wall thickness of ( )

# ALUMINUM TYPES

## POSITION OF DRIVE ARM

| L (mm) | W (mm) | No. of Blades | Position of Drive Arm X (mm) |
|--------|--------|---------------|------------------------------|
| 200    | 204    | 2             | 52                           |
| 300    | 304    | 3             | 252                          |
| 400    | 404    | 4             |                              |
| 500    | 504    | 5             |                              |
| 600    | 604    | 6             |                              |
| 700    | 704    | 7             |                              |
| 800    | 804    | 8             | 452                          |
| 900    | 904    | 9             |                              |
| 1000   | 1004   | 10            |                              |

## SIZE

### SINGLE SECTION

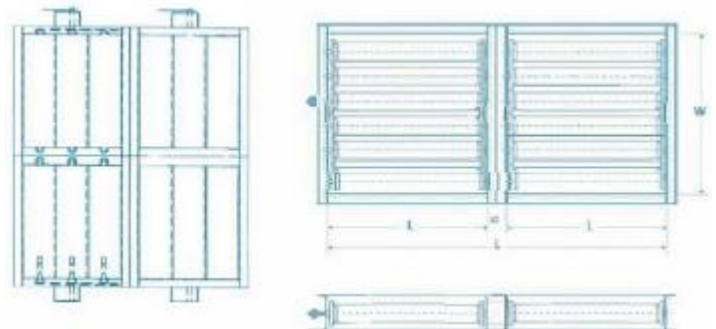
For dimensions (1000 MM • 1000 MM)

Single Section is Applied.



### MULTIABLE SECTION

For dimensions more than (1000MM \* 1000MM)  
a double or more sections is applied



# STEEL TYPE



U-channel frame type for duct flange mounting or flat surface suitable for (high - medium - low ) pressure application

## SPECIFICATIONS

### MATERIAL

The Dampers are made from galvanized steel .

### CASING

4 parts of formed galvanized sheet metal GA .16(1.5mm thickness), welded together to obtain rigid construction .

### BLADE

Galvanized sheet metal GA.16 (1.8 mm thickness) , formed with three grooves to strengthen the blade in order to resist pressure

### AXLE

1 / 2 " round galvanized steel bar bolted to the blade

### SLEEVE

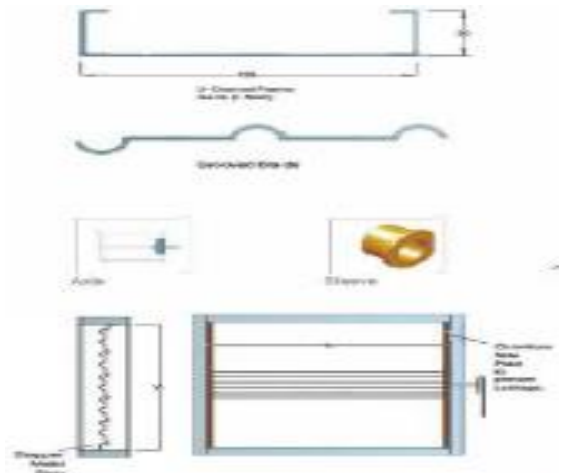
Round brass.

### HANDLE

Hand quadrant for manual operation.

### FINISH

Standard finish galvanized or powder coated





# STEEL TYPE

## OPERATION TYPE

It may be classified into two types according to operating mechanism:

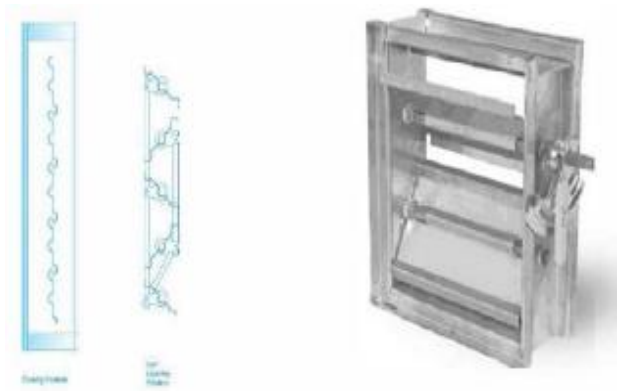
### PARALLEL BLADES

connected by side linkage of galvanized steel concealed in the u channel side frame . parallel blades offer rapid air response to blade movement but divert air flow to one side of the duct blades rotation is in the same direction and is best suited for on and off application.



### OPPOSITE BLADES

two sets of opposed blade connected by side linkage of galvanized steel concealed in the u channel side frame opposed blades provide non diverting air flow and reduce turbulence ,which is important when the damper is used in front of fans or coils . the opposed blade damper require a lower opening torque .

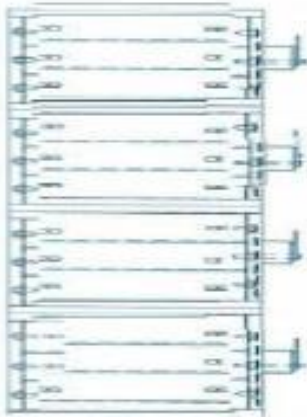
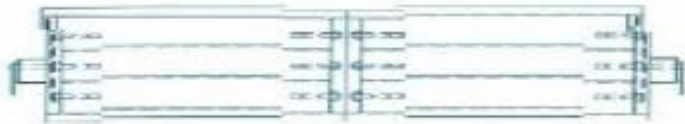


# STEEL TYPE

## FOR LONG AND WIDE DAMPERS

For dimensions more than (1200MM \* 1200MM)

A double or more sections are applied



# ROUND VOLUME DAMPER



## INTRODUCTION

The round control damper with a full circumference blade seal for low leakage. It is designed to replace a section of the duct work where a damper is needed. This construction to ship actuators installed on the damper. The damper can be constructed of stainless steel if required. The rolled duct stops make for ease of installation and sealing the duct work to the damper. The damper is one of the lowest leak dampers in the Industry

## APPLICATIONS

Generally used for applications in round ducts and pre-insulated ducts to control air flow rate.



# ROUND VOLUME DAMPER



## SPECEFICATIONS

### MATERIAL

The Dampers are made from galvanized steel sheets or stainless steel as required

### CASING

(.8 mm) Gage 22 rolled galvanized steel sheets .

### BLADE

(.8 mm } Gage 22 circular blade galvanized steel full circumference neoprene blade steel .

### QUADRANT HAND

For manual operation made from galvanized steel

### AXLE

1 / 2 " round galvanized steel bar bolted to the blade

### SIZES

80mm Diameter up to 630 Dia. in single blade construction .

### FINISH

Standard galvanized finish or powder coated

