

# **Smoke Damper**



#### **Standard Construction:**

- Frame: 4" x 1.5 mm Galvanized, Flanged Frame
- Blades: 1.5 mm Galvanized Steel, reinforced with 3 longitudinal structured designed V's
- Axis: ½" Ø plated Steel
- Bushings: Bronze-self oiling
- - Actuator: Spring return two position 24 or 220 VAC

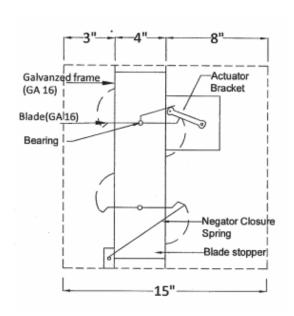
Finish: Mill Galvanized

Linkage: Exposed in frame

Casing: 1.5mm G.I. Steel Plain Casing

Mounting: Vertical or Horizontal

ctuator Brask Actuato HEIGHT(H) Galvanized frame Negator Closure Spri



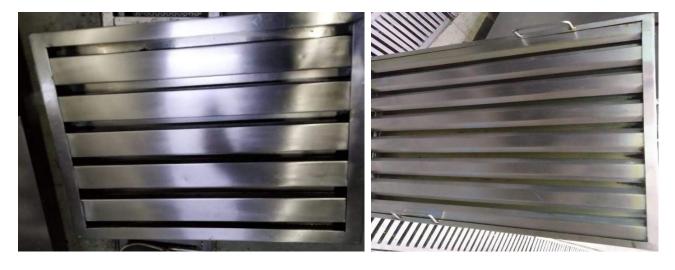
- G.I. Steel Angle
- Size: 30mm x 3mm x 3mm Black Colored
- Duct bended Flange in casing 5mm depth or as required















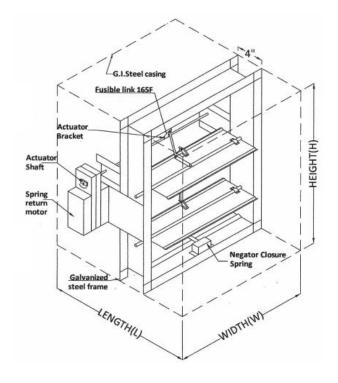
# **Combination Fire / Smoke Damper**

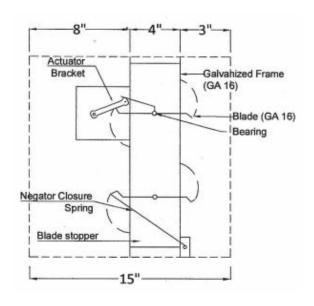


#### **Standard Construction:**

- Frame: 4" x 1.5 mm Galvanized, Flanged Frame
- Blades: 1.5 mm Galvanized Steel, reinforced with 3 longitudinal structured designed V's
- Axis: ½" Ø plated Steel
- Bushings: Bronze-self oiling
- Fusible Link: UL Listed. Standard for fusing Temperature of 165° F. Other fusing temperatures are available on request

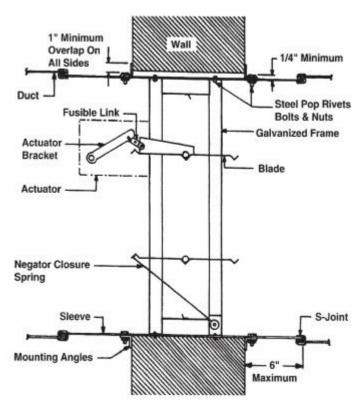
- Linkage: Exposed in frame
- Mounting: Vertical or Horizontal
- Actuator: Spring return two position 24 or 220 VAC
- Finish: Mill Galvanized
- Casing: 1.5mm G.I. Steel Plain Casing
- Fire Rating: 3 hours





- G.I. Steel Angle
- Size: 30mm x 3mm x 3mm Black Colored
- Duct bended Flange in casing 5mm depth or as required

## **Installation Details**



- Minimum clearance of ¼" shall be provided between the sleeve and wall or floor opening
- Connect duct to sleeve by any one of approved joints:
- The following duct connections are used:
- Plain S-Slip, hemmed S-slip, standing S-Slip, reinforced standing S-Slip, inside Slip joint, and Double S-Slip joint. Don't screw or the rivet joints
- Mounting angles shall be 1 ½" x 1 ½" x 14 gauge minimum and fastened with No. 10 bolts or screws, 3/16" Diameter steel rivets or ½" long tack welds. Space fasteners 8" on center.
- Damper sleeve shall not extend more than6" beyond the fire wall or partition and not more than 9" on the actuator side.

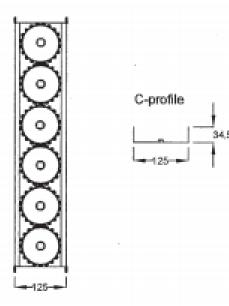
## **Volume Control Damper**

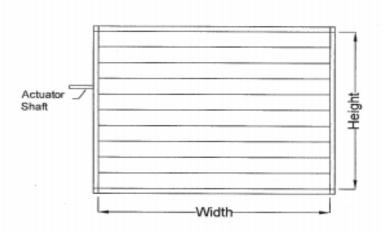




## **Description**

- Standard Toothed (geared) wheel volume control damper is the toothed wheels instead of the conventional linkage mechanism to operate the blades. The advantages of toothed wheel over the linkage mechanism is limited not only with the neat appearance it provides but also the more free area achieved by placing the gears outside the air stream.
- Extruded Aerofoil type aluminium blades
  while allowing a laminar flow across the
  blade depth also prevent the air from
  producing turbulence. Thus pressure exerted
  by the air on duct wall due to turbulence is
  considerably reduced.





- Frames and blades of toothed volume control damper are extruded aluminium alloy and are mill finished
- Concealed gear train n high grade nylon construction
- The frame and blade have a typical wall thickness of 1/16" (16 gauge) and 1/21" (18 gauge) respectively
- Suitable for manual and motorized operation



## Fire Damper

## **Description**

- The Fire Damper meets specifications requiring one damper to provide a 1-1/2 hour fire rating. The Fire Damper is intended for use in Heating, Ventilating, and Air Conditioning (HVAC) duct systems passing through fire-resistant assemblies.
- When the temperature in the system climbs above the fusible link temperature, the link melts, allowing the spring to close and lock

the damper blades

- The standard Fire Damper includes a fusible link rated at 165 F (74 C). Fusible links rated at 212 F (100 C) and 285 F (141 C) are available.
- Dampers up to 72 in. wide x 96 in. high or 120 in. wide x 48 in. high meet rating requirements for mounting in walls, cement floors, or ceilings.

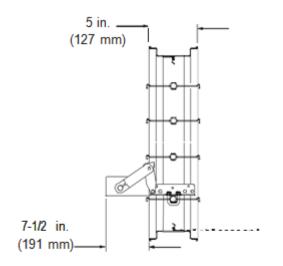


Figure 2: Mounting Dimensions

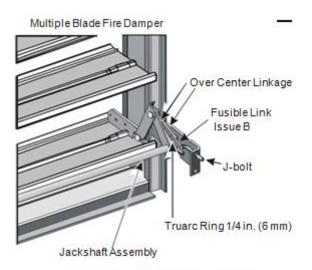


Figure 3: Damper Components

- Frame: 5 in. deep x 16-gauge galvanized steel
- Blades: 16-gauge galvanized steel, Triple V All blades are 6 in. nominal width and 8 in. maximum width.
- Linkage: Concealed in the frame
- Sleeve: 20-gauge galvanized steel, 20 in. long (optional)
- Blade Pin: 1/2-inch plated steel, hex
- Bearings: Stainless steel
- Side Seal: Flexible metal compression, stainless steel (optional)
- Blade Seal Inflatable silicone-coated fiberglass and galvanized steel, mechanically locked into blade edge (optional)