

Reference:

Client:

Project:

Consultant:

Location:

Contractor:

Date:

Submitted by:



Manufacturing Excellence

### Model SSD-3V-FA-202

Smoke Damper

Front Access Application

3V Blade, Class 2, UL-Classified

(Class II is < 20 cfm per sq. ft. @ 4" w.g.)

### Application:

The CVS-SAFE4 model SSD-3V-FA-202 is a smoke damper with 3V style blades intended for installation outside the plane of a wall or floor with front (or grille) access to the actuator. The SSD-3V-FA-202 is used to prevent the spread of smoke through a penetration in a smoke rated barrier made by an HVAC duct or transfer. The SSD-3V-FA-202 can be installed vertically (with blades running horizontally) or horizontally. The SSD-3V-FA-202 can be installed in static or dynamic systems up to the allowable tested pressures and velocities below.

**MAXIMUM VELOCITY:** 2000 fpm (10.2 m/s) on all sizes.

**MAXIMUM PRESSURE:** 4" wg (1kPa) on all sizes.

### Standard Construction:

|                                | Standard  | Optional   |
|--------------------------------|---|--|
| <b>Frame Material</b>          | 20 Gauge (1) Galv. Roll-Formed Steel hat section w/ staked corners for integral bracing | -----  |
| <b>Blade Material and Type</b> | 16 Gauge (1.5) "3V" Galv. Roll-Formed Steel   | Airfoil Galv. Steel (see Model SSD-AF-FA-202)  |
| <b>Blade Sizes</b>             | Min. width of 4.25" (108) to max. width of 7.25" (184)                                  | -----  |
| <b>Frame Depth</b>             | 5" (127)  | -----  |
| <b>Dimensions</b>              | Actual - 1/4" (6)   | Actual   |
| <b>Axle Bearings</b>           | Bronze Oilite (press fit into frame)  | -----  |
| <b>Axle Material</b>           | Plated Steel  | -----  |
| <b>Linkage</b>                 | .125" (3.2) plated steel, Concealed in Frame  | -----  |
| <b>Sleeve</b>                  | 16" x 20 gauge (406x1) galvanized steel   | Wide variety of gauges and lengths available   |
| <b>Thermal Blanket</b>         | -----   | 0.25" (6) thick thermal blanket 3 sides for vertical and 4 sides for horizontal applications |
| <b>Front Access Panel</b>      | Max. 6 inch. (152.4 mm), installed inside damper sleeve to conceal actuator.            | -----  |
| <b>Operating Temp.</b>         | 350° (177°C)  | -----  |
| <b>Leakage Class Rating</b>    | Class 2   | Class 1 (see Model SSD-3V-FA-201)  |

### Minimum & Maximum Sizes:

| Front Access Damper Model | Minimum Size                     | Maximum Size         |
|---------------------------|----------------------------------|----------------------|
| SSD-3V-FA-202 Vertical    | 12 x 12 (305 x 305) <sup>1</sup> | 36 x 48 (914 x 1219) |

<sup>1</sup>Contact Factory for smaller sizes.

All dimensions shown in inches, parentheses ( ) indicate millimeters.



### LISTINGS:

**UL Listing:** R27700(UAE), R41135(KSA), R40068(Qatar), R41122(Egypt)

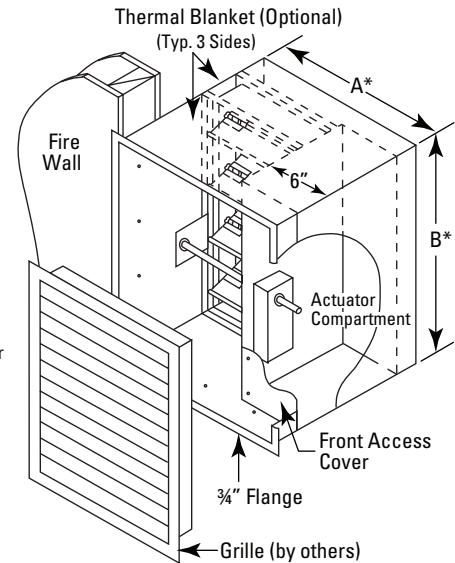
### STANDARDS MET:

**NFPA Standards:** 80, 90A, 92A, 92B and 101

**Building Code Standard:**

ICC International Building Code

\*Width [A dimension] and Height [B Dimension] are approximately 1/4" undercut. Sleeved dampers are furnished approximately same size as given duct dimension plus 0.25" (6) for insulation.



### Optional Construction:

#### Auxiliary Switch

Add to Actuator (recommended)

Add to Damper (STO/R)

#### Momentary Test Switch

#### Factory Sleeve:

**Length:** \_\_\_\_\_ (Std. 16" [406])

**Gauge:** 20 (1.0) 18 (1.2) 16 (1.5) 14 (2.0) 10 (3.5)

#### Remote Control Box

RCB-1 RCB-2 RCB-3

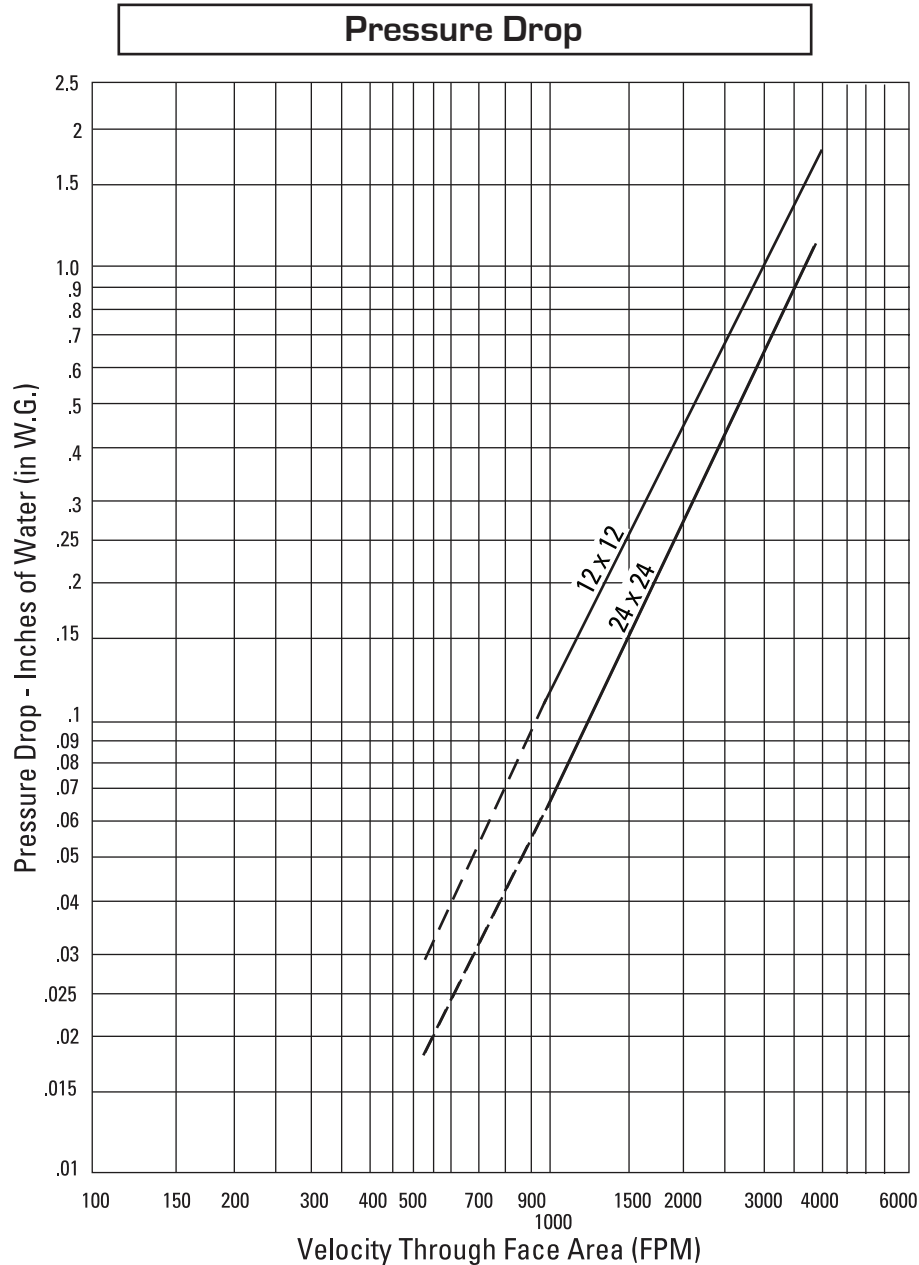
#### Smoke Detector

Factory Mounted Shipped Loose

#### Actuators (Refer to UL Damper Actuator Reference Chart)

**Type:** Electric: Model # \_\_\_\_\_ Pneumatic: Model # \_\_\_\_\_

**Location:** Internal (Std.)

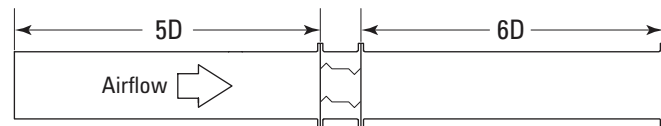


**To determine pressure drop:**

1. Locate the applicable face velocity on the bottom of the chart.
2. Move up the chart to the most appropriate size damper line.
3. From the intersection point, move left to determine the pressure drop.

**AMCA Figure 5.3 - Ducted Inlet and Outlet**

Pressure drop testing was performed by an independent laboratory to the AMCA Standard 500-D, Fig. 5.3 (ductwork upstream and downstream).



**Note:**

Pressure Drop for both sizes reflect damper face area only, and does not take into account the 6" deep actuator compartment.

**Actuator Requirements:**

**UL555S requires that all leakage rated dampers be provided with factory mounted actuators.** Available actuators vary by damper size and velocity, pressure and temperature ratings. Consult Motor/Actuator sheet for UL Products for current offering.

**Sleeve Requirements:**

**Sleeve must be installed at the factory for front access products.**

Sleeve length is dependent upon damper height, grille depth (including OBD) and actuator selection:

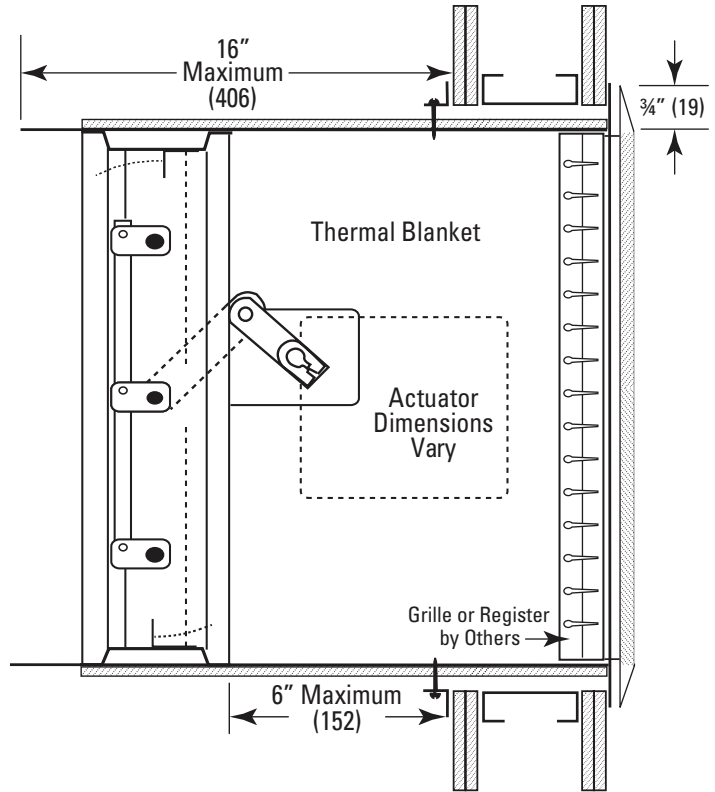
- Standard clearance allowance for grille inset is 3" (76).
- Maximum sleeve length is 16"(406) plus the total wall depth.

**Sleeve is provided with a 3/4" (19) flange on the actuator end of the sleeve by default.** Flange must be on top of barrier in horizontal installations.

**Thermal Requirements (Optional):**

A factory installed thermal blanket is provided on three sides (bottom excluded) for dampers ordered for vertical installation and on all four sides for dampers ordered for horizontal installation.

Due to the nature of the application for Front Access Smoke dampers, a 0.25" (6) thermal blanket is installed around the sleeve at the factory.



\*Thermal Blanket provided 3 sides for Vertical and 4 sides for Horizontal.

**Top View**

