

**MODEL : AEROVAC - VCD - AV - 11 - G - G - F**

**MODEL : AEROVAC - MVCD - G - G - F - 200**

AEROVAC – AV-11-G-G-F low leakage Volume control dampers are most popular choice for use in low to medium velocity and pressure commercial HVAC systems. They are low cost, high quality dampers that meet the frequently specified leakage criteria of less than 8cfm per sq. ft. at 4" w.g. (148 M<sup>3</sup>/hr/M<sup>2</sup>).

Design features include durable steel construction, a sturdy 20-16 ga. galvanized steel hat channel frame with die-formed corner gussets providing superior structural strength equivalent to 13 ga. (2.4 mm) channel type frames, an interlocking vee groove blade design that maximizes strength and optimizes airflow, double bolted / riveted no slip blade axle connections with Brass /Nylon bearings, Silicon extruded blade seals and a no-maintenance concealed linkage located within the side frame out of the air stream for reduced pressure drop, air turbulence and noise. A variety of electric or pneumatic actuators are available for factory or field mounting along with a comprehensive selection of options to meet specific installation requirements and applications.

### STANDARD CONSTRUCTION:

- Frame : 20-16 ga. galvanized steel hat channel with die-formed corner gussets
- Blades : 6" (152) wide on 5 1/2" (140) centers. 18-16 ga. galvanized steel Vee groove design. Opposed / Parallel action.
- Linkage : Concealed type totally enclosed within the frame and out of the air stream (Plated steel).
- Bearings : 1/ 2" (12.5 mm) dia. Brass Bush (Standard),Nylon Bush (Optional)
- Axles : 1/ 2" (12.5 mm) dia. Galvanized Steel.
- Blade Seals : Silicon extruded Rubber Gasket (Optional).
- Operation : Manual Quadrant.  
: Electric Honeywell / Belimo Actuator (24 V / 230 V)

### Models AV-11-G-G-F Sizes (Duct W x H):

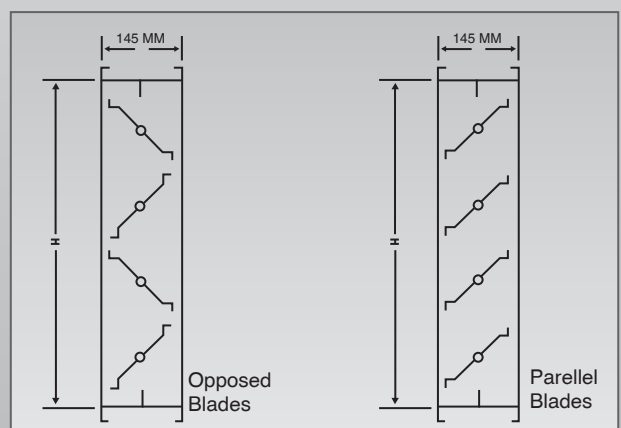
Minimum		Maximum	
Single Section		Single Section	Multiple Section
Single Blade 4" x 4" (102 x 102)	Two Blades 8" x 10" (203 x 254)	48" x 48" (1219 x 1219)	Unlimited

Temperature Range: -50°F to 275°F (-46°C to 135°C)

### \* Flange Width : 25mm Standards

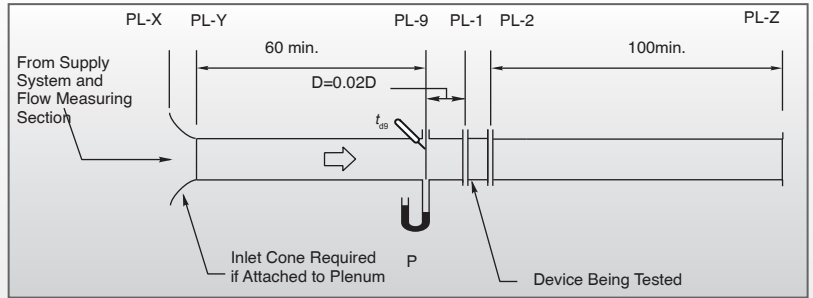
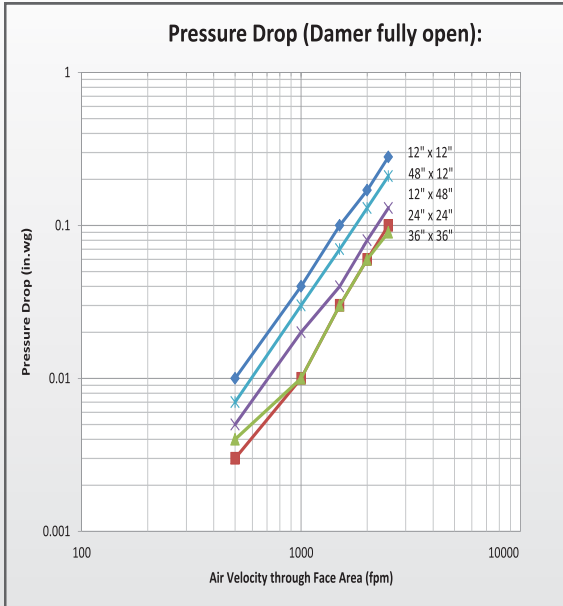
### OPTIONAL CONSTRUCTION:

- Compression type Stainless steel jamb seal will be provided at the side of the damper for low leakage requirement.
- Stainless Steel constructions available
- Concealed linkage cover on both side.
- S & C, Plain and Flange frames available.
- Heavier gauge frame construction for heavy duty application.
- Front, rear or double flange frame (with or without bolt holes).



Catalogue ID : AV-11-G-G-F, September 2015

## AIR PERFORMANCE DATA:



AMCA Figure 5.3 Pressure Drop



Prime Air Conditioning Industries LLC. certifies that the model AV-11-G-G-F shown herein is licensed to bear the AMCA Seal. The rating shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified ratings Programs. The AMCA Certified Rating Seal applies to Air Leakage and Air Performance ratings.

### The maximum static pressure drop for specified air flow rate at standard air density

12" x 48" (305x1220)				12" x 12" (305x305)				24" x 24" (610x610)				36" x 36" (914x914)				48" x 12" (1220x305)			
Velocity		Pressure Drop		Velocity		Pressure Drop		Velocity		Pressure Drop		Velocity		Pressure Drop		Velocity		Pressure Drop	
fpm	m/s	inch w.g.	Pa	fpm	m/s	inch w.g.	Pa	fpm	m/s	inch w.g.	Pa	fpm	m/s	inch w.g.	Pa	fpm	m/s	inch w.g.	Pa
500	2.5	0.005	1	500	2.5	0.01	2	500	2.5	0.003	0.7	500	2.5	0.004	0.9	500	2.5	0.007	1
1000	5.0	0.02	4	1000	5.0	0.04	9	1000	5.0	0.01	2	1000	5.0	0.02	4	1000	5.0	0.03	7
1500	7.5	0.04	9	1500	7.5	0.1	24	1500	7.5	0.03	7	1500	7.5	0.04	9	1500	7.5	0.07	17
2000	10.0	0.08	19	2000	10.0	0.17	42	2000	10.0	0.06	14	2000	10.0	0.06	14	2000	10.0	0.14	34
2500	12.5	0.13	32	2500	12.5	0.28	69	2500	12.5	0.1	24	2500	12.5	0.10	24	2500	12.5	0.21	52
Free Area : 76%				Free Area : 57%				Free Area : 78%				Free Area : 85%				Free Area : 66%			

## LEAKAGE DATA:

Air leakage is based on operation between 32°F (0°C) and 120°F (49°C).  
 Tested for leakage in accordance with ANSI/AMCA Standard 500-D, Figure 5.4  
 Tested for air performance in accordance with ANSI/AMCA Standard 500-D, Figure 5.3

## Torque

Recorded data are based on a torque of 27.5 in.lbs./ft<sup>2</sup> (33.5 N-M/M<sup>2</sup>) applied to close and seat the damper during the test.

Air leakage is based on operation between 50°F to 104°F. All data corrected to represent air density of 0.075 lbs/ft<sup>3</sup>. Tested per AMCA Standard 500-D (leakage) , figure 5.4 Alternative.

### Recorded Data:

Leakage Class				
1.0" W.G	1.5" W.G	2.0" W.G	3.0" W.G	4" W.G
Class 1	Class 1	Class 1	Class 1	Class 1

Maximum Allowable Leakage, cfm/ft <sup>2</sup>			
Pressure Class	1.0" W.G	4" W.G	8" W.G
1A	3	N/A	N/A
1	4	8	11
2	10	20	28
3	40	80	112



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