

## INLET VANE DAMPER

Class I and II Fans

### STANDARD CONSTRUCTION

**FRAME**

10 (3.5) gage steel channel frame (see table).

**BLADES**

16 (1.6) gage steel.

**BEARINGS**

Stainless steel.

**AXLES**

1/2" (13) diameter plated steel.

**THRUST WASHERS**

Stainless steel.

**HUB**

Open (O).

**OPERATING LEVER**

Crank Lever (CL) for motor operation or hand quadrant (HQ) for manual operation.

**FINISH**

Aluminum paint.

**MAXIMUM TEMPERATURE**

200°F (121°C).

**MINIMUM SIZE**

12" (305) diameter.

**MAXIMUM SIZE**

65" (1651) diameter. Consult Ruskin for larger sizes.

### VARIATIONS

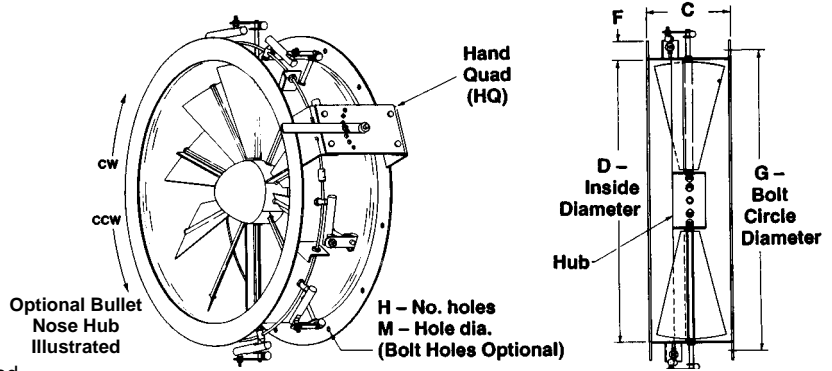
Variations to standard construction are available at additional cost and include:

- Heavier construction for higher pressures, air flow (cfm), and temperatures.
- Bullet nose (BN) and flat cap (FC) capped hubs.
- Cantilever (hubless) design.
- Special materials.
- Damper built into a fan inlet cone spinning furnished by the customer.
- Bolt holes in flanges.
- Electric and pneumatic actuators.

**NOTES:** 1. Heavier duty dampers are available for applications not covered by IVD standard construction. Consult Ruskin for details and pricing.

2. If CFM or static pressure is significantly less than shown, and opposite factor (CFM or SP) is higher than shown, standard construction may still be applicable. Consult Ruskin.

Dimensions in parenthesis ( ) indicate millimeters.



**VIEW FROM AIR INLET SIDE**  
Inlet air rotation (CW or CCW) determined from air inlet side of fan. Rotation must be supplied with order.

### FRAME DIMENSIONS

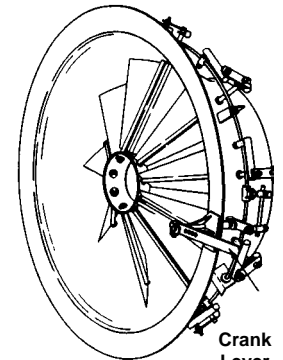
Standard Construction

D - INSIDE DIAMETER		FRAME	
ABOVE	THROUGH	F-Flange	C-Webb
12" (305) & ABOVE	14" (356)	10 ga. x 1 1/2" (38)	9" (229)
14" (356)	24" (610)	1/4" x 1 1/2" (6 x 38)	9" (229)
24" (610)	41" (1041)	1/4" x 2" (6 x 51)	9" (229)
41" (1041)	57 1/2" (1461)	1/4" x 2" (6 x 51)	10" (254)
57 1/2" (1461)	65" (1651)	1/4" x 2" (6 x 51)	11" (279)

### MAXIMUM AIR FLOW

Standard Construction

D-DIAMETER		MAXIMUM CFM	MAXIMUM SP
ABOVE	THROUGH		
12" (305)	16" (407)	11,000	8"
16" (407)	19" (483)	14,000	8"
19" (483)	21" (534)	16,500	8"
21" (534)	24" (610)	18,000	8"
24" (610)	27" (686)	20,500	8"
27" (686)	30" (762)	22,500	8"
30" (762)	33" (838)	25,000	8"
33" (838)	37" (940)	27,000	7"
37" (940)	41" (1041)	29,700	7"
41" (1041)	45" (1143)	32,500	4"
45" (1143)	52" (1321)	35,000	4"
52" (1321)	57" (1448)	37,000	4"
57" (1448)	62" (1575)	39,000	4"
62" (1575)	65" (1651)	41,000	4"



Inlet vane dampers available custom fabricated in customer furnished fan inlet cone spinning.

QTY.	DIMENSIONS					BOLT HOLE ORIENTATION		HUB			AIR ROTATION**		LEVER TYPE		VARIATIONS
	D	G	H	M	FAN-SHFT DIA*	S STRADDLE	T PARALLEL	O	BN	FC	CW	CCW	HQ	CL	

\*This information required when fan shaft passes through hub.

\*\*This information required for order processing.

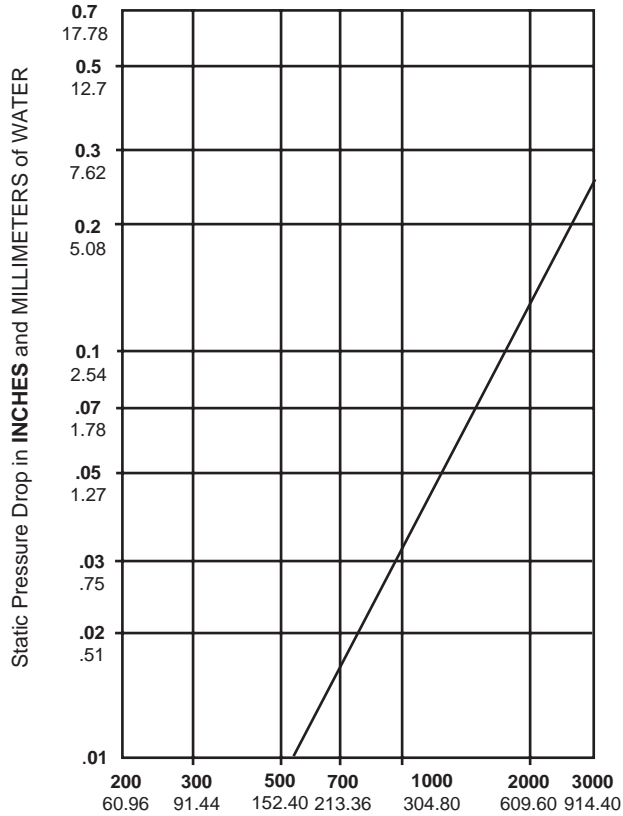
JOB

LOCATION

CONTRACTOR

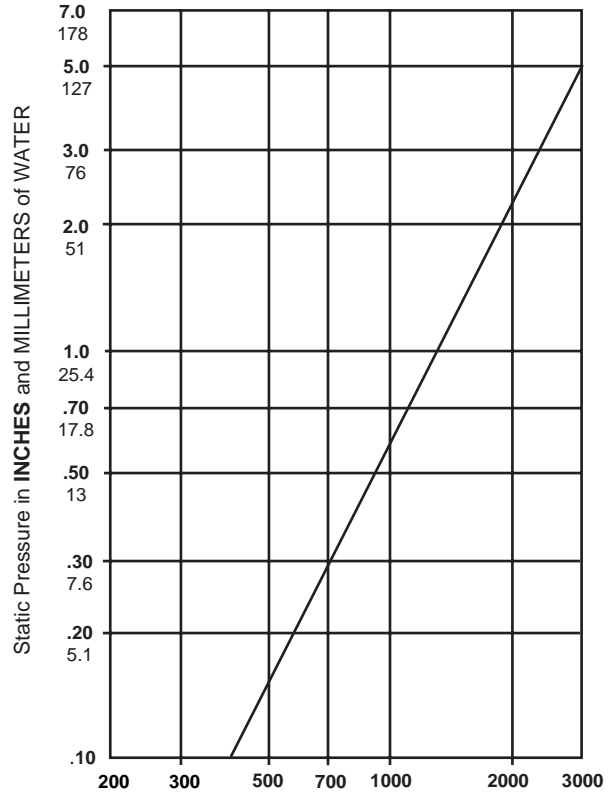
## PERFORMANCE DATA

**Pressure Drop - Damper Open (24" [610] dia. size)**



Air Velocity in **FEET** and **METERS** per minute through **FACE AREA**. Tested per AMCA Std. 500, Fig. 5.3, ductwork upstream and downstream.

**Air Leakage - Damper Closed (48" [1219] dia. size)**



Air Leakage in **CFM** through **FACE AREA**. Tested per AMCA Std. 500, Fig. 5.5, plenum mounted.

## SUGGESTED SPECIFICATIONS

Furnish and install, at locations shown on plans or in accordance with schedules, fan inlet dampers to meet the following construction standards: Frame shall be minimum 10 gage (3.5) steel channel with minimum 16 gage (1.6) steel blades. Damper shall be suitable for use with Class I and Class II fans and in temperatures to

200°F (93°C). Axles shall be 1/2" (13) diameter plated steel supported in stainless steel sleeve bearings. All parts not otherwise protected shall be given one coat of aluminum paint. Damper shall be Ruskin Model IVD.