

Application

The VCDRM-53, a low leakage insert type multi-blade round damper, is designed to provide control of airflow in round HVAC ductwork.

Ratings

Pressure

Up to 5 in. wg (1.2 kPa)

Velocity

Up to 2500 fpm (12.7 m/s).

Leakage

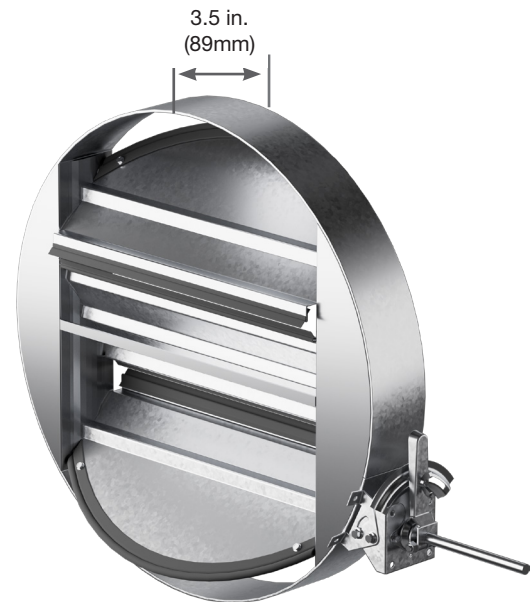
3½ cfm/ft² @ 1 in. wg (64 cmh/m² @ 0.25 kPa) on 48 in. diameter.

Temperature

Up to 180°F (82°C)

Construction

	Standard	Optional
Frame Material	Galvanized Steel	304SS
Frame Thickness	3 ½ in. x 14 ga. (89mm x 2mm) under 22 in. dia. (559mm); 3 ½ in. x 10 ga. (89mm x 3mm) 22 in. and greater	
Frame Type	Round	-
Blade Material	Galvanized Steel	304SS
Blade Action	Opposed	Parallel
Blade Seals	Vinyl blade seals with silicone on top and bottom radii	
Blade Thickness	16 ga. (1.5mm)	-
Blade Type	3V	-
Linkage	Plated Steel	316SS
Axle Material	½ in. (13mm) Plated Steel	-
Jamb Seals	Stainless Steel	-



*Diameter furnished approximately ¼ in. (6mm) undersize.

Diameter*	Minimum	Maximum
in. (mm)	11 in. (279)	48 in. (1219)
* 1 in. (25mm) increments		

Options and Accessories

- Electric actuator and manual quadrant available. Factory supplied actuators are sized for 1500 fpm (7m/s) and fully closed differential pressure of 2 in. wg (.5 kPa). contact factory for actuator sizing on applications exceeding those limits.
- Clean Wrap
- NEMA enclosures: 3, 4, 4X, 7
- Transformers

Document Links



[INSTALLATION](#)



[DAMPER SELECTION
GUIDE](#)



[CATALOG](#)

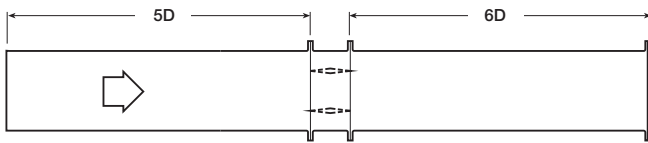


[WARRANTY](#)



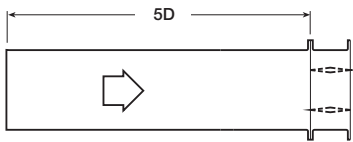
[SPECIFICATIONS](#)

Pressure drop testing was conducted in accordance with AMCA Standard 500-D using the three configurations shown. All data has been corrected to represent standard air at a density of 0.075 lb/ft³ (1.2 kg/m³). Actual pressure drop found in an HVAC system is a combination of many factors. This pressure drop information, along with an analysis of other system influences should be used to estimate actual pressure losses for a damper installed in an HVAC system.



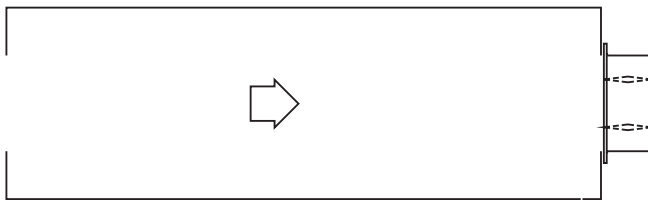
AMCA 5.3

D = Duct length
 W = Damper width
 H = Damper height



AMCA 5.2

$$D = \sqrt{\frac{4(W)(H)}{3.14}}$$



AMCA 5.5

Dimension inches	12			24			36		
AMCA figure	5.2	5.3	5.5	5.2	5.3	5.5	5.2	5.3	5.5
Velocity (ft/min)	Pressure Drop in. wg								
500	.04	.03	.05	.03	.02	.04	.05	.05	.06
1000	.15	.11	.19	.13	.10	.15	.19	.20	.25
1500	.33	.25	.42	.29	.21	.33	.42	.44	.57
2000	.59	.45	.75	.51	.38	.59	.75	.79	1.01
2500	.93	.70	1.18	.79	.60	.92	1.18	1.23	1.58

Leakage Data

Leakage testing was conducted in accordance with AMCA Standard 500-D and is expressed as cfm/ft² of damper face area. All data has been corrected to represent standard air at a density of 0.075 lb/ft³ (1.201 kg/m³).

