

# Round Dampers



**CVS**   
DAMPER SERIES



## MANUAL DAMPERS

The Model ED-I is an ideal manual balancing damper, with the added ability of complete shut off for control. For use in up to 12" round.

### STANDARD CONSTRUCTION:

#### FRAME:

24 ga. thru 10"  
20 ga. thru 12"

#### BLADE:

24 ga. thru 10"  
20 ga. thru 12"

#### GASKET:

Foam

#### HAND QUADRANT:

1/4" square axle

#### FINISH:

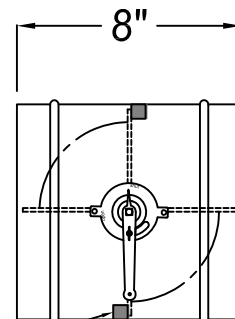
Galvanized

#### MAXIMUM VELOCITY:

1400 FPM



MODEL ED-I



Foam Gasket

approx. 1/8" o.d. undersized

Job Name:

Location:

Architect:

Engineer:

Contractor:

☐ **MODEL ED-I**



**MANUAL DAMPERS**

The Model ED is an ideal manual balancing damper for duct up to 20" round.

**STANDARD CONSTRUCTION:**

**FRAME:**

- 24 ga. thru 12"
- 20 ga. thru 20"

**BLADE:**

- 20 ga. thru 14"
- 18 ga. thru 20"

**HAND QUADRANT:**

- 1/4" square axle-Steel

**Options:**

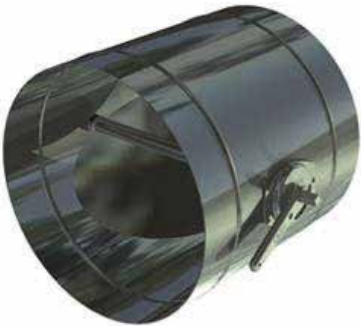
- ☐ 1/4" Continous Shaft; Steel
- ☐ Nylon Bushings
- ☐ Stand Off Bracket
- ☐ Paint Grip

**FINISH:**

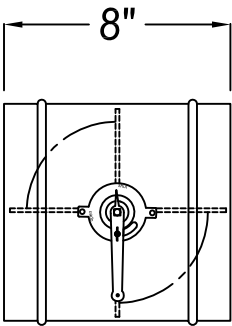
- Galvanized

**MAXIMUM VELOCITY:**

- 1400 FPM



MODEL ED



approx. 1/8" o.d. undersized

Job Name:

Location:

Architect:

Engineer:

Contractor:

☐ **MODEL ED**

**MANUAL DAMPERS**

The Model RD is a G-90 galvanized steel damper with factory mounted with heavy duty locking hand quadrant designed especially for manual balancing applications. It is easy to install, seal, and becomes part of the duct work.

DIAMETER	LENGTH	BODY & BLADE
4 - 10"	8"	20 ga.
12 - 18"	8"	20 ga.
20 - 30"	8"	20 ga.
32 - 40"	8"	18 ga.

**MODEL RD**

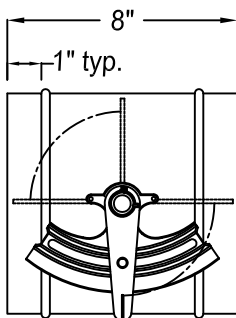
approx. 1/8" o.d. undersized

**SHAFT:**

1/2" round solid aluminum (thru 30")  
3/4" round solid steel (32" thru 40")

**BEARING:**

Molded synthetic  
Nylon 6/6



MAXIMUM VELOCITY		
DIAMETER	FPM	Max. Pressure Differential
4 - 8"	2600	3"
10 - 12"	2400	2.5"
14 - 18"	2300	2"
20 - 24"	2300	1.5"
26 - 30"	2200	1.25"
32 - 40"	2000	0.75"

**VARIATIONS:**

- ☐ Stainless steel body, blade, shaft and quadrant
- ☐ All aluminum construction w/ steel plated quadrant
- ☐ Extended quadrant 2"

Job Name:

Location:

Architect:

Engineer:

Contractor:

☐ **MODEL RD**

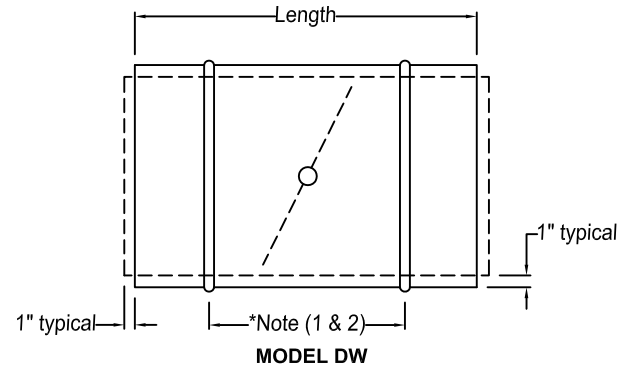
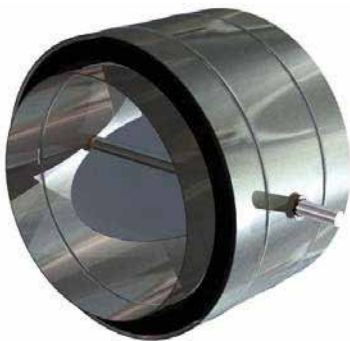
**DUAL WALL DAMPERS  
For Spiral Duct**

The MODEL DW is an insulated galvanized steel balancing damper for spiral duct. It is easy to install, seal, and becomes part of the duct work.

I.D. Diameter	Body Length	Exterior Body	Interior Body (solid)	Blade	Shaft
4-10"	8"	18 ga.	18 ga.	18 ga.	1/2"Ø
12-24"	8"	18 ga.	18 ga.	16 ga.	1/2"Ø
25-34"	8"	16 ga.	18 ga.	16 ga.	1/2"Ø
35-42"	8"	*14 ga.	18 ga.	16 ga.	3/4"Ø
43-52"	8"	*12 ga.	16 ga.	14 ga.	3/4"Ø
53-66"	8"	*10 ga.	16 ga.	12 ga.	3/4"Ø

**BEARING:** Interior and Exterior Body: Bronze oilite

**INSULATION:** Fiberglass



Approximately 1/8" O.D. & I.D. undersize

Note: Both damper bodies fit inside of spiral duct (male connection)

\*Note (1) 5-7/16" - 4" Thru 10"

7-7/16" - 12" Thru 66"

\*Note (2) Seal Bead Not Available above 35".

**VARIATIONS:**

- ☐ Heavier Gauge Construction
- ☐ Stainless Steel Body, Blade, Shaft, and Bearing
- ☐ All Aluminum Construction w/ Bronze Oilite Bearing
- ☐ Hand Quadrant
- ☐ Actuator
- ☐ Low leakage Blade Gasket

Job Name:

Location:

Architect:

Engineer:

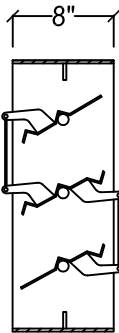
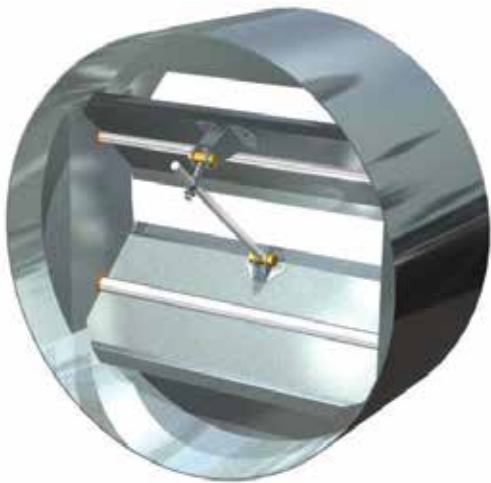
Contractor:

☐ **MODEL DW**

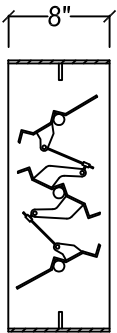


ROUND MULTI-BLADE DAMPER

The Model R-PB & R-OB was developed to maintain a more even airflow through the duct system.



MODEL R-PB  
(parallel blade)



MODEL R-OB  
(opposed blade)

approx. 1/4" o.d. undersized

STANDARD FEATURES:

- FRAME: 16 ga galvanized steel, 8" deep
- BLADES: 16 ga galvanized steel
- BEARINGS: 1/2" dia. self lubricating porous bronze
- BEARING PINS: 1/2" x 2" long plated steel rods
- HARDWARE: Plated brackets, brass pivots, 1/4" dia. steel rods
- CONTROL ROD: 1/2" x 9" long plated steel
- FINISH: galvanized
- MAX. TEMP.: 200°F
- MAX. VELOCITY: 2000 FPM
- MIN. SIZE: 12" Ø
- MAX. SIZE: 44" Ø

OPTIONS:

- ☐ Blade seals (EPDM) 180°F
- ☐ #304 stainless steel (including linkage)
- ☐ Actuators
- ☐ Powder coated (epoxy)
- ☐ Powder coated (polyester)

Job Name:	<input type="checkbox"/> <b>MODEL R-PB, R-OB</b>
Location:	
Architect:	
Engineer:	
Contractor:	

**CONTROL DAMPER****APPLICATION AND DESIGN:**

The Model RI was developed in response to automation controls companies need for a damper with the flexibility to mount various manufacturers actuators and controls.

**SHAFT:**

1/2" round solid aluminum (thru 30")

3/4" round solid steel (32" thru 46")

**BEARING:**

Bronze oilite (175°)

**BLADE SEALS:**

Crosslinked closed cell ( 200° F)

**MOUNTING PLATE:**

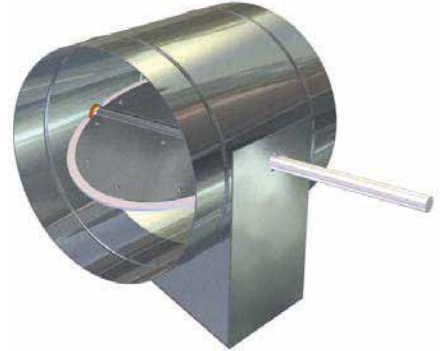
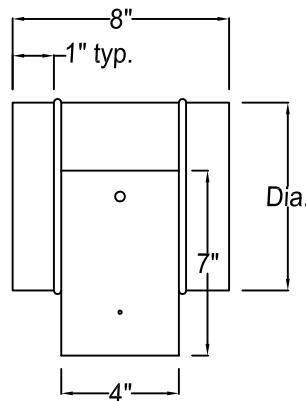
20 ga. galvanized steel

**OPTIONS:**

- ☐ Stainless steel body, blade, shaft and quadrant
- ☐ Silicone Blade Seal (400° F)
- ☐ All aluminum construction w/ steel plated quadrant
- ☐ Nylon 6/6 bushing (for aluminum construction)
- ☐ Extended quadrant 2"
- ☐ Factory furnished and mounted actuator
- ☐ Motor and/or control enclosure
- ☐ Stainless steel bearings (700° F)
- ☐ Silica Seals (800° F)

Heavier Gauges:

- ☐ 16 ga
- ☐ 14 ga

**MODEL RI**

approx. 1/8" o.d. undersized

**MAXIMUM VELOCITY**

DIAMETER	FPM	MAX. PRESSURE DIFFERENTIAL
4 - 8"	2600	6"
10 - 12"	2400	5"
14 - 18"	2300	4"
20 - 24"	2300	3"
26 - 30"	2200	2-1/2"
32 - 46"	2000	1-3/4"

DIAMETER	LENGTH	BODY & BLADE
4 - 10"	8"	24 ga.
12 - 18"	8"	20 ga.
20 - 30"	8"	20 ga.
32 - 46"	8"	18 ga.

Job Name:

Location:

Architect:

Engineer:

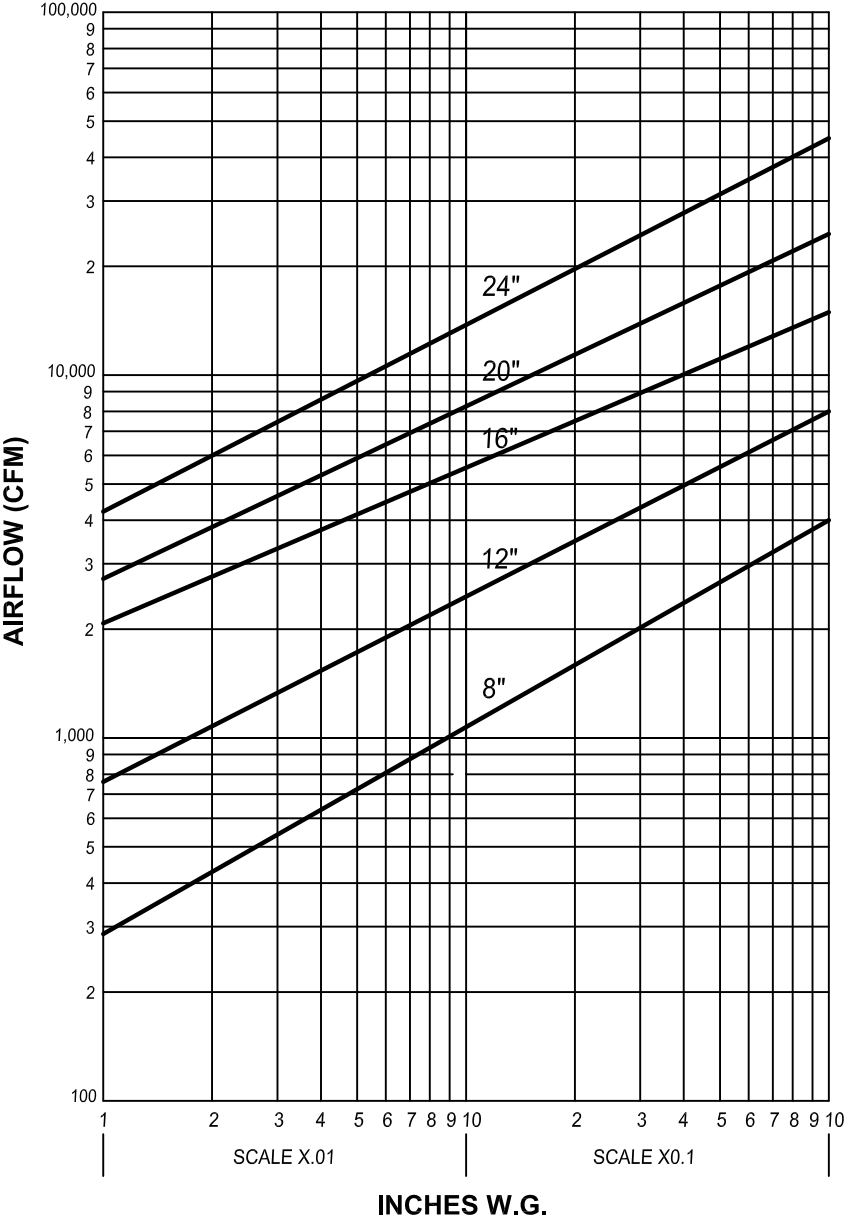
Contractor:

☐ **MODEL RI**



ROUND DAMPERS

STATIC PRESSURE DROP



Determining Static Pressure Drop (Round)

To determine static pressure drop through an open damper, start on the left side of the damper pressure drop chart. Given the CFM of air flow through the damper, follow the CFM line to the diagonal line of the damper size required, then down to the static pressure drop of the unit.

Example:

The pressure drop of an 8" damper with 700 CFM flow is .051 inches w.g.

Job Name:

Location:

Architect:

Engineer:

Contractor:

☐ Performance Data



# Product Range

- ▶ Fire-Resisting Ductwork (BS & EN)
- ▶ Fire-rated Insulation (ASTM & UL)
- ▶ Sound Attenuators (ASTM & BS)
- ▶ VAV Boxes (AHRI)
- ▶ Life Safety Dampers (UL)
- ▶ Control Dampers (AMCA & BS)
- ▶ Access Doors (BS & EN)
- ▶ Louvers (AMCA)
- ▶ Smoke Exhaust, Building, Car Park & Tunnel Ventilation Fans (AMCA & EN)
- ▶ Domestic and Industrial Ventilation Fans
- ▶ AHU, FAHU, FCU, RTU, ERV & Ecology Units (Eurovent, TUV & AHRI)
- ▶ Electrostatic Precipitators (ESPs) & UL Listed Air Filters (UL)

## Our Brands



Non-Coated Fire-Resisting Ductwork  
& Life Safety Dampers



Building & Industry  
Smoke Exhaust, Car Park &  
Tunnel Ventilation



Control Dampers, Louvers,  
Sound Attenuators & VAV Boxes



Fire-rated Insulation



Coated Fire-Resisting  
Ductwork



General Ventilation



AHU, FCU, RTU, ERV  
& Ecology Units

### U.A.E

Industrial Area 2,  
Al Wasit Road,  
Sharjah, UAE

### K.S.A

Dammam 2nd  
Industrial City,  
Dammam 31952,  
K.S.A

### Egypt

Al Minya Industrial Zone,  
Al Minya Governorate  
2427606, Egypt

### Qatar

Street 9 Industrial Area,  
Doha, Qatar



[sales@cvshvac.com](mailto:sales@cvshvac.com)



[www.cvshvac.com](http://www.cvshvac.com)