Project: Contractor:

Location: Architect:

Date: Submitted by:

# **O**EMC

#### Model MBD-57

Manual Balancing Damper (Multi-Blade)

#### **Application:**

The MBD-57 is designed to provide a cost effective and reliable solution to volume control and balancing of an HVAC system. The MBD-57's rigid frame and integrally braced corners provide true damper alignment and greatly resists the chance of the damper being installed out of square.

The MBD-57 is provided with 3V type blades and available in parallel or opposed blade orientations. The MBD-57 is designed for balancing and volume control and not for positive shut off or for automatic control (such as by an actuator). The MBD-57 meets the SMACNA construction requirements for manual balancing dampers.

#### Standard Construction:

**FRAME**: Roll-formed 20 ga. galvanized steel hat section with staked corners with integral bracing.

BLADES: 16 ga. Roll-formed, galvanized steel

Minimum width: 4.250" (108) Maximum width: 7.250" (184)

**BEARINGS:** Nylon, press-fit to Frame. **AXLES:** 1/2" (13) dia. plated steel.

LINKAGE: Concealed in frame. Linkage bars are .125" (3) thick

plated steel.

FINISH: Mill galvanized.

EXTENDED SHAFT: Removable, 6" long x 1/2" dia.(152 x 13)

plated steel coupled to square axle.

**MAX. TEMPERATURE:** 250°F (121°C) **MINIMUM SIZE:** 5"w x 4"h (127 x 102)

**MAXIMUM SIZES:** 

Single Section - 48"w x 72"h (1219 x 1829)

Multiple Section - Unlimited

## **Optional Construction:**

Locking hand quadrant (½ round) Standoffs (supplied loose):

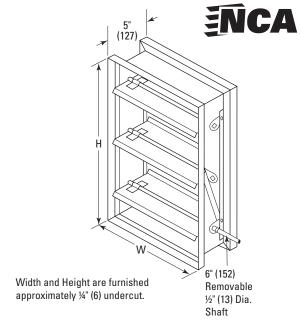
2" (51) Standoff 1" (25) Standoff

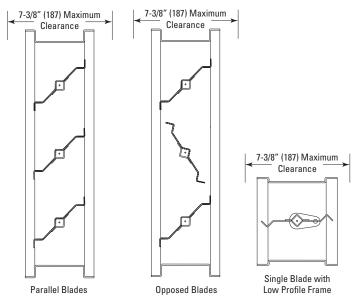
Blade Action
Parallel

Opposed

#### Notes:

- Not recommended with blades running vertically.
- The MBD-57 is not for positive shutoff. They are intended for balancing purposes only.
- Not provided with blade stops.





Low Profile Frame provided for damper under 18" high.

RATINGS			
DAMPER	MAX. PRESSURE	MAX. VELOCITY	
12" (305)	5" WC	3000 FPM	
24" (610)	5" WC	3000 FPM	
36" (914)	4" WC	2500 FPM	
48" (1219)	2.5" WC	2000 FPM	

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

Project: Contractor:

Location: Architect:

Date: Submitted by:



# **Application:**

The MBD-RD-88 is designed to provide a cost effective and reliable solution to volume control and balancing of an HVAC system. The MBD-RD-88's rigid round shell is welded for minimal leakage and provided in varying gauges depending on diameter.

The MBD-RD-88 is designed for balancing and volume control and not for positive shut off or for automatic control (such as by an actuator).

#### Standard Construction:

FRAME - Galvanized Steel, Rolled Reinforcement		
DIAMETER	GAUGE	
4" - 8" (102 - 204)	22 ga.	
9" - 12" (229 - 305)	20 ga.	
13" - 24" (330 - 610)	18 ga.	

BLADE: 16 ga. Galvanized steel with welded channel reinforcement

**BEARINGS:** Bronze oilite

AXLES: 3/8" (9.5) square, plated steel

FINISH: Mill galvanized.

EXTENDED SHAFT: 3/8" (9.5) square, plated steel 4" (102)

beyond frame.

MAX. TEMPERATURE: 200°F (93°C) SIZES: 4" - 24" (102 - 610) diameters. MAXIMUM VELOCITY: 2000 FPM MAXIMUM PRESSURE: 4" WC

## **Optional Construction:**

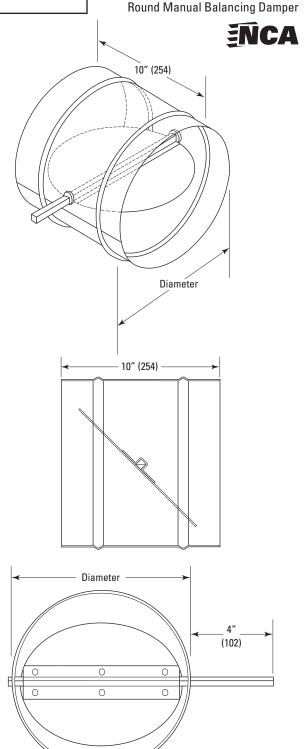
Locking quadrant (3/8" square)

Standoffs:

2" (51) Standoff 1" (25) Standoff

#### Notes:

- Dampers fabricated 1/8" (3) under opening size unless otherwise noted
- Blade stops are not provided



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

Project: Contractor:

Location: Architect:

Date: Submitted by:



Economy Single Blade Manual Balancing Damper

# INCA

# **Application:**

The PBD-20 is designed to provide a very cost effective yet efficient solution to regulating the flow of air in an HVAC system. The PBD-20 is manufactured as a single blade balancing damper and provided with a manual hand quadrant. The PBD-20 is not intended for positive shut off or automatic control (such as with an actuator).

#### Standard Construction:

**FRAME**: 18 ga. galvanized steel. **BLADES**: 18 ga. galvanized steel.

AXLES: 1/4" (6 mm) square plated steel.

FINISH: Mill galvanized.

**MINIMUM SIZE**: 6" x 4" (152 x 102) **MAXIMUM SIZE**: 36" x 12" (914 x 305)

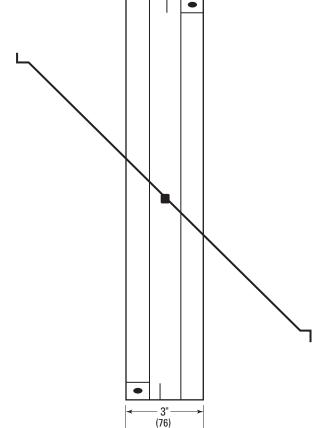
RATING: Maximum velocity: 1500 FPM

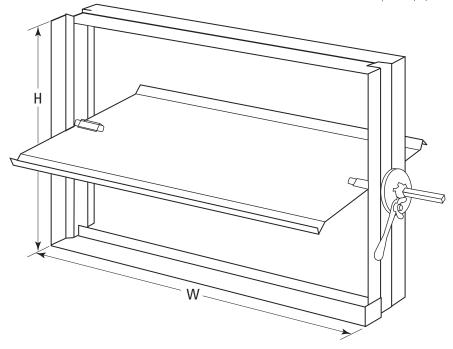
**OPERATOR:** Locking quadrant.

Maximum pressure: 1.0" WC

#### Notes:

- All dampers are fabricated 1/4" (6) under listed size unless otherwise specified "actual or exact".
- All dampers must be installed with blades running horizontally.
- For SMACNA compliance for dampers over 12" (305) in height, use MBD-57.





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

1 As part of our continuous improvement program, we reserve the right to make further improvements without notice.

Submittal - Model PBD-20 - 1117

Project: Contractor:

Location: Architect:

Date: Submitted by:



Round Economy Manual Balancing Damper



# **Application:**

The PBD-20RS is designed to provide a very cost effective yet efficient solution to regulating the flow of air in an HVAC system. The PBD-20RS is manufactured as a single blade true round balancing damper and provided with a manual hand quadrant. The PBD-20RS is not intended for positive shut off or automatic control (such as with an actuator).

#### Standard Construction:

FRAME: 8" (203) long sleeve, 20 ga. galvanized steel

**BLADES**: 18 ga. galvanized steel. **AXLES**: 1/4" (6) square plated steel.

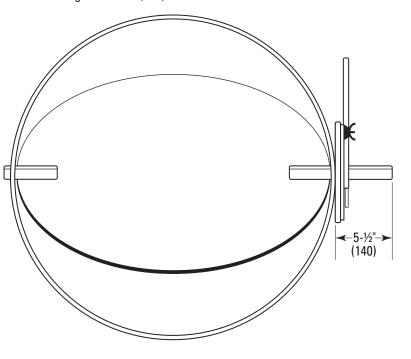
FINISH: Mill galvanized.
MINIMUM SIZE: 4" (102)
MAXIMUM SIZE: 20" (508)
OPERATOR: Locking quadrant.

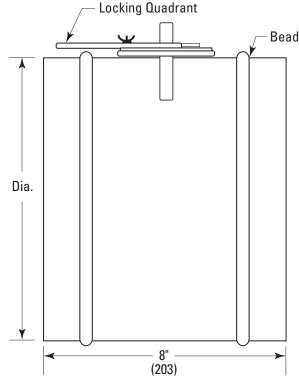
RATING: Maximum velocity: 1500 FPM

Maximum pressure: 1.0" WC

#### Notes:

- All dampers are fabricated 1/8" (3) under listed size unless otherwise specified "actual or exact".
- Not recommended for motor operation.
- For sizes larger than 20" (508) use PBD-100RS.





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

1 As part of our continuous improvement program, we reserve the right to make further improvements without notice.

Submittal - Model PBD-20RS - 1117