



# HEAVY DUTY INDUSTRIAL ISOLATION DAMPER

## ROUND • STEEL

### MODEL: 1995

The Nailor Model 1995 is an extra heavy duty, industrial butterfly type isolation damper designed for use in high pressure industrial HVAC or process air systems. The model offers precise airflow control or shut-off in applications involving pressure differentials of up to 20" w.g. and velocities up to 7000 fpm, depending on unit size. The extra heavy duty flanged frame, with optional bolt holes, connects easily to flanged duct for fast, secure installation. Model 1995 may be used for two-position or modulating control utilizing a selection of electric or pneumatic actuators, or can be operated manually with the optional locking hand quadrant.

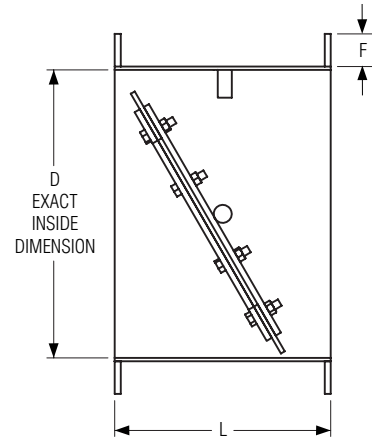
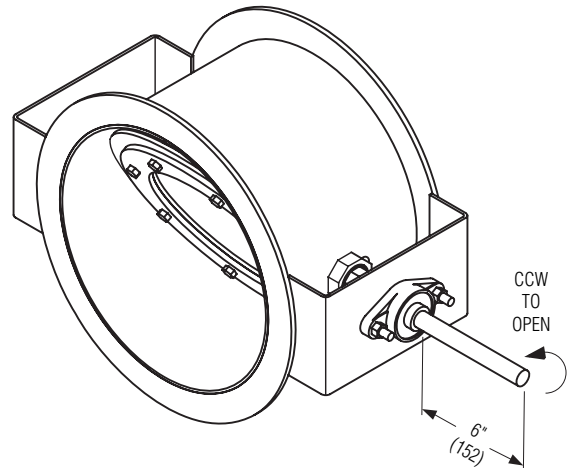
#### STANDARD CONSTRUCTION:

- FRAME:** Steel channel. See chart below for thickness, depth and flange dimensions.
- BLADE:** Steel, reinforced as required. See chart below for thickness.
- SEAL:** Full circumference elastomer type. Secured to blade with bolted retaining ring.
- BEARINGS:** Sealed ball bearings, relubricable, outboard mounted with adjustable shaft seals.
- AXLE:** Plated steel, continuous, reinforced as required. See chart below for diameter.
- DRIVE SHAFT:** Continuous axle extends approx. 6" (152) beyond outboard bearing.
- BLADE STOP:** Single tab, welded to frame.
- FINISH:** Grey epoxy paint.
- AVAILABLE SIZES:** 4" (102) through 72" (1829) diameter.
- MAXIMUM TEMPERATURE:** 250°F (121°C) standard. 400°F (204°C) with increased blade/frame clearance (Option code HT).
- MAX. PRESSURE:** 15 to 20" w.g. (see page 2).
- MAX. VELOCITY:** 7000 fpm (see page 2).

#### OPTIONS:

- BH Bolt holes in flanges
- BSS Silicone blade seal (up to 400°F (204°C))
- 304 Stainless steel construction
- SSA 304 stainless steel axles only
- HT High temp. (up to 400°F (204°C)) blade/frame clearance
- HDLQ Locking hand quadrant
- FMA Factory mounted actuator. Specify \_\_\_\_\_.
- Special \_\_\_\_\_.

Note: For variations not shown, contact factory.



Size (Inside Diameter 'D')	Frame Depth (L) x Thickness	Flange Width (F) x Thickness	Blade Thickness	Axle Diameter
4" (102) to < 9" (229)	6" (152) x 10 ga.	1 1/4" (32) x 10 ga.	1/4" (6)	1/2" (13)
9" (229) to < 12" (305)	9" (229) x 10 ga.	1 1/4" (32) x 10 ga.	1/4" (6)	3/4" (19)
12" (305) to < 14" (356)	9" (229) x 10 ga.	1 1/2" (38) x 10 ga.	1/4" (6)	3/4" (19)
14" (356) to < 24" (610)	9" (229) x 10 ga.	1 1/2" (38) x 1/4" (6)	1/4" (6)	3/4" (19)
24" (610) to < 32" (813)	12" (305) x 1/4" (8)	2" (51) x 1/4" (6)	1/4" (6)	3/4" (19)
32" (813) to < 44" (1118)	12" (305) x 1/4" (8)	2" (51) x 1/4" (6)	1/4" (6)	1" (25)
44" (1118) to < 48" (1219)	12" (305) x 1/4" (8)	2" (51) x 1/4" (6)	1/4" (6)	1 1/2" (38)

**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

Page 1 of 2  
Dimensions are in inches (mm).

**DATE**

**B SERIES**

**SUPERSEDES**

**DRAWING NO.**

10 - 4 - 07

1990

3 - 30 - 06

1995



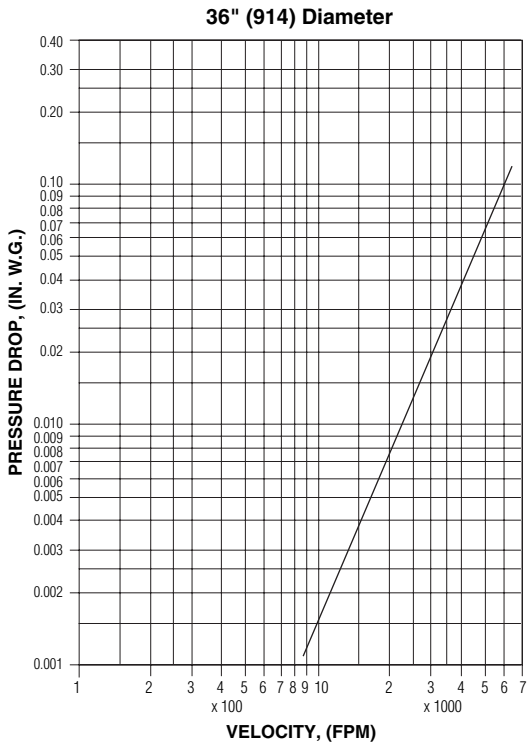
**HEAVY DUTY INDUSTRIAL ISOLATION DAMPER  
ROUND • STEEL  
PERFORMANCE DATA  
MODEL: 1995**

**PERFORMANCE LIMITATIONS:**

Damper Diameter	Maximum System Pressure	Maximum Velocity
72" (1829)	15.0" w.g.	7000 fpm
60" (1529)	15.0" w.g.	7000 fpm
48" (1219)	15.0" w.g.	7000 fpm
36" (914)	16.0" w.g.	7000 fpm
24" (610)	17.0" w.g.	7000 fpm
12" (305)	20.0" w.g.	7000 fpm

Pressure and velocity limitations shown are guidelines for design purposes. Although ratings are on the conservative side, contact Nailor for requirements beyond limitations shown.

**PRESSURE DROP:**



Tested per AMCA Standard 500-D, Figure 5.3.

**LEAKAGE:**

Damper Diameter	Leakage in CFM (L/S)
72" (1829)	6.56 (3.10)
60" (1529)	5.47 (2.58)
48" (1219)	4.37 (2.06)
36" (914)	3.28 (1.55)
24" (610)	2.19 (1.03)
12" (305)	1.09 (0.51)

Leakage based on 10" w.g. pressure differential. Tested per AMCA Standard 500-D, Figure 5.5.

<b>SCHEDULE TYPE:</b>		Page 2 of 2			
<b>PROJECT:</b>		Dimensions are in inches (mm).			
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>	
<b>CONTRACTOR:</b>	10 - 4 - 07	1990	3 - 30 - 06	1995	