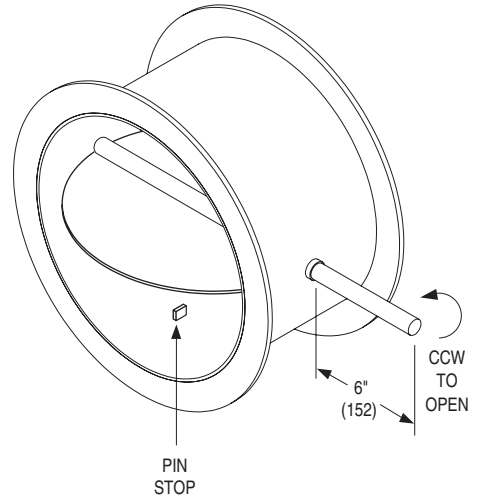


The Nailor Model 1989 is a light duty, butterfly type damper designed for use in medium pressure industrial HVAC or process air systems. The model offers precise airflow control or shut-off in applications involving up to 6" w.g. (1.5 kPa) pressure for diameters up to 24", and up to 4" w.g. (1.0 kPa) pressure for diameters above 24", and velocities up to 4000 fpm (20 m/s). The flanged frame, with optional bolt holes, connects easily to flanged duct for fast, secure installation. Model 1989 may be used for two-position or modulating control utilizing a variety of electric or pneumatic actuators, or can be operated manually with the optional locking hand quadrant.

**STANDARD CONSTRUCTION:**

- Frame:** Galvanized steel. See chart below for thickness, depth and flange dimensions.
- Blade:** Steel, reinforced as required. See chart below for thickness.
- Bearings:** Stainless steel sleeve type.
- Axle:** Plated steel, continuous, reinforced as required. See chart below for diameter.
- Drive Shaft:** Continuous axle extends approx. 6" (152) beyond frame.
- Blade Stop:** Pin stop.
- Finish:** Mill galvanized.
- Available Sizes:** 4" (102) through 48" (1219) diameter.

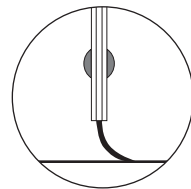


Model 1989 Maximum Performance Ratings	
Maximum Velocity	Up to 4000 fpm (20.3 m/s)
Maximum Pressure	Up to 6" w.g. (1.5 kPa)
Maximum Temperature	250°F (121°C)

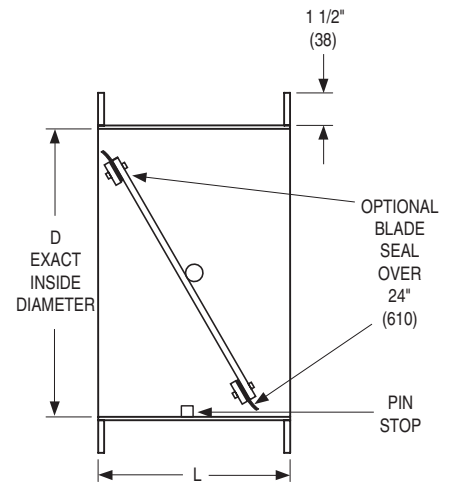
**Note:** For higher operating temperatures, contact factory.

**OPTIONS:**

- 304 Type 304 Stainless Steel construction
- 316 Type 316 Stainless Steel construction
- AS50/75/10 Type 304 Stainless Steel axles only
- BSN Neoprene blade seal (up to 250°F [121°C])
- BSS Silicone blade seal (up to 400°F [204°C])
- BSE EPDM blade seal (up to 250°F [121°C])
- BH1 Bolt holes in one flange
- BH2 Bolt holes in both flanges
- HDLQ Heavy duty hand locking quadrant
- FMXX Factory mounted actuator. Specify \_\_\_\_\_.
- Special Features: \_\_\_\_\_.



Optional blade seal up to 24" (610).



**Note:** For variations not shown, contact factory.

Size (Inside Diameter 'D')	Frame Depth (L) x Thickness	Frame Width (F) x Thickness	Blade * Thickness	Axle Diameter
4" (102) to 8" (203)	6" (152) x 16 ga.	1 1/2" (38) x 12 ga.	16 ga.	1/2" (13)
> 8" (203) thru 18" (457)	8" (203) x 16 ga.	1 1/2" (38) x 12 ga.	16 ga.	1/2" (13)
> 18" (457) thru 24" (610)	8" (203) x 12 ga.	1 1/2" (38) x 12 ga.	16 ga.	1/2" (13)
> 24" (610) thru 36" (914)	8" (203) x 12 ga.	1 1/2" (38) x 12 ga.	14 ga.	3/4" (19)
> 36" (914) thru 48" (1219)	8" (203) x 12 ga.	1 1/2" (38) x 12 ga.	12 ga.	3/4" (19)

\* Double skin equivalent (2 x 22 ga.) with optional blade seal up to 24" (610) diameter. Blade seal is a peripheral sandwich gasket.

<b>SCHEDULE TYPE:</b>	Page 1 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>	8 - 18 - 20	1989	3 - 8 - 18	1989

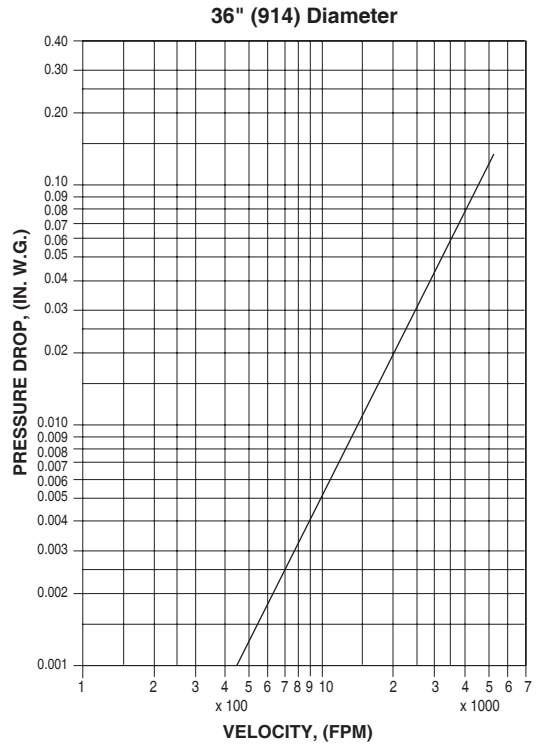
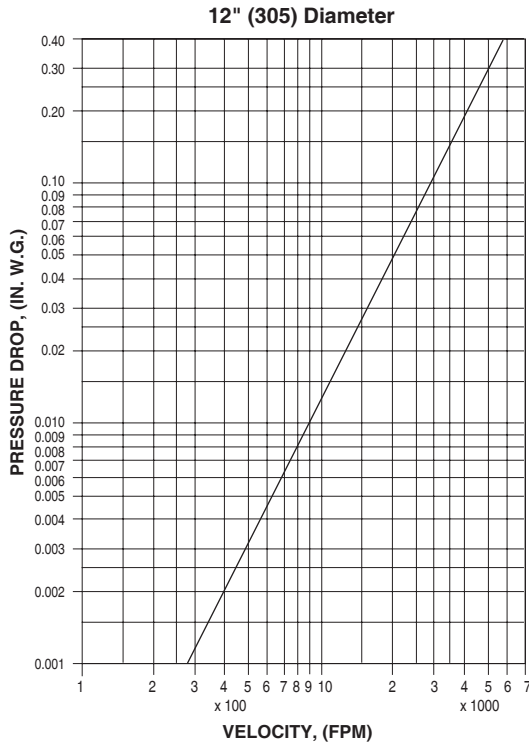


**LIGHT DUTY INDUSTRIAL CONTROL DAMPER**  
**ROUND • STEEL**  
**PERFORMANCE DATA**  
**MODEL: 1989**

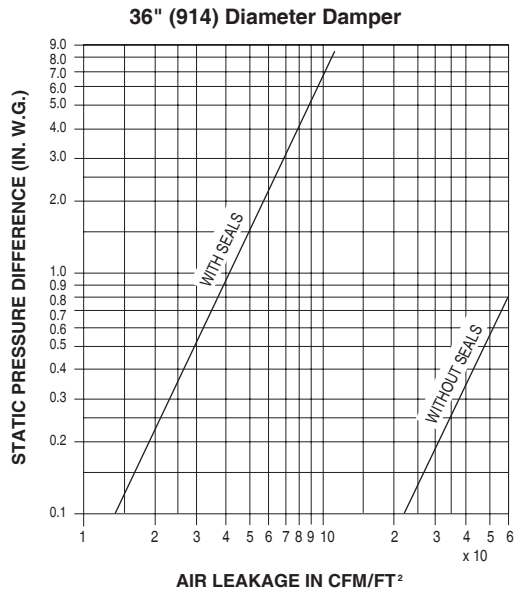
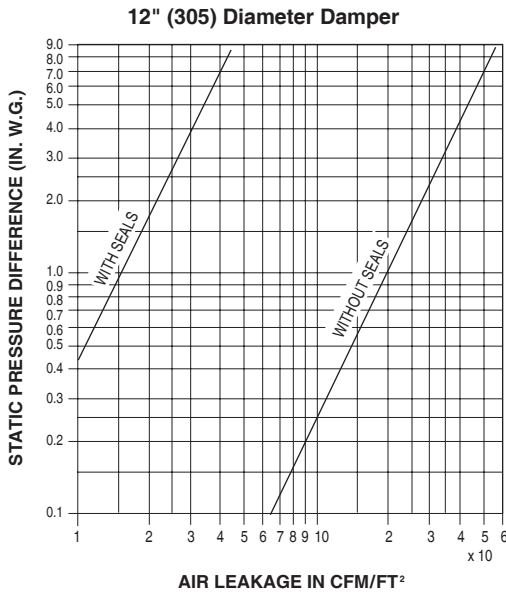
**PERFORMANCE LIMITATIONS:**

Diameter	12" (305)	24" (610)	36" (914)	48" (1219)
Maximum System Pressure	6.0" w.g.	6.0" w.g.	4.0" w.g.	4.0" w.g.
Maximum System Velocity	4000 fpm	3000 fpm	2500 fpm	2500 fpm

**PRESSURE DROP:**



**LEAKAGE:**



<b>SCHEDULE TYPE:</b>	
<b>PROJECT:</b>	
<b>ENGINEER:</b>	
<b>CONTRACTOR:</b>	

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

DATE	B SERIES	SUPERSEDES	DRAWING NO.
8 - 18 - 20	1989	3 - 8 - 18	1989