



ROUND CONTROL DAMPER
STEEL • LOW LEAKAGE
MODEL: 1090

The Nailor Model 1090 is a low leakage, butterfly damper which has been designed for all types of round ductwork applications and is suitable for use in the majority of low to medium pressure and velocity commercial HVAC systems. The 1090 installs easily in round spiral ductwork. The damper may be used for two position or modulating control using a variety of electric or pneumatic actuators or may also be used as a manual balancing damper when used with the optional hand locking quadrant and positive shut-off is required.

STANDARD CONSTRUCTION:

- FRAME:** 22 ga. (0.86) corrosion-resistant steel with stiffening beads up to 12" (305) dia. 20 ga. (0.91) over 12" (305) dia.
- BLADE:** 2 x 22 ga. (0.86) corrosion-resistant steel laminated together, equivalent to 16 ga. (1.6). Open and close end stops. 90 degree rotation. CCW to open.
- BEARINGS:** Celcon®.
- DRIVE SHAFT/ AXLE:** 1/2" (13) dia. plated steel double bolted to blade. Axle extends approx. 6" (152) beyond frame.
- BLADE SEAL:** Cross-linked polyethylene.
- AVAILABLE SIZES:** 4" (102) through 24" (610) diameter in nominal 1" (25) increments.

TEMPERATURE RANGE: -50°F to 180°F (-45°C to +82°C)

OPTIONS:

- BO Oilite bearings
- BS Stainless steel bearings
- HLQ Hand locking quadrant
- 304 Stainless steel construction
- FMS Full perimeter metal blade stop
- Special features _____.

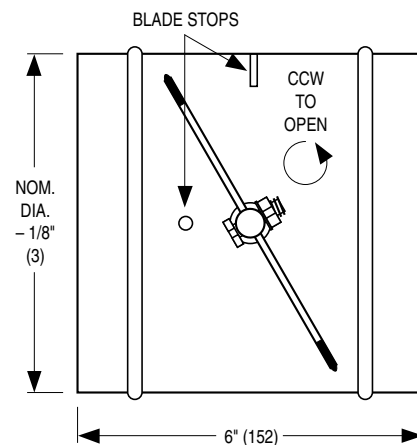
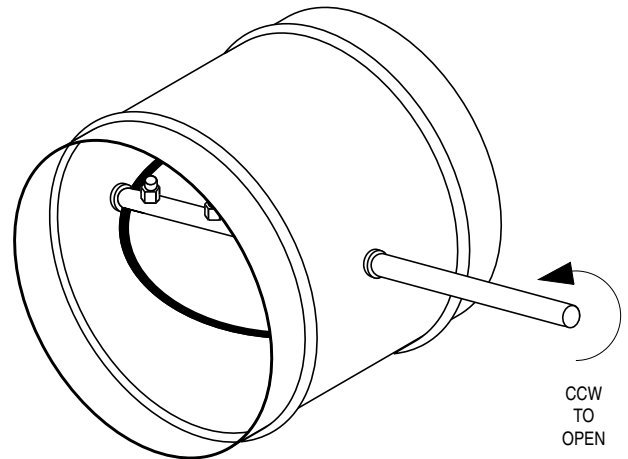
FACTORY MOUNTED ACTUATORS:

- Actuators below are two position, spring return.
- ML-4115. Honeywell 120 VAC.
 - ML-8115. Honeywell 24 VAC.
 - 331-4826 (pneumatic).

Actuator Connection:

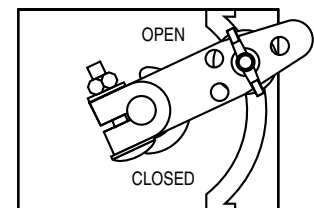
- Normally closed damper (standard)
- Normally open damper

Nailor offers a comprehensive selection of alternative actuators for factory or field installation.



OPTIONAL HAND LOCKING QUADRANT

7/8" (22) stand-off



PERFORMANCE:

Dampers are designed to operate in a clean, dry environment.

Maximum System Pressure: 4" w.g. (1 kPa).

Maximum Face Velocity: 2000 fpm (10 m/s).

Leakage: Less than 10 cfm/sq. ft. @ 4" w.g.

(0.05 m³/s/m² @ 1 kPa) or 0.5% @ 2000 fpm (10 m/s).

SCHEDULE TYPE:		Dimensions are in inches (mm).			
PROJECT:					
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.	
CONTRACTOR:	3 - 11 - 03R	1000	11 - 5 - 99RR	1000-6	