



# MODULATING SMOKE DAMPER

AIRFOIL BLADE • HIGH PERFORMANCE  
 ULTRA-LOW LEAKAGE • LOW PRESSURE DROP  
 MODELS: 1210M AND 1211M (TYPE A)



### QUALIFICATIONS:

- UL 555S & CAN/ULC-S112.1 CLASSIFIED SMOKE DAMPER Class I at 250°F elevated temperature. (File # R9492)
- Meets NFPA 90A, 92, 101 and 105 as well as IBC and NBC (Canada) Building Code requirements.
- California State Fire Marshal Listing No. 03230-0935:0107.
- City of New York MEA# 366-03-M.
- Maximum velocity: 2000 fpm @ 4" w.g. (10 m/s @ 1 kPa).

The 1210M Series modulating dampers are classified for use as a volume control damper in applications where building codes require a leakage rated smoke damper as part of a static smoke control or dynamic smoke management system.

The 1210M Series has been especially designed and tested to offer premium performance. The 1210M Series provides the lowest leakage class available and is qualified for vertical or horizontal installation with airflow in either direction. Airfoil blade design and elimination of blade sills, top and bottom, provide lowest pressure drop. Unique inter-locking double skin blade design eliminates combustible blade seals and provides flame and smoke seal under fire conditions.

### STANDARD CONSTRUCTION:

- Frame:** 5" x 7/8" x 16 ga. (127 x 22 x 1.6) galvanized steel hat channel.
- Blades:** 14 ga. (2.0) equivalent galvanized steel formed airfoil on 5 1/2" (140) centers. Opposed action.
- Linkage:** Concealed in frame. 12 ga. (2.7) plated steel.
- Bearings:** 1/2" (13) dia. self-lubricating oilite bronze.
- Axles:** 1/2" (13) dia. plated steel double bolted to blades.
- Jackshaft:** 1/2" (13) dia. cadmium plated steel.
- Jamb Seals:** Cambered stainless steel.

### Sizes (Duct W x H):

Velocity/ Pressure Rating	Elevated Temp. °F	Minimum		Maximum	
		Single Section	Single Section	Multiple Section	
		Vertical/Horizontal	Vert./Horiz.	Vertical/Horizontal	Vertical/Horizontal
24	250	8" x 8" (203 x 203). 6" x 6" (152 x 152) with low profile frame (maximum size is 18" x 6" [457 x 152]).	36" x 48" (914 x 1219)	144" x 96" (3658 x 2438) or 288" x 48" (7315 x 1219)	

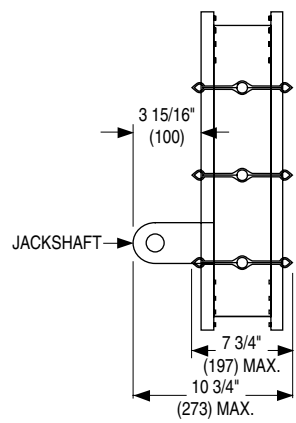
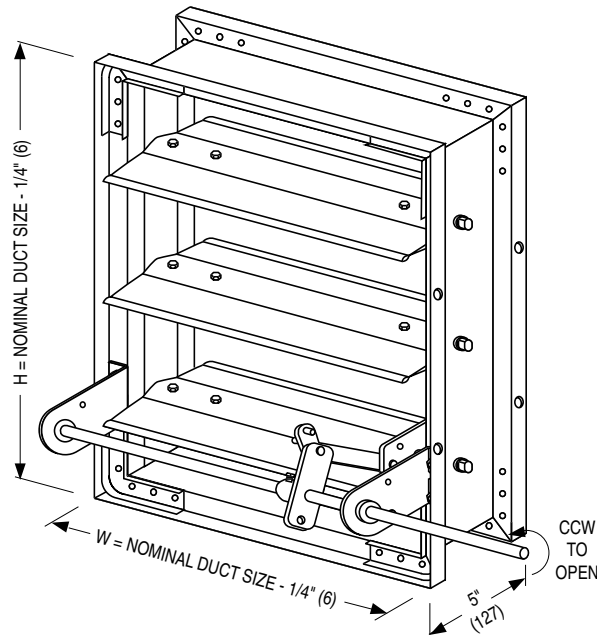
**Note:** Dampers with duct heights less than 6" (152) (8" [203] if width is over 18" [457]) require a Type 'B' sleeve enclosure (Model 1212M). Duct sizes less than 8" (203) in width require a Type 'C' enclosure (Model 1213M).

### BASE MODEL SELECTION:

- 1210M** With side actuator mounting plate
- 1211M** Standard factory sleeve (caulked to UL requirements) 16" long x 20 ga. (406 x 1.0).
- 1211M** Non-standard sleeve. Specify \_\_\_\_\_ length \_\_\_\_\_ ga. Available up to 36" (914) in length and 10 through 20 ga. (3.5 through 1.0).

**LEAKAGE CLASS/ELEVATED TEMPERATURE: I @ 250°F**

**DYNAMIC VELOCITY/PRESSURE RATING: 24** 2000 fpm @ 4" w.g.



### ACTUATOR SELECTION:

- Electric**  **Pneumatic**

### ACTUATOR LOCATION:

- External**  **Internal** (in the airstream)

**ACTUATOR FAIL POSITION: Closed.**

### OPTIONS:

- BS** Stainless steel bearings
- MLS-300** Position indicator switch pack
- TDF1** Flange (one end) } (20 or 22 ga. sleeves only)
- TDF2** Flange (both ends) }

For installation instructions, see IOM-SDINST.

Dimensions are in inches (mm)

<b>SCHEDULE TYPE:</b>				
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	10 - 11 - 24	1200	6 - 14 - 13	1210M-1