



MODULATING COMBINATION FIRE/SMOKE DAMPER
AIRFOIL BLADE • HIGH PERFORMANCE
3 HR. LABEL • SQ., RECT. OR OVAL DUCT CONNECTION
MODEL: 1223M-3 (TYPE C SLEEVE ENCLOSURE)



QUALIFICATIONS:

- UL 555 & CAN/ULC-S112 CLASSIFIED DYNAMIC FIRE DAMPER 3 hr. Label (File #'s R9492 & R19569).
- UL 555S CLASSIFIED SMOKE DAMPER (File # R9492) Leakage Class I at 250°F elevated temperature.
- City of New York. MEA #366-03-M.
- California State Fire Marshal: Fire Damper Listing No. 3225-0935:106.
- Meets NFPA 80, 90A, 92A, 92B, 101 and 105 as well as IBC and NBC (Canada) Building Code requirements.
- Maximum velocity: 2000 fpm @ 4" w.g.

The 1220M-3 Series modulating dampers are classified for use as a volume control damper in applications where building codes require both a fire damper for the protection of ductwork penetrations in walls or floors that have a fire resistance rating of up to 4 hours and also require a leakage rated damper for operational smoke control in static or dynamic smoke management systems.

The 1220M-3 Series has been especially designed and tested to provide premium performance. It offers the lowest leakage class available and is qualified for installation with airflow in either direction and inverted mounting. Airfoil blade design and elimination of blade sills, top and bottom, provide a low pressure drop design.

Unique, inter-locking double skin blade design provides flame and smoke seal under fire conditions.

STANDARD SPECIFICATION:

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: Stainless steel.

Heat Responsive Device (Controlled Closure):

ERL (Electric Resettable Link) is standard on dampers with electric actuators: 250°F (121°C) standard. 165°F (74°C) and 212°F (100°C) available.

PRL (Pneumatic Replaceable Link) is standard on dampers with pneumatic actuators: 212°F (100°C) standard. 165°F (74°C) available.

Sizes (Duct W x H):

Velocity/ Pressure Rating	Elevated Temp. °F	Minimum		Maximum		
		Single Section Vertical/Horizontal	Single Section Vertical	Single Section Horizontal	Multiple Section Vertical	
24	250	4" x 4" (102 x 102) (Overall damper size is 8" x 8" [203 x 203] min.)	34" x 46" (864 x 1168)	30" x 46" (762 x 1168)	118" x 94" (2997 x 2388) (maximum each section 30" x 48" [762 x 1219])	

SLEEVE/ENCLOSURE SELECTION:

1223M-3 Standard factory sleeve (caulked to UL requirements) 16" long x 20 ga. (406 x 1.0).

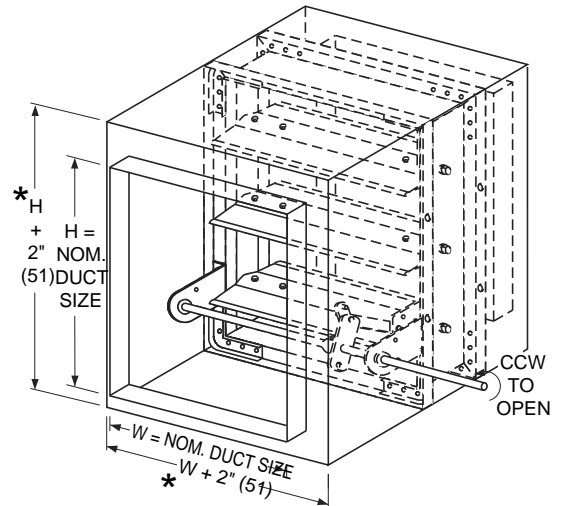
1223M-3 Non-standard sleeve. Specify _____ length _____ ga. Available up to 36" (914) dependent upon wall thickness and 10 through 20 ga. (3.5 through 1.0).

LEAKAGE CLASS/ELEVATED TEMPERATURE: I @ 250°F

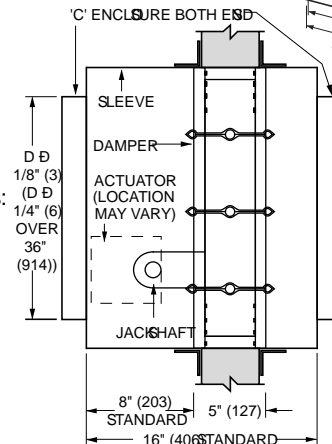
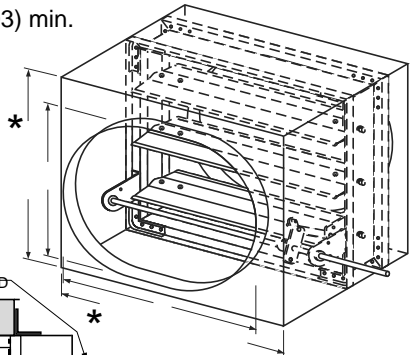
DYNAMIC VELOCITY/PRESSURE RATING: 24 2000 fpm @ 4" w.g.

ACTUATOR SELECTION: Electric Pneumatic

ACTUATOR LOCATION: External Internal (in the airstream)



* or 8" (203) min.



Wall Thickness	Minimum Sleeve Length
4 (102)	16 (406)
8 (203)	20 (508)
12 (305)	24 (610)
16 (406)	28 (711)

ACTUATOR FAIL POSITION: Closed.

OPTIONS:

- BS Stainless steel bearings
- MLS-300 Position indicator switch pack
- MLS-400 Electric Fire Sensor (Re-openable control system). Includes dual heat sensors (165°F and 250°F) and position indicator switch pack.
- QS1 Quick-set retaining angle (one side)
- QS2 Quick-set retaining angles (two sides)

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

For installation instructions, see IOM-1220INST.
 Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
5 - 7 - 12	1200	8 - 21 - 08	1220M-3-4