



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



QUALIFICATIONS:

- UL 555 & CAN/ULC-S112 CLASSIFIED DYNAMIC FIRE DAMPER 3 hr. Label (File # R9492).
- UL 555S & CAN/ULC-S112.1 CLASSIFIED SMOKE DAMPER Leakage Class I or II at 250°F or 350°F elevated temperature (File # R9492).
- City of New York. MEA # 366-03-M.
- California State Fire Marshal: Fire Damper Listing No. 3225-0935:0106.
- Meets NFPA 80, 90A, 92A, 92B, 101 and 105 as well as IBC and NBC (Canada) Building Code requirements.
- Maximum velocity: Up to 4000 fpm @ 8" w.g. (20 m/s @ 2 kPa).

The 1220-3 Series dampers are ideal for 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 1220-3 Series has been especially designed and tested to provide premium performance and is AMCA licensed. 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 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.

Linkage: Concealed in frame. 12 ga. (2.7) plated steel.
Bearings: 1/2" (13) dia. self-lubricating oilite bronze.
Axes: 1/2" (13) dia. plated steel double bolted to blades.
Jackshaft: 1/2" (13) dia. cadmium plated steel.
Jamb Seals: Stainless steel.

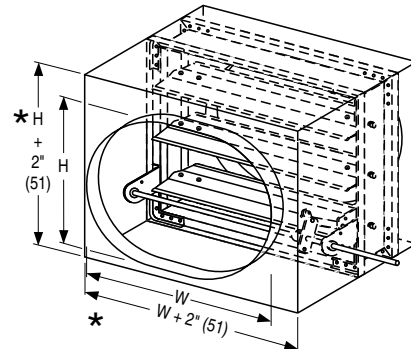
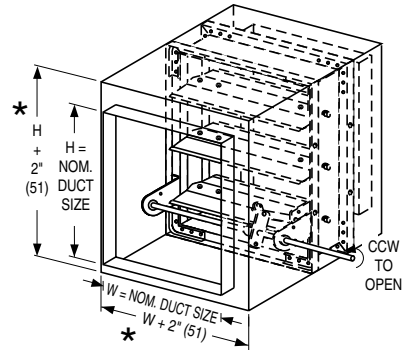
Heat Responsive Device (Controlled Closure):

ERL (Electric Resettable Link) is standard on dampers with electric actuators: 250°F (121°C) standard. 165°F (74°C), 212°F (100°C) and 350°F (176°C) available.

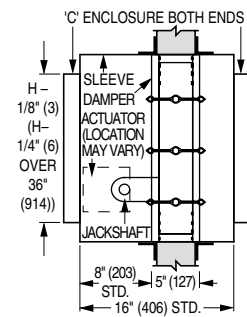
PRL (Pneumatic Replaceable Link) is standard on dampers with pneumatic actuators: 212°F (100°C) standard. 165°F (74°C) and 280°F (138°C) available.

Sizes (Duct W x H):

Velocity/ Pressure Rating	Elevated Temp. °F	Minimum				Maximum		
		Single Section		Single Section		Multiple Section		
		Vert./Horiz.	Vertical	Horizontal	Vertical			
24, 34, 36, 46	250/350	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 is 30" x 48" [762 x 1219]).			
48	250		34" x 46" (864 x 1168)	30" x 46" (762 x 1168)	118" x 94" (2997 x 2388) (maximum each section is 30" x 48" [762 x 1219]).			
48	350		34" x 22" (864 x 559)	30" x 22" (762 x 559)	118" x 46" (2997 x 1168) (maximum each section is 30" x 24" [762 x 610]).			



* 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)

BASE MODEL SELECTION:

- 1223-3** Standard factory sleeve (caulked to UL requirements) 16" long x 20 ga. (406 x 1.0) (18 ga. [1.3] for dampers over 84" [2134] in width).
- 1223-3** 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).

For installation instructions, see IOM-1220INST.

SCHEDULE TYPE:				
PROJECT:				
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	4 - 29 - 24	1200	7 - 26 - 21	1220-3-4



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MOUNTING:

- V** Vertical
- H** Horizontal

ACTUATOR SELECTION:

- Electric** **Pneumatic**

POWER REQUIREMENT:

- 120** 120 VAC
- 230** 230 VAC
- 24** 24 VAC
- 25** 25 psi Pneumatic

LEAKAGE RATING:

- I** Class I (Standard)
- II** Class II

DYNAMIC VELOCITY/PRESSURE RATING:

- 24** 2000 fpm @ 4" w.g. (Standard)
- 34** 3000 fpm @ 4" w.g. (Optional)
- 36** 3000 fpm @ 6" w.g. (Optional)
- 46** 4000 fpm @ 6" w.g. (Optional)
- 48** 4000 fpm @ 8" w.g. (Optional)

ELEVATED TEMPERATURE:

- 250** 250°F (121°C) (Standard)
- 350** 350°F (176°C)

CLOSURE DEVICE:

- ERL** Electric Resettable Link
- PRL** Pneumatic Link
- DTO** Dual Temp. Override Sensor
- FL** Fusible Link

CLOSURE TEMPERATURE:

- 250°F** (121°C) (std.)
- 212°F** (100°C) (std.)
- 250°F / 165°F**
(121°C / 74°C) (std.)
- 165°F** (74°C) (std.)
- 165°F** (74°C)
- 212°F** (100°C)
- 165°F** (74°C)
- 280°F** (138°C)
- 350°F / 165°F**
(176°C / 74°C)
- 212°F** (100°C)
- 212°F** (100°C)
- 350°F** (176°C)

FL Fusible Link is only available with electric actuator (external mount, fail open) @ 250°F (121°C), 2000 fpm @ 4" w.g. (34" x 34" [864 x 864] Vertical, 30" x 34" [762 x 864] Horizontal max.).

ACTUATOR MOUNTING:

- EXT** External (Standard)
- INT** Internal (Optional)

ACTUATOR FAIL POSITION:

- CL** Closed (Standard)
- OP** Open (Optional) (Requires FL Fusible Link)

OPTIONS:

- BS** Stainless steel bearings
- MLS-300** Position Indicator Switch Pack
- QS1** Quick-set retaining angle (one side)
- QS2** Quick-set retaining angles (two sides)

For installation instructions, see IOM-1220INST.

SCHEDULE TYPE:	Page 2 of 2			
PROJECT:	Dimensions are in inches (mm)			
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	4 - 29 - 24	1200	7 - 26 - 21	1220-3-4