

# COMBINATION FIRE/SMOKE DAMPER

AIRFOIL BLADE • HIGH PERFORMANCE
1 1/2 HR. LABEL • SQUARE, RECTANGULAR

OR OVAL DUCT CONNECTION

MODEL: 1223 (TYPE C) SLEEVE ENCLOSURE



#### QUALIFICATIONS:

- UL 555 & CAN/ULC-S112 CLASSIFIED DYNAMIC FIRE DAMPER 1 1/2 hr. Label (File # R9492).
- UL 555S CLASSIFIED SMOKE DAMPER (File # R9492) Leakage Class I or II at 250°F or 350°F elevated temperature.
- 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 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 2 hours and also require a leakage rated damper for operational smoke control in static or dynamic smoke management systems.

The 1220 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:  $5" \times 7/8" \times 16$  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.

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):**

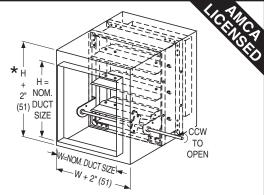
ERL (Electric Resettable Link) is standard on dampers with electric actuators: 250°F (121°C) standard. 165°F (74°C), 212°F (100°C) and 350°F (176°C) available.

PRL (Pneumatic Replaceable Link) is standard on dampers with pneumatic actuators:  $212^{\circ}F$  ( $100^{\circ}C$ ) standard.  $165^{\circ}F$  ( $74^{\circ}C$ ) and  $280^{\circ}F$  ( $138^{\circ}C$ ) available.

### Sizes (Duct W x H):

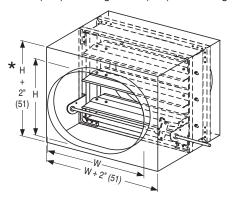
Velocity/ Pressure Rating	Elevated Temp. °F	Minimum	Maximum			
		Single Section	Single Section		Multiple Section	
		Vertical/Horiz.	Vertical	Horizontal	Vertical	Horizontal
24, 34, 36, 46	250/350		34" x 46" (864 x 1168)	30" x 46" (762 x 1168)	142" x 94" (3607 x 2388)	126" x 94" (3200 x 2388)
48	250	4" x 4" (102 x 102)	34" x 46" (864 x 1168)	30" x 46" (762 x 1168)	142" x 94" (3607 x 2388)	126" x 94" (3200 x 2388)
48	350		34" x 22" (864 x 559)	30" x 22" (762 x 559)	142" x 46" (3607 x 1168)	126" x 46" (3200 x 1168)

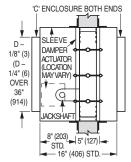
SCHEDULE TYPE:		Page 1 of 2			
PROJECT:	Di	Dimensions are in inches (mm).			
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.	
CONTRACTOR:	8 - 23 - 23	1200	7 - 26 - 21	1220-4	



Exception:

\*5" (127) duct height is 8" (203) overall height.





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 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 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.



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MOUNTING:				VI O
□ V Vertical				CEN CA
☐ 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)				
☐ <b>36</b> 3000 fpm @ 6" w.g. (Optional) ☐ <b>46</b> 4000 fpm @ 6" w.g. (Optional)				
☐ 48 4000 fpm @ 8" w.g. (Optional)				
ELEVATED TEMPERATURE:				
<b>250</b> 250°F (121°C) (Standard)				
<b>☐ 350</b> 350°F (176°C)				
CLOSURE DEVICE: CLOSURE TEMPERATURE:	_		_	
☐ ERL Electric Resettable Link ☐ 250°F (121°C) (std.) ☐ 165°F ☐ PRL Pneumatic Link ☐ 212°F (100°C) (std.) ☐ 280°F	,	<b>1 212°F</b> (100	°C) <b>3</b> 5	<b>0°F</b> (176°C)
□ PRL Pneumatic Link       □ 212°F (100°C) (std.)       □ 280°F         □ DTO Dual Temp. Override Sensor       □ 250°F / 165°F       □ 350°F /				
(121°C / 74°C) (std.) (176°C	7 74°C)			
☐ FL Fusible Link ☐ 165°F (74°C) (std.) ☐ 212°F	,			
FL Fusible Link is only available with electric actuator (external mount, fail ope 2000 fpm @ 4" w.g. (34" x 34" [864 x 864] Vertical, 30" x 34" [762 x 864] Horiz		I21°C),		
ACTUATOR MOUNTING:				
☐ EXT External (Standard) ☐ INT Internal (Optional)				
☐ 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				
<ul><li>☐ QS1 Quick-set retaining angle (one side)</li><li>☐ QS2 Quick-set retaining angles (two sides)</li></ul>				
	For installa	tion instructi	ons, see ION	I-1220INST.
SCHEDULE TYPE:	Page 2 of 2			
PROJECT:	Dimensions are in inches (mm)			
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	8 - 23 - 23	1200	7 - 26 - 21	1220-4