

MODULATING COMBINATION FIRE/SMOKE **DAMPER**

AIRFOIL BLADE • HIGH PERFORMANCE 3 HR. LABEL • ULTRA-LOW LEAKAGE

MODEL: 1222M-3 (TYPE B SLEEVE ENCLOSURE)

FOR DUCTS UNDER 8" (203) IN HEIGHT AND 8" (203) OR MORE IN WIDTH

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.

Concealed in frame. 12 ga. (2.7) plated steel. Linkage: 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):

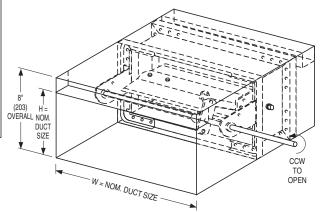
| Velocity/ | Elevated | Minimum | Maximum | | | |
|-----------|----------|---|-----------------------------|-----------------------------|---|--|
| Pressure | Temp. | Single Section | Single Section | | Multiple Section | |
| Rating | °F | Vertical/Horizontal | Vertical | Horizontal | Vertical | |
| 24 | 250 | 8" x 4" (203 x 102) (Overall damper height is 8" [203]) | 36" x 7 1/2" (914 x 191) | 32" x 7 1/2" (813 x 191) | 120" x 7 1/2" (3048 x 191) (maximum each section 30" x 7 1/2" [762 x 191]) | |

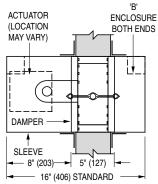
Note: Duct sizes less than 8" (203) in width require a Type 'C' enclosure (Model

SLEEVE/ENCLOSURE SELECTION:

| 1222M-3 | Std. factory sleeve (caulked to UL requirements) | 16" lor | าg x 20 |
|---------|--|---------|---------|
| | ga. (406 x 1.0). | | |

☐ 1222M-3 Non-standard sleeve. Specify _ _ length Available up to 36" (914) dependent upon wall thickness and 10 through 20 ga (3.5 through 1.0)





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

LEAKAGE CLASS/ELEVATED TEMPERATURE: I @ 250°F

DYNAMIC VELOCITY/PRESSURE RATING:

24 2000 fpm @ 4" w.g.

ACTUATOR SELECTION:

Pneumatic Electric **ACTUATOR LOCATION: External.**

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)

For installation instructions, see IOM-1220INIST

| and to unough 25 ga. (5.5 unough 1.5). | | istaliation instructions, see folia-1220ins i. | | | |
|---|------------|--|--------------|------------|--|
| CHEDULE TYPE: Dimensions are in inches | | | in inches (m | (mm) | |
| PROJECT: | | Differsions are in inches (min). | | | |
| ENGINEER: | DATE | B SERIES | SUPERSEDES | DRAWING NO | |
| CONTRACTOR: | 5 - 7 - 12 | 1200 | 8 - 21 - 08 | 1220M-3-2 | |