MODEL AA2M

Smoke Damper • Airfoil Blades • Leakage Class II • 250°F Rated • Galvanized Steel • For Volume Control Applications

Standard Materials and Construction

FRAME:	51/2" x 1/8" x 16 GA. galvanized steel hat channel. A flat
	head and sill are used for sizes up to 13" high.
BLADES:	20 GA. galvanized steel double skinned (equal to 14-GA),
	parallel action.
AXLES:	Plated solid steel stub.
BEARINGS:	Oil impregnated bronze.
LINKAGE:	Plated steel angle and crank plates with stainless steel
	pivots, in-jamb type.
STORS.	
STOPS:	18 GA. galvanized steel at head and sill.
BLADE SEALS:	Silicone.
JAMB SEALS:	Stainless steel.
SLEEVE:	Minimum 20 GA. galvanized steel by 18" long.
CAULKING:	Hardcast Irongrip 601 or UL-listed equivalent.
FINISH:	Mill on galvanized steel.
ACTUATOR:	24VAC/DC Electric: factory-installed for power-open/
	spring-close (fail close) operation. External left-hand
	mounted as viewed form jackshaft side of damper.

Options

Exact Size (no undercut)

Flange - Front, Rear or Both

Right Hand and/or Internal Actuator Mounting Locations (restrictions apply) Dual Position Indication (IDPI) Switches

Model SM-501 Flow-Rated Smoke Detector

Model 2151 No-Flow Smoke Detector (12" minimum damper height)

Remote test box

Momentary test switch

Transformers

Tab-Lock retaining angles - 1 or 2 sets

Stainless steel bearings

Stainless steel axles

Security bars

Sleeves of various depths and gauge thickness (restrictions apply)

No sleeves or side plates only (restrictions apply)

Round or oval transitions

Short-width (less than 8") and/or short-height (less than 6") transitions

<u>Notes</u>

1. Nominal deductions will be made to the opening size given.

2. Dampers greater than or equal to 12" in height with factory mounted SM-501 smoke detectors require a minimum 19" deep sleeve ($10\frac{1}{2}$ " on the actuator side). Detectors will be mounted on the side of the damper opposite actuator.

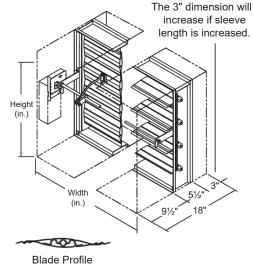
3. Dampers less than 12" in height with factory mounted SM-501 smoke detectors require a minimum 20 deep sleeve ($11\frac{1}{2}$ " on the actuator side). Detectors will be mounted on the bottom or top of damper.

- 4 Smoke detectors can be ordered for field mounting with standard 18" deep sleeve.
- 5. Actuator control signal is 2-10 VDC or with addition of 500 ohm resistor (by others) is 4-20 mA.



This smoke damper meets the construction and performance requirements of:

- Underwriters Laboratories Inc. Standards 555S
- National Fire Protection Association Standards 80 and 90A
- ICC's International Building Code
- New York City MEA Listing #112-99-M
- California State Fire Marshal Listing #3230-1328:111
- Underwriters Laboratories Inc. Approved for dual direction airflow and dynamic conditions.
- Underwriters Laboratories Inc. Classified for use in smoke control systems for Leakage Class II and 250°F or 350°F.
- Actuators must be controlled by a smoke detection system.



When using a true 6" high damper, width is limited to 16". If damper is ordered as 6" high and width is less than 16", an 8" high damper with 2" short-height transition will be supplied.

Damper Style	Temp Rating Velocity & Press		Horizontal and Vertical Min Panel	Horizontal and Vertical Max Panel	cal Horizontal and Vertice Max Assembly	
No Transition		2000 FPM, 4 in. w.g.	8" x 6" frame	22" x 22" frame	96" x 48" frame	
C-Round -or- C-Square	250°F		4" dia. duct -or- 4" x 4" duct (8" x 6" frame)	22" dia. duct -or- 22" x 22" duct	46" dia. duct -or- 46" x 46" duct	
C-Oval -or- C-Rectangular			4" dia. duct (8" x 6" frame)	22" x 22" duct	94" x 46" duct	

All dimensions are shown as width x height.

For dampers with no transition, the order size will equal frame size, which should equal duct size.

Unless notes, duct size will be the order size.

For dampers with transitions, the damper's frame size will equal the order width + 2 inches x the order height plus 2 inches.



In the interest of product development, Arrow United reserves the right to make changes without notice. 450 Riverside Dr • Wyalusing PA, 18853 • Phone 570-746-1888 • Fax 570-746-9286 AUI-22-01-03

Damper Sizes

MODEL AA2M

Operational Rating

Maximum Differential Pressure: 4 in. w.g. Maximum Velocity: 2000 fpm

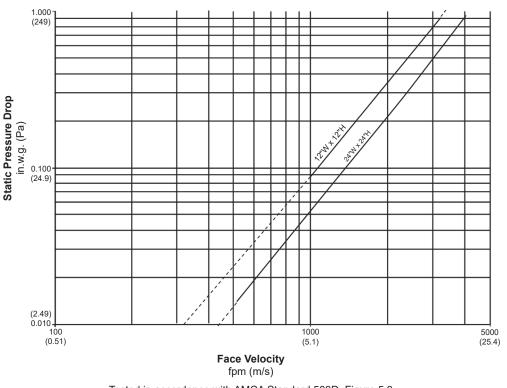
Leakage Rating

UL Class II

10 cfm per sq. ft. maximum @ 1 in. w.g. 20 cfm per sq. ft. maximum @ 4 in. w.g.

Pressure Drop Rating

The pressure drop data shown below is based on laboratory conditions. The test setup does not take into account elbows or other duct fittings that are part of every actual duct system. The configuration of the actual duct system immediately upstream and downstream of the damper often contributes more pressure loss than the damper itself.





Arrow United Industries certifies that the AA2M damper shown here is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to Air Performance Ratings only.

Tested in accordance with AMCA Standard 500D, Figure 5.3 Intake air converted to standard air density.

lkere #	0.	Qty Damper Size	Horizontal	Vertical	250)°F	Velocity	Pressure	COD S	
Item #	QIY		Orientation		Temp. Rating		Operational Rating		Union Made	
Arch.	/ Eng.:				EDR:		ECN:		Job:	
Conti	ractor:									
P	roject:				Date:		DWN:		DWG:	

