

FIRE/SMOKE DAMPER – MODEL 771 & 771-3 CLASS I 771 (1-1/2 HR.) **RATED 771-3 (3 HR.)** RATED

Features – U.L. rated for static/dynamic closure & leakage CLASS I @ 350° F, for use in a 2 hour walls or floors in the HVAC systems with velocities to 2000 FPM and pressure to 4" W.G. Meets NFPA 90A & UL555 & UL555S.

STANDARD CONSTRUCTION

FRAME

4-5/16" deep, 16 gauge galvanized steel

BLADES

6" wide triple "V", 16 gauge galvanized steel
(Bottom blade width may vary depending on damper height)

BLADE AXLES & BEARINGS

AXLES – 7/16" Plated hex
BEARINGS – Bronze oil impregnated

LINKAGE

Plated steel in opposed blade configuration, concealed inside the jamb.
Operator shaft is 1/2" steel rod extending 4-1/2" from damper side

SEALS

Extruded Silicone blade seals and stainless steel jamb seals

MAXIMUM UL CLASSIFIED LEAKAGE CLASS I SIZES

Single section assemblies:

- 771** - 36"W x 48"H Vertical
36"W x 48"H Horizontal
- 771 - 3** - 36"W x 36"H Vertical
36"W x 36"H Horizontal

MULTIPLE ASSEMBLIES

Multiple assemblies: (made of sections no larger than above sizes)

771 (144" x 96") vertical or horizontal mount

MINIMUM UL CLASSIFIED LEAKAGE CLASS I SIZE

8"W x 6"H (200 x 150)

SLEEVE

18 ga. x 16" deep galvanized steel

UNDERSIZED

1/4" under ordered size unless specified Exact or Actual

FINISH

Mill

HEAT SENSOR

165°F standard. 212°F, 250°F, or 350° F (Optional)

OPERATOR

Refer to UL approved actuator chart
(Specify external or internal mounting)

OPTIONAL CONSTRUCTION

HEAT SENSOR- 212°F, 250°F, OR 350°F

SPECIFIED MATERIAL – Available in stainless steel

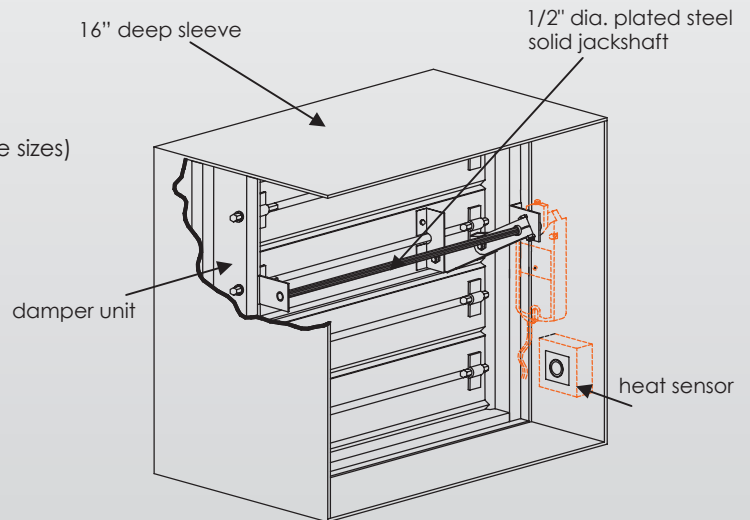
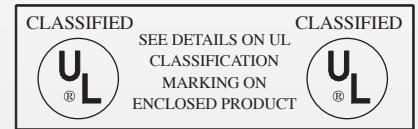
SLEEVE AND DUCTWORK CONNECTION – 10 ga. to 20 ga. galvanized steel to 30" in length. – Transitions available in: round, oval, rectangular or custom. Factory can install access door, retaining angles, flange connections, or security bars

Dampers 11" high and under will be single blade, and extend from the frame proportionately

ACCESSORIES

Smoke Detector
Monitoring Station

Indicator Switches
Dual Sensors

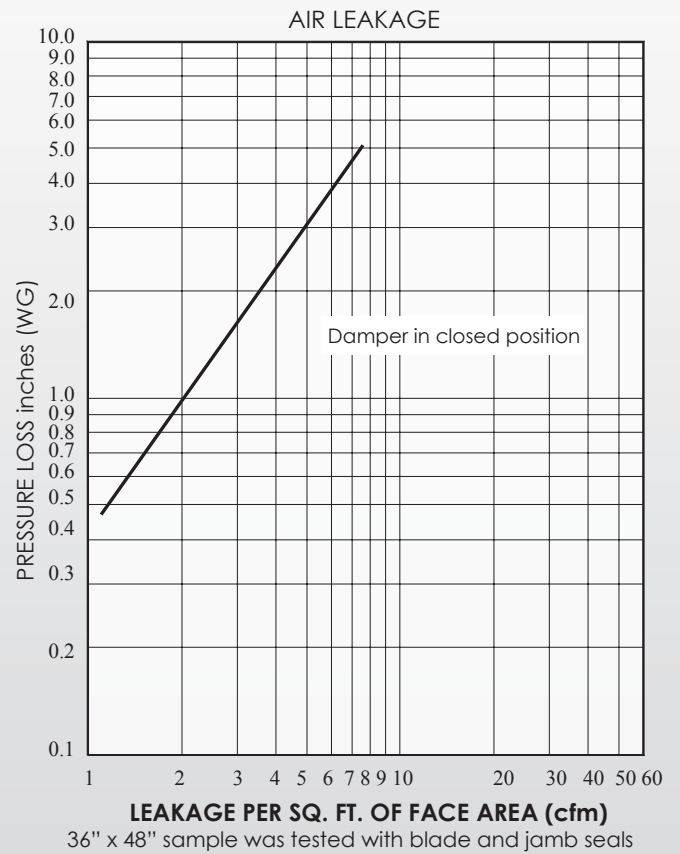
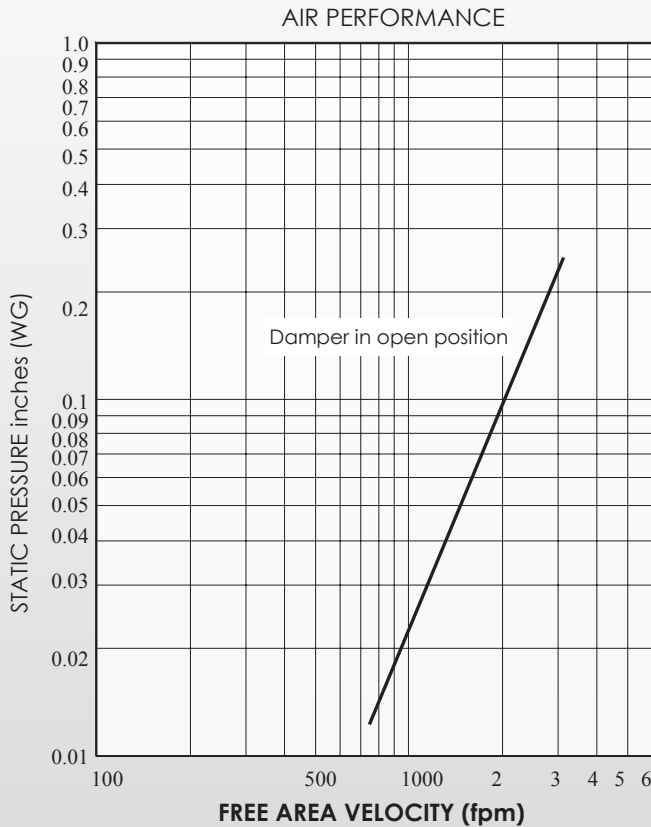


DATE	ARCHITECT			ENGINEER
PROJECT				
ITEM	QTY	W	H	DESCRIPTION

APPROVED ACTUATORS			
	Honeywell	Siemens	Belimo
24 Vac -	MS 8104F	GND121.1U	FSNF24 US *
	MS 8109F	GND126.1U	
	MS 8120F	GGD121.1U	
120 Vac -	MS 4104F	GND221.1U	FSNF120 US *
	MS 4109F	GND226.1U	
	MS 4120F	GGD221.1U	
230 Vac -	MS 4604F	GND321.1U	FSNF230 *
	MS 4609F	GGD321.1U	
	MS 4620F		
Pneumatic - (8-13 PSI)		331-2961	
		331-3060	
		331-4826	

* Only for dampers up to 24" x 24"

771 & 771-3 PERFORMANCE



CALCULATING PRESSURE LOSS:

Based upon a given flow rate (in CFM), the flowing pressure loss maybe determined from the "air performance graph, knowing the sq. ft. of free area of the damper. Alternately, the free area may be determined based upon a volumetric flow rate and a maximum pressure loss. Utilizing the "air performance" graph.

_____ in. W.C. Max. Pressure Loss Intake or Exhaust
 _____ FPM (Free Area Velocity From "Air Performance" Graph)
 _____ CFM / _____ FPM Free Area Velocity = _____ Sq. Ft. Free Area

Model 771 (1-1/2 hr.) rated CLASS I
Model 771-3 (3 hr.) rated CLASS I

FREE AREA CALCULATIONS IN SQ. FT.

		WIDTH						
		12	16	20	24	28	32	36
HEIGHT	12	0.56	0.78	1.00	1.22	1.44	1.67	1.89
	16	0.83	1.17	1.50	1.83	2.17	2.50	2.83
	20	1.06	1.48	1.91	2.33	2.75	3.18	3.60
	24	1.28	1.80	2.31	2.83	3.34	3.85	4.37
	28	1.51	2.11	2.72	3.32	3.93	4.53	5.14
	32	1.79	2.50	3.22	3.93	4.65	5.36	6.08
	36	2.01	2.82	3.63	4.43	5.24	6.04	6.85
	40	2.37	3.30	4.23	5.17	6.10	7.04	7.97
44	2.60	3.63	4.66	5.68	6.71	7.74	8.77	
48	2.84	3.96	5.08	6.20	7.32	8.44	9.56	

U. L. CLASSIFIED DYNAMIC CLOSURE RATING

Our maximum recommended operating for this damper is 2000 fpm @ 4" static pressure. This damper has been tested in accordance with the U.L. requirements for closure under installed " system in operation" conditions, (Dynamic closure). Single sections 36" w x 48" h have been tested capable to close, mounted either vertical or horizontal, at 3000 fpm. @ 8" static pressure.