



## Fire/Smoke Damper Airfoil Blade Class I Model 781 & 781-3

**Features** – U.L. rated for dynamic closure & leakage CLASS I @ 350°F (176°C), for use in a 2 hour wall or partition.  
781 is 1½-hour fire rated, 781-3 is 3-hour rated. Meets NFPA 90A & UL555 & UL555S. Seismic and Fragility tested.

### STANDARD CONSTRUCTION

#### FRAME

4-5/16" (110) deep, 16 gauge (1.6) galvanized steel

#### BLADES

6 1/2" (165) wide, double wall 20 gauge (1.0) galvanized steel in airfoil shape, equivalent to a 14-gauge (1.9) single skin blade.  
(Bottom blade width may vary depending on damper height)

#### BLADE AXLES & BEARINGS

AXLES – 7/16" (11) Plated hex mechanically fastened to blade  
BEARINGS – Bronze oil impregnated

#### LINKAGE

Plated steel in opposed blade configuration, concealed inside the jamb.  
Operator shaft is 1/2" (13) steel rod extending 4-1/2" (114) from damper side

#### SEALS

Extruded Silicone blade seals and stainless steel jamb seals

#### MAXIMUM UL CLASSIFIED LEAKAGE CLASS I SIZES

Single section assemblies:

781	32"W x 48"H Vertical
	32"W x 36"H Horizontal
781-3	32"W x 48"H Vertical
	32"W x 36"H Horizontal

#### MULTIPLE SECTIONS

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

781	(144" x 48") (3658 x 1219) vertical or horizontal mount
781-3	(32" x 48" max.) (813 x 1219) single section assembly only

Available also in 144"w x 96"h (3658 x 2438) (Static Rated)

#### MINIMUM UL CLASSIFIED LEAKAGE CLASS I SIZE

12"W x 8"H (305 x 203)

#### SLEEVE

18 ga. x 16" (1.3 x 406) deep galvanized steel

#### UNDERSIZED

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

#### FINISH

Galvanized

#### HEAT SENSOR

120 VAC, 165°(73°C) to 350° (176°C)

#### OPERATOR

None

### OPTIONAL CONSTRUCTION

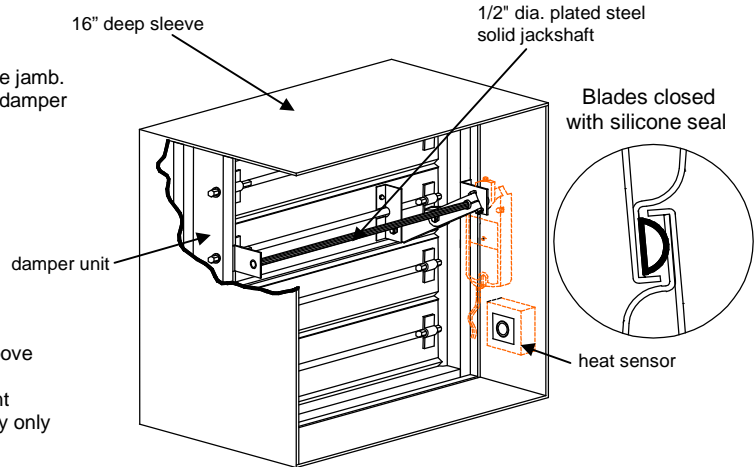
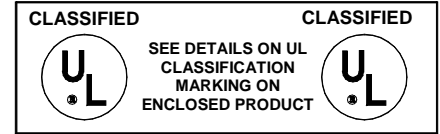
**SPECIFIED MATERIAL** – Available in stainless steel

**SLEEVE AND DUCTWORK CONNECTION** – 10 ga.(3.5) to 20 ga. (1.0) galvanized steel to 30" (762) in length. – Transitions available in: round, oval, rectangular or custom. Factory can install access door, retaining angles, flange connections, or security bars

**OPERATOR** – Electric or pneumatic, internally or externally mounted, please see installation instructions for operator listing. (Operator type and location will affect the temperature rating of the damper)

### SPECIAL PURPOSE CONSTRUCTION

Full welded corner assembly  
Security bars (mounted in sleeve)  
Filter Racks  
Face and Bypass dual mixing damper configuration



	Honeywell	Siemens	Belimo
24 Vac -	ML 8115	GND121.1U	FSNF24 US*
	MS 4309	GGD121.1U	
	MS 8120		
120 Vac -	ML 4115	GND221.1U	FSNF120 US*
	MS 4209	GGD221.1U	
	MS 4120		
230 Vac -		GND321.1U	
		GGD321.1U	
Pneumatic -		331-2961	
		331-3060	

\* Only for dampers up to 24" x 24"

### ACCESSORIES

Smoke Detector  
Indicator Switches  
Monitoring Station  
Dual Sensors

\* Dampers 11" (279) high and under will be single blade, and extend from the frame proportionately.

<b>Contractor</b>
<b>Project</b>
<b>Engineer</b>

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