

April-2026-DYMFDA

DAMPER



DONG YANG AIR-CONDITIONING Co., Ltd.

APPLICATION

- **Prevention of fire spread**
- **Prevention of smoke spread**

FEATURES OF DYMFDA

■ **Blade seal with low leakage**

Seals ensure excellent airtightness, minimizing leakage when the blades are closed.

■ **Application of a special circular STS jamb seal**

To minimize leakage, a highly elastic spring plate is used as the jamb seal, ensuring smooth operation and low leakage.

■ **Excellent durability and corrosion resistance**

Using materials that comply with KS standards or equivalent quality, it offers excellent durability and corrosion resistance, ensuring smooth operation even after long-term use.

■ **Blade structure designed to minimize deformation**

Designed with a double steel plate structure to minimize blade deformation even at high temperatures.

■ **Air Performance and Leakage Rate AMCA Licensed**

The leakage and pressure drop ratings shown are based on test results in accordance with AMCA Publication 511.

STANDARD CONSTRUCTION

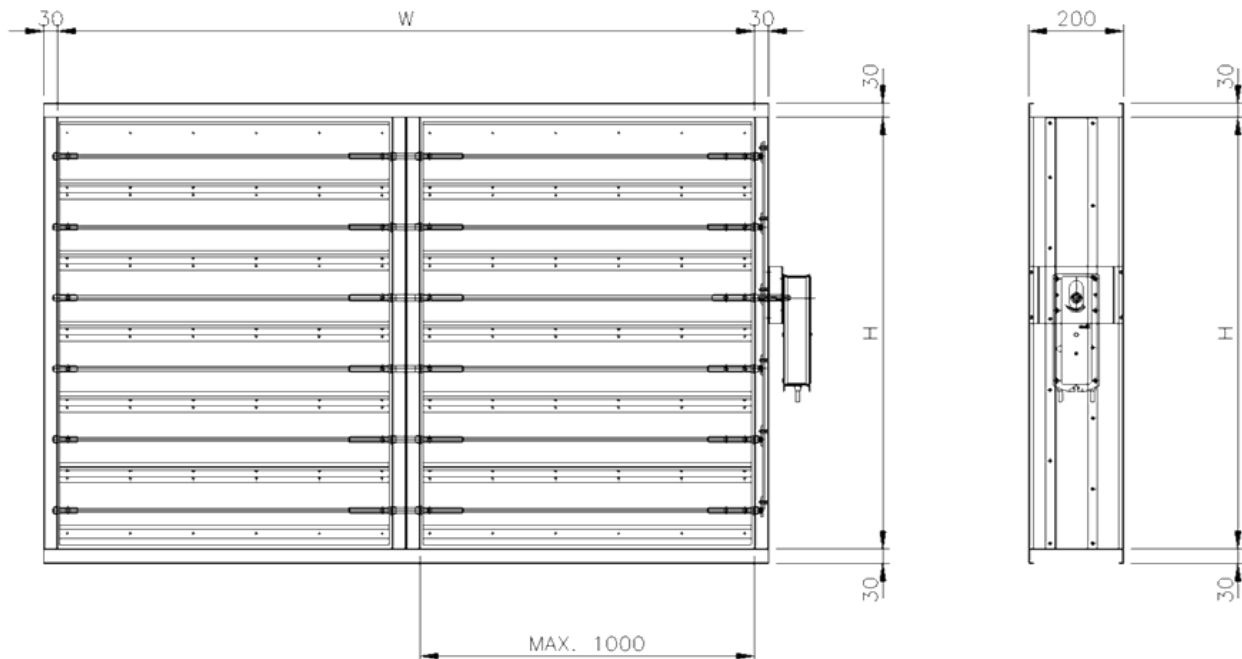
- **Frame** Galvanized steel or stainless steel 304
- **Blade** Double-skinned blade made of galvanized steel or stainless steel 304
- **Link** Galvanized steel or stainless steel 304
- **Shaft** Galvanized steel round bar or stainless steel round bar
- **Bearing** Sleeve bearing
- **Jamb seal** Stainless steel spring plate
- **Blade seal** Silicone or STS or EPDM



DONG YANG AIR-CONDITIONING CO., LTD. certifies that the DYMFDA Model shown herein 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 and air leakage ratings only.



STANDARD DIMENSIONS



- Intermediate support frame will be placed at every maximum width of 1,000mm for strength.
- 30 mm or different frame height for flange is available as a standard.

■ Standard Manufacturing Size

Description	Standard Dimensions	Max. Size	Min. Size
Height (H)	100mm ~ 3000mm	3,000mm	100mm
Width (W)	100mm ~ 2400mm	2,400mm	100mm

- Two or more dampers are assembled on the job site for dampers larger than the standard size.

For larger dampers than upper standard size, please contact us.

■ Standard Heights per Number of Blades (H mm)

No. of Blade	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Height (H)	200	350	500	650	800	950	1100	1250	1400	1550	1700	1850	2000	2150	2300	2450

■ For Installation of Actuator

- Installation method and accessories for actuator vary with type and model of actuator.
Please contact us for installation of actuator.
- We also supply dampers with installation work of actuators.

■ Shaft for Driving

- Shaft Size: Ø12.7 or Ø12
- Protruded Length: Length of shaft varies with the type and model of actuator.
Please contact us.

PRESSURE DROP OF DYMFDA

■ Articles Related to the Test

- Tested for air performance in accordance with

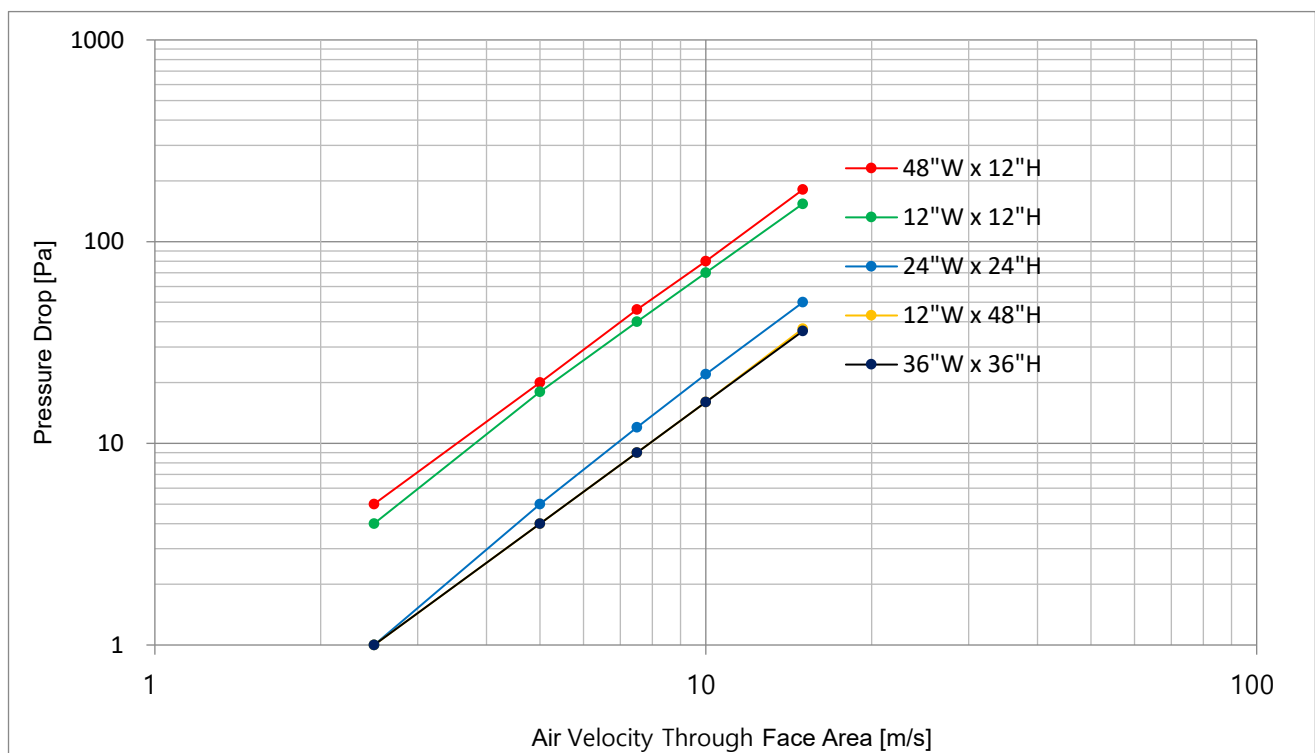
ANSI / AMCA Standard 500-D, Figure 5.3

- Tested Damper Size

- 305 mm x 305 mm (12 in. x 12 in.)
- 610 mm x 610 mm (24 in. x 24 in.)
- 914 mm x 914 mm (36 in. x 36 in.)
- 305 mm x 1,220 mm (12 in. x 48 in.)
- 1,220 mm x 305 mm (48 in. x 12 in.)



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■ The Trend of Pressure Drop Across the Damper

- Dampers with higher face velocity have bigger pressure drop.
- Dampers with larger face area at a certain velocity have smaller pressure drop.
- Bigger difference between width and height makes bigger pressure drop in the dampers with same face velocity and area.

LEAKAGE PERFORMANCE OF DYMFDA

■ Articles Related to the Test

- Tested for air leakage in accordance with
ANSI / AMCA Standard 500-D, Figure 5.4 Alternate
- Tested Damper Size
 - 305 mm x 1,220 mm (12 in. x 48 in.)
 - 2,400 mm x 914 mm (94.5 in. x 36 in.)

■ Torque Applied to Dampers

- 53.7Nm/m² applied to close and seat the damper during the test

■ Air leakage is based on operation between 0°C to 49°C

■ Leakage Class

- The AMCA Certified Ratings Seal applies only to the following leakage class
for the volume control dampers.

Damper Size	Leakage Class			
	1 in.wg	4 in.wg	6 in.wg	8 in.wg
305 x 1,220	2	2	2	2
2,400 x 914	2	2	2	2

■ AMCA Leakage Classification

SI	Maximum Allowable Leakage, L/s/m ²		
Class	at 0.25 kPa	at 1.0 kPa	at X kPa
1A	15.2	N/A	N/A
1	20	40	$2\sqrt{X} \times 20$
2	51	102	$2\sqrt{X} \times 51$
3	203	406	$2\sqrt{X} \times 203$

I-P	Maximum Allowable Leakage, cfm/ft ²		
Class	at 1 in. wg	at 4 in. wg	at X in. wg
1A	3	N/A	N/A
1	4	8	$\sqrt{X} \times 4$
2	10	20	$\sqrt{X} \times 10$
3	40	80	$\sqrt{X} \times 40$



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