AIR TIGHT DAMPER

MODEL – HDAL 150

amca WORLDWIDE CERTIFIED RATINGS
AIR LEAKAGE
AIR PERFORMANCE
AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC.®
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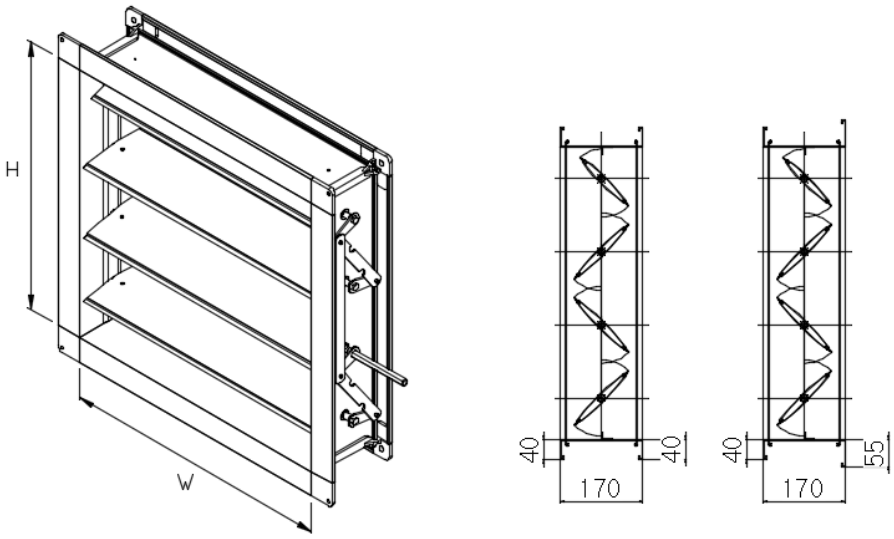
HUMITECHKOREA CO.,LTD.

Air Tight Damper MODEL-HDAL 150

Application

Air Tight Damper of Humitechkorea Co., Ltd. is a product with airfoil typed blade which is successfully passed through air performance

Dimension



Standard Construction

- Frame – A6063T5 channel shaped extruded aluminum
- Blade – A6063T5 double skin airfoil shaped extruded aluminum
- Link – A6063T5 extruded aluminum
- Shaft – SM15C Six Angles Bar
- Blade Sea l – EPDM Rubber
- Jamb Seal – Stainless Steel
- Bearing – Plastic

Pressure Drop

Humitechkorea Co., Ltd. certifies that the HDAL150 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 Leakage and Air Performance ratings.

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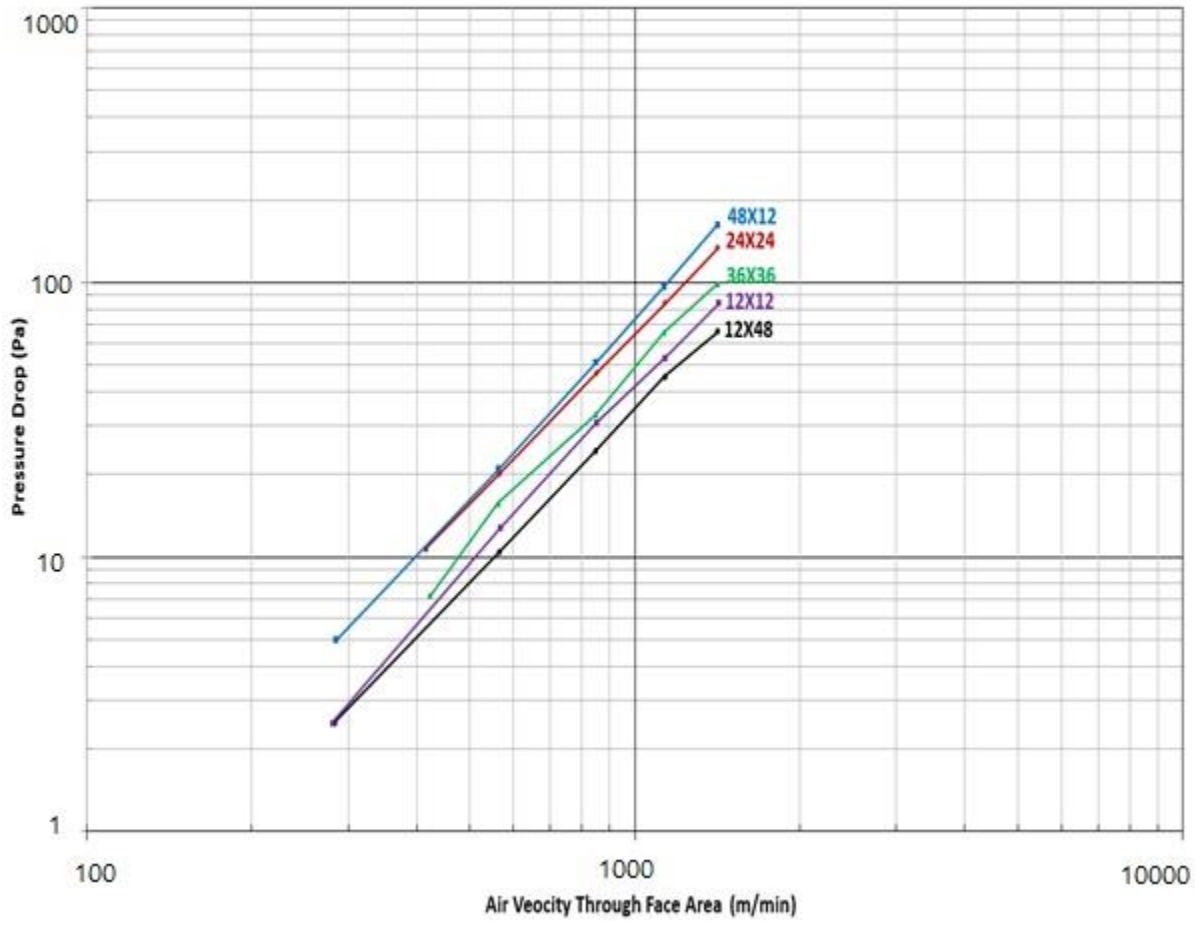
Test Information

- Tested for air performance in accordance with ANSI/AMCA500-D, Figure 5.3
- Tested damper size(width X height): 12"X12", 24"X24", 36"X36", 12"X48", 48"X12" (5Set)

Air Performance



Air Tight Damper MODEL-HDAL 150

Leakage Performance

Humitechkorea Co., Ltd. certifies that the HDAL150 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 Leakage and Air Performance ratings.

Test Information

- Air leakage is based on operation between 32°F and 120°F
- Tested for air leakage in accordance with ANSI/AMCA Standard 500-D, Figure 5.4,And Figure 5.6A
- Tested damper size(width X height): 12"X48", 48"X36", 118"X36" (3Set)
- Closure method: Torque arm & hanging weights
- Data are based on a torque of 44Nm/㎡ applied to close and seat the damper during the test

Torque

Damper Size (Inchs)	Torque (Nm)
12 X 48	16.3
48 X 36	15.0
118 X 36	45.2

Leakage Class

Damper Size (Inchs)	Pressure		
	1 in. wg	4 in. wg	8 in. wg
12 X 48	1A	1	1
48 X 36	1A	1	1
118 X 36	1A	1	1

Allowable Air Leakage to Achieve Classification

SI	Maximum Allowable Leakage, L/s/㎡		
Class	at 0.25 kPa	at 1.0 kPa	at x kPa
1A	15.2	N/A	N/A
1	20	40	$2\sqrt{x}$ X 20
2	51	102	$2\sqrt{x}$ X 51
3	203	406	$2\sqrt{x}$ X 203

I-P	Maximum Allowable Leakage, cfm/ft²		
Class	at 1 in. wg	at 4 in. wg	at x in. wg
1A	3	N/A	N/A
1	4	8	$\sqrt{x}$ X 4
2	10	20	$\sqrt{x}$ X 10
3	40	80	$\sqrt{x}$ X 40

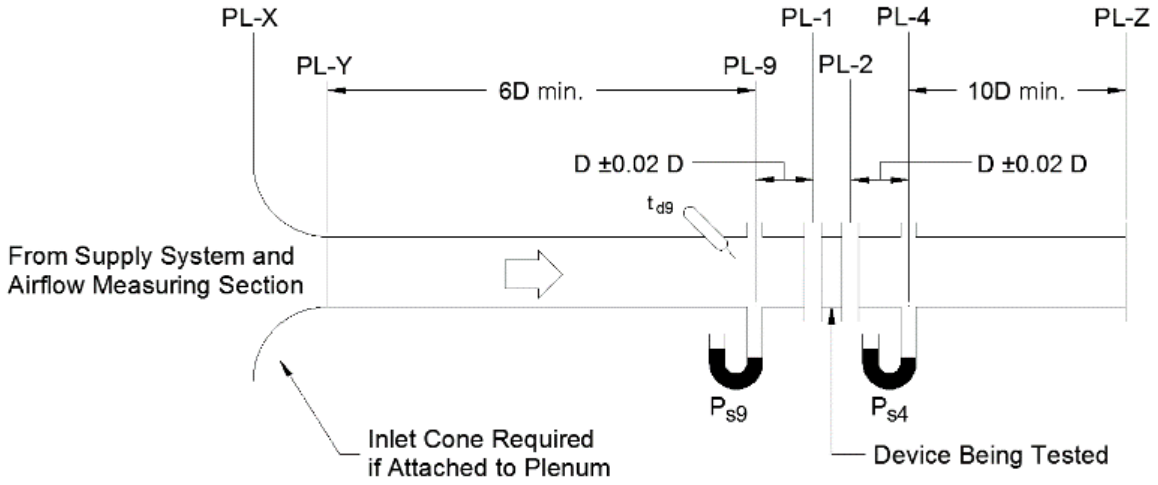


FIGURE 5.3 Test Damper Setup with Inlet and Outlet Ducts

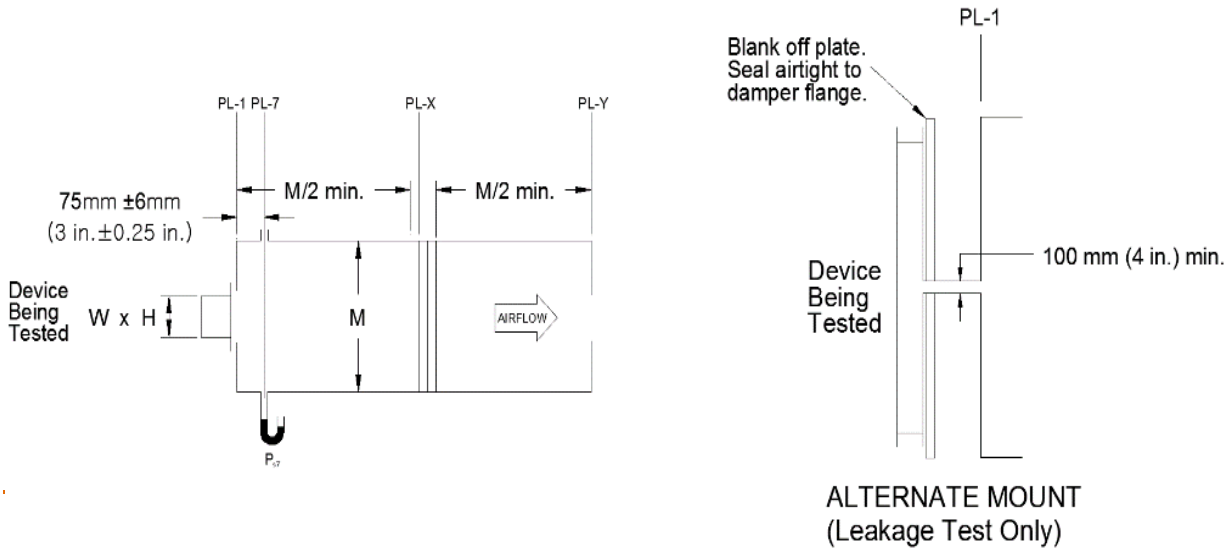


Figure 5.4 - Test Damper Setup with Outlet Chamber

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