

# HDHD

## DÖRTGEN HAVA DAMPERİ

### Rectangular Volume Damper



#### TANIM

- **HDHD-A:** Standart Dörtgen Hava Damperi
- **HDHD-B:** Contalı Dörtgen Hava Damperi

#### MALZEME

Kasa ve kanatlar 1. Sınıf alüminyum profilden oluşmaktadır.

#### UYGULAMA

HDHD-A ve HDHD-B serisi hava kontrol damperleri hava kanallarında, hava miktarının ayarlanması amacıyla kullanılır. Kullanılan mekanizma sayesinde kanatlar zit yönlü çalışmaktadır. Manuel kumandalı hava damperleri elle istenilen hava miktarına göre ayarlanıp kol üzerindeki kilitleme mekanizması sayesinde ayarlandığı konumda sabitlenir. İsteğe bağlı olarak 24V ve 230V servo motor kumandasına uygun imal edilebilmektedir. Standart olarak plastik enjeksiyon sistemiyle üretilmiş dıştan tahrif mekanizmaları kullanılır. Uygulama yerine göre plastik dişli mekanizmasının kullanılmayacağı durumlarda özel bronz yataklı olarak imalat yapılabilir.

#### YÜZEY KAPLAMA

- Elektrostatik toz boyası (Standart renkler RAL9010 ve RAL9016)
- Alüminyum eloksal
- İsteğe bağlı olarak RAL kodundaki diğer tüm renklerde temin edilmektedir.

#### MONTAJ

- Hava kanalına montajı civata-somun ve kanal klipsi vasıtısıyla

#### AKSESUARLAR

- **SM:** Servo Motor (24V - 230V)
- **LS:** Limit swiç

#### DESCRIPTION

- **HDHD-A:** Standard Rectangular Volume Damper
- **HDHD-B:** Rectangular Volume Damper with Gasket

#### MATERIAL

Products casing and blades are manufactured from extruded aluminium profile.

#### APPLICATION

HDHD-A and HDHD-B Series volume control dampers are used in air ducts to control air volume. As a result of the mechanism employed the blades work in opposite directions. Manually controlled volume dampers are adjusted manually to the air volume requires and the locking mechanism on the handle is used to maintain the specified level of air. On request, they can be manufactured to incorporate 24V and 240V servo-motor control. Externally driven gear manufactured from plastic injection method is used as standard. Where plastic gears cannot be used, special bronze bearing bears can be manufactured.

#### SURFACE COATING

- Electrostatic powder coating (Standard colours are RAL 9010 and RAL 9016)
- Aluminium anodized
- As an option all the colours in other RAL codes can be provided.

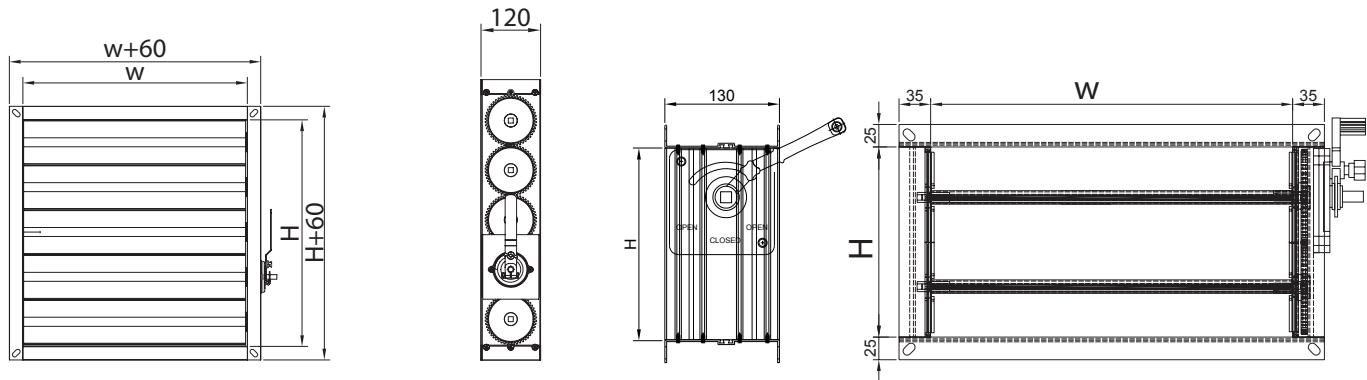
#### ASSEMBLY

- Assembly to air duct with bolt-nut and clamps.

#### ACCESSORIES

- **SM:** Servo motor (24V - 230V)
- **LS:** Limith switch

**DÖRTGEN HAVA DAMPERİ ÖLÇÜLERİ ve EFEKTİF ALANLARI**  
 RECTANGULAR VOLUME DAMPER DIMENSIONS and EFFECTIVE AREAS



**HDHD-A Efektif Alan**  
*(Effective Area)*

Aeff ( $m^2$ )		HDHD-A																			
		100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
H (mm)	100	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.09	0.10	0.11	0.11	0.12	0.13	0.14	0.15	0.15	0.16
	200	0.02	0.03	0.05	0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.18	0.19	0.21	0.23	0.24	0.26	0.28	0.29	0.31	0.32
	300	0.02	0.05	0.07	0.10	0.12	0.15	0.17	0.19	0.22	0.24	0.27	0.29	0.32	0.34	0.36	0.39	0.41	0.44	0.46	0.49
	400	0.03	0.06	0.10	0.13	0.16	0.19	0.23	0.26	0.29	0.32	0.36	0.39	0.42	0.45	0.49	0.52	0.55	0.58	0.62	0.65
	500	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36	0.41	0.45	0.49	0.53	0.57	0.61	0.65	0.69	0.73	0.77	0.81
	600	0.05	0.10	0.15	0.19	0.24	0.29	0.34	0.39	0.44	0.49	0.53	0.58	0.63	0.68	0.73	0.78	0.83	0.87	0.92	0.97
	700	0.06	0.11	0.17	0.23	0.28	0.34	0.40	0.45	0.51	0.57	0.62	0.68	0.74	0.79	0.85	0.91	0.96	1.02	1.08	1.13
	800	0.06	0.13	0.19	0.26	0.32	0.39	0.45	0.52	0.58	0.65	0.71	0.78	0.84	0.91	0.97	1.04	1.10	1.17	1.23	1.30
	900	0.07	0.15	0.22	0.29	0.36	0.44	0.51	0.58	0.66	0.73	0.80	0.87	0.95	1.02	1.09	1.17	1.24	1.31	1.39	1.46
	1000	0.08	0.16	0.24	0.32	0.41	0.49	0.57	0.65	0.73	0.81	0.89	0.97	1.05	1.13	1.22	1.30	1.38	1.46	1.54	1.62
	1100	0.09	0.18	0.27	0.36	0.45	0.53	0.62	0.71	0.80	0.89	0.98	1.07	1.16	1.25	1.34	1.43	1.51	1.60	1.69	1.78
	1200	0.10	0.19	0.29	0.39	0.49	0.58	0.68	0.78	0.87	0.97	1.07	1.17	1.26	1.36	1.46	1.56	1.65	1.75	1.85	1.94
	1300	0.11	0.21	0.32	0.42	0.53	0.63	0.74	0.84	0.95	1.05	1.16	1.26	1.37	1.47	1.58	1.68	1.79	1.90	2.00	2.11
	1400	0.11	0.23	0.34	0.45	0.57	0.68	0.79	0.91	1.02	1.13	1.25	1.36	1.47	1.59	1.70	1.81	1.93	2.04	2.15	2.27
	1500	0.12	0.24	0.36	0.49	0.61	0.73	0.85	0.97	1.09	1.22	1.34	1.46	1.58	1.70	1.82	1.94	2.07	2.19	2.31	2.43
	1600	0.13	0.26	0.39	0.52	0.65	0.78	0.91	1.04	1.17	1.30	1.43	1.56	1.68	1.81	1.94	2.07	2.20	2.33	2.46	2.59
	1700	0.14	0.28	0.41	0.55	0.69	0.83	0.96	1.10	1.24	1.38	1.51	1.65	1.79	1.93	2.07	2.20	2.34	2.48	2.62	2.75
	1800	0.15	0.29	0.44	0.58	0.73	0.87	1.02	1.17	1.31	1.46	1.60	1.75	1.90	2.04	2.19	2.33	2.48	2.62	2.77	2.92
	1900	0.15	0.31	0.46	0.62	0.77	0.92	1.08	1.23	1.39	1.54	1.69	1.85	2.00	2.15	2.31	2.46	2.62	2.77	2.92	3.08
	2000	0.16	0.32	0.49	0.65	0.81	0.97	1.13	1.30	1.46	1.62	1.78	1.94	2.11	2.27	2.43	2.59	2.75	2.92	3.08	3.24

**HDHD**

# DÖRTGEN HAVA DAMPERİ

## Rectangular Volume Damper

### HDHD-B Efektif Alan (Effective Area)

A<sub>eff</sub> (m<sup>2</sup>): Efektif alan

W (mm): Dörtgen hava damperi genişliği

H (mm): Dörtgen hava damperi yüksekliği

Effective area

Rectangular volume damper width

Rectangular volume damper height

		HDHD-B													
A <sub>eff</sub> (m <sup>2</sup> )		W (mm)													
		200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
H (mm)	200	0.03	0.05	0.07	0.08	0.10	0.12	0.14	0.15	0.17	0.19	0.20	0.22	0.24	0.25
	300	0.05	0.08	0.10	0.13	0.15	0.18	0.20	0.23	0.25	0.28	0.30	0.33	0.36	0.38
	400	0.07	0.10	0.14	0.17	0.20	0.24	0.27	0.30	0.34	0.37	0.41	0.44	0.47	0.51
	500	0.08	0.13	0.17	0.21	0.25	0.30	0.34	0.38	0.42	0.47	0.51	0.55	0.59	0.64
	600	0.10	0.15	0.20	0.25	0.30	0.36	0.41	0.46	0.51	0.56	0.61	0.66	0.71	0.76
	700	0.12	0.18	0.24	0.30	0.36	0.42	0.47	0.53	0.59	0.65	0.71	0.77	0.83	0.89
	800	0.14	0.20	0.27	0.34	0.41	0.47	0.54	0.61	0.68	0.75	0.81	0.88	0.95	1.02
	900	0.15	0.23	0.30	0.38	0.46	0.53	0.61	0.69	0.76	0.84	0.91	0.99	1.07	1.14
	1000	0.17	0.25	0.34	0.42	0.51	0.59	0.68	0.76	0.85	0.93	1.02	1.10	1.19	1.27
	1100	0.19	0.28	0.37	0.47	0.56	0.65	0.75	0.84	0.93	1.02	1.12	1.21	1.30	1.40
	1200	0.20	0.30	0.41	0.51	0.61	0.71	0.81	0.91	1.02	1.12	1.22	1.32	1.42	1.52
	1300	0.22	0.33	0.44	0.55	0.66	0.77	0.88	0.99	1.10	1.21	1.32	1.43	1.54	1.65
	1400	0.24	0.36	0.47	0.59	0.71	0.83	0.95	1.07	1.19	1.30	1.42	1.54	1.66	1.78
	1500	0.25	0.38	0.51	0.64	0.76	0.89	1.02	1.14	1.27	1.40	1.52	1.65	1.78	1.91