

# KD1

- > Rectangular VAV
- > Single Blade
- > Double Wall

Note: KS1 model shown

## DESCRIPTION

Our rectangular VAV units contain a single low noise air tight damper blade and airflow averaging grid within a robust galvanised casing.

Our single blade rectangular VAV units are available in many sizes offering  $\Delta P$  max of 1000Pa. The units can also provide a Constant Air Volume.

## STANDARDS

- 1.25 mm casing exceeds leakage EN 1751, 1998 Class B
- Damper blade rubber seal leakage exceeds EN 1751 Class 2

## CONSTRUCTION

1.25 mm galvanised steel casing. 50 mm acoustic lining (fire resistant to BS476; Part 7).

### Options:

- ASK Attenuator
- Polyester Powder Coating

## MODELS

### VAV-KS1:

Rectangular single wall

### VAV-KD1:

Rectangular double wall

### VAV-KS 100:

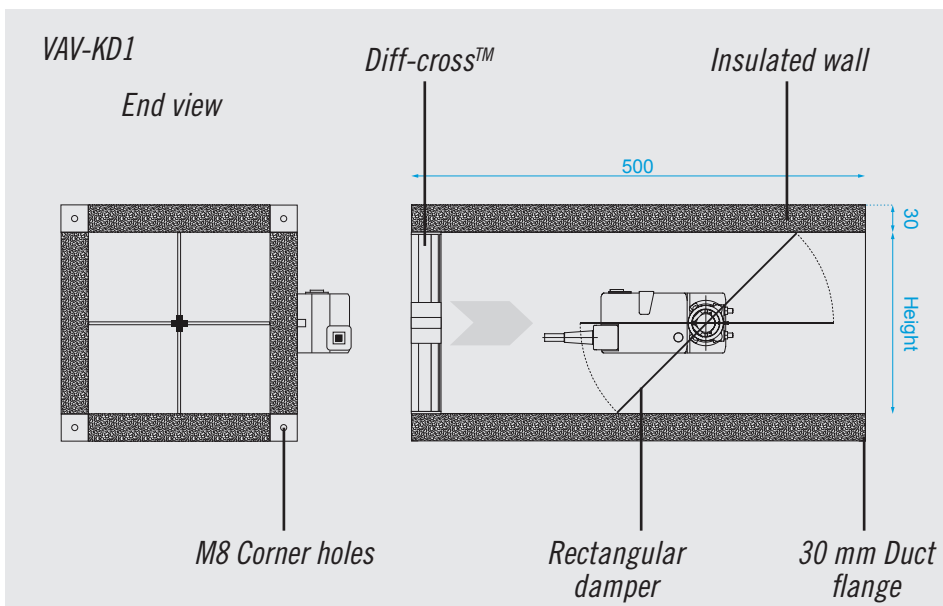
Single blade rectangular single wall

### VAV-KD 100:

Multi blade rectangular double wall

## NOTES

Minimum velocity 1.5 m/s. Controller actuator included. All dimensions are given in mm. Requires 3x diameter straight approach for effective operation.



## DIMENSIONS (mm)

Width	Height
Min 200	Min 100
<b>50 mm increments</b>	
Max 600	Max 300

## RADIATED SOUND

Radiated sound allowance according to VDI2081 is 5dB/oct for room attenuation and 4dB/oct for ceiling attenuation total 9dB/oct. Double wall radiated figures are based on duct work being acoustically lagged 3 m either side of the unit.

## DISCHARGE SOUND ALLOWANCE

Calculated according to VDI 2081

Hz	125	250	500	1K	2K	4K
dB	10	8	7	8	8	8

## DISCHARGE SOUND ALLOWANCE

Calculated according to VDI 2081

l/s	139	278	417	556	695	834	1111	1389	1667
dB/oct	0	3	5	6	7	8	9	10	11

# KD1 - SELECTION DATA

SUPPLY SELECTION DATA												
200 x 100	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	40	4 (+5)	37	44	49	19	26	32	15	21	26
4	80	9 (+10)	41	47	52	23	30	34	19	25	29	
6	120	18 (+20)	44	50	55	28	33	37	22	28	32	
8	160	33 (+37)	48	54	58	32	36	38	26	32	34	

SUPPLY SELECTION DATA												
400 x 100	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	80	4 (+5)	40	47	52	21	28	33	17	23	28
4	160	8 (+10)	43	49	54	25	31	35	21	27	31	
6	240	17 (+20)	46	52	57	28	33	37	24	30	34	
8	320	30 (+37)	49	55	58	32	36	38	28	34	36	

600 x 100	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	120	3 (+5)	41	48	53	22	30	35	19	25	30
4	240	7 (+10)	44	51	55	26	32	36	23	29	33	
6	360	14 (+20)	46	52	57	29	34	38	26	32	36	
8	480	25 (+37)	49	55	59	32	37	39	30	36	38	

200 x 200	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	80	4 (+8)	40	47	52	21	28	33	17	23	28
4	160	8 (+18)	43	49	54	25	31	35	21	27	31	
6	240	17 (+36)	46	52	57	28	33	37	24	30	34	
8	320	30 (+65)	49	55	58	32	36	38	28	34	36	

400 x 300	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	160	4 (+8)	42	50	55	21	27	32	20	27	31
4	320	8 (+18)	44	51	56	26	30	34	24	30	34	
6	480	15 (+36)	46	52	57	31	33	36	27	33	37	
8	640	28 (+65)	48	54	58	35	37	38	31	37	39	

600 x 200	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	240	3 (+8)	42	49	54	21	28	33	22	29	33
4	480	6 (+18)	44	51	55	26	31	35	26	32	36	
6	720	13 (+36)	45	51	56	30	33	36	29	35	39	
8	960	24 (+65)	48	54	58	35	37	39	33	39	41	

200 x 300	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	120	3 (+7)	41	48	53	22	30	35	19	25	30
4	240	7 (+17)	44	51	55	26	32	36	23	29	33	
6	360	14 (+43)	46	52	57	29	34	38	26	32	36	
8	480	25 (+62)	49	55	59	32	37	39	30	36	38	

400 x 300	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	240	3 (+7)	42	49	54	21	28	33	22	29	33
4	480	6 (+17)	44	51	55	26	31	35	26	32	36	
6	720	13 (+34)	45	51	56	30	33	36	29	35	39	
8	960	24 (+62)	48	54	58	35	37	39	33	39	41	

600 x 300	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	360	3 (+7)	43	50	55	24	32	37	24	31	35
4	720	6 (+17)	45	52	56	29	35	39	28	34	38	
6	1,080	13 (+34)	46	52	57	34	37	40	31	37	41	
8	1,440	24 (+62)	49	55	58	38	40	43	35	41	43	

## KEY INFORMATION

100 Pa 200 Pa 400 Pa System Static Pressure.  
Discharge and Radiated Sound (LpA)

VEL = Velocity in (m/s)

VOL = Volume in (l/s)