

KS1

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

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 ΔP 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

Single wall 1.25 mm thick galvanised steel casing.

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

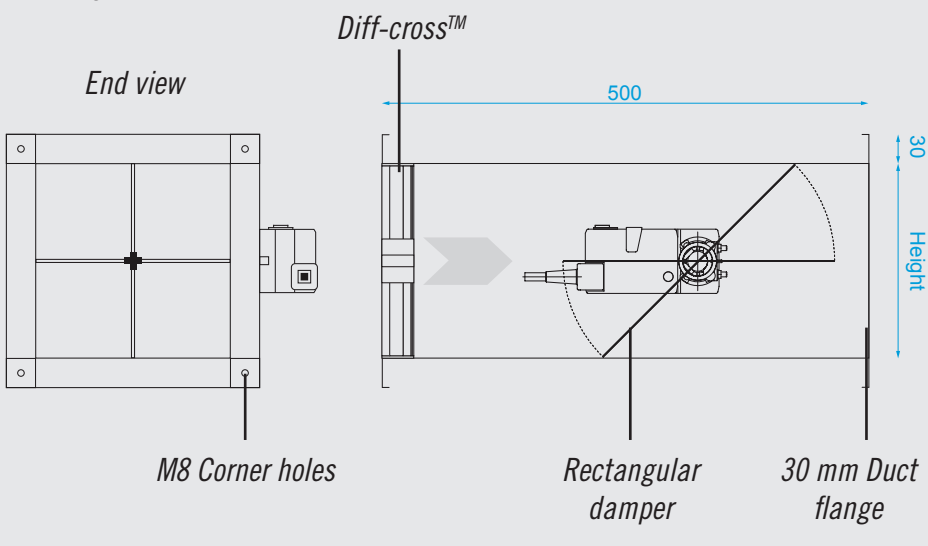
VAV-KD 100:

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.

VAV-KS1



DIMENSIONAL DATA (mm)

| Width | Height |
|--------------------------|---------|
| Min 200 | Min 100 |
| 100 mm increments | |
| 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 |

KS1 - 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 | 24 | 32 | 37 |
| 4 | 80 | 9 (+10) | 41 | 47 | 52 | 23 | 30 | 34 | 28 | 35 | 39 | |
| 6 | 120 | 18 (+20) | 44 | 50 | 55 | 28 | 33 | 37 | 32 | 38 | 42 | |
| 8 | 160 | 33 (+37) | 48 | 54 | 58 | 32 | 36 | 38 | 36 | 42 | 45 | |

| 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 | 26 | 34 | 39 |
| 4 | 160 | 8 (+10) | 43 | 49 | 54 | 25 | 31 | 35 | 30 | 37 | 41 | |
| 6 | 240 | 17 (+20) | 46 | 52 | 57 | 28 | 33 | 37 | 34 | 40 | 44 | |
| 8 | 320 | 30 (+37) | 49 | 55 | 58 | 32 | 36 | 38 | 38 | 44 | 47 | |

| 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 | 28 | 36 | 41 |
| 4 | 240 | 7 (+10) | 44 | 51 | 55 | 26 | 32 | 36 | 32 | 39 | 43 | |
| 6 | 360 | 14 (+20) | 46 | 52 | 57 | 29 | 34 | 38 | 36 | 42 | 46 | |
| 8 | 480 | 25 (+37) | 49 | 55 | 59 | 32 | 37 | 39 | 40 | 46 | 49 | |

| 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 | 26 | 34 | 39 |
| 4 | 160 | 8 (+18) | 43 | 49 | 54 | 25 | 31 | 35 | 30 | 37 | 41 | |
| 6 | 240 | 17 (+36) | 46 | 52 | 57 | 28 | 33 | 37 | 34 | 40 | 44 | |
| 8 | 320 | 30 (+65) | 49 | 55 | 58 | 32 | 36 | 38 | 38 | 44 | 47 | |

| 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 | 29 | 37 | 42 |
| 4 | 320 | 8 (+18) | 44 | 51 | 56 | 26 | 30 | 34 | 33 | 40 | 44 | |
| 6 | 480 | 15 (+36) | 46 | 52 | 57 | 31 | 33 | 36 | 37 | 43 | 47 | |
| 8 | 640 | 28 (+65) | 48 | 54 | 58 | 35 | 37 | 38 | 41 | 47 | 50 | |

| 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 | 31 | 39 | 44 |
| 4 | 480 | 6 (+18) | 44 | 51 | 55 | 26 | 31 | 35 | 35 | 42 | 46 | |
| 6 | 720 | 13 (+36) | 45 | 51 | 56 | 30 | 33 | 36 | 39 | 45 | 49 | |
| 8 | 960 | 24 (+65) | 48 | 54 | 58 | 35 | 37 | 39 | 43 | 49 | 52 | |

| 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 | 28 | 36 | 41 |
| 4 | 240 | 7 (+17) | 44 | 51 | 55 | 26 | 32 | 36 | 32 | 39 | 43 | |
| 6 | 360 | 14 (+43) | 46 | 52 | 57 | 29 | 34 | 38 | 36 | 42 | 46 | |
| 8 | 480 | 25 (+62) | 49 | 55 | 59 | 32 | 37 | 39 | 40 | 46 | 49 | |

| 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 | 31 | 39 | 44 |
| 4 | 480 | 6 (+17) | 44 | 51 | 55 | 26 | 31 | 35 | 35 | 42 | 46 | |
| 6 | 720 | 13 (+34) | 45 | 51 | 56 | 30 | 33 | 36 | 39 | 45 | 49 | |
| 8 | 960 | 24 (+62) | 48 | 54 | 58 | 35 | 37 | 39 | 43 | 49 | 52 | |

| 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 | 33 | 41 | 46 |
| 4 | 720 | 6 (+17) | 45 | 52 | 56 | 29 | 35 | 39 | 37 | 44 | 48 | |
| 6 | 1,080 | 13 (+34) | 46 | 52 | 57 | 34 | 37 | 40 | 41 | 47 | 51 | |
| 8 | 1,440 | 24 (+62) | 49 | 55 | 58 | 38 | 40 | 43 | 45 | 51 | 54 | |

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)