

RS

- > Circular VAV
- > Elliptical Damper
- > Single Wall

APPLICATION

Our compact VAV units are laser welded with continuous galvanised casing and contain a low noise air tight oval air damper with Diff-cross™ airflow averaging grid.

The unit is designed to stop leakage using unique elliptical damper blades with rubber seals and nylon bearings.

STANDARDS

- Tight shut off to EN 1751 Class C
- Spigots to EN 1506 or 13180, swaged to EN 1506:2006 & 2007
- Damper blade rubber seal leakage exceeds EN 1751 Class 3

DESIGN

Construction:

Single wall 1mm thick galvanised steel.

Options:

- Stainless steel
- Epoxy coating
- Polyester powder coating

AVAILABLE TYPES

- VAV-RS:** Circular single wall
VAV-RD: Circular double wall
VAV-RAS: Circular attenuated supply
VAV-RAE: Circular attenuated extract

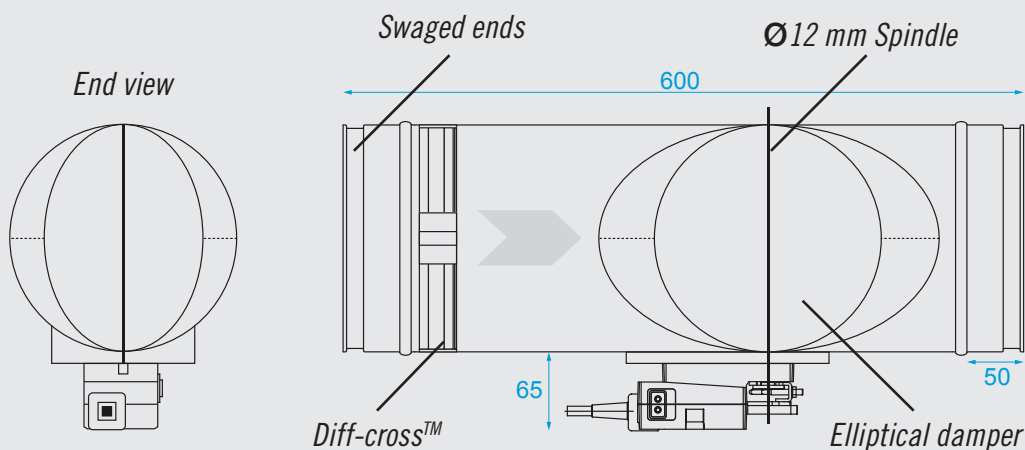
RADIATED SOUND

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.

REMARKS

Minimum velocity 1.0 m/s. Controller actuator included. All dimensions are given in mm. Requires 3x diameter straight approach for effective operation.

VAV-RS



DIMENSIONAL DATA (mm)

| Ø Dia. | Length |
|--------|--------|
| 100 | 600 |
| 125 | 600 |
| 160 | 600 |
| 200 | 600 |
| 250 | 600 |
| 315 | 600 |
| 355 | 600 |
| 400 | 600 |

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 |

RS – PERFORMANCE DATA

| | SIZE | | | DISCHARGE SOUND (LpA) | | | RADIATED SOUND (LpA) | | |
|--------------------|--------------|------------|-----------------|-----------------------|--------|--------|----------------------|--------|--------|
| | AIR VELOCITY | AIR VOLUME | MIN Δ Ps | RS/RD | | | SINGLE WALL (RS) | | |
| | m/s | l/s | Pa | 100 Pa | 200 Pa | 400 Pa | 100 Pa | 200 Pa | 400 Pa |
| 100 mm DIAMETER | 2 | 15 | 2 | 32 | 40 | 47 | -- | 22 | 30 |
| | 4 | 29 | 10 | 36 | 42 | 49 | -- | 24 | 31 |
| | 6 | 44 | 23 | 38 | 45 | 51 | 21 | 26 | 33 |
| | 8 | 59 | 41 | 41 | 47 | 53 | 23 | 29 | 35 |
| | | | | | | | | | |
| 125 mm DIAMETER | 2 | 23 | 2 | 32 | 40 | 47 | -- | 22 | 30 |
| | 4 | 47 | 10 | 37 | 43 | 50 | -- | 25 | 33 |
| | 6 | 70 | 22 | 40 | 45 | 52 | 22 | 27 | 35 |
| | 8 | 93 | 39 | 43 | 48 | 55 | 26 | 30 | 37 |
| | | | | | | | | | |
| 160 mm DIAMETER | 2 | 39 | 2 | 30 | 41 | 47 | -- | 24 | 31 |
| | 4 | 78 | 10 | 36 | 43 | 51 | -- | 26 | 34 |
| | 6 | 116 | 21 | 40 | 46 | 53 | 23 | 28 | 36 |
| | 8 | 155 | 37 | 43 | 49 | 56 | 26 | 31 | 39 |
| | | | | | | | | | |
| 200 mm DIAMETER | 2 | 61 | 2 | 30 | 39 | 47 | -- | 23 | 32 |
| | 4 | 122 | 9 | 37 | 44 | 51 | 20 | 28 | 35 |
| | 6 | 183 | 18 | 40 | 48 | 54 | 23 | 32 | 38 |
| | 8 | 244 | 33 | 43 | 51 | 56 | 27 | 35 | 41 |
| | | | | | | | | | |
| 250 mm DIAMETER | 2 | 96 | 2 | 31 | 39 | 48 | -- | 23 | 32 |
| | 4 | 192 | 9 | 38 | 46 | 52 | 21 | 29 | 36 |
| | 6 | 287 | 17 | 42 | 49 | 55 | 26 | 33 | 39 |
| | 8 | 383 | 29 | 46 | 52 | 58 | 30 | 35 | 42 |
| | | | | | | | | | |
| 315 mm DIAMETER | 2 | 153 | 3 | 30 | 39 | 46 | 16 | 25 | 33 |
| | 4 | 306 | 14 | 38 | 47 | 51 | 23 | 32 | 37 |
| | 6 | 459 | 15 | 41 | 49 | 55 | 27 | 35 | 41 |
| | 8 | 611 | 26 | 45 | 52 | 58 | 30 | 38 | 44 |
| | | | | | | | | | |
| 355 mm DIAMETER | 2 | 194 | 2 | 31 | 38 | 48 | 16 | 24 | 35 |
| | 4 | 389 | 10 | 39 | 46 | 52 | 24 | 32 | 38 |
| | 6 | 584 | 14 | 42 | 49 | 56 | 28 | 35 | 41 |
| | 8 | 778 | 25 | 47 | 52 | 58 | 32 | 38 | 43 |
| | | | | | | | | | |
| 400 mm DIAMETER | 2 | 248 | 2 | 31 | 39 | 49 | 17 | 25 | 35 |
| | 4 | 495 | 10 | 39 | 47 | 53 | 25 | 32 | 39 |
| | 6 | 742 | 13 | 44 | 50 | 57 | 30 | 35 | 43 |
| | 8 | 990 | 23 | 48 | 53 | 59 | 34 | 39 | 45 |
| | | | | | | | | | |

100 Pa 200 Pa 400 Pa System Static Pressure