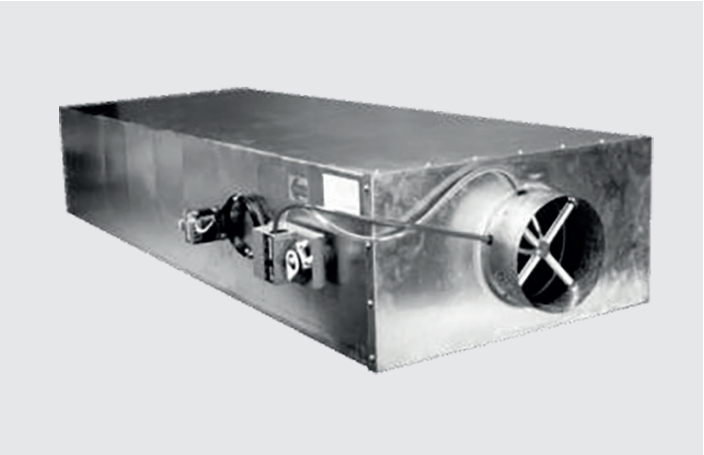
PRICE
ENGINEERED SOLUTIONS Ltd



VDV

> Transformation VAV
> Attenuated
> Double Wall

DESCRIPTION

Our transformation VAV units offer a circular spigot to rectangular connection. They contain low noise air tight dampers, an airflow averaging grid and a built-in attenuator.

CONSTRUCTION

Galvanised mild steel casing.

Options:

- ASV attenuator
- Multiple outlet spigot boxes
- Polyester powder coating

MODELS

VAV-VSV:
Single wall supply

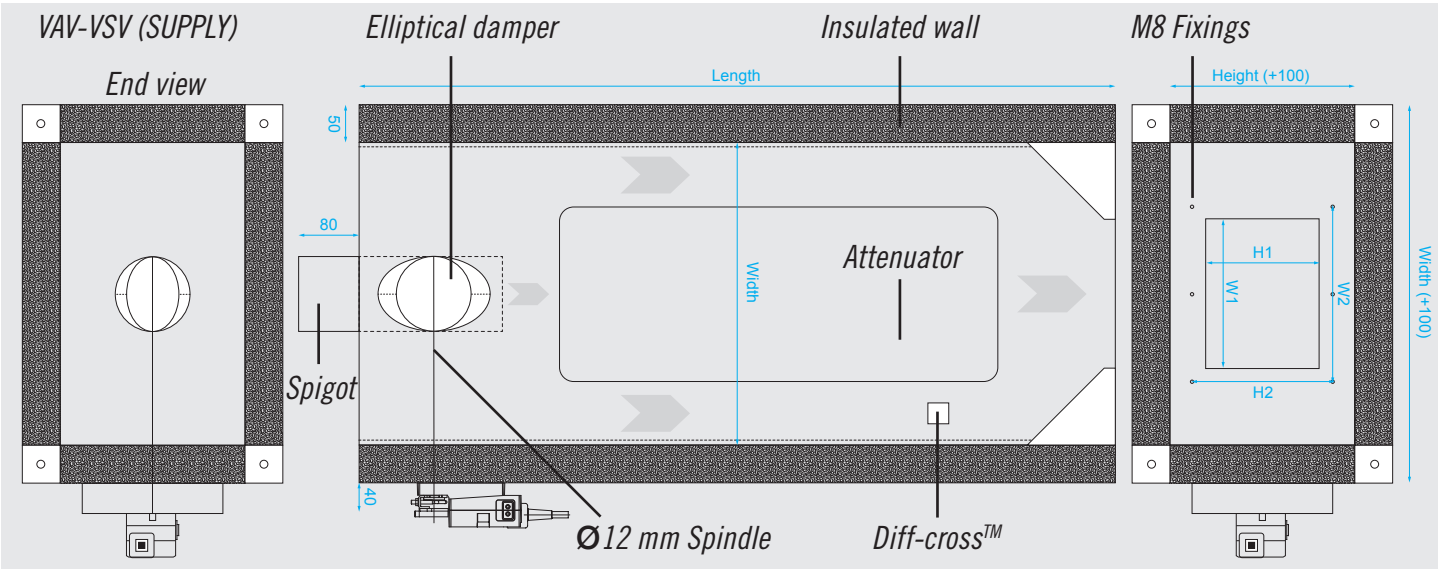
VAV-VDV:
Double wall supply

VAV-VSE:
Single wall extract

VAV-VDE:
Double wall extract

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



CIRCULAR SPIGOT DIAMETER	*UNIT SIZE in mm (WxHxL)	RECTANGULAR DUCT CONNECTION (W1xH1)	M8 FIXING CONNECTION in mm (W2xH2)
100	400 x 240 x 1000	198 x 150	232 x 186
125	400 x 240 x 1000	198 x 150	232 x 186
160	400 x 240 x 1000	308 x 150	342 x 186
200	560 x 280 x 1200	458 x 200	492 x 244
250	700 x 310 x 1500	598 x 200	632 x 236
315	900 x 360 x 1500	798 x 250	832 x 288
355	1000 x 450 x 1800	898 x 350	932 x 388
400	1000 x 450 x 1800	898 x 350	932 x 388

REMARKS

Minimum velocity 2.0 m/s. Controller actuator included. All dimensions are given in mm. The units can provide both Variable Air Volume and Constant Air Volume (CAV).

VAV-VDV – SELECTION DATA

SUPPLY SELECTION DATA

Ø 100 mm

Size			Discharge Sound			Radiated Sound	
VEL m/s	VOL l/s	Min Δ Ps Pa	100 Pa	200 Pa	400 Pa	200 Pa	400 Pa
2	15	2	24	22	28	--	--
4	29	10	30	26	32	--	--
6	44	23	31	30	35	--	20
8	59	41	33	32	39	21	25
10	74	65	35	35	41	23	28

SUPPLY SELECTION DATA

Ø 125 mm

Size			Discharge Sound			Radiated Sound	
VEL m/s	VOL l/s	Min Δ Ps Pa	100 Pa	200 Pa	400 Pa	200 Pa	400 Pa
2	23	2	23	23	29	--	--
4	47	10	30	28	33	--	--
6	70	22	33	31	36	20	21
8	93	39	35	34	40	23	26
10	117	61	37	36	42	24	29

Ø 160 mm

Size			Discharge Sound			Radiated Sound	
VEL m/s	VOL l/s	Min Δ Ps Pa	100 Pa	200 Pa	400 Pa	200 Pa	400 Pa
2	39	2	25	31	37	--	--
4	78	10	35	34	41	--	22
6	116	21	39	37	44	23	26
8	155	37	40	40	47	26	30
10	194	57	41	42	47	29	32

Ø 200 mm

Size			Discharge Sound			Radiated Sound	
VEL m/s	VOL l/s	Min Δ Ps Pa	100 Pa	200 Pa	400 Pa	200 Pa	400 Pa
2	61	2	21	24	31	--	--
4	122	9	30	29	36	--	--
6	183	18	31	32	38	--	21
8	244	33	32	34	39	21	24
10	305	51	34	35	41	23	27

Ø 250 mm

Size			Discharge Sound			Radiated Sound	
VEL m/s	VOL l/s	Min Δ Ps Pa	100 Pa	200 Pa	400 Pa	200 Pa	400 Pa
2	96	2	23	24	33	--	--
4	192	9	29	31	37	--	22
6	287	17	30	33	39	20	30
8	383	29	33	34	41	22	31
10	479	46	34	36	41	26	32

Ø 315 mm

Size			Discharge Sound			Radiated Sound	
VEL m/s	VOL l/s	Min Δ Ps Pa	100 Pa	200 Pa	400 Pa	200 Pa	400 Pa
2	153	3	20	20	28	--	--
4	306	14	24	25	30	--	20
6	459	15	25	26	33	--	27
8	611	26	27	28	34	20	28
10	764	41	29	30	36	23	30

Ø 1355 mm

Size			Discharge Sound			Radiated Sound	
VEL m/s	VOL l/s	Min Δ Ps Pa	100 Pa	200 Pa	400 Pa	200 Pa	400 Pa
2	194	2	19	19	29	--	--
4	389	10	23	25	31	--	20
6	584	14	25	26	33	--	28
8	778	25	28	28	34	21	29
10	973	38	29	31	36	24	30

Ø 400 mm

Size			Discharge Sound			Radiated Sound	
VEL m/s	VOL l/s	Min Δ Ps Pa	100 Pa	200 Pa	400 Pa	200 Pa	400 Pa
2	248	2	18	19	29	--	--
4	495	10	23	24	31	--	19
6	742	13	25	26	32	--	26
8	990	23	28	28	34	22	29
10	1237	36	30	30	36	25	32

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.*

INSERTION LOSS								
For ASV sound attenuator								
Model	100	124	160	200	250	315	355	400
dB(A)	13	13	13	13	13	12	11	11

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)