

VSV

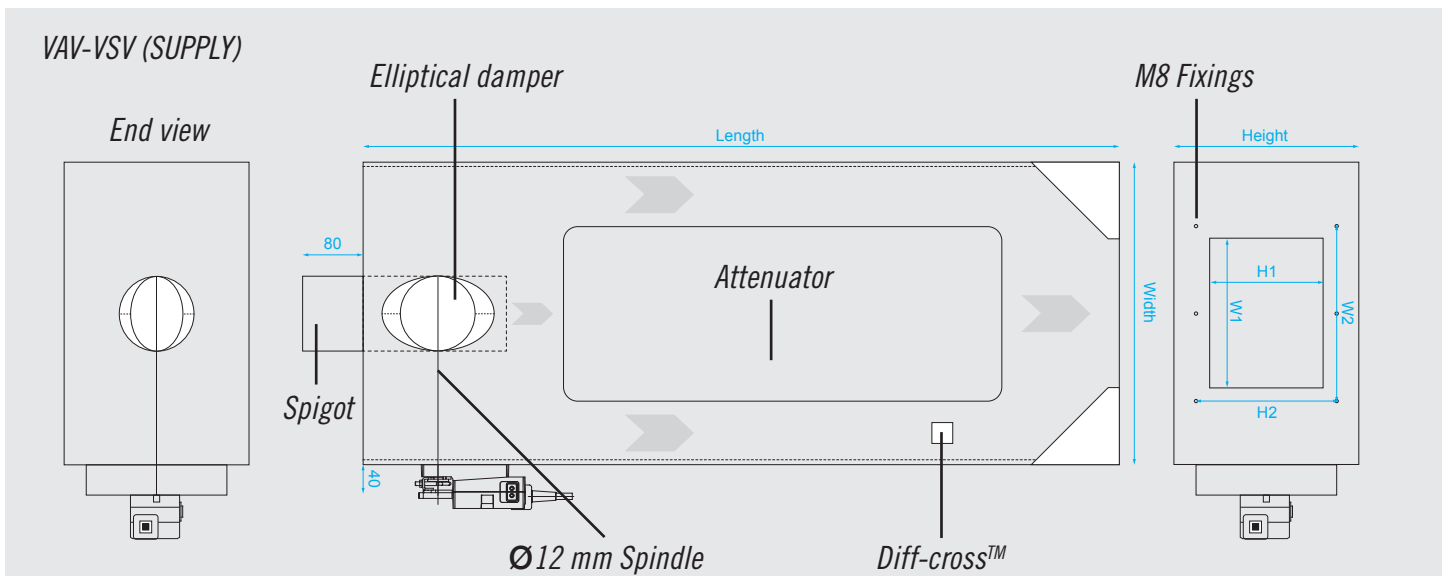
- > Transformation VAV
- > Attenuated
- > Single Wall

Note: VDV model shown

DESCRIPTION	CONSTRUCTION	MODELS
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.	Galvanised mild steel casing. Options: <ul style="list-style-type: none"> ASV attenuator Multiple outlet spigot boxes Polyester powder coating 	VAV-VSV: Single wall supply VAV-VSE: Single wall extract VAV-VDV: Double wall supply 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).

VSV – 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	100 Pa	200 Pa	400 Pa
	2	15	2	24	22	28	--	21	27
4	29	10	30	26	32	--	25	30	
6	44	23	31	30	35	23	29	33	
8	59	41	33	32	39	27	32	38	
10	74	65	35	35	41	29	34	40	

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	100 Pa	200 Pa	400 Pa
	2	23	2	23	23	29	--	21	27
4	47	10	30	28	33	--	27	31	
6	70	22	33	31	36	24	31	35	
8	93	39	35	34	40	28	33	39	
10	117	61	37	36	42	31	35	41	

Ø 160 mm	Size			Discharge Sound			Radiated Sound		
	VEL m/s	VOL l/s	Min Δ Ps Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	39	2	25	31	37	22	29	35
4	78	10	35	34	41	23	32	40	
6	116	21	39	37	44	24	36	42	
8	155	37	40	40	47	26	39	45	
10	194	57	41	42	47	27	42	47	

Ø 200 mm	Size			Discharge Sound			Radiated Sound		
	VEL m/s	VOL l/s	Min Δ Ps Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	61	2	21	24	31	27	22	30
4	122	9	30	29	36	30	28	35	
6	183	18	31	32	38	34	32	37	
8	244	33	32	34	39	42	35	40	
10	305	51	34	35	41	41	37	43	

Ø 250 mm	Size			Discharge Sound			Radiated Sound		
	VEL m/s	VOL l/s	Min Δ Ps Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	96	2	23	24	33	27	22	31
4	192	9	29	31	37	31	31	37	
6	287	17	30	33	39	35	34	42	
8	383	29	33	34	41	39	37	43	
10	479	46	34	36	41	41	40	45	

Ø 315 mm	Size			Discharge Sound			Radiated Sound		
	VEL m/s	VOL l/s	Min Δ Ps Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	153	3	20	20	28	29	19	27
4	306	14	24	25	30	32	27	32	
6	459	15	25	26	33	34	30	37	
8	611	26	27	28	34	36	33	40	
10	764	41	29	30	36	37	36	42	

Ø 1355 mm	Size			Discharge Sound			Radiated Sound		
	VEL m/s	VOL l/s	Min Δ Ps Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	194	2	19	19	29	20	19	29
4	389	10	23	25	31	24	28	34	
6	584	14	25	26	33	29	31	39	
8	778	25	28	28	34	33	34	40	
10	973	38	29	31	36	36	38	43	

Ø 400 mm	Size			Discharge Sound			Radiated Sound		
	VEL m/s	VOL l/s	Min Δ Ps Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	248	2	18	19	29	26	20	30
4	495	10	23	24	31	29	28	35	
6	742	13	25	26	32	30	32	39	
8	990	23	28	28	34	35	35	41	
10	1237	36	30	30	36	39	38	44	

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)