

CONSTANT AIR VOLUME CONTROL DAMPER

Circular CAV - Performance Data

Technical data

Nominal sizes	80 – 400 mm
Volume flow rate range	11 – 1400 l/s or 40 – 5040 m³/h
Volume flow rate control range	Approx. 25 to 100 % of the nominal volume flow rate
Scale accuracy	± 4 %
Minimum differential pressure	50 Pa (nominal size 80: 100 Pa)
Maximum differential pressure	1000 Pa
Operating temperature	10 – 50 °C

Sound pressure level at differential pressure 150 Pa

Nominal size	V̇ l/s	V̇ m³/h	Air-regenerated noise			
			①	②	③	④
			L _{PA}	L _{PA1}		
				dB(A)		
80	11	40	37	24	17	15
	20	72	39	27	19	17
	40	144	47	34	24	22
	45	162	48	35	25	24
100	22	79	37	24	17	15
	40	144	40	29	22	20
	70	252	47	35	27	26
	90	324	50	38	30	29
125	35	126	37	27	21	18
	60	216	43	34	27	25
	115	414	50	41	35	33
	140	504	52	44	39	37
160	60	216	40	32	26	24
	105	378	45	37	32	29
	190	684	49	41	35	33
	240	864	50	41	36	34
200	90	324	40	31	24	22
	160	576	43	35	28	26
	300	1080	48	40	33	32
	360	1296	49	41	35	33
250	145	522	41	32	24	22
	255	918	42	34	28	26
	470	1692	46	39	33	31
	580	2088	48	41	35	34
315	230	828	39	33	26	23
	400	1440	42	35	29	27
	750	2700	44	38	32	31
	920	3312	46	41	35	34
400	350	1260	46	39	33	29
	610	2196	48	42	36	32
	1130	4068	50	44	38	35
	1400	5040	51	45	40	37

- 1- CAV
- 2- CAV with silencer, lenght 500mm
- 3- CAV with silencer, lenght 1000mm
- 4- CAV with silencer, lenght 1500mm

Quick sizing - Example

Data:

V_{max}: 290 l/s (1044 m³/h) - ΔP:150Pa Required sound pressure level in the room 35 dB(A)

Selection:

CAV/200 with circular silencer 200×1000mm

Air-regenerated noise LPA = 33 dB(A)

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Submitted by:

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