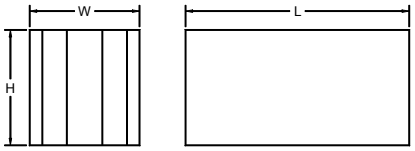
RSV-PV-L45

Rectangular, Straight, Plenum Velocity Sounpak® Silencer with Vapor Barrier

Availability
L: 3 feet and greater (sections if L>12ft)
W: 11.5-12.5, 23-25, 35-38, 46-50 inches
H: any length (72 inches practical limit)



5 ft Quick Rating = P78-L45-M82

See bottom of page for explanation.

Table 1: Insertion Loss

Length (in)	Face Velocity (fpm)	Insertion Loss (dB)							
		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
36	- 750	8	13	14	14	17	20	19	18
	0	8	14	14	14	19	19	17	14
	750	9	14	16	15	20	19	16	14
60	- 750	16	15	19	22	32	31	23	20
	0	15	17	19	21	30	26	23	19
	750	12	16	21	24	30	27	23	18
84	- 750	19	23	30	32	44	40	35	37
	0	18	29	27	31	40	38	33	36
	750	16	24	34	35	43	38	31	25
120	- 750	22	24	38	41	52	54	33	32
	0	20	31	42	44	50	55	36	31
	750	19	26	53	52	53	55	39	28

Note that ASTM inter-laboratory testing has shown insertion loss may vary as much as 6 dB in the 63hz band, and 3 dB for all other frequencies. Data in parenthesis () may be greater than shown due to limitations in laboratory equipment and/or facilities.

Table 2: Airflow Generated Sound Power Level

Face Velocity (fpm)	Airflow Generated Sound Power Level (dB)							
	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
-1500	57	53	50	54	52	51	44	29
- 750	55	48	42	46	42	34	22	29
750	52	40	38	33	40	33	24	25
1500	57	51	46	44	49	48	44	29

Note that ASTM inter-laboratory testing has shown that generated noise may vary as much as 6 dB in the 63hz band, and 3 dB for all other frequencies. Data in parenthesis () may be less than shown due to limitations in laboratory equipment and/or facilities.

Table 3: Face Area Adjustment Factor

Silencer cross-sectional area (sq ft)							
1	2	4	8	16	32	64	128
-6	-3	0	+3	+6	+9	+12	+15

Look up silencer cross-sectional area in table. Add adjustment to each octave band airflow generated sound power level from Table 2.

Weight = 5.9 lb/ft^3

Table 4: Pressure Loss

Length (in)	Loss Coefficient	Dynamic Pressure Loss (in wg)					
		Face Velocity (fpm)					
		125	250	375	500	625	750
36	10.41	0.01	0.04	0.09	0.16	0.25	0.37
60	12.45	0.01	0.05	0.11	0.19	0.30	0.44
84	14.40	0.01	0.06	0.13	0.22	0.35	0.51
120	17.71	0.02	0.07	0.16	0.28	0.43	0.62

Note: Shaded regions represent a design condition that may have negative consequences for acoustically sensitive applications.

The Quick Rating is a designation used for comparing different silencer models to note differences in energy consumption (pressure loss), low frequency performance, and mid-frequency performance . The P rating is the pressure drop at 1000 fpm where PXX is the pressure drop in hundredths of an inch wg. The LYY rating is the total insertion loss, YY dB, of the 63, 125 and 250 Hz octave bands at 0 fpm. The MZZ rating is the total insertion loss, ZZ dB, of the 500, 1000 and 2000 Hz octave bands at 0 fpm. See the sheet titled “Quick Rating Guide” for further information.