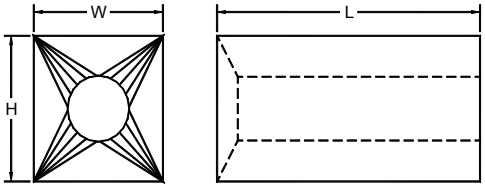
RSF-PV-L47

Rectangular, Straight, Fiber-Filled, Plenum Velocity Sounpak® Silencer

Availability
L: 5 feet
W: 23.5-24.5, 47-48, 94-96 inches
H: 23.5-24.5, 47-48, 94-96 inches



5 ft Quick Rating = P60-L47-M87

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
60	-1000	11	13	24	33	35	24	20	10
	0	12	15	25	33	36	21	18	13
	1000	11	13	23	30	35	22	20	15

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
-1000	57	57	55	52	50	50	47	44
-500	53	42	37	36	33	25	26	32
500	52	40	29	25	23	28	32	35
1000	54	55	47	42	42	47	44	36

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 = 5.5 lb/ft^3

Table 4: Pressure Loss

Length (in)	Loss Coefficient	Dynamic Pressure Loss (in wg)					
		Face Velocity (fpm)					
		250	500	750	1000	1250	1500
60	9.59	0.04	0.15	0.34	0.60	0.93	1.02

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.