



REF-LV-L42

Rectangular, Elbow, Fiber-Filled,
Low Velocity Sounpak® Silencer

Availability

L1 and L2: 2 feet and greater

W: 11.5-12.5, 23-25, 35-38, 46-50 inches

H: any length (72 inches practical limit)

Quick Rating = P34-L42-M130

See bottom of page for explanation.

Table 1: Insertion Loss

L1 x L2 (in)	Face Velocity (fpm)	Insertion Loss (dB)							
		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
36 x 24	- 1000	6	17	24	40	45	46	25	23
	0	7	15	23	44	47	(50)	45	32
	1000	7	14	21	42	43	45	39	23

Insertion loss data is derived from NVLAP® accredited laboratories, independent and internal, as well as computerized airflow and acoustical analysis. Actual performance under controlled test conditions will fall within accepted interlaboratory tolerances as given by ASTM. 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	(68)	(49)	29	41	42	33	24	39
- 500	(67)	(37)	26	26	26	21	22	40
500	(58)	(37)	29	20	27	22	29	27
1000	(65)	(44)	30	32	43	35	29	21

Generated noise data is derived from NVLAP® accredited laboratories, independent and internal, as well as computerized airflow and acoustical analysis. Actual performance under controlled test conditions will fall within accepted interlaboratory tolerances as given by ASTM. 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

Weight = 4.5 lb/ft³

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

Table 4: Pressure Loss

L1 x L2 (in)	Loss Coefficient	Dynamic Pressure Loss (in wg)					
		Face Velocity (fpm)					
		500	750	1000	1250	1500	2000
36 x 24	5.50	0.09	0.19	0.34	0.54	0.77	1.37

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.