

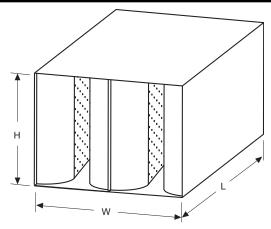
RECTANGULAR DISSIPATIVE SILENCER

BROADBAND • MEDIUM INSERTION LOSS TAPERED POD DESIGN

MODEL: RBB-MP

SPECIFICATIONS:

Engineered Acoustics' dissipative, rectangular duct silencers are designed to offer superior acoustic and aerodynamic performance. Constructed with a standard outer casing of 22 gauge (0.85) galvanized steel. Each internal "pod" includes a solid 22 gauge (0.85) elliptical nosepiece, 22 gauge (0.85) acoustically transparent perforated metal, and is exponentially tapered to minimize dynamic pressure loss and maximize static pressure regain. The inorganic, odorless, vermin and moisture proof, absorption media is compressed a minimum of 5% to eliminate voids and prevent settling.



INSERTION LOSS IN DECIBELS WITH AND WITHOUT AIRFLOW (+) FORWARD FLOW (-) REVERSE FLOW

LENGTH (inches)	FACE VELOCITY (fpm)	STATIC	OCTAVE BAND / CENTER FREQUENCY(Hz)									
		PRESSURE	1	2	3	4	5	6	7	8		
		DROP	63	125	250	500	1000	2000	4000	8000		
		(in w.g.)	INSERTION LOSS (dB)									
36	-1500	.18	2	6	12	21	29	23	13	7		
	-1000	.09	2	6	11	21	29	23	13	7		
	0	0	2	5	10	21	28	23	16	10		
	+1000	.07	2	4	10	20	28	23	16	10		
	+2000	.28	1	4	9	18	27	23	15	10		
60	-1500	.26	3	10	17	35	45	36	20	11		
	-1000	.12	4	9	16	35	46	38	22	11		
	0	0	5	9	16	35	47	41	25	14		
	+1000	.10	5	8	15	34	47	41	26	14		
	+2000	.41	4	7	15	33	46	39	26	14		
84	-1500	.30	8	12	24	40	46	40	26	15		
	-1000	.15	8	12	23	42	47	41	27	15		
	0	0	6	11	21	43	49	45	29	16		
	+1000	.13	7	10	20	42	49	46	29	16		
	+2000	.50	6	9	19	41	46	44	30	17		

NOTE:

- The incombustible filler material does not exceed the following fire hazard classifications when tested in accordance with NFPA 90 and UL 181: Flame spread 25, Fuel contributed 0, Smoke development 50.
- 2. All performance data is independently tested using a 24" x 24" (610 x 610) rectangular sample. Forward Flow (+) occurs when noise and air travel in the same direction. Reverse Flow (-) occurs when noise and air travel in opposite directions.
- 3. Face velocities represent velocity across the total inlet area of the silencer. Static pressure drop is reported in accordance with standard ASTM E-477 involving specified lengths of straight duct before and after the test specimen. Actual system conditions may vary from the standard and require additional system performance calculations.

SELF GENERATED NOISE

	OCTAVE BAND / CENTER FREQUENCY (Hz)										
FACE VELOCITY	1	2	3	4	5	6	7	8			
(fpm)	63	125	250	500	1000	2000	4000	8000			
(AIR FLOW GENERATED SOUND POWER LEVELS (dB)										
-1500	61	55	54	58	60	62	56	48			
-1000	54	50	49	52	55	55	47	37			
+1000	54	50	42	42	39	36	34	29			
+2000	60	59	59	52	52	55	56	52			

FACE AREA CORRECTION FACTORS

FACE AREA (sq. ft)	.5	1	2	4	8	16	32	64	128	256
PWL CORRECTION FACTOR (dB)	-8	-6	-3	0	+3	+6	+9	+12	+15	+18

OPTIONS:

- ☐ High temperature sealant
- ☐ Field or factory assembled multiple modules
- ☐ TDF Flange one or both ends
- ☐ 1.5" (38) flange one or both ends
- ☐ 18 gauge (1.31) outer casing construction

SCHEDULE TYPE:	Discossions are in inch as (seeds)					
PROJECT:	Dimensions are in inches (mm's).					
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO		
CONTRACTOR:	11 - 29 - 16	RBB	4 - 2 - 08	RBB-MP		