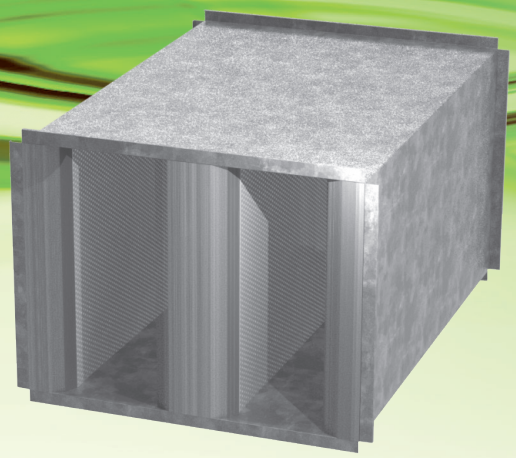
SLR-LP Rectangular Silencers



ASLI Rectangular Silencers (SLR-LP) is designed to minimize pressure drop. The baffle width is tuned to target at middle frequency and high frequency which human hearing is most sensitive at. The shape of baffle is optimized in order to achieve the best insertion loss of noise with minimum pressure drop. The tail of baffle is specially designed to regain static loss and reduce turbulent air flow pattern, as well as regenerative noise.

Materials

Outer casing : 1.0mm - 1.2mm thickness galvanized steel.
Baffle : 0.5mm - 0.7mm thickness perforated galvanized steel.
Infill : Acoustic composite

Surface Finish

Mill galvanized.

Connection Joint

TDC joint as standard.
Angle bar joint as optional.

Features

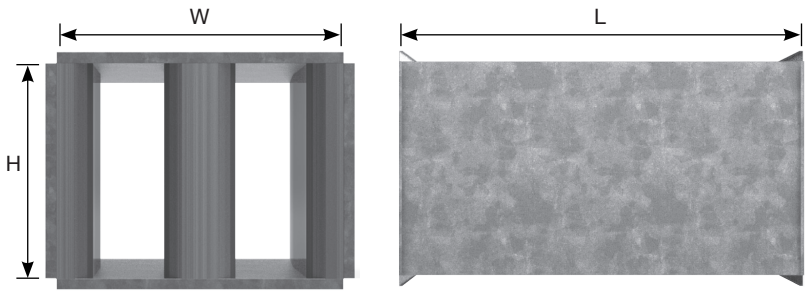
- Specially tuned to target at middle frequency and high frequency which human hearing is most sensitive at.
- Special baffle design to minimize pressure drop.
- TDC joint to ensure installation friendly.
- Lined with polyester film for clean room application. (Optional)

Nominal Length *Unit : mm*

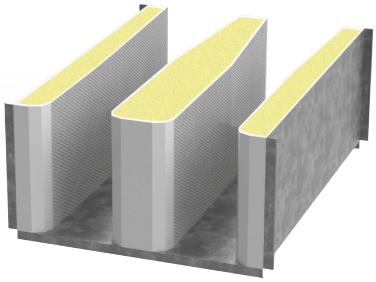
*600 / 900 / **1200 / 1500 / 1800
2100 / 2400 / 2700 / 3000

* Actual length for 600 is 515mm.
** Actual length for 1200 is 1135mm.

SLR-LP Construction Illustration



Front Side



Cut Section

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SLR-LP Table 1: Insertion Loss *Unit : dB*

Model	Length (mm)	Minimum width (mm)	Frequency (Hz)							
			63	125	250	500	1000	2000	4000	8000
SLR-LP-33	600	300	3	7	14	27	38	25	21	16
	900	300	4	9	17	31	42	31	26	19
	1200	300	5	11	21	36	47	35	28	21
	1500	300	6	14	26	42	51	41	30	23
	1800	300	6	16	31	48	55	47	33	25
	2100	300	7	19	37	51	57	53	35	27
	2400	300	8	21	41	57	62	58	37	28
	2700	300	8	22	42	59	62	58	39	30
	3000	300	9	24	44	60	62	59	42	31
SLR-LP-39	600	325	3	6	12	25	32	20	16	13
	900	325	4	8	16	29	37	27	21	16
	1200	325	5	10	20	33	41	31	23	18
	1500	325	5	11	24	35	44	35	25	20
	1800	325	5	14	30	40	51	40	28	22
	2100	325	6	16	38	46	54	44	30	23
	2400	325	7	18	41	49	59	49	32	25
	2700	325	8	19	42	52	60	52	34	26
	3000	325	9	20	44	55	62	56	36	28
SLR-LP-45	600	365	2	4	10	18	24	16	11	9
	900	365	3	6	13	25	29	22	15	12
	1200	365	4	8	17	28	34	24	17	14
	1500	365	5	11	23	33	38	28	19	16
	1800	365	5	13	28	38	44	31	22	18
	2100	365	6	15	33	44	50	33	24	20
	2400	365	7	17	38	47	55	37	26	21
	2700	365	7	18	40	50	53	41	27	22
	3000	365	8	19	41	52	59	44	29	23
SLR-LP-50	600	400	2	5	9	15	21	14	9	6
	900	400	3	6	12	20	25	17	11	8
	1200	400	4	8	15	23	29	19	14	12
	1500	400	5	10	19	27	33	22	17	13
	1800	400	5	11	23	32	38	25	20	14
	2100	400	5	12	27	34	43	28	23	16
	2400	400	6	13	30	40	47	31	26	18
	2700	400	6	15	30	41	48	33	27	19
	3000	400	7	17	32	43	50	35	29	20

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SLR-LP Table 2: Air Generated Sound Power Level *Unit : dB*

Model	Face velocity (m/s)	Frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
SLR-LP-33	5	70	64	58	55	54	52	46	40
	10	86	80	74	71	70	68	62	56
	15	95	89	83	80	79	77	71	65
SLR-LP-39	5	65	59	53	50	49	47	41	35
	10	81	75	69	66	65	63	57	51
	15	90	84	78	75	74	72	66	60
SLR-LP-45	5	58	52	46	43	42	40	34	28
	10	75	69	63	60	59	57	51	45
	15	84	78	72	69	68	66	60	54
SLR-LP-50	5	55	49	43	40	39	37	31	25
	10	71	65	59	56	55	53	47	41
	15	80	74	68	65	64	62	56	50

• The above performance data is generated from 1.0m² face area silencer. Please use the correct factor at table 3 for other face area silencers.

SLR-LP Table 3: Correction Factor for Air Generated Sound Power Level *Unit : dB*

Face Area (m²)	0.125	0.25	0.5	1	2	4	8
Correction Factor	-9	-6	-3	0	+3	+6	+9

SLR-LP Table 4: Pressure Drop *Unit : Pa*

Model	Length, L (mm)	Face velocity (m/s)						
		2	4	6	8	10	12	14
SLR-LP-33	600 ≤ L ≤ 1800	11	44	98	175	273	393	535
	2100 ≤ L ≤ 3000	12	46	104	185	289	416	566
SLR-LP-39	600 ≤ L ≤ 1800	7	28	64	114	178	256	349
	2100 ≤ L ≤ 3000	8	30	68	120	188	271	368
SLR-LP-45	600 ≤ L ≤ 1800	4	18	40	71	112	161	219
	2100 ≤ L ≤ 3000	5	19	42	75	117	168	228
SLR-LP-50	600 ≤ L ≤ 1800	3	12	27	48	75	108	147
	2100 ≤ L ≤ 3000	3	13	28	51	79	114	155

SLR-LP Order Code

Model	Width, W (mm)	Height, H (mm)	Length, L (mm)
SLR-LP-50	600	600	900

Example: SLR-LP-50 W600XH600XL900mm