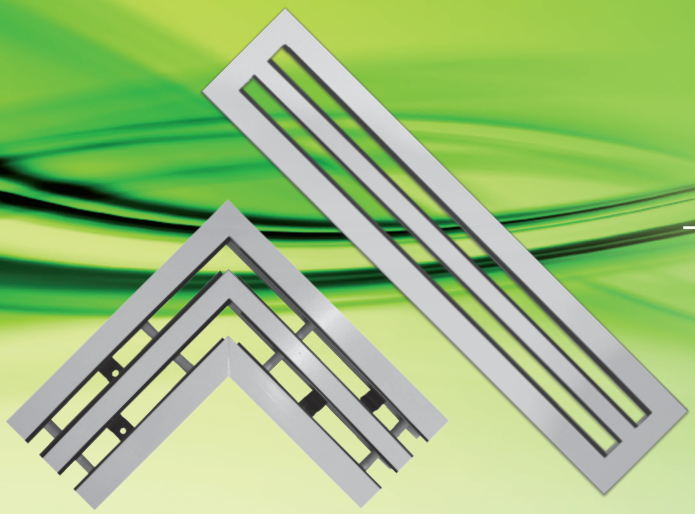
SLLS Linear Ceiling Diffuser



ASLI SLLS is a type of diffuser combine a high air change rate capacity with maximum flexibility in air pattern and volume control. It offers unobtrusive good looks together with functional efficiency.

Materials

Frame : Aluminium extrusion
Blade : Roll forming blade

Surface Finish

- Baked white powder coat as standard.
- Pattern controller vane is black colourbond.

Standard size *Unit : mm*

600 (2') / 1200 (4')
Others avaiable upon request

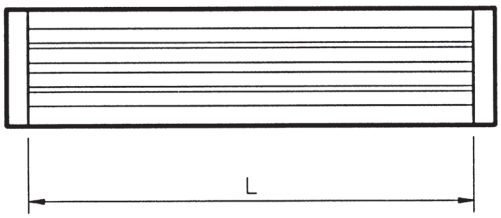
Features

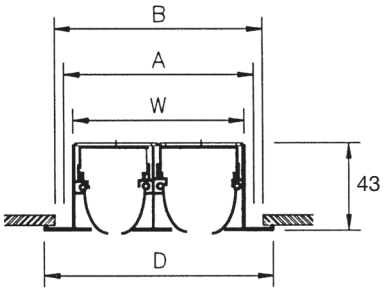
- SLLS linear diffuser can be used in T-bar ceiling suspension system & other ceiling types as well.
- The diffuser incorporates curved blade pattern controller for adjustable of air distribution.
- Model SLLS-1 has a 90° mitred corner connection
- Linear diffusers that come with plenum boxes are known as SLLSB.
- Approximately 38% free area when blades are fully open.
- Available in 1 slot to 6 slots.

Accessories

PB Plenum Box

SLLS Physical Dimension *Unit : mm*



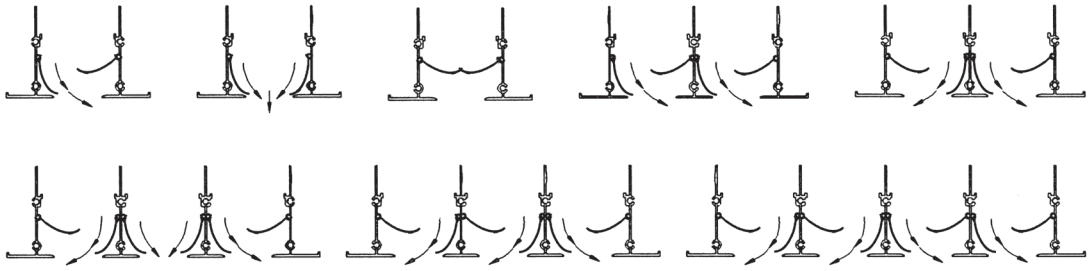


Model	W Neck Size	A Duct Size	B Ceiling Size	D Face Size
1 Slot	48	L+10 W+10	L+15 W+15	L+37 W+37
2 Slot	93			
3 Slot	138			
4 Slot	183			
5 Slot	228			
6 Slot	273			

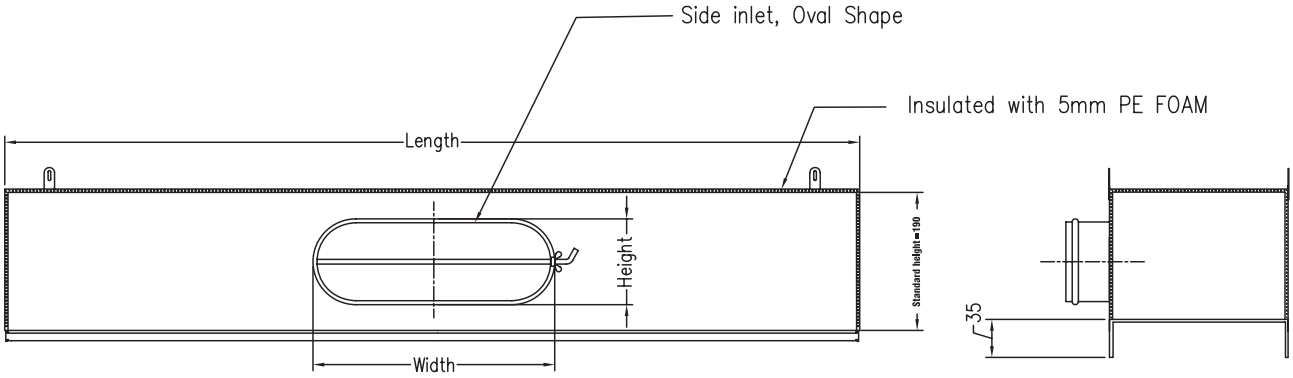
SLLS Linear Ceiling Diffuser

SLLS Frame Details

SLLS Air Distribution Adjustment



Model SLLSB: SLLS Linear Diffuser c/w Plenum Box



Oval Dimension		
Diameter Oval (inch)	Witdth	Height
6	175	89
8	247	105
10	308	129
12	378	159
14	448	208

Plenum Box	
Oval Side Inlet Diameter (Inch)	Box Height (mm)
6-8	190
10	190
12	190
14	233

SLLSB Physical Dimension *Unit : mm*

- Plenum box is constructed of 0.5mm SPGC galvanized steel.
- Internal insulation: 5mm thick PE foam.

SLLS Linear Ceiling Diffuser

SLLS (Supply) Performance Data

No. of Slot	Neck Vel. (m/s)		0.2	0.4	0.7	0.9	1.1	1.3	1.6	1.8	2.0
	St. Press. (mmAq)		0.1	0.4	0.8	1.4	2.3	3.3	4.4	5.8	7.3
1 Slot	CMH		48	88	136	177	224	272	313	360	401
	NC		-	-	13	20	26	30	34	37	40
	Throw (m)	H	0.6-1.8	1.8-4.9	3.7-6.4	4.9-7.3	5.8-8.2	6.4-8.8	6.7-9.8	7.3-10.4	7.6-11.0
		V	0.6	2.4	3.7	4.3	4.6	5.2	5.5	5.8	6.1
2 Slot	CMH		88	177	272	360	449	537	626	721	809
	NC		-	-	16	23	29	33	37	40	43
	Throw (m)	H	0.9-3.7	3.7-7.0	5.2-8.8	7.0-10.7	8.2-11.6	8.8-12.8	9.8-13.7	10.4-14.6	11.0-15.5
		V	1.5	3.4	4.9	5.8	6.7	7.3	7.9	8.5	9.1
3 Slot	CMH		136	272	401	537	673	809	945	1074	1210
	NC		-	-	18	25	30	35	39	42	45
	Throw (m)	H	1.5-4.3	4.3-8.5	6.4-11.0	8.5-12.8	10.1-14.0	11.0-15.5	11.9-16.8	12.8-18.0	13.4-18.9
		V	2.1	4	6.1	7.3	8.2	8.8	9.8	10.4	11
4 Slot	CMH		177	360	537	721	898	1074	1258	1435	1618
	NC		-	-	19	26	32	36	40	43	46
	Throw (m)	H	1.8-4.9	4.9-10.1	7.3-12.8	10.1-14.6	11.6-16.5	12.8-18.0	13.7-19.2	14.6-20.7	15.5-21.9
		V	2.4	4.6	7	8.5	9.4	10.4	11	11.9	12.8
5 Slot	CMH		224	449	673	898	1122	1346	1571	1795	2020
	NC		-	-	20	27	33	37	41	44	47
	Throw (m)	H	2.4-5.5	5.5-11.0	8.2-14.0	11.0-16.5	12.8-18.3	14.0-20.1	15.2-21.6	16.5-23.2	17.4-24.4
		V	2.7	5.2	7.6	9.4	10.4	11.6	12.5	13.1	13.7
6 Slot	CMH		272	537	809	1074	1346	1618	1884	2156	2421
	NC		-	12	22	29	34	38	42	45	48
	Throw (m)	H	3.0-6.1	6.1-12.2	9.1-15.5	12.2-18.0	14.0-20.1	15.5-21.9	16.8-23.8	18.0-25.3	18.9-26.8
		V	2.7	5.8	8.5	10.4	11.6	12.5	13.7	14.6	15.5

SLLS (Return) Performance Data

No. of Slots	Neg. SP (mmAq)	0.5	1.0	1.8	2.8	4.1	5.5	7.2	11.5
1 Slot	CMH	135	200	270	340	405	475	545	680
	NC	-	-	-	24	29	33	37	43
2 Slot	CMH	270	405	545	680	815	950	1085	1360
	NC	-	-	22	27	31	36	40	46
3 Slot	CMH	405	610	815	1020	1225	1425	1630	2040
	NC	-	-	24	29	34	38	42	48
4 Slot	CMH	545	815	1085	1360	1630	1905	2175	2720
	NC	-	-	24	30	35	39	43	49
5 Slot	CMH	680	1020	1360	1700	2040	2380	2720	3400
	NC	-	-	22	28	33	37	41	47
6 Slot	CMH	1224	1224	1632	2040	2448	2856	3264	4080
	NC	-	-	23	29	34	38	42	48

- Throw values are based on an entire section 1.2 meter long.
- Vertical throw is based on terminal velocity of 0.25m/s.
- Horizontal throw is based on terminal velocities of 0.5m/s – 0.25m/s respectively.
- NC value is based on a room absorption of 10 dB, re 10^{-12} watts.
- Dash (-) in space indicates NC value less than 20.
- Performance data are obtain based on isothermal condition.

SLLS Linear Ceiling Diffuser

NC correction for various diffuser lengths

Length (m)	0.6	1.2	2.4
Supply NC	-3	0	+3
Return NC	-3	0	+5

Throw correction multiplier for length

Length	0.6	1.2	2.4
Throw Correction	0.7	1.0	1.5

SLLSB Performance Data

No. of Slot	Round Inlet (mm)	Length (mm)							
1	Ø 150	600	CMH	51	77	102	128	153	179	204
			Tot. Press (mmAq)	0.4	0.8	1.4	2.3	3.3	4.5	5.8
			NC	-	-	26	31	35	38	42
			Throw (m)	1.8 - 3.4	2.7 - 4.0	3.4 - 4.6	3.7 - 5.2	4.0 - 5.5	4.3 - 6.1	4.6 - 6.4
		1200	CMH	77	116	153	192	230	269	306
			Tot. Press (mmAq)	0.3	0.8	1.4	2.1	3.1	4.2	5.5
			NC	-	-	25	30	35	38	41
			Throw (m)	0.6 - 2.7	2.1 - 4.0	2.7 - 4.6	3.7 - 5.2	4.0 - 5.5	4.3 - 6.1	4.6 - 6.4
1	Ø 200	600	CMH	51	82	111	141	170	201	230
			Tot. Press (mmAq)	0.4	1.0	1.9	3.1	4.5	6.3	8.3
			NC	-	-	24	29	34	38	41
			Throw (m)	1.5 - 4.0	3.0 - 6.4	4.3 - 8.2	5.5 - 9.4	6.7-10.4	7.9-11.3	8.5-11.9
		1200	CMH	85	128	170	213	255	298	340
			Tot. Press (mmAq)	0.3	0.6	1.1	1.7	2.5	3.4	4.4
			NC	-	-	23	29	33	37	40
			Throw (m)	1.5 - 3.0	2.4 - 4.0	3.0 - 4.9	3.7 - 5.2	4.0 - 5.8	4.6 - 6.4	4.9 - 6.7
1	Ø 250	600	CMH	68	94	119	145	170	196	221
			Tot. Press (mmAq)	1.1	2.1	3.4	5.1	7.0	9.2	11.8
			NC	-	-	23	27	31	35	37
			Throw (m)	2.4 - 5.2	3.7 - 7.3	4.6 - 8.5	5.8 - 9.4	6.7-10.4	7.6-11.0	8.2-11.9
		1200	CMH	102	153	204	255	306	357	408
			Tot. Press (mmAq)	0.4	0.8	1.4	2.2	3.2	4.4	5.7
			NC	-	-	25	30	35	38	41
			Throw (m)	1.8 - 3.7	2.7 - 4.6	3.7 - 5.2	4.0 - 5.8	4.6 - 6.4	4.9 - 7.0	5.2 - 7.3
1	Ø 300	1200	CMH	119	179	238	298	357	417	476
			Tot. Press (mmAq)	0.6	1.4	2.5	3.9	5.7	7.7	10.1
			NC	-	-	25	30	34	38	41
			Throw (m)	2.1- 4.0	3.4 - 4.9	4.0 - 5.5	4.6 - 6.4	4.9 - 7.0	5.2 - 7.3	5.5 - 7.9

- Throw is based on terminal velocities of 0.5m/s – 0.25m/s respectively.
- NC value is based on a room absorption of 10 dB, re 10^{-12} watts.
- Dash (-) in space indicates NC value less than 20.
- Performance data are obtain based on isothermal condition.

SLLS Linear Ceiling Diffuser

SLLSB Performance Data

No. of Slot	Round Inlet (mm)	Length (mm)							
2	Ø 150	600	CMH	68	107	145	184	221	260	298
			Tot. Press (mmAq)	0.3	0.7	1.2	2.0	2.8	3.9	5.2
			NC	-	-	24	29	34	37	41
			Throw (m)	0.9 - 3.7	2.1 - 5.8	4.0 - 7.9	5.2-10.1	6.1-11.9	7.0-12.8	8.2-13.7
		1200	CMH	119	175	230	286	340	396	451
			Tot. Press (mmAq)	0.5	1.1	2.0	3.0	4.3	5.9	7.6
			NC	-	-	24	29	33	37	40
			Throw (m)	0.9 - 3.0	2.1 - 4.6	3.0 - 5.5	3.7 - 6.1	4.6 - 6.7	5.2 - 7.3	5.5 - 7.6
2	Ø 200	600	CMH	85	128	170	213	255	298	340
			Tot. Press (mmAq)	0.3	0.6	1.1	1.7	2.5	3.4	4.4
			NC	-	-	23	29	33	37	40
			Throw (m)	1.5 - 4.6	3.0 - 7.0	4.6 - 9.4	5. 8-11.6	7.0-12.8	8.2-13.7	9.4-14.6
		1200	CMH	153	213	272	332	391	451	510
			Tot. Press (mmAq)	0.5	0.9	1.4	2.1	2.9	3.9	4.9
			NC	-	-	24	29	33	36	39
			Throw (m)	1.5 - 4.0	2.7 - 5.2	3.7 - 6.1	4.3 - 6.7	5.2 - 7.3	8.5 - 7.6	5.8 - 8.2
2	Ø 250	600	CMH	102	153	204	255	306	357	408
			Tot. Press (mmAq)	0.4	0.8	1.4	2.2	3.2	4.4	5.7
			NC	-	-	25	30	35	38	41
			Throw (m)	2.1 - 5.5	4.3 - 8.5	5.5-11.3	7.0- 12.8	8.5-14.0	9.8-14.9	11.3-16.2
		1200	CMH	170	247	323	400	476	553	629
			Tot. Press (mmAq)	0.4	0.8	1.4	2.1	2.9	4.0	5.2
			NC	-	-	25	30	34	38	41
			Throw (m)	2.1 - 4.6	3.4 - 5.8	4.3 - 6.4	5.2 - 6.4	5.5 - 7.9	6.1 - 8.5	6.4 - 9.1
2	Ø 300	1200	CMH	204	289	374	459	544	459	714
			Tot. Press (mmAq)	0.4	0.8	1.3	1.9	2.7	3.6	4.6
			NC	-	-	25	29	33	37	40
			Throw (m)	2.7 - 5.2	3.7 - 6.1	4.9 - 7.0	5.5 - 7.9	6.1 - 8.5	6.4 - 9.1	7.0 - 9.8

- Throw is based on terminal velocities of 0.5m/s – 0.25m/s respectively.
- NC value is based on a room absorption of 10 dB, re 10^{-12} watts.
- Dash (-) in space indicates NC value less than 20.
- Performance data are obtain based on isothermal condition.

SLLS Linear Ceiling Diffuser

SLLSB Performance Data

No. of Slot	Round Inlet (mm)	Length (mm)							
3	Ø 150	600	CMH	102	145	187	230	272	315	357
			Tot. Press (mmAq)	0.5	0.9	1.5	2.3	3.2	4.3	5.6
			NC	-	-	23	28	32	36	39
			Throw (m)	1.2 - 4.6	2.1 - 6.4	3.7 - 8.5	5.2-10.4	6.1-12.2	7.0-14.0	7.9-14.9
		1200	CMH	162	221	281	340	400	459	519
			Tot. Press (mmAq)	0.8	1.6	2.6	3.8	5.2	6.9	8.8
			NC	-	-	22	27	31	34	37
			Throw (m)	0.9 - 3.4	1.8 - 4.6	3.0 - 6.1	3.7 - 6.7	4.3-7.3	4.9-7.9	5.5-8.2
3	Ø 200	600	CMH	85	153	221	289	357	425	493
			Tot. Press (mmAq)	0.2	0.6	1.2	2.0	3.1	4.3	5.8
			NC	-	-	23	30	35	39	42
			Throw (m)	0.9 - 3.0	2.4 - 7.0	4.9-10.1	6.4-13.1	7.9-14.9	9.4-16.5	11.0-17.7
		1200	CMH	170	264	357	451	544	638	731
			Tot. Press (mmAq)	0.4	1.0	1.9	3.0	4.4	6.1	8.0
			NC	-	-	24	30	34	38	41
			Throw (m)	1.2 - 3.7	2.7 - 5.5	3.7 - 7.0	4.9 - 7.6	5.8 - 8.5	6.4 - 9.1	7.0 - 9.8
3	Ø 250	600	CMH	136	196	255	315	374	434	493
			Tot. Press (mmAq)	0.3	0.7	1.2	1.8	2.5	3.4	4.4
			NC	-	-	24	29	33	37	40
			Throw (m)	1.8 - 6.1	4.0 - 8.8	5.8-11.6	7.0-14.0	8.5-15.2	9.8-16.5	11.0-17.1
		1200	CMH	204	303	400	498	595	694	791
			Tot. Press (mmAq)	0.4	0.9	1.5	2.3	3.4	4.5	5.9
			NC	-	-	24	29	34	37	40
			Throw (m)	1.5 - 4.3	3.4 - 6.4	4.3 - 7.3	5.2 - 8.2	6.4 - 8.8	6.7 - 9.4	7.3-10.4
3	Ø 300	1200	CMH	255	366	476	587	697	808	918
			Tot. Press (mmAq)	0.4	0.7	1.2	1.8	2.6	3.5	4.5
			NC	-	-	24	29	33	37	40
			Throw (m)	2.4 - 5.5	4.0 - 7.0	5.2 - 7.9	6.1 - 8.8	6.7 - 9.4	7.3-10.4	7.9 - 11.0

- Throw is based on terminal velocities of 0.5m/s – 0.25m/s respectively.
- NC value is based on a room absorption of 10 dB, re 10^{-12} watts.
- Dash (-) in space indicates NC value less than 20.
- Performance data are obtain based on isothermal condition.

SLLS Linear Ceiling Diffuser

SLLSB Performance Data

No. of Slot	Round Inlet (mm)	Length (mm)							
4	Ø 150	600	CMH	119	175	230	286	340	396	451
			Tot. Press (mmAq)	0.5	1.1	1.9	3.1	4.4	5.9	7.7
			NC	-	-	24	29	33	37	40
			Throw (m)	0.9 ~ 4.0	2.2 ~ 6.8	3.7 ~ 8.9	5.6~11.1	6.8~13.6	7.7~15.7	8.9~17.0
		1200	CMH	196	277	357	439	519	600	680
			Tot. Press (mmAq)	1.1	2.3	3.9	5.8	8.2	10.9	14.0
			NC	-	-	24	29	33	36	39
			Throw (m)	0.9 ~ 3.7	1.9 ~ 5.2	3.1 ~ 6.8	4.0 ~ 7.7	4.9 ~ 8.3	5.6 ~ 8.9	6.5 ~ 9.6
4	Ø 200	600	CMH	102	179	255	332	408	485	561
			Tot. Press (mmAq)	0.2	0.6	1.2	2.0	3.2	4.5	5.9
			NC	-	-	22	29	34	38	41
			Throw (m)	0.6 ~ 2.8	2.2 ~ 7.1	4.6~10.2	6.5~13.0	8.0~16.0	9.6~17.6	11.1~19.1
		1200	CMH	238	340	442	544	646	748	850
			Tot. Press (mmAq)	0.7	1.5	2.7	4.0	5.5	7.4	9.7
			NC	-	-	25	30	34	37	40
			Throw (m)	1.5 ~ 4.3	2.8 ~ 6.5	4.0 ~ 7.7	4.9 ~ 8.6	6.2 ~ 9.3	7.1~10.2	7.7~10.8
4	Ø 250	600	CMH	170	243	315	388	459	532	604
			Tot. Press (mmAq)	0.4	0.7	1.3	1.9	2.8	3.7	4.8
			NC	-	-	25	30	34	37	40
			Throw (m)	1.9 ~ 4.9	3.7 ~ 7.1	4.6 ~ 8.0	5.6 ~ 8.9	6.8 ~ 9.9	7.4~10.5	8.0~11.1
		1200	CMH	272	383	493	604	714	825	935
			Tot. Press (mmAq)	0.6	1.1	1.9	3.0	4.1	5.5	7.0
			NC	-	-	25	30	34	37	40
			Throw (m)	1.9 ~ 4.9	3.7 ~ 7.1	4.6 ~ 8.0	5.6 ~ 8.9	6.8 ~ 9.9	7.4~10.5	8.0~11.1
4	Ø 300	1200	CMH	323	451	578	706	833	961	1088
			Tot. Press (mmAq)	0.4	0.8	1.3	2.0	2.9	3.8	4.8
			NC	-	-	24	29	33	36	39
			Throw (m)	2.5 ~ 6.2	4.3 ~ 7.7	5.2 ~ 8.9	6.5 ~ 9.9	7.4~10.5	8.0~11.4	8.6~12.0

- Throw is based on terminal velocities of 0.5m/s – 0.25m/s respectively.
- NC value is based on a room absorption of 10 dB, re 10^{-12} watts.
- Dash (-) in space indicates NC value less than 20.
- Performance data are obtain based on isothermal condition.

SLLSB Order Code

Model	Accessories	90°	No. of Slot	L
SLLS	PB	1	2	100

Example : SLLS + PB - 1 - 2 - 100