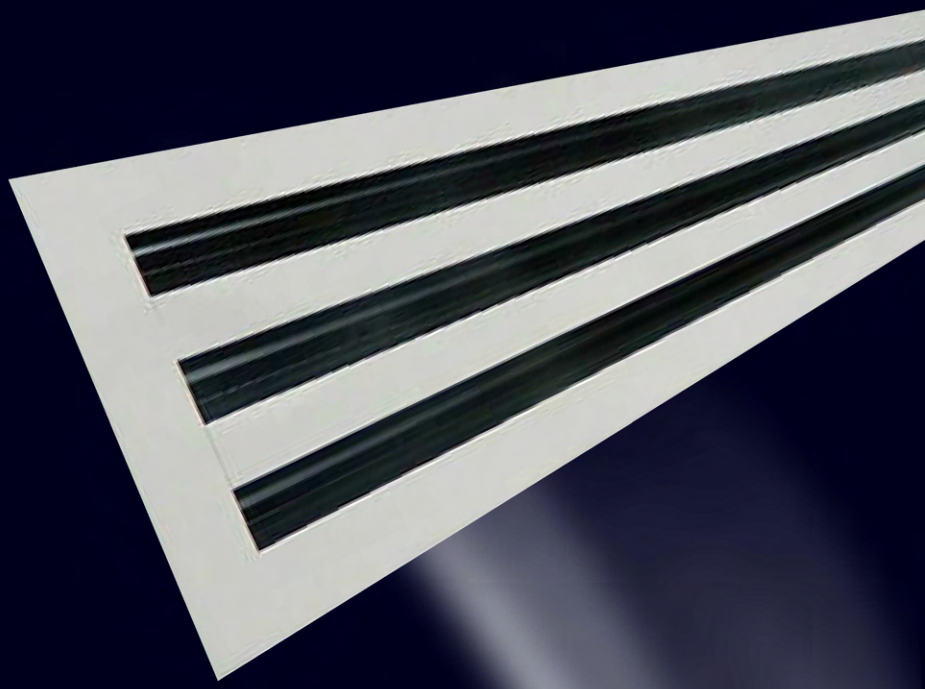
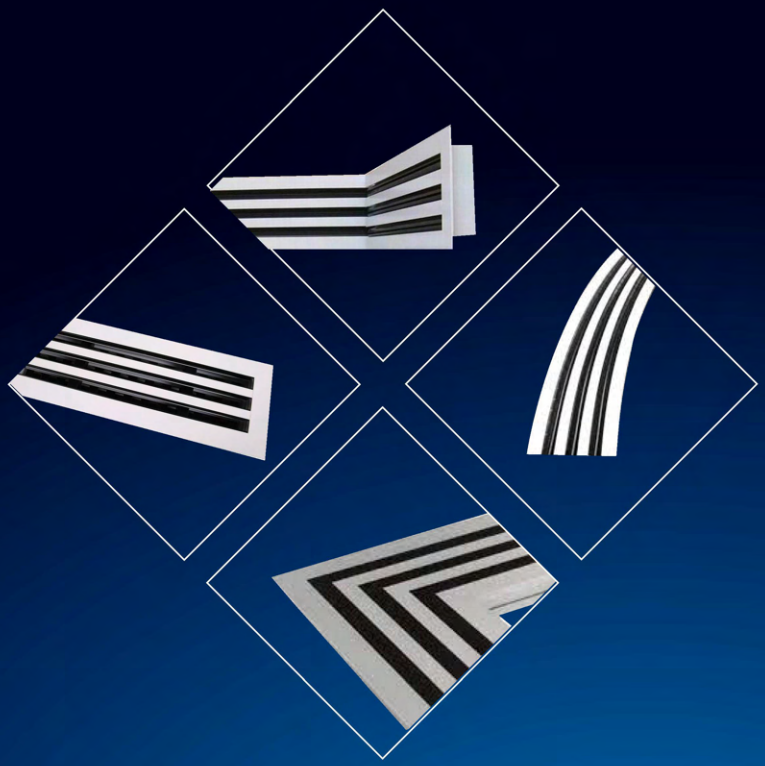
Global Air

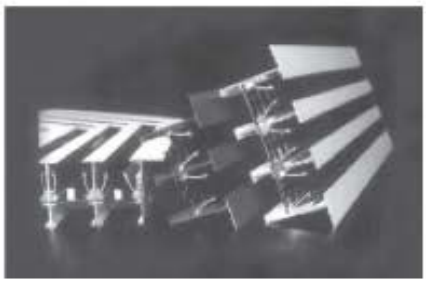
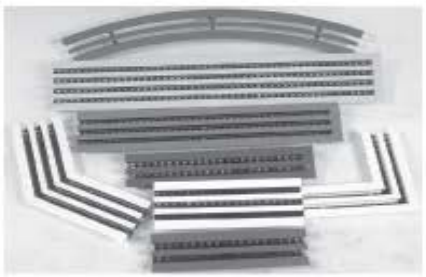




Linear Slot Diffusers

LINEAR SLOT DIFFUSERS

CONTENTS

Our Company Linear Slot Diffusers have been designed to satisfy architectural concepts that require continuous length applications without compromising air distribution performance. A combination of engineering excellence and architectural appeal in a single product is provided in this type of units.
Linear Slot Diffusers for supply air applications are usually installed in ceilings or high side wall locations, the design of these units features an adjustable supply air pattern and makes them particularly suitable for open office perimeter zones, main floor entrance foyers and lobbies, elevator lobbies, conference rooms, mall atriums and theatres.

- Construction: Frame, Core & Deflection Blades are made of high quality Extruded Aluminium Profiles of 6063 Alloy.
- Hit - and - Miss Damper Material: made of Pre-painted Aluminium coils of 3005 Alloy in matt black color finish.

Features & Characteristics:

- Frame Flange Width: 28 mm.
- Available in 1 to 8 Numbers of Slots.
- Available in three different slot widths (openings):
  - 20 mm (3/4) as standard.
  - 16 and 25 mm (5/8 and 1) as option.
- The design of linear slot diffusers provides a full flexibility in volume and air pattern control.
- The Volume Control Damper (Hit- and - Miss Damper) installed in the rear part of the linear slot diffuser consists of two Aluminium strips, the rear one is fixed and the other one is sliding.
- Both the Hit and Miss strips are having 10 x 10 mm square holes. Adjacent holes are spaced in 10 mm distances also.
- Manually and from the slot face opening, the air flow rate can be adjusted by moving the sliding part of the Hit- and - Miss damper left or right.
- The Volume Control Damper (Hit- and - Miss Damper) is designed in a unique way that it can be used as an equalizing grid.
- Air pattern can be directed vertically or horizontally by means of Deflection Blades in fully 180 degree range without changing the air flow rate. These blades can be manually adjusted from slot face opening.
- The Adjustable Deflection Blades allow for the air pattern to be directed along the ceiling, straight down or at some intermediate setting.
- To maintain perfect and unbroken appearance for continuous runs, alignment joining strips are provided in proper lengths and quantities with no extra cost.

- Also, End Cap pieces to be provided in proper sizes as requested with no extra cost.
- Mounting Instructions: see page No. LD-06.
- Surface Finishes: see page No. LD-17.

OPERATING RANGE AND QUICK SELECTION TABLE FOR LINEAR SLOT DIFFUSERS								
SLOT OPENING = 16 mm			SLOT OPENING = 20 mm (Standard)			SLOT OPENING = 25 mm		
No. of Slots	CFM Range		No. of Slots	CFM Range		No. of Slots	CFM Range	
1	50	74	1	70	95	1	85	127
2	95	136	2	119	170	2	155	229
3	125	191	3	165	248	3	252	318
4	163	254	4	212	316	4	265	413
5	201	290	5	259	371	5	345	519
6	248	339	6	314	424	6	403	583
7	271	381	7	350	519	7	473	678
8	297	424	8	386	562	8	530	742

CFM Values are based on:

- Length of one metre
- Noise level ranging from 15-25 (dB).
- Vertical Discharge without wall effect

NO. OF SECTIONS PER RUNNING UNIT			
No. of Slots	ONE SECTION	TWO SECTIONS	MULTI SECTIONS
1	≤ 4.0	> 4.0	> 6.0
2	≤ 4.0	> 4.0	> 6.0
3	≤ 4.0	> 4.0	> 6.0
4	≤ 4.0	> 4.0	> 6.0
5	≤ 3.5	> 3.5	> 6.0
6	≤ 3.5	> 3.5	> 6.0
7	≤ 3.5	> 3.5	> 6.0
8	≤ 3.5	> 3.5	> 6.0

- Above arrangements are approximate and subject to change according to order / site conditions

End Cap / Flange Arrangements

- Open Ends

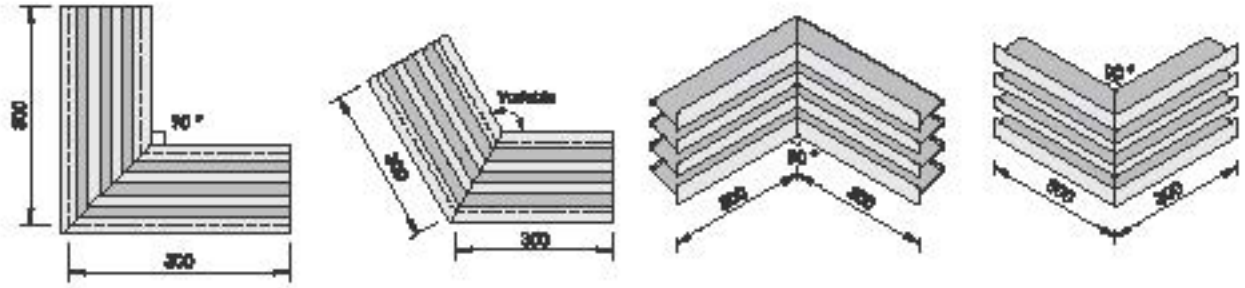
- End Cap at One side

- End Cap at Both side

- End Cap at Both Terminal Sides (Multi Sections)

MITERED CORNERS

Ceiling Mounted Corners | **Wall Mounted Corners**



90 ° Corner
Standard

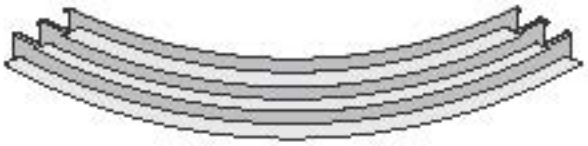
Variable Angle Corner
Optional

Inside 90 ° Corner
Optional

Outside 90 ° Corner
Optional

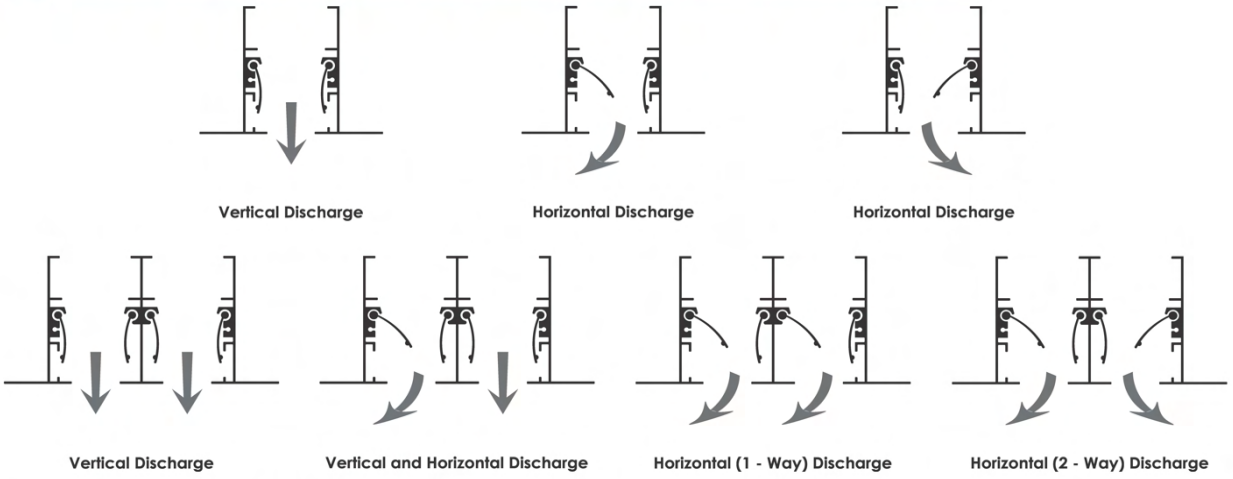
- Corners are always supplied in 300 mm adjacent sides as standard unless otherwise specified or required

Features & Characteristics:



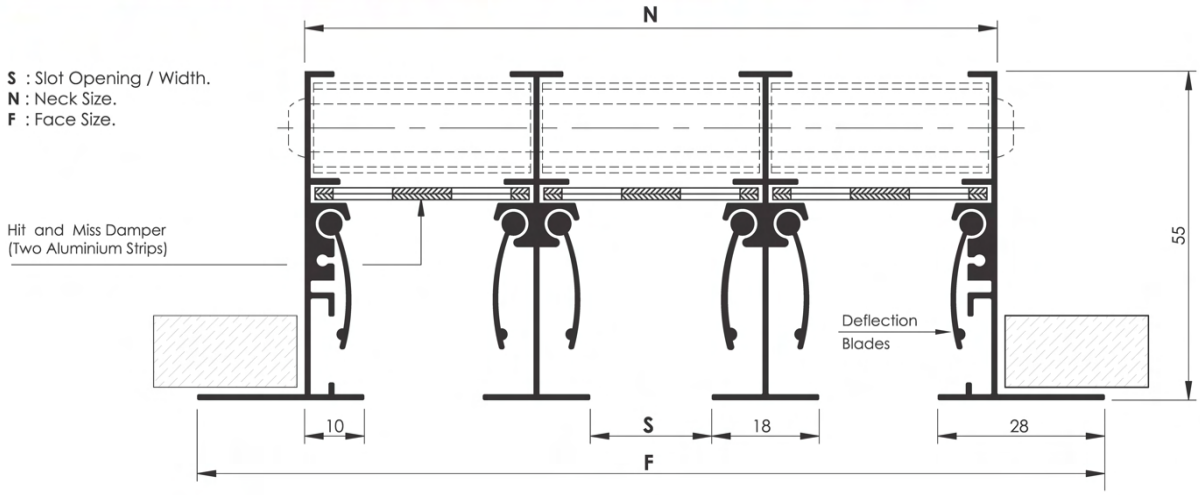
- Curves can be fabricated in minimum curvature radius - 1 mtr.
- Curve applications are not possible for side wall installments

Single and Multiple Slot PaHern Adjustment



- Two deflectors per slot provide an adjustable air pattern of fully 180 degrees

Single and Multiple Slot PaHern Adjustment

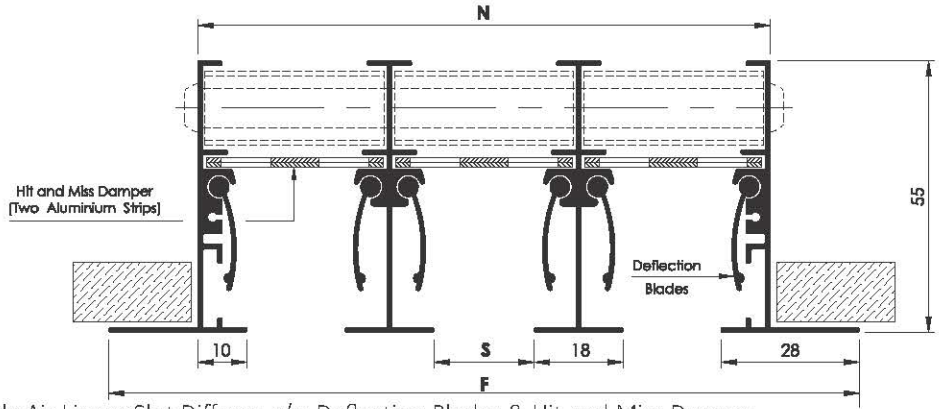


NECK & OVERALL DIMENSIONS FOR LINEAR SLOT DIFFUSERS						
No. of Slots	S = 16 mm		S = 20 mm (Standard)		S = 25 mm	
	N	F	N	F	N	F
1	36	72	40	76	46	82
2	70	106	78	114	90	126
3	104	140	116	152	134	170
4	138	174	154	188	178	214
5	172	208	192	228	222	258
6	206	242	230	266	266	302
7	240	276	268	30 4	310	346
8	274	310	306	342	354	390

- All dimensions are in mm and subject to ±mm tolerance.

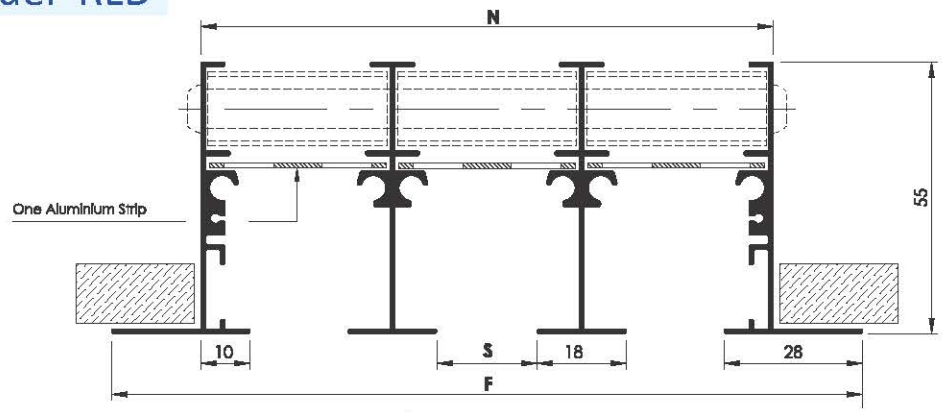
Available Models
Construction and Dimensional D tails

Model SLD



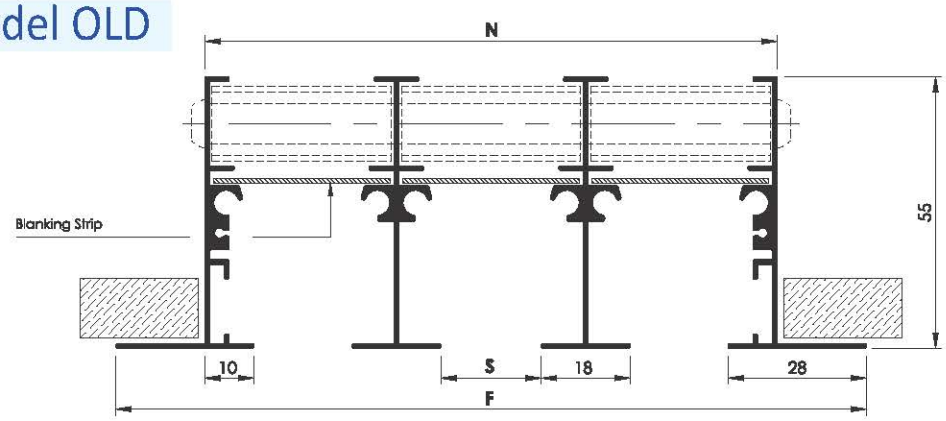
- **SLD:** is Supply Air Linear Slot Diffuser c/w Deflection Blades & Hit and Miss Damper.

Model RLD



- **RLD:** is Return 1 Extract Air Linear Slot Diffuser w/o Deflection Blades & Hit and Miss Damper.

Model OLD



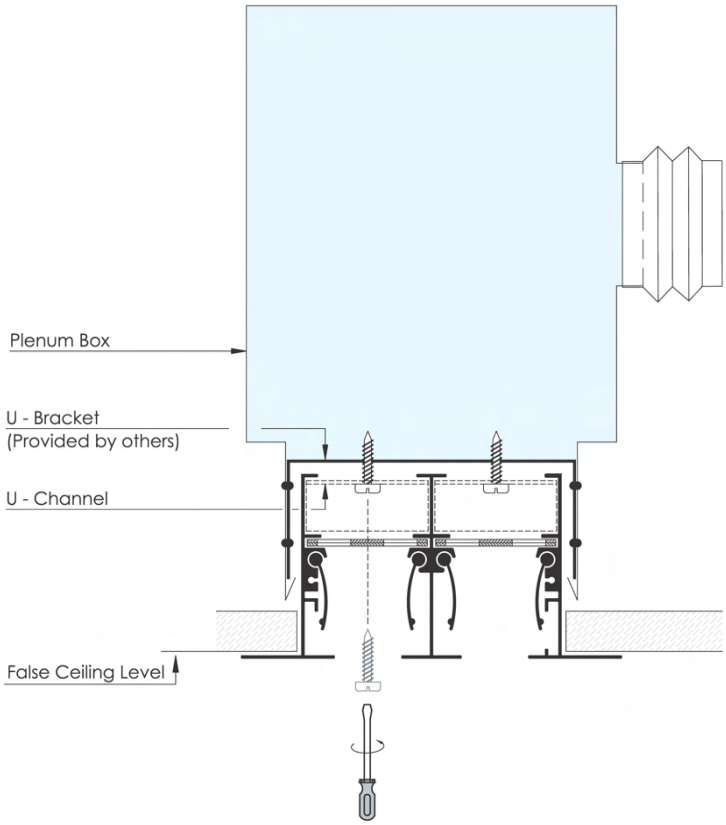
S :Slot Opening1 Width.
N :Neck Size.
F : Face Size.

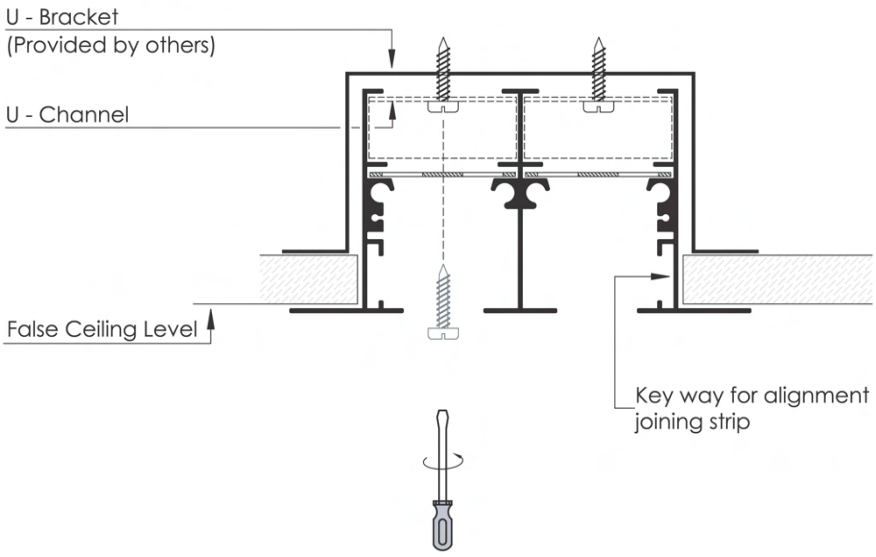
All dimensions are in mm and subject to ± 1 mm tolerance.

Mounting Instructions

With Plenum Box (provided by others):

Fix the plenum to the ceiling. The plenum has a border in the lower part by which the upper part of the diffuser can be inserted into it. Your diffuser is provided with ceiling mounting fixing U - Channels. These channels are inserted into the keyway and should be slid into the final position corresponding to the opposite fixing point previously prepared on the U - Bracket as shown(plenums usually supplied with these brackets). The two elements (diffuser and plenum) can be attached together using self-tapping screws and screw driver. The diffuser should be made level using a water level and by adjusting the screw positions (left, right, up and down) as shown.





Without Plenum Box:

In this case the diffuser can be attached to U - Shape bracket (provided by others) and rest directly on the ceiling as shown.

Diffuse s in Continuous Running

Normal installations as described above but, besides apply the provided joining key strips between the diffuser adjoining sections. After insertion and alignment of the joined sections set diffusers in the final position.

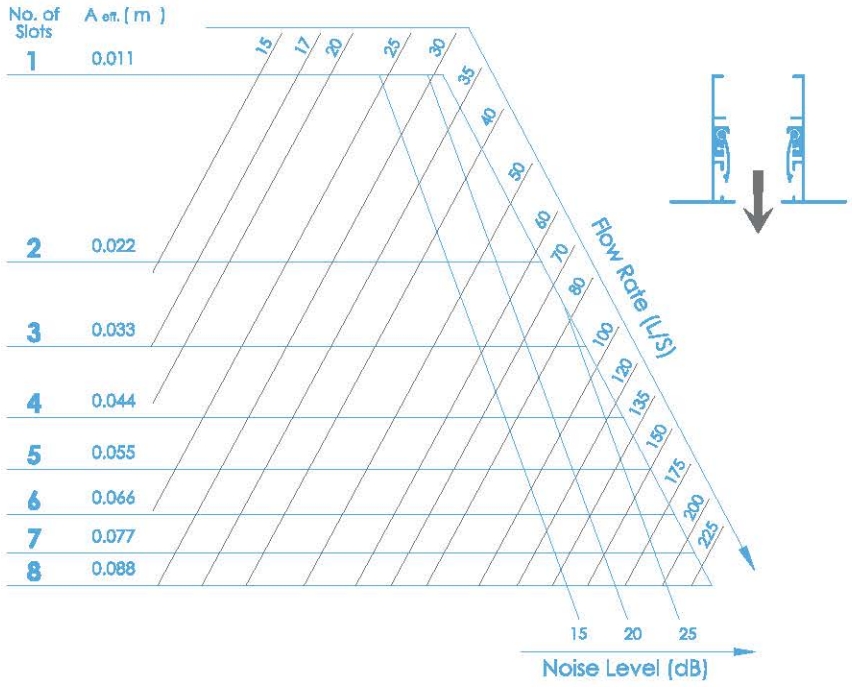
Engineering and Performance Data

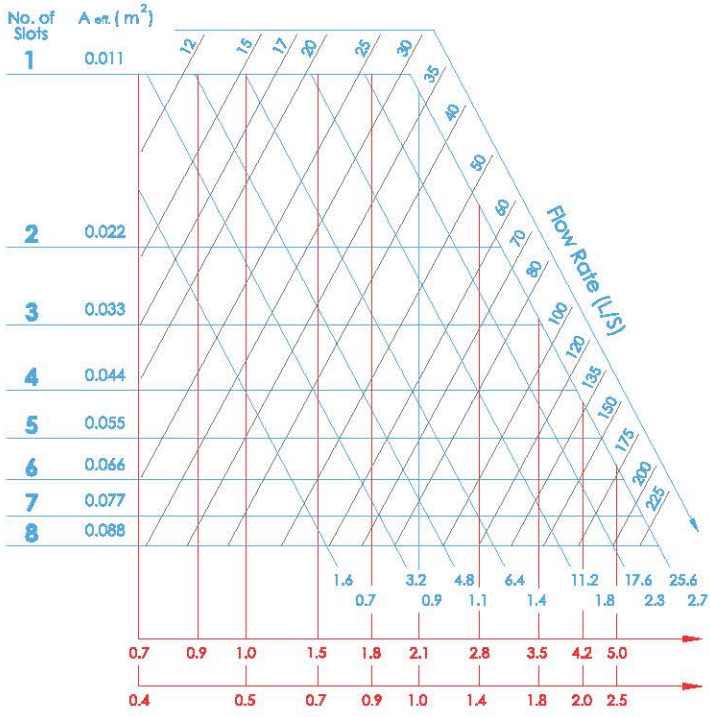
Vertical Discharge

Slot Opening / Width = 16mm

Correction table for other Lengths :

Length (m)	Noise Level	Throw (m)
1.0	0	x 1.00
1.5	+ 2	x 1.05
2.0	+ 3	
2.5	+ 4	
3.0	+ 5	x 1.10
4.0	+ 6	
5.0	+ 7	
6.0	+ 8	
8.0	+ 9	x 1.15
10.0	+ 10	





Correction table for Return/Extract applications :

V eff. (m/s)	x 0.45
△ Pt (Pa)	x 0.65
NC	- 10

- Performances are based on a length of one metre and with no wall effect.
- Hit-Miss Damper at full open position.
- For Return / Extract applications select performance data using above charts and correction table after ignoring throw values.
- Noise Level values are based on 1dB room attenuation.

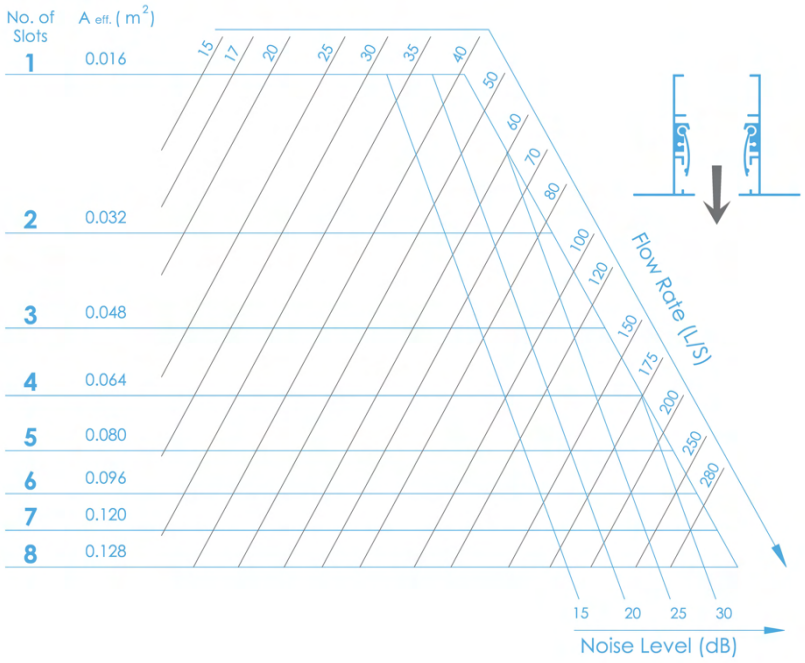
Engineering and Performance Data

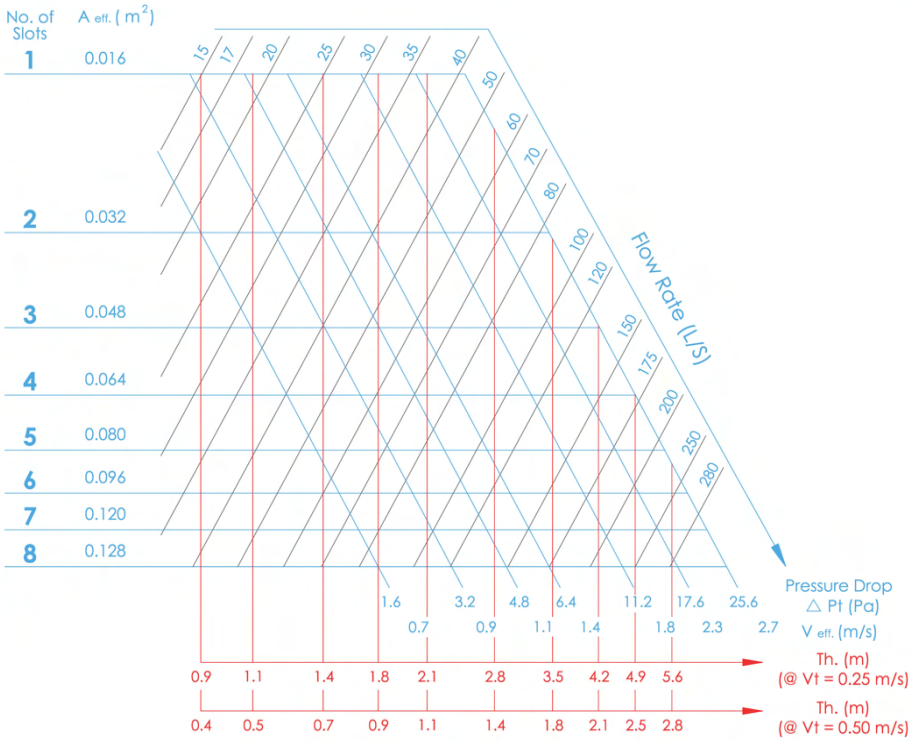
Vertical Discharge

Slot Opening / Width = 20 mm (standard)

Correction table for other Lengths :

Length (m)	Noise Level	Throw (m)
1.0	0	x 1.00
1.5	+ 2	x 1.05
2.0	+ 3	
2.5	+ 4	
3.0	+ 5	x 1.10
4.0	+ 6	
5.0	+ 7	
6.0	+ 8	
8.0	+ 9	x 1.15
10.0	+ 10	





Correction table for Return/Extract applications :

V eff. (m/s)	x 0.45
△ Pt (Pa)	x 0.65
NC	- 10

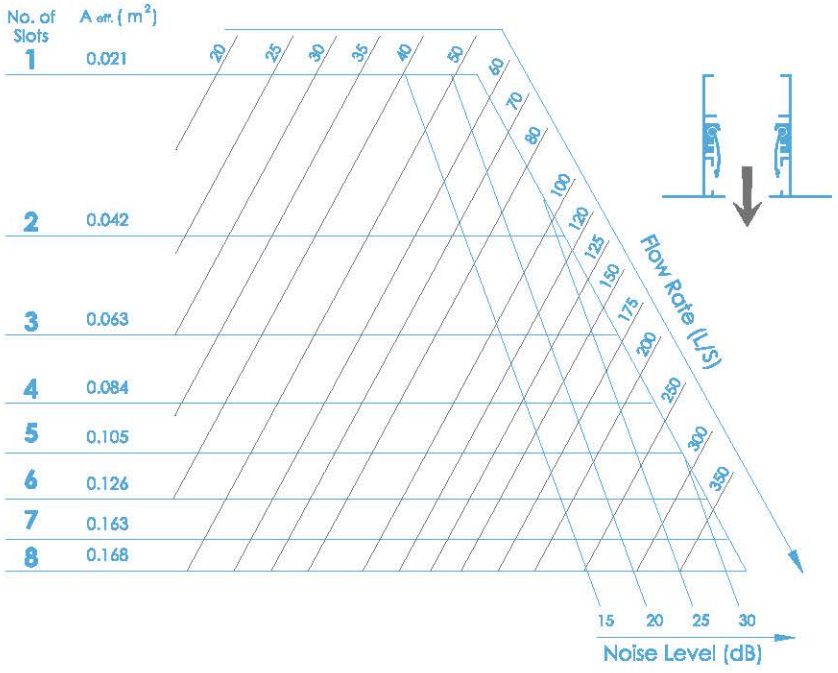
- Performances are based on a length of one metre and with no wall effect.
- Hit-Miss Damper at full open position.
- For Return / Extract applications select performance data using above charts and correction table after ignoring throw values.
- Noise Level values are based on 10 dB room attenuation.

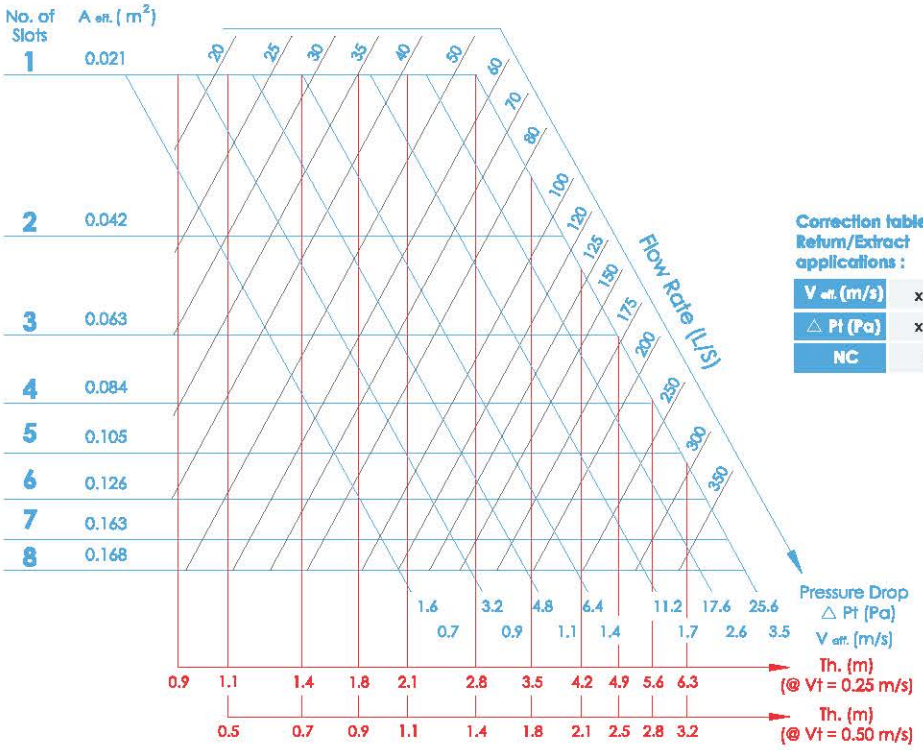
Vertical Discharge

Slot Opening / Width = 25 mm (standard)

Correction table for other Lengths :

Length (m)	Noise Level	Throw (m)
1.0	0	x 1.00
1.5	+ 2	x 1.05
2.0	+ 3	
2.5	+ 4	
3.0	+ 5	x 1.10
4.0	+ 6	
5.0	+ 7	
6.0	+ 8	
8.0	+ 9	x 1.15
10.0	+ 10	





Correction table for Return/Extract applications :

V eff. (m/s)	x 0.45
△ Pt (Pa)	x 0.65
NC	- 10

- Performances are based on a length of one metre and with no wall effect.
- Hit-Miss Damper at full open position.
- For Return / Extract applications select performance data using above charts and correction table after ignoring throw values.
- Noise Level values are based on 10 dB room attenuation.

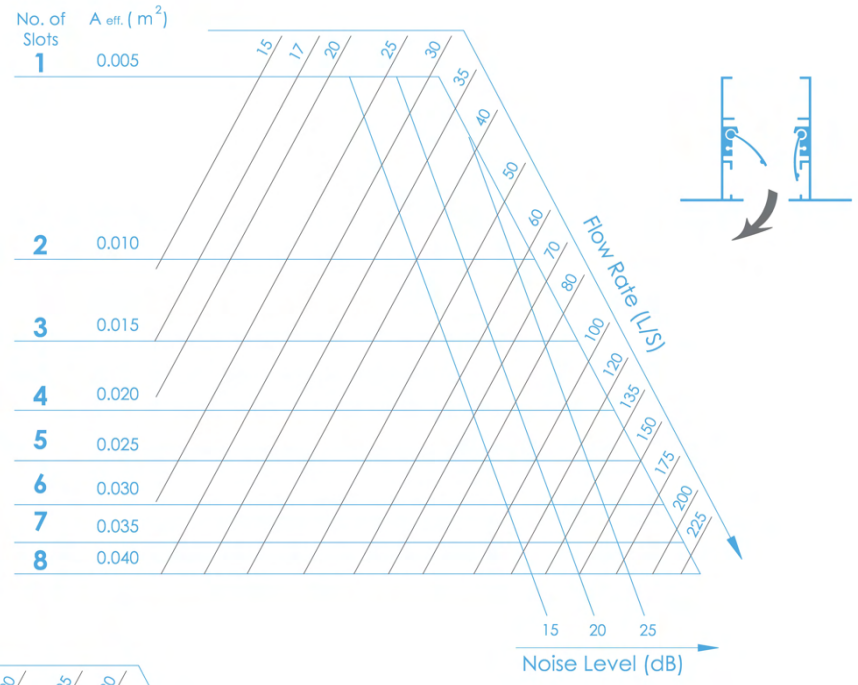
Engineering and Performance Data

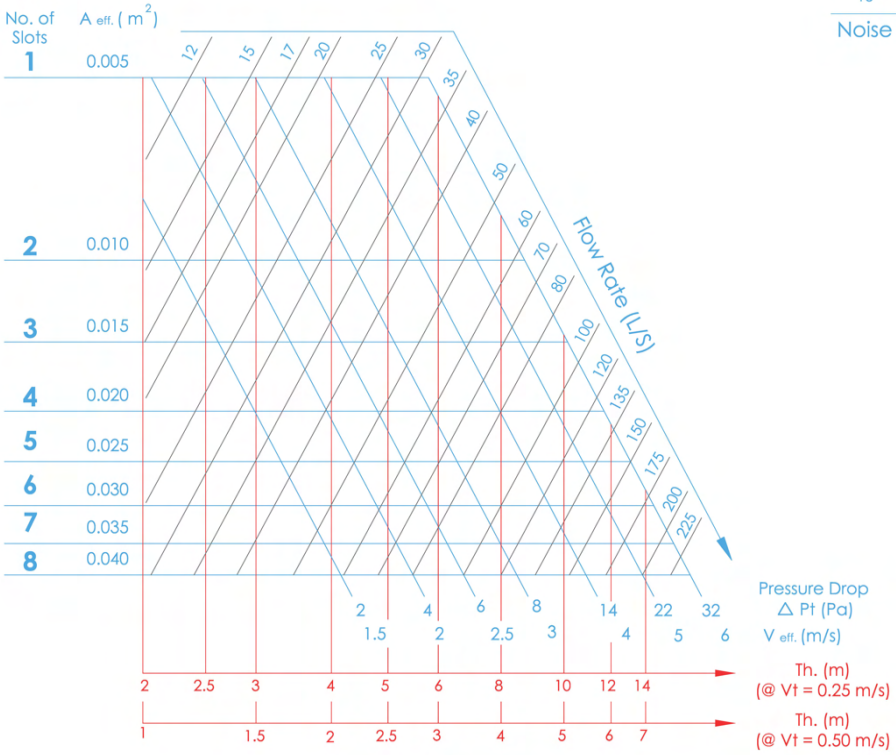
Horizontal Discharge

Slot Opening / Width = 16 mm

Correction table for other Lengths :

Length (m)	Noise Level	Throw (m)
1.0	0	x 1.00
1.5	+ 2	x 1.05
2.0	+ 3	x 1.10
2.5	+ 4	
3.0	+ 5	
4.0	+ 6	
5.0	+ 7	
6.0	+ 8	x 1.15
8.0	+ 9	
10.0	+ 10	





- Performances are based on a length of one metre
- Hit-Miss Damper at full open position.
- For Return / Extract applications select performance data using above charts and correction table after ignoring throw values.
- Noise Level values are based on 10 dB room attenuation.

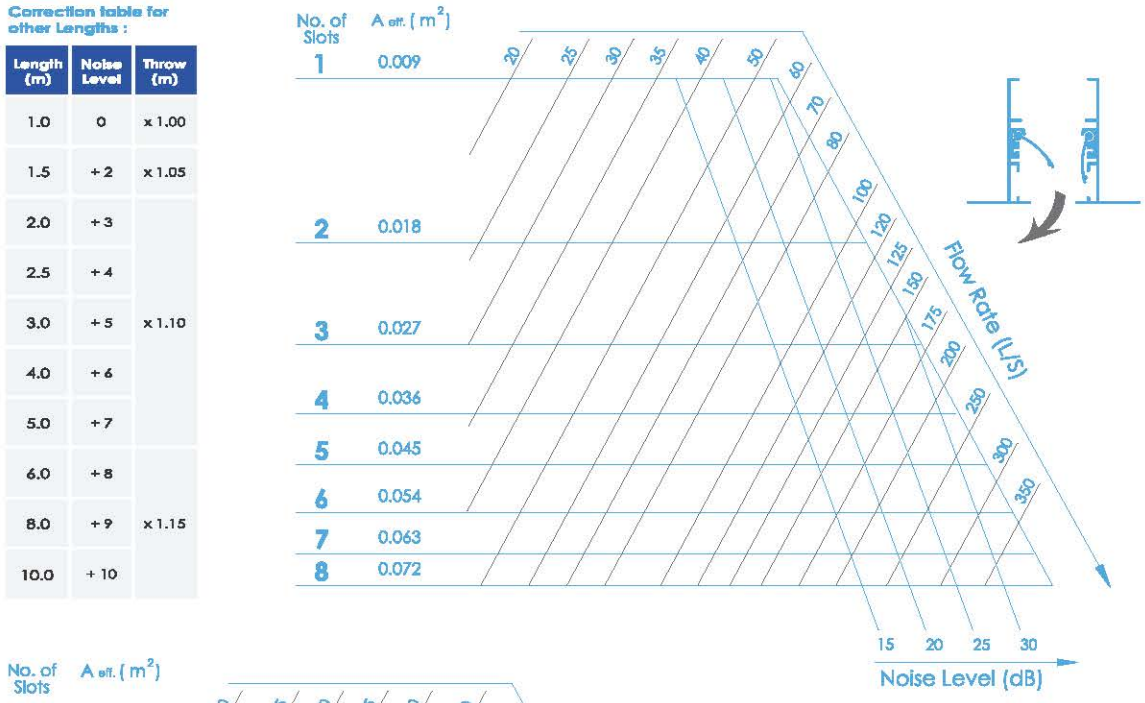
Global Air

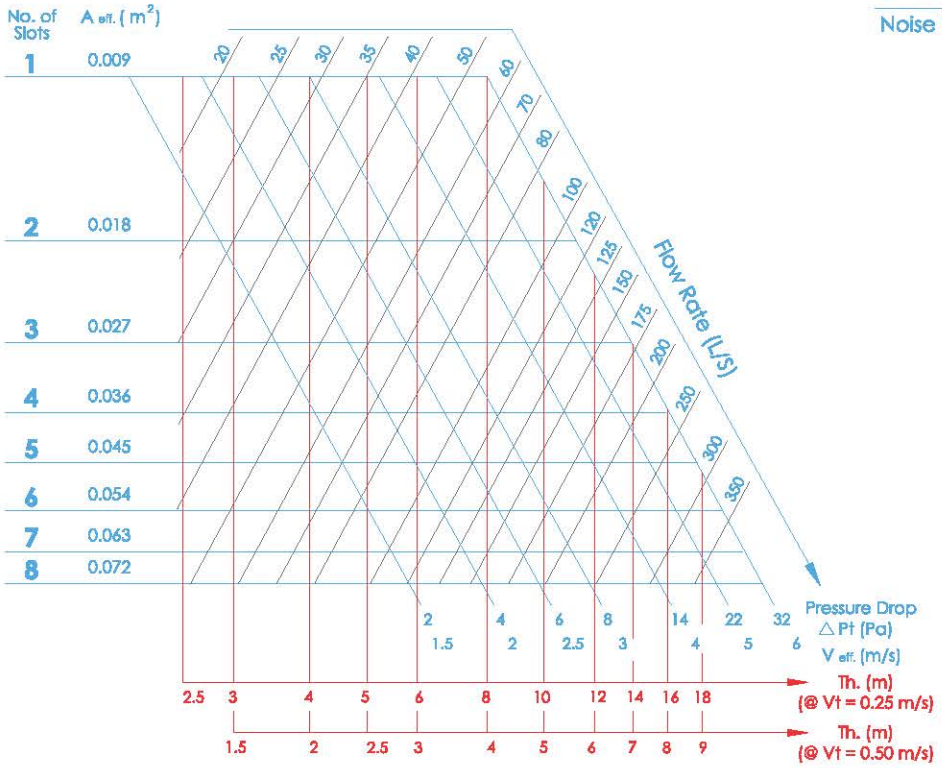
Horizontal Discharge

Slot Opening / Width = 20 mm (standard)

Correction table for other Lengths :

Length (m)	Noise Level	Throw (m)
1.0	0	x 1.00
1.5	+ 2	x 1.05
2.0	+ 3	
2.5	+ 4	
3.0	+ 5	x 1.10
4.0	+ 6	
5.0	+ 7	
6.0	+ 8	
8.0	+ 9	x 1.15
10.0	+ 10	





- Performances are based on a length of one metre.
- Hit-Miss Damper at full open position.
- For Return / Extract applications select performance data using above charts and correction table after ignoring throw values.
- Noise Level values are based on 1 dB room attenuation.

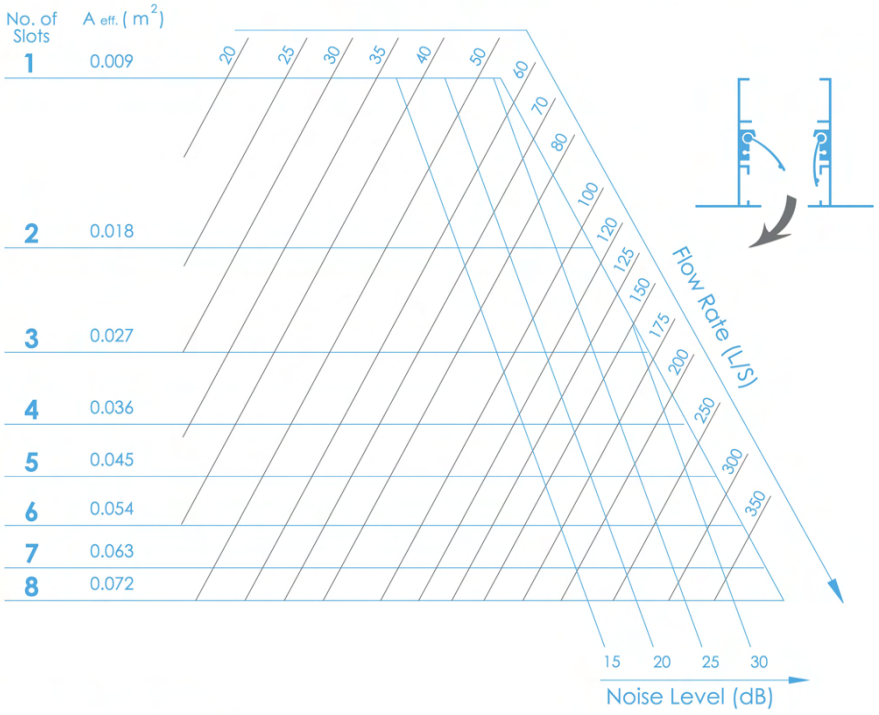
Engineering and Performance Data

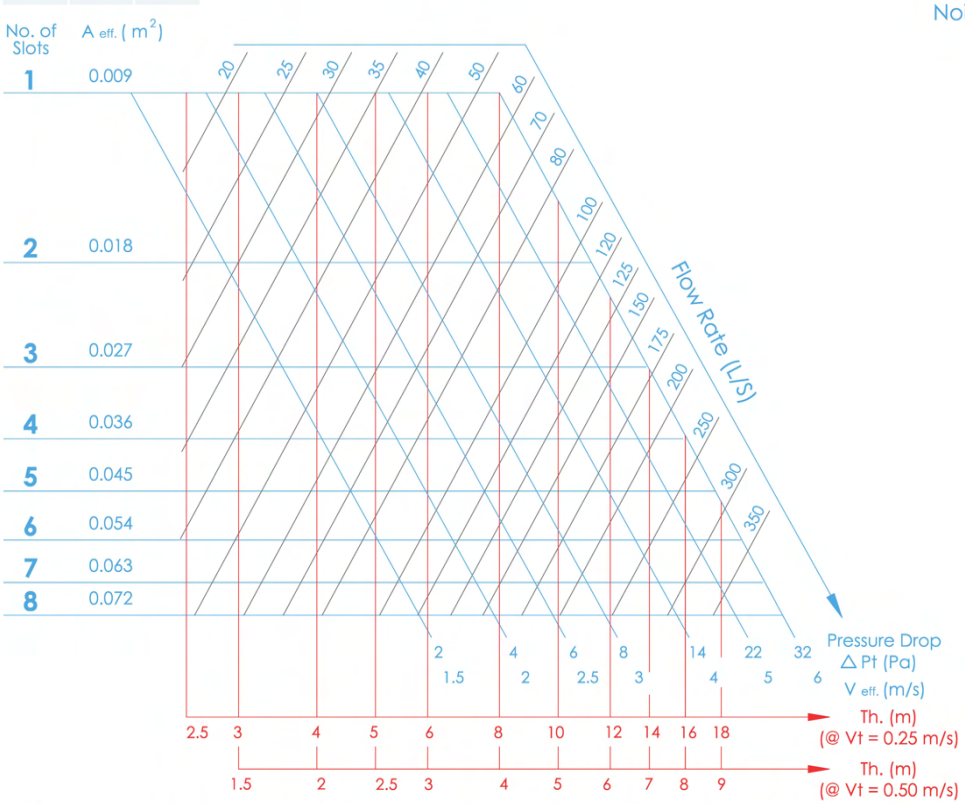
Horizontal Discharge

Slot Opening / Width = 25 mm

Correction table for other Lengths :

Length (m)	Noise Level	Throw (m)
1.0	0	x 1.00
1.5	+ 2	x 1.05
2.0	+ 3	
2.5	+ 4	
3.0	+ 5	x 1.10
4.0	+ 6	
5.0	+ 7	
6.0	+ 8	
8.0	+ 9	x 1.15
10.0	+ 10	

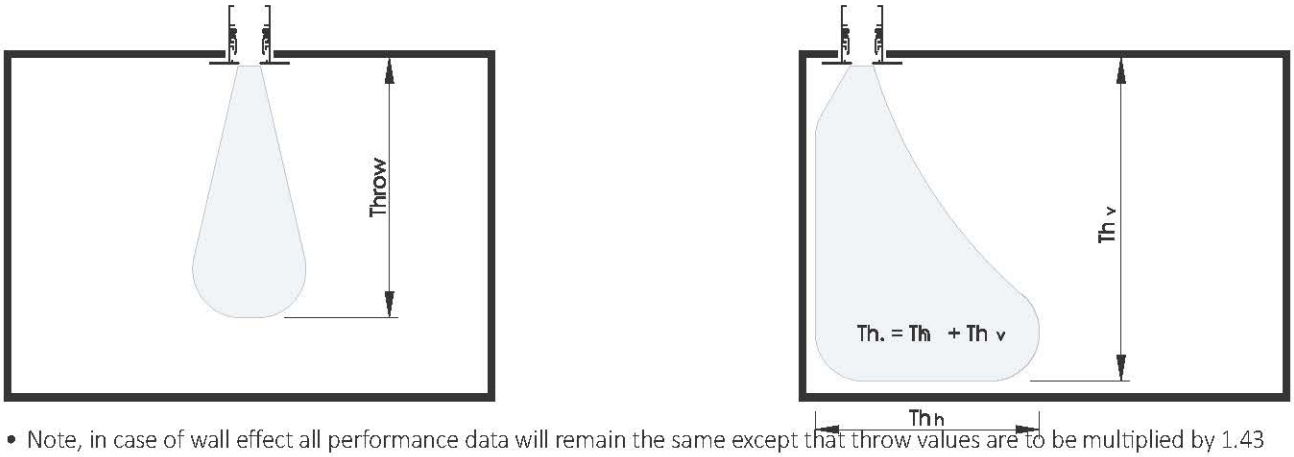




- Performances are based on a length of one metre
- Hit-Miss Damper at full open position.
- For Return / Extract applications select performance data using above charts and correction table after ignoring throw values.
- Noise Level values are based on 10 dB room attenuation.

Global Air

Throw and Wall Effect for Vertical Discharge



- Note, in case of wall effect all performance data will remain the same except that throw values are to be multiplied by 1.43

Linear Slot Diffusers Selection Procedure

I.Verti al Discharge (without wall e ect): (Illustrati e Example)

Given Data:
No. of Slots = 3
Slot Opening /Width = 20 mm (Standard}. Length = 2.5 m.
Air Flow Rate= 530 CFM = 250 (L/S).
Per one metre length 250 (LIS/2.5 m = 100 (L/S)/m.
Refer to page No. LD - 08 for Vertical Discharge and 20 mm slot opening and find out that:
A elf. = 0.048 m^2 .
Noise Level = 22 + 4 = 26 dB (value as read from the chart and corrected by the correction table for other lengths@ 2.5 m}.
V elf. = 2.2 m/s.
Δ. Pt = 16.8 Pa.
Th.@ Vt = 0.25 m/s = 3.4 x 1.1 = 3.7 m (value as read from the chart and corrected by the correction table for other lengths@ 2.5 m).
Ditto,but@ 0.5 mls = 1.7 x 1.1 = 1.9 m.
In case of wall effect as shown above,only correct the throw values to be : Th. @ Vt = 0.25 m/s = 3.7 x 1.43 = 5.3 m.
Ditto,but@ 0.5 m/s = 1.9 x 1.43 = 2.7 m.

For Return I Extract data (if required) ignore throw values and read others as followings :-
Noise Level = 26- 10 = 16 dB (see correction table).
V elf. = 2.2 x 0.45 = 1.0 m/s (see correction table).
Δ. Pt = 16.8x 0.65 = 10.9 Pa (see correction table).

II. Horizontal Discharge: (Illustrati e Example)

Given Data:
No. of Slots = 4
Slot Opening I Width = 25 mm.
Length = 5.0 m.
Air Flow Rate = 1430 CFM = 675 (LIS}.
Per one metre length 675 (L/S) I 5.0 m = 135 (L/S)Im. Refer to page No. LD - 12 for Horizontal Discharge and 25 mm slot opening and find out that:
A elf.= 0.036 m^2 .
Noise Level = 19 +7 = 26 dB (value as read from the chart and corrected by the correction table for other lengths @5 m).
v elf. = 3.8 m/s.
Δ. Pt = 12.5 Pa.
Th.@ Vt = 0.25 mls = 10 x 1.1 = 11 m (value as read from the chart and corrected by the correction table for other lengths@ 5.0 m).
Ditto, but @ 0.5 mls = 5 x 1.1 = 5.5 m.
For Return I Extract data (if required) ignore throw values and read others after applying the same given data again but on Vertical Discharge charts (page No.
LD - 09) as follows:-
Noise Level = 17-10 = 7 < 15 dB (see correction table).
V eff. = 5.6 x 0.45 =2.5 m/s (see correction table).
Δ. Pt = 10 x 0.65 = 6.5 Pa (see correction table).

		16 MM				20 MM				25 MM			
SLOTS	L/S per meter	AK	Pt	Th	NC	AK	Pt	Th	NC	AK	Pt	Th	NC
1	24	0.006	0.91	2.4	15	0.008	0.58	2.1	<15	0.010	0.37	1.8	<15
	35		2.06	3.0	19		1.32	2.7	15		0.84	2.4	<15
	47		3.66	4.3	28		2.34	3.7	22		1.50	3.1	18
	59		5.72	6.1	34		3.66	5.5	27		2.34	4.9	22
	71		8.33	7.6	41		5.33	7.0	33		3.41	6.4	26
	83		11.31		45		7.24		36		4.63		29
	94		14.97		51		9.58		41		6.13		33
2	24	0.017	0.31	2.4	16	0.021	0.20	2.1	<15	0.026	0.13	1.8	<15
	47		1.19	5.2	20		0.76	4.6	16		0.49	4.0	<15
	71		2.66	6.4	28		1.70	5.8	22		1.09	5.2	18
	94		4.77	8.2	40		3.05	7.6	32		1.95	7.0	26
	118		7.42	10.0	46		4.75	9.1	37		3.04	8.2	30
	142		10.72		54		6.86		43		4.39		34
	165		14.69		59		9.40		47		6.02		38
3	47	0.024	0.56	3.0	16	0.030	0.36	2.7	<15	0.038	0.23	2.4	<15
	71		1.23	5.2	20		0.79	4.6	16		0.51	4.0	<15
	94		2.19	6.7	28		1.40	6.1	22		0.90	5.5	18
	118		3.41	8.5	36		2.18	7.9	29		1.40	7.3	23
	142		4.92	10.3	43		3.15	9.4	34		2.02	8.5	27
	165		6.67		48		4.27		38		2.73		30
	189		8.73		53		5.59		42		3.58		34
4	71	0.030	0.75	4.3	16	0.037	0.48	4.0	<15	0.046	0.31	3.7	<15
	94		1.31	5.2	20		0.84	4.9	16		0.54	4.6	<15
	118		2.06	6.4	28		1.32	5.8	22		0.84	5.2	18
	142		2.98	8.2	33		1.91	7.6	26		1.22	7.0	21
	165		4.05	10.3	39		2.59	9.4	31		1.66	8.5	25
	189		5.28		41		3.38		33		2.16		26
	212		6.75		46		4.32		37		2.76		30
5	94	0.037	0.88	4.6	15	0.046	0.56	4.3	< 15	0.058	0.36	4.0	<15
	118		1.34	5.5	19		0.86	5.2	15		0.55	4.9	<15
	142		1.94	7.0	25		1.24	6.4	20		0.79	5.8	16
	165		2.66	8.5	31		1.70	7.9	25		1.09	7.3	20
	189		3.45	10.0	35		2.21	9.1	28		1.41	8.2	22
	212		4.36		39		2.79		31		1.79		25
	236		5.39		44		3.45		35		2.21		28
6	118	0.043	0.95	4.6	15	0.054	0.61	4.3	< 15	0.068	0.39	4.0	<15
	142		1.39	5.8	19		0.89	5.2	15		0.57	4.6	<15
	165		1.91	7.0	23		1.22	6.4	18		0.78	5.8	<15
	189		2.45	8.8	28		1.57	8.2	22		1.00	7.6	18
	212		3.14	10.7	31		2.01	9.8	25		1.28	8.9	20
	236		3.89		34		2.49		27		1.59		22
	283		5.56		44		3.56		35		2.28		28

SYMBOLS

L/S : Air volume in liter per second.

Ak : Effective face area in meter Square per 1000 mm.

Pt. : Total pressure in millimeters water gauge.

Th. : Throw in meters.

NC : Noise Criteria.

CONDITIONS

* Supply
* Vertical discharge flow pattern.
* Noise Criteria values are based on(10 db) room attenuation.
* Damper is fully open.
* Throw values are based on terminal velocity of 0.50 m/s

		16mm				20mm				25mm			
SLOTS	L/S per meter	Ak	Pt	Th	NC	Ak	Pt	Th	NC	Ak	Pt	Th	NC
1	24	0.004	1.23	0.6-1.5-2.7	23	0.005	0.79	0.3-1.2-2 .4	18	0.006	0.51	0.3-1.2-2.1	<15
	35		2.78	1.2-2.1-3.3	31		1.78	0 .9-1.8-3 .0	25		1.44	0.9 -1.5-2.7	20
	47		4.97	1.8-3.0-4.6	41		3.18	1.5-2.7-4.3	33		2.04	1.2 -2.4-4.0	26
	59		7.73	2.7 -4.3-7.0	48		4.95	2.4 -4.0 -6.4	38		3.17	2.1 -3.7-5.8	30
	71		11.11	4.0-5.8-8.5	54		7.11	3.7-5 .2-7.9	43		4.55	3.4 -4.6-7.3	34
2	24	0.001	0.39	1.2-1.8-2.7	16	0.014	0.25	0 .9-1.5-2 .4	<15	0.018	0.16	0.9 -1.2-2.1	<15
	47		1.59	1.5-3.3-5.5	25		1.02	1..2-3.0-5.2	20		0.65	0.9 -2.7-4.6	16
	71		3.58	1.8-4.0-7.3	39		2.29	1 .5-3.7-6 .7	31		1.47	1.2 -3.4-6.1	25
	94		6.27	2.7-6.1-9.4	50		4.01	2.4- 5.5-8 .5	4 0		2.57	2.1 -4.9-7.9	32
	118		9.92	4 .0-7.6-11-.0	56		6.35	3.7-7.0-10.1	45		4.06	3.4 -6.4-9.2	36
3	47	0.018	0.80	1.2-1.8-3.7	21	0.022	0.51	0.9-1.5-3.4	17	0.028	0.33	0.9 -1.2-3.1	<15
	71		1.75	1.8-3.0-6.1	29		1.12	1.5-2.7-5.5	23		0.72	1.2 -2.4-5.2	18
	94		3.09	2.1-4.3-7.6	39		1.98	1.8-4.0-7.0	31		1.27	1.5 -3.7-6.4	25
	118		4.84	3.0 -6.1-9 .7	48		3.10	2.7-5.5-8.8	38		1.98	2.4 -4.9-8.2	30
	142		7.38	4.3-7.3-1 1.3	53		4.72	4.0-6.7-10.4	42		3.02	3.7 -6.1-9.5	34
4	71	0.024	1.00	1.5-2.1-4.9	24	0.030	0.64	1.2-1.8-4.6	19	0.038	0.41	1.9 -1.5-4.3	15
	94		1.75	1.8-3 .3-6.1	31		1.12	1.5-3.0-5.5	25		0.72	1.2-2..7 -5.2	20
	118		2.73	2.1-4.3-7.3	38		1.75	1.8-4.0-6.7	30		1.12	1.5-3.7-6.1	24
	142		3.97	3.0-6.1-9.4	44		2.54	2.7-5.5-8.5	35		1.63	2.4-.4.9- 7.9	28
	165		5.36	4.0-7.6-1.3	50		3.43	3.7-7.0-10.4	40		2.20	3.4-6.4-9.5	32
5	94	0.030	1.34	1.8-2.4-5.5	26	0.038	0.86	1.5-2.1-4.9	21	0.048	0.55	1.2-1 .8-4.6	17
	118		2.06	2.4-3.7-6.7	33		1.32	2.1-3.4-6.1	26		0.84	1.8-3..1-5.5	21
	142		2.98	3.0-4.6-7.6	38		1.91	2.7-4.3-7.0	30		1.22	2.4-4 .0-6.4	24
	165		4.05	3.7-6.4-9.7	43		2.59	3.4-5.8-8.8	34		1.66	2. 8-5.2- 7.9	27
	189		5.31	4.3-7.6-1.0	49		3.40	4.0-7.0-10.1	39		2.18	3.7-6.4- 9.2	31
6	118	0.037	1.59	1.8-2.7-5.5	28	0.046	1.02	1.5-2.4-4.9	22	0.058	0.65	1.2 -1.8-4.3	18
	142		2.27	2.4-3.7-6.7	35		1.45	2.1-3.4-6.1	28		0.93	1.8-3.1-5.5	2 2
	165		3.09	3.0-4.9-7.9	39		1.98	2.7-4.6-7.3	31		1.27	2.4-4.0-6.7	25
	189		4.05	3.3-6.4-10.0	44		2.59	3.0-5.8-9.1	35		1.66	2.7-5.2-8.2	28
	212		5.16	4.0-7.6-11.3	48		3.30	3.7-7.0-10.4	38		2 .11	3.4-6.4-9.5	30

SYMBOLS

L/S : Air volume in liter per second.

Ak : Effective face area in meter Square per 1000 mm.

Pt. : Total pressure in millimeters water gauge.

Th. : Throw in meters.

NC : Noise Criteria.

NOTES

*The large throw values are based on the minimum terminal velocity of 0.25m/Sec.

*The middle throw values are based on the middle terminal velocity of 0.50 m/Sec.

*The small throw values are based on the maximum terminal velocity of 0.75m/Sec.

CONDITIONS

* Supply

* Horizontal Discharge flow pattern

* Noise Criteria values are based on (10 db) room attenuation.

* Damper is fully open.

* The tested specimens were of 1000 mm length

*S.I. UNITS

		16m m		20mm		25mm	
SLOTS	L/S per meter	Ps	NC	Ps	NC	Ps	NC
1	35	3.38	24	2.16	19	1.38	15
	47	5.95	31	3.81	25	2.44	20
	59	9.13	40	5.84	32	3.74	26
	71	13.81	49	8.84	39	5.66	31
	83	18.66	55	11.94	44	7.64	35
2	71	3.97	24	2.54	19	1.63	15
	83	5.80	31	3.71	25	2.37	20
	94	7.19	36	4.60	29	2.94	23
	118	11.11	45	7.11	36	4.55	29
	142	15.88	53	10.16	42	6.50	34
3	94	3.97	25	2.54	20	1.63	16
	118	6.19	33	3.96	26	2.53	21
	142	8.94	39	5.72	31	3.66	25
	165	12.14	46	7.77	37	4.97	30
	212	20.16	54	12.90	43	8.26	34
4	142	6.34	28	4.06	22	2.60	18
	165	8.61	35	5.51	28	3.53	22
	189	11.11	40	7.11	32	4.55	26
	236	16.78	48	10.74	38	6.87	30
	283	24.92	55	15.95	44	10.21	35
5	142	4.44	26	2.84	21	1.82	17
	189	7.86	35	5.03	28	3.22	22
	236	12.30	43	7.87	34	5.04	27
	283	17.66	48	11.30	38	7.23	30
	330	24.02	55	15.37	44	9.84	35
6	189	6.19	29	3.96	23	2.53	18
	236	9.64	36	6.17	29	3.95	23
	283	13.89	44	8.89	35	5.69	28
	330	18.86	49	12.07	39	7.72	31
	378	24.69	55	15.80	44	10.11	35

SYMBOLS

L/S : Air volume in liter per second.

P/s : Negative static pressure in milimeters water gauge.

NC : Noise Criteria.

CONDITIONS

*Return

*Damper is full open.

*Noise Criteria values are based on(10 db) room attenuation

*The tested specimens were of 1000mm length

Ordering Data

Available Surface Finishes for Linear Slot Diffusers:

- Na1ural I Matt Silver Anodized.
- Powder Coating (Standard Colors are white RAL 9010/ 9016, other optional colors if required to be provided in RAL-No. only and charged extra).
- Aluminium in Mill Finish.
- Other Special finishes (on request if available).

• Available Surface Finishes For Hit- and - Miss Damper & Deflection Blades:

- Matt Black Powder Coating only as standard.

• Ordering Specifications:

SpecHy:

1. Linear Slot Diffuser Description (Supply, Return, Extract, Dummy, etc.).
2. No. of Slots.
3. Linear Slot Diffuser Length.
4. Quantity.
5. Linear Slot Diffuser Surface Finish.
6. RAL- No. (Only mention if powder coating surface finish is required).
7. Curve (only mention if required in curved shape).
8. End Caps (to be mentioned as required).
9. Slot opening /width (only indicate if not standard, i.e. for 16 or 25 mm only).

Example 1:

1	2	3	4	5	6	7	8	9
SLD	3	1000 mm	30	Powder Coating	9016	–	End Cap at both Sides	–

Example 2:

1	2	3	4	5	6	7	8	9
RLD	6	2.85 m	15	Silver Anodized	–	Curve	–	25 mm

Example 3:

1	2	3	4	5	6	7	8	9
DLD	4	120 "	10	Powder Coating	1013 (Optional)	–	End Cap at one Side	16 mm

*IMPERIAL UNITS

		3/5"				4/5"				1"			
SLOTS	CMF Per Foot	Ak	Pt	Th	NC	Ak	Pt	Th	NC	At	Pt	Th	NC
1	15	0.020	0.036	8	<15	0.025	0.023	7	<15	0.03 1	0.01 0	7	<15
	23		0.081	10	16		0.052	9	<15		0.02 3	8	<15
	30		0.144	14	23		0.092	12	18		0.04 1	11	<1 5
	38		0.225	19	29		0.144	18	23		0.06 1	17	18
	45		0.328	25	36		0.210	23	29		0.08 6	21	23
	53		0.455		40		0.285		32		0.1 13		26
	60		0.589		46		0.377		37		0.15 0		30
2	15	0.053	0.013	8	<15	0.066	0.008	7	<15	0.81 8	0.00 6	5	<15
	30		0.047	17	17		0.030	15	<15		0.01 2	11	<15
	45		0.105	21	23		0.067	19	18		0.03 9	15	17
	60		0.188	28	35		0.120	25	28		0.08 2	21	22
	75		0.292	33	41		0.187	30	33		0.12 6	26	26
	90		0.422		49		0.270		39		0.19 4		31
	105		0.578		54		0.370		43		0.26 6		34
3	30	0.077	0.022	10	<15	0.096	0.014	9	<15	1.19 0	0.00 9	7	<15
	45		0.048	17	17		0.031	15	<15		0.02 4	14	<15
	60		0.086	22	23		0.055	20	18		0.03 8	18	16
	75		0.134	29	31		0.086	26	25		0.04 9	23	20
	90		0.194	34	38		0.124	31	30		0.08 1	28	24
	105		0.263		43		0.168		34		0.10 9		27
	120		0.344		48		0.220		38		0.14 2		30
4	45	0.097	0.030	15	<15	0.121	0.019	13	<15	1.50 0	0.00 9	11	<15
	60		0.052	18	17		0.033	16	<15		0.02 0	14	<15
	75		0.081	22	23		0.052	19	18		0.03 6	16	<15
	90		0.117	28	28		0.075	25	22		0.04 3	22	18
	105		0.159	34	34		0.102	31	27		0.07 7	28	22
	120		0.208		36		0.133		29		0.10 2		23
	135		0.266		41		0.170		33		0.12 1		26
5	60	0.118	0.034	16	<15	0.147	0.022	14	<15	1.82 3	0.01 3	13	<15
	75		0.053	19	16		0.034	17	<15		0.02 1	15	<15
	90		0.077	23	20		0.049	21	16		0.03 9	19	15
	105		0.105	29	26		0.067	26	21		0.05 1	23	17
	120		0.136	33	30		0.087	30	24		0.06 9	27	19
	135		0.172		34		0.110		27		0.07 4		22
	150		0.213		39		0.136		31		0.1 11		25
6	75	0.138	0.038	15	<15	0.173	0.024	14	<15	2.14 5	0.01 7	13	<15
	90		0.055	19	16		0.035	17	<15		0.02 6	15	<15
	105		0.075	23	19		0.048	21	<15		0.03 3	19	<15
	120		0.097	30	23		0.062	27	18		0.04 8	24	16
	135		0.123	34	26		0.079	32	21		0.05 8	29	17
	150		0.153		29		0.098		23		0.06 7		18
	180		0.219		39		0.140		31		0.10 6		25

SYMBOLS

CFM : Air volume in cubic feet per minute.

Ak : Effective face area in meter Square feet per foot.

Pt. : Total pressure in inches water gauge.

Th. : Throw in feets.

NC : Noise Criteria.

CONDITIONS

* Supply
* Vertical discharge flow pattern.
* Noise Criteria values are based on(10 db) room attenuation.
* Damper is fully open.
* Throw values are based on terminal velocity of 75 fpm
* The tested specimens were 3ft length

*IMPERIAL UNITS

		3/5"				4/5"				1"			
SLOTS	CFM Per Foot	Ak	Pt	Th	NC	Ak	Pt	Th	NC	Ak	Pt	Th	NC
1	15	0.014	0.048	1-4-8	17	0.018	0.031	1-4-8	<1 5	0.023	0.020	1-3-7	<15
	23		0.109	4-7-1	1 26		0.070	3-6-10	2 1		0.045	3-5-9	17
	30		0.195	6-10-15	36		0.125	5-9-14	29		0.080	5-8-13	23
	38		0.305	9-15-23	43		0.195	8-13-21	34		0.125	7-12-19	27
	45		0.438	14-19-29	49		0.280	12-17-26	39		0.179	10-15-23	31
2	15	0.036	0.016	3-6-9	18	0.045	0.010	3-5-8	<1 5	0.056	0.006	3-5-7	<15
	30		0.063	5-1	1-19 20		0.040	4-10-17	16		0.026	3-9-15	<15
	45		0.141	6-13-25	34		0.090	5-12-22	2 7		0.058	4-1 1-20	22
	60		0.247	10-20-30	45		0.158	8-1 8-28	3 6		0.101	7-16-25	29
	75		0.391	14-25-35	51		0.250	12-23-33	41		0.160	10-21-30	33
3	30	0.058	0.031	4-6-12	16	0.072	0.020	3-5-11	<15	0.090	0.013	3-5-10	<15
	45		0.069	6-10-20	24		0.044	5-9-18	19		0.028	4-8-15	15
	60		0.122	7-15-25	34		0.078	6-13-23	27		0.050	5-12-21	22
	75		0.19 1	1 0-20	-32 43		0.122	9-18-29	34		0.078	8-16-26	27
	90		0.29 1	1 5-24	-36 48		0.186	13-22-34	38		0.1 19	12 -20-31	30
4	45	0.078	0.039	5-7-17	19	0.097	0.025	4-6-15	15	0.121	0.016	3-5-13	<15
	60		0.069	6-1	1-19 26		0.044	5-10-18	21		0.0 28	4-9-16	17
	75		0.108	7-15-24	33		0.069	6-13-22	26		0.044	5-1 1-20	21
	90		0.156	10-20-30	39		0.100	9-18-28	31		0.064	8-16-2 5	25
	105		0.21 1	14-25-37	45		0.135	12-23-34	36		0.086	10-2 1-31	29
5	60	0.098	0.053	6-8-18	21	0.123	0.034	5-7-16	17	0.154	0.022	4-6 -14	<1 5
	75		0.081	8-13-22	28		0.052	7-11-20	22		0.033	6-10-1 8	18
	90		0.1 17	10-16-25	33		0.075	9-14-23	26		0.048	8-12-2 1	21
	105		0.159	13-21-32	38		0.102	11-19-29	30		0.0 65	1 0-1 7-2 6	24
	120		0.209	15-25-36	44		0.134	13-23-33	35		0.0 86	1 1-2 1-3 0	28
6	75	0.1 18	0.063	6-10-18	23	0.148	0.040	5-8-16	18	0.185	0.02 6	4-7 -14	<15
	90		0.089	8-12-23	30		0.057	7-11-20	24		0.0 36	6 -10 -18	1 9
	105		0.122	10-17-27	34		0.078	9-15-24	27		0.05 0	8-13-21	22
	120		0.159	1	1-21-33 39		0.102	10-19-30	31		0.065	9-17-27	25
	135		0.203	13-25-37	43		0.130	12-23-34	34		0.083	11-21-31	27

SYMBOLS

CFM : Air volume in cubic feet per minute.
Ak : Effective face area in meter Square feet per feet.
Pt. : Total pressure in inches water gauge.
Th. : Throw in feet.
NC : Noise Criteria.

NOTES

*The large throw values are based on the minimum terminal velocity of 50 fpm.
*The middle throw values are based on the middle terminal velocity of 75 fpm.
*The small throw values are based on the maximum terminal velocity of 150 fpm.

CONDITIONS

* Supply
* Horizontal Discharge flow pattern
* Noise Criteria values are based on (10 db) room attenuation.
* Damper is fully open.
* The tested specimens were of 3ft length

*IMPERIAL UNITS

SLOTS	CFM per foot	3/5" Ps	3/5" NC	4/5" Ps	4/5" NC	1" Ps	1" NC
1	23	0.133	19	0.085	15	0.054	<15
	30	0.234	26	0.150	21	0.096	17
	38	0.359	35	0.230	28	0.147	22
	45	0.544	44	0.348	35	0.233	28
	53	0.734	50	0.470	40	0.301	32
2	45	0.156	19	0.100	15	0.064	<15
	53	0.228	26	0.146	21	0.093	17
	60	0.283	31	0.181	25	0.116	20
	75	0.438	40	0.280	32	0.179	26
	90	0.625	48	0.400	38	0.256	30
3	60	0.156	20	0.100	16	0.064	<15
	75	0.244	28	0.156	22	0.100	18
	90	0.352	34	0.225	27	0.144	22
	105	0.478	41	0.306	33	0.196	26
	135	0.794	49	0.508	39	0.325	31
4	90	0.250	23	0.160	18	0.102	<15
	105	0.339	30	0.217	24	0.139	19
	120	0.438	35	0.280	28	0.179	22
	150	0.661	43	0.423	34	0.271	27
	180	0.981	50	0.628	40	0.402	32
5	90	0.175	21	0.112	17	0.072	<15
	120	0.309	30	0.198	24	0.127	19
	150	0.484	38	0.310	30	0.198	24
	180	0.695	43	0.445	34	0.285	27
	210	0.945	50	0.605	40	0.387	32
6	120	0.244	24	0.156	19	0.100	15
	150	0.380	31	0.243	25	0.156	20
	180	0.547	39	0.350	31	0.224	25
	210	0.742	44	0.475	35	0.304	28
	240	0.972	50	0.622	40	0.398	32

SYMBOLS

CFM : Air volume in cubic feet per minute.

P/s : Negative static pressure in inches water gauge.

NC : Noise Criteria.

CONDITIONS

*Return

*Damper is full open.

*Noise Criteria values are based on(10 db) room attenuation

*The tested specimens were of 3ft length

Notes:

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