

AIR CONTROL INDUSTRY



LINEAR SLOT DIFFUSERS

QUICK FACTS

- ► Flexible spread pattern
- ► Vertical spread option
- ► Simultaneous vertical/horizontal spread option
- ► Large induction effect
- ► Possible to mount in long runs
- ► Corner module
- ▶ Regulation and sound absorbent functions



QUALITY ASSURANCE

An ISO 9001:2015 certified company
Product tested and approved by ETL testing laboratories USA





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MADE IN LIAF

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- Air Control linear slot diffusers are specially designed to provide supply or return air in heating, cooling or ventilating systems. Constructed of extruded aluminium, these diffusers can be used in virtually any type of ceiling.
- ▶ Available slot width of 16mm, 20mm (standard) and 25mm.
- Available in 1 to 8 slots.
- ► Frame width of 30mm standard.
- ▶ Air distribution can be changed vertically or horizontally by means of deflection blades without changing the air flow rate. These blades can be fully adjusted from face opening.
- ▶ Air flow rate can be adjusted by fixing hit and miss damper at the rear side of the diffuser.
- ▶ Positive alignment of adjacent sections can be made by using alignment strips.
- ► Suitable for installation for ceiling and sills.
- ▶ Also available in curved shape without the hit and miss damper or deflector blades



AVAILABLE MODELS

1. AC - SLD - Supply Linear Diffuser with deflector blades and hit and miss damper.

2. AC - RLD - Return Linear Diffuser without damper.

FINISHES

Mill Aluminium

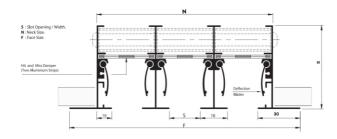
Polyester powder coating to any RAL or BS colour





TECHNICAL DRAWINGS & DATA

Linear Slot Diffusers - Dimensions													
No. of	S= 16 r	nm	S= 20 mm	(standard)	S= 25	mm							
Slots	N	F	N	F	N	F							
1	36	78	39	83	45	89							
2	68	115	78	122	88	132							
3	104	148	116	161	131	176							
4	138	182	154	198	175	220							
5	173	215	192	236	219	262							
6	206	242	230	266	266	302							
7	240	276	268	304	310	346							
8	274	310	306	242	354	390							



END CAP ARRANGEMENTS



With open ends



With one side flange



With both side flange



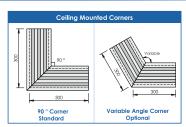
With one side end cap

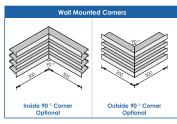


With both side end cap

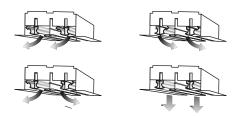


MILTERED CORNERS

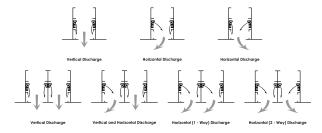




SPREAD PATTERN



SINGLE & MULTIPLE PATTERN ADJUSTEMNT

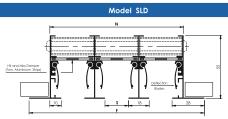


Two deflectors per slot provide an adjustable air pattern of fully 180°

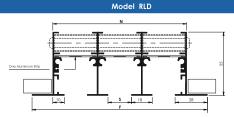


AVAILABLE MODELS

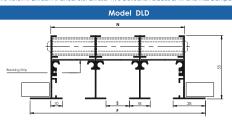
Construction and Dimensional Details



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



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



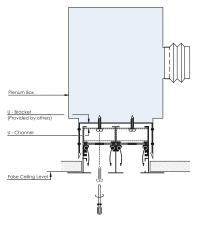
- $\bullet \ \ DLD: is \ Dummy \ (Non\ Active)\ Linear\ Slot\ Diffuser\ supplied\ with\ blanking\ strip\ replacing\ the\ Hit\ and\ Miss\ Damper.$
- S : Slot Opening / Width. N : Neck Size.
- F : Face Size
- F : FOCE SIZE
- All dimensions are in mm and subject to ± 1 mm tolerance.



Mounting Instructions

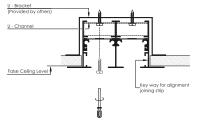
With Plenum Box (provided by others):

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 screws 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.



Diffusers 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.

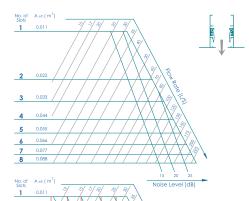


Vertical Discharge

Slot Opening / Width = 16 mm

Correction table for other Lengths:

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

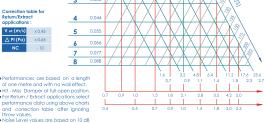




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- x 0.45 x 0.65
- · Performances are based on a length of one metre and with no wall effect. • Hit - Miss Damper at full open position. For Return / Extract applications select performance data using above charts
- throw values. Noise Level values are based on 10 dB room attenuation.



Pressure Drop △ Pt (Pa)

Th. (m) (@ Vt = 0.25 m/s) Th. (m) (@ Vt = 0.50 m/s)



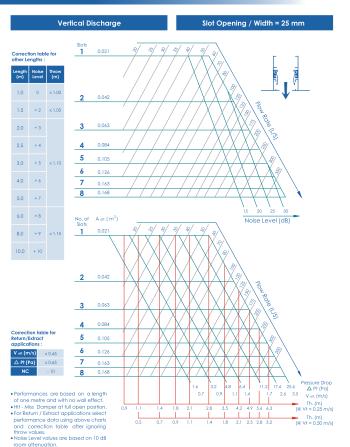
Slot Opening / Width = 20 mm (Standard) Vertical Discharge Slots 1 Correction table for other Lengths: Throv (m) 2 0.032 3 0.064 5 0.080 0.096 7 0.120 8 No. of Slots 1 8.0 2 3 0.048 0.064 4 Correction table for Return/Extract 5 0.080 applications : 6 0.096 x 0.45 0.120 x 0.65 8 0.128 Pressure Drop △ Pt (Pa) · Performances are based on a length Th. (m) of one metre and with no wall effect. (@ Vt = 0.25 m/s)

- 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
- Noise Level values are based on 10 a room attenuation.

Th. (m) (@ Vt = 0.50 m/s)





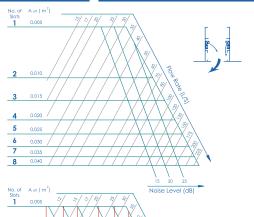


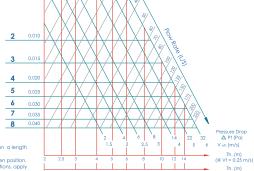
Horizontal Discharge

Slot Opening / Width = 16 mm

Correction table for other Lengths :

otner Le	engths :	
Length (m)	Noise Level	Throw (m)
1.0	0	x 1.00
1.5	+2	× 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	× 1.15





- Performances are based on a length of one metre.
 Hit Miss Damper at full open position.
- For Return / Extract applications, apply the same data on Vertical Discharge charts (page No. LD - 07) and use correction table.
- Noise Level values are based on 10 dB room attenuation.

(@ Vt = 0.50 m/s)

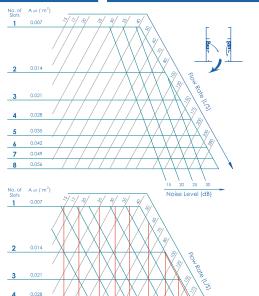


Horizontal Discharge

Slot Opening / Width = 20 mm (Standa

Correction table for other Lengths :

omer Le	engins :	
Length (m)	Noise Level	Throw (m)
1.0	0	× 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.

8

5 0.035 6 0.042 7 0.049

- Hit Miss Damper at full open position.
 For Return / Extract applications, apply the same data on Vertical Discharge
- charts (page No. LD 08) and use correction table.

 Noise Level values are based on 10 dB
- Noise Level values are based on 10 c room attenuation.



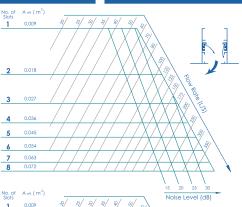


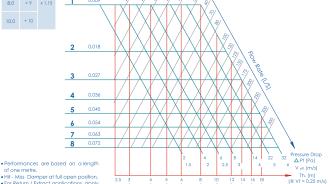
Horizontal Discharge

Slot Opening / Width = 25 mm

Correction table for

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



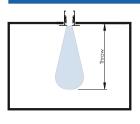


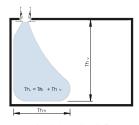
- · Performances are based on a length of one metre.
- · For Return / Extract applications, apply the same data on Vertical Discharge
- charts (page No.LD 09) and use Noise Level values are based on 10 dB
- room attenuation.

Th. (m) (@ Vt = 0.50 m/s)



Throw and Wall Effect for Vertical Discharge





Vertical Discharge without wall effect

Vertical Discharge with wall effect

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

Linear Slot Diffusers Selection Procedure

I. Vertical Discharge (without wall effect): (Illustrative Example)

Given Data:

No. of Slots = 3

Slot Opening / Width = 20 mm (Standard).

Length = $2.5 \, \text{m}$.

Air Flow Rate = 530 CFM = 250 (L/S).

Per one metre length 250 (L/S) / 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 eff. = 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 eff. $= 2.2 \, \text{m/s}.$ ▲ Pt $= 16.8 \, \mathrm{Pa}.$

Th. @ V₁ = 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 ml.

Ditto, but @ 0.5 m/s = 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 / Extract data (if required) ignore throw values and read others as followings:-

Noise Level = 26 - 10 = 16 dB (see correction table). $V_{\text{eff.}} = 2.2 \times 0.45 = 1.0 \text{ m/s}$ (see correction table). ▲Pt = 16.8 x 0.65 = 10.9 Pa (see correction table).

II. Horizontal Discharge: (Illustrative Example)

Given Data:

No. of Slots = 4

Slot Opening / Width = 25 mm.

Length = 5.0 m.

Air Flow Rate = 1430 CFM = 675 (L/S).

Per one metre length 675 (L/S) / 5.0 m = 135 (L/S)/m.

Refer to page No. LD - 12 for Horizontal Discharge and 25 mm slot opening and find out that:

A eff. = 0.036 m^2 .

Noise Level = 19 + 7 = 26 dB (value as read from the chart and corrected by the correction table for other lenaths @ 5 m).

Veff = 3.8 m/s**▲** Pt $= 12.5 \, \text{Pa}.$

Th. @ V₁ = 0.25 m/s = 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 m/s = 5 x 1.1 = 5.5 m.

For Return / 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 followings :-

Noise Level = 17 - 10 = 7 < 15 dB (see correction table). $V_{\text{eff.}} = 5.6 \times 0.45 = 2.5 \text{ m/s}$ (see correction table).

 \triangle Pt = 10 x 0.65 = 6.5 Pa (see correction table).



Performances at Selected Values of Air Flow Rate (S = 16 mm)

No.	Flow		١	/ertico	al Disch		Horizontal Discha					
of Slots	Rate (L/S)	Aeff. (m²)	∆Pt (Pa)	V eff. (m/s)	Noise Level	Th. w/o Wall Effect	(m) with Wall Effect	Aeff. (m²)	∆Pı (Pa)	V eff. (m/s)	Noise Level	Th. (m)
1	15 20 25 27 30 35 40	0.011	6.4 11.2 17.6 22.4 24.0 30.4 33.6	1.4 1.8 2.3 2.4 2.6 2.9 3.5	< 15 < 15 16 18 21 25 29	0.5 - 1.0 0.7 - 1.3 0.8 - 1.7 0.9 - 1.8 1.0 - 2.0 1.2 - 2.4 1.4 - 2.8	0.7 - 1.5 1.0 - 1.9 1.2 - 2.4 1.3 - 2.6 1.4 - 2.8 1.7 - 3.4 2.0 - 4.0	0.005	8.0 14.0 21.0 28.0 30.0 38.0 42.0	3.0 4.0 5.0 5.3 5.8 6.5 7.0	< 15 < 15 19 21 24 28 32	1.5-2.9 1.9-3.8 2.4-4.8 2.6-5.2 2.8-5.6 3.4-6.8 4.0-8.0
2	30 35 40 45 50 60 70	0.022	5.6 7.2 10.4 14.4 16.0 24.0 30.4	1.2 1.5 1.8 1.9 2.2 2.6 3.1	< 15 < 15 < 15 15 18 23 25	0.7 - 1.3 0.8 - 1.6 0.9 - 1.9 1.1 - 2.1 1.2 - 2.4 1.5 - 2.9 1.7 - 3.3	1.0-1.9 1.1-2.3 1.4-2.7 1.5-3.0 1.7-3.4 2.1-4.2 2.4-4.8	0.010	7.0 9.0 13.0 18.0 20.0 30.0 38.0	2.7 3.3 3.9 4.4 4.8 5.8 6.8	< 15 < 15 15 18 21 26 28	1.9-3.8 2.3-4.5 2.7-5.4 3.0-6.0 3.4-6.8 4.2-8.4 4.5-9.0
3	40 50 60 70 80 90	0.033	5.2 8.0 12.0 16.0 20.8 25.6 29.6	1.2 1.5 1.8 2.2 2.4 2.7 2.9	< 15 < 15 16 19 23 25 28	0.8 - 1.6 1.0 - 2.0 1.2 - 2.5 1.4 - 2.8 1.6 - 3.2 1.8 - 3.5 1.9 - 3.9	1.2-2.3 1.4-2.8 1.8-3.5 2.0-4.1 2.3-4.6 2.5-5.0 2.8-5.5	0.015	6.5 10.0 15.0 20.0 26.0 32.0 37.0	2.7 3.4 4.0 4.8 5.3 6.0 6.5	< 15 < 15 19 22 26 28 31	2.3-4.6 2.8-5.6 3.5-7.0 4.1-8.1 4.6-9.2 5.0-10 5.5-11
4	50 60 70 80 100 120	0.044	4.8 6.4 7.2 11.2 17.6 23.2 29.6	1.1 1.4 1.6 1.8 2.3 2.6 2.8	< 15 < 15 < 15 16 22 25 29	0.9 - 1.7 1.0 - 2.1 1.2 - 2.5 1.4 - 2.8 1.7 - 3.4 1.9 - 3.9 2.2 - 4.4	1.2-2.5 1.5-3.0 1.8-3.5 2.0-4.0 2.4-4.8 2.8-5.5 3.2-6.4	0.020	6.0 8.0 9.0 14.0 22.0 29.0 37.0	2.5 3.0 3.5 4.0 5.0 5.8 6.3	< 15 < 15 15 19 25 28 32	2.5-4.9 3.0-5.9 3.5-7.0 4.0-8.0 4.8-9.6 5.5-11 6.4-12
5	70 80 90 100 120 135	0.055	6.0 7.6 8.8 11.2 15.2 17.6 25.6	1.3 1.5 1.7 1.8 2.2 2.4 2.7	< 15 < 15 < 15 17 21 24 29	1.1 - 2.1 1.3 - 2.5 1.4 - 2.8 1.5 - 3.1 1.8 - 3.5 2.0 - 4.0 2.3 - 4.6	1.5-3.0 1.8-3.6 2.0-4.0 2.2-4.4 2.5-5.0 2.9-5.7 3.3-6.5	0.025	7.5 9.5 11.0 14.0 19.0 22.0 32.0	2.8 3.3 3.8 4.0 4.8 5.3 6.0	< 15 15 17 20 24 27 32	3.0-6.0 3.6-7.2 4.0-8.0 4.4-8.8 5.0-10 6.0-11.4 6.5-13
6	90 100 120 135 150 175	0.066	5.6 6.4 8.0 10.4 14.4 17.6 24.0	1.2 1.3 1.5 1.8 2.0 2.3 2.7	< 15 < 15 < 15 17 20 24 27	1.1 - 2.2 1.3 - 2.6 1.4 - 2.8 1.6 - 3.2 1.8 - 3.6 2.4 - 4.8 2.5 - 4.9	1.6-3.2 1.9-3.7 2.0-4.0 2.3-4.6 2.6-5.2 3.5-6.9 3.5-7.0	0.030	7.0 8.0 10.0 13.0 18.0 22.0 30.0	2.7 2.9 3.3 3.9 4.5 5.0 5.9	< 15 < 15 16 20 23 27 30	3.2-6.4 3.7-7.4 4.0-8.0 4.6-9.2 5.0-10.4 7.0-13.8 7.0-14
7	90 100 120 135 150 175 200	0.077	5.2 5.6 8.0 9.6 12.8 17.6 23.2	1.2 1.3 1.5 1.8 1.9 2.3 2.7	< 15 < 15 < 15 16 20 24 27	1.2 - 2.3 1.3 - 2.6 1.5 - 3.0 1.7 - 3.4 1.9 - 3.9 2.2 - 4.4 2.6 - 5.3	1.7-3.3 1.9-3.7 2.1-4.3 2.4-4.8 2.8-5.5 3.1-6.3 3.8-7.5	0.035	6.5 7.0 10.0 12.0 16.0 22.0 29.0	2.7 2.8 3.3 3.9 4.3 5.0 5.9	< 15 < 15 16 19 23 27 30	3.3-6.6 3.7-7.4 4.3-8.5 4.8-9.6 5.5-11 6.3-12 7.5-15
8	100 120 135 150 175 200 225	0.088	4.8 6.0 8.0 10.4 13.6 17.6 23.2	1.1 1.2 1.5 1.8 1.9 2.3 2.6	< 15 < 15 < 15 17 21 25 27	1.2 - 2.4 1.4 - 2.8 1.6 - 3.2 1.8 - 3.6 2.1 - 4.1 2.3 - 4.6 2.8 - 5.6	1.7 - 3.4 2.0 - 4.0 2.3 - 4.5 2.6 - 5.1 3.0 - 5.9 3.3 - 6.5 4.0 - 8.0	0.040	6.0 7.5 10.0 13.0 17.0 22.0 29.0	2.5 2.7 3.4 3.9 4.4 5.0 5.8	< 15 < 15 16 20 24 28 30	3.4-6.8 4.0-8.0 4.5-9.0 5.1-10 5.9-12 6.5-13 8.0-16

Performances are based on a length of one meter.

Throw distance measured at Vt = 0.5 & 0.25 m/s respectively.
 Damper at full open position.



Performances at Selected Values of Air Flow Rate (S = 20 mm Standard)

No.	Flow		Vertical Discharge							ntal D	ischar	ge
of	Rate	Aeff.	∆Pı	V eff.	Noise	Th.	(m)	Aeff.	∆Pt	V eff.	Noise	Th.
Slots	(L/S)	(m²)	(Pa)	(m/s)	Level	w/o Wall Effect	with Wall Effect	(m²)	(Pa)	(m/s)	Level	(m)
1	15 20 25 27 30 35 40	0.016	3.6 5.6 8.8 10.4 12.0 16.8 24.8	0.9 1.2 1.5 1.6 1.8 2.3 2.7	< 15 < 15 < 15 < 15 < 15 < 17 23	0.4-0.9 0.6-1.1 0.7-1.4 0.8-1.5 0.9-1.7 1.0-2.0 1.2-2.5	0.6 - 1.3 0.8 - 1.6 1.0 - 2.0 1.1 - 2.2 1.2 - 2.4 1.4 - 2.8 1.8 - 3.5	0.007	4.5 7.0 11.0 13.0 15.0 21.0 31.0	2.1 2.7 3.4 3.6 4.0 5.0 6.0	< 15 < 15 < 15 < 15 16 20 26	1.3 - 2. 1.6 - 3. 2.0 - 4. 2.2 - 4. 2.4 - 4. 2.8 - 5. 3.5 - 7.
2	30 35 40 45 50 60 70	0.032	3.4 4.8 6.4 8.0 9.6 13.6 17.6	0.9 1.1 1.4 1.5 1.6 1.9 2.3	<15 <15 <15 <15 <15 <17 21	0.6-1.2 0.7-1.4 0.8-1.7 0.9-1.9 1.0-2.0 1.2-2.5 1.4-2.9	0.9 - 1.7 1.0 - 2.0 1.2 - 2.5 1.4 - 2.7 1.5 - 2.9 1.8 - 3.5 2.1 - 4.1	0.014	4.3 6.0 8.0 10.0 12.0 17.0 22.0	2.0 2.5 3.0 3.4 3.6 4.3 5.0	< 15 < 15 < 15 < 15 15 20 24	1.7 - 3. 2.0 - 4. 2.5 - 4. 2.7 - 5. 2.9 - 5. 3.5 - 7. 4.1 - 8.
3	40 50 60 70 80 90	0.048	3.2 4.4 6.0 8.0 10.4 13.6 16.8	0.9 1.1 1.3 1.5 1.8 2.0 2.2	<15 <15 <15 <15 16 19 22	0.7-1.4 0.8-1.7 1.0-2.0 1.2-2.3 1.4-2.7 1.5-3.1 1.7-3.4	1.0 - 2.0 1.2 - 2.4 1.4 - 2.9 1.7 - 3.4 2.0 - 3.9 2.2 - 4.4 2.4 - 4.8	0.021	4.0 5.5 7.5 10.0 13.0 17.0 21.0	2.0 2.4 2.8 3.4 4.0 4.5 4.9	< 15 < 15 < 15 15 19 22 25	2.0 - 4. 2.4 - 4. 2.9 - 5. 3.4 - 6. 3.4 - 7. 4.4 - 8. 4.8 - 9.
4	50 60 70 80 100 120	0.064	2.8 3.6 4.8 6.4 9.6 12.8 16.0	0.8 1.0 1.1 1.4 1.7 1.9 2.2	< 15 < 15 < 15 < 15 15 20 25	0.7 - 1.5 0.9 - 1.8 1.0 - 2.0 1.2 - 2.3 1.5 - 2.9 1.7 - 3.4 1.9 - 3.9	1.1 - 2.1 1.3 - 2.5 1.5 - 2.9 1.7 - 3.4 2.1 - 4.2 2.4 - 4.8 2.8 - 5.5	0.028	3.5 4.5 6.0 8.0 12.0 16.0 20.0	1.8 2.2 2.5 3.0 3.8 4.2 4.9	< 15 < 15 < 15 < 15 18 23 28	2.1 - 4. 2.5 - 5. 2.9 - 5. 3.4 - 6. 4.2 - 8. 4.8 - 9. 5.5 - 1
5	70 80 90 100 120 135	0.080	3.2 4.4 5.2 6.0 8.0 10.0 12.4	0.9 1.0 1.1 1.3 1.5 1.7	< 15 < 15 < 15 < 15 < 15 < 15 17	0.9 - 1.8 1.0 - 2.1 1.2 - 2.3 1.3 - 2.6 1.5 - 3.0 1.7 - 3.4 1.9 - 3.7	1.3 - 2.6 1.5 - 3.0 1.7 - 3.3 1.9 - 3.8 2.2 - 4.3 2.4 - 4.8 2.7 - 5.4	0.035	4.0 5.5 6.5 7.5 10.0 12.5 15.5	2.0 2.3 2.5 2.9 3.3 3.7 4.1	< 15 < 15 < 15 < 15 < 15 17 20 23	2.6-5. 3.0-5. 3.3-6. 3.8-7. 4.3-8. 4.8-9. 5.5-1
6	80 90 100 120 135 150	0.096	2.8 3.6 4.4 5.6 7.2 8.8 12.0	0.9 1.0 1.1 1.3 1.4 1.6 1.8	< 15 < 15 < 15 < 15 < 15 < 15 < 16 20	0.9 - 1.9 1.1 - 2.1 1.2 - 2.4 1.4 - 2.8 1.6 - 3.2 1.7 - 3.4 2.0 - 4.0	1.4 - 2.7 1.5 - 3.0 1.7 - 3.4 2.0 - 4.0 2.3 - 4.5 2.5 - 4.9 2.9 - 5.8	0.042	3.5 4.5 5.5 7.0 9.0 11.0 15.0	1.9 2.2 2.4 2.8 3.2 3.5 4.0	< 15 < 15 < 15 < 15 < 15 15 19 23	2.7 - 5. 3.0 - 6. 3.4 - 6. 4.0 - 7. 4.5 - 9. 4.9 - 9. 6 - 11.
7	90 100 120 135 150 175 200	0.120	2.6 3.2 4.4 5.2 6.4 8.8 12.0	0.8 0.9 1.1 1.2 1.4 1.6 1.8	< 15 < 15 < 15 < 15 < 15 < 17 21	1.0 - 2.0 1.1 - 2.2 1.3 - 2.6 1.4 - 2.9 1.6 - 3.2 1.9 - 3.7 2.2 - 4.4	1.4 - 2.8 1.6 - 3.1 1.8 - 3.7 2.1 - 4.1 2.3 - 4.6 2.7 - 5.4 3.1 - 6.3	0.049	3.3 4.0 5.5 6.5 8.0 11.0 15.0	1.8 2.0 2.4 2.6 3.0 3.5 4.0	< 15 < 15 < 15 < 15 < 15 15 20 24	2.8 - 5. 3.1 - 6. 3.7 - 7. 4.1 - 8. 4.6 - 9. 5 - 10. 6 - 12.
8	100 120 135 150 175 200 225	0.128	2.4 3.2 4.0 4.8 6.4 9.2 10.8	0.8 0.9 1.0 1.1 1.4 1.7	< 15 < 15 < 15 < 15 < 15 < 15 18	1.0-2.0 1.2-2.3 1.3-2.6 1.5-2.9 1.7-3.4 2.0-4.0 2.3-4.6	1.5 - 2.9 1.7 - 3.4 1.9 - 3.7 2.1 - 4.2 2.5 - 4.9 2.9 - 5.8 3.3 - 6.5	0.056	3.0 4.0 5.0 6.0 8.0 11.5 13.5	1.7 2.0 2.3 2.5 3.0 3.7 4.0	< 15 < 15 < 15 < 15 16 21 24	2.9 - 5. 3.4 - 6. 3.7 - 7. 4.2 - 8. 4.9 - 9. 6 - 11. 6.5 - 1

- Performances are based on a length of one meter.
- Throw distance measured at Vt = 0.5 & 0.25 m/s respectively.
- Damper at full open position.



Performances at Selected Values of Air Flow Rate (S = 25 mm)

No.	Flow	_	1	/ertico	al Disch		Horizo	ntal D	ischar	ge		
of	Rate	Aeff.	ΔPt	V eff.	Noise		(m)	Aeff.	ΔPı	V eff.	Noise	Th.
Slots	(L/S)	(m ²)	(Pa)	(m/s)	Level	w/o Wall Effect	with Wall Effect	(m²)	(Pa)	(m/s)	Level	(m)
1	15 20 25 27 30 35 40	0.021	2.4 3.6 5.2 6.0 7.2 10.4 14.8	0.8 1.0 1.2 1.3 1.4 1.7 2.0	<15 <15 <15 <15 <15 <15 <15	0.3 -0.5 0.5 -1.0 0.6 -1.3 0.7 -1.3 0.7 -1.5 0.9 -1.8 1.0 -2.1	0.4 -0.8 0.7 -1.5 0.9 -1.8 1.0 -1.9 1.1 -2.1 1.3 -2.5 1.5 -3.0	0.009	3.0 4.5 6.5 7.5 9.0 13.0 18.5	1.7 2.2 2.7 2.8 3.1 3.8 4.5	<15 <15 <15 <15 <15 <15 <15	0.8-1. 1.5-2. 1.8-3. 1.9-3. 2.1-4. 2.5-5. 3.0-5.
2	30 35 40 45 50 60 70	0.042	2.0 2.8 4.0 4.8 5.6 8.0 10.4	0.7 0.9 1.0 1.1 1.2 1.5 1.8	<15 <15 <15 <15 <15 <15 <15	0.5 - 1.1 0.6 - 1.3 0.7 - 1.5 0.8 - 1.6 0.9 - 1.8 1.1 - 2.2 1.3 - 2.6	0.8 - 1.5 0.9 - 1.8 1.1 - 2.1 1.2 - 2.3 1.3 - 2.6 1.6 - 3.1 1.8 - 3.7	0.018	2.5 3.5 5.0 6.0 7.0 10.0	1.6 1.9 2.3 2.6 2.7 3.4 4.0	<15 <15 <15 <15 <15 <15	1.5-3. 1.8-3. 2.1-4. 2.3-4. 2.6-5. 3.1-6. 3.7-7.
3	40 50 60 70 80 90	0.063	1.4 2.6 3.8 4.8 6.4 7.6 9.6	0.7 0.8 1.0 1.1 1.3 1.5	<15 <15 <15 <15 <15 <15 <15	0.6 -1.2 0.7 -1.5 0.9 -1.8 1.0 -2.0 1.2 -2.4 1.3 -2.6 1.5 -3.0	0.9 -1.7 1.1 -2.1 1.3 -2.5 1.5 -2.9 1.7 -3.4 1.9 -3.7 2.1 -4.3	0.027	1.8 3.3 4.8 6.0 8.0 9.5 12.0	1.5 1.8 2.3 2.5 2.9 3.4 3.8	<15 <15 <15 <15 <15 <15	1.7-3 2.1-4 2.5-5 2.9-5 3.4-6 3.7-7 4.3-8
4	50 60 70 80 100 120 135	0.084	1.2 2.0 2.8 3.6 5.2 6.6 10.0	0.6 0.7 0.8 0.9 1.2 1.4	<15 <15 <15 <15 <15 <15 <16	0.6 -1.3 0.8 -1.5 0.9 -1.8 1.0 -2.0 1.3 -2.6 1.5 -3.0 1.8 -3.5	0.9 -1.8 1.1 -2.2 1.3 -2.5 1.5 -2.9 1.9 -3.7 2.1 -4.3 2.5 -5.0	0.036	1.5 2.5 3.5 4.5 6.5 8.3 12.5	1.4 1.6 1.9 2.2 2.7 3.0 3.3	<15 <15 <15 <15 <15 <15 <15	1.8-3 2.2-4 2.5-5 2.9-5 3.7-7 4.3-8 5.0-1
5	70 80 90 100 120 135 150	0.105	1.6 2.4 3.0 3.8 4.8 6.4 7.2	0.7 0.8 0.9 1.0 1.1 1.3	<15 <15 <15 <15 <15 <15 <15 <15	0.8 -1.6 0.9 -1.9 1.1 -2.2 1.3 -2.6 1.5 -3.0 1.6 -3.3 1.7 -3.4	1.2 - 2.3 1.3 - 2.7 1.6 - 3.2 1.8 - 3.7 2.1 - 4.3 2.3 - 4.7 2.4 - 4.9	0.045	2.0 3.0 3.8 4.8 6.0 8.0 9.0	1.5 1.7 2.0 2.3 2.5 3.0 3.1	<15 <15 <15 <15 <15 <15 <17	2.3-4 2.7-5 3.2-6 3.7-7 4.3-8 4.7-9 4.9-9
6	80 90 100 120 135 150 175	0.126	1.2 2.0 2.6 3.4 4.8 5.2 6.4	0.6 0.7 0.8 0.9 1.1 1.2	<15 <15 <15 <15 <15 <15 <15	0.8 - 1.7 0.9 - 1.9 1.0 - 2.0 1.2 - 2.4 1.5 - 2.9 1.5 - 3.0 1.8 - 3.6	1.2 -2.4 1.4 -2.7 1.5 -2.9 1.7 -3.4 2.1 -4.2 2.2 -4.4 2.6 -5.2	0.054	1.5 2.5 3.3 4.3 6.0 6.5 8.0	1.4 1.7 1.8 2.0 2.5 2.6 3.0	< 15 < 15 < 15 < 15 < 15 < 15 < 16	2.4-4 2.7-5 2.9-5 3.4-6 4.2-8 4.4-8 5.0-1
7	90 100 120 135 150 175 200	0.163	0.8 1.6 2.4 2.8 4.0 5.0 6.0	0.6 0.7 0.8 0.9 1.0 1.1	<15 <15 <15 <15 <15 <15 <15	0.8 - 1.7 0.9 - 1.9 1.1 - 2.2 1.3 - 2.6 1.4 - 2.8 1.5 - 3.0 1.9 - 3.7	1.2 - 2.5 1.4 - 2.7 1.6 - 3.1 1.9 - 3.8 2.0 - 4.0 2.1 - 4.3 2.7 - 5.4	0.063	1.0 2.0 3.0 3.5 5.0 6.3 7.5	1.3 1.5 1.7 1.9 2.0 2.5 3.0	<15 <15 <15 <15 <15 <15 <15	2.5-4 2.7-5 3.1-6 3.8-7 4.0-8 4.3-8 5.0-10
8	100 120 135 150 175 200 225	0.168	0.6 1.6 2.0 3.0 4.0 5.2 6.0	0.6 0.7 0.8 0.9 1.0 1.2	<15 <15 <15 <15 <15 <15 <15	0.9 - 1.8 1.0 - 2.0 1.2 - 2.4 1.3 - 2.7 1.5 - 3.0 1.8 - 3.5 1.9 - 3.9	1.3 - 2.5 1.5 - 2.9 1.7 - 3.4 1.9 - 3.8 2.2 - 4.4 2.5 - 5.0 2.8 - 5.5	0.072	0.8 2.0 2.5 3.8 5.0 6.5 7.5	1.3 1.5 1.8 2.0 2.3 2.6 2.8	<15 <15 <15 <15 <15 <15	2.5-5 2.9-5 3.4-6 3.8-7 4.4-8 5.0-1 5.5-1

Performances are based on a length of one meter.

Throw distance measured at Vt = 0.5 & 0.25 m/s respectively.
 Damper at full open position.



ORDERING DATA

Available Surface Finishes For Linear Slot Diffusers :

- Natural / 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:

Specify:

- 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
D	lD	4	120"	10	Powder Coating	1013 (Optional)	-	End Cap at one Side	16 mm