

High Induction Slot Diffusers

Description

For supply of extract air, the individual nozzle arrangement and micro-jet pattern provide a high-induction air flow, ensuring a rapid reduction of supply air speed and temperature differences. Suitable for wall or ceiling mounting.

Construction

From extruded aluminium sections, with cylindrical, black or white plastic nozzles.

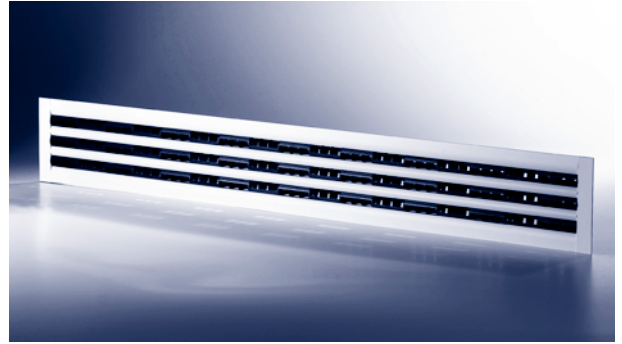
Size and Weight

Height of slot diffuser is determined by the number of slots, usually to a maximum of five slots. The slot diffuser is designed to form long continuous lengths but is also effective in short sections.

How to Specify

STATE QUANTITY, THE PRODUCT CODING AND THE SIZE WIDTH X HEIGHT

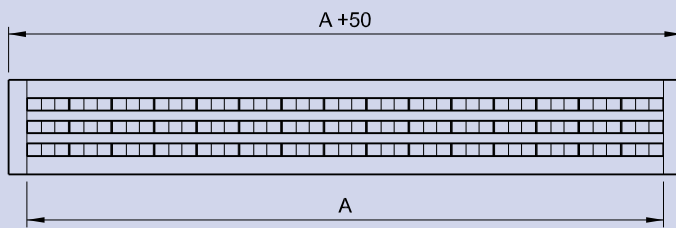
e.g. 10 Qty. Y4H30+8C 3000 Long.



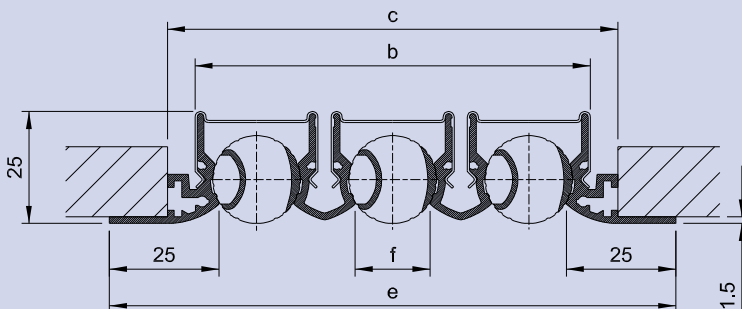
Frame Style	Options	Slot Quantity	Accessories
Y4 25mm Border 2 End Caps	H High Induction	1 > 5	B Black Nozzles
Y3 25mm Border 1 End cap			W White Nozzles
Y2 25mm Border No End Caps			



Fixings	Finish
8 Concealed Rear Bracket	C PPC BS /RAL Colour



Y4H3B+8C
(View on face)



f	1	2	3	4	5
Slot Quantity	1 x f	2 x f	3 x f	4 x f	5 x f
b	30	61	92	123	154
c	42	73	104	135	166
e	67	98	129	160	191
f	17	17	17	17	17

Technical Data Linear Slot Diffusers (High Induction) Supply

qm (l/s) (1000mm)	f = 1 > 6 (Slot Quantity)	Ps (Pascals)	NR
20	1 x f	6	18
30	1 x f	14	29
	2 x f	4	13
40	1 x f	26	37
	2 x f	6	21
	3 x f	3	11
50	2 x f	10	27
	3 x f	4	17
	4 x f	3	10
60	2 x f	14	32
	3 x f	6	22
	4 x f	4	16
70	2 x f	20	37
	3 x f	9	27
	4 x f	5	20
80	2 x f	26	40
	3 x f	11	31
	4 x f	6	24
	5 x f	4	18
90	3 x f	14	34
	4 x f	8	27
	5 x f	5	22
	6 x f	4	17
100	3 x f	18	37
	4 x f	10	30
	5 x f	6	25
	6 x f	4	20
125	4 x f	16	36
	5 x f	10	31
	6 x f	7	27
150	4 x f	23	41
	5 x f	14	36
	6 x f	10	32
175	5 x f	20	41
	6 x f	14	36
200	5 x f	26	44
	6 x f	18	40

Note

This diffuser utilises high induction airflow principles which ensure that the supply air velocity rapidly decreases to within 0.25 m/s just 0.5 metre from the diffuser. As such the usual air throw pattern, typical of a standard slot diffuser, does not apply and therefore is not shown.

Selection Example:

Required Air Volume: 350 l/s
 Length of Slot Available: 5.0 metres
 Max. Pressure Differential: 10 pa
 Max. Noise Level: NR 30

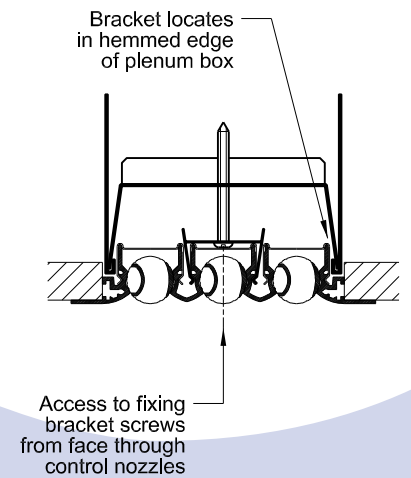
Divide the required air volume of 350 l/s by the maximum length of Slot available.

$$\frac{350}{5} = 70 \text{ l/s/m}$$

From the technical data table we can select a 3 Slot diffuser which gives 9 pa and NR 27 both within the set requirements.

1 Qty. Y4H3B+8C 5000mm Long

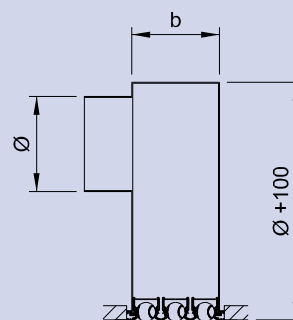
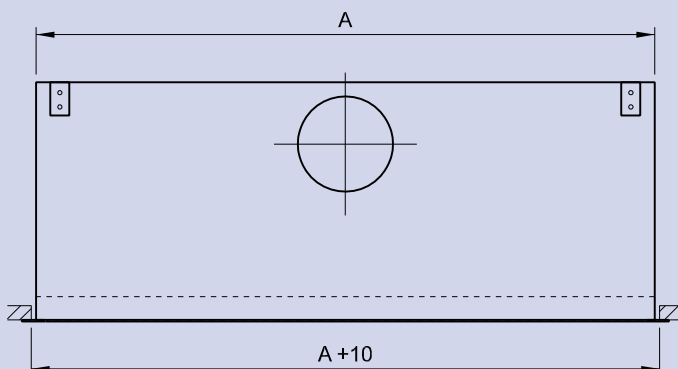
High Induction Slot Diffuser Fixings



Installation into G7010+80 plenum box

+8 Concealed Rear Brackets

G7010+80 plenum box



Note: Dim b shown = Diffuser neck size + 1/8 hemmed edge of plenum