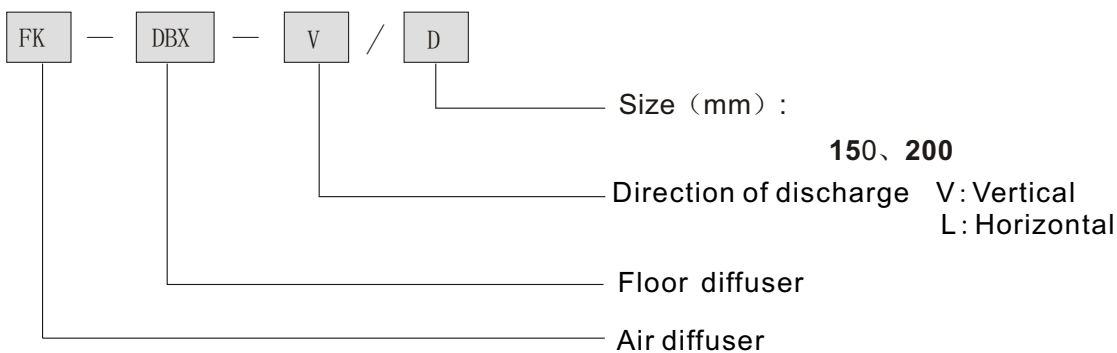


1, General description

FK-DBX series Floor diffuser is one of our latest new products .Floor diffuser suitable for supply air system in false floors ,specially for the location which require high quality air and low noise ,such as office , gymnasium,meeting room,hall ,theater ,odeum etc.This diffuser with a perfect appearance ,easy to match with building's fitment , easy to install and maintain .

2, Symbol Explanation



3, Characteristic

Floor diffuser

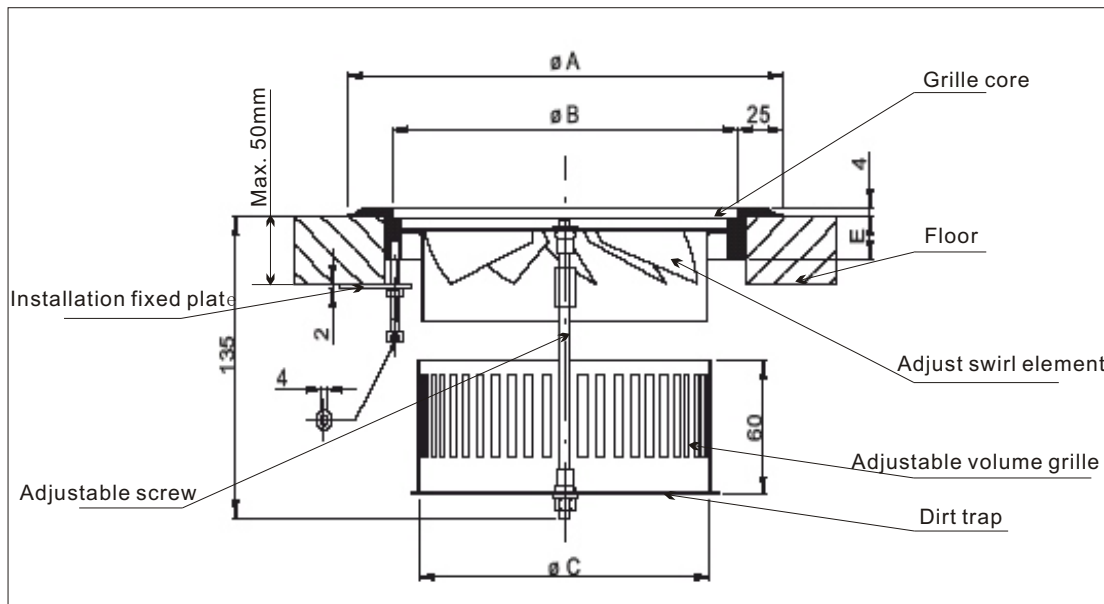
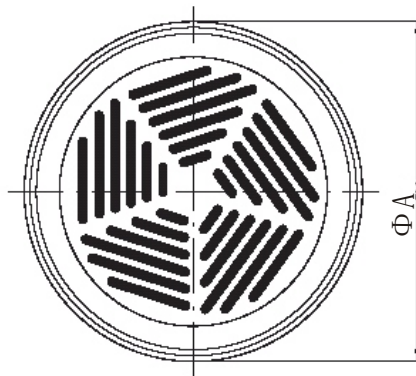


- $\Phi 150$ and $\Phi 200$ are available
- The panel of floor diffuser has a large number of radial ribs to produce swirling discharge, as that ensure mix supply air flow with surrounding air fastly and even with low noise.
- Inner floor diffuser ,there is a adjustable swirl element to adjust air volume and discharge direction. In general, can adjust the air volume via inner grille's different position.(In general ,Foundation can preset the adjustable swirl element if required direction of discharge

4, Material and Construction

- 1)Material of grille core and trim ring are aluminum via die cast and deburred. Surface are available paint or deburred .If paint ,colors available on request . In general ,color in accordance RAL standard series.
- 2)There is dirt trap bottom on the diffuser ,can clear the dirt regularly.
- 3)Galvanized sheet steel dirt trap and adjustable swirl element.

5, Specification



Size	φA	φB	φC	E
150	190	140	124	14
200	240	190	160	19

Note: For installation max.floor thckness is 50mm. If floor thickness is more than 50mm,please tell us when ordering.

6, Technical parameter

(1) Horizontal discharge

Φ 150

Table 2

Air volume(m ³ /h)	20	30	40	50	60	70	80	90	100
Spread radius Lx(m)	0.3	0.4	0.48	0.6	0.71	0.8	0.9	1	1.1
Pressure lost Pa	2	5	8	15	21	30	40	46	54
Regenerative noise dB(A)	17	20	23	26	29.5	33	36.5	40	43.5

Φ 200

Air volume(m ³ /h)	20	30	40	50	60	70	80	90	100	200
Spread radius Lx(m)	0.2	0.32	0.41	0.47	0.54	0.62	0.9	1	1.1	1.28
Pressure lost Pa	2	5	8	15	21	30	40	46	54	39
Regenerative noise dB(A)	17	20	23	26	29.5	33	36.5	40	43.5	47

(2) Vertical discharge

Φ 150

Table 3

Air volume(m ³ /h)	20	30	40	50	60	70	80	90	100
Spread radius Lx(m)	0.5	0.8	1.3	1.6	1.8	2	2.3	2.55	2.8
Pressure lost Pa	2	6	9	17	26	33	41	48	56
Regenerative noise dB(A)	17	20	23	26	29.5	33	36.5	40	43.5

Φ 200

Air volume(m ³ /h)	20	30	40	50	60	70	80	90	100	200
Spread radius Lx(m)	0.6	0.7	0.8	0.9	1	1.1	1.2	1.4	1.7	2
Pressure lost Pa	-	3	5	7.5	10	14	20	24	30	42
Regenerative noise dB(A)	17	20	23	26	29.5	33	36.5	40	43.5	47

(3) Effective area of supply air

Table 4

Size	Area of supply air(m ²)
Φ150	0.0048
Φ200	0.0172

(4) Correction of temperature difference of supply air

Data at table1 and table 2 we test when temperature difference between supply air and indoor room is 6℃

If the temperature difference is not 6℃,so you can correct as the following table

表五

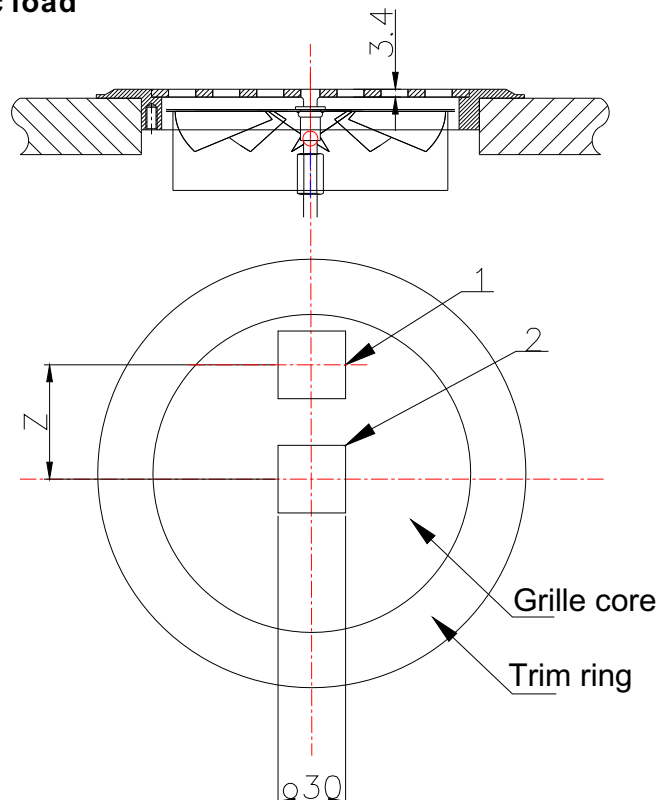
Δt (°C)	4	6	8	10
Lx	*0.8	*1.0	*1.1	*1.7
Hx	*1.2	*1.0	*0.85	*0.75

(5) Inner assistant correction corresponding the open condition of Adjustable volume
Above table 2,table 3 ,pressure lost corresponding when adjustable volume grille open full.When adjust the air volume ,just need to adjust grille to other position,at this time inner assistant valve should be correct.

Table 6

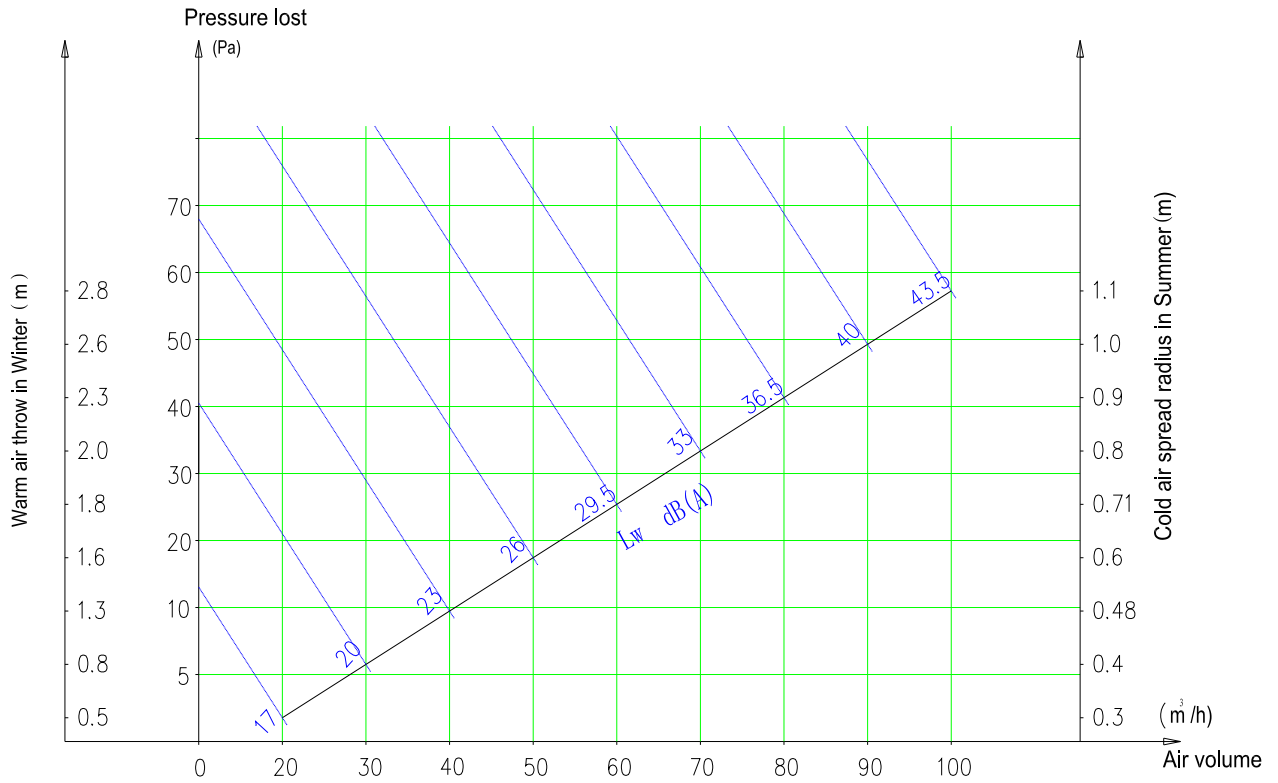
Open condition of inner grille	pressure lost ΔP (Pa)	
	$\Phi 150$	$\Phi 200$
100%	*1.0	*1.0
50%	*1.35	*1.35
25%	*2.4	*2.4

(6)Breaking static load

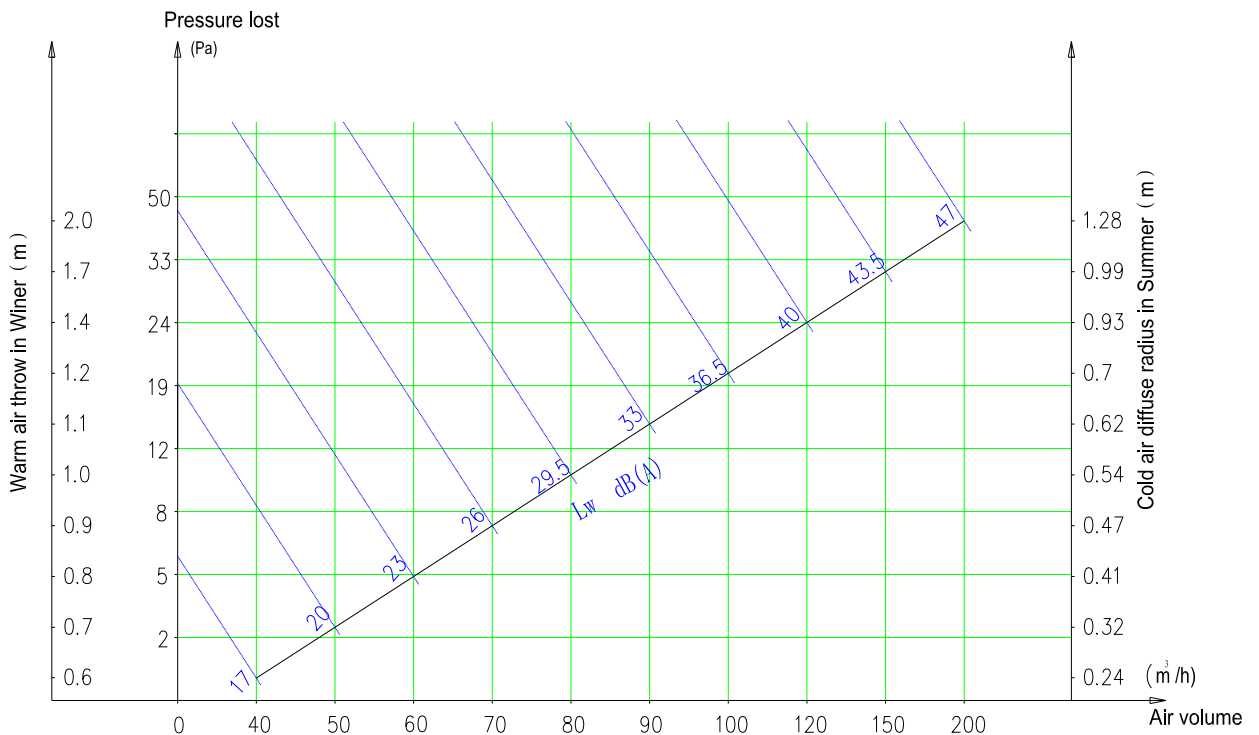


Size	Breaking load KG		Load point position Z	Remark
	Load point position 1	Load point position 2		
FK-DBX $\Phi 150$	128	98	52	
FK-DBX $\Phi 200$	117	82	77	

(7)Characteristic Curve



Curve of Air volume、Pressure lost、Spread distance、Diffuse radius、Noise for FK-DBX-φ150(Vx=0.20m/s)



Curve of Air volume、Pressure lost、Spread distance、Diffuse radius、Noise for FK-DBX-φ200(Vx=0.20m/s)

7, Order details

- (1) The technical parameters listed in are reckoned in special working conditions. When use condition is different from the testing condition, the technical parameters in the samples may have a little windage.
- (2) When making orders, you should give the exclusive decision confirmation according to the samples' examples of method.
- (3) Our company retains the rights of interpretation and revision of this sample.