



We Focus On Indoor Air Quality.

We Focus On Energy Saving In Building.

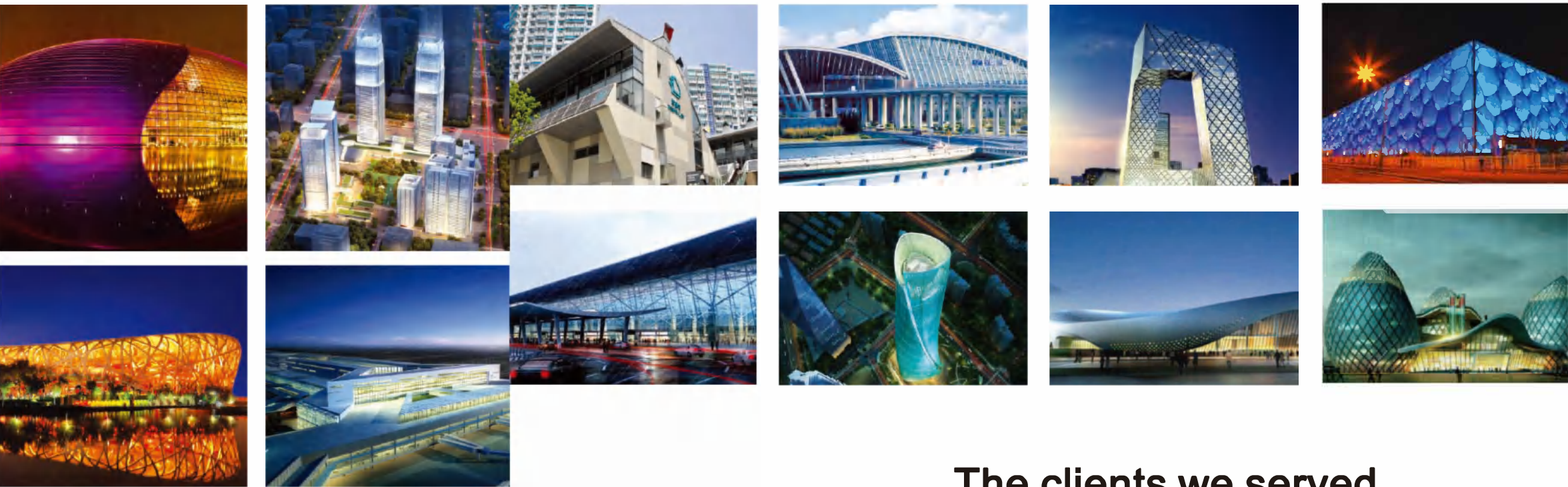
We Care About The Balance Between The Human Being And Our Earth.



Overview of air diffuser products



We focus on indoor air distribution



The clients we served

C O N T E N T

General ventilation diffuser in large space

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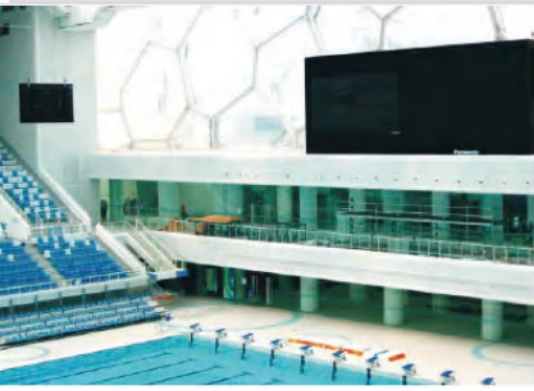






### General ventilation diffuser for large space

KST general ventilation diffusers for large space have excellent results on ventilation and have high induction ratio, and the height of installation can be up to 10m. The blow angle can be adjusted by manual, motor-driven and temperature control. Supply air can reach the bottom of room and avoid the effect of floating-up for warm air effectively, so the diffusers satisfy the requirements of airflow distribution in large space and also of comfort.



## JND jet nozzle

### Characteristic :

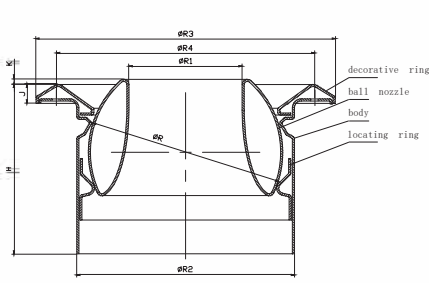
KST jet nozzles have many types, it is suitable for high space, generally supply air from sides wall. Jet nozzles are used for the preference where the supply air from the diffuser needs to travel a larger distance to the occupied zone. People may also be in the recirculation region due to the deeper penetration of supplied air. Nozzle can adjust the supply air angle in order to satisfy the hot or cold situation. It can rotate  $\pm 30^\circ$  without affecting the airflow area. Can be adjusted by manual temperature or electric actuator, circle duct can connect with circle pipe directly.

### Material:

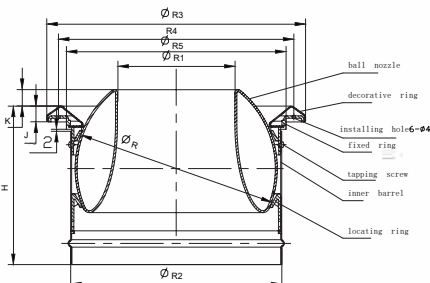
Nozzle and ornament made of aluminum alloy;  
Duct is Galvanized steel sheet; ; JND100-160 is made of aluminum Powder-coating for diffuser surface,color options.



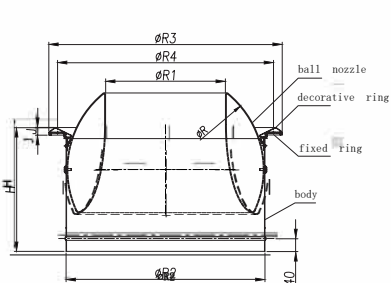
### Structure size:



JND100-160 manual jet nozzle schematic

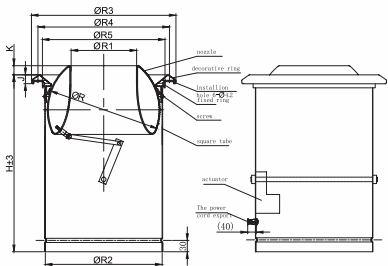


JND200-400 manual jet nozzle schematic



JND500-630 manual jet nozzle schematic

Size	$\Phi R$	$\Phi R 1$	$\Phi R 2$	$\Phi R 3$	$\Phi R 4$	H	J
JND100	85	50	98	144	119	86	11
JND125	110	64	123	169	144	96	11
JND160	145	82	158	200	175	108	11
JND200	185	109	198	256	232	126	18
JND250	235	135	248	303	277	179	19
JND315	300	176	313	384	349	190	21
JND400	385	230	398	467	430	211	24
JND500	485	295	498	575	538	264	25
JND630	615	374	628	730	680	332	25



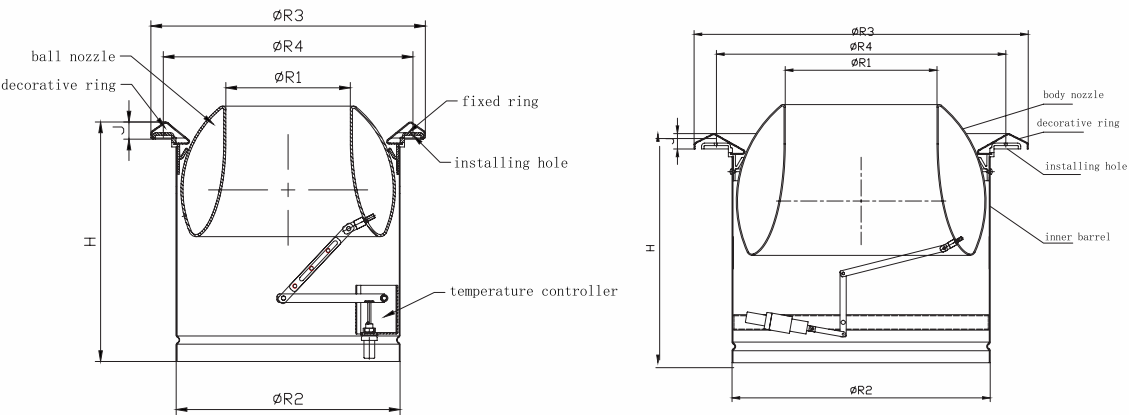
JND315-630 motorized jet nozzle schematic

Size	$\Phi R$	$\Phi R1$	$\Phi R2$	$\Phi R3$	$\Phi R4$	$\Phi R5$	H	K	J
JND315	300	176	313	384	349	326	490	35	21
JND400	385	230	398	467	430	410	490	50	24
JND500	485	295	498	575	538	510	530	56	25
JND630	615	374	628	730	680	640	590	98	25



JND jet nozzle

JND jet nozzle



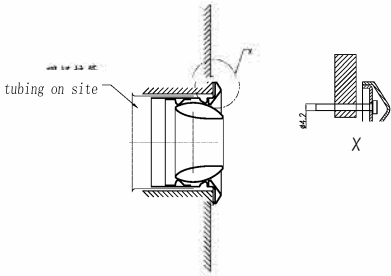
JND250-400 temperature control jet nozzle schematic      JND500-630 temperature control jet nozzle schematic

Size	Φ R1	Φ R2	Φ R3	Φ R4	H	J
JND250	135	248	303	277	320	19
JND315	176	313	384	349	330	21
JND400	230	398	467	430	400	24
JND500	295	498	575	538	450	25
JND630	374	628	730	680	500	26

160	Air Volume(m³/h)	140	200	260	320	380
	Duct Air velocity(m/s)	7.4	10.5	13.7	16.8	20
	Range(m)	5	7	8	12	16
	Pressure drop(Pa)	38	68	100	130	175
	Noise(NC)	< 20	24	34	39	44
200	Air Volume(m³/h)	250	350	450	550	650
	Duct Air velocity(m/s)	7.6	10.6	13.7	16.7	19.7
	Range (m)	4.5	6.5	10	15	20
	Pressure drop(Pa)	42	70	100	149	165
	Noise(NC)	< 20	25	39	44	49
250	Air Volume(m³/h)	360	520	680	840	1000
	Duct Air velocity(m/s)	6.9	9.9	13	16.1	19.1
	Range(m)	5.8	7.2	12.6	15	25
	Pressure drop(Pa)	28	65	100	149	160
	Noise(NC)	20	30	35	44	49
315	Air Volume(m³/h)	500	800	1100	1400	1700
	Duct Air velocity(m/s)	5.8	9.2	12.6	16	19.5
	Range(m)	7	12	18	22	26
	Pressure drop(Pa)	25	60	100	150	200
	Noise(NC)	< 20	34	44	49	53
400	Air Volume(m³/h)	800	1300	1800	2300	2800
	Duct Air velocity(m/s)	5.4	8.7	12	15.4	18.7
	Range(m)	12	17	21	26	35
	Pressure drop(Pa)	22	50	92	120	160
	Noise(NC)	24	34	44	48	52
500	Air Volume(m³/h)	1300	2100	2700	3500	4300
	Duct Air velocity(m/s)	5.3	8.1	11.1	14.2	16.8
	Range(m)	21	35	26	30	40
	Pressure drop(Pa)	21	44	82	111	148
	Noise(NC)	< 20	32	39	46	50
630	Air Volume(m³/h)	2000	3000	4000	5000	6000
	Duct Air velocity(m/s)	5.1	7.6	10.1	12.6	15.2
	Range(m)	20	35	30	35	50
	Pressure drop(Pa)	21	40	70	100	132
	Noise(NC)	< 20	32	37	44	49

Installation instruction:


KST jet nozzle connected to square or circle duct on the side wall, two connections methods also have flange without drilling holes. It can be fixed with the screw or self-tapping pin, and cover with the ornament after installed. Fix the ornament with bayonet in order to dismounting. As the right figure :



Technical Specification:

Size		Parameter					
100	Air Volume(m³/h)	50	80	100	120	140	
	Duct Air velocity(m/s)	7.1	11.3	14.2	17	19.8	
	Range(m)	3.3	4.3	5.2	6.5	8.8	
	Pressure drop(Pa)	36	72	144	147	160	
	Noise(NC)	<20	<20	24	29	34	
125	Air Volume(m³/h)	80	123	160	200	240	
	Duct Air velocity(m/s)	6.09	10.4	13.8	17.3	20.7	
	Range(m)	4	5.8	7	10.5	14	
	Pressure drop(Pa)	34	58	99	140	185	
	Noise(NC)	14	19	29	34	39	

Order Co de: JND/250/M



100

125

160

200

250

315

400

500

630

规格

M1 Actuator (2 phase control) 220V 50Hz

M2 Actuator (2 phase control) 24V 50Hz

M3 Actuator (proportional control ) 24V-0-10V

T Automatic temperature control

Example: JND/250/M  
Standard color: RAL9010



# SWD swirl diffuser

## Characteristic:

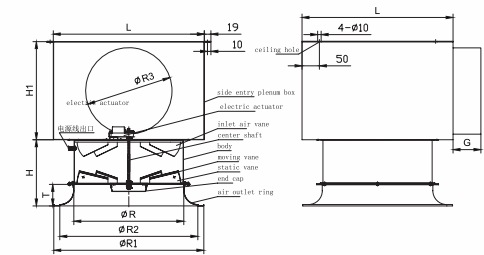
KST SWD swirl diffuser have more air volume, is suitable for indoor ventilation with more story heights buildings, especially for larger public buildings or factory, can adjust the supply air angle between 45° and 90°. Adjust manually and automatic temperature control. Supply air has more temperature differential, so that can provide comfortable air no matter supply heat or cold air, the plenum box can top entry or side entry.

## Material:

Body and blade for galvanized sheet. Diffuser circle and end cover for aluminum alloy, spinning forming.The overall surface coating processing.

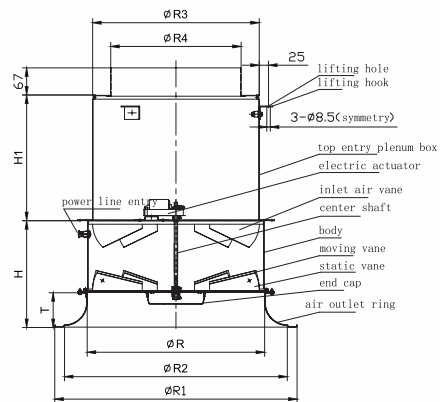


SWD200-800 manual (electric) swirl diffuser side entry plenum box



Size	ΦR	ΦR1	ΦR2	ΦR3	H	H1	T	L	G
SWD200*	200	304	260	148	145	200	40	320	48
SWD250*	250	368	318	198	177	260	50	380	48
SWD315	315	464	404	248	211	280	8	435	80
SWD400	400	566	510	313	240	367	80	500	80
SWD500	500	690	530	348	286	445	120	60	80
SWD630	630	871	801	398	393	467	125	750	80
SWD800	800	1077	1007	398	517	480	160	960	80
Remark: ①"***" can only do manual ,②Air inlet blade is only 630 and 800									

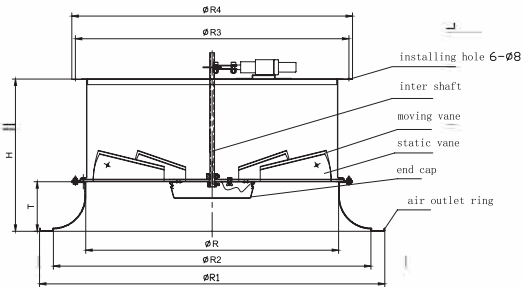
SWD200-800 manual (electric) swirl diffuser top entry plenum box



Size	ΦR	ΦR1	ΦR2	ΦR3	ΦR4	H	H1	T
SWD200*	200	304	200	200	148	145	145	40
SWD250*	250	368	318	250	198	177	185	50
SWD315	315	464	404	315	248	211	226	63
SWD400	400	566	510	400	313	240	295	80
SWD500	500	690	630	500	348	286	323	120
SWD630	630	871	801	635	398	393	360	125
SWD800	800	1077	1007	800	498	517	430	160
Remark: " **" can only do manual ,②Air inlet blade is only 630 and 800								

# SWD swirl diffuser

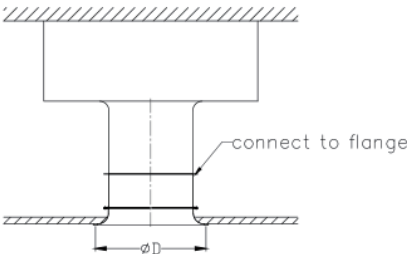
SWD500-800electric swirl diffuser



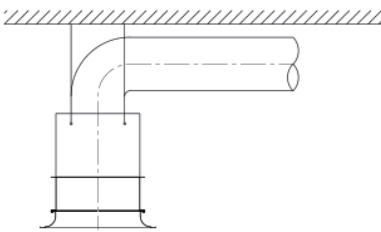
Size	ΦR	ΦR1	ΦR2	ΦR3	ΦR4	H	T	G
SWD250	250	368	318	276	300	177	50	/
SWD315	315	464	404	339	361	211	63	57
SWD400	400	566	510	423	449	240	80	62
SWD500	500	690	530	534	550	286	100	85
SWD630	630	871	801	665	685	393	125	/
SWD800	800	1077	1007	833	855	517	160	/

## Install instruction:

Because of various function of SWD swirl diffuser, it can be installed horizontally to ceiling, or suspending into the ceilings. As for the gridding ceiling, the effect of supplying air is the same for the two different installment methods, supply air angle can be adjusted constantly.



Install to enclosed ceiling, supply air horizontally or vertically



Susspending on the ceilings: such as factory supply air angle can be adjusted constantly




# SWD swirl diffuser

■ Technical Specification :

Size	Volume (m³/h)	Pressure drop (Pa)	Noise (NC)	Max penetration depth/ supply isothermal air/discharge angle 45°	Max penetration depth/supply warm air/discharge angle:90°/temperature difference: ±8℃
250	300	30	28	1.2	2.6
	500	40	42	2.1	3.9
	900	90	51	2.3	5.6
315	500	40	29	1.4	2.7
	800	80	44	2	4.1
	1000	120	48	2.35	5.8
400	800	30	20	1.8	3.6
	1200	40	27	2.4	5.5
	1600	100	37	3.2	7.7
500	2000	150	50	4.2	8.5
	1500	24	22	2.2	4.1
	2000	40	30	2.9	6.3
630	2600	80	42	3.6	8.4
	3100	130	49	4.3	10.6
	1800	22	24	2.5	4.8
800	2500	50	34	3.8	7.5
	3600	120	49	4.5	11.5
	2500	30	35	2.5	6
800	4000	80	45	4.5	9.5
	5000	120	49	5.5	12.5

■ Order Code :



SWD-L/630/M

entry plenum box

Side entry plenum box

200

250

315

400

500

630

800

size

M1 Actuator (2 phase control) 220V 50Hz

M2 Actuator (2 phase control) 24V 50Hz

M3 Actuator (proportional control) 24V-0-10V

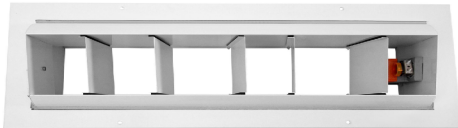
T Automatic temperature control

Example: SWD-L/630/M  
Standard color: RAL9010

# DLA industrial drum louver

■ Characteristic:

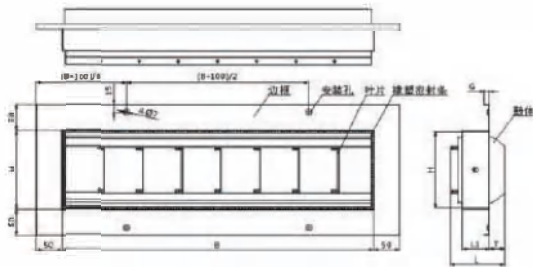
KST DLA drum louvers are designed for handing larger air volumes and long-distance supply air, such as gymnasium, theatre etc; supply sir angle can be adjusted in the scope of ±30° by manually or automatically, the guide vane can control the air flow distribution, coordinator with air volume damper to control the air volume, can prevent leakage because the sealing material between frame and drum body.



■ Material:

The frame is galvanized steel sheet. Powder-coating for the whole surface. Drum body is aluminum alloy.

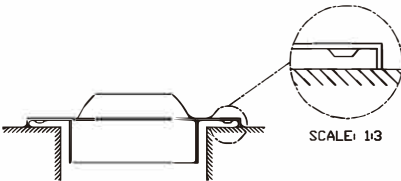
■ Structure size:



B	H	L	L1	G	T	Vane number
300	150	104	52	10	28	3
475	150	104	52	10	28	5
600	150	104	52	10	28	7
725	150	104	52	10	28	8
500	250	175	90	10	54	3
600	250	175	90	10	54	4
750	250	175	90	10	54	5
900	250	175	90	10	54	6

■ Install instruction:

KST drum louver can be installed on the wall. Diffuser face fixed with bolt, embed the accessory decorative cap into the recess of head bolt.



■ Technical Specification:

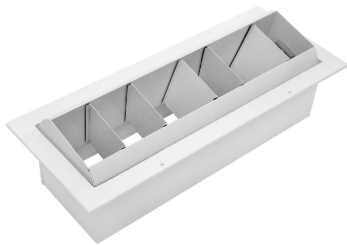
Size		Parameter				
250×150	Volume(m³/h)	500	600	800	1000	1200
	Duct velocity (m/s)	10.3	12.3	16.5	20.6	24.7
	Range(m)	4.2	6.4	13.2	17	23
	Pressure drop(Pa)	55	80	100	150	180
	Noise(NC)	27	35	38	42	49
	Volume(m³/h)	600	800	1000	1200	1500
300×150	Duct velocity (m/s)	8.2	11	13.7	16.4	20.6
	Range(m)	3.8	6.8	13	15	23
	Pressure drop(Pa)	45	80	105	140	270
	Noise(NC)	17	27	32	38	53



DLA industrial drum louver

475×150	Volume(m³/h)	800	1000	1200	1500	2000
	Duct velocity(m/s)	6.6	8.2	9.9	12.3	16.5
	Range(m)	4	6.5	9	14.5	23
	Pressure drop(Pa)	40	60	80	150	180
	Noise(NC)	22	25	35	38	42
625×150	Volume(m³/h)	1000	1500	2000	2500	3500
	Duct velocity(m/s)	5.9	8.8	11.8	14.7	20.6
	Range(m)	4.5	9.2	15.5	25	42
	Pressure drop(Pa)	35	65	80	145	200
	Noise(NC)	15	27	29	35	48
500×250	Volume(m³/h)	1500	2000	2500	3000	4000
	Duct velocity(m/s)	7.4	9.9	12.3	14.8	19.7
	Range(m)	6.5	10	14.5	19.5	30
	Pressure drop(Pa)	60	78	100	180	280
	Noise(NC)	25	27	38	39	49
650×250	Volume(m³/h)	2000	2500	3000	4000	5000
	Duct velocity(m/s)	7.4	9.3	11.1	14.8	18.5
	Range(m)	7.5	12	15.5	25.7	36
	Pressure drop(Pa)	64	82	105	180	280
	Noise(NC)	23	27	32	42	49
750×250	Volume(m³/h)	2500	3000	4000	5000	6000
	Duct velocity(m/s)	7.4	8.9	11.9	14.8	17.8
	Range(m)	9	13.5	19.5	27	38.5
	Pressure drop(Pa)	65	80	139	188	220
	Noise(NC)	27	32	33	45	49
900×250	Volume(m³/h)	3000	5000	6000	7000	8000
	Duct velocity(m/s)	7.4	12.3	14.8	17.3	19.8
	Range(m)	9.5	24	33.6	40	49
	Pressure drop(Pa)	63	142	188	241	290
	Noise(NC)	21	32	34	39	41

Order Code:



DLA/250X150/C/M

300X150

475X150

625X150

500X250

650X250

750X250

900X250

Electric actuator

Volume control damper

size

Example: DLA/250X150/C/M  
Standard color: RAL9010

Decorative diffuser for general ventilation in slap-up building

KST decorative diffuser characterize a higher induction ratio and even flow. The temperature field may be even in short time by using those diffusers, and the product with a beautiful look can be combined with ornaments in room. It applies to slap-up office, hotel foyer and so forth that have higher requirements.

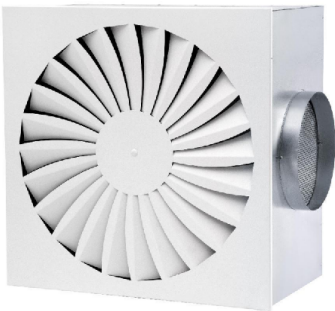




# SDA swirl diffuser

## Characteristic:

The face of the KST swirl diffuser has round and square two choices. Air control blade is fixed with radial direction, supply air is horizontal swirl, high induction, can make indoor temperature uniform rapidly, can be used to supply and extract air; the plenum box can top entry or side entry, or can be connected to duct directly, 2.6-6 meter height from the ground, suitable for hotel, office buildings or other large space.

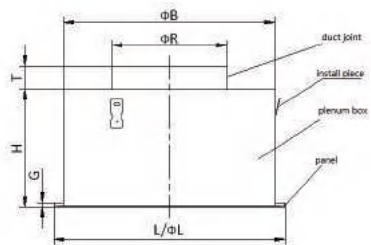


## Material:

Panel for galvanized sheet; Powder-coating for all surface. Plenum box is made of galvanized steel.

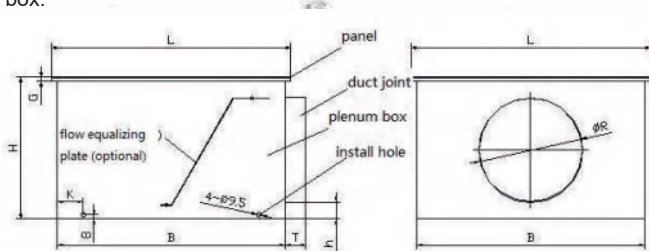
## Structure size:

SDA plenum box top entry schematic:



size	SDAQ/R300	SDAQ/R400	SDAQ/R500	SDAQ/R600
L/ΦL	298	398	498	598
ΦB	280	364	462	559
H	200	200	200	200
T	40	40	40	40
ΦR	158	198	198	248
G	8	8	8	8

SDA plenum box side entry plenum box:

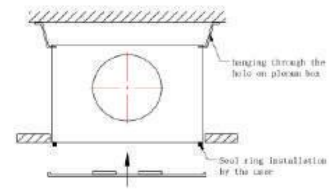


Size	L	B	H	h	T	ΦR	K	G
SDAQ300	298	290	252	32	40	158	50	8
SDAQ400	398	372	297	32	40	198	50	8
SDAQ500	498	476	297	32	40	198	50	8
SDAQ600	598	567	347	32	40	248	90	8
SDAQ625	623	567	347	32	40	248	90	8

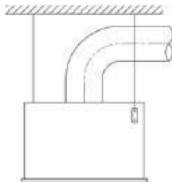
## Install instruction:

KST SDA swirl diffuser can be installed into suspended ceilings system, and hang freely.

Ceiling installation(plenum box)



hang freely (installation through hange)



# SDA swirl diffuser

## Technical Specification:

Size	Air Volume(m³/h)	Noise(NC)	Pressure drop(Pa)
300	144	15	10
	150	19	12
	250	34	28
400	180	<9	3
	290	29	15
	396	34	30
500	216	<9	3
	370	19	14
	522	29	28
600	288	<9	3
	441	14	9
	594	24	20
625	288	15	6
	441	24	14
	594	35	25
825	420	<9	3
	661	29	30
	1021	48	60

## Order Code:



SDA-R-L/400		
quadrate	Top entry spigot	300
		400
circular	Side entry spigot	500
		600
		625
		size

Example: SDA-R-L/400  
Standard color: RAL9010



# SDB swirl diffuser

## Characteristic:

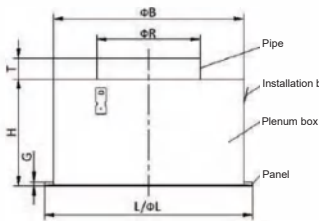
The face of the KST swirl diffuser has round and square two choices. control blade is fixed with radial direction, supply air is horizontal sw high induction, can make indoor temperature uniform rapidly, can be used supply and extract air; the plenum box can top entry or side ent 2.6-6 meter height from the ground, suitable for hotel, office buildings other large space. Air control blade can be adjusted from two directions satisfy different swirl effect.

## Material:

Panel forgalvanized sheet; Plenum box is galvanized;  
Blade is plastic with white or black color.

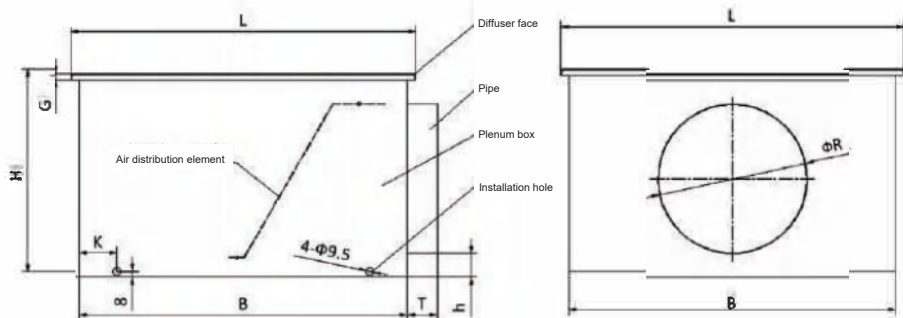
## Structure size:

SDB with top entry plenum box :



Size	SDBQ/ R300X8	SDBQ/ R400X16	SDBQ/ R500X24	SDBQ/ R600X24	SDBQ/ R600X48	SDBQ/ R625X24	SDBQ/ R625X54	SDBQ/ R825X72
L	298	398	498	598	598	623	623	825
B	280	364	462	559	580	559	605	796
H	200	200	200	200	300	200	300	400
T	40	40	40	40	40	40	40	40
ΦR	158	198	198	248	248	248	248	313
G	8	8	8	12	12	12	12	15

SDB with side entry plenum box:

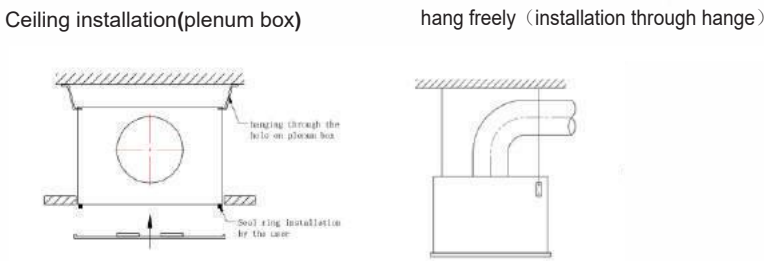


Size	L	B	H	h	T	ΦR	K	G
SDBQ300X8	298	290	252	32	40	158	50	8
SDBQ400X16	398	372	297	32	40	198	50	8
SDBQ500X24	498	476	297	32	40	198	90	8
SDBQ600X24	598	567	347	32	40	248	90	12
SDBQ600X48	598	590	347	32	40	248	90	12
SDBQ625X24	623	567	347	32	40	248	90	12
SDBQ625X54	623	615	347	32	40	248	90	12
SDBQ825X72	825	806	412	32	40	313	120	15

# SDB swirl diffuser

## Installment instruction:

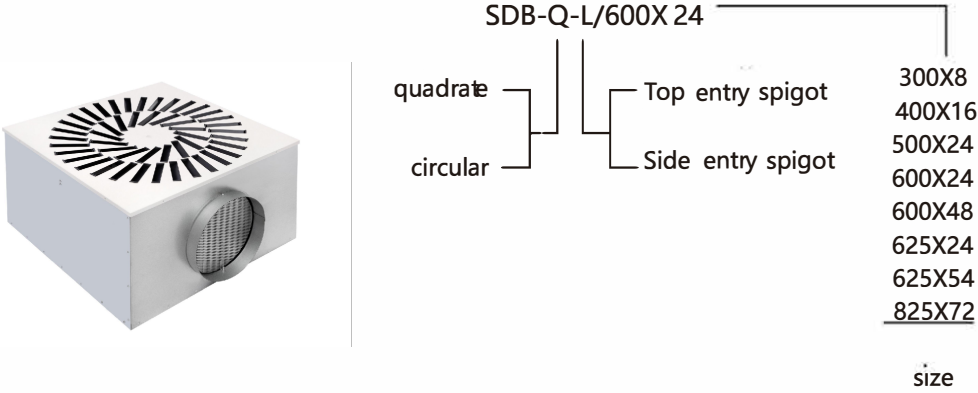
KST SDB swirl diffuser can be installed into suspended ceilings system and hang freely.



## Technical Specification:

Size	Air Volume (m <sup>3</sup> /h)	Noise (NC)	Pressure drop (Pa)	Size	Air Volume (m <sup>3</sup> /h)	Noise (NC)	Pressure drop (Pa)
300×8	55	< 9	3	600×48	360	< 9	3
	160	18	20		900	34	39
	250	34	50		1400	45	98
400×16	110	< 9	3	625×24	210	< 9	3
	350	25	30		600	19	19
	500	38	68		1250	44	77
500×24	140	< 9	3	625×54	430	< 9	12
	450	28	29		900	37	42
	760	39	89		1500	55	100
600×24	210	< 9	3	825×72	560	12	5
	600	28	24		1500	37	89
	1050	44	77		2400	50	150

## Order Code:



Example: SDB-Q-L/600X24  
Standard color: RAL9010

# SLT slot diffuser

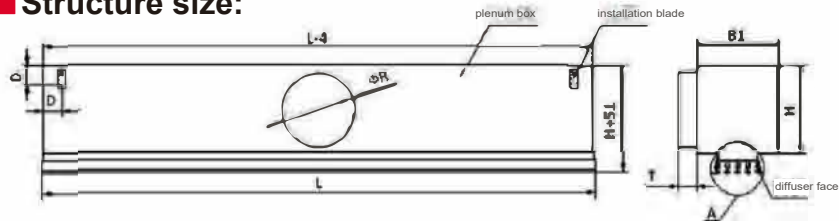
## Characteristic:

Slot diffuser is available with 1-4 slots (more than 4 slot need to be customized), adjust the supply air angle as requirement. Low height means it is suitable for suspending ceilings. Match with different kind of design styles, used in the wide range. High induction, eliminating the supply air temperature differential rapidly, and reduce the air discharge velocity. Make indoor comfortable.

## Material:

Face panel is consists of aluminum alloy; the blade consists of plastic. Plenum box consist of galvanize steel shee. Aluminum natural color, oxidation finish.

## Structure size:



Size	L	600	750	800	900	1050	1200	1350	1500	1650	1800	1950
nXΦR	SLT1				1X98	1X123				2X98	2X123	
	SLT2				1X123	1X138				2X123	2X138	
	SLT3				1X138	1X148				2X138	2X148	
	SLT4				1X148	1X198				2X148	2X198	
	SLT5				1X198	2X248				2X148	2X198	
	SLT7				2X248	2X198				2X248	2X248	

Size	B1	B2	B3	H	T	D	K
SLT1	100	55	24	151	40	50	10
SLT2	138	82	53	182	40	50	10
SLT3	176	108	77	198	40	50	10
SLT4	214	135	104	230	40	50	10
SLT5	245	150	129	290	40	50	4
SLT7	275	220	182.5	290	40	50	12

## Install instruction:

Standard of the slot diffuser hanging installation, there are four hangers on header, hanging on the buildings,as shown in Figure1.  
When the slot diffusers are installed in linear configuration through top to end connection, can use the alignment pins and fish plates to make it, as shown in Figure 2.

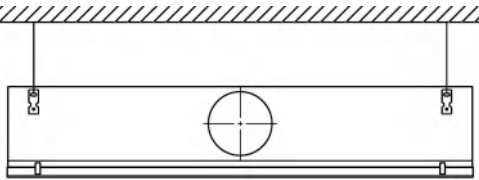


Figure 1

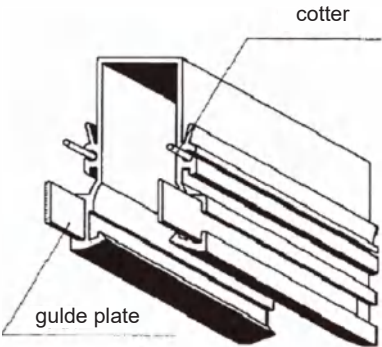


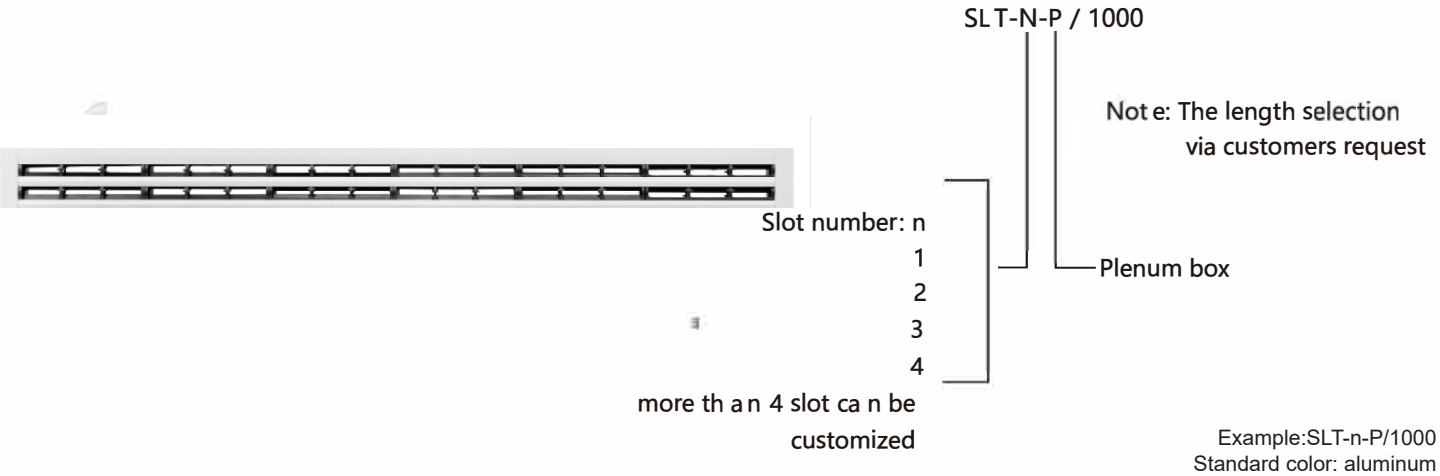
Figure 2

# SLT slot diffuser

## Technical Specification:

Size								
1slot	Air Volume(m³/h)	30	50	70	100	150	200	300
	Noise(NC)	< 9	< 10	20	25	38	45	65
	Pressure drop(Pa)	2	5	15	20	45	80	180
2slots	Air Volume(m³/h)	50	70	100	150	200	300	400
	Noise(NC)	< 10	< 10	< 10	19	25	39	49
	Pressure drop(Pa)	< 5	< 5	5	12	20	55	100
3slots	Air Volume(m³/h)	70	100	150	200	300	500	700
	Noise(NC)	< 10	< 10	15	20	35	49	55
	Pressure drop(Pa)	< 5	< 5	8	15	36	98	170
4slots	Air Volume(m³/h)	/	/	200	300	500	700	900
	Noise(NC)	/	/	12	25	39	49	59
	Pressure drop(Pa)	/	/	6	15	42	75	120
5slots	Air Volume(m³/h)	/	/	300	500	700	900	1100
	Noise(NC)	/	/	23	37	45	57	63
	Pressure drop(Pa)	/	/	10	35	70	110	135
7slots	Air Volume(m³/h)	/	/	500	700	900	1100	1300
	Noise(NC)	/	/	36	45	56	60	72
	Pressure drop(Pa)	/	/	30	64	105	124	147

## Order Code:





# SLC linear diffuser

## Characteristic:

The structure of the SLC linear diffuser is simple, the static pressure is low, can control the noise not too high, slot is three-dimension structure. The two end fix with gears, can adjust the discharge angle as needed. The air discharge direction can horizontal, vertical or incline through rotate the gears. Suitable for all kinds of ceiling installation with low total height, coordinate with variety of design style. Eliminate the temperature difference rapidly and decrease the air velocity, so make the indoor comfort.

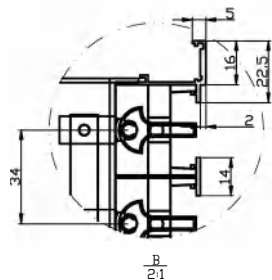
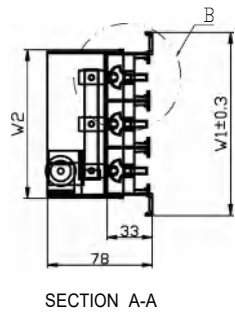
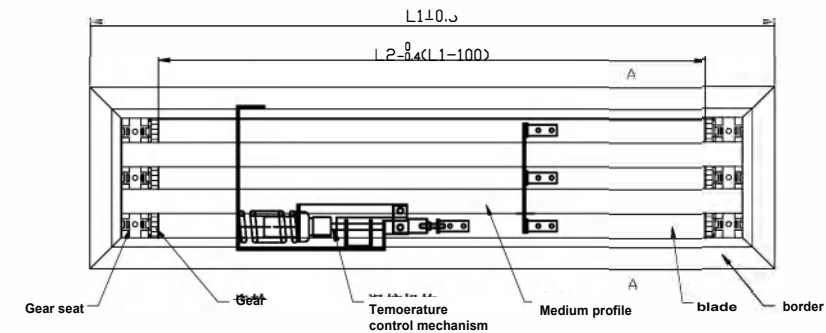


## Material:

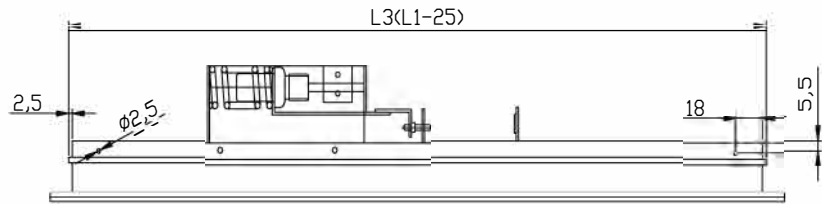
The blade (three-dimension structure), diffuser face consist of aluminum alloy, the gears at the two end consist of the black industry plastic; plenum box consist of galvanized steel sheet. The color is static powder coated RAL9010, also can be anodizing for the natural aluminum color.

## Structure size(With temperature control, for example):

Linear diffuser	Neck size	Facial size
1Slot	41	66
2Slots	74	99
3Slots	108	133
4Slots	142	167
5Slots	176	201



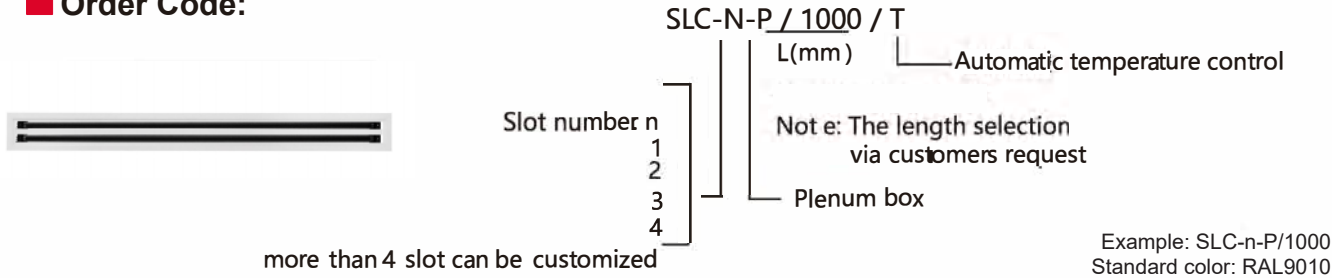
# SLC linear diffuser



## Technical Specification:

Size(meter)								
1Slot	Air Volume(m³/h)	60	130	190	260	330	400	470
	Noise(NC)	< 9	< 10	< 10	16	23	32	39
	Pressure drop(Pa)	< 10	< 10	< 10	23	32	52	83
2Slots	Air Volume(m³/h)	90	200	300	400	510	620	730
	Noise(NC)	< 10	< 10	< 10	17	25	34	41
	Pressuredrop(Pa)	< 10	< 10	< 10	26	34	55	85
3Slots	Air Volume(m³/h)	140	310	470	630	790	950	1120
	Noise(NC)	< 10	< 10	12	19	28	36	44
	Pressure drop(Pa)	< 10	< 10	< 10	35	44	68	98
4Slots	Air Volume(m³/h)	230	490	750	1010	1270	1530	1800
	Noise(NC)	12	17	23	30	37	44	49
	Pressuredrop(Pa)	< 10	< 10	24	51	66	78	110

## Order Code:



Example: SLC-n-P/1000  
Standard color: RAL9010

# SG grille diffuser

■ **Characteristic:**

The shape is beautiful, and the narrow frame can meet various installation requirements. The frame is 15mm, meeting different decorative visual effects. The grid is fixed, and the grid spacing is only 12mm. The long strip splicing effect can also be made for large space office buildings. It can be used as the air outlet and return air outlet of the air conditioner, and can also be installed on the side wall or ceiling. It is widely used in high-end hotels, office buildings, home air-conditioning air supply/return outlets and other applications

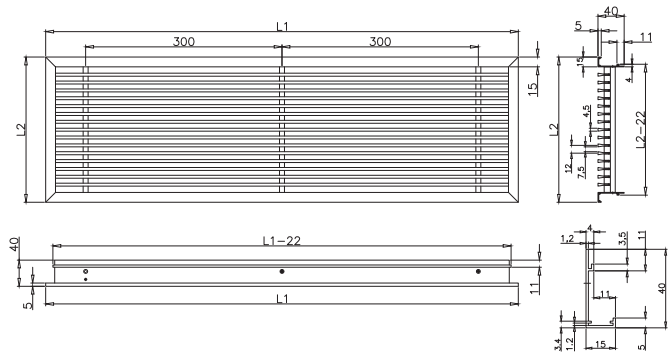
■ **Material:**

Aluminum alloy, surface electrostatic powder spraying, standard

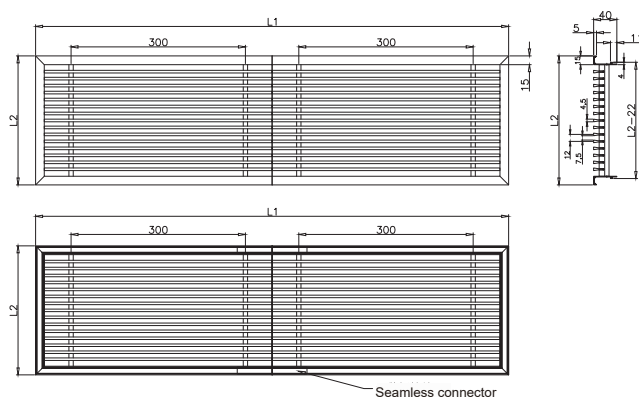
■ **Structure size:**

Face size=neck size+22, please consult KST factory for special size

■ **Install instruction:**

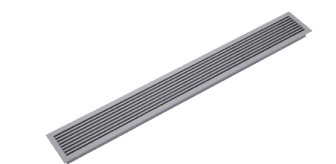


SG grille diffuser



Schematic diagram of seamless splicing of SG grille diffuser

■ **Order Code:**



SG/300×200  
size

Example: SG/300×300  
Standard color: RAL9010

Non standard size and color can be customized.  
For specific parameters, please consult our factory

# SLA linear diffuser

■ **Characteristic:**

The structure of the SLA linear diffuser is simple, low static pressure, low noise and beautiful appearance, slot is composed of two curved blades to form a perfect air outlet angle. One to five air outlet slots are available. The tuyere shall be an integral structure formed by stretching. No matter how many air outlet slots are used, there can be no seams in the middle. The air supply jet is stable and suitable for constant air volume or variable air volume air conditioning systems. Suitable for all kinds of ceiling installation with low total height, coordinate with variety of design style. Eliminate the temperature difference rapidly and decrease the air velocity, so make the indoor comfort.

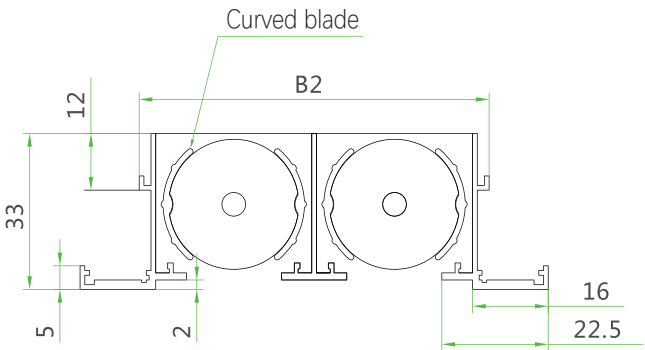


■ **Material:**

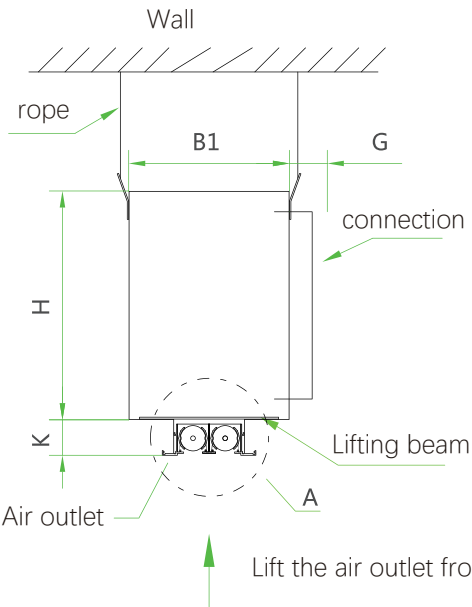
Air outlet is made of aluminum stretch profile, and the surface of gear and gear seat is made of engineering plastic for pretreatment and spraying according to RAL standard color. The standard color of air guide is black. Plenum box is galvanized, the surface is treated by electrostatic powder spraying, and the color is optional.

■ **Structure size:**

size	B1/mm	B2/mm	D	H/mm	G	K	W/mm
1	101	41	Ø125	185	40	40	65
2	135	75	Ø150	210	40	40	99
3	169	109	Ø200	260	40	40	133
4	203	143	Ø200	260	40	40	167
5	237	177	Ø250	310	40	40	201

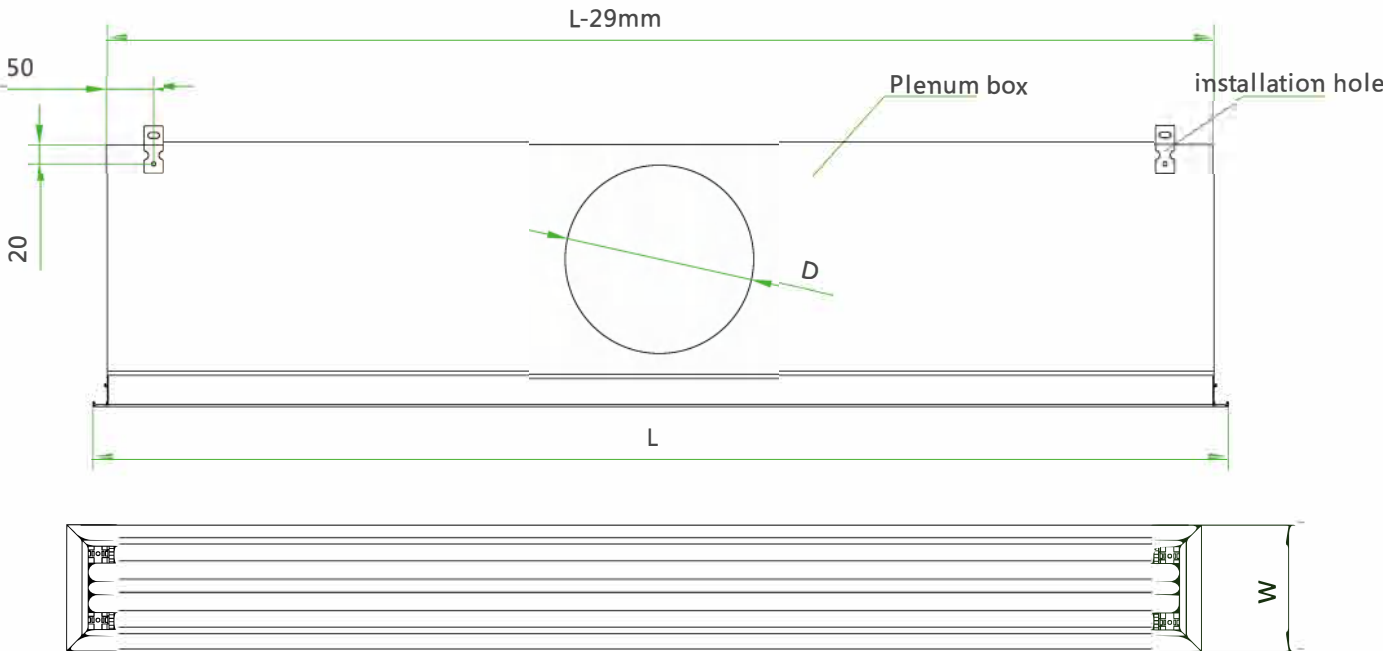


Section rendering





# SLA linear diffuser



## Technical Specification:

Size(per meter)								
1Slot	Air Volume(m³/h)	60	130	190	260	330	400	470
	Noise(NC)	<9	<10	<10	16	23	32	37
	Pressure drop(Pa)	<10	<10	<10	20	31	49	80
2Slots	Air Volume(m³/h)	90	200	300	400	510	620	730
	Noise(NC)	<10	<10	<10	17	25	33	41
	Pressuredrop(Pa)	<10	<10	<10	23	34	54	84
3Slots	Air Volume(m³/h)	140	310	470	630	790	950	1120
	Noise(NC)	<10	<10	12	19	27	36	43
	Pressure drop(Pa)	<10	<10	<10	34	43	66	97
4Slots	Air Volume(m³/h)	490	490	750	1010	1270	1530	1800
	Noise(NC)	12	17	23	29	37	42	48
	Pressuredrop(Pa)	<10	<10	24	49	66	76	108

## Order Code:



more than 5 slot can be customized

SLA-N-P / 1000  
L(mm)

Slot number n

Not e: The length selection via customers request

Plenum box

1  
2  
3  
4  
5

Example: SLA-n-P/1000  
Standard color : RAL9010

# LT Light troffer diffuser

## Characteristic:

KST LT Light troffer diffuser connected with lamps and lanterns provides a comfort and low noise air supply. Its adjustable guide vane can independently adjust the direction of the wind, can be adjusted according to the requirements of the indoor load assigned to each delivery of the space, also can adjust supply air flow direction, to ensure the best indoor air distribution. When the guide vane adjustment to supply air in level, it can ensure a good attached with the airflow effect, through making people stay in the air velocity that in a comfort range. This product has a stable supply air jet, strong induction , the supply air temperature and wind speed can be fast decreased, with large volume and low noise characteristics, especially suitable for the constant or variable air volume air conditioning system.

KST LT Light troffer diffuser is applicable to the height of 2.60 m to 4.00 m indoors, due to the height of the diffuser is very small, so it is suitable for installation in a low ceiling. Such diffuser can be conveniently connected with the standard grille lamps or LED flat panel lamp, the air outlet hidden in the sides of the lamps and lanterns for two inconspicuous gaps . Can be combined with any standard models of lamps and lanterns installation. Supply air diffuser direction can adapt to specific indoor conditions, before the product delivery, guide vane can be adjusted according to the requirements of users, if change the wind direction later, also can adjust on site.

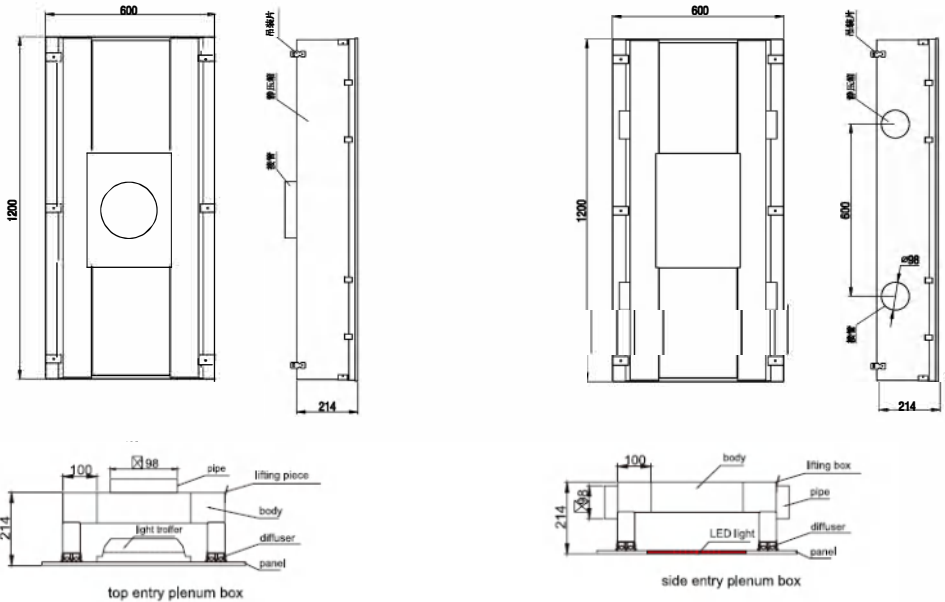
## Material:

Air outlet made of aluminum alloy material, the standard color is pure white powder coating (RAL9010), guide vane standard color is black (RAL9005), according to the need can also provide other surface treatment methods. Plenum box, panel and damper plates for galvanized steel sheet, rubber and plastic heat preservation material are used for insulation.

## Structure size:

KST LT Light troffer diffuser is composed of the wind trough, guide vane and static pressure box can match the circular or rectangular to connect the pipe, the pipe connected position is on the top or side, can choose according to user requirements about the inside insulation, outside insulation or no heat preservation material, also can according to user's request to match damper.

## Structure size:





# LT Light troffer diffuser

■ **Installment instruction:**

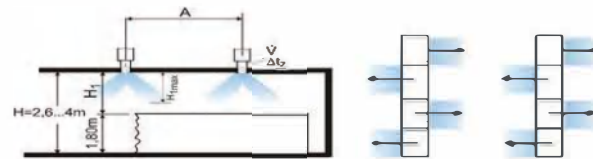
KST LT Light troffer can lugged on the static pressure box hanging on the ceiling, is suitable for the gypsum or aluminum alloy ceiling installation.

■ **Air adjusted direction:**

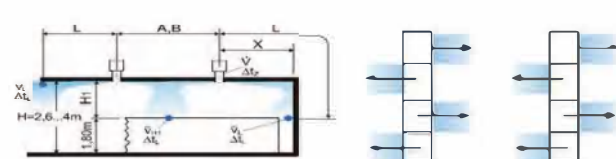
KST LT Light troffer air diffuser supply direction can choose horizontal, vertical, or other supply diagonal direction can be preset in the factory, or adjustment on site. Can use other tools or manual to regulate, and into the groove of diffuser slot, gently turn the guide vane, thus changing the flow direction.

■ **Airflow direction:**

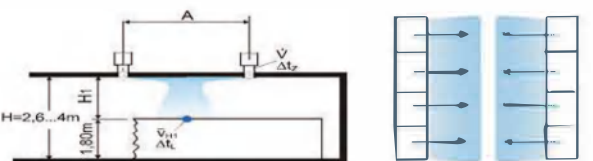
1.The cross air supply, diagonal



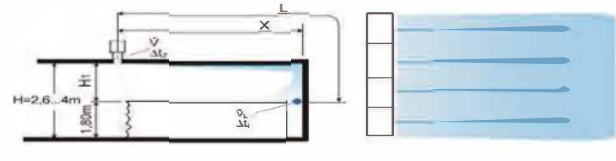
2.Cross air supply , level



3.Single supply, level



4.Single supply, level



■ **Technical Specification:**

Size								
1Slot	Air Volume(m3/h)	30	50	70	100	150	200	300
	Noise(NC)	<9	<10	20	25	38	45	65
	Pressuredrop(Pa)	2	5	15	20	45	80	180
2Slots	Air Volume(m3/h)	50	70	100	150	200	300	400
	Noise(NC)	<10	<10	<10	19	25	39	49
	Pressuredrop(Pa)	<5	<5	5	12	20	55	100
3Slots	Air Volume(m3/h)	70	100	150	200	300	500	700
	Noise(NC)	<10	<10	15	20	35	49	55
	Pressuredrop(Pa)	<5	<5	8	15	36	98	170
4Slots	Air Volume(m3/h)	/	/	200	300	500	700	900
	Noise(NC)	/	/	12	25	39	49	59
	Pressuredrop(Pa)	/	/	6	15	42	75	120



## Displacement ventilation diffuser

Displacement ventilation diffuser drives in an idea of energy saving in Europe is a comfortable form of supply air. It cut down the energy consumption for air-condition system considerably because it just only takes the occupied zone into consideration. The air that has been treated for heat and humidity is blown into the occupied zone by the displacement ventilation diffuser, then form a thin air layer by speeding through the floor for cool air. The heat come from occupants and equipment will float up under the effect of buoyancy and form convectional air. The dirty air is driven out from the exit at the top of the building. The momentum of supply air is low because of low velocity, so the fresh air would spread through the floor and form air lake. Temperature gradient and convectional gradient would occur due to convectional flow, so the dirty and heat air can be exhausted from the top of room. The temperature of exhausted air is higher than that of occupied zone, so it is with concentration. KST popularizes the technology of displacement ventilation in China at the early time. In addition to the existing standard type, we can also design custom products independently or in cooperation with customers to meet specific needs, according to customers' requirements. The displacement diffuser applied in industrial workshop, tall building, and places of higher requirements in energy saving and comfort.





# IDH air displacement vents units

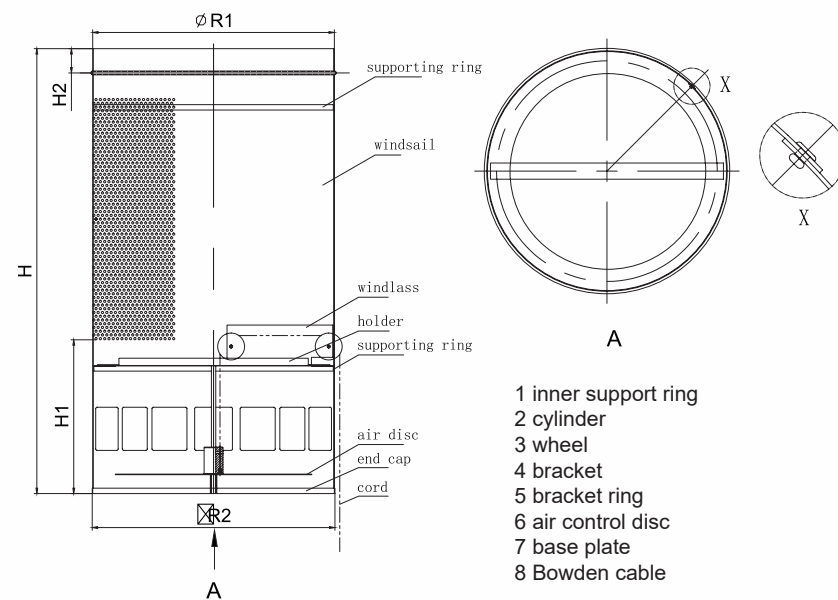
## Characteristic:

KST IDH air displacement vent units can be suspend in larger workshop, it is aesthetic and not need ground space, it is convenient for mechanical equipment pass through; they can satisfy the indoor changing thermal loads because the supply air temperature is larger than the general displacement, they can supply cold, hot air or isothermal air as needed flexibly. The air control can be adjusted manually using a chain pull or electronically with an actuator. When cooling (discharge of chilled air) the supply air has to be discharged horizontally with low velocity, when heating (discharged of warm air) the supply air has to be discharged vertically downwards. They are mainly used in the industrial areas with heights of 3 to 10m.

## Material:

Galvanized steel sheet cylinder, the surface for powder-coated.

## Structure size:

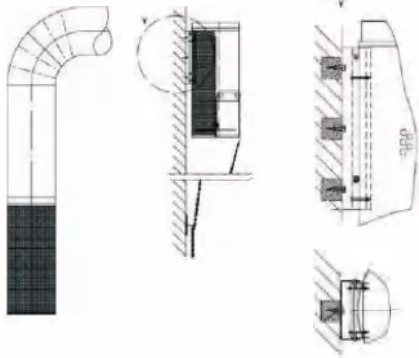


Size	IDH250	IDH355	IDH400	IDH450	IDH500	IDH560
$\Phi R1$	247	352	397	447	497	557
$\Phi R2$	250	355	400	450	500	560
H	829	829	829	829	829	829
H1	286	286	286	286	286	286
H2	45	45	45	45	45	45

# IDH air displacement vents units

## Installation instruction:

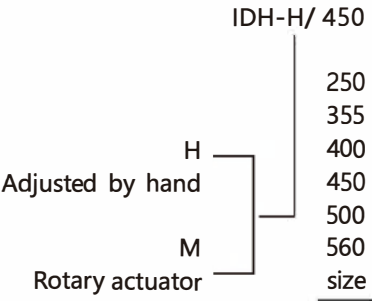
KST IDH air displacement vent units can be suspended ceilings or installed to walls. Suspending ceilings, connected to duct directly, make sure the duct is not less than the 2 times length of diffuser. Installed to walls, connected the top of the duct, the air displacement vent unit is located on the mounting frame from above and fitted to it with two screws.



## Technical Specification:

Size	Air Volume (m <sup>3</sup> /h)	Noise (NC)	Pressure drop (Pa)	Max penetration depth when supply warm air (m)
250	700	25	10	2.8
	1250	48	32	4.6
	2000	55	88	8.5
355	1250	22	10	4.2
	2500	48	42	6.2
	3500	53	85	10
400	1500	23	11	4.2
	2500	46	37	6.5
	4000	50	75	10.5
450	2000	22	12	4.2
	3500	45	35	6.8
	5000	49	78	10.8
500	2500	18	10	4.1
	4500	40	34	8.1
	6000	20	69	10.5
560	2500	16	8	4.1
	5000	42	35	8
	7000	18	68	11

## Order Code:



Example: IDH-H/450  
Standard color : RAL9010

# FDD air displacement vents units

## Characteristic:

KST IDH air displacement vent units is suitable for the public buildings such as the larger factory, or other places that require energy conservation and comfortable, the supply method is different from the diffuser that installed into ceilings or walls, supply the air from ground with lower velocity, which can make small noise. The supply temperature difference can be choice as needed. In this way fresh air can be came into the working area make people comfortable, the exhaust air will spread from the floor, spread upward when come across the barrier, at the same time take away the contamination and hazardous substance, finally discharge the muddy air and hazardous substance gathered the above of the space.

## Material:

The duct and the face consist of galvanized sheet; the filter and the air distribution bag consist of woven.

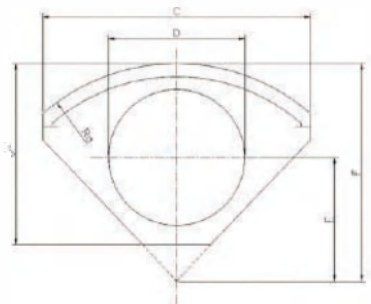
## Product form:

FDD according to the installation requirement, have three types 90°.180°.360°

## Installation:

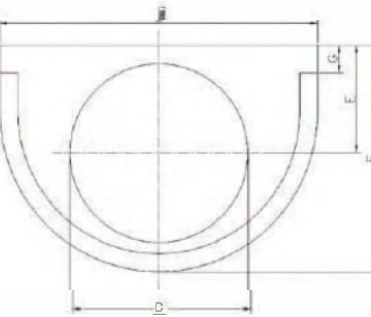
FDD-90 mainly installed at the corner of the wall, on the ground, duct top entry  
FDD-180 mainly installed on the side of the wall, on the ground, duct top entry  
FDD-360 mainly installed indoor room, not lean against the ground, duct top entry

## Dimension:



FDD - 90 :

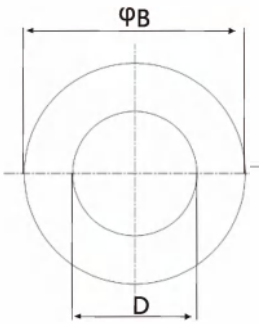
size	RB	C	D	E	F	G	H
400	400	568	248	320	500	342	750
600	600	851	398	445	700	492	1000
800	800	1134	448	620	900	542	1250
1000	1000	1416	498	795	1100	592	1500



FDD - 180 :

size	B	D	E	F	G	H
400	400	248	173	348	148	750
600	600	398	253	498	198	1000
800	800	448	262	570	170	1250
1000	1000	498	287	620	120	1500
1500	1500	628	352	864	120	1500
2000	2000	798	457	1114	120	2000

# FDD air displacement vents units

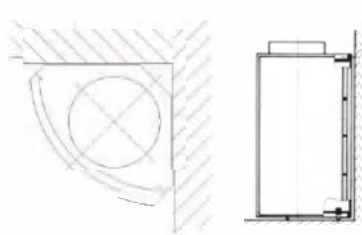


FDD - 360 :

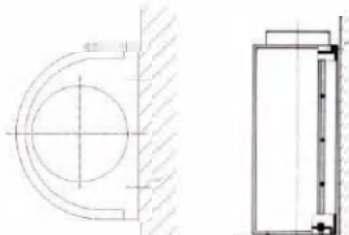
size	B	D	H
1000	1000	628	750
1500	1500	798	1000
2000	2000	998	1250
			1500

## Installation instruction:

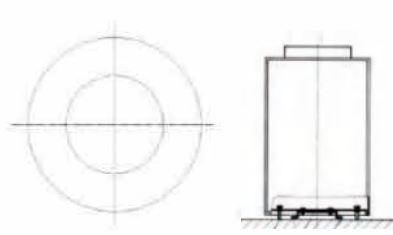
FDD-90 fixed on the wall with bolt, or not fixed when the higher is than 1000mm



FDD - 90



FDD - 180



FDD - 360

## Technical Specification:

FDD - 90 :

Size					
H		400	600	800	1000
750	Volume(m³/h)	750	1600	2000	2500
	Noise(NC)	<21	<21	<21	<21
1000	Volume(m³/h)	800	1700	2200	2700
	Noise(NC)	<21	<21	<21	22
1250	Volume(m³/h)	850	1800	2300	2900
	Noise(NC)	<21	<21	22	24
1500	Volume(m³/h)	950	2000	2500	3100
	Noise(NC)	<21	<21	24	26
2000	Volume(m³/h)	1000	2100	2700	3300
	Noise(NC)	<21	<21	25	27



# FDD air displacement vents units

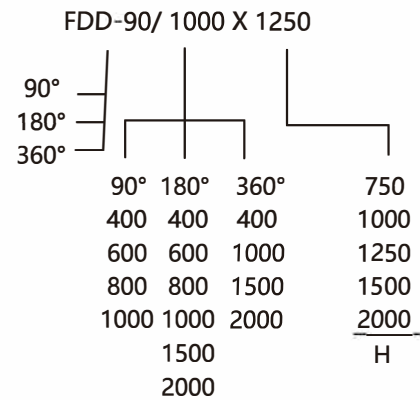
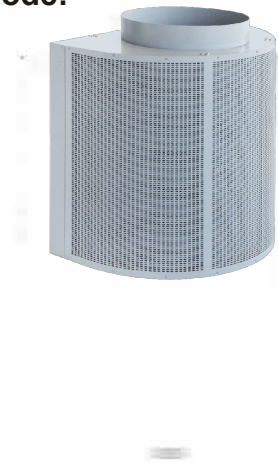
FDD - 180 :

Size							
H		400	600	800	1000	1500	2000
750	Volume(m³/h)	750	1600	2000	2500	3800	5600
	Noise(NC)	<21	<21	<21	<21	24	26
1000	Volume(m³/h)	800	1700	2200	2700	4200	6300
	Noise(NC)	<21	<21	<21	22	26	29
1250	Volume(m³/h)	850	1800	2300	2900	4400	6500
	Noise(NC)	<21	<21	22	22	27	30
1500	Volume(m³/h)	950	2200	2500	3100	4700	7100
	Noise(NC)	<21	<21	24	26	29	32
2000	Volume(m³/h)	1000	2100	2700	3300	5100	7600
	Noise(NC)	<21	23	25	27	31	33

FDD - 360 :

Size				
H		1000	1500	2000
750	Volume(m³/h)	4200	6600	9600
	Noise(NC)	26	29	32
1000	Volume(m³/h)	4600	7200	10700
	Noise(NC)	28	32	35
1250	Volume(m³/h)	4900	7700	11200
	Noise(NC)	30	33	36
1500	Volume(m³/h)	5300	8300	12200
	Noise(NC)	32	35	38
2000	Volume(m³/h)	5800	8800	13000
	Noise(NC)	33	37	39

## Order Code:



Example: FDD-90/1000X1250  
Standard color : RAL9010

# STD staircase swirl diffuser

## Characteristic:

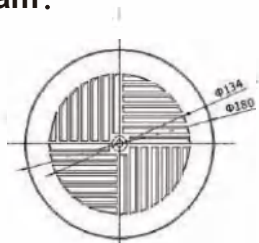
The staircase swirl diffuser is suitable for stepwise place, such as the concert hall, cinema, gymnasium etc. they can be installed into stepped surface or floors. Supply air horizontally or diffusely can be selection. The temperature differential can up to  $\pm 6^{\circ}\text{C}$ , can make the round or square face.



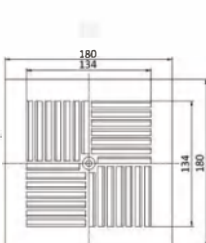
## Material:

The face and duct consist of galvanized steel sheet, and the surface is powder-coating.

## Structure diagram :



STD-structure diagram



STD-structure diagram

## Installation instruction :

1. 3 holes apart from 1200 to each other are drilled in the stair covering. The diameter of the hole depends on the type of the stair covering. The pipe is inserted into the opening in the stair covering, firmly fixed at the edges using the wood screw. The diffuser face fixed with the accessory center screw; embed the decorative cap into the recess of the screw head. (Figure 1)

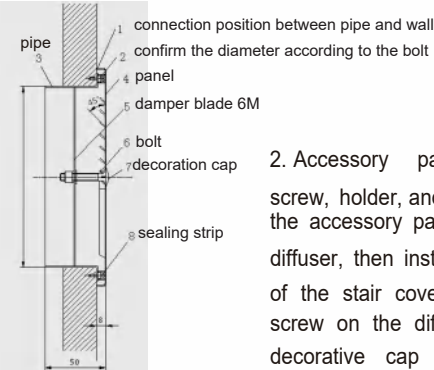


Figure 1

2. Accessory parts including center screw, holder, and decorative cap, install the accessory parts into the rear of the diffuser, then install them to the opening of the stair covering, tighten the center screw on the diffuser face, embed the decorative cap into the recess of the screw head. (Figure 2)

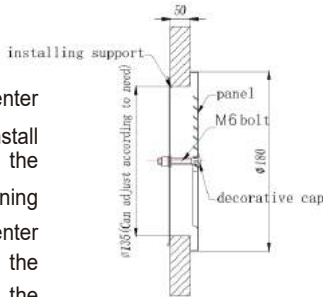
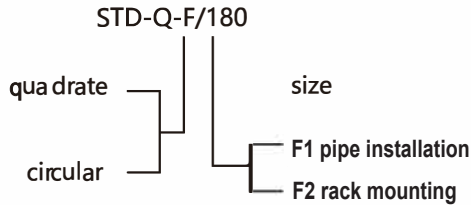


Figure2

## Technical specification :

Size							
180	Volume(m³/h)	30	35	45	60	70	90
	Duct Air velocity(m/s)	0.1	0.13	0.15	0.21	0.25	0.32
	Pressure drop(Pa)	5	8	11	18	23	42
	Noise(NC)	< 10	< 10	14	21	25	25

## Order Code:



Example: STD-Q-F1/180  
Standard color: RAL9010

BD floor diffuser

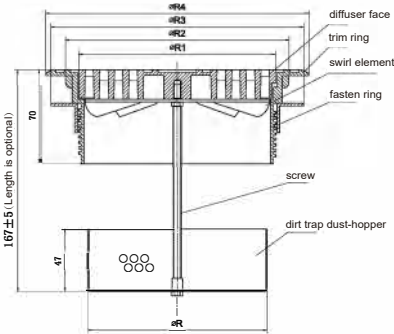
Characteristic:

KST BD floor diffuser can keep comfortable present in the occupied zone, such as the office; this design can avoid the local heat loads result in the air streams conduction caused by people or machinery, also can move along the work station, can adjust the air direction, not need plenum box, also with the dirt trap in order to clean.

Material:

The face consists of aluminum, electrophoresis finish; dirt trap consist galvanized steel sheet, powder-coating finish, swirl element air control damper consist of plastic.

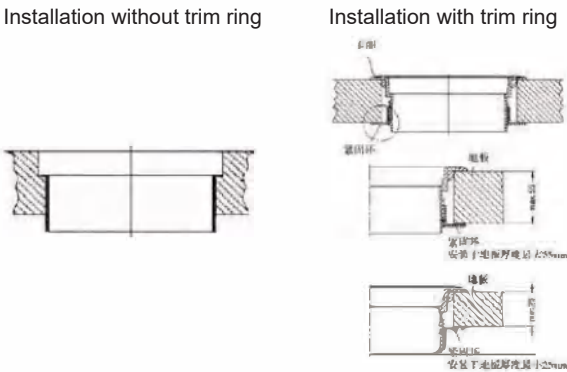
Structure size:



size	BD150	Bd200
ΦR	135	180
ΦR1	148	199
ΦR2	168	221
ΦR3	190	248
ΦR4	198	248

Installation instruction:

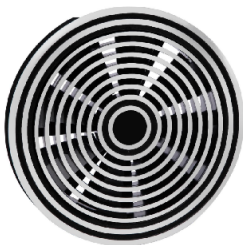
A trimming ring is not required for installation in false floors with hard material covering. A trimming ring is recommended for installation if false floors with carpeting due to edge better protection. Providing a fastener ring if buy the trimming ring, they can spin together through the screw of the trimming ring. They are only for tile thickness 25-55cm because the fastener ring and trim ring restricted by the adjust distance. The installation with or without trim ring are shown in the below



Technical Specification :

Size		The level of air supply				Vertical ventilation
		0.3m	0.9m	1.2m	1.5m	
200	Air Volume(m3/h)	58-100	76-126	90-150	108-180	36-108
	Noise(NC)	8-18	13-35	18-50	28-70	5-50
	Pressuredrop(Pa)	< 10-20	16-28	21-36	27-41	> 10-26

Order Code:



BD-A/ 200 (standard)  
150  
Dirt trap

Example: BD-A/200  
Aluminum natural color if have no requirement

USD seat diffuser

Characteristic:

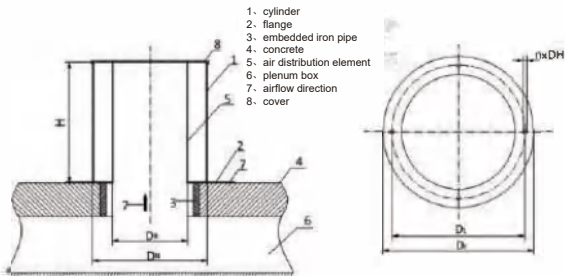
Supplying air of the seat displacement diffuser coordinate with the seat, is suitable for the area such as the cinema, art halls, gymnasium etc. the configuration is fit for the decoration style of the room, A wide variety of colors can be selected. The air column of the load-bearing seat can support the weight, can make the effect of the supplying air excellent and the installation location is subtle. It is character by the good air quality, energy conservation, comfortable, low noise based on the displacement principle. They can eliminate the local load rapidly, because the binocular construct and perforated sheet can make the air flow stable.

Material:

Load bearing seat consist of 3mm cold-roll steel sheet, common seat diffuser consist of 1.2mm cold-roll steel sheet. Flange connection to the ground.

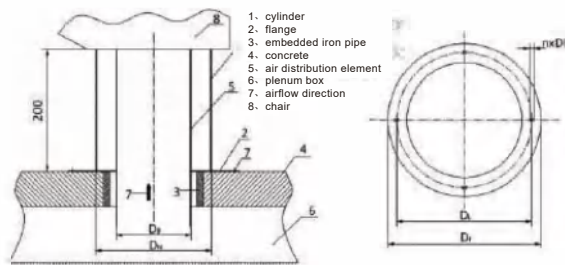
Structure size:

USD Common seat diffuser:



size	130	190	250
H	200	200	200
DN	130	190	250
DB	98	123	148
Dr	190	250	310
DL	160	220	280
n	4	4	4
DH	7	7	7

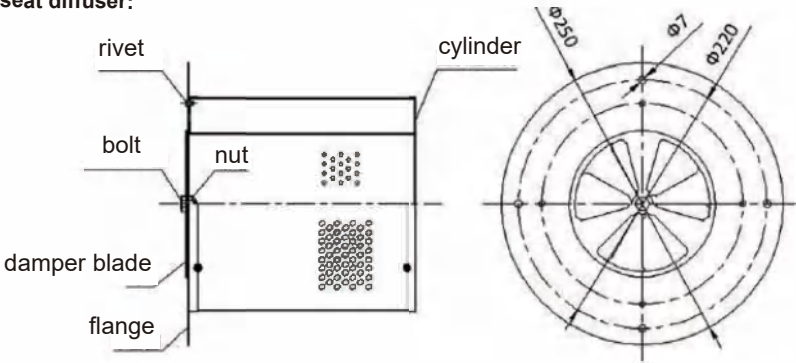
USD Load bearing seat diffuser:



size	130	190	250
DN	130	190	250
DB	98	123	148
Dr	190	250	310
DL	160	220	280
n	4	4	4
DH	7	7	7

Installation instruction:

USD Common seat diffuser:



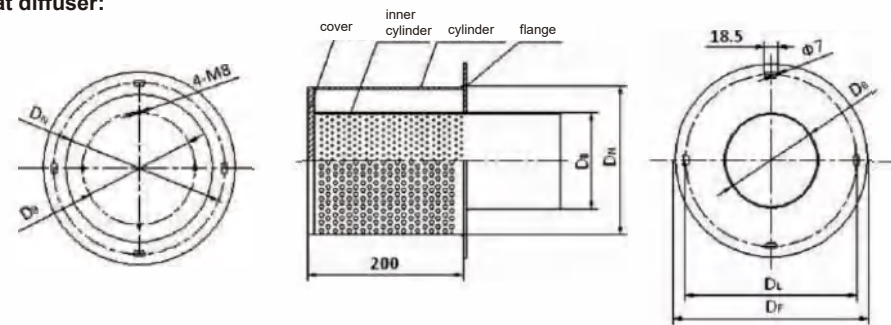
Remarks:  
1. Flange connects to cylinder with rivet, should not have gap between them.  
2. Blade connects to inner cylinder with screw, the blade can rotate by pushing with hand, and blade should stop rotate without force.



# USD seat diffuser

■ Installation instruction:

USD Load bearing seat diffuser:



Size	DN(mm)	DB(mm)	DF(mm)	DL(mm)
130	130	98	190	160
190	190	123	250	220
250	250	148	310	280

■ Technical Specification:

Size						
130	Volume(m³/h)	20	30	40	50	60
	Duct Air velocity(m/s)	0.09	0.12	0.16	0.2	0.28
	Noise(NC)	< 5	11	14	18	22
	Pressure drop(Pa)	7	16	19	32	45
190	Volume(m³/h)	40	50	60	70	80
	Duct Air velocity(m/s)	0.12	0.14	0.17	0.2	0.23
	Noise(NC)	6	12	16	19	23
	Pressure drop(Pa)	9	16	19	31	45
250	Volume(m³/h)	50	70	90	100	120
	Duct Air velocity(m/s)	0.07	0.11	0.14	0.16	0.19
	Noise(NC)	7	13	18	22	27
	Pressure drop(Pa)	14	23	35	41	50

■ Order Code:



USD-L/190X200

L	130	H (mm)
Load	190	
N	250	
Unload	直径	D (mm)

Example: USD-L/190X200  
Standard color: RAL9005

# GAL floor grille diffuser

■ Characteristic:

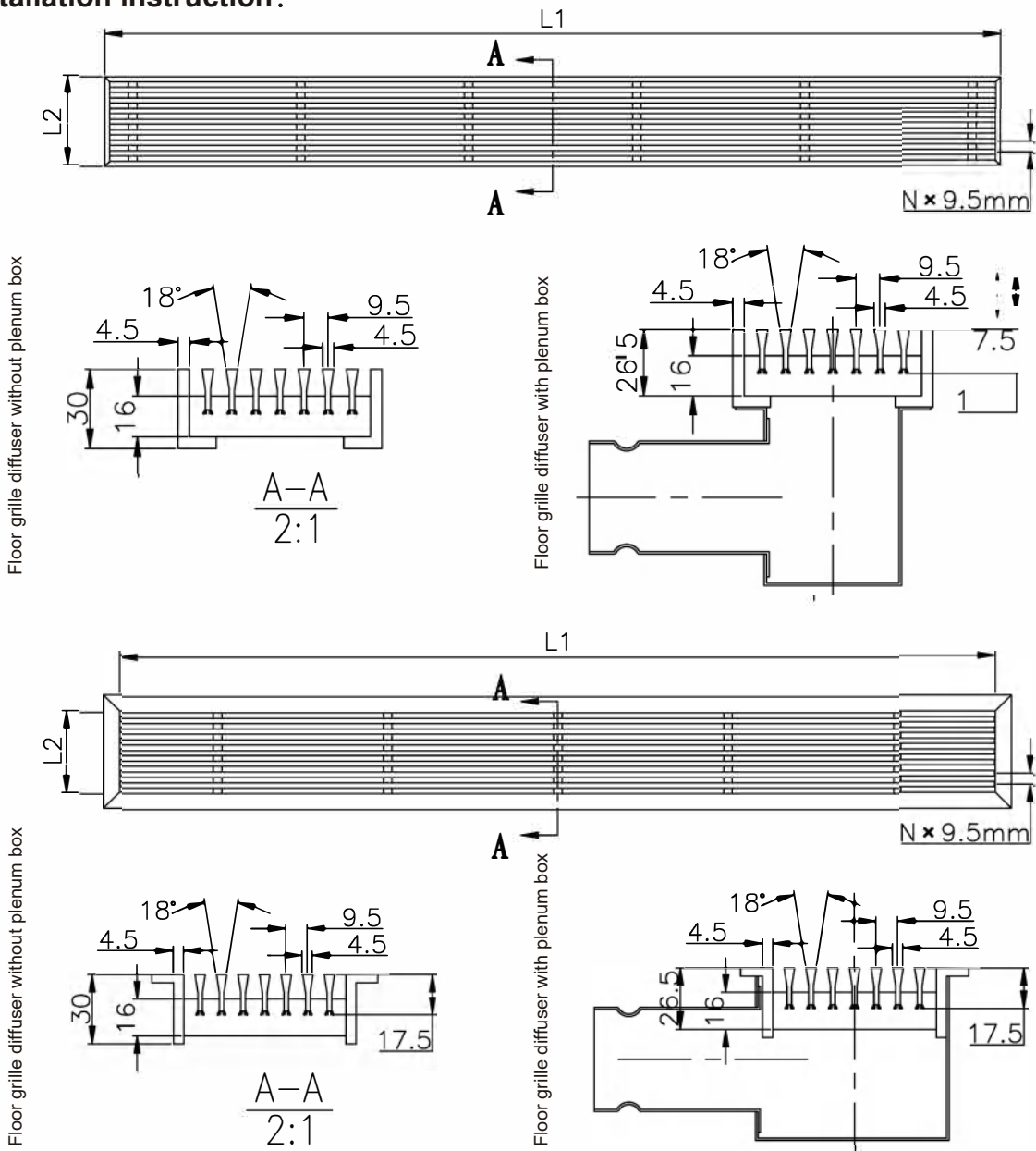
KST floor grille can be used to supply and exhaust air, also can supply air from the floor and walls, recommend dirt-trap if used for floor diffuser, can be easily dismantled with spring device, also can be mounted on masonry area, or mounted 90° angle, vertical and horizontal expand, then form large area grille, stable connection, easily dismant.

■ Material:

The face of the grille consists of extruded aluminum material, oxidation finish.



■ Installation instruction :



# GAL floor grille diffuser

■ Structure size:

L1	L2
800	80
900	90
1000	100
1100	
1200	

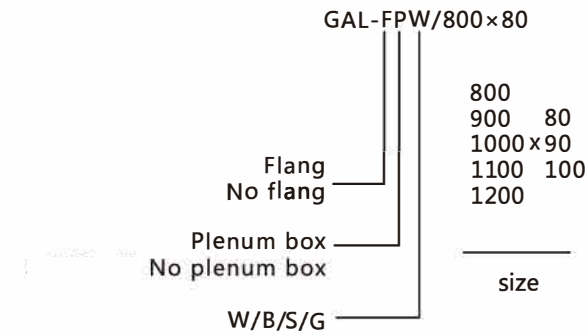
■ 颜色 :



■ Technical Specification:

Volume(m³/h)					
L1(mm)	800	900	1000	1100	1200
L2(mm)					
80	58	65	72	80	87
90	65	73	81	90	98
100	72	81	90	99	108

■ 选型代码 :



Example: GAL/0/75X10  
RAL9010 Standard color: RAL9010  
Non standard size and color can be customized.  
For specific parameters, please consult our factory

# AFD floor grille diffuser

■ Characteristic:

KST AFD floor grille is a specially customized winding lattice type special air outlet for floor air supply, which is applicable to places that emphasize the cleanliness and comfort of personnel's stay area, such as high-end office buildings, high-end home clubs, etc. The winding grille design is convenient for disassembly, installation and wide application. It can not only achieve good air supply effect, but also achieve excellent air quality, energy saving, comfort, low noise and other functions.



■ Material:

Air outlet the grille consists of aluminum alloy, oxidation finish; Plenum box consist of galvanize steel sheet, connector is flexible plastic.

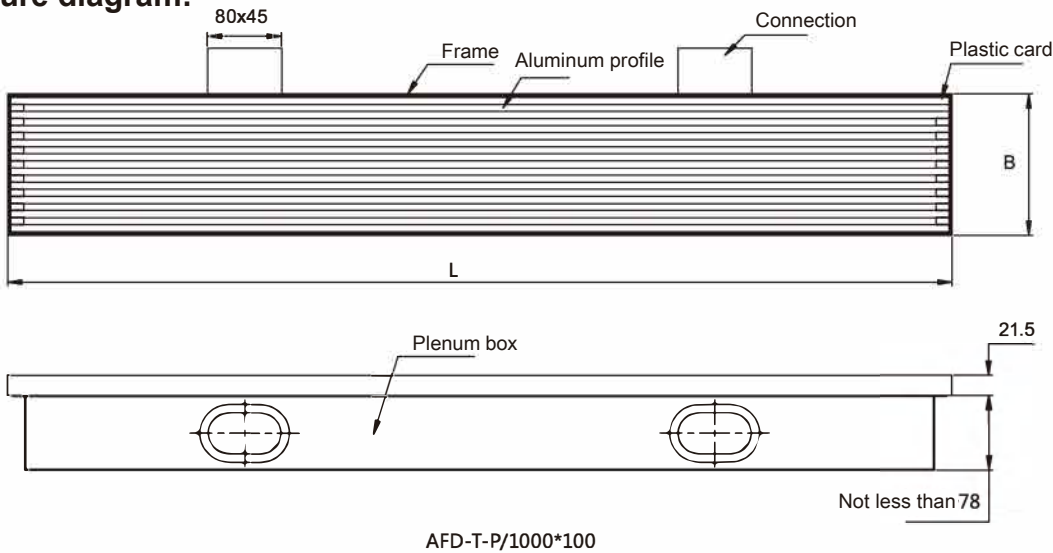
■ Technical Specification:

Volume(m³/h)		
100x800	150x1000	200x1500
72	135	270
Pressure drop(Pa)		
100x800	150x1000	200x1500
14	37	60
Noise(dB)		
100x800	150x1000	200x1500
16	24	31

■ Structure size:

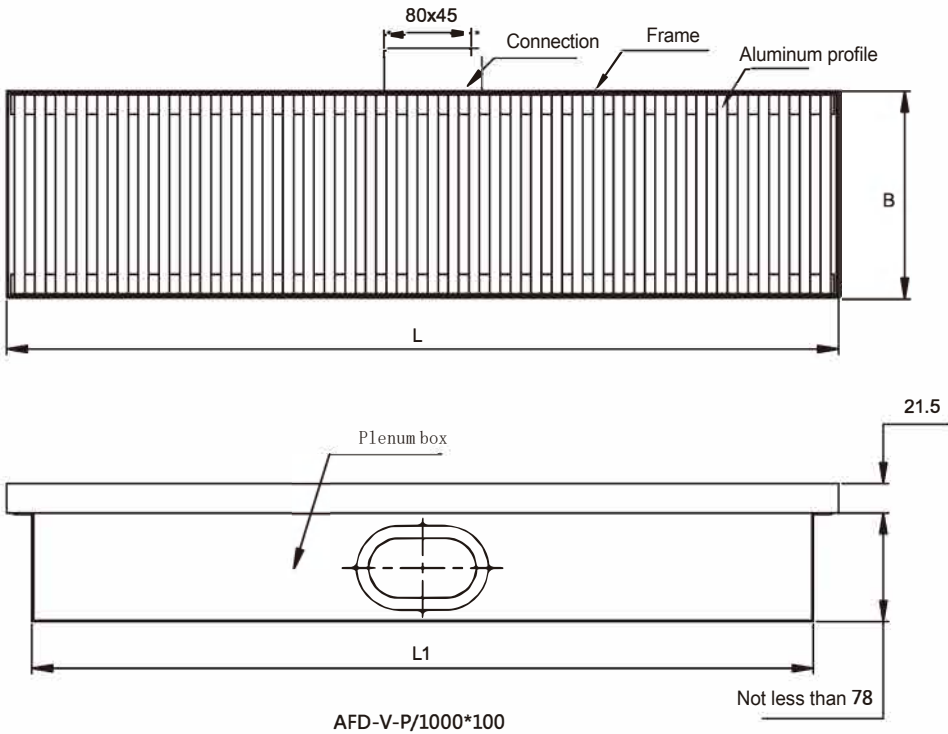
L	B
800	100
1000	150
1500	200

■ Structure diagram:

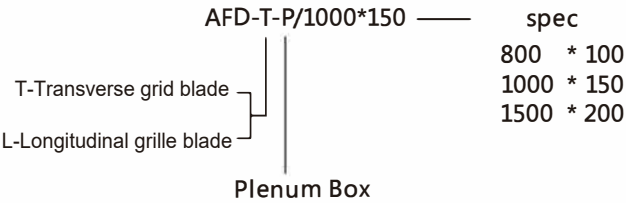
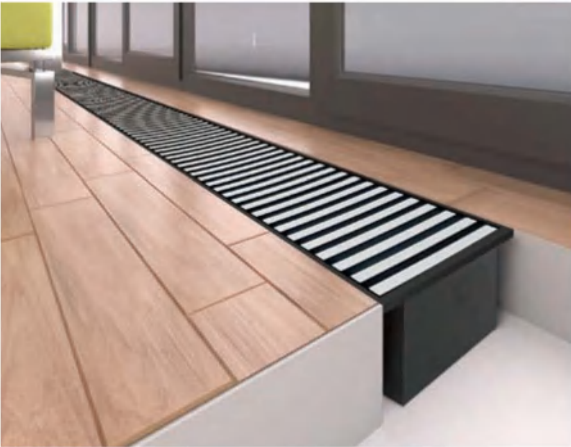




# AFD floor grille diffuser



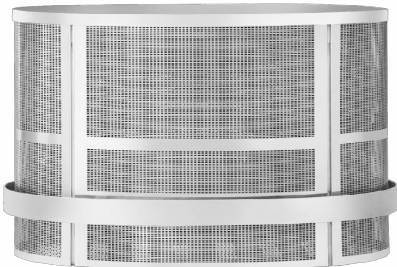
■ Order Code:



# IDD stainless displacement diffuser

■ Characteristic:

KST stainless displacement diffuser designed for large airport, which is suitable for high comfortable area, high energy efficient than common displacement diffuser, airport is a special area, mobility distribution, working area is rather far away from diffuser, so need high air velocity than common displacement diffuser, occupied zone is at the speed of 0.5m/s, but the velocity of people's ankle is less than 0.5m/s for the new design of the stainless displacement diffuser, from design to appearance, IDD not only take the requirements for air displacement distribution, adjustable in winter and summer, and removable elements such as the water collector inside and loudspeaker into consideration, but also take attention to the aesthetics and durable.



The following for IDD displacement diffuser(Xi'an XianYang airport)

■ Technical specification:

Velocity in summer ≤ 0.5m/s, velocity in winter ≤ 0.8m/s, size 2000×1800×800, all the plate can removable. Take mobility distribution into consideration, high velocity can meet the supply air effect.

■ Design characteristic:

1.Function

Air distribution element is at the bottom of the diffuser, so air flow with low speed when supply air from bottom, orifice plate has 42% holes.

2.Airflow adjust

More than 1200mm in the diffuser, with air volume adjustable element, in summer the element adjusted upward, ensure the velocity require, get airflow with low speed and noise. In winter the element adjusted downward, supply air area 60% of the summer, high velocity, compensate heat air flow upward.

3.Anti-collision facilities

Because of special requirement for the airport, increase fence with 10mm thickness stainless, at the same time make diffuser stronger, also take aesthetics and durable into consideration.

4.Special design

Set acoustics between diffuser to meet customer's special requirement, airport LOGO auspicious clouds on the plate, match with the decorative. KST can satisfy more customer individuation requirement.

# QD quadrate diffuser

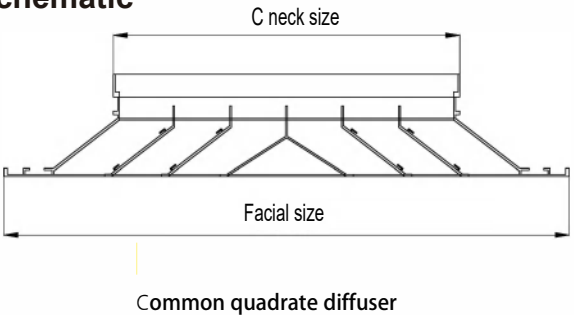
■ Characteristic:

KST QD square diffuser adopts a structure of separating the blade at the inner cone and the outer frame, which is convenient for installation and adjustment. It can be made into a four sided blowing air, and the blowing air flow belongs to the attached (horizontal) type.

■ Specification:

Common quadrate diffuser: Facial size = neck size + 123

■ Installation:schematic



QD quadrate diffuser

# CD circular diffuser

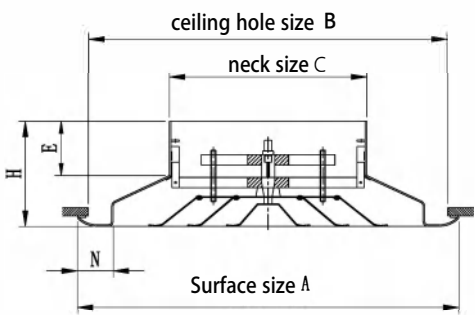
■ Characteristic:

KST CD circular diffusers include common circular diffuser and temperature-regulated type. The former supplies air from 45° direction, the three layers blade parallel to the frame, inner parts can be easy to dismounting. Common type can manually adjustable blade up and down. During the summer air supply is in horizontal and during the winter in vertical air supply. Temperature-regulated type adjusts blades up and down automatically by the warm feeling.

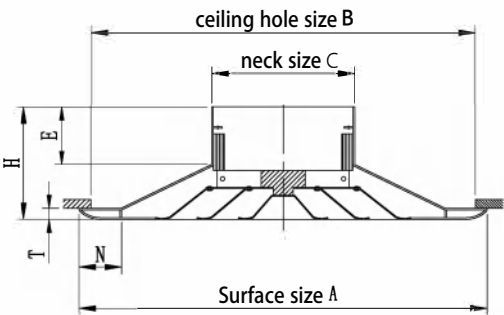


CD Common circular diffuser

■ Installation schematic:



CD Temperature controlled diffuser



CD Common circular diffuser

# CD circular diffuser

■ Technical Specification:

Neck size	A Facial size	B Facial size	E	H	T	N
150	338	286	80	125	15	35
200	438	376	80	135	20	40
250	520	456	80	145	20	40
300	600	530	80	155	25	45
350	708	625	80	165	25	50

# SVD single-layer shutter diffuser

■ Characteristic:

KST SVD single-layer shutter diffuser is suitable for all kinds of diffusers, used to supply and extract air, which can satisfy different decoration vision effect. it is suitable for supply and extract air of the indoor or hall also can be installed on the walls or ceilings.

SVD-A single-layer shutter diffuser

SVD-A-1



SVD-A-2



SVD-Bsingle-layer shutter diffuser (Blade inclination 24 ° )

SVD-B-1



SVD-B-2



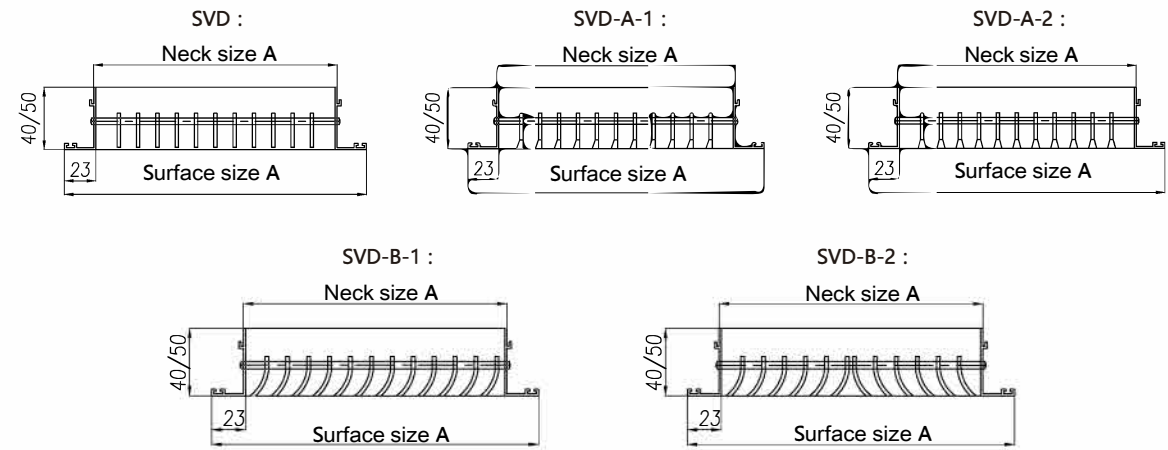


# SVD single-layer shutter diffuser

■ Structure size:

Facial size = neck size + 37

■ Installation schematic:



# ORD opened shutter inlet diffuser

■ Characteristic:

KST ORD opened shutter inlet diffuser is on the basis of ordinary shutter inlet added a border, the whole diffuser can be free adjust , is advantageous to the installation and supporting the use of filter, commonly used in the guest room and the hall's return air. Handle switch damper on both sides of the door, damper can be opened; we can take out the filter to clean. When it closed, as long as the damper on the both sides swing door bolt can be automatically locked, the appearance will be flat and level.



■ Special form:



■ Material and size:

Material: Aluminum alloy profiles.Surface treatment: electrostatic coating, paint or anodizing. Added attachments: R2 nylon screen, R3 aluminum screen.  
Size: when E = 23, surface size = neck size+ 37 When E = 32, surface size = neck size +54

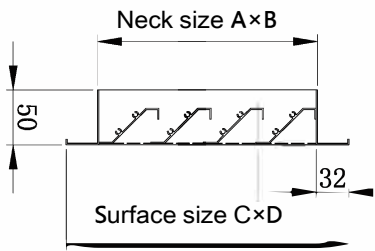
# WPRD waterproof shutter inlet diffuser

■ Characteristic:

KST WPRD waterproof shutter inlet diffuser have waterproof function, especially suitable for installation on the wall and basement room return air system, and the vane is fixed.



■ Installation schematic:



■ Order Code: WPRD /800X400

size

# FRD fixed shutter diffuser

■ Characteristic:

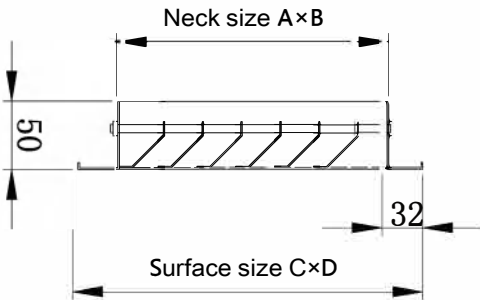
KST FRD fixed shutter diffuser is suitable for general office or return air places such as hotels, and the vane is fixed.

■ Material:

Aluminum alloy profiles, according to customer requirements tailored to galvanized steel material, surface treatment for high quality powder electrostatic spraying, and oxidation treatment can be applied to aluminum

■ Size:

surface size = neck size+ 54  
other size can also be in accordance with the set



# GR grille diffuser

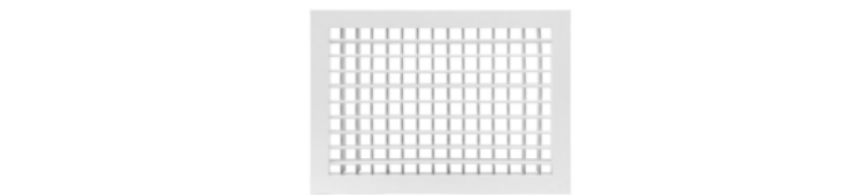
■ **Characteristic:**

KST GR grille diffuser is divided into two kinds of single grille diffuser and double grille diffuser; the vane can be free adjusted within the range 0 °to 180 °. It can get different air supply distance and different supply air angle and be used as inlet diffuser.

GR-1 single grille diffuser:

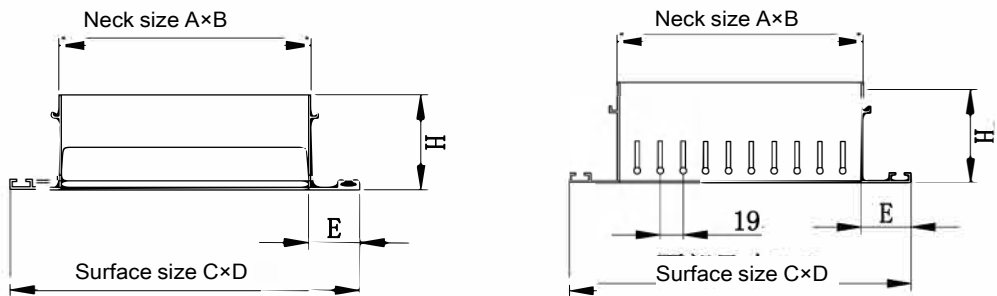


GR-2 double grille diffuser:

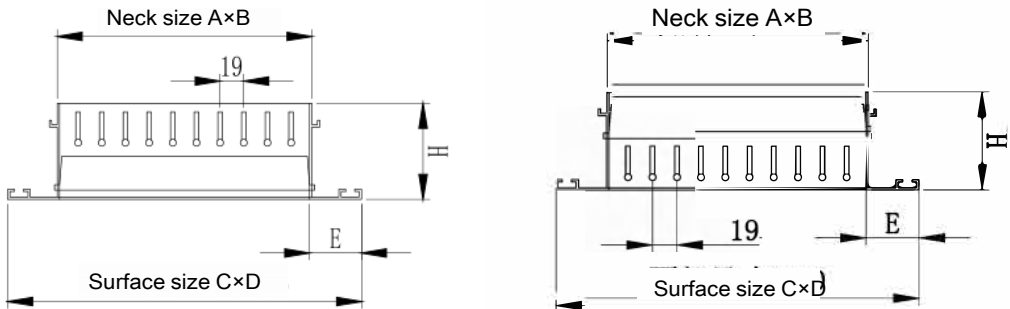


■ **Installation schematic:**

Single grille diffuser



Double grille diffuser



# GR grille diffuser

■ **Size:**

Single grille diffuser :  
Out edge width: 23 mm, 32mm  
When E=23, H=30 mm, surface size = neck size + 37; When E=32, H=30 mm, surface size = neck size+ 54. Other size can also be in accordance with the set.

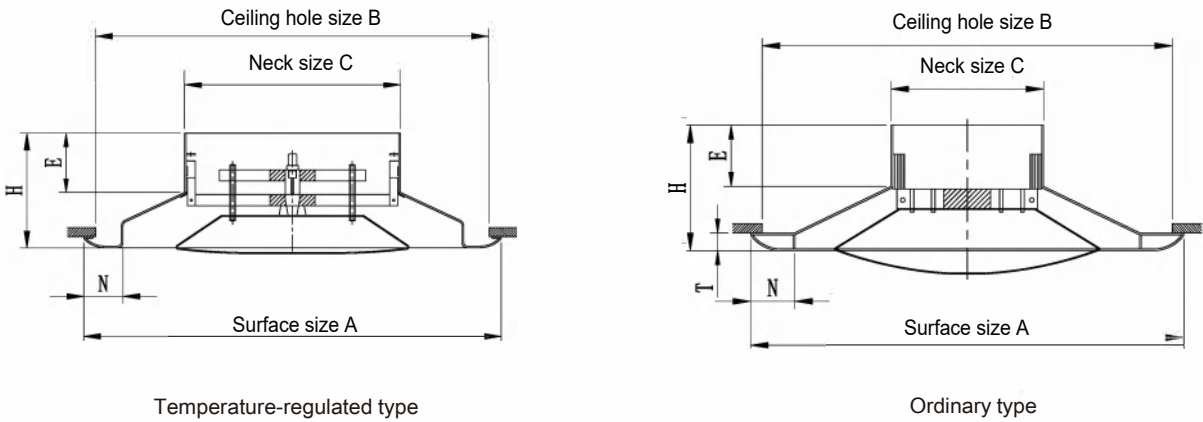


# RD disc diffuser unit

■ **Characteristic:**

KST RD disc diffuser unit is divided into temperature- regulated type and ordinary type. Temperature- regulated type can adjust the vane up and down automatically by the warm feeling; can get the best effect of air supply, ordinary type can also manually adjustable vane up and down.

■ **Installation schematic:**



■ **Technical Specification:**

Neck size	A Facial size	B Facial size	E	H	T	N
150	338	286	80	125	15	35
200	438	376	80	135	20	40
250	520	456	80	145	20	40
300	600	530	80	155	25	45
350	708	625	80	165	25	50



# FCF floor convert diffuser



## Characteristic:

In modern buildings, using convectors to realize the functions of refrigeration, heating and ventilation has become a more and more common way.

The FCF floor convector uses water as the medium to transmit heat, which makes the installation and laying of pipes easier. At the same time, the heat loss and power consumption in the system transmission process will also be significantly reduced and very low.

The unique air supply mode of FCF floor convector not only has the advantages of energy saving and environmental protection, but also can create a healthy and comfortable living environment for users and effectively ensure work efficiency and quality of life.

FCF floor convector skillfully installs the equipment in the mezzanine raised floor, which can not only flexibly and efficiently realize the purpose of refrigeration, heating and conveying fresh air, but also avoid the impact on the building structure, function and beauty of the room, and bring greater imagination and play space to the architects' design.

FCF floor convectors have all kinds of modern standardized shape design, which can be integrated with the interior decoration of the building, and a variety of operation control methods can meet the most personalized needs of users.

All FCF floor convectors can realize independent control, group control and wireless control by adopting the corresponding FC-CS room temperature control system, and can be connected to BAS building control system according to customer needs.



# FCF floor convert diffuser

With the rapid development of modern society, people have put forward higher and higher requirements for the coordination and unity of beauty and practicality of buildings. Therefore, architects require that the functions of heating and air conditioning systems are also improving accordingly. Especially when the glass curtain wall structure is adopted on a large scale in modern buildings, the application of a heating and air conditioning system that can give consideration to both beautiful appearance and air comfort is rapidly popularized, which is the floor convector (curtain wall air conditioning system).

FCF floor convector is a kind of heating and cooling equipment installed in the ground in an embedded way. It has built-in high-efficiency heat exchanger, powerful mute fan, aluminum alloy grille frame, and the height of the equipment can be adjusted freely.

FCF floor fan convector can be used with both heating and cooling functions, and has excellent performance under dry / wet conditions. Three series of FAF-C room ultra-thin floor convectors, FCF-B general comfortable floor convectors and FCF-C curtain wall strong floor convectors. Coordinated use can meet the personalized needs of various architectural patterns in the building. At the same time, in order to meet the needs of people in the building for fresh air, each equipment can be equipped with an optional fresh air access.

KST FCF floor convector series products can integrate four functions of refrigeration / heating / circulating fresh air. The special control system can be used in conjunction with the floor convector to provide a variety of flexible control modes. Individual control, group control, stepless speed regulation control and wireless remote control can meet the different needs of users.



## Applicable buildings:

➤ Offices and administrative areas ➤ commercial areas ➤ Lobby and foyer ➤ Exhibition venue ➤ Places requiring rapid heating and cooling

## Product advantages:

➤ Easy installation, quick connection of equipment heating and cooling ➤ Powerful, installed inside the raised floor ➤ Customized scheme based on site conditions ➤ Optional external fresh air equipment connection ➤ Fan can be optional stepless or three levels control dry/wet ➤ Optimum operating condition ➤ Exquisite and elegant appearance

## Order Code:



FCF C35·1250(F)-4R		:2 pipes 4:4 pipes
长度	F: New	L: Left R: Right
1250:1250mm		
2000:2000mm		
2750:2750mm		
高度	宽度	
A:95mm	30:300mm	
B:130mm	35:350mm	
C:150mm	40:400mm	
D:200mm		

FCF floor convert diffuser

Technical Specification:

Series of FCF-A

Performance Model			FCF-A28-1250					FCF-A28-1600					FCF-A28-2000				
Volume		m³/h	V	IV	III	II	I	V	IV	III	II	I	V	IV	III	II	I
cooling capacity W	Total heat	5/13°C	721	680	612	565	488	1082	1020	918	848	732	1442	1360	1224	1130	976
		7/12°C	714	675	604	556	476	1071	1013	906	834	714	1428	1350	1208	1112	952
		16/18°C	328	311	278	256	219	493	466	417	384	328	657	621	556	512	438
	sensible heat	5/13°C	548	517	465	429	371	822	775	698	644	556	1096	1034	930	859	742
		7/12°C	528	500	447	411	352	793	749	670	617	528	1057	999	894	823	704
		16/18°C	328	311	278	256	219	493	466	417	384	328	657	621	556	512	438
heating capacity W		90/70°C	1884	1781	1594	1467	1256	2826	2672	2391	2201	1884	3768	3562	3187	2934	2512
		80/60°C	1565	1479	1324	1218	1043	2347	2219	1986	1828	1565	3129	2959	2647	2437	2086
		70/50°C	1245	1177	1053	969	830	1867	1765	1580	1454	1245	2490	2354	2106	1939	1660
		60/50°C	1085	1026	918	845	724	1628	1539	1377	1268	1085	2171	2052	1836	1690	1447
		55/45°C	925	875	783	720	617	1388	1312	1174	1081	925	1850	1749	1565	1441	1234
Input power W			14	12	10	8	7	21	18	15	12	11	28	24	20	16	14
Noise dB(A)			36	34	31	<30	<30	38	36	32	<30	<30	39	36	33	31	<30
Water flow m³/h	cooling	0.125	0.118	0.106	0.097	0.083	0.188	0.177	0.159	0.146	0.125	0.250	0.237	0.212	0.195	0.167	
	heating	0.095	0.090	0.080	0.074	0.063	0.143	0.135	0.121	0.111	0.095	0.190	0.180	0.161	0.148	0.127	
Water resistance KPa	cooling	6	6	5	5	5	9	9	8	8	7	14	13	13	12	12	
	heating	5	5	5	4	4	8	8	7	7	6	12	12	12	11	11	
Weight kg			21					26					32				
L×W×H (mm)			1250*280*95					1600*280*95					2000*280*95				

Notes A: AC motor E: DC motor III: mid-speed V: high-speed

Series of FCF-B

Performance		FCF-B30-1250					FCF-B30-2000					FCF-B30-2750						
		V	IV	III	II	I	V	IV	III	II	I	V	IV	III	II	I		
Volume	m³/h	260	220	180	150	120	520	440	360	300	240	780	660	540	450	360		
cooling capacity W	Total heat	5/13°C	1329	1180	1040	926	730	2658	2360	2080	1852	1460	3987	3540	3120	2778	2190	
		7/12°C	1302	1157	1015	903	708	2604	2314	2030	1806	1416	3906	3471	3045	2709	2124	
		16/18°C	599	532	467	415	326	1198	1064	934	831	651	1797	1597	1401	1246	977	
	sensible heat	5/13°C	1010	897	790	704	555	2020	1794	1581	1408	1110	3030	2690	2371	2111	1664	
		7/12°C	963	856	751	668	524	1927	1712	1502	1336	1048	2890	2569	2253	2005	1572	
heating capacity W		16/18°C	599	532	467	415	326	1198	1064	934	831	651	1797	1597	1401	1246	977	
		90/70°C	3435	3053	2678	2383	1868	6871	6106	5356	4765	3736	10306	9158	8034	7148	5604	
		80/60°C	2853	2536	2224	1979	1552	5707	5071	4449	3958	3103	8560	7607	6673	5937	4655	
		70/50°C	2270	2017	1770	1574	1234	4540	4034	3539	3149	2469	6810	6051	5309	4723	3703	
		60/50°C	1979	1759	1543	1373	1076	3958	3517	3086	2745	2152	5937	5276	4628	4118	3228	
		55/45°C	1687	1499	1315	1170	917	3374	2999	2631	2340	1835	5061	4498	3946	3510	2752	
		Input power W		13	11	9	8	6	26	22	18	16	12	39	33	27	24	18
		Noise dB(A)		37	35	32	<30	<30	38	36	33	<30	<30	39	36	33	31	<30
		Water flow m³/h	cooling	0.228	0.203	0.178	0.158	0.124	0.456	0.406	0.356	0.317	0.248	0.685	0.608	0.534	0.475	0.372
			heating	0.173	0.154	0.135	0.120	0.094	0.347	0.308	0.270	0.241	0.189	0.520	0.462	0.406	0.361	0.283
Water resistance KPa	cooling	9	9	8	8	7	13	13	12	11	10	17	16	16	15	14		
	heating	8	8	7	7	6	11	11	10	10	9	16	15	15	14	12		
Weight	kg	28					44					61						
L×W×H (mm)		1250*300*130					2000*300*130					2750*300*130						

Notes A: AC motor E: DC motor III: mid-speed V: high-speed

FCF floor convert diffuser

Series of FCF-C

Performance			FCF-C35-1250					FCF-C35-2000					FCF-C35-2750				
Volume    m³/h			V	IV	III	II	I	V	IV	III	II	I	V	IV	III	II	I
cooling capacity W	Total heat	5/13°C	1887	1712	1571	1304	1067	3774	3424	3142	2608	2134	5661	5136	4713	3912	3201
		7/12°C	1856	1685	1536	1284	1046	3712	3370	3072	2568	2092	5568	5055	4608	3852	3138
		16/18°C	854	775	707	591	481	1708	1550	1413	1181	962	2561	2325	2120	1772	1443
	sensible heat	5/13°C	1434	1301	1194	991	811	2868	2602	2388	1982	1622	4302	3903	3582	2973	2433
		7/12°C	1373	1247	1137	950	774	2747	2494	2273	1900	1548	4120	3741	3410	2850	2322
		16/18°C	854	775	707	591	481	1708	1550	1413	1181	962	2561	2325	2120	1772	1443
heating capacity W		90/70°C	4897	4446	4053	3388	2760	9794	8892	8106	6776	5520	14692	13338	12159	10164	8280
		80/60°C	4067	3693	3366	2814	2292	8135	7385	6732	5628	4585	12202	11078	10098	8442	6877
		70/50°C	3236	2938	2678	2239	1824	6472	5875	5356	4477	3647	9707	8813	8034	6716	5471
		60/50°C	2821	2561	2335	1952	1590	5642	5122	4669	3903	3180	8463	7684	7004	5855	4770
		55/45°C	2373	2183	1990	1664	1355	4747	4367	3981	3328	2711	7210	6550	5971	4992	4066
Input power W			30	20	15	13	10	60	40	30	26	20	90	60	45	39	30
Noise dB(A)			48	46	42	39	35	50	47	44	40	36	51	48	45	42	38
Water flow m³/h	cooling	0.325	0.295	0.269	0.225	0.183	0.651	0.591	0.538	0.450	0.367	0.976	0.886	0.808	0.675	0.550	
	heating	0.247	0.224	0.205	0.171	0.139	0.494	0.449	0.409	0.342	0.279	0.742	0.673	0.614	0.513	0.418	
Water resistance KPa	cooling	13	12	12	11	10	18	18	17	16	16	20	19	18	17	16	
	heating	11	11	11	10	9	17	16	16	15	14	17	17	16	16	15	
Weight    kg			35					55					75				
L×W×H (mm)			1250*350*150					2000*350*150					2750*350*150				

Notes A: AC motor E: DC motor III: mid-speed V: high-speed

Series of FCF-D

Performance			FCF-D40-1250					FCF-D40-2000					FCF-D40-2750						
Volume m³/h			V	IV	III	II	I	V	IV	III	II	I	V	IV	III	II	I		
cooling capacity W	Total heat	5/13°C	2897	2720	2430	2180	1866	5794	5440	4860	4360	3732	8691	8160	7290	6540	5598		
		7/12°C	2780	2606	2323	2080	1771	5560	5212	4646	4160	3542	8340	7818	6969	6240	5313		
		16/18°C	1279	1199	1069	957	815	2558	2398	2137	1914	1629	3836	3596	3206	2870	2444		
	sensible heat	5/13°C	2202	2067	1847	1657	1418	4403	4134	3694	3314	2836	6605	6202	5540	4970	4254		
		7/12°C	2057	1928	1719	1539	1311	4114	3857	3438	3078	2621	6172	5785	5157	4618	3932		
		16/18°C	1279	1199	1069	957	815	2558	2398	2137	1914	1629	3836	3596	3206	2870	2444		
heating capacity W		90/70°C	7721	7238	6452	5777	4919	15443	14476	12904	11554	9838	23164	21714	19356	17331	14757		
		80/60°C	6413	6012	5359	4798	4085	12826	12023	10718	9596	8171	19239	18035	16076	14395	12256		
		70/50°C	5102	4783	4263	3817	3250	10204	9565	8526	7634	6500	15306	14348	12790	11452	9750		
		60/50°C	4448	4170	3717	3328	2834	8896	8339	7434	6656	5667	13344	12509	11150	9984	8501		
		55/45°C	3792	3555	3169	2837	2416	7584	7109	6337	5674	4831	11376	10664	9506	8512	7247		
Input power W			50	42	34	28	22	100	84	68	56	44	150	126	102	84	66		
Noise dB(A)			49	47	44	40	37	51	48	46	42	39	52	59	47	43	40		
Water flow m³/h	cooling	0.487	0.457	0.407	0.365	0.310	0.974	0.913	0.814	0.729	0.621	1.462	1.370	1.221	1.094	0.931			
	heating	0.390	0.365	0.326	0.292	0.248	0.780	0.731	0.651	0.583	0.497	1.169	1.096	0.977	0.875	0.745			
Water resistance KPa	cooling	17	17	16	16	15	24	24	23	22	21	26	25	25	24	23			
	heating	16	16	15	14	13	22	22	21	20	19	25	24	23	23	21			
Weight kg		42						65						88					
L×W ×H (mm)			1250*400*200						2000*400*200						2750*400*200				



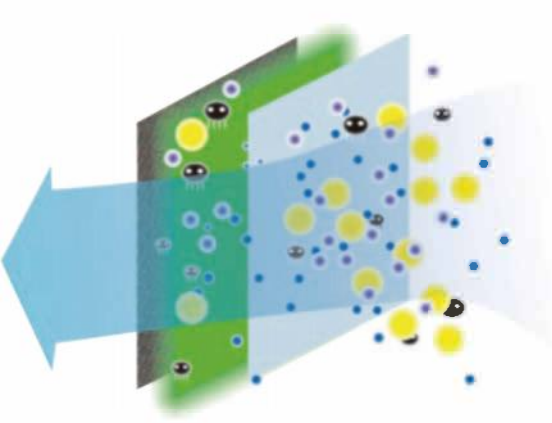
# PSG Purified return air diffuser

## Characteristic:

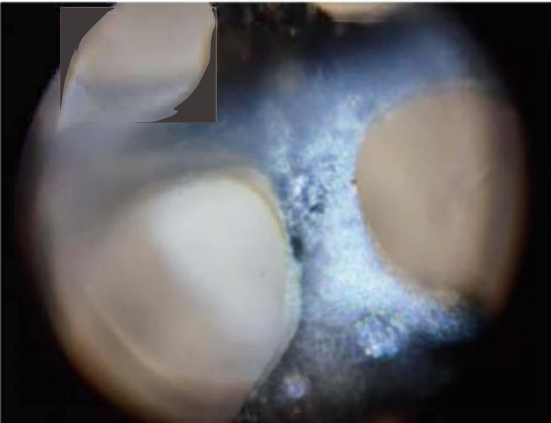
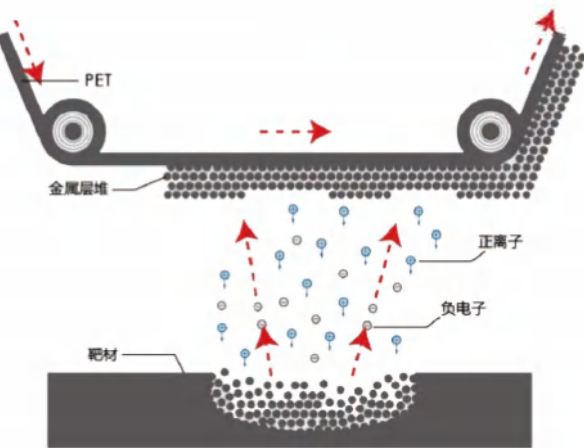
KST PSG purification air return is composed of patented purification materials that can quickly decompose viruses and bacteria, with KST SG grille diffuser. It solves the problems of high wind resistance and poor purification effect of activated carbon and other materials in the purification system. The patented technology of magnetic control catalytic oxygen vacancy is used to decompose harmful substances such as bacteria, viruses and formaldehyde, which are combined with the air return outlet of the air conditioner. It is applied to the return air of the indoor unit of the traditional air conditioner to purify the indoor environment. For the post epidemics, the installation is simple, the replacement is convenient, and the application range is wide.

## Purification principle:

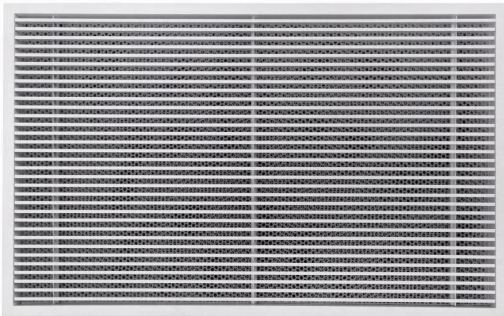
Through patented technology, the catalytic oxygen vacancy phenomenon at room temperature is realized. Through the catalytic reduction reaction in nano form, the oxygen atoms "O" and "O2" are constantly transformed into each other. Because the oxygen atom "O" is extremely active, it has the characteristics of rapid attachment to other substances, combined with the instantaneous destruction of the molecular chain of other substances, so as to achieve the effect of rapid decomposition of harmful substances. Long service life and only quantitative bonds can not produce secondary pollutants such as ozone and nitrogen oxides. A two-component structure is designed, which is equipped with slow-release inorganic salts and plant extracts, and forms a gaseous barrier around the two layers of materials driven by gas, which can quickly decompose organic compounds and inactivate bacterial viruses.



(The two-component intermediate layer forms a protective barrier, and harmful substances are decomposed when passing through)



(Image of material surface under microscope)



# PSG Purified return air diffuser

## Test report:



## Order Code:

PSG/W\*H  
W is the width  
H is the height

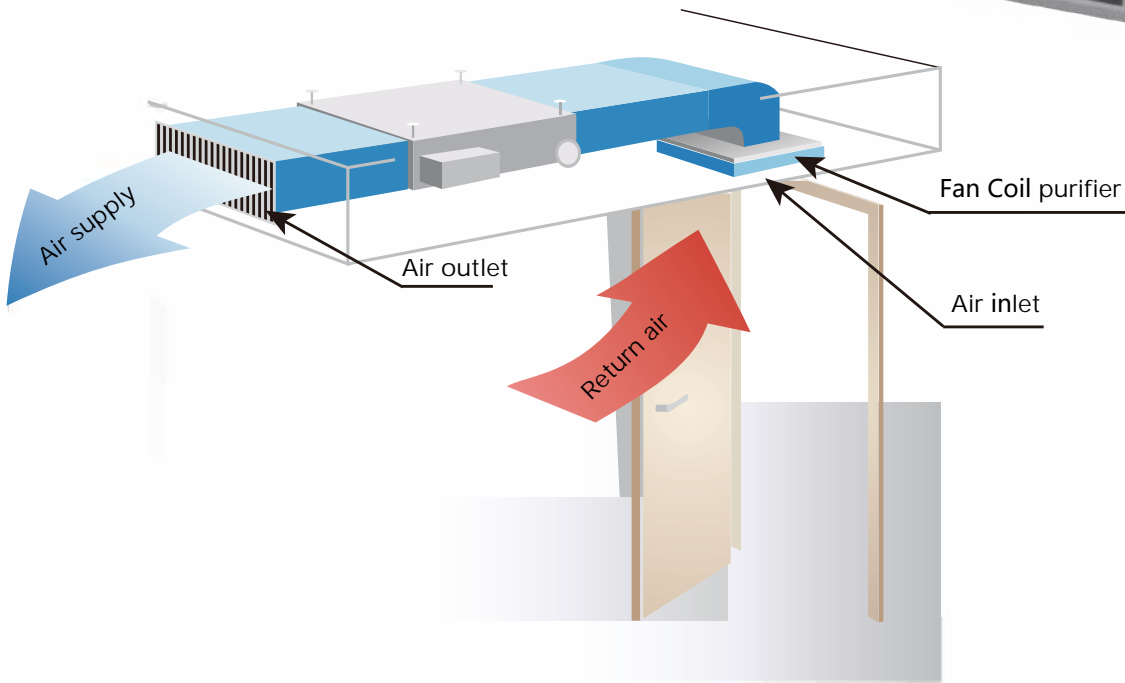


EF micro electrostatic return air purifier

Characteristic:

"Micro electrostatic" purification technology, no consumables, no noise, no ozone, can remove 99% of PM2.5, methanal, influenza virus and other air pollutants. At the same time, the wind resistance is small and energy-saving, so as to protect the surface cooler of fan coil or air-conditioning box, and avoid the dirty and blocked rabbit coil and reduce the heat exchange.

The honeycomb structure of micro electrostatic filter also greatly improves the dust capacity, doubles the absorption area, and the purification effect is more remarkable. KST EF micro electrostatic return air purifier can concealed in return air inlet of central air-conditioning without destroying decoration and occupying floor space, can be applied to both fluorine and water systems



MESP Technology

0 material consumption

low energy consumption

Remove methanal dust and bacteria

Low pressure drop

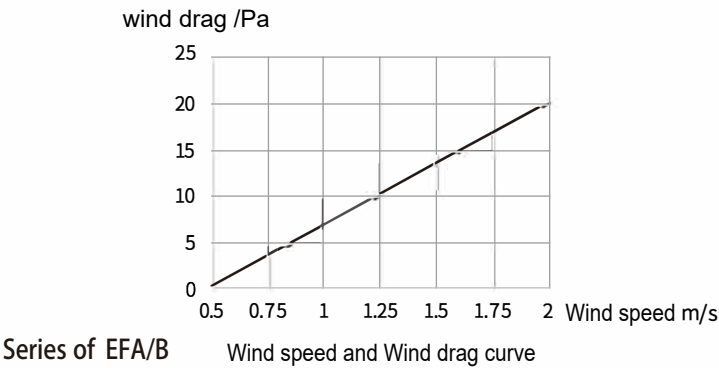
3-D air circulation

Product executive standard:

- GB 15982-2012;
- WS/T 648-2019;
- 《Technical specification for disinfection》 (Ministry of Health ,2002);
- Q31/0113000146C002-2021(1);
- GB/T 34012-2017;
- GB 4706.1-2005;
- GB 4706.45-2008(2)。

EF micro electrostatic return air purifier

Resistance curve:



Technical Specification:

Product Model	EF03A	EF05A	EF06A	EF08A
Overall Dimensions(L*W*T mm)	660*241*90	960*241*90	1170*241*90	1470*241*90
Applicable Air Volume(m³/h)(@0.5-1-1.5m/s)	170~340~510	280~570~850	340~690~1020	460~920~1360
PM2.5 One-time Purification Efficiency (@0.5-1-1.5m/s)	98-93-90%			
Microorganism PurificationEfficiency (@1.25m/s)	≥90%			
Pressure Drop (Pa)(@0.5-1-1.5m/s)	2.5-9-15			
Disinfection method and certification	Electrostatic sterilization(Sterilizer certification)			
Bactericidal rate(%)	99.93(Staphylococcus albus)			
Viruses killing rate(min)	60			
Power Supply(V/hz)	110-240~/50-60			
Rated Power(W)	5	6	7	8
Status indication	Running / Cleaning			
Weight (Kg)	4.5	6.5	8	9.5

Product Model	EF03B	EF05B	EF06B	EF08B
Overall Dimensions(L*W*T mm)	700*241*145	1000*241*145	1204*241*145	1504*241*145
Applicable Air Volume(m³/h)(@0.5-1-1.5m/s)	170~340~510	280~570~850	340~690~1020	460~920~1360
PM2.5 One-time Purification Efficiency (@0.5-1-1.5m/s)	98-93-90%			
Microorganism Purification Efficiency (@1.25m/s)	≥90%			
Pressure Drop (Pa)(@0.5-1-1.5m/s)	2.5-9-15			
Disinfection method and certification	/			
Bactericidal rate(%)	/			
Viruses killing rate(min)	/			
Power Supply(V/hz)	110-240~ / 50-60			
Rated Power(W)	5	6	7	8
Status indication	Running / Cleaning			
Weight (Kg)	5.5	7	8.5	10

Notes:

1.The overall dimensions, rated power, weight, negative ion content and other data are laboratory measured values, which are only for reference;

2.Standard wind tunnel switch (suitable for fluorine machine / water machine), a series is front extraction, and B series is side extraction.