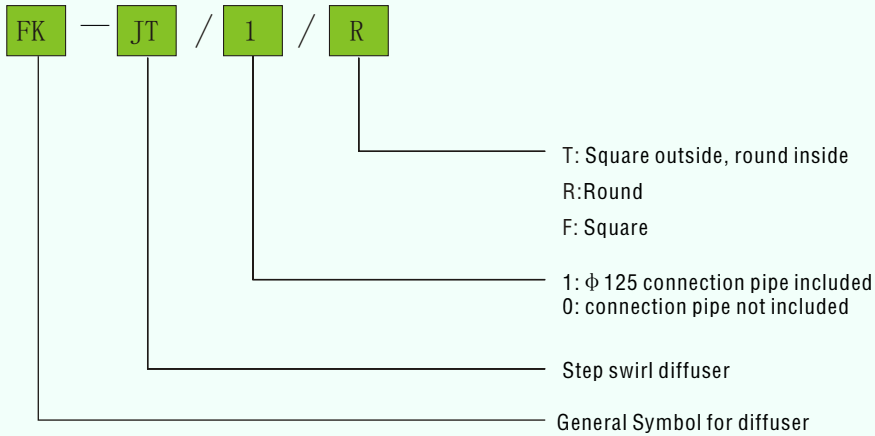


1 General Introductions

FK-JT serial step swirl diffuser is one of our latest products. It is often used in theatres, halls, music halls, cinemas and other places. The diffuser is installed on the vertical side of steps or on the ground. Please note to achieve better conformability, the max. temperature difference shall not exceed $\pm 6T$.

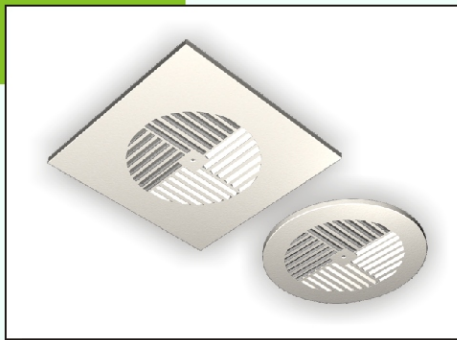
2 Representation Format for YX JT



For example, FK-JT/1/R stands for round step swirl diffuser including 125 connection pipe.

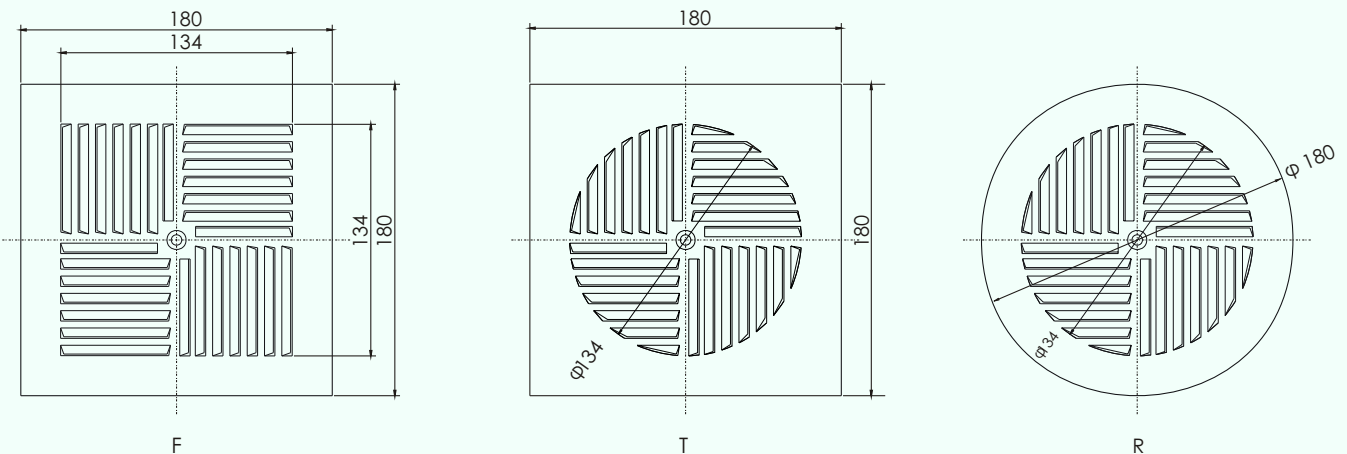
3. Feature

FK-JT
Serial Step Swirl Diffuser

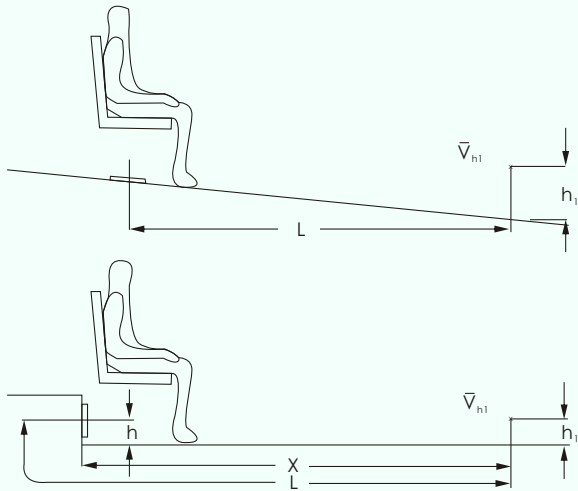


- Round or square for option in accordance with the actual situation of the building;
- Four sections on the panel for blowing to produce swirl; every blade is vertical to each other;
- Seams on the panel guaranteeing horizontal blow; panel fixed to the internal beam by central bolt; trim lid to cover

4. Appearance and Sizes

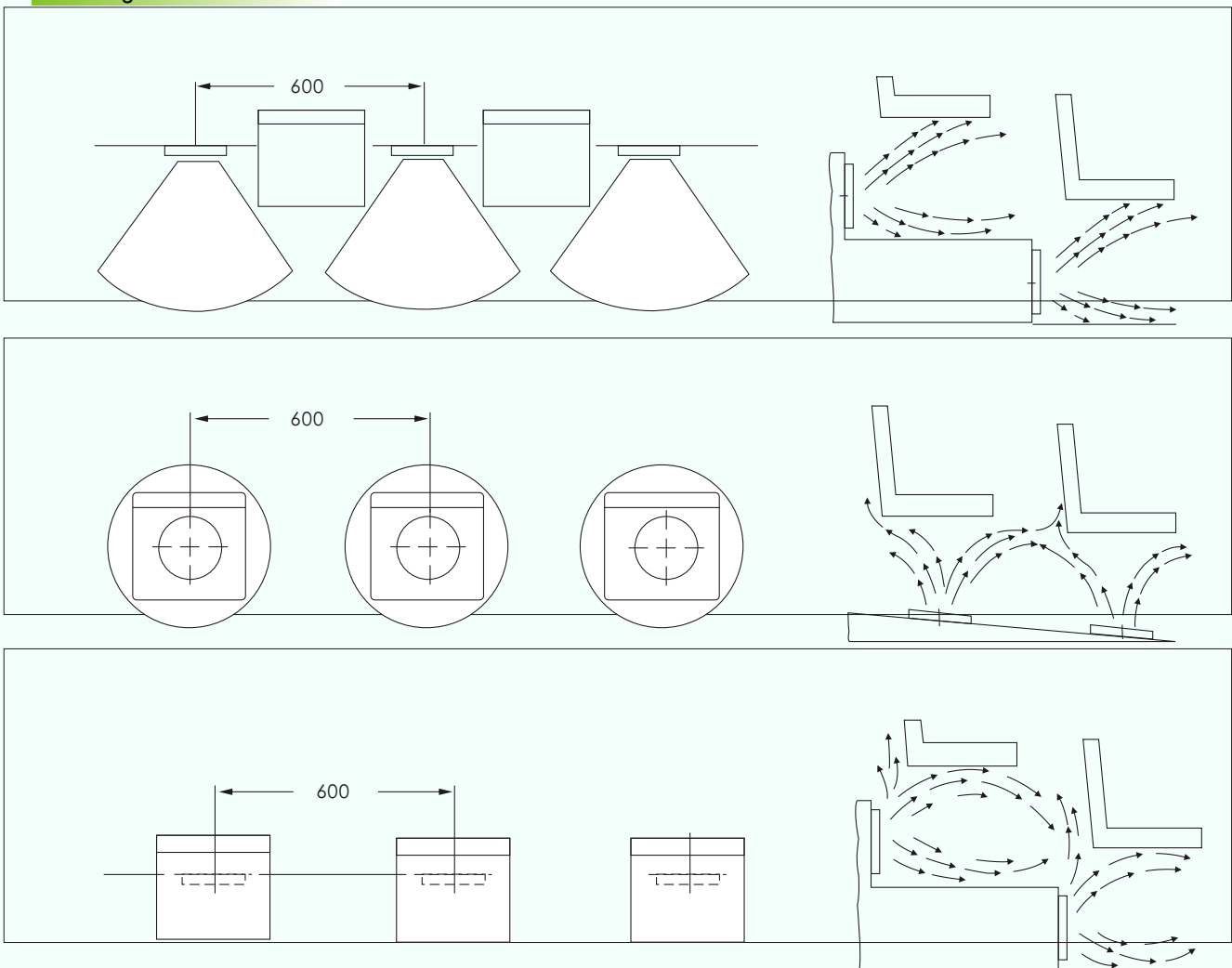


5. Symbol Definitions



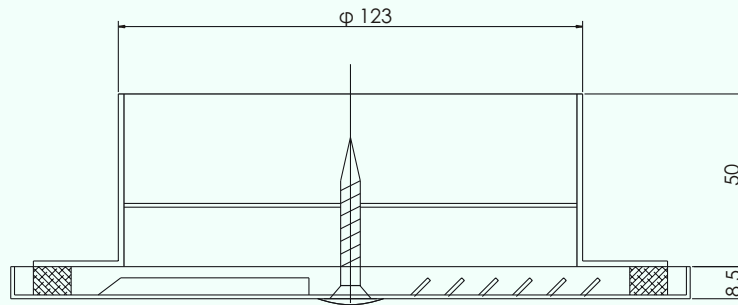
- \bar{V} (m³/h) (m³/h) blast volume of every air port
- h (m) installation height
- L (m) distance from diffuser (side installed L=h+x)
- h₁(m) distance from the ceiling to the activity area
- $\bar{V}h_1$ (m/s) (m/s) average air velocity between the two air ports at Height H
- ΔPt (Pa) total pressure loss (air blowing)
- LWA(dB) A (dB<A>) A sound power level noise

6. Usage

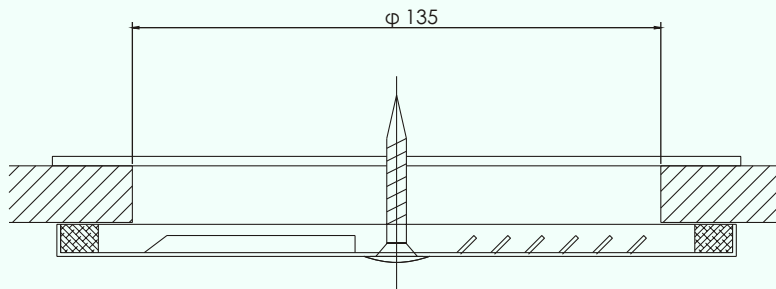


7. Installation

Installation with round connection pipe;



Installation without round connection pipe



8. Technical Performance Diagram

Structure	Round	Square
Effective blowing area	0.00354	0.00445

Item	Specs	Rated air volume at the air intake (m ²)	Round		Square	
			Pressure loss (Pa)	Noise (A)	Pressure loss (Pa)	Noise (A)
A		50	13	25	9	26
		43	8.5	21	6	16
		36	6.5	15	4.5	10
B		86	38	39	32	34
		58	17.5	27	14.5	22
		36	7	13	5.5	14

A Style Installation (horizontal blow)

Refer to effective distance less than 0.4m

Shape Air volume (m ³ /h) designed head-on wind speed (m/s)	Round					Square				
	50	43	36	29	22	50	43	36	29	22
Effective blowing distance at the diffuser L (m)										
When survey station is 0.06m:										
0.1	2	1.8	1.5	1.36	0.95	1.8	1.6	1.4	1.2	0.8
0.15	1.4	1.2	1.1	0.75	0.43	1.4	1.2	0.95	0.6	—
0.2	1.15	0.95	0.65	0.45	—	1.05	0.8	0.55	—	—
0.25	0.85	0.62	0.45	—	—	0.65	0.5	—	—	—
0.3	0.6	0.45	—	—	—	0.48	—	—	—	—
When survey station is 0.1m:										
0.1	1.6	1.5	1.3	0.95	0.6	1.6	1.4	1.2	0.85	0.45
0.15	1.2	1.05	0.75	0.45	—	1.1	0.85	0.6	—	—
0.2	0.7	0.55	—	—	—	0.65	0.45	—	—	—
0.25	0.45	—	—	—	—	0.4	—	—	—	—
When survey station is 0.2m:										
0.1	1.3	1.1	0.8	0.5	—	1.2	0.95	0.65	0.45	—
0.15	0.75	0.55	—	—	—	0.55	0.4	—	—	—
When survey station is 0.4m:										
0.1	0.75	0.6	0.4	—	—	0.75	0.5	—	—	—

N Style Installation (horizontal blow)

Shape Air volume (m ³ /h) designed head-on wind speed (m/s)	Round						Square				
	86	72	58	43	36	29	86	72	58	43	36
Effective blowing distance at the diffuser L (m)											
When survey station is 0.06m:											
0.1	2.2	2.0	1.7	1.2	1.0	0.68	2.0	1.8	1.5	1.1	0.85
0.15	1.6	1.5	1.1	0.68	0.45	—	1.5	1.3	1.0	0.55	0.4
0.2	1.3	1.05	0.68	0.4	—	—	1.1	0.85	0.55	—	—
0.25	1.0	0.7	0.45	—	—	—	0.8	0.55	—	—	—
0.3	0.68	0.48	—	—	—	—	0.55	0.4	—	—	—
When survey station is 0.1m:											
0.1	1.9	1.7	1.4	0.9	0.65	0.4	1.7	1.3	1.2	0.75	0.5
0.15	1.3	1.1	0.75	0.4	—	—	1.3	1.0	0.6	—	—
0.2	1.0	0.68	0.4	—	—	—	0.7	0.5	—	—	—
0.25	0.65	0.4	—	—	—	—	0.48	—	—	—	—
When survey station is 0.2m:											
0.1	1.4	1.2	0.75	0.45	—	—	1.3	1.0	0.7	0.4	—
0.15	0.85	0.6	—	—	—	—	0.65	0.45	—	—	—
0.2	0.43	—	—	—	—	—	0.4	—	—	—	—
When survey station is 0.4m:											
0.1	0.9	0.65	0.4	—	—	—	0.75	0.5	—	—	—

A Style Installation (upward blow)

Shape Air volume (m ³ /h)	Round					Square				
	50	43	36	29	22	50	43	36	29	22
designed head-on wind speed (m/s)	Effective blowing distance at the diffuser L (m)									
When survey station is 0.06m:										
0.1	0.65	0.55	0.5	0.45	—	0.58	0.53	0.48	0.4	—
0.15	0.48	0.46	—	—	—	0.45	0.4	—	—	—
When survey station is 0.1m:										
0.1	0.75	0.7	0.62	0.55	0.45	0.72	0.65	0.55	0.48	0.4
0.15	0.55	0.5	0.45	—	—	0.52	0.47	0.43	—	—
0.2	0.48	0.42	—	—	—	0.44	0.38	—	—	—
0.25	0.4	—	—	—	—	0.4	—	—	—	—
When survey station is 0.2m:										
0.1	0.95	0.85	0.75	0.64	0.54	0.85	0.77	0.67	0.6	0.52
0.15	0.72	0.65	0.58	0.5	0.42	0.66	0.6	0.52	0.45	0.4
0.2	0.58	0.55	0.48	0.42	—	0.53	0.48	0.42	—	—
0.25	0.52	0.47	0.41	—	—	0.48	0.44	—	—	—
When survey station is 0.4m:										
0.1	1.2	1.1	0.96	0.84	0.7	1.1	1.0	0.85	0.75	0.62
0.15	0.85	0.76	0.7	0.58	0.5	0.82	0.75	0.65	0.58	0.48
0.2	0.72	0.65	0.58	0.5	0.42	0.65	0.6	0.54	0.46	0.4
0.25	0.63	0.52	0.5	0.44	—	0.58	0.53	0.47	0.41	—
0.3	0.55	0.5	0.45	—	—	0.52	0.47	0.43	—	—