

# VARIABLE SWIRL DIFFUSER

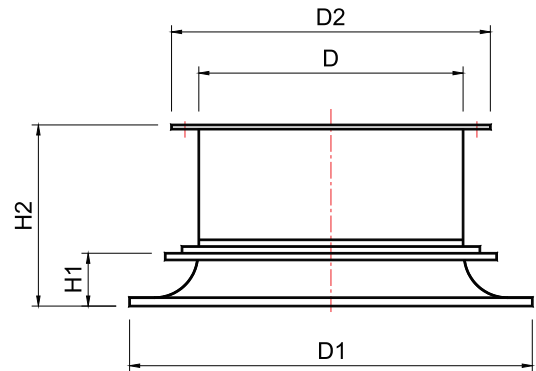
## FEATURES

- KYODO series SW-V variable swirl diffusers are applicable for spaces with a height of more than 3.8m, such as airport, theatre, stadium, hall, assembly rooms and etc.
- SW-V variable swirl diffuser adopts hydrokinetics principle for the design of its blade, by which the blade pushes the current by means of swirl with a certain initial velocity to achieve a larger throw distance, bigger space covered by a jet, and more efficient convection current effect.
- The blade can be changed its quadrant angle to adapt to different conditions by blowing rotating current of horizontal, slant and vertical directions.
- Constructed of aluminium and steel sheet metal.

## FINISH

Standard finish in baked white enamel.  
Other colours are available on request.

## MODEL: SW-V



### Condition A:



The blade could be adjusted to refrigeration mode to adapt to summer conditions. Cold air blows out by means of diffusing swirls to facilitate air convection.

### Condition B:



The blade could be adjusted to normal temperature mode to adapt to the fresh wind conditions in spring and autumn to supply fresh wind into the indoors in large scale.

### Condition C:



The blade could be adjusted to warming mode to adapt to winter condition. Warm jets are amassed vertically to be supplied to areas where there are human activities.

## DIMENSIONS (mm)

SIZE	D	D1	D2	H1	H2
315	Φ315	Φ465	Φ380	63	205
400	Φ400	Φ575	Φ465	80	240
630	Φ630	Φ870	Φ708	125	385
800	Φ800	Φ1075	Φ870	160	570

## TECHNICAL PERFORMANCE DATA

### MODEL: SW-V

#### (Condition C):

Φ315	Air Volume CMH	560	840	1120	1400	1680
	Throw (m)	3.0	5.5	7.5	9.0	11.3
	S.P. (Pa)	8	17	30	48	72
	NC	36	46	52	58	62
Φ400	Air Volume CMH	900	1360	1810	2260	2715
	Throw (m)	4.0	5.6	7.8	10.0	13.0
	S.P. (Pa)	8	16	28	45	68
	NC	35	47	52	56	61
Φ630	Air Volume CMH	2245	3365	4490	5610	6730
	Throw (m)	5.0	8.5	11.5	13.5	15.0
	S.P. (Pa)	6	14	24	38	55
	NC	36	48	53	57	62
Φ800	Air Volume CMH	3620	5430	7240	9050	10860
	Throw (m)	11.0	19.0	22.0	24.0	25.0
	S.P. (Pa)	8	18	32	47	70
	NC	35	48	54	58	62

Performance data are tested with blades fully open, which provides maximum vertical throw.

- NC - Based on room absorption of 10dB, re 10<sup>-12</sup> watts.
- SP - Static Pressure drops are in Pascals.
- Throw - Throw at 0.5m/s terminal velocity in metres.

#### (Condition A):

Φ315	Air Volume CMH	560	840	1120	1400	1680	
	Throw (m)	H	1.2	1.5	1.6	1.8	2.0
		V	0.4	0.9	1.3	2.7	3.3
	S.P. (Pa)	15	33	58	92	130	
NC	38	49	55	60	65		
Φ400	Air Volume CMH	900	1360	1810	2260	2715	
	Throw (m)	H	1.8	2.8	3.2	3.5	3.6
		V	0.5	0.8	1.0	1.5	3.4
	S.P. (Pa)	15	35	59	92	135	
NC	36	48	53	58	63		
Φ630	Air Volume CMH	2245	3365	4490	5610	6730	
	Throw (m)	H	2.5	3.0	4.8	6.0	8.0
		V	0.5	0.6	1.2	2.0	5.0
	S.P. (Pa)	16	36	60	100	145	
NC	39	50	56	60	66		
Φ800	Air Volume CMH	3620	5430	7240	9050	10860	
	Throw (m)	H	5.0	7.4	9.4	13.0	14.5
		V	0.8	1.0	2.1	3.6	4.9
	S.P. (Pa)	15	34	60	93	135	
NC	38	50	57	61	66		

- NC - Based on room absorption of 10dB, re 10<sup>-12</sup> watts.
- SP - Static Pressure drops are in Pascals.
- Throw - Throw at 0.5m/s terminal velocity in metres.  
H - Horizontal  
V - Vertical