

CONNOLS-AIR

SWIRL DIFFUSER (SD-A)



Material:
Aluminium.

Size:
As shown in Table-1.

Construction:
From pressed sheet aluminium and welded inner vanes. Optional OBD is of extruded aluminium.

Finish:
Powder coated with RAL9010 or RAL9016.

Description:
For supply or extract air, adjusted blade circular swirl diffuser. The recessed core diffuser is used for horizontal air distribution whilst the flush face style is more suitable for vertical air distribution when mounted at higher levels, for example: factory, airport, theater and hall.

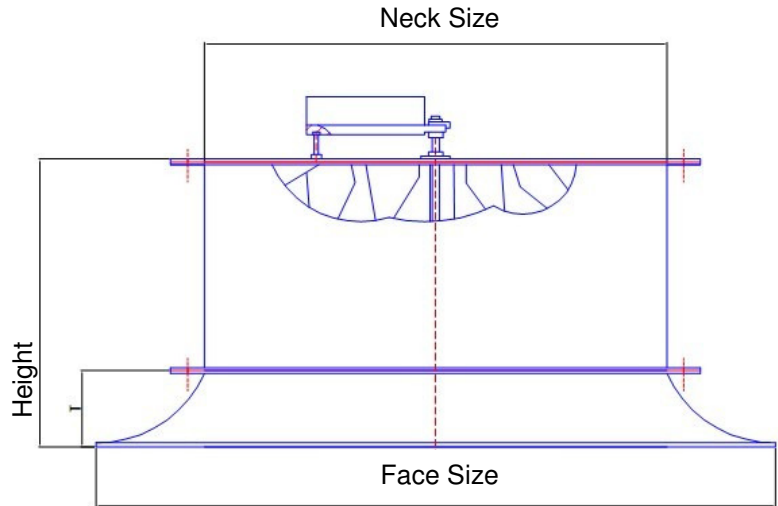


Figure-1
Swirl Diffuser Only

Table-1

Specification	Face Size (mm)	Neck Size(mm)	Height	Qty (20GP)	Package
Ø250	Ø366	Ø253.5	166	1008	PE, Carton, 2 pcs/ctn.
Ø315	Ø468	Ø318.5	203	440	
Ø400	Ø568	Ø403.5	238	216	
Ø500	Ø688	Ø503.5	252	168	
Ø630	Ø872	Ø633.5	383	96	

Technical Data

CONDITIONS:

-Supply.

Table-2

Specifi- cation	Av (m/s)	Q (m/h)	A	B	C	d=45°				d=60°				d=75°				d=90°		
			Pa	Pa	Pa	Lt				Lt				Lt				Lt		
						±0K	+5K	+10K	+15K	±0K	+5K	+10K	+15K	±0K	+5K	+10K	+15K	+5K	+10K	+15K
ø250	3	175	12	13	14	2.3	1.3	-	-	3.0	1.6	1.3	1.0	3.5	1.8	1.4	1.3	1.8	1.2	0.4
	5	292	28	27	26	2.7	1.4	1.1	-	1.0	2.0	1.5	1.3	4.0	2.1	1.5	1.4	2.4	1.5	1.3
	8	465	85	83	82	3.7	1.8	1.4	1.2	6.0	3.0	2.4	1.9	6.8	3.0	2.2	1.9	3.7	2.4	1.9
	12	700	160	170	180	5.1	2.7	2.0	1.7	8.5	4.2	3.3	2.8	9.0	5.0	3.7	3.2	6.2	4.0	3.3
ø315	3	294	8	9	9	2.4	1.2	-	-	3.5	1.7	1.4	1.2	3.7	1.8	1.4	1.3	1.8	1.1	0.9
	5	490	22	19	20	3.2	1.7	1.3	1.1	4.8	2.5	1.8	1.6	5.1	2.7	2.0	1.7	2.8	1.8	1.5
	8	783	60	58	61	4.8	2.4	1.7	1.4	7.0	3.8	2.8	2.5	8.5	4.6	3.4	2.9	4.8	3.0	2.7
	12	1175	125	130	140	6.7	3.4	2.5	2.1	11.0	6.0	4.4	3.7	14.0	7.1	5.4	4.7	8.5	6.0	4.7
ø400	3	550	5	9	9	3.0	1.5	1.2	1.0	4.5	2.4	1.7	1.4	4.6	2.5	1.8	1.6	3.5	1.5	1.3
	5	918	14	26	26	4.4	2.3	1.7	1.3	6.8	3.5	2.6	2.2	7.5	4.1	3.0	2.7	6.3	3.8	3.2
	8	1468	37	61	62	6.2	3.0	2.4	2.0	10.5	5.5	4.0	3.6	13.5	7.0	5.0	4.3	8.0	5.0	4.0
	12	2200	80	150	145	8.2	4.5	3.4	2.8	15.5	8.0	6.2	5.2	20.0	10.0	7.5	6.8	13.5	8.5	7.0
ø500	3	745	6	8	8	3.0	1.5	1.2	0.8	4.7	2.4	1.7	1.5	4.9	2.6	1.8	1.6	2.5	1.6	1.4
	5	1240	15	28	28	4.5	2.3	1.7	1.4	7.5	3.8	2.8	2.5	9.0	4.5	3.5	3.1	4.8	3.1	2.6
	8	1990	40	70	72	6.4	3.2	2.3	1.9	12.5	6.2	4.5	3.8	14.0	7.7	5.8	4.9	8.6	5.1	4.0
	12	2980	85	160	165	8.0	4.6	3.4	2.8	17.5	8.7	7.0	6.0	22.0	12.5	9.0	8.0	15.0	9.0	7.6
ø630	3	1058	5	9	11	3.6	1.7	1.3	1.1	5.2	2.7	2.1	1.7	6.5	3.0	2.3	1.9	4.1	2.7	2.2
	5	1754	15	30	38	6.0	3.0	2.4	1.9	9.0	4.3	3.3	2.7	10.0	5.0	3.7	3.4	6.0	3.6	3.0
	8	2822	38	80	95	7.0	3.8	2.7	2.3	13.5	6.7	5.0	4.3	15.5	8.5	6.0	5.2	7.9	6.3	5.1
	12	4233	95	170	180	9.0	5.0	3.7	3.3	19.0	10.0	7.5	6.5	22.0	13.0	9.5	8.6	17.0	11.0	8.5

SYMBOLS:

Av:Supply air effective velocity
in m/s. Q:Supply airflow in m/h.

A:Diffuser only.

B:Diffuser with side inlet plenum.

C:Diffuser with vertical inlet plenum.

Pa:Pressure expense in Pa.

d:Supply air angle.

Lt:Throw in m.

+:Supply hot air.

-:Supply cold air.

+5K,+10K,+15K:Supply hot air difference in
temperature.

0K:Supply air no difference in normal
temperature,when supply cold air also
according to this location.



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