ALSHARQA

JET DIFFUSERS

AIR OUTLETS
TECHNICAL CATALOGUE

Alsharqa
Air Conditioning and Industies
المصرية الخليجية لأعمال التكييف - الشارقة
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JET DIFFUSERS

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ALSHARQA
AIR OUTLETS

CONSTRUCTION

- **Frame** : High quality heavy gauge aluminum sheet.
- **Outer flange** : High quality extruded aluminum profiles.
- **Inner rings** : Aluminum spun rings.
- **Optional accessories** : Plenum box either lined or un lined as per clients choice.

DESCRIPTION

-Frame and inner rings are high quality aluminum construction with the advantages of corrosion resistance.

-Jet nozzle section is mounted in aluminum square plate covered by flanged border.

-Nozzles can be adjusted 30^0 up words and down words to achieve required throw as per site condition. Nozzle jet can be rotated by 360^0 by adjusting the mounting frame.

-Generally designed for wall mounting. For ceiling mounting drill 2 to 4 holes in the face of the flanged border.

-Ideal for commercial use such as concert halls, theatres, exhibition and sport halls.

-Jet nozzles can be supplied with plenum box, which is manufactured from galvanized steel sheet as option.

-Plenum boxes can be supplied with round duct damper at the spigot as option.

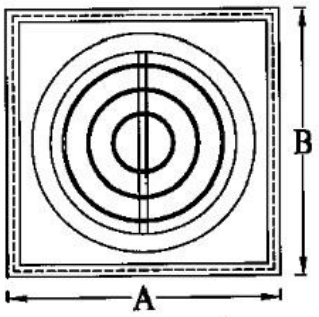
Jet Diffuser (Three Element Assembly)

JET DIFFUSERS

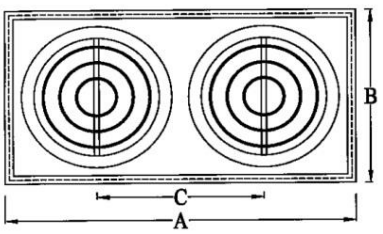
PANEL ARRENGEMENT

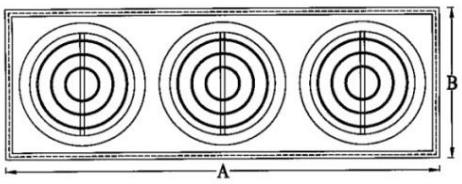
1,2,3 or 4 no. of jet diffusers will be arranged in a panel as per performance requirement.

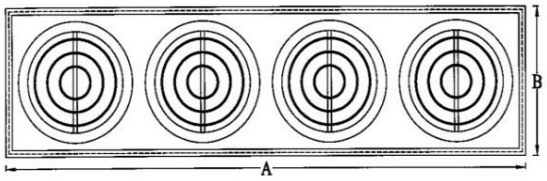
Model	Duct size L x W in	A	B	(Ø) E
SJD 100-P	200 x 200	250	250	100
SJD 150-P	250 x 250	300	300	150
SJD 200-P	300 x 300	350	350	200
SJD 250-P	350 x 350	400	400	250
SJD 300-P	400 x 400	450	450	300
SJD 350-P	450 x 450	500	500	350
SJD 400-P	500 x 500	550	550	400



Model	Duct size L x W in	A	B	C
SJD 100-2P	390 x 200	440	250	200
SJD 100-3P	580 x 200	630	250	200
SJD 100-4P	790 x 200	840	250	200
SJD 150-2P	490 x 250	540	300	250
SJD 150-3P	730 x 250	780	300	250
SJD 150-4P	990 x 400	1040	300	250
SJD 200-2P	590 x 300	640	350	300
SJD 200-3P	880 x 300	930	350	300
SJD 200-4P	1190 x 300	1240	350	300
SJD 250-2P	690 X 400	740	400	350
SJD 250-3P	1030 X 350	1080	400	350
SJD 250-4P	1390 X 350	1440	400	350
SJD 300-2P	790 X 400	840	450	400
SJD 300-3P	1180 X 400	1230	450	400
SJD 300-4P	1590 X 400	1640	450	400
SJD 350-2P	890 X 450	1040	500	450
SJD 350-3P	1330 X 450	1530	500	450
SJD 350-4P	1770 X 450	1820	500	450
SJD 400-2P	990 X 500	1040	550	500
SJD 400-3P	1480 X 500	1530	550	500
SJD 400-4P	1970 X 500	2020	550	500







All sizes are in mm.

JET DIFFUSERS

AIR FLOW DATA

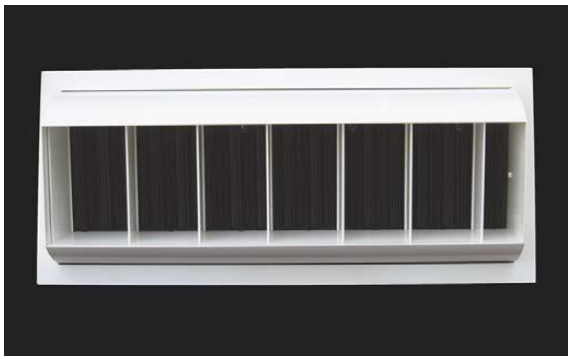
Size in mm dia	Neck velocity in m/sec	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0	7.0
Neck area in sq mt	P_v=vel pr loss in mm H_2O	0.15	0.25	0.41	0.56	0.79	1.016	1.57	2.29	3.1
100	Cfm	30	40	50	60	70	80	90	110	130
	M^3/sec.	0.0141	0.0189	0.0236	0.0283	0.0331	0.378	0.0425	0.052	0.614
	Ps in mm H_2O	<0.25	<0.25	1.67	1.81	2.8	3.4	4.3	6.2	8.7
0.0079	Throw in m	2.4	2.4	2.7	2.9	3.4	3.7	4.0	4.3	4.6
	NC	<15	<15	<15	19	24	32	36	40	44
150	Cfm	60	80	100	120	140	160	200	240	280
	M^3/sec.	0.0283	0.0378	0.0472	0.0567	0.066	0.756	0.0945	0.113	0.132
	Ps in mm H_2O	0.51	<0.75	1.4	1.4	1.76	2.13	3.64	5.8	8.5
0.0177	Throw in m	2.4	3.0	3.7	4.6	5.0	5.5	6.1	6.7	7.0
	NC	<15	<15	<15	19	24	33	36	40	45
200	Cfm	110	140	180	210	250	280	350	420	490
	M^3/sec.	0.052	0.066	0.085	0.099	0.118	0.132	0.165	0.198	0.231
	Ps in mm H_2O	<0.25	0.51	0.84	1.11	1.71	2.85	3.41	6.1	8.7
0.0314	Throw in m	3.7	5.2	5.5	6.1	6.4	7.0	7.6	8.2	8.5
	NC	<15	18	18	19	24	33	37	40	45
250	Cfm	170	220	280	330	390	440	550	660	770
	M^3/sec.	0.08	0.104	0.132	0.156	0.184	0.208	0.26	0.312	0.364
	Ps in mm H_2O	<0.25	0.51	0.84	1.11	1.42	1.76	2.6	3.8	7.0
0.049	Throw in m	5.5	6.1	6.4	7.3	8.3	8.5	9.5	10.1	10.7
	NC	<15	<15	15	20	25	33	37	42	46
300	Cfm	240	320	400	480	550	630	790	950	1100
	M^3/sec.	0.113	0.151	0.189	0.227	0.26	0.298	0.373	0.449	0.519
	Ps in mm H_2O	<0.25	<0.25	0.7	1.11	1.42	2.85	2.56	2.9	5.8
0.071	Throw in m	6.4	7.0	7.9	8.5	9.5	9.8	11.6	12.2	12.5
	NC	<15	<15	<15	21	27	34	38	43	47
350	Cfm	330	430	540	650	750	860	1070	1290	1500
	M^3/sec.	0.156	0.203	0.255	0.307	0.354	0.406	0.505	0.609	0.708
	Ps in mm H_2O	<0.25	<0.25	0.73	1.14	1.14	1.42	1.71	2.9	7.3
0.096	Throw in m	7.0	7.9	9.5	10.1	11.0	11.9	12.5	14.0	15.2
	NC	<15	<15	<15	21	27	36	38	43	47
400	Cfm	420	560	700	840	980	1120	1400	1680	1960
	M^3/sec.	0.198	0.264	0.331	0.397	0.463	0.529	0.66	0.793	0.926
	Ps in mm H_2O	<0.25	<0.25	0.84	1.06	0.63	0.85	1.17	2.05	2.5
0.126	Throw in m	8.2	9,8	11.0	11.9	12.5	13.1	14.6	16.4	18.3
	NC	15	<15	<15	22	28	36	39	43	47

- Neck velocity is measured in m/sec.
- Ps & Pv = Static and dynamic pressure losses across the diffuser in mm of H_2O.
- Throw (meters) is measured for a terminal velocities of 0.25 m/sec.
- NC based on room attenuation of 10 dB.

DRUM LOUVER

CONSTRUCTION

- **Frame :** Constructed with high quality extruded aluminum profiles.
- **Drum :** Aluminum sheet and specially shaped extruded aluminum profiles.
- **Blades:** High quality extruded aluminum adjustable directional blades.
- **Damper:** Opposed blade damper made with aluminum profiles.



DESCRIPTION

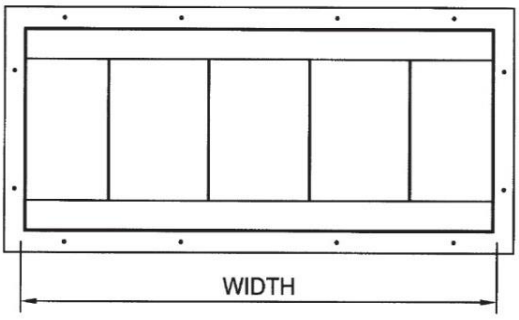
-Blades are fixed inside the drum body made with aluminum sheets and specially shaped profiles and the opposed blade damper is attached to the drum body. The whole assembly is fixed to the frame by mechanical fasteners so as to enable rotation in the vertical direction.

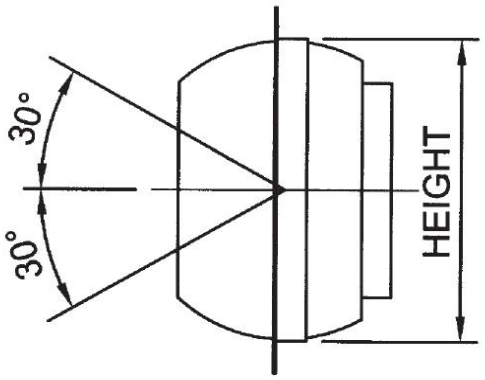
-The opposed blade damper in supply diffuser can be easily adjusted through the face of the unit by means of screw driver.

-The louver is suitable for both long and short throw patterns with trajectory control.

-The drum can be adjusted in the vertical direction 0º to 30º up or down to direct the air throw in the desired direction.

-Foam gasket is sealed around the back of the Frame to avoid air leakage.





Model: SDL

Neck Velocity	Size	225x150 175x200	750x150 550x200	1500x150 1100x200	1600x200 1250x250	1750x250 1500x300	1750x300 1250x375
1	CFM	83	261	475	651	914	1363
	NC	<15	<15	<15	<15	<15	<15
	P_s in mm of H_2O	0.45	0.275	0.20	0.175	0.125	0.1
	THROW in M	1-1.2-1.5	3.9-5.8-8.8	4.6-6.0-10.0	7-9.1-14.3	7.3-9.4-15.2	7.0-10.4-17.9
1.5	CFM	124	390	713	974	1373	1615
	NC	<15	15	<15	<15	<15	<15
	P_s in mm of H_2O	1.025	0.675	0.375	0.375	0.3	0.275
	THROW in M	1.8-2.1-3.7	4.5-6.0-10.0	7.0-9.1-14.3	7.6-9.7-15.8	7.6-10.6-17.9	8.2-10.6-19.2
2	CFM	162	523	950	1297	1829	2157
	NC	15	16	15	15	16	17
	P_s in mm of H_2O	1.75	1.15	0.7	0.7	0.55	0.525
	THROW in M	2.7-3.7-6.0	5.8-7.6-12.1	7.6-9.8-15.8	9.1-11.5-18.2	9.4-12.1-21.3	10.0-13.1-21.9
2.5	CFM	204	651	1188	1625	2285	2693
	NC	16	18	20	21	23	25
	P_s in mm of H_2O	2.8	1.825	1.05	1.05	0.85	0.8
	THROW in M	3.4-4.9-7.3	7-9.1-14.3	8.8-11.9-18.6	10.3-13.1-21.3	12.8-15.8-27.4	13.1-16.7-30.4
3	CFM	247	781	1425	1948	2741	3230
	NC	18	23	28	30	32	31
	P_s in mm of H_2O	4.125	2.7	1.575	1.575	1.25	1.175
	THROW in M	4.0-5.8-8.8	7.9-10.9-16.7	10.9-14.0-21	13.4-16.1-24.9	14.3-17.9-30.4	17.3-21.3-37.4
3.5	CFM	285	912	1663	2275	3197	3772
	NC	24	30	33	33	35	35
	P_s in mm of H_2O	5.475	3.625	2.175	2.175	1.7	1.6
	THROW in M	4.9-6.4-9.8	9.4-12.4-18.8	13.1-15.8-24.9	14.6-17.9-27.7	17.0-21.0-36.5	20.1-25.9-43.0
4	CFM	333	1040	1900	2598	3658	4308
	NC	27	35	39	40	40	43
	P_s in mm of H_2O	7.475	4.5	2.825	2.825	2.2	2.05
	THROW in M	5.4-7.0-10.7	10.0-13.1-20.1	14.3-17.0-27.7	16.4-19.8-30.4	19.8-24.0-41.1	23.1-25.9-48.7
4.5	CFM	380	1173	2138	2921	4114	4850
	NC	31	39	43	44	47	48
	P_s in mm of H_2O	9.8	5.975	3.55	3.55	2.775	2.6
	THROW in M	5.8-7.9-11.6	10.7-14.0-21.0	15.2-18.2-29.5	18.5-21.9-33.8	21.3-25.9-43.5	25.9-32.3-53.3
5	CFM	413	1302	2375	3249	4570	5387
	NC	36	43	47	48	49	50
	P_s in mm of H_2O	11.55	7.2	4.425	4.425	3.45	3.225
	THROW in M	6.0-8.2-11.9	10.9-14.3-21	16.4-19.2-30.4	18.8-22.2-34.1	22.2-24.3-45.7	26.2-33.5-54.8

- Neck velocity is measured in m/sec.
- Ps Static pressure in mm of H_2O.
- Throw (meters) is measured for a terminal velocity of 0.75, 0.5 and 0.25 m/sec.
- NC based on a room attenuation of 10 dB.

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