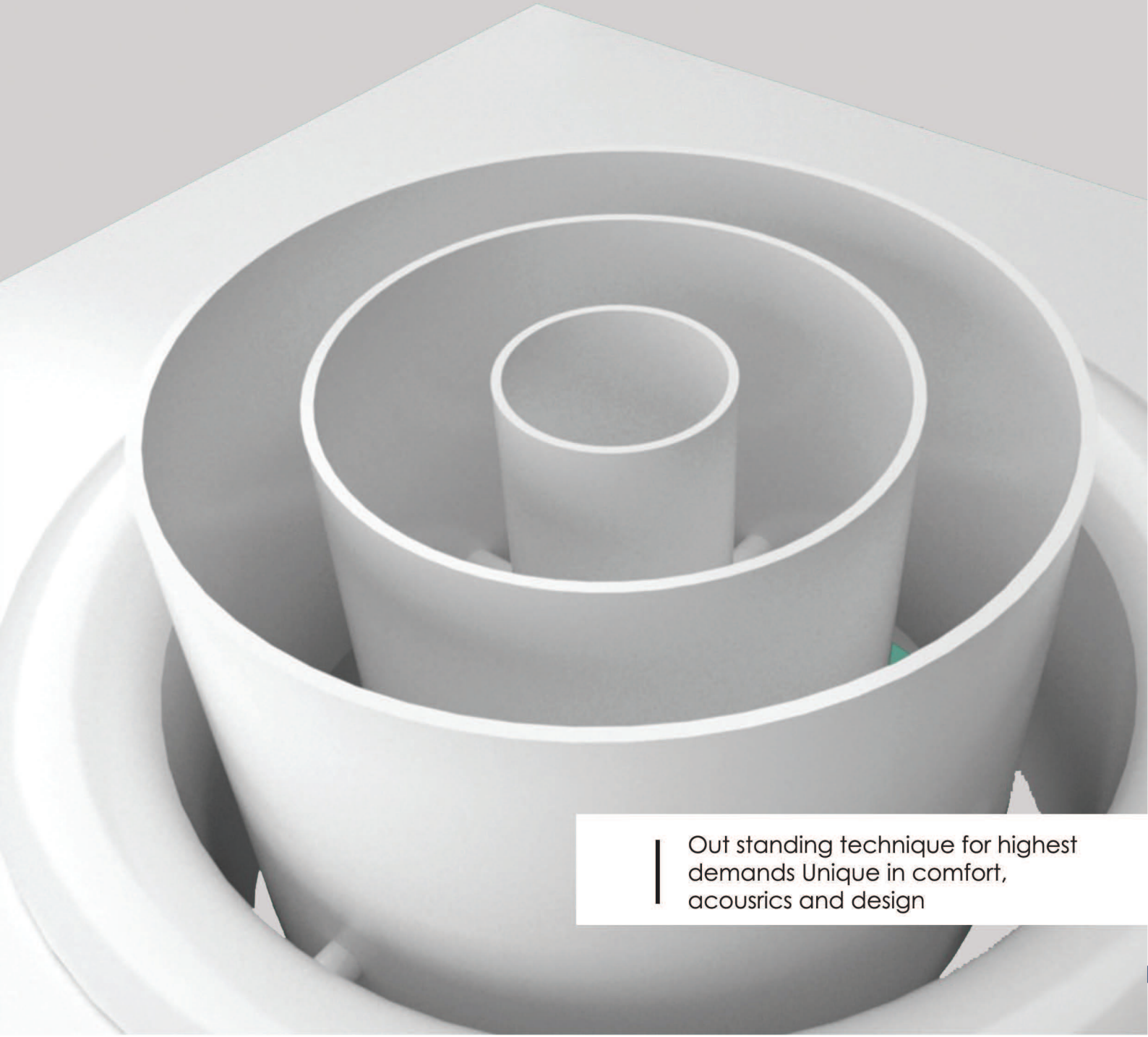
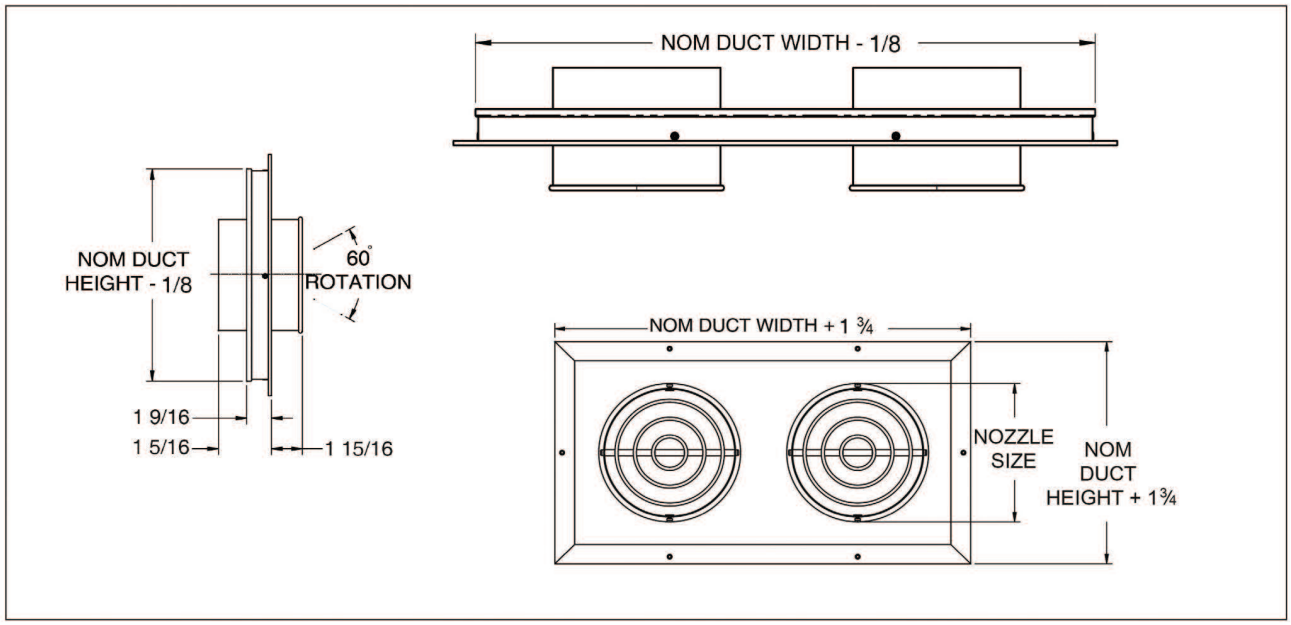
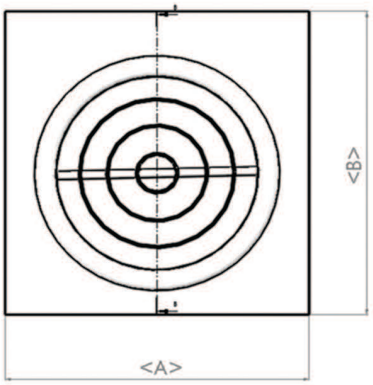
JET DIFFUSER

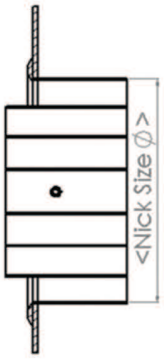


Out standing technique for highest demands Unique in comfort, acousrics and design

Construction







1 - Panel
Made from high quality heavy aluminum sheet.

2 - Panel frame
Made from high quality extruded aluminum profile with 30 mm flange width as standard and non standard widths are available as option.

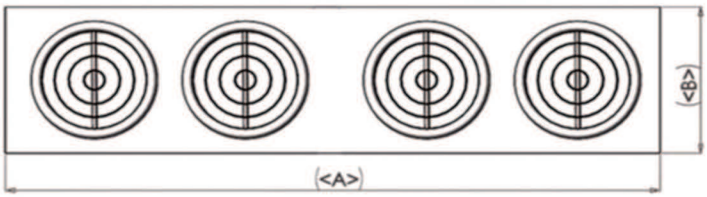
3 - Inner rings
Aluminum spun rings.

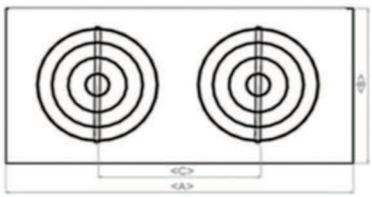
Description

- Framed and inner rings are high quality aluminum construction with powder coated color finish.
- Generally designed for wall mounting for ceiling mounting. drill 2 to 4 holes in the face of the flanged border.
- Nozzles can be adjusted 30 upwards and down words to achieve required throw as per site condition. Nozzle jet can be rotated by 360 by adjusting the mounting frame.
- Jet nozzles can be supplied with plenum box. which is manufactured from galvanized steel sheet as option.
- Plenum boxes can be supplied with round damper as option.
- Jet nozzle available from 100 mm diameter to 400 mm as standard and non-standard sizes are available as option.
- Jet nozzle available with 160 mm depth as standard and greater than 160 mm is available for higher throw.
- Powder coated color finish per RAL color codes as standard and flexibility of finish.

Number Of Elements

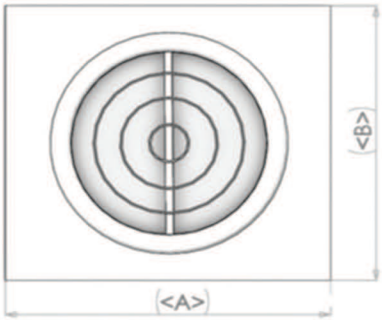
Multiple element





Diameter (mm)	No . of Diffusers	Duct size (mm)	A(mm)	B(mm)	c(mm)
100	2	390×200	440	250	200
100	3	580×200	630	250	200
100	4	790×200	840	250	200
150	2	490×250	540	300	250
150	3	730×250	780	300	250
150	4	990×250	1040	300	250
200	2	590×300	640	350	300
200	3	880×300	930	350	300
200	4	1190×300	1240	350	300
250	2	690×350	740	400	350
250	3	1030×350	1080	400	350
250	4	1390×350	1440	400	350
300	2	790×400	840	450	400
300	3	1180×400	1230	450	400
300	4	1590×400	1640	450	400
350	2	890×450	940	500	450
350	3	1330×450	1380	500	450
350	4	1770×450	1820	500	450
400	2	990×500	1040	550	500
400	3	1480×500	1530	550	500
400	4	1970×500	2020	550	500

Single element



Diameter (mm)	Duct size (mm)	A(mm)	B(mm)
100	200×200	250	250
150	250×250	300	300
200	300×300	350	350
250	350×350	400	400
300	400×400	450	450
350	450×450	500	500
400	500×500	550	550

EGY AIR AIR CONDITIONING

Performance Data

jet diffuser
at 0 deflection

Neck size in mm Dia	neck velocity in m / sec p = vel pr loss in mm HO	1.5 .15	2 .25	2.5 .41	3 .56	3.5 .79	4 1.016	5 1.57	6 2.29	7 3.1
100	cfm	30	40	50	60	70	80	90	110	130
	m^3/ sec	.0141	.0189	.0236	.0283	.0331	.378	.0425	.052	.614
	ps in mm H_2o	.025	0.25	.67	1.22	1.65	2.37	3.08	3.68	6.
	throw in m	2.7	3.1	3.4	3.8	3.9	4.2	4.2	4.5	4.7
	NC	15	15	15	16	22	24	33	36	42
150	cfm	60	80	100	120	140	160	200	240	280
	m^3/ sec	.0283	.0378	.0472	.0567	.066	.756	.0945	.113	.132
	ps in mm H_2o	0.25	0.25	.51	.76	1.27	1.25	2.06	3.35	4.75
	throw in m	3.	3.9	4.5	4.8	4.8	5.7	6.4	7.1	7.7
	NC	15	15	15	16	24	26	33	37	43
200	cfm	110	140	180	210	250	280	350	420	490
	m^3/ sec	.052	.066	.085	.099	.118	.132	.165	.198	.231
	ps in mm H_2o	0.25	.254	.51	.61	1.02	1.54	2.51	4.19	6.15
	throw in m	4.3	5.8	6.1	6.9	7.1	7.8	8.5	8.9	15
	NC	15	15	15	16	24	27	33	37	43
250	cfm	170	220	280	330	390	440	550	660	770
	m^3/ sec	.08	.104	.132	.156	.184	.208	.26	.312	.364
	ps in mm H_2o	0.25	0.25	.25	.46	.76	1.12	1.5	2.12	2.79
	throw in m	6.4	7.7	7.9	8.8	8.8	9.7	10.2	11.27	18
	NC	15	15	15	16	25	27	34	38	44
300	cfm	240	320	400	480	550	630	790	950	1100
	m^3/ sec	113	.151	.149	.227	.26	.298	.373	.449	.519
	ps in mm H_2o	0.25	0.25	0.25	.9	1.02	1.4	1.4	1.67	2.79
	throw in m	7.6	8.6	9.2	9.7	10	10.6	12.3	12.53	12.8
	NC	15	15	15	16	27	29	34	38	45
350	cfm	330	430	540	650	750	860	1070	1290	1500
	m^3/ sec	.156	.203	.255	.307	.354	.406	.505	.609	.708
	ps in mm H_2o	0.25	0.25	0.25	.84	.78	.88	1.17	1.46	3.5
	throw in m	8.2	9.6	10.1	11.5	11.9	12.3	13	15.5	17.6
	NC	15	15	15	17	27	29	35	39	45
400	cfm	420	560	700	840	980	1120	1400	1680	1960
	m^3/ sec	.198	264	.331	.397	.463	.529	.66	.793	.926
	ps in mm H_2o	0.25	0.25	0.25	.62	.92	1.17	1.46	1.75	2.04
	throw in m	9.1	10.9	11.5	12.8	12.7	13.9	16.3	18.5	20.8
	NC	15	15	15	17	29	31	36	41	46

- Neck velocity is measured in m/sec.
- Ps: static pressure loss across the diffuser in mm of H_2O.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- Noise criteria (NC) based on a room attenuation of 10 db.
-

Performance Data

Jet diffuser at 30 deflection

Neck size in mm Dia	neck velocity in m / sec	1.5	2	2.5	3	3.5	4	5	6	7
	p = vel pr loss in mm HO	.15	.25	.41	.56	.79	1.016	1.57	2.29	3.1
100	cfm	30	40	50	60	70	80	90	110	130
	m^3/ sec	.0141	.0186	.0236	.0283	.0331	.378	.0425	.052	.614
	ps in mm H_2o	.025	0.25	1.67	1.81	2.8	3.4	4.3	6.2	8.7
	throw in m	2.4	2.4	2.7	2.9	3.4	3.7	4.	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	.0283	.0378	.0472	.0567	.066	.756	.0945	.113	.132
	ps in mm H_2o	.51	0.75	1.4	1.4	1.76	2.13	3.64	5.8	8.5
	throw in m	2.4	3.	3.7	4.6	5.	5.5	6.1	6.7	7.
	NC	15	15	15	19	24	33	36	40	45
200	cfm	110	140	180	210	250	280	350	420	490
	m^3/ sec	.052	.066	.085	.099	.118	.132	.165	.198	.231
	ps in mm H_2o	0.25	.51	.84	1.11	1.71	2.85	3.41	6.1	8.7
	throw in m	3.7	5.2	5.5	6.1	6.4	7.	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	.08	.104	.132	.156	.184	.208	.26	.312	.364
	ps in mm H_2o	0.25	.51	.84	1.11	1.42	1.76	2.6	3.8	7.
	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	113	.151	.189	.227	.26	.298	.373	.449	.519
	ps in mm H_2o	0.25	0.25	.7	1.11	1.42	2.85	2.56	2.9	5.8
	throw in m	6.4	7.	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	.156	.203	.255	.307	.354	.406	.505	.609	.708
	ps in mm H_2o	0.25	0.25	.73	1.14	1.14	1.42	1.71	2.9	7.3
	throw in m	7.	7.9	9.5	10.1	11.	11.9	12.5	14	15.2
	NC	15	15	15	21	27	36	38	43	47
400	cfm	420	560	700	480	980	1120	1400	1680	1960
	m^3/ sec	.198	264	.331	.397	.463	.529	.66	.793	.926
	ps in mm H_2o	0.25	0.25	.84	1.06	.63	.85	1.17	2.05	2.5
	throw in m	8.2	9.8	11.	11.9	12.5	13.1	14.6	16.4	18.3
	NC	15	15	15	22	28	36	39	43	47

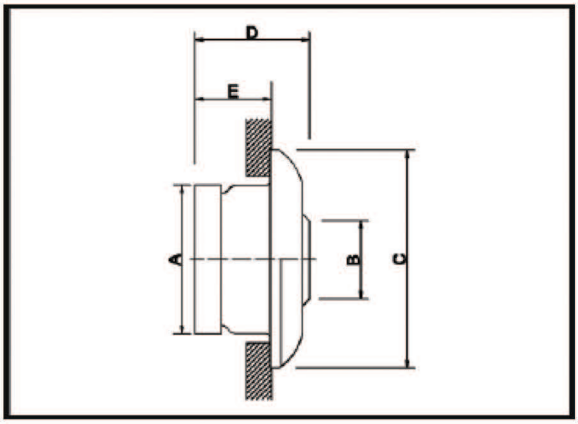
- Neck velocity is measured in m/sec.
- Ps: static pressure loss across the diffuser in mm of H_2O.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- Noise criteria (NC) based on a room attenuation of 10 db.
-

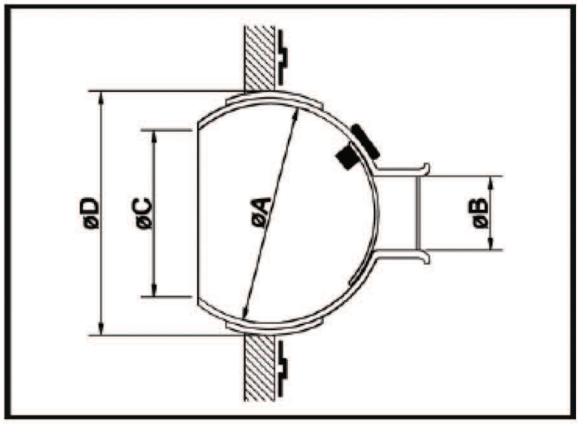
Jet Nozzle - Ball Jet

JD-VA

JD-VB

- Jet nozzles are developed for large and high area, such as airports, shopping centers, show centers, theaters etc.
- It ensures a long throw (25m) at high outlet velocities.
- The ball can be oriented 30°angle.
- They are used for cooling or heating with the characteristic of orientation.
- Rotated by manual or motor control.
- Material: They are made of aluminum sheet.
- Accessories:Damper (butterfly damper in plastic or steel manual control; radial-shape damper screw control).
- Mounting:Ceiling or wall mounting by screws, or collected into a circular duct.
- Finishing:White powder coating RAL 9016, RAL 9010, or customized color.





Jet Nozzle Size Data

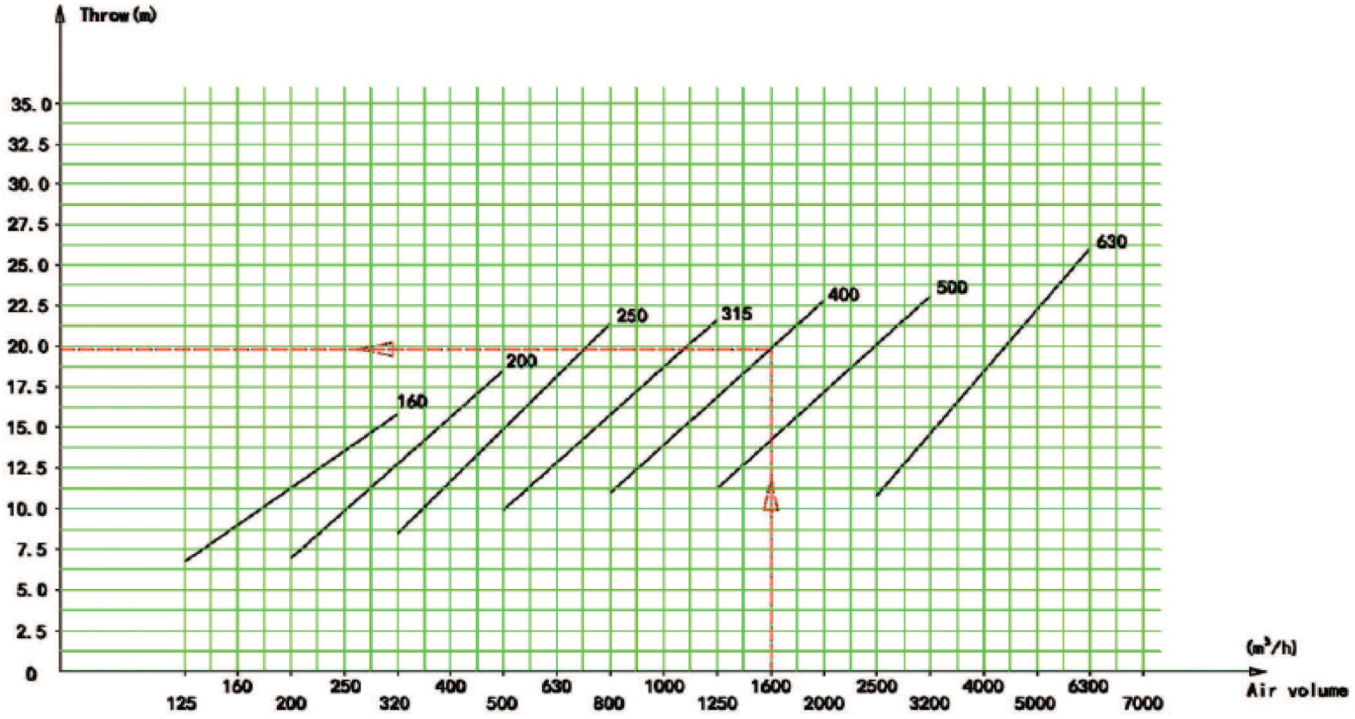
JD-VA size(mm)	A	B	C	D	E
125	120	61	172	96	72
150	145	75	200	113	83
160	155	75	200	113	83
200	195	105	265	142	107
250	245	128	314	179	135
315	310	165	390	230	174
350	345	185	433	251	186
400	395	210	495	285	218
450	445	235	559	316	235
500	495	256	618	350	259
630	625	323	779	440	335

JD-VB size(mm)	A	B	C	D
160	145	80	115	160
200	195	100	160	220
250	245	125	215	260
315	310	162	255	320
400	395	200	345	410

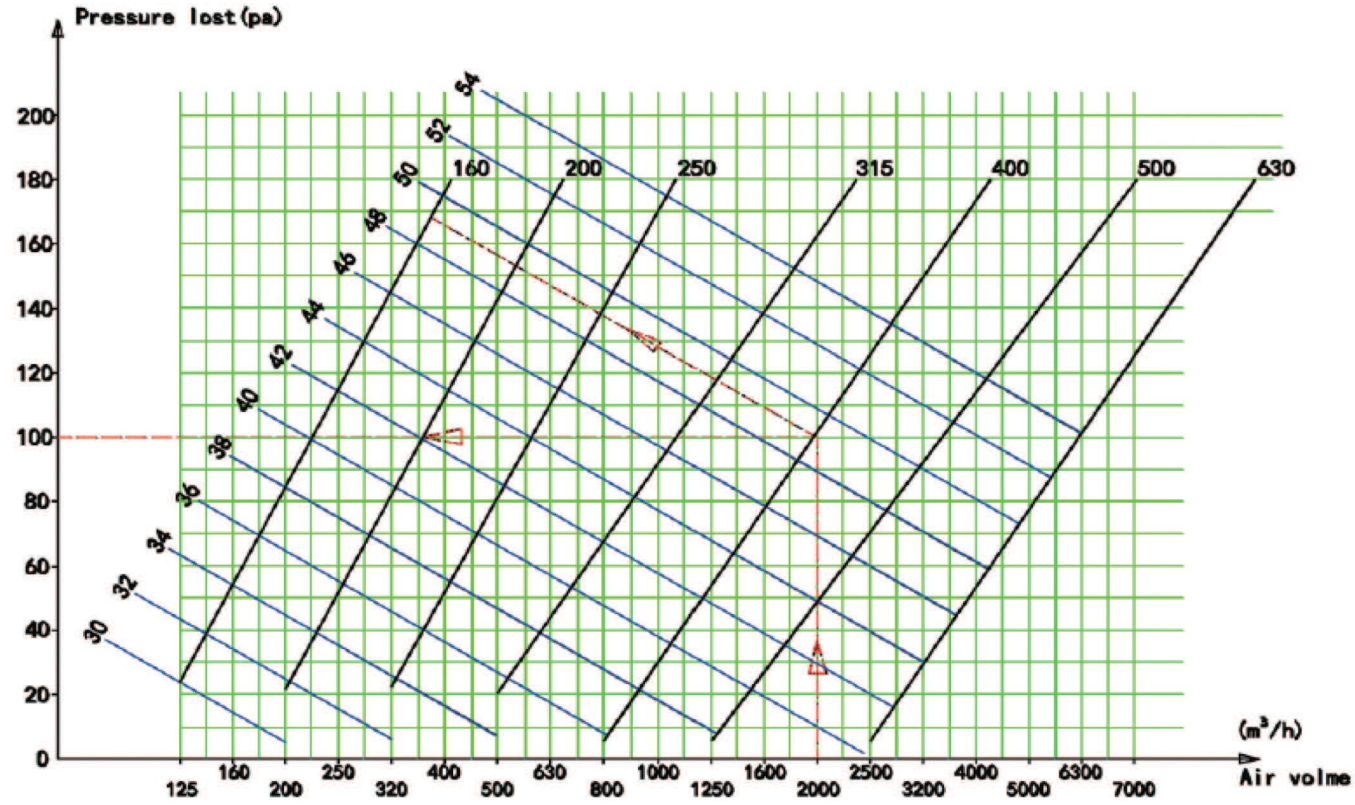
JD-VA size(mm)	Suitable round duct diameter						
125	200	250	315	500	630	800	1000
150	•	•					
160			•	•	•	•	
200			•	•	•	•	
250				•	•	•	
315				•	•	•	
350					•	•	
400					•	•	
450						•	
500						•	•
630							•

JD-VB	Suitable round duct diameter			
size(mm)	315	500	630	800
160	•	•	•	•
200		•	•	•
250		•	•	•
315		•	•	•
400			•	•

Jet Nozzle Data



Curve of air volume and throw for JD-VA Series (Vx = 0.5m/s)



Curve of air volume pressure lost and noise for JD-VA Series (Vx=0.5m/s)

Jet Nozzle Spec. Data (JD-VA)

Size(mm)	Effective area(m2)	Air volume(m3/h)	Pressure lost (Pa)	Noise dB(A)	Throw (m)
160	0.005	100	18.5	26	10.8
		125	22.8	30	13.5
		160	56	34	17.4
		200	82	39	22.2
		250	116	43	27.3
200	0.009	160	10	30	12.7
		200	21	33	16
		250	54	38	20
		320	82	41	25.7
		400	116	45	32.2
250	0.0145	250	11	29	12.9
		320	22	34	16.9
		400	55	39	25.2
		500	81	42	31.5
		630	116	46	37.5
315	0.023	400	12.8	26	16
		500	21	34	20
		630	46	38	25
		800	68	42	30.2
		1000	94	46	37
400	0.0415	630	8	32	17.6
		800	17	36	22.2
		1000	31	39	28.4
		1250	58	43	34
		1600	80	46	40
500	0.0642	1000	5	30	18.3
		1250	12	36	22.8
		1600	28.8	41	28.9
		2000	51	44	34.8
		2500	70	50	41.2
630	0.127	2000	6	36	17.5
		2500	12.5	41	21.8
		3200	29.4	43	27.6
		4000	52	46	35.4
		5000	78	49	44.3

Data were chosen when the air velocity is 2.5m/s and the velocity at throw distance is 0.25m/s.

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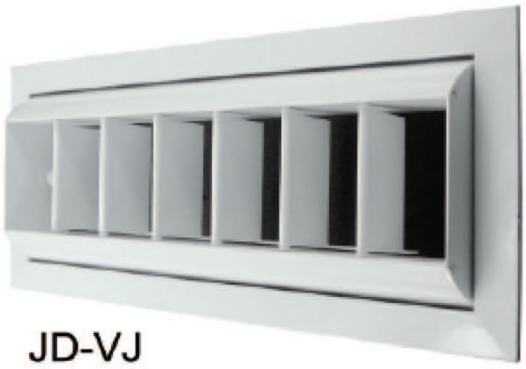
Jet Nozzle Spec. Data (JD-VB)

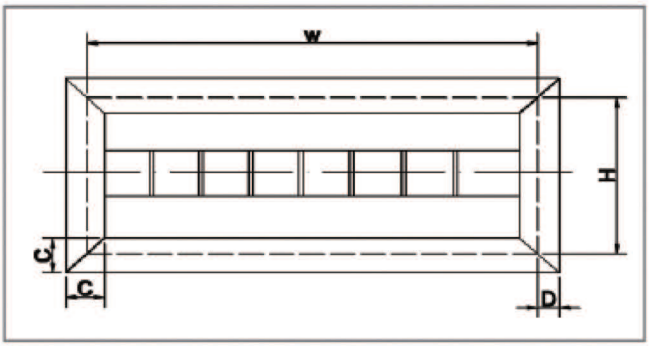
Size(mm)	Effective area(m2)	Air volume(m3/h)	Pressure lost (Pa)	Noise dB(A)	Throw (m)
160	0.0033	100	19	26	10.8
		125	23	30	13.5
		160	58	34	17.4
		200	85	39	22.2
		250	119	43	27.3
200	0.0079	160	12	30	12.7
		200	23	33	16
		250	56	38	20
		320	84	41	25.7
		400	117	45	32.2
250	0.0122	250	11	29	12.9
		320	22	34	16.9
		400	55	39	25.2
		500	81	42	31.5
		630	116	46	37.5
315	0.0214	400	12.8	26	16
		500	21	34	20
		630	46	38	25
		800	68	42	30.2
		1000	94	46	37
400	0.0415	630	8	32	17.6
		800	17	36	22.2
		1000	31	39	28.4
		1250	58	43	34
		1600	80	46	40

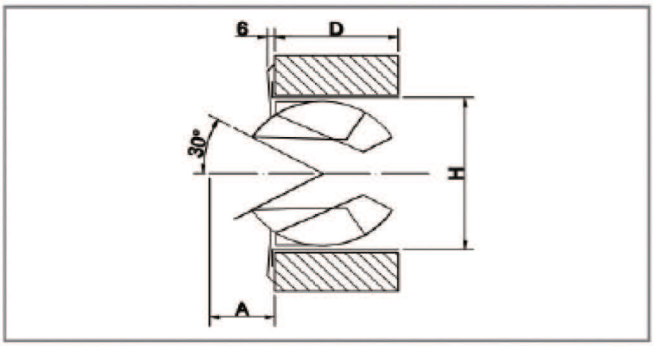
Data were chosen when the air velocity is 2.5m/s and the velocity at throw distance is 0.25m/s.

Drum Jet Diffuser

- Drum jet diffuser is designed to meet the requirements of low pressure drop, quiet operations, long distance throw and good air spread in large areas.
- The air flow direction can be oriented up and down by rotating the cylindrical inner casing in a 60°angle.
- The air flow direction can be oriented left and right by adjusting the blades on the inner casing.
- Material: They are made of aluminum sheet.
- Mounting: Wall mounting by screws, or collected into a rectangular or circular duct.
- Finishing: White powder coating RAL 9016, RAL 9010, or customized color.


JD-VJ





Selection table

Standard size (mm)	Air volume (m3)	Throw (m)
300 ~ 150	350 ~ 800	6 ~ 16
375 ~ 150	450 ~ 1100	6 ~ 17
450 ~ 150	500 ~ 1300	6 ~ 17
600 ~ 150	600 ~ 1900	6 ~ 20
750 ~ 150	750 ~ 2300	6 ~ 21
900 ~ 150	800 ~ 2800	6 ~ 23
600 ~ 250	1700 ~ 3500	18 ~ 33
750 ~ 250	2000 ~ 4500	18 ~ 35
900 ~ 250	2200 ~ 5000	18 ~ 38
1050 ~ 250	2500 ~ 6000	18 ~ 40
1200 ~ 250	3000 ~ 7000	18 ~ 43
1350 ~ 250	3200 ~ 7500	18 ~ 43
1500 ~ 250	3400 ~ 8500	18 ~ 43

How To Order


HOW TO ORDER
Model Code
J D
Diameter
200 mm
No.Of Diffusers
No . Of Ways
1 D
2 D
3 D
4 D
Quantity
10
Accessories
Plenum box
Finish
R 9010
Any Other Color Code

We are proud to be associated with

MALL OF ARABIA