



شركة مصنع عالم الناصريه المحدودة

AL NASSERIAH WORLD FACTORY COMPANY LTD

## JET NOZZLE DIFFUSERS



## **ANA Jet Diffuser :**

Is designed for supplying air, commonly used in Ceiling air distribution applications in places which requires a high throw. Basically constructed from a frame and a horizontally or vertically movable cylinders core.



## **ANA JD Construction**

### **Frame :**

Constructed from Aluminum Sheet alloy **6063** in a round shaped or can be made with square shape GI sheet **G90**.

### **Core :**

Constructed from Aluminum sheet alloy **6063** or Galvanized steel to handle huge airflow. fixed to the frame using mullion bars and arranged with Fixed distances between each two cores. Can be controlled manually and directed Vertically or horizontally in **30°**.

### **Dampers:**

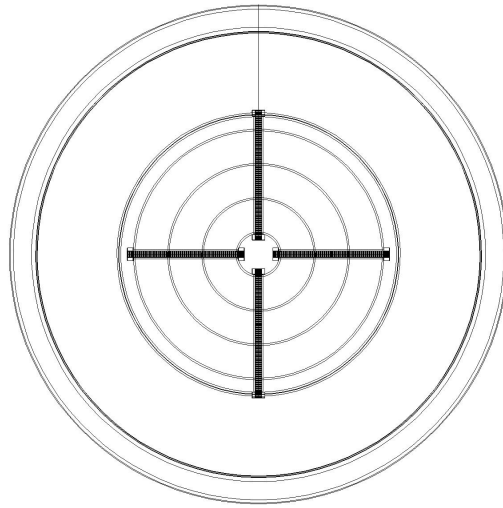
Can be added if required. Butterfly Damper type attached to the top side of the Diffuser by locking clips, constructed from Galvanized steel. and can be controlled by the screw.

### **Finish :**

Electrostatic powder coating is used for Jet Diffusers with standard white color for the Frame and the Cores (**RAL 9016**) and black color for the damper (**RAL 9005**) and other colors are available upon request.

## ANA Jet Diffuser

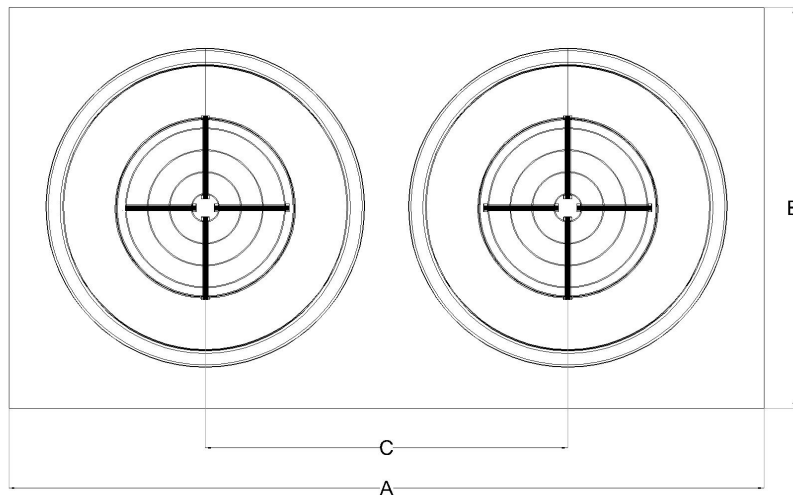
Model : NJD



- Air Discharge gives a high throw with adjustable  $60^\circ$  rotation angle .
- Volume damper (Butterfly Damper) can be added and attached to the neck and can be controlled by the screw.

## ANA Jet Diffuser Panel

Model : NJDP

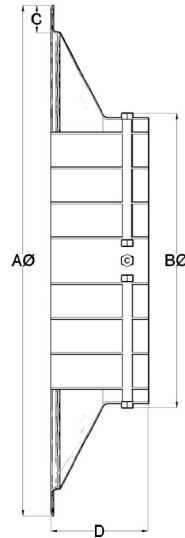


- Air Discharge gives a high throw with adjustable  $60^\circ$  rotation angle .
- Number of elements per panel should be specified.
- Volume damper (Butterfly Damper) can be added and attached to the neck of each element and can be controlled by the screw.

# JET NOZZLE DIFFUSERS

## ANA Jet Diffuser Dimensions:

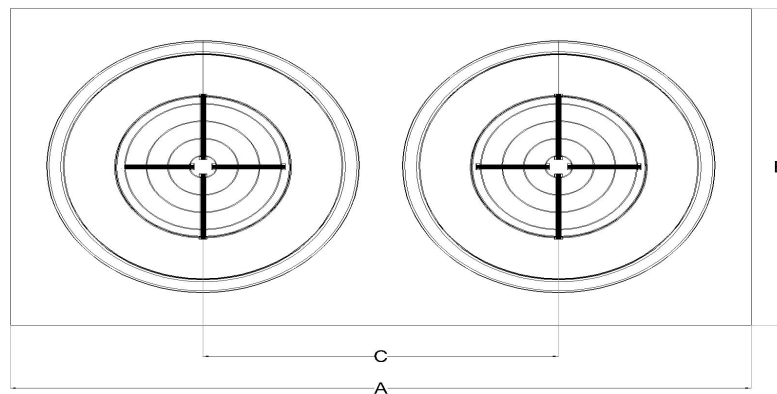
### JET DIFFUSER



#### Dimensions (mm)

SIZE	A	B	C	D
150 Ø	342	147	25	85
200 Ø	394	199	25	85
250 Ø	444	249	25	85
300 Ø	494	299	25	85
350 Ø	545	350	25	85
400 Ø	596	401	25	85
450 Ø	657	462	30	85

### JET DIFFUSER PANEL



\*Co-ordinate with our Technical Department to select Jet Diffuser Sizes and Panel Size based on the Air Flow and project requirements.

# JET NOZZLE DIFFUSERS

## ANA Jet Diffuser Performance Data:

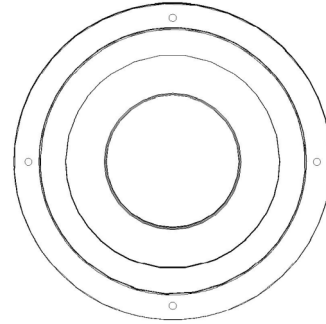
SIZE	Neck Velocity (fpm)		300		400		500		600		700		800		1000		1200		1400	
	Velocity Pressure (in. w.g.)		0.006		0.010		0.016		0.022		0.031		0.040		0.062		0.090		0.122	
	Deflection		0	22.5	0	22.5	0	22.5	0	22.5	0	22.5	0	22.5	0	22.5	0	22.5	0	22.5
8"	Neck Area sq. ft. 0.349	CFM	110		140		180		210		250		280		350		420		490	
		SP (in. w.g.)	-	-	0.010	0.020	0.020	0.030	0.024	0.040	0.040	0.060	0.055	0.100	0.090	0.120	0.150	0.210	0.220	0.300
		NC	-	-	-	18	-	18	15	18	20	21	22	26	25	32	27	33	35	40
		Throw (ft.)	14	12	18	17	20	18	22	20	24	21	26	23	28	25	30	27	32	28
10"	Neck Area sq. ft. 0.545	CFM	170		220		280		330		390		440		550		660		770	
		SP (in. w.g.)	-	-	-	0.020	0.010	0.030	0.018	0.040	0.030	0.050	0.040	0.062	0.054	0.091	0.076	0.130	0.100	0.240
		NC	-	-	-	-	-	15	-	20	20	22	15	16	24	18	25	32	34	38
		Throw (ft.)	21	18	24	20	26	21	28	24	30	27	32	28	34	31	38	33	40	35
12"	Neck Area sq. ft. 0.785	CFM	240		320		400		480		550		630		790		950		1100	
		SP (in. w.g.)	-	-	-	0.010	-	0.025	0.035	0.040	0.040	0.050	0.050	0.100	0.050	0.090	0.060	0.100	0.100	0.200
		NC	-	-	-	-	-	-	-	-	-	20	18	22	22	32	31	38	35	42
		Throw (ft.)	25	21	27	23	28	26	31	28	34	31	35	32	41	38	42	40	43	41
14"	Neck Area sq. ft. 1.069	CFM	330		430		540		650		750		860		1070		1290		1500	
		SP (in. w.g.)	-	-	-	-	-	0.026	0.030	0.041	0.028	0.040	0.030	0.050	0.040	0.060	0.050	0.100	0.150	0.250
		NC	-	-	-	-	-	-	-	15	15	21	16	29	24	30	29	34	36	40
		Throw (ft.)	27	23	30	26	33	31	37	33	40	36	41	39	43	41	52	46	59	50
16"	Neck Area sq. ft. 1.396	CFM	420		560		700		840		980		1120		1400		1680		1960	
		SP (in. w.g.)	-	-	-	-	-	0.030	0.022	0.038	0.033	0.022	0.040	0.030	0.050	0.041	0.060	0.070	0.070	0.085
		NC	-	-	-	-	-	-	-	-	-	15	-	17	23	26	30	33	35	38
		Throw (ft.)	30	27	34	32	38	36	41	39	43	41	46	43	54	48	62	54	70	60
18"	Neck Area sq. ft. 1.767	CFM	540		720		900		1075		1255		1435		1795		2150		2500	
		SP (in. w.g.)	-	-	-	-	-	0.03	0.02	0.03	0.03	0.04	0.04	0.05	0.06	0.07	0.10	0.11	0.12	0.14
		NC	-	-	-	-	-	-	-	15	-	15	17	25	26	32	30	35	36	40
		Throw (ft.)	35	32	40	37	42	40	47	44	50	47	55	50	63	56	71	67	80	72

### Data Key :

- Air Flow : (CFM)
- Velocity : Feet per Minute (FPM)
- Throw : Feet (ft.)
- Pressure drop : Inch Water Gauge (in.w.g)
- CFM : Cubic Feet per Minute (CFM)
- NC : Noise Criteria at 10db attenuation.
- A<sub>r</sub> : Area Factor (Square Feet).

## ANA Eye Ball (Jet Nozzle)

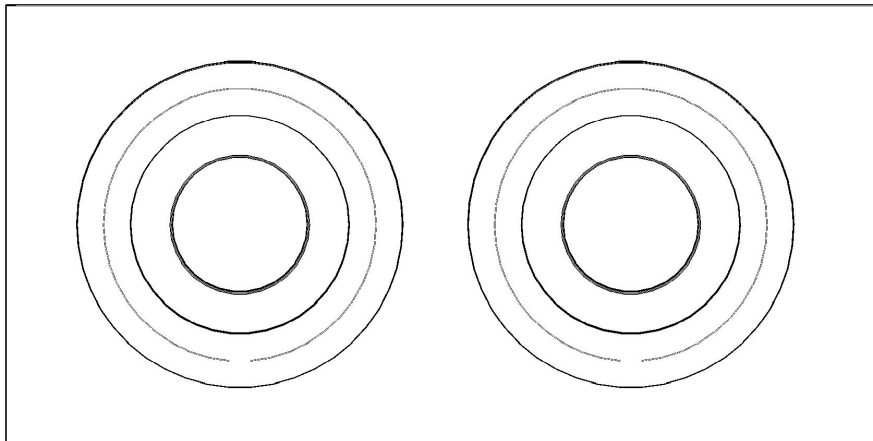
Model : NJN



- Jet nozzles are developed for large and high area, such as airports, shopping centres, theatres etc.
- Air Discharge gives a high throw (**25 m**) with adjustable **30°** rotating angle .
- Manufactured from Aluminum sheet **6063**.
- Mounted in ceiling or wall by screws.

## ANA Eye Ball Panel

Model : NJNP

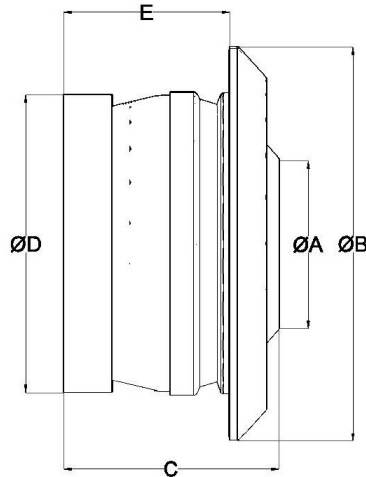


- Air Discharge gives a high throw (**25 m**) with adjustable **180°** rotating angle.
- Number of elements per panel should be specified.
- Manufactured from Aluminum sheet **6063**.
- Mounted in ceiling or wall by screws.

## JET NOZZLE DIFFUSERS

### ANA Eye Ball (Jet Nozzle) Dimensions:

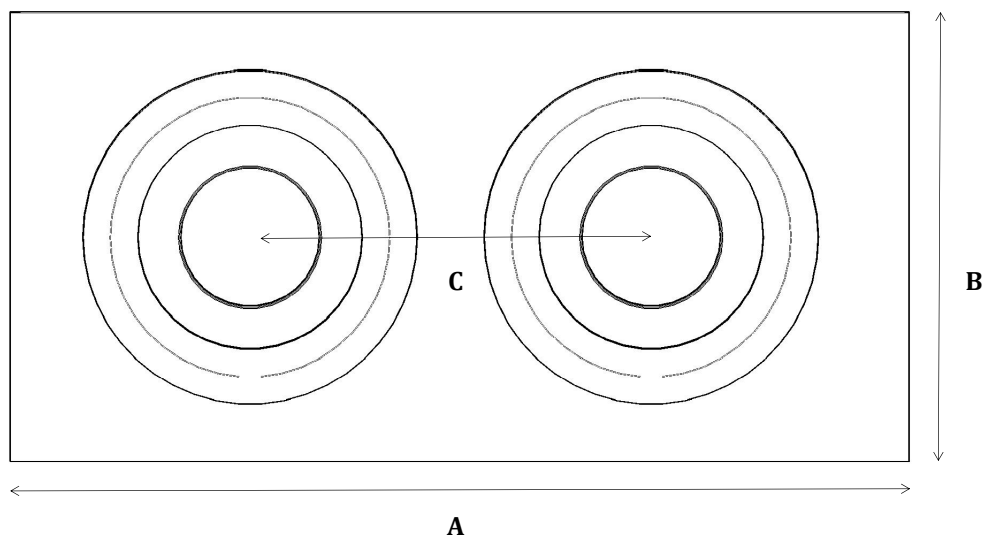
#### JET NOZZLE



#### Dimensions (mm)

SIZE	A	B	C	D	E
100 Ø	45	140	85	97	61
150 Ø	75	200	113	145	83
200 Ø	105	265	142	195	107
250 Ø	128	314	179	245	135
315 Ø	165	390	230	310	174
350 Ø	185	433	251	345	186
400 Ø	210	495	285	395	218

#### JET NOZZLE PANEL



\*Co-ordinate with our Technical Department to select Jet Nozzle Sizes and Panel Sizes based on the Air Flow and project requirements.

## ANA Eye Ball (Jet Nozzle) Performance Data:

Size (mm)	A <sub>r</sub> Effective Area (m <sup>2</sup> )	Air Volume (m <sup>3</sup> /h)	Pressure Drop (Pa)	NC	Throw (m)
150	0.005	100	18.5	<20	10.8
		125	22.8	<20	13.5
		160	56	24	17.4
		200	82	29	22.2
		250	116	33	27.3
200	0.009	160	10	20	12.7
		200	21	23	16
		250	54	28	20
		320	82	31	25.7
		400	116	35	32.2
250	0.0145	250	11	<20	12.9
		320	22	24	16.9
		400	55	29	25.2
		500	81	32	31.5
		630	116	36	37.5
315	0.023	400	12.8	<20	16
		500	21	24	20
		630	46	28	25
		800	68	32	30.2
		1000	94	36	37
350	0.0285	550	13	23	18
		670	23	27	23
		830	55	30	29
		1100	85	32	35
		1300	98	36	42
400	0.0415	630	8	22	17.6
		800	17	26	22.2
		1000	31	29	28.4
		1250	58	33	34
		1600	80	36	40

### Data Key :

- Air Flow : (m<sup>3</sup>/h)
- Throw : Meter (m)
- Pressure drop : Pascal (pa)
- NC : Noise Criteria at 10db attenuation.
- A<sub>r</sub> : Effective area (m<sup>2</sup>)

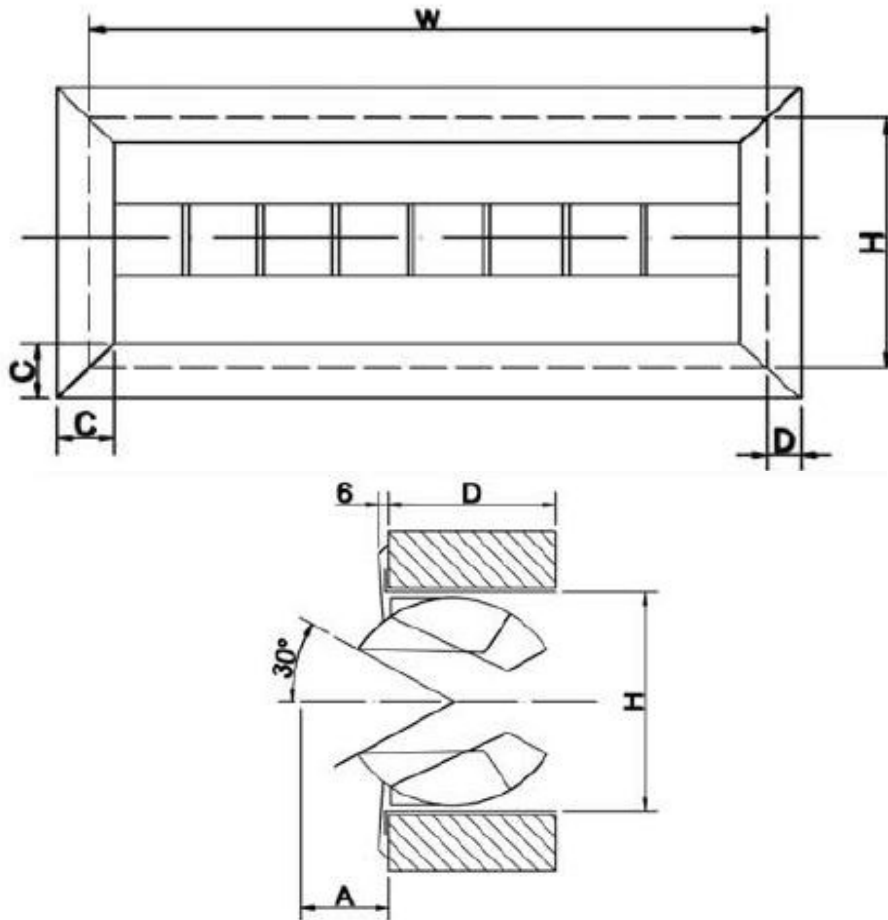
### ANA Drum Jet Diffuser Model : NDJD



- Air Discharge gives a long throw with good air spread angle, and a rotating angle of 60°.
- Air Direction can be adjusted Right and left by moving the blades.
- Manufactured from Aluminum sheet **6063**.
- Mounted in wall by screws.
- **Drum Jet Diffuser** Panel options are available

## JET NOZZLE DIFFUSERS

### ANA Drum Jet Diffuser Dimensions



### ANA Drum Jet Diffuser Performance Data

Size W x H (mm)	Air Flow (m <sup>3</sup> /h)	Throw (m)
300 x 150	350 - 800	6 - 16
375 x 150	450 - 1100	6 - 17
450 x 150	500 - 1300	6 - 17
600 x 150	600 - 1900	6 - 20
750 x 150	750 - 2300	6 - 21
900 x 150	800 - 2800	6 - 23
600 x 250	1700 - 3500	18 - 33
750 x 250	2000 - 4500	18 - 35
900 x 250	2200 - 5000	18 - 38
1050 x 250	2500 - 6000	18 - 40
1200 x 250	3000 - 7000	18 - 43
1350 x 250	3200 - 7500	18 - 43
1500 x 250	3400 - 8500	18 - 43





