



JET FLOW DIFFUSERS



## Our Product Ranges

### Dampers

- 1 Fire Dampers
- 2 Fire / Smoke Dampers
- 3 Volume Control Dampers
- 4 Motorized Control Dampers
- 5 Pressure Relief Dampers /Non Return Dampers

### Variable Air Volumes

- 6 Pressure Independent VAV
- 7 Constant Air Volume VAV
- 8 By Pass VAV

### Louvers

- 9 Sand Trap Louvers
- 10 Acoustic Louvers
- 11 Stationery Louvers / Architectural Louvers
- 12 Storm Louvers
- 13 Weather Louvers

### Sound Attenuators

- 14 Rectangular Sound Attenuators
- 15 Circular Sound Attenuators
- 16 Crosstalk Attenuators

### Electric Duct Heaters

- 17 Flange & Slip 'n' Type
- 18 Modulating & On/Off Type

### Air Outlets

- 19 Registers & Grilles
- 20 Diffusers (Linear Diffusers, Sq. & Rect. Ceiling Diffusers, Round Diffusers, Jetflow Diffusers)
- 21 Swirl Diffusers & Disc Valves
- 22 Drum Louvers



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**Airwellcare** Jet Diffusers provides ventilation to places where distribution of air through ceiling diffusers are difficult, where the space is an important factor.

## Why Jet Diffuser

In a large room or wide open areas, performance of ceiling outlets will be poor / inefficient and or unable to supply the required air uniformly.

Due to its aesthetical appearance and to obtain the optimum performance, Airwellcare JFD can be used in different areas such as Stadiums, Airports, Indoor Games, Shopping Malls, Theatres, Museums etc. where the air is supplied into the space at high velocity.



## Material & Finish

The Jet Diffusers are made of high quality Aluminium. The different powder coated finishes of Jet Diffusers will provide an architectural & aesthetic look.



## Series of Diffusers

Airwellcare Jet Diffusers can be used individually or in series to give a very high efficiency. The Jet Diffusers assembly panel can include up to four diffusers in series and can control up to four different zones.

The nozzles are comprising of face circular mounting flange with aerodynamically shaped and formed.

## Quality & Performance

Airwellcare Jet Diffusers are quality proven and is being performed competently in numerous prestigious projects across Middle East & Asia.

## Model : JFD 10 AE

**Airwellcare** Eye Ball Jet Diffusers are available between 160mm to 400mm Dia.

### Construction

The jet diffusers frames and its inner rings are made of high quality of Aluminium and can be mounted on a panel made of galvanized sheet steel.

### Standard Sizes

160, 200, 250, 315 & 400 mm

### Fixing

Diffusers can be prefixed on the Galvanized Panel comprising of 1, 2, 3 or 4 Nos Diffusers, depends on the performance required and the panel can be fixed onto the duct with screws.

- Can be direct fixed on the Circular Ducts.
- Fixed with Screws directly from flange to the Ducts.
- Jet Diffusers can be supplied with Plenum Box.



Type - A

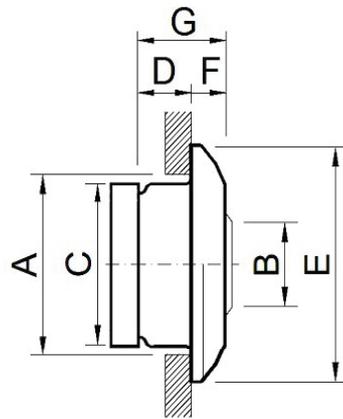


Type - B

## Key Features

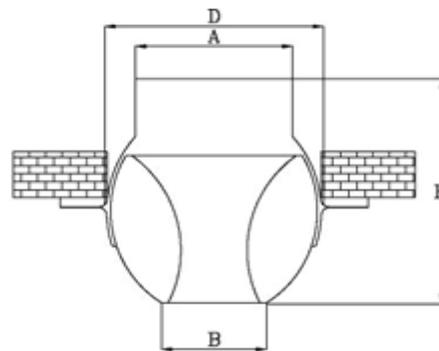
- Hurdle free installation.
- Aerodynamic design gives long throw even at high outlet velocities, and reduced noise levels.
- The Jet diffusers handle different supply air temperatures and the directional air flow pattern can be adjusted over +/-30° deflection with 360°rotation.
- Surface Finish
- Powder coated finish.
- Architecturally aesthetic appearance.
- Leakages are controlled with the help of Gaskets around the back of spout.

## Dimensional Details



Size (mm) Dia	A	B	C	D	E	F	G
125	135	61	125	40	173	24	58
160	175	75	159	48	200	23	68
200	215	105	203	70	265	27	95
250	270	130	252	110	310	25	138
315	335	180	318	123	378	30	153
400	420	223	398	170	468	31	225

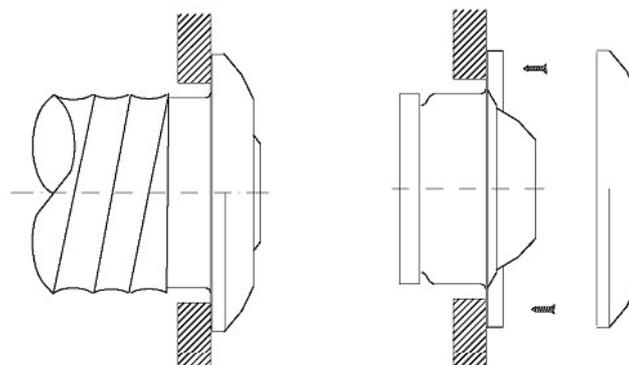
Type - B



Size (mm)	A	B	D	H
160	120	70 1	75 1	85
200	173	100	230	220
250	224	130	275	235
315	300	190	390	330
400	335	230	435	285

Type - A

## Installation Details



## Engineering Guidelines

Neck Size (mm)	Velocity (FPM)	492	591	689	788	886	985	1083
	Total Press. (Inch H <sub>2</sub> O)	0.02	0.064	0.11	0.25	0.41	0.52	0.66

160mm	CMH	48	59	68	80	90	97	102
	Total Press. (Inch H <sub>2</sub> O)	0.01	0.021	0.025	0.035	0.045	0.051	0.058
	Throw (m)	3.9 - 5.3	4.0 - 6.2	5.0 - 7.5	5.9 - 8.5	6.1 - 9.7	7.3 - 11	7.9 - 11.8
	NC	<13	<13	<13	<13	<13	<17	<17

200mm	CMH	82	93	112	127	148	156	185
	Total Press. (Inch H <sub>2</sub> O)	0.024	0.028	0.039	0.047	0.059	0.067	0.090
	Throw (m)	5.3 - 7.7	5.3 - 8.4	6.9 - 10.0	7.5 - 11.5	8.7 - 13.5	9.5 - 14.7	11.0 - 16.8
	NC	<15	<15	<17	<19	<19	<20	<22

250mm	CMH	127	153	178	199	224	250	275
	Total Press. (Inch H <sub>2</sub> O)	0.016	0.024	0.028	0.035	0.043	0.055	0.063
	Throw (m)	6.3 - 9.7	7.4 - 11.8	8.2 - 13.9	10.5 - 14.8	11.5 - 17.0	12.7 - 19.0	13.9 - 20.8
	NC	<16	<16	<16	<18	<18	<18	<20

315mm	CMH	212	251	294	336	374	416	455
	Total Press. (Inch H <sub>2</sub> O)	0.024	0.031	0.044	0.055	0.063	0.075	0.086
	Throw (m)	7.0 - 10.0	7.9 - 11.8	9.2 - 13.8	10.5 - 15.6	11.8 - 17.1	12.5 - 19.2	14.0 - 21.0
	NC	<17	<17	<18	<20	<20	<20	<21

400mm	CMH	464	557	663	787	909	1040	1172
	Total Press. (Inch H <sub>2</sub> O)	0.031	0.044	0.051	0.063	0.071	0.083	0.094
	Throw (m)	6.5 - 9.5	7.5 - 11.9	9.5 - 14.0	10.1 - 15.0	11.5 - 17.2	12.3 - 18.7	14.0 - 21.0
	NC	<18	<18	<19	<21	<21	<23	<23

- Throw is based on terminal velocities of 0.5 m/s.—0.25 m/s. respectively.
- NC Value is based on room absorption of 10dB, re 10<sup>-12</sup> Watts.
- Throw is measured in meters.
- Pressure loss across the diffuser in Inch of H<sub>2</sub>O.



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