

Jet Nozzle - JN

Model: JN-AB-11A/B

Type: A- Square Face; B- Round Face

**Construction: Aluminium (AL)** 

**BETEC CAD.** manufactures Jet Nozzles, which are designed to be used mainly in HVAC systems for the supply of conditioned (cool / hot) air from the jet diffuser, which has to travel a large distance to the occupied zone, where the distribution of air via ceiling diffusers is not possible. The jet nozzles are placed in the corners, high level areas and can be mounted in any angle, as its air pattern can be altered to any angle.

Jet Nozzle are suitable for vertical, inclined and horizontal air discharge applications, where spot heating or cooling is required such as entrances and concentrated areas of machinery which have high heat loads and are hence used normally in large rooms like Malls, Airports, Auditoriums, Sports Arena, Hyper markets, Zoo etc.

## **Description**

The frame, inner rings and mounting plate are of high quality aluminium construction. Nozzles are adjusted 30° up words and down words to achieve required throw as per site condition. Nozzle jet can be rotated by 360° by adjusting the mounting frame. The diffusers are wall mounted and are designed to withstand larger airflows with longer throws.

They are ideal for concert halls, theatres, exhibition and sport halls.

# **Standard Construction**

Frame

Aluminium sheet.

**Outer flange** 

Aluminium sheet.

Inner rings

Aluminium spun rings.

Mounting plate

1.2 mm thick aluminium sheet.

**Finish** 

Mill Finish

## **Optional Fittings**

## Plenum chamber

Plenum is available with circular, square or rectangular spigots in either top or side entry applications.

### Plenum Casing

0.7 mm thick galvanized steel sheet.

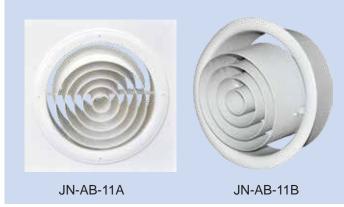
## Insulation

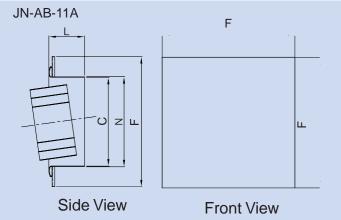
Acoustic liner of 13 mm thickness, 32 kg/m<sup>3</sup> density.

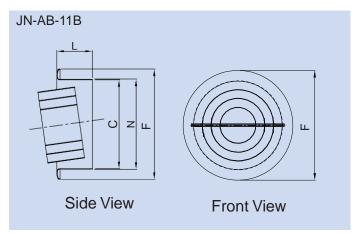
#### **Finish**

Available with RAL powder coating, please specify color.

# **B-10 Series**







| N = Nominal | JN-AB-11A      | JN-A | \B-11B             |     | No of |  |
|-------------|----------------|------|--------------------|-----|-------|--|
| Duct Dia    | F=Face<br>Size | С    | F=Fac<br>e<br>Size | L   | Slots |  |
| 150         | 240 x 240      | 150  | 220                | 130 | 2     |  |
| 210         | 295 x 295      | 205  | 275                | 130 | 3     |  |
| 250         | 350 x 350      | 248  | 325                | 130 | 4     |  |
| 300         | 400 x 400      | 300  | 375                | 130 | 5     |  |
| 350         | 450 x 450      | 340  | 425                | 130 | 6     |  |
| 400         | 500 x 500      | 398  | 475                | 130 | 7     |  |

Selected Products of the company have been Classified / Listed / Tested by various international testing authorities.

















**B-10 Series** 

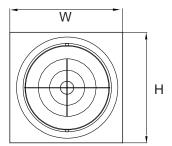


Jet Nozzle - JN **Construction Details and Daimensions** 

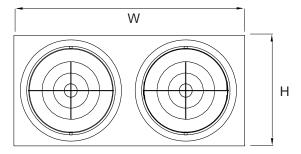
Model: JN-AB-11A/B

Type: A- Square Face; B- Round Face

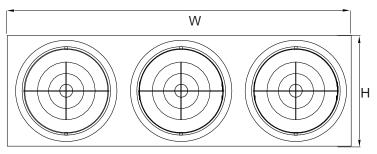
**Construction: Aluminium (AL)** 



Model: JN-AB-11A-1P



Model: JN-AB-11A-2P



Model: JN-AB-11A-3P

| Model       | Face Plate |             |  |  |  |
|-------------|------------|-------------|--|--|--|
| I-AB-11A-1P | Width (mm) | Height (mm) |  |  |  |
| mm Neck Dia | 250        | 250         |  |  |  |

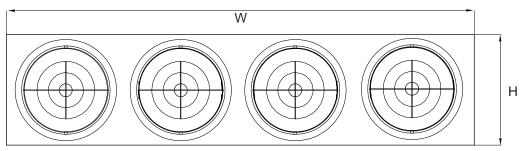
| 150 mm Neck Dia | 250 | 250 |  |  |
|-----------------|-----|-----|--|--|
| 200 mm Neck Dia | 300 | 300 |  |  |
| 250 mm Neck Dia | 350 | 350 |  |  |
| 300 mm Neck Dia | 400 | 400 |  |  |
| 350 mm Neck Dia | 450 | 450 |  |  |
| 400 mm Neck Dia | 500 | 500 |  |  |

JN-AB-1

| Model           | Face Plate |             |  |  |
|-----------------|------------|-------------|--|--|
| JN-AB-11A-2P    | Width (mm) | Height (mm) |  |  |
| 150 mm Neck Dia | 500        | 250         |  |  |
| 200 mm Neck Dia | 610        | 300         |  |  |
| 250 mm Neck Dia | 710        | 350         |  |  |
| 300 mm Neck Dia | 810        | 400         |  |  |
| 350 mm Neck Dia | 910        | 450         |  |  |
| 400 mm Neck Dia | 1010       | 500         |  |  |

| Model           | Face Plate |             |  |  |  |
|-----------------|------------|-------------|--|--|--|
| JN-AB-11A-3P    | Width (mm) | Height (mm) |  |  |  |
| 150 mm Neck Dia | 750        | 250         |  |  |  |
| 200 mm Neck Dia | 915        | 300         |  |  |  |
| 250 mm Neck Dia | 1065       | 350         |  |  |  |
| 300 mm Neck Dia | 1215       | 400         |  |  |  |
| 350 mm Neck Dia | 1365       | 450         |  |  |  |
| 400 mm Neck Dia | 1515       | 500         |  |  |  |

| Model           | Face Plate |             |  |  |  |
|-----------------|------------|-------------|--|--|--|
| JN-AB-11A-4P    | Width (mm) | Height (mm) |  |  |  |
| 150 mm Neck Dia | 1000       | 250         |  |  |  |
| 200 mm Neck Dia | 1220       | 300         |  |  |  |
| 250 mm Neck Dia | 1420       | 350         |  |  |  |
| 300 mm Neck Dia | 1620       | 400         |  |  |  |
| 350 mm Neck Dia | 1820       | 450         |  |  |  |
| 400 mm Neck Dia | 2020       | 500         |  |  |  |



Model: JN-AB-11A-4P

Selected Products of the company have been Classified / Listed / Tested by various international testing authorities.



















Jet Nozzle – JN B-10 Series

**Engineering And Performance Data** 

Model: JN-AB-11A/B

Type: A- Square Face; B- Round Face

**Construction: Aluminium (AL)** 

| Size | Neck<br>Velocity | 400   | 800   | 1200  | 1600 | 2400 | 2800 | 3200 | 3600 | 4000 |
|------|------------------|-------|-------|-------|------|------|------|------|------|------|
| 6    | CFM              | 123   | 153   | 183   | 213  | 243  | 273  | 303  | 333  | 363  |
|      | Ps (in.w.g)      | 0.023 | 0.036 | 0.05  | 0.12 | 0.21 | 0.33 | 0.52 | 0.74 | 0.92 |
|      | Throw            | 13.12 | 16.4  | 19.6  | 23   | 26.2 | 29.5 | 50   | 60   | 72   |
|      | NC               | <15   | <15   | 18    | 20   | 22   | 23   | 24   | 25   | 25   |
|      | CFM              | 142   | 187   | 232   | 277  | 322  | 367  | 412  | 457  | 502  |
| 0    | Ps (in.w.g)      | 0.024 | 0.048 | 0.096 | 0.15 | 0.25 | 0.37 | 0.61 | 0.82 | 1.22 |
| 8    | Throw            | 22    | 37    | 52    | 65   | 111  | 127  | 137  | 147  | 160  |
|      | NC               | <15   | <15   | 17    | 18   | 19   | 21   | 23   | 24   | 25   |
|      | CFM              | 175   | 235   | 295   | 350  | 410  | 470  | 530  | 590  | 650  |
| 40   | Ps (in.w.g)      | 0.017 | 0.034 | 0.069 | 0.12 | 0.23 | 0.41 | 0.74 | 0.93 | 1.31 |
| 10   | Throw            | 30    | 48    | 69    | 101  | 147  | 183  | 210  | 231  | 256  |
|      | NC               | <15   | <15   | 17    | 19   | 20   | 21   | 21   | 22   | 24   |
|      | CFM              | 222   | 302   | 382   | 462  | 542  | 622  | 702  | 782  | 862  |
| 40   | Ps (in.w.g)      | 0.02  | 0.05  | 0.1   | 0.15 | 0.3  | 0.53 | 0.87 | 1.02 | 1.37 |
| 12   | Throw            | 30    | 52    | 72.12 | 107  | 152  | 191  | 217  | 237  | 267  |
|      | NC               | <15   | <15   | 16    | 18   | 19   | 22   | 26   | 28   | 30   |
|      | CFM              | 277   | 376   | 475   | 574  | 672  | 770  | 869  | 968  | 1067 |
| 4.4  | Ps (in.w.g)      | 0.03  | 0.06  | 0.1   | 0.16 | 0.31 | 0.59 | 0.99 | 1.1  | 1.42 |
| 14   | Throw            | 32    | 55    | 90    | 125  | 162  | 203  | 226  | 249  | 276  |
|      | NC               | <15   | <15   | 18    | 20   | 21   | 24   | 27   | 30   | 32   |
| 16   | CFM              | 347   | 467   | 587   | 707  | 827  | 949  | 1070 | 1190 | 1313 |
|      | Ps (in.w.g)      | 0.04  | 0.069 | 0.16  | 0.2  | 0.39 | 0.71 | 1.19 | 1.37 | 1.57 |
|      | Throw            | 36    | 62    | 101   | 136  | 179  | 210  | 237  | 263  | 294  |
|      | NC               | <15   | <15   | 22    | 24   | 25   | 28   | 31   | 33   | 36   |

## Note:

- 1. Airflow is measured in Cubic foot/ minute (CFM).
- 2. Static Pressure (Ps) is measured in inch water guage (in.w.g).
- 3. Noise Criteria (NC) is measured in decibals (dB).
- 4. Neck velocity is measured in feet/ minute (fpm).













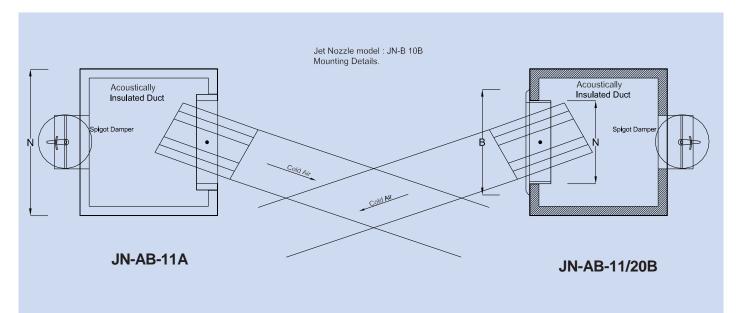


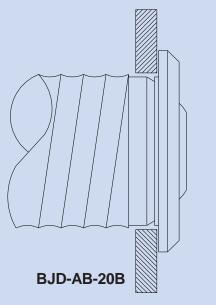


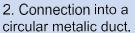


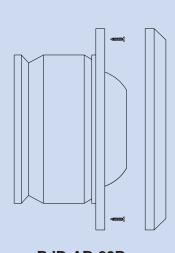
# Valves & Nozzles

## **Installation Details**









BJD-AB-20B

1. Wall or ceiling mounting by means of hidden screw behind the ring.

The diffuser can be fixed directly to the round duct.

Selected Products of the company have been Classified / Listed / Tested by various international testing authorities.















