

# DRPF-AL MODEL

## ALUMINUM ROUND DIFFUSER WITH TWO DISCHARGE PATTERN FOR LOW VOLUME



- Diffuser for HVAC application.
- Core plates, for maximum performance, at 360° diffusion pattern.
- 8", 10", 12" & 14" diameter available.

### CONSTRUCTION

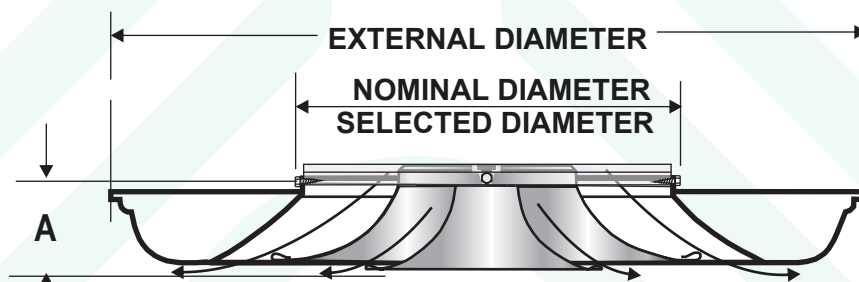
Aluminium construction

**FINISH:** Standard white Anodic acrylic paint.  
Other colors available.

**PERFORMANCE:** This diffusers assure a trustworthy use with cooling differentials temperature up to 20°F with a predictable low velocity airflow in the occupied area (35 feet/m)

## Dimensional Data

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| NOMINAL DIAMETER<br>SELECTED DIAMETER =<br>DUCT DIAMETER | EXTERNAL<br>DIAMETER | DIMENSION<br>"A" |
|----------------------------------------------------------|----------------------|------------------|
| 8"                                                       | 14-5/8"              | 2"               |
| 10"                                                      | 18-1/4"              | 2"               |
| 12"                                                      | 22- 0"               | 2-3/4"           |
| 14"                                                      | 26- 0"               | 3-1/8"           |
| 16"                                                      | 29- 0"               | 3-1/8"           |
| 18"                                                      | 31- 0"               | 3-1/8"           |

## ALUMINUM ROUND DIFFUSER WITH TWO DISCHARGE PATTERN FOR LOW VOLUME

TABLE 1 PERFORMANCE DATA

| NECK DIAMETER |       | NECK VELOCITY (Feet/Min .) |        |         |         |          |          |          |          |          |
|---------------|-------|----------------------------|--------|---------|---------|----------|----------|----------|----------|----------|
|               |       | 400                        | 500    | 600     | 700     | 800      | 900      | 1000     | 1200     | 1400     |
|               | VP    | 0.010                      | 0.016  | 0.022   | 0.031   | 0.040    | 0.050    | 0.062    | 0.090    | 0.122    |
|               | TP    | 0.029                      | 0.045  | 0.065   | 0.089   | 0.116    | 0.146    | 0.181    | 0.260    | 0.354    |
| 8"            | CFM   | 140                        | 175    | 210     | 245     | 280      | 315      | 350      | 420      | 490      |
|               | THROW | 2-3-7                      | 3-4-8  | 3-5-9   | 4-6-10  | 4-7-11   | 5-7-11   | 5-8-12   | 7-9-13   | 8-10-14  |
|               | NC    | -                          | -      | 12      | 17      | 21       | 25       | 28       | 34       | 39       |
| 10"           | CFM   | 218                        | 273    | 327     | 382     | 436      | 491      | 545      | 654      | 763      |
|               | THROW | 3-4-8                      | 3-5-10 | 4-6-12  | 5-7-12  | 5-8-13   | 6-9-14   | 7-10-15  | 8-12-16  | 10-12-18 |
|               | NC    | -                          | -      | 14      | 19      | 23       | 27       | 30       | 36       | 41       |
| 12"           | CFM   | 315                        | 390    | 470     | 550     | 630      | 705      | 785      | 940      | 1100     |
|               | THROW | 3-5-10                     | 4-6-12 | 5-7-14  | 6-9-15  | 7-10-16  | 7-11-17  | 8-12-18  | 10-14-20 | 11-15-21 |
|               | NC    | -                          | -      | 16      | 20      | 25       | 29       | 32       | 38       | 43       |
| 14"           | CFM   |                            |        |         |         |          |          |          |          |          |
|               | THROW | 4-6-11                     | 5-7-14 | 6-8-16  | 7-10-17 | 8-11-19  | 8-13-20  | 9-14-21  | 11-16-23 | 13-17-25 |
|               | NC    | -                          | -      | 17      | 22      | 26       | 30       | 33       | 39       | 44       |
| 16"           | CFM   | 560                        | 700    | 840     | 980     | 1120     | 1260     | 1400     | 1680     | 1960     |
|               | THROW | 4-7-13                     | 5-8-16 | 7-10-18 | 8-11-20 | 9-13-21  | 10-15-23 | 11-16-24 | 13-18-26 | 15-20-28 |
|               | NC    | -                          | 12     | 18      | 23      | 27       | 31       | 34       | 40       | 45       |
| 18"           | CFM   | 665                        | 850    | 1070    | 1255    | 1535     | 1730     | 2050     | 2460     | 3085     |
|               | THROW | 5-8-15                     | 6-9-18 | 8-12-20 | 9-12-22 | 10-15-23 | 12-17-25 | 13-18-27 | 15-20-29 | 17-22-30 |
|               | NC    | -                          | 14     | 21      | 28      | 34       | 41       | 45       | 57       | 64       |

- NOTES:1.- CFM IS CUBIC FEET PER MINUTE.  
 2.- TP IS TOTAL PRESSURE LOSS INCHES WATER COLUMN  
 3.- THROW IS THE AIR STEAM REACH IN FEET AT A TERMINAL VELOCITY OF 150, 100 & 50 FEET PER MINUTE, RESPECTIVELY.  
 4.- NC IS NOISE CRITERIA BASED ON 10dB ROOM ABSORPTION (Re:10-12WATTS) IN ANY OF THE OCTAVE BAND, 2nd THROUGH 7th.  
 5.- IF THE DIFFUSER IS MOUNTED ON AN EXPOSED DUCT THE THROW VALUES ARE 70% OF THOSE LISTED IN THE TABLE.  
 6.- ACTUAL PERFORMANCE, WITH FLEXIBLE DUCT INLET, MAY VARY IN THE FIELD.  
 7.- TO OBTAIN STATIC PRESSURE, SUBTRACT THE VELOCITY PRESSURE FROM THE TOTAL PRESSURE.