

# RADIAL SLOT DIFFUSER

# Performance Data

### 12 in. x 12 in. - Circular Array

Inlet Size	Neck Velocity (fpm) Velocity Pressure (in. w.g.)	200 0.002	300 0.006	400 0.010	500 0.016	600 0.022	700 0.031	800 0.040	900 0.050	1000 0.062	1200 0.090
6"0	Static Pressure (in. w.g.)	0.014	0.029	0.048	0.071	0.098	0.128	0.163	0.200	0.241	0.333
	Flow Rate (cfm)	39	59	79	98	118	137	157	177	196	236
	Sound (NC)	-	1		18	23	27	30	33	36	41
	Throw (ft.)	0-1-2	1-1-3	1-2-4	2-3-6	2-3-7	3-4-7	3-4-8	3-5-8	4-6-9	4-7-10

#### 24 in. x 24 in. - Circular Array

Inlet Size	Neck Velocity (fpm)	200	300	400	500	600	700	800	900	1000	1200
	Velocity Pressure (in. w.g.)	0.002	0.006	0.010	0.016	0.022	0.031	0.040	0.050	0.062	0.090
8"0	Static Pressure (in. w.g.)	0.006	0.013	0.022	0.032	0.045	0.059	0.075	0.093	0.112	0.155
	Flow Rate (cfm)	70	105	140	175	209	244	279	314	349	419
	Sound (NC)		12	1	+:	16	21	25	28	31	36
	Throw (ft.)	1-1-2	1-2-3	1-2-4	2-3-6	2-3-7	3-4-8	3-4-9	3-5-10	4-6-11	4-7-1
	Static Pressure (in. w.g.)	0.013	0.027	0.045	0.067	0.092	0.122	0.155	0.191	0.231	
1084	Flow Rate (cfm)	109	164	218	273	327	382	436	491	545	l
10"0	Sound (NC)			18	24	29	33	37	41	44	l
	Throw (ft.)	1-2-3	2-3-5	2-3-7	3-4-9	3-5-10	4-6-11	5-7-12	5-8-13	6-9-14	
12"ø	Static Pressure (in. w.g.)	0.025	0.052	0.086	0.129	0.178	0.235	0.298			
	Flow Rate (cfm)	157	236	314	393	471	550	628			
	Sound (NC)		20	28	34	39	44	48			
	Throw (ft.)	2-3-5	3-4-8	3-5-10	4-6-11	5-8-13	6-9-14	7-10-15			

## 24 in. x 24 in. - Square Array

Inlet Size	Neck Velocity (fpm) Velocity Pressure (in. w.g.)	200 0.002	300 0.006	400 0.010	500 0.016	600 0.022	700 0.031	800 0.040	900 0.050	1000 0.062	1200 0.090
8"0	Static Pressure (in. w.g.)	0.006	0.013	0.021	0.030	0.041	0.054	0.067	0.083	0.099	0.135
	Flow Rate (cfm)	70	105	140	175	209	244	279	314	349	419
	Sound (NC)	100			8.5	17	21	25	28	31	36
	Throw (ft.)	0-0-2	0-1-3	1-2-4	1-2-6	2-3-7	2-4-8	3-4-9	3-5-10	4-6-11	4-7-13
10"ø	Static Pressure (in. w.g.)	0.011	0.022	0.038	0.057	0.079	0.105	0.134	0.167	0.202	
	Flow Rate (cfm)	109	164	218	273	327	382	436	491	545	
	Sound (NC)		3.5.7	18	24	29	34	37	41	44	l
	Throw (ft.)	0-1-3	1-2-5	2-3-7	3-4-9	3-5-10	4-6-12	5-7-13	5-8-14	6-9-15	
12"ø	Static Pressure (in. w.g.)	0.026	0.053	0.089	0.132	0.182	0.239	0.303			
	Flow Rate (cfm)	157	236	314	393	471	550	628			
	Sound (NC)	165	20	28	34	39	44	48			
	Throw (ft.)	1-2-5	2-4-8	3-5-10	4-6-12	5-8-14	6-9-15	7-10-16			

#### **Performance Notes:**

- $1.\ Tested\ in\ accordance\ with\ ASHRAE\ Standard\ 70\ -\ 2006\ ``Method\ of\ Testing\ for\ Rating\ the\ Performance\ of\ Air\ Outlets\ and\ Inlets."$
- 2. Airflow is in cubic feet per minute [cfm].
- 3. NC, sound pressure levels, are based on a room absorption of 10 dB re 10-12 Watts, and a single diffuser/grille.
- 4. Blanks "-" indicate an NC level below 15.
- 5. All pressures are in inches of water column [in. w.g.].
- 6. Pressures not listed can be calculated using the following formula: Ptotal = Pstatic + Pvelocity
- 7. Throw data is based on supply air and room air being at isothermal conditions.
- 8. Throw data is given in feet [ft] to terminal velocities of:
- \* 150 fpm (minimum)
- \* 100 fpm (middle)
- \* 50 fpm (maximum)

Submittal No. Revision: Date: 01/01/2019 Submitted by: Date submitted: