

# AND/ANR/ANF

## Concentric Ring Nozzle Diffuser

# PERFORMANCE DATA

## AND

Size	Duct Velocity (fpm) Velocity Pressure (in. w.g.)	300 0.010	400 0.022	500 0.040	600 0.062	700 0.090	80 0.122	900 0.160	1000 0.090	1100 0.122	1200 0.160
5	Total Pressure (in. w.g.)	0.016	0.029	0.045	0.065	0.089	0.116	0.147	0.182	0.220	0.262
	Flow Rate (cfm)	41	55	68	82	95	109	123	136	150	164
	Sound (NC)	-	-	-	-	-	-	-	-	17	20
	Throw (ft.)	2-4-8	4-5-10	4-7-11	5-8-2	6-9-13	7-10-13	8-10-14	9-11-15	9-11-16	10-12-16
6	Total Pressure (in. w.g.)	0.017	0.030	0.047	0.068	0.093	0.121	0.153	0.189	0.229	0.273
	Flow Rate (cfm)	59	79	98	118	137	157	177	196	216	236
	Sound (NC)	-	-	-	-	-	-	18	22	26	29
	Throw (ft.)	3-5-10	4-6-11	5-8-13	6-10-14	7-11-15	9-11-16	10-12-17	10-13-18	11-13-19	11-14-20
8	Total Pressure (in. w.g.)	0.018	0.032	0.050	0.073	0.099	0.129	0.163	0.201	0.244	0.290
	Flow Rate (cfm)	105	140	174	209	244	279	314	349	384	419
	Sound (NC)	-	-	-	-	18	23	27	31	35	38
	Throw (ft.)	4-6-13	6-9-15	7-11-17	9-13-19	10-14-20	11-15-21	13-16-23	14-17-24	15-18-25	15-19-26
10	Total Pressure (in. w.g.)	0.019	0.034	0.053	0.076	0.103	0.135	0.171	0.211	0.255	0.304
	Flow Rate (cfm)	164	218	273	327	382	436	491	545	600	654
	Sound (NC)	-	-	-	16	21	26	31	35	38	42
	Throw (ft.)	5-8-16	7-11-19	9-13-21	11-16-23	12-18-25	14-19-27	16-20-29	17-21-30	18-22-32	19-23-33
12	Total Pressure (in. w.g.)	0.020	0.035	0.055	0.079	0.107	0.140	0.177	0.218	0.264	0.315
	Flow Rate (cfm)	236	314	393	471	550	628	707	785	864	942
	Sound (NC)	-	-	-	16	22	27	31	35	39	42
	Throw (ft.)	6-10-19	9-13-23	11-16-26	13-19-28	15-21-30	17-23-32	19-24-34	21-25-36	22-27-38	23-28-39
14	Total Pressure (in. w.g.)	0.020	0.036	0.056	0.081	0.110	0.144	0.182	0.225	0.272	0.324
	Flow Rate (cfm)	321	427	534	641	748	855	962	1068	1175	1282
	Sound (NC)	-	-	-	15	21	26	31	35	38	41
	Throw (ft.)	7-11-22	10-15-27	12-19-30	15-22-33	17-25-35	20-27-38	22-28-40	24-30-42	25-31-44	27-33-46
15	Total Pressure (in. w.g.)	0.020	0.036	0.057	0.082	0.112	0.146	0.184	0.228	0.276	0.328
	Flow Rate (cfm)	368	491	613	736	859	981	1104	1227	1349	1472
	Sound (NC)	-	-	-	-	20	25	30	34	37	41
	Throw (ft.)	7-12-24	11-16-29	13-20-32	16-24-35	19-27-38	21-29-40	24-30-43	26-32-45	27-33-47	29-35-49
16	Total Pressure (in. w.g.)	0.021	0.037	0.058	0.083	0.113	0.147	0.187	0.230	0.279	0.332
	Flow Rate (cfm)	419	558	698	837	977	1116	1256	1396	1535	1675
	Sound (NC)	-	-	-	-	19	24	29	33	36	40
	Throw (ft.)	8-13-26	11-17-30	14-21-34	17-26-37	20-28-40	23-30-43	26-32-46	28-34-48	29-36-50	30-37-53

### Performance Notes:

- Performance data is based on extrapolation of existing data. Testing must be done to confirm the above data.
- Air flow is in cubic feet per minute, CFM.
- All pressures are in inches of water.
- Throw values are given in feet to terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum).
- Throw data is based on supply air and room air at isothermal conditions.
- The NC values, sound pressure level, are based on a room absorption of 10 dB, re 10-12 watts and one diffuser.
- Blanks (-) indicate an NC value less than 15.

### Correction Factors

Deflection	0°	15°	30°
NC	-	+2	+4
Throw	-	-	-
Total Pressure	-	x 1.08	x1.12