Performance Data

Models RUNI and ARUNI

Nominal Neck Size	Neck Velocity, FPM	400	500	600	700	800	900	1000	1200	1400	1600
	Velocity Pressure	**.010**	**.016**	**.022**	**.031**	**.040**	**.050**	**.062**	**.090**	**.122**	**.160**
6" Dia.	**Total Pressure Horizontal**	.025	.039	.056	.077	.101	.128	.158	.220	.303	.399
	Vertical	.038	.060	.087	.121	.159	.204	.254	.355	.493	.655
	Airflow, CFM	**80**	**100**	**120**	**140**	**160**	**180**	**200**	**235**	**275**	**315**
	NC Horizontal	—	—	—	—	15	19	21	29	34	37
	Vertical	—	—	—	—	17	22	25	32	37	40
	Throw Horizontal	2-3-6	2-3-7	3-4-9	3-5-10	4-6-11	4-6-12	5-7-12	5-8-13	6-10-14	7-11-15
	Vertical	8-12-23	10-15-25	12-18-26	14-21-27	16-23-28	18-24-29	20-25-30	23-26-31	24-27-32	25-28-33
8" Dia.	**Total Pressure Horizontal**	.021	.033	.047	.064	.083	.105	.129	.185	.250	.325
	Vertical	.046	.072	.103	.141	.184	.232	.287	.412	.561	.732
	Airflow, CFM	**140**	**175**	**209**	**244**	**279**	**314**	**349**	**419**	**489**	**558**
	NC Horizontal	—	—	—	—	15	19	23	31	35	38
	Vertical	—	—	—	—	18	24	31	34	39	45
	Throw Horizontal	3-5-11	4-6-13	5-7-14	5-8-16	6-9-17	7-10-18	8-12-19	9-14-22	11-16-24	12-18-26
	Vertical	15-22-31	18-24-34	20-27-37	22-29-40	24-31-43	26-32-46	28-34-48	31-37-53	34-40-57	38-43-61
10" Dia.	**Total Pressure Horizontal**	.022	.034	.048	.066	.085	.108	.133	.191	.259	.338
	Vertical	.043	.067	.096	.131	.171	.217	.267	.384	.523	.682
	Airflow, CFM	**218**	**273**	**327**	**382**	**436**	**491**	**545**	**654**	**764**	**873**
	NC Horizontal	—	—	—	—	—	19	24	31	35	38
	Vertical	—	—	—	15	22	26	31	35	41	46
	Throw Horizontal	3-5-11	4-6-13	5-7-14	5-8-16	6-9-17	7-10-18	8-12-20	9-14-22	11-16-24	12-19-27
	Vertical	15-22-31	18-25-35	20-27-38	22-29-41	24-31-44	26-33-47	28-35-49	32-38-54	36-41-58	39-44-62
12" Dia.	**Total Pressure Horizontal**	.025	.038	.055	.074	.096	.121	.149	.214	.289	.376
	Vertical	.051	.080	.115	.156	.203	.257	.317	.456	.619	.808
	Airflow, CFM	**314**	**393**	**471**	**550**	**628**	**707**	**785**	**942**	**1100**	**1257**
	NC Horizontal	—	—	—	—	15	18	21	29	34	39
	Vertical	—	—	—	—	18	24	29	29	40	45
	Throw Horizontal	4-6-14	5-7-16	6-9-17	7-10-19	8-12-20	9-13-21	10-15-22	12-17-24	14-20-26	16-23-28
	Vertical	23-28-39	25-31-43	28-34-47	30-36-51	32-39-55	34-41-58	36-43-61	39-47-67	42-51-72	45-55-77
14" Dia.	**Total Pressure Horizontal**	.027	.041	.059	.080	.104	.131	.161	.230	.312	.406
	Vertical	.052	.081	.117	.158	.206	.261	.321	.461	.625	.814
	Airflow, CFM	**428**	**535**	**641**	**748**	**855**	**962**	**1069**	**1283**	**1497**	**1710**
	NC Horizontal	—	—	—	—	—	19	22	31	35	41
	Vertical	—	—	—	19	21	28	31	39	44	49
	Throw Horizontal	4-7-16	5-8-19	7-10-20	8-11-22	9-13-24	10-15-26	11-16-27	13-20-30	15-23-33	17-26-35
	Vertical	24-29-41	26-32-45	29-35-50	31-38-54	33-41-57	35-43-61	37-45-64	41-50-70	44-54-75	47-57-81
16" Dia.	**Total Pressure Horizontal**	.030	.045	.064	.086	.110	.138	.168	.238	.318	.410
	Vertical	.056	.087	.125	.170	.222	.280	.345	.496	.673	.877
	Airflow, CFM	**559**	**698**	**838**	**977**	**1117**	**1257**	**1396**	**1676**	**1955**	**2234**
	NC Horizontal	—	—	—	—	18	22	25	33	37	41
	Vertical	—	—	19	21	24	30	33	40	45	50
	Throw Horizontal	5-7-16	6-9-19	7-11-22	8-12-25	9-14-27	11-16-30	12-18-32	14-21-36	17-25-41	19-28-45
	Vertical	25-31-43	28-34-48	31-38-53	33-40-57	35-43-61	38-46-64	40-48-68	43-53-74	47-57-80	50-61-86

Performance Notes:

1. Horizontal throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions for a ceiling mounted diffuser (inner plaque in fully down position A). For exposed duct mounting, multiply the throw values by 0.70.

2.Vertical throws are given at 150, 100 and 50 fpm under isothermal conditions (inner plaque in fully up position B). For non-isothermal conditions, use the correction factors in the table.

3. All pressures are in inches w.g.. To obtain static pressure, subtract the velocity pressure from the total pressure.

4. NC (Noise Criteria) values are based upon 10 dB room absorption, re 10^{-12} watts. Dash (-) in space indicates an NC of less than 15.

5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.

ΔT Temp. Differential	Correction Factor
20°F Cooling	x 1.40
Isothermal	x 1.00
10°F Heating	x 0.83
20°F Heating	x 0.58
30°F Heating	x 0.53
40°F Heating	x 0.43

Neck Size Diameter in Inches	Ak Factor Position A (Cones Down Horizontal)
6	.12
8	.21
10	.33
12	.51
14	.70
16	.88