



ENGINEERING DATA

VTD

VTD Maximum Flow Selection Table

Inlet Size	Neck Velocity	400	500	600	700	800	900	1000
	Velocity Pressure	0.010	0.016	0.022	0.031	0.040	0.050	0.062
6"	Static pressure	0.016	0.024	0.037	0.048	0.064	0.082	0.100
	Total Pressure	0.026	0.04	0.059	0.079	0.104	0.132	0.162
	CFM	79	98	118	137	157	177	196
	NC	5	10	14	17	20	23	25
	Throw, ft	1-2-3	1-2-4	2-3-5	2-3-6	2-3-7	3-4-7	3-4-8
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8"	Static pressure	0.021	0.032	0.047	0.063	0.083	0.106	0.130
	Total Pressure	0.031	0.048	0.069	0.094	0.123	0.156	0.192
	CFM	140	175	209	244	279	314	349
	NC	8	13	17	20	23	25	28
	Throw, ft	2-3-5	2-3-7	2-4-8	3-5-9	3-5-10	4-6-10	4-7-11
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10"	Static pressure	0.030	0.047	0.069	0.093	0.122	0.155	0.190
	Total Pressure	0.040	0.063	0.091	0.124	0.162	0.205	0.252
	CFM	218	273	327	382	436	491	545
	NC	14	19	23	26	29	31	34
	Throw, ft	3-4-8	4-5-10	4-6-11	5-8-12	6-9-13	6-10-14	7-10-14
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12"	Static pressure	0.048	0.075	0.109	0.147	0.192	0.244	0.301
	Total Pressure	0.058	0.091	0.131	0.178	0.232	0.294	0.363
	CFM	314	393	471	550	628	707	785
	NC	24	29	33	36	39	41	44
	Throw, ft	4-6-11	5-8-12	6-9-13	7-10-14	8-11-15	9-11-16	10-12-17

- See page SP55 for performance notes



ENGINEERING DATA

VTD

AHRI Rating Data				Inlet Size	6" Inlet	8" Inlet	10" Inlet	12" Inlet	
Standard Ratings Sound Power Level, dB	3. Airflow, cfm				147	262	409	589	
	4. Min. Operating Pressure, in H ₂ O				0.091	0.108	0.142	0.204	
	5. Max. Inlet Static Pressure				0.116	0.196	0.392	0.565	
	6. Rated with Pressure Relief, yes/no				n	n	n	n	
	Discharge	Standard Airflow Fully open damper	Minimum Differential Static Pressure,	Octave Band Frequency (Hz)	125	36	38	46	53
					250	37	40	48	56
					500	34	36	42	50
					1000	30	34	39	44
					2000	21	29	32	36
					4000	+	19	23	28
	Discharge	Standard Airflow Throttled Damper	Max. Inlet Static Pressure, in H ₂ O		125	+	44	46	50
					250	36	52	54	55
					500	40	57	58	60
					1000	34	51	55	58
2000					23	44	48	52	
4000					+	37	42	47	
NOTE: Sound Power levels below values shown in this table shall be listed as below significance.									
Hz Octave Band					125	250	500	1000	2000
Sound Power Level, dB				36	29	26	22	19	17

Notes:

1. Test were conducted in accordance with ARI Standard 880-98.
2. Sound power levels are referenced to 10⁻¹² watt.
3. Octave bands 2-7 correspond to 125 to 4000 Hz.
4. Performance data is presented for the VTD diffuser with the internal VAV damper in full open position

Noise Criteria (NC) Notes:

1. A plus (+) indicates the NC is lower than 15.
2. Noise Criteria (NC) were found using ARI Standard 885-98 Appendix E (2002 Addendum)