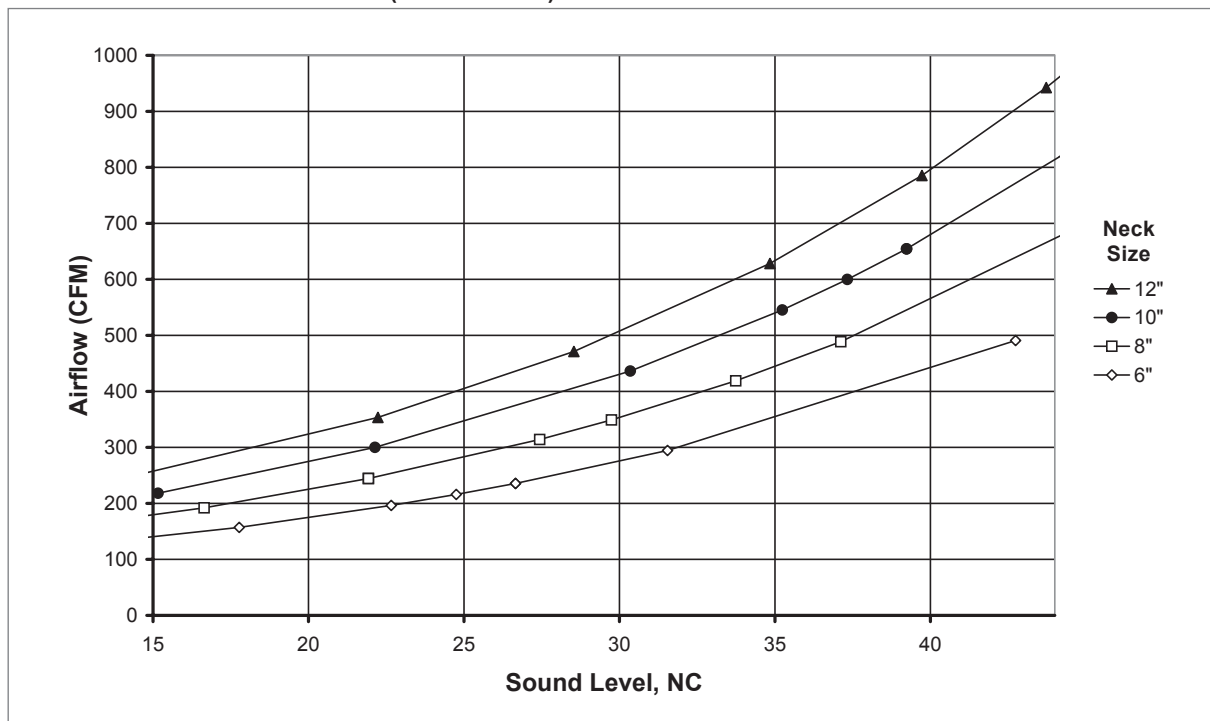


VPQ (Thermal VAV Control) Reference Charts: Horizontal Throw
AIRFLOW VS. NC LEVEL: VPQ-4 (FULLY OPEN)


VAV DIFFUSERS

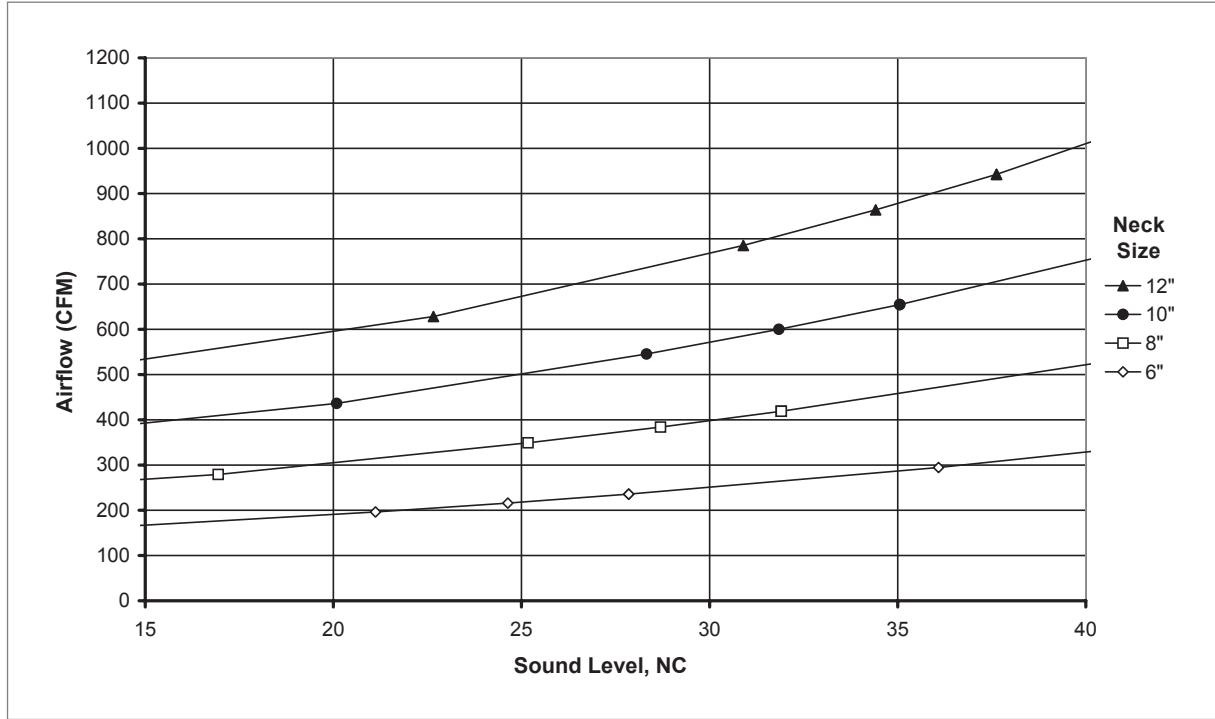
VPQ (Thermal VAV Control) Performance Data
IP/METRIC DATA: VPQ-4, 24"x24" PANEL SIZE, MAXIMUM FLOW SELECTION (FULLY OPEN)

	IP Data					NC	Metric Data					Octave Band, dB					
	Neck Vel	Air Flow	Min Ps	Min Pt	Throw		Neck Vel	Air Flow	Min Ps	Min Pt	Throw						
	FPM	CFM	"WG	"WG	ft		m/s	L/s	Pa	Pa	m	2	3	4	5	6	7
6" Dia.	400	79	0.014	.024	1 - 1 - 4	-	2.03	37	3.4	5.9	0.2 - 0.4 - 1.1	21	22	19	16	-	-
	550	108	0.026	.045	1 - 2 - 5	-	2.79	51	6.5	11.2	0.4 - 0.7 - 1.5	27	28	25	22	14	-
	700	137	0.042	.073	2 - 3 - 6	15	3.56	65	10.5	18.1	0.6 - 0.9 - 1.9	32	33	30	27	20	-
	850	167	0.062	.107	2 - 4 - 7	19	4.32	79	15.4	26.6	0.8 - 1.1 - 2.3	36	37	34	31	24	13
	1000	196	0.086	.148	3 - 4 - 9	23	5.08	93	21.4	36.9	0.9 - 1.3 - 2.7	39	40	37	35	27	17
8" Dia.	400	140	0.023	.033	2 - 3 - 6	-	2.03	66	5.6	8.1	0.5 - 0.9 - 1.8	28	30	26	22	14	-
	550	192	0.043	.062	3 - 4 - 8	17	2.79	91	10.6	15.3	0.8 - 1.2 - 2.4	35	36	32	28	21	11
	700	244	0.069	.100	3 - 5 - 10	22	3.56	115	17.2	24.8	1.0 - 1.5 - 3.1	40	41	37	33	26	16
	850	297	0.102	.147	4 - 6 - 12	26	4.32	140	25.4	36.6	1.2 - 1.9 - 3.6	43	45	41	37	30	21
	1000	349	0.141	.204	5 - 7 - 13	30	5.08	165	35.2	50.7	1.5 - 2.2 - 3.9	47	49	44	41	34	24
10" Dia.	400	218	0.034	.044	3 - 4 - 8	15	2.03	103	8.5	10.9	0.8 - 1.3 - 2.5	34	36	31	26	19	-
	550	300	0.064	.083	4 - 6 - 11	22	2.79	142	16.0	20.7	1.1 - 1.7 - 3.4	40	43	37	33	26	17
	700	382	0.104	.135	5 - 7 - 13	27	3.56	180	25.9	33.5	1.5 - 2.2 - 4.1	45	48	42	38	31	22
	850	464	0.153	.199	6 - 9 - 15	32	4.32	219	38.2	49.4	1.8 - 2.7 - 4.5	49	52	46	42	35	26
	1000	545	0.212	.275	7 - 10 - 16	35	5.08	257	52.9	68.4	2.1 - 3.1 - 4.9	52	55	49	46	39	30
12" Dia.	400	314	0.048	.058	4 - 5 - 11	20	2.03	148	11.9	14.4	1.1 - 1.6 - 3.3	39	41	35	30	23	15
	550	432	0.091	.109	5 - 7 - 14	27	2.79	204	22.6	27.3	1.5 - 2.3 - 4.4	45	48	42	37	30	21
	700	550	0.147	.177	6 - 9 - 16	32	3.56	259	36.5	44.1	1.9 - 2.9 - 4.9	50	53	46	42	35	27
	850	668	0.216	.261	8 - 11 - 18	36	4.32	315	53.9	65.1	2.3 - 3.5 - 5.4	54	57	50	46	39	31
	1000	785	0.300	.362	9 - 13 - 19	40	5.08	371	74.6	90.1	2.7 - 4.1 - 5.9	57	60	54	49	43	34

NOTES: Throw values are given for isothermal conditions and terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Dash in space denotes a NC or dB value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70. See Krueger's selection software for performance data not shown, including octave band data.

VPQ (Constant Volume / No Control) Reference Chart: Horizontal Throw

AIRFLOW VS. NC LEVEL: VPQ-0 (NO DAMPER)



VAV DIFFUSERS

VPQ (Constant Volume / No Control) Performance Data

IP/METRIC DATA: VPQ-0, 24"x24" PANEL SIZE (NO DAMPER)

	IP Data					NC	Metric Data					Octave Band, dB						
	Neck Vel	Air Flow	Ps	Pt	Throw		Neck Vel	Air Flow	Ps	Pt	Throw	Octave Band, dB						
	FPM	CFM	"WG	"WG	ft		m/s	L/s	Pa	Pa	m	2	3	4	5	6	7	
6" Dia.	200	39	0.000	.003	0 - 0 - 1	-	1.02	19	0.1	0.7	0.0 - 0.1 - 0.4	-	-	-	-	-		
	400	79	0.001	.011	1 - 1 - 4	-	2.03	37	0.3	2.8	0.2 - 0.4 - 1.1	22	14	-	-	-		
	600	118	0.002	.025	1 - 3 - 5	-	3.05	56	0.6	6.2	0.4 - 0.8 - 1.6	33	27	23	11	-		
	800	157	0.004	.044	2 - 4 - 7	13	4.06	74	1.1	11.0	0.7 - 1.1 - 2.1	41	35	32	22	11		
	1000	196	0.007	.069	3 - 4 - 9	21	5.08	93	1.7	17.2	0.9 - 1.3 - 2.7	47	42	40	30	21		
	1200	236	0.010	.100	4 - 5 - 11	28	6.10	111	2.4	24.8	1.1 - 1.6 - 3.2	52	48	46	36	28	13	
8" Dia.	200	70	0.002	.004	0 - 1 - 3	-	1.02	33	0.5	1.1	0.1 - 0.3 - 0.9	-	-	-	-	-		
	400	140	0.008	.018	2 - 3 - 6	-	2.03	66	2.0	4.5	0.5 - 0.9 - 1.8	27	18	13	-	-		
	600	209	0.018	.040	3 - 4 - 9	-	3.05	99	4.5	10.1	0.9 - 1.3 - 2.6	38	30	26	15	-		
	800	279	0.032	.072	4 - 6 - 12	17	4.06	132	8.0	17.9	1.2 - 1.8 - 3.5	46	39	36	26	16		
	1000	349	0.050	.112	5 - 7 - 13	25	5.08	165	12.4	28.0	1.5 - 2.2 - 3.9	52	46	43	34	26	11	
	1200	419	0.072	.162	6 - 9 - 14	32	6.10	198	17.9	40.3	1.8 - 2.6 - 4.3	57	52	49	41	33	20	
10" Dia.	200	109	0.004	.007	1 - 2 - 4	-	1.02	51	1.0	1.7	0.2 - 0.5 - 1.3	12	-	-	-	-		
	400	218	0.017	.027	3 - 4 - 8	-	2.03	103	4.2	6.7	0.8 - 1.3 - 2.5	31	21	15	-	-		
	600	327	0.038	.060	4 - 6 - 12	-	3.05	154	9.4	15.0	1.3 - 1.9 - 3.8	42	33	29	19	-		
	800	436	0.067	.107	5 - 8 - 14	20	4.06	206	16.8	26.7	1.7 - 2.5 - 4.4	49	42	38	29	20		
	1000	545	0.105	.168	7 - 10 - 16	28	5.08	257	26.2	41.8	2.1 - 3.1 - 4.9	55	49	45	37	30	17	
	1200	654	0.152	.242	8 - 12 - 18	35	6.10	309	37.8	60.1	2.5 - 3.8 - 5.4	60	54	51	44	37	26	
12" Dia.	200	157	0.007	.009	1 - 3 - 5	-	1.02	74	1.7	2.3	0.3 - 0.8 - 1.6	15	-	-	-	-		
	400	314	0.028	.038	4 - 5 - 11	-	2.03	148	6.9	9.4	1.1 - 1.6 - 3.3	34	23	17	-	-		
	600	471	0.062	.085	5 - 8 - 15	12	3.05	222	15.5	21.1	1.6 - 2.5 - 4.6	45	36	31	21	11		
	800	628	0.111	.151	7 - 11 - 17	23	4.06	297	27.6	37.5	2.2 - 3.3 - 5.3	53	44	40	32	23	12	
	1000	785	0.173	.236	9 - 13 - 19	31	5.08	371	43.1	58.6	2.7 - 4.1 - 5.9	59	51	47	40	33	22	
	1200	942	0.249	.339	11 - 15 - 21	38	6.10	445	62.1	84.5	3.3 - 4.6 - 6.4	63	57	53	47	40	30	

NOTES: Throw values are given for isothermal conditions and terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Dash in space denotes a NC or dB value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70. See Krueger's selection software for performance data not shown, including octave band data.

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