

Performance Data

Models 4320CB, 4320CBA, 4320CBAA • 12 x 12 (300 x 300) Module Size

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	1100	
6" Dia.	VP	.006	.010	.016	.023	.031	.040	.051	.075	
	TP	.023	.042	.037	.039	.052	.159	.204	.307	
	Flow Rate, CFM	60	80	95	115	135	155	175	215	
	T	4-Way	1-2-4	2-3-6	2-4-7	3-5-7	3-5-8	4-6-9	5-6-9	6-6-11
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15	7-11-16
		2-Way	2-4-8	3-5-11	4-6-13	5-8-15	6-9-16	7-11-18	8-12-20	9-13-22
1-Way		3-4-9	4-6-12	5-8-16	6-9-18	7-11-20	8-12-22	9-14-23	10-16-26	
NC	—	—	—	18	23	28	32	40		
8" Dia.	TP	.025	.045	.069	.102	.137	.180	.227	.340	
	Flow Rate, CFM	105	140	175	210	245	280	315	385	
	T	4-Way	2-3-6	2-4-8	3-5-9	4-6-10	4-7-11	4-8-12	5-9-12	6-9-15
		3-Way	2-3-7	3-4-9	3-5-11	4-7-12	5-8-13	6-9-14	7-10-14	8-11-16
		2-Way	3-4-9	4-6-13	5-8-15	6-9-17	7-11-18	8-13-20	9-14-21	10-16-24
		1-Way	3-5-11	5-7-15	6-9-18	7-11-21	8-13-22	10-15-24	11-17-25	12-19-29
NC	—	—	15	21	26	31	34	41		
6 x 6	TP	.025	.045	.066	.096	.132	.175	.224	.338	
	Flow Rate, CFM	75	100	125	150	175	200	225	275	
	T	4-Way	1-2-5	2-3-7	3-4-8	3-5-8	4-6-9	5-7-10	5-7-11	6-8-12
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15	7-11-17
		2-Way	3-4-9	4-6-12	5-7-15	6-9-17	7-10-20	8-12-21	9-14-22	10-16-25
		1-Way	3-5-10	4-7-14	6-9-18	7-10-21	8-12-23	9-14-24	10-16-26	11-18-29
NC	—	—	—	19	24	29	33	41		
8 x 8	TP	.027	.049	.076	.112	.151	.197	.249	.374	
	Flow Rate, CFM	135	175	220	265	310	355	400	490	
	T	4-Way	2-3-6	3-4-9	3-5-10	4-6-11	5-8-12	6-9-13	6-10-14	7-11-16
		3-Way	2-3-7	3-5-10	4-6-12	5-7-13	6-9-14	7-10-15	7-11-16	8-12-18
		2-Way	3-5-11	4-7-14	6-9-17	7-11-20	8-13-21	9-14-23	11-16-24	12-18-27
		1-Way	4-6-12	5-8-17	7-10-21	8-12-23	9-14-25	11-17-27	12-20-28	14-23-32
NC	—	—	16	22	27	32	35	42		

Models 4320CB, 4320CBA, 4320CBAA • 24 x 12 (600 x 300) Module Size

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	1100	
6" Dia.	VP	.006	.010	.016	.023	.031	.040	.051	.075	
	TP	.023	.042	.037	.039	.052	.159	.204	.307	
	Flow Rate, CFM	60	80	95	115	135	155	175	215	
	T	4-Way	1-2-4	2-3-6	2-4-7	3-5-7	3-5-8	4-6-9	5-6-9	6-6-11
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15	7-11-16
		2-Way	2-4-8	3-5-11	4-6-13	5-8-15	6-9-16	7-11-18	8-12-20	9-13-22
1-Way		3-4-9	4-6-12	5-8-16	6-9-18	7-11-20	8-12-22	9-14-23	10-16-26	
NC	—	—	—	18	23	28	32	40		
8" Dia.	TP	.025	.045	.069	.102	.137	.180	.227	.340	
	Flow Rate, CFM	105	140	175	210	245	280	315	385	
	T	4-Way	2-3-6	2-4-8	3-5-9	4-6-10	4-7-11	4-8-12	5-9-12	6-9-15
		3-Way	2-3-7	3-4-9	3-5-11	4-7-12	5-8-13	6-9-14	7-10-14	8-11-16
		2-Way	3-4-9	4-6-13	5-8-15	6-9-17	7-11-18	8-13-20	9-14-21	10-16-24
		1-Way	3-5-11	5-7-15	6-9-18	7-11-21	8-13-22	10-15-24	11-17-25	12-19-29
NC	—	—	15	21	26	31	34	41		
6 x 6	TP	.025	.045	.066	.096	.132	.175	.224	.338	
	Flow Rate, CFM	75	100	125	150	175	200	225	275	
	T	4-Way	1-2-5	2-3-7	3-4-8	3-5-8	4-6-9	5-7-10	5-7-11	6-8-12
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15	7-11-17
		2-Way	3-4-9	4-6-12	5-7-15	6-9-17	7-10-20	8-12-21	9-14-22	10-16-25
		1-Way	3-5-10	4-7-14	6-9-18	7-10-21	8-12-23	9-14-24	10-16-26	11-18-24
NC	—	—	—	19	24	29	33	41		
8 x 8	TP	.027	.049	.076	.112	.151	.197	.249	.374	
	Flow Rate, CFM	135	175	220	265	310	355	400	490	
	T	4-Way	2-3-6	3-4-9	3-5-10	4-6-11	5-8-12	6-9-13	6-10-14	7-11-16
		3-Way	2-3-7	3-5-10	4-6-12	5-7-13	6-9-14	7-10-15	7-11-16	8-12-18
		2-Way	3-5-11	4-7-14	6-9-17	7-11-20	8-13-21	9-14-23	11-16-24	12-18-27
		1-Way	4-6-12	5-8-17	7-10-21	8-12-23	9-14-25	11-17-27	12-20-28	14-23-32
NC	—	—	16	22	27	32	35	42		

For performance notes, see page D161.

Performance Data

Models 4320CB, 4320CBA, 4320CBAA • 24 x 24 (600 x 600) Module Size • Round Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	1100	
6" Dia.	VP	.006	.010	.016	.023	.031	.040	.051	.075	
	TP	.014	.025	.036	.052	.071	.094	.120	.181	
	Flow Rate, CFM	60	80	95	115	135	155	175	215	
	T	4-Way	1-2-4	2-3-6	2-3-7	3-4-7	3-5-8	4-6-9	4-6-9	5-6-11
		3-Way	1-2-5	2-3-7	2-4-8	3-5-9	4-6-9	4-7-10	5-7-11	6-8-12
		2-Way	2-3-7	3-4-9	4-6-11	4-7-12	5-8-13	6-9-14	7-11-15	8-12-17
1-Way		2-4-8	3-5-11	4-7-13	5-8-15	6-9-16	7-11-17	8-12-18	9-14-21	
NC	—	—	—	17	22	26	28	35		
8" Dia.	TP	.015	.027	.041	.060	.081	.106	.134	.200	
	Flow Rate, CFM	105	140	175	210	245	280	315	385	
	T	4-Way	2-3-6	2-4-8	3-5-9	4-6-10	4-7-11	4-8-12	5-9-12	6-9-15
		3-Way	2-3-7	3-4-9	3-5-11	4-7-12	5-8-13	6-9-14	7-10-14	8-11-16
		2-Way	3-4-9	4-6-13	5-8-15	6-9-17	7-11-18	8-13-20	9-14-21	10-16-24
		1-Way	3-5-11	5-7-15	6-9-18	7-11-21	8-13-22	10-15-24	11-17-25	12-19-29
NC	—	—	17	21	26	30	32	37		
10" Dia.	TP	.017	.029	.045	.066	.090	.118	.149	.224	
	Flow Rate, CFM	165	215	270	325	380	435	490	600	
	T	4-Way	2-3-7	3-5-10	4-6-12	5-7-13	5-8-14	6-10-15	7-11-16	8-12-19
		3-Way	2-4-8	3-5-11	4-7-13	5-8-15	6-10-16	7-11-17	8-13-18	9-15-21
		2-Way	4-6-12	5-8-16	6-10-20	8-12-22	9-14-23	10-16-25	12-18-27	14-21-31
		1-Way	4-7-14	6-9-18	7-11-23	9-14-26	11-16-28	12-18-29	14-22-31	16-25-35
NC	—	—	19	23	28	31	34	40		
12" Dia.	TP	.018	.032	.050	.072	.099	.127	.162	.394	
	Flow Rate, CFM	235	315	390	470	550	625	705	865	
	T	4-Way	3-4-9	4-6-12	5-7-14	6-9-15	7-10-17	8-12-18	9-13-20	10-15-22
		3-Way	3-5-10	4-7-14	5-8-16	7-10-18	8-12-20	9-14-22	10-15-23	11-17-26
		2-Way	4-7-14	6-9-20	8-12-24	9-14-26	11-17-28	13-20-30	14-23-32	16-26-36
		1-Way	5-8-17	7-11-23	9-14-28	11-17-31	13-20-33	15-23-35	17-26-37	19-29-42
NC	—	16	21	25	29	33	36	42		
14" Dia.	TP	.019	.034	.054	.078	.107	.139	.175	.230	
	Flow Rate, CFM	320	425	535	640	750	855	960	1175	
	T	4-Way	3-5-10	4-7-14	5-8-16	7-10-18	8-12-21	9-14-22	10-16-23	14-19-26
		3-Way	4-6-12	5-8-16	6-10-20	8-12-22	9-14-24	10-16-25	12-18-27	14-21-31
		2-Way	5-8-17	7-11-24	9-14-28	11-17-30	13-21-33	15-24-35	17-26-37	19-29-42
		1-Way	6-9-20	8-13-27	11-16-33	13-20-36	15-24-38	17-27-41	20-30-43	23-34-49
NC	—	17	22	26	30	34	38	45		
15" Dia.	TP	.011	.036	.056	.081	.110	.144	.180	.271	
	Flow Rate, CFM	370	490	615	740	860	985	1100	1350	
	T	4-Way	3-6-10	4-2-14	5-8-17	8-10-19	8-13-21	10-14-23	10-16-24	14-19-26
		3-Way	4-6-12	6-8-17	6-11-21	8-13-22	10-14-25	11-16-26	13-18-28	15-21-32
		2-Way	4-8-17	7-12-25	9-15-30	11-18-31	13-22-34	16-25-35	17-27-38	19-31-43
		1-Way	6-9-20	8-14-28	12-17-34	14-21-37	16-24-39	18-27-42	17-31-43	19-35-49
NC	—	18	23	27	31	35	39	46		
16" Dia.	TP	.021	.038	.059	.084	.114	.149	.189	.283	
	Flow Rate, CFM	420	560	700	835	975	1115	1255	1535	
	T	4-Way	4-6-12	5-8-16	6-10-20	8-12-22	9-14-23	10-16-25	12-18-26	16-22-31
		3-Way	4-7-14	6-9-18	7-11-23	9-14-25	10-16-27	12-18-29	14-22-30	16-25-34
		2-Way	6-9-20	8-13-27	10-16-32	13-20-35	15-24-37	17-27-40	20-30-42	23-34-48
		1-Way	7-11-23	10-15-31	12-18-37	15-23-41	17-27-44	21-31-47	23-35-50	26-40-57
NC	—	20	24	28	32	36	41	48		
18" Dia.	TP	.022	.039	.061	.087	.118	.155	.196	.293	
	Flow Rate, CFM	530	705	885	1060	1235	1415	1590	1945	
	T	4-Way	4-7-14	5-9-18	7-10-20	9-13-24	10-16-26	10-19-28	13-21-29	17-25-33
		3-Way	4-7-17	6-10-21	8-12-24	10-15-28	11-20-30	13-22-32	17-24-34	19-27-39
		2-Way	7-10-23	10-14-29	11-17-34	15-22-36	18-28-43	20-30-44	24-34-50	27-39-57
		1-Way	8-12-26	11-17-33	14-21-40	18-25-45	21-32-50	23-38-53	29-40-56	33-46-64
NC	—	18	25	30	34	38	42	47	54	

For performance notes, see page D161.

Performance Data

Models 4320CB, 4320CBA, 4320CBAA • 24 x 24 (600 x 600) Module Size • Square Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	1100	
6 x 6	VP	.006	.010	.016	.023	.031	.040	.051	.075	
	TP	.015	.027	.039	.057	.078	.103	.132	.199	
	Flow Rate, CFM	75	100	125	150	175	200	225	275	
	T	4-Way	1-2-5	2-3-7	3-4-8	3-5-8	4-6-9	5-7-10	5-7-11	6-8-12
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15	7-11-16
2-Way		3-4-9	4-6-12	5-7-15	6-9-17	7-10-20	8-12-21	9-14-22	10-16-25	
1-Way		3-5-10	4-7-14	6-9-18	7-10-21	8-12-23	9-14-24	10-16-26	11-18-29	
NC	—	—	—	18	23	27	29	35		
8 x 8	TP	.016	.029	.045	.066	.089	.116	.147	.220	
	Flow Rate, CFM	135	175	220	265	310	355	400	490	
	T	4-Way	2-3-6	3-4-9	3-5-10	4-6-11	5-8-12	6-9-13	6-10-14	7-11-16
		3-Way	2-3-7	3-5-10	4-6-12	5-7-13	6-9-14	7-10-15	7-11-16	8-12-18
		2-Way	3-5-11	4-7-14	6-9-17	7-11-20	8-13-21	9-14-23	11-16-24	12-18-27
1-Way		4-6-12	5-8-17	7-10-21	8-12-23	9-14-25	11-17-27	12-20-28	15-22-32	
NC	—	—	18	22	27	31	33	38		
10 x 10	TP	.018	.031	.049	.072	.099	.129	.163	.246	
	Flow Rate, CFM	210	275	345	415	485	555	625	765	
	T	4-Way	2-4-8	3-5-11	4-7-13	5-8-14	6-10-16	7-11-17	8-12-18	9-13-21
		3-Way	3-4-9	4-6-13	5-8-15	6-9-17	7-11-18	8-13-20	9-14-22	10-16-25
		2-Way	4-6-13	6-9-18	7-11-22	9-13-25	10-16-26	12-18-28	13-21-30	15-24-34
1-Way		5-8-16	7-10-22	8-13-26	10-16-29	12-18-31	14-22-33	16-25-35	18-29-40	
NC	—	—	20	24	29	32	35	41		
12 x 12	TP	.019	.035	.055	.079	.108	.139	.178	.433	
	Flow Rate, CFM	300	400	500	600	700	800	900	1100	
	T	4-Way	3-5-10	4-6-13	5-8-16	6-10-17	8-12-20	9-13-21	10-15-22	11-17-25
		3-Way	3-5-11	5-7-15	6-9-18	7-11-21	9-13-23	10-15-24	11-17-26	12-19-29
		2-Way	5-8-16	7-11-23	9-13-27	11-16-29	13-20-32	14-23-34	16-25-36	18-29-41
1-Way		6-9-20	8-12-26	10-16-31	12-20-34	14-23-37	17-26-40	22-31-44	25-35-50	
NC	—	17	22	26	30	34	37	43		
14 x 14	TP	.020	.037	.059	.085	.117	.152	.192	.253	
	Flow Rate, CFM	410	545	680	815	955	1090	1360	1500	
	T	4-Way	1-1-6	1-3-8	2-4-11	3-6-13	4-7-15	5-8-17	7-11-22	8-12-25
		3-Way	1-3-10	2-6-14	4-9-18	6-10-21	8-12-26	9-14-29	11-18-37	12-21-42
		2-Way	2-5-14	4-9-19	7-12-24	9-14-30	11-17-35	13-19-40	16-24-47	18-27-54
1-Way		3-8-17	6-11-23	9-14-30	11-17-36	13-20-42	15-23-48	19-30-54	22-35-64	
NC	—	18	23	27	31	35	39	46		
15 x 15	TP	.012	.039	.061	.089	.121	.158	.198	.298	
	Flow Rate, CFM	470	625	780	935	1095	1250	1405	1720	
	T	4-Way	4-6-12	5-8-17	7-10-21	8-12-23	10-15-25	11-17-26	12-20-28	13-22-32
		3-Way	4-7-14	6-9-20	8-12-24	9-14-26	11-17-28	13-20-30	14-23-32	16-26-36
		2-Way	6-10-21	9-13-28	11-17-33	13-21-37	16-25-40	18-28-42	21-32-45	24-36-51
1-Way		8-12-25	10-16-33	13-21-39	16-25-43	18-29-46	22-33-49	25-37-53	29-42-60	
NC	—	19	24	28	32	36	40	47		
16 x 16	TP	.023	.041	.064	.092	.125	.163	.207	.311	
	Flow Rate, CFM	530	710	890	1065	1245	1420	1600	1955	
	T	4-Way	4-7-14	5-9-18	7-10-20	9-13-24	10-16-26	10-19-28	13-21-29	15-24-33
		3-Way	4-7-17	6-10-21	8-12-24	10-15-28	11-20-30	13-22-32	17-24-34	19-27-39
		2-Way	7-10-23	10-14-29	11-17-34	15-22-36	18-28-43	20-30-44	24-34-50	27-39-57
1-Way		8-12-26	11-17-33	14-21-40	18-25-45	21-32-50	23-38-53	29-40-56	33-46-64	
NC	—	21	25	29	33	37	42	49		
18 x 18	TP	.024	.042	.067	.095	.129	.170	.215	.322	
	Flow Rate, CFM	675	900	1125	1350	1575	1800	2025	2475	
	T	4-Way	5-7-15	6-10-21	8-12-25	10-15-27	12-18-30	13-21-32	15-24-33	17-27-38
		3-Way	5-8-17	7-11-24	9-14-29	11-17-32	13-22-34	15-24-36	17-27-39	19-31-44
		2-Way	8-12-26	11-16-34	13-21-40	16-26-44	20-30-47	23-34-50	26-38-54	29-43-62
1-Way		9-14-29	12-20-39	16-25-47	20-29-52	23-34-56	26-39-60	29-44-64	33-50-73	
NC	19	26	31	35	39	43	48	55		

CFM - cubic feet per minute
FPM - feet per minute velocity
TP - total pressure - inches w.g.
VP - velocity pressure - inches w.g.
T - throw in feet
NC - Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.

Performance Notes:

- Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.

Balancing:

It is recommended that a commercially available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.