

Performance Data

Model: VLDS, VLDSOB, VLDFM, VLDFMOB- ONE-WAY PATTERN

Nominal Duct Width, inches	Neck Velocity Velocity Pressure Total Pressure	300 .006 .037	400 .010 .064	500 .016 .101	600 .022 .145	700 .031 .197	800 .040 .258	900 .050 .326
3"	CFM per ft.	75	100	125	150	175	200	225
	NC	—	—	20	24	28	32	35
	Throw	14-17-24	16-20-28	16-22-31	20-24-34	21-26-38	20-28-39	24-30-42
4 1/2"	CFM per ft.	113	150	188	225	263	300	338
	NC	—	16	22	26	30	34	37
	Throw	18-22-32	21-26-37	23-29-41	28-32-44	28-34-48	30-37-51	32-39-55
6"	CFM per ft.	150	200	250	300	350	400	450
	NC	—	17	23	27	31	35	38
	Throw	21-25-36	24-29-31	27-33-46	29-36-51	32-39-55	34-41-59	36-44-63
7 1/2"	CFM per ft.	187	150	312	375	437	500	563
	NC	—	17	23	27	31	35	38
	Throw	23-29-41	27-33-47	29-37-52	33-41-56	36-43-61	38-47-65	41-49-70
9"	CFM per ft.	225	300	375	450	525	600	675
	NC	—	18	24	28	32	36	39
	Throw	25-31-44	30-36-52	33-40-58	35-45-63	39-48-67	42-52-73	45-56-77
10 1/2"	CFM per ft.	263	350	438	525	613	700	788
	NC	—	18	25	28	33	37	40
	Throw	27-34-48	32-39-60	34-43-61	39-48-66	42-50-72	48-55-76	48-58-82
12"	CFM per ft.	300	400	500	600	700	800	900
	NC	—	19	25	29	33	37	40
	Throw	29-36-51	34-42-59	37-46-65	42-51-71	45-54-77	48-59-82	51-62-88

Model VLDS, VLDSOB, VLDFM, VLDFMOB-TWO-WAY PATTERN

Nominal Duct Width, inches	Neck Velocity Velocity Pressure Total Pressure	300 .006 .037	400 .010 .064	500 .016 .101	600 .022 .145	700 .031 .197	800 .040 .258	900 .050 .326
3"	CFM per ft.	75	100	125	150	175	200	225
	NC	—	13	18	23	27	30	34
	Throw	8-12-22	11-16-25	13-20-28	16-22-30	19-23-33	20-25-35	21-26-37
6"	CFM per ft.	150	200	250	300	350	400	450
	NC	—	16	21	26	30	33	37
	Throw	11-17-30	16-23-34	19-27-39	23-30-42	27-33-45	28-34-49	30-36-52
9"	CFM per ft.	225	300	375	450	525	600	675
	NC	—	18	24	28	32	36	39
	Throw	14-21-37	19-28-43	24-34-48	28-37-52	32-39-55	35-43-60	37-45-64
12"	CFM per ft.	300	400	500	600	700	800	900
	NC	—	19	25	29	33	37	40
	Throw	16-24-42	21-32-48	26-38-54	32-42-59	37-45-64	39-48-68	41-51-72

Throw Correction Factors for Various Lengths

Length (ft.)	2	3	4	5	6	8	10	12
Throw Correction	.70	.86	1.0	1.1	1.25	1.4	1.55	1.7

NC Correction Factors for Various Lengths

Length (ft.)	2	3	4	5	6	8	10
NC Correction	-3	-1	0	+1	+2	+3	+5

Performance Notes:

1. All pressures are in inches w.g.
2. Horizontal throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
3. Throw values are based on a 4 ft. section. For other lengths, use the correction factor table above.
4. NC values are based on a 4 ft. section and a room

absorption of 10 dB, re 10⁻¹² watts. For other lengths, use the correction factor table. Dash (—) in space denotes an NC value less than 15.

5. When used as a return intake, the NC value is increased by 4 and the negative static pressure is TP x 0.8.
6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.