



Performance Data

Hospital/Clean Room Diffusers

Performance Data • Model LFHDP

With HEPA Filter • 99.99% Minimum Removal Efficiency on 0.30 Micrometer Particle Size

8" dia. Inlet

	Airflow, CFM	100	120	140	160	180	200	220	240	260	280	290
48" x 12" Module *	Total Pressure	0.17	0.24	0.33	0.43	0.55	0.68	0.82	0.98	1.14	1.33	1.42
	Static Pressure	0.16	0.24	0.32	0.42	0.53	0.66	0.79	0.94	1.11	1.28	1.38
	NC	—	17	19	22	25	27	29	31	34	35	37
	Throw	.5-1-2	.5-1-3	1-1.5-4	1.5-2-4	1.5-2.5-5	2-3.5-5	2.5-4-6	3-4.5-7	3-4.5-7.5	4-5.5-8	4.5-6-9
60" x 12" Module	Total Pressure	0.11	0.16	0.22	0.28	0.36	0.44	0.54	0.64	0.75	0.87	0.93
	Static Pressure	0.11	0.15	0.21	0.27	0.34	0.42	0.51	0.61	0.71	0.83	0.89
	NC	—	16	18	21	24	25	28	30	33	34	36
	Throw	.5-1-2	1-1-3	1-1.5-4	1-2-4	1-2.5-4.5	2-3.5-5	2-4-5.5	3-4-6.5	3-5-7	4-5-8	4-6-8.5

	Airflow, CFM	100	120	140	160	180	200	220	240	260	280	295
24" x 24" Module *	Total Pressure	0.17	0.24	0.32	0.42	0.54	0.66	0.80	0.95	1.12	1.30	1.44
	Static Pressure	0.16	0.23	0.31	0.41	0.52	0.64	0.77	0.92	1.08	1.25	1.39
	NC	—	17	19	22	25	27	29	31	34	35	37
	Throw	.5-1-2	.5-1-3	1-1.5-4	1.5-2-4	1.5-2.5-5	2-3.5-6	2.5-4-6	3-4.5-7	3-4.5-7.5	4-5.5-8	4.5-6-9
36" x 24" Module	Total Pressure	0.07	0.10	0.14	0.18	0.23	0.29	0.35	0.41	0.48	0.56	0.62
	Static Pressure	0.07	0.10	0.13	0.17	0.21	0.26	0.32	0.38	0.45	0.52	0.58
	NC	—	15	18	21	24	26	28	30	33	34	36
	Throw	0-1-1.5	0-1-2	0-1-3	1-2-3.5	1-2-4.5	2-3-5	2-3-5.5	2-3.5-6	2.5-4.5-7	3-5-8	3-5-8
48" x 24" Module	Total Pressure	0.05	0.07	0.09	0.12	0.15	0.18	0.22	0.27	0.31	0.36	0.40
	Static Pressure	0.04	0.06	0.08	0.10	0.13	0.16	0.20	0.24	0.28	0.32	0.36
	NC	—	—	17	20	23	25	27	30	32	33	35
	Throw	0-.5-1.5	.5-1-2	.5-1-2.5	1-1.5-3	1-2-4	1-2-5	1.5-2.5-5	2-3-6	2-4-6.5	2-4.5-7	3-5-7

10" dia. Inlet

	Airflow, CFM	160	180	200	220	240	260	280	300	320	340	360
36" x 24" Module	Total Pressure	0.14	0.18	0.22	0.27	0.32	0.37	0.43	0.50	0.56	0.64	0.71
	Static Pressure	0.14	0.17	0.21	0.26	0.30	0.36	0.41	0.48	0.54	0.61	0.69
	NC	15	18	20	21	23	26	28	30	32	34	36
	Throw	1-2-3.5	1-2-4.5	2-3-5	2-3-5.5	2-3.5-6	2.5-4-7	3-5-8	3-5-8	4-5.5-8.5	4-6-9	5-7-9.5
48" x 24" Module	Total Pressure	0.08	0.10	0.13	0.15	0.18	0.21	0.25	0.28	0.32	0.37	0.41
	Static Pressure	0.08	0.10	0.12	0.14	0.17	0.20	0.23	0.27	0.30	0.34	0.38
	NC	—	15	18	19	22	25	27	29	31	33	35
	Throw	1-1-3	1-2-4	1-2-5	1.5-2.5-5	2-3-6	2-4-6.5	2-4.5-7	3-5-7	3-5-8	4-6-8.5	5-7-9
60" x 24" Module	Total Pressure	0.06	0.07	0.09	0.11	0.13	0.15	0.17	0.20	0.22	0.25	0.28
	Static Pressure	0.05	0.06	0.08	0.10	0.11	0.13	0.15	0.18	0.20	0.23	0.26
	NC	—	—	17	19	22	24	27	29	31	33	35
	Throw	1-1-3	1-2-4	1-2-5	1.5-2.5-5	2-3-6	2-4-6.5	2-4.5-7	3-5-7	3-5-8	4-6-8.5	5-7-9

12" dia. Inlet

	Airflow, CFM	230	260	290	315	345	375	400	430	460	490	520
48" x 24" Module	Total Pressure	0.16	0.20	0.25	0.29	0.35	0.42	0.48	0.55	0.63	0.71	0.80
	Static Pressure	0.15	0.19	0.24	0.28	0.34	0.40	0.46	0.53	0.61	0.69	0.78
	NC	15	18	21	22	25	28	30	32	35	38	42
	Throw	1-2-6	1.5-3-6.5	2-4-7	3-5-8	4-5.5-8	4.5-6-8.5	5-7-9.5	5.5-7.5-10	6-8-11	6.5-8.5-11.5	7-9-12
60" x 24" Module	Total Pressure	0.10	0.13	0.16	0.19	0.23	0.27	0.31	0.36	0.41	0.47	0.53
	Static Pressure	0.10	0.12	0.16	0.18	0.22	0.26	0.30	0.34	0.39	0.44	0.50
	NC	15	18	21	22	25	28	30	32	35	38	42
	Throw	1-2-6	2-3-6	2-4-7	3-5-8	4-5.5-7.5	4.5-6-8.5	5-6.5-9	5.5-7.5-9.5	6-8-10.5	6-8.5-11	6.5-8.5-11.5

CFM - cubic feet per minute

FPM - feet per minute velocity

Pt - total pressure - inches w.g.

Ps - static pressure - inches w.g.

T - throw in feet

NC - Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.

Performance Notes:

1. Throws are the average vertical distance in feet to terminal velocities of 100, 75 and 50 fpm. Based upon a cooling ΔT of 10°F. 9 ft. ceiling.

2. Performance data is for diffusers with clean filters. Filters may be operated up to a final resistance of 2" w.g. (500 Pa).

3.* Maximum airflow shown is based on 150 fpm velocity per square foot of filter face area. Exceeding these airflows may result in reduced filter efficiencies. Refer to the engineering section for more details.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.