

SERIES HLC-GSL HOSPITAL DIFFUSER PERFORMANCE DATA

LAMINAR FLOW DIFFUSER WITH GEL SEAL HEPA FILTER

8" Diameter Inlet												
Nominal Size	Airflow, CFM	100	120	140	160	180	200	220	240	260	280	295
24" x 24" Module	Pt	0.17	0.24	0.32	0.42	0.54	0.66	0.8	0.95	1.12	1.3	1.44
	Ps	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 (feet)	0-1-2	0-1-3	1-2-4	1-2-4	2-3-5	2-4-6	3-4-6	3-5-7	3-5-8	4-6-8	5-6-9
36" x 24" Module	Pt	0.07	0.1	0.14	0.18	0.23	0.29	0.35	0.41	0.48	0.56	0.62
	Ps	0.07	0.1	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 (feet)	0-1-2	0-1-2	0-1-3	1-2-4	1-2-5	2-3-5	2-3-6	2-4-6	3-5-7	3-5-8	3-5-8
48" x 24" Module	Pt	0.05	0.07	0.09	0.12	0.15	0.18	0.22	0.27	0.31	0.36	0.4
	Ps	0.04	0.06	0.08	0.1	0.13	0.16	0.2	0.24	0.28	0.32	0.36
	NC	-	-	17	20	23	25	27	30	32	33	35
	Throw (feet)	0-1-2	1-1-2	1-1-3	1-2-3	1-2-4	1-2-5	2-3-5	2-3-6	2-4-7	2-5-7	3-5-7

10" Diameter Inlet												
Nominal Size	Airflow, CFM	160	180	200	220	240	260	280	300	320	340	360
36" x 24" Module	Pt	0.14	0.18	0.22	0.27	0.32	0.37	0.43	0.5	0.56	0.64	0.71
	Ps	0.14	0.17	0.21	0.26	0.3	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 (feet)	1-2-4	1-2-5	2-3-5	2-3-6	2-4-6	3-4-7	3-5-8	3-5-8	4-6-9	4-6-9	5-7-10
48" x 24" Module	Pt	0.08	0.1	0.13	0.15	0.18	0.21	0.25	0.28	0.32	0.37	0.41
	Ps	0.08	0.1	0.12	0.14	0.17	0.2	0.23	0.27	0.3	0.34	0.38
	NC	-	15	18	19	22	25	27	29	31	33	35
	Throw (feet)	1-1-3	1-2-4	1-2-5	2-3-5	2-3-6	2-4-7	2-5-7	3-5-7	3-5-8	4-6-9	5-7-9

12" Diameter Inlet												
Nominal Size	Airflow, CFM	230	260	290	315	345	375	400	430	460	490	520
48" x 24" Module	Pt	0.16	0.2	0.25	0.29	0.35	0.42	0.48	0.55	0.63	0.71	0.8
	Ps	0.15	0.19	0.24	0.28	0.34	0.4	0.46	0.53	0.61	0.69	0.78
	NC	15	18	21	22	25	28	30	32	35	38	42
	Throw (feet)	1-2-6	2-3-7	2-4-7	3-5-8	4-6-8	5-6-9	5-7-9	6-8-10	6-8-11	7-9-12	7-9-12

PERFORMANCE NOTES FOR SERIES HLC-GSL

All data is tested in accordance with ANSI/ASHRAE 70 and 113.

DEFINITION OF UNITS

Ps Static pressure loss through the diffuser and does not include velocity pressure. Measured in inches wg.

Pt Total pressure = Static Pressure + Velocity Pressure

NC Based on Lw re: 10^{-12} watt, includes 10 dB room attenuation and a maximum inlet velocity of 500 fpm

CFM Cubic Feet per Minute (air)

Throw Non-isothermal horizontal throw (supply air temperature 10°F colder than average room temperature); values are for 100, 75, and 50 fpm velocities

HEPA Filter HEPA filter is high efficiency filter with 99.97% efficiency on particles with diameters of 0.3 microns