

**SERIES XG-PHCS PERFORMANCE DATA**  
**MODEL XG-PHCS/XG-PHCSI**

		CFM/LF	20	30	40	50	60	80	90	100	110
6" Round Inlet	2' Length	CFM	40	60	80	100	120	160	180	200	-
		Ps	.010	.022	.040	.062	.089	.159	.201	.248	-
		Pt	.013	.028	.050	.078	.113	.200	.254	.313	-
		Throw	1-2-7	2-5-11	4-7-14	6-9-18	7-11-19	10-14-22	11-16-24	12-18-25	-
		NC	<15	17	21	26	31	39	44	48	-
	3' Length	CFM	60	90	120	150	180	240	270	300	-
		Ps	.013	.029	.052	.081	.117	.208	.263	.324	-
		Pt	.019	.042	.075	.117	.169	.301	.381	.470	-
		Throw	1-3-7	3-5-11	5-7-14	6-9-18	7-11-22	10-14-27	11-16-28	12-18-30	-
		NC	<15	<15	16	22	27	36	41	46	-
	4' Length	CFM	80	120	160	200	240	320	360	400	440
		Ps	.015	.033	.059	.092	.132	.235	.298	.368	.445
		Pt	.025	.056	.100	.157	.226	.401	.507	.626	.758
		Throw	2-5-10	5-7-14	6-10-19	8-12-24	10-14-37	13-19-31	14-22-33	16-24-35	18-26-36
		NC	<15	<15	<15	19	25	35	40	44	49
	5' Length	CFM	100	150	200	250	300	400	450	500	-
		Ps	.015	.034	.061	.095	.137	.243	.308	.380	-
		Pt	.031	.071	.125	.196	.262	.502	.635	.784	-
		Throw	4-6-12	6-9-18	8-12-24	10-15-27	12-18-30	16-24-35	118-26-37	20-27-39	-
		NC	<15	<15	16	21	27	36	41	45	-
8" Oval Inlet	2' Length	CFM	40	60	80	100	120	160	180	200	-
		Ps	.006	.014	.026	.040	.058	.103	.130	.161	-
		Pt	.007	.017	.029	.046	.066	.118	.149	.184	-
		Throw	0-1-3	1-2-5	2-3-7	3-4-8	3-5-10	5-7-14	5-8-15	6-8-16	-
		NC	<15	<15	19	24	28	37	41	46	-
	3' Length	CFM	60	90	120	150	180	240	270	300	330
		Ps	.009	.020	.036	.056	.081	.143	.181	.224	.271
		Pt	.011	.025	.044	.069	.099	.177	.224	.276	.334
		Throw	1-2-5	2-4-8	3-5-10	4-6-13	5-8-15	7-10-18	8-11-19	8-13-20	9-14-21
		NC	<15	<15	<15	20	25	35	39	44	49
	4' Length	CFM	80	120	160	200	240	320	360	400	440
		Ps	.011	.025	.044	.069	.099	.176	.223	.275	.333
		Pt	.015	.033	.059	.092	.133	.236	.299	.369	.446
		Throw	2-3-7	3-5-10	5-7-14	6-8-16	7-10-18	9-14-20	10-15-21	11-16-23	12-17-24
		NC	<15	<15	<15	18	23	33	38	43	48
	5' Length	CFM	100	150	200	250	300	400	450	500	550
		Ps	.013	.028	.050	.079	.113	.201	.255	.314	.380
		Pt	.018	.041	.074	.115	.166	.294	.373	.460	.557
		Throw	3-4-8	4-6-13	6-8-16	7-11-18	8-13-20	11-16-23	13-17-24	14-18-25	15-19-27
		NC	<15	<15	<15	20	26	35	38	42	46

PLENUM SLOT  
DIFFUSERS

PLENUM DIFFUSERS WITH  
HIGH CAPACITY FIXED  
PATTERN CONTROLLERS

XG-PHCS

**SERIES XG-PHCS PERFORMANCE DATA**  
**MODEL XG-PHCS/XG-PHCSI**

	CFM/LF	20	30	40	50	60	80	90	100	110	120	
10" Oval Inlet	3' Length	CFM	60	90	120	150	180	240	270	300	330	360
		Ps	.008	.017	.030	.047	.068	.120	.152	.188	.227	.270
		Pt	.009	.019	.034	.054	.077	.137	.174	.214	.260	.309
		Throw	1-2-5	2-4-8	3-5-10	4-6-13	5-8-14	7-10-16	8-11-17	8-13-18	9-14-19	10-14-20
		NC	<15	<15	<15	17	22	31	36	40	45	50
	4' Length	CFM	80	120	160	200	240	320	360	400	440	480
		Ps	.010	.021	.038	.060	.086	.153	.193	.239	.289	.344
		Pt	.011	.026	.046	.072	.103	.183	.232	.286	.346	.412
		Throw	2-3-7	3-5-10	5-7-13	6-8-15	7-10-16	9-13-19	10-14-20	11-15-21	13-16-22	13-16-23
		NC	<15	<15	<15	<15	20	30	35	39	44	48
	5' Length	CFM	100	150	200	250	300	400	450	500	550	600
		Ps	.011	.024	.043	.068	.097	.173	.219	.271	.328	.390
		Pt	.014	.031	.055	.086	.124	.221	.279	.345	.417	.497
		Throw	3-4-8	4-6-13	6-8-15	7-11-17	8-13-18	11-15-21	13-16-23	14-17-24	14-18-25	15-18-26
		NC	<15	<15	<15	17	23	32	36	40	43	47
12" Oval Inlet	4' Length	CFM	80	120	160	200	240	320	360	400	440	480
		Ps	.008	.019	.033	.052	.075	.134	.170	.209	.253	.301
		Pt	.010	.021	.038	.060	.086	.152	.193	.238	.288	.343
		Throw	2-3-6	3-5-10	4-6-13	5-8-15	6-10-16	8-13-19	10-14-20	11-15-21	12-16-22	13-16-23
		NC	<15	<15	<15	<15	18	28	33	37	42	46
	5' Length	CFM	100	150	200	250	300	400	450	500	550	600
		Ps	.010	.023	.040	.063	.091	.162	.205	.253	.306	.364
		Pt	.012	.027	.048	.074	.107	.190	.241	.298	.360	.428
		Throw	3-4-8	4-6-12	5-8-15	7-10-17	8-12-18	11-15-21	12-16-22	13-17-23	14-17-25	15-18-26
		NC	<15	<15	<15	16	21	30	34	38	41	45

**PERFORMANCE NOTES FOR SERIES XG-PHP**  
**MODEL XG-PHCS/XG-PHCSI**

All data is tested in accordance with ANSI/ASHRAE 70-2006.

**DEFINITION OF UNITS**

CFM Cubic Feet per Minute (air)

Pt Total pressure (inches of water column)

Ps Static pressure = Pt-Pv (inches of water column)

Throw Isothermal throw (supply air temperature the same as average room temperature); values are for 150, 100 and 50fpm velocities

NC Noise criterion, sound pressure level NC ratings are based on sound power level (Lw) re: 10<sup>-12</sup> watts minus a 10dB room attenuation in all octave bands

**SERIES XG-PHCS PERFORMANCE DATA**  
**MODEL XG-PHCS/XG-PHCSI-DB**

		CFM/LF	20	30	40	50	60	70	80	90	100
<b>6" Round Inlet</b> <b>12" x 7/16" Down Blow Slot</b>	<b>3' Length</b>	CFM	60	90	120	150	180	210	240	270	-
		Ps	.049	.111	.198	.309	.445	.606	.791	1.001	-
		Pt	.055	.124	.221	.345	.497	.677	.884	1.119	-
		Throw H	1-3-9	3-7-13	6-9-18	7-11-22	9-13-25	10-16-27	12-18-28	13-20-30	-
		Throw V	1-1-2	1-2-4	2-2-5	2-3-6	2-4-6	3-4-6	3-5-7	4-5-7	-
		NC	19	23	28	32	36	40	44	47	-
	<b>4' Length</b>	CFM	80	120	160	200	240	280	320	360	-
		Ps	.052	.116	.207	.323	.465	.633	.827	1.047	-
		Pt	.062	.140	.248	.388	.558	.760	.993	1.256	-
		Throw H	2-6-12	6-9-18	8-12-23	10-25-26	12-18-28	14-21-31	16-23-33	18-25-35	-
		Throw V	1-2-3	2-2-5	2-3-6	3-4-6	3-5-7	4-5-7	4-5-8	5-6-8	-
		NC	<15	21	27	33	37	42	46	49	-
	<b>5' Length</b>	CFM	100	150	200	250	300	350	400	450	-
		Ps	.020	.046	.081	.127	.183	.249	.325	.412	-
		Pt	.037	.082	.146	.228	.329	.447	.584	.739	-
		Throw H	4-7-15	7-11-22	10-15-26	12-19-29	15-22-32	17-24-34	20-26-37	22-28-39	-
		Throw V	1-2-4	2-3-5	3-4-6	3-5-7	4-5-7	5-6-8	5-6-8	5-6-9	-
		NC	<15	<15	20	27	34	39	44	49	-
<b>8" Oval Inlet</b> <b>12" x 7/16" Down Blow Slot</b>	<b>3' Length</b>	CFM	60	90	120	150	180	210	240	270	300
		Ps	.031	.069	.122	.191	.275	.375	.489	.619	.764
		Pt	.033	.074	.131	.204	.294	.400	.523	.662	.817
		Throw H	1-3-9	3-6-13	6-9-16	7-11-18	9-13-20	10-15-22	11-16-23	13-17-24	14-18-26
		Throw V	1-1-2	1-2-3	1-2-4	2-3-4	2-3-5	2-4-5	3-4-5	3-4-6	3-4-6
		NC	15	20	24	28	33	37	40	44	47
	<b>4' Length</b>	CFM	80	120	160	200	240	280	320	360	400
		Ps	.018	.040	.071	.111	.160	.218	.285	.360	.445
		Pt	.022	.048	.086	.134	.194	.264	.344	.436	.538
		Throw H	2-6-11	6-9-16	8-11-19	9-14-21	11-16-23	13-18-25	15-19-27	16-20-28	17-21-30
		Throw V	1-1-3	1-2-4	2-3-4	2-3-6	3-4-5	3-4-6	4-4-6	4-5-7	4-5-7
		NC	<15	17	23	29	33	37	41	45	49
	<b>5' Length</b>	CFM	100	150	200	250	300	350	400	450	500
		Ps	.016	.035	.063	.098	.141	.192	.251	.317	.391
		Pt	.021	.048	.086	.134	.193	.263	.344	.435	.537
		Throw H	4-7-14	7-11-18	9-14-21	12-17-23	14-18-26	16-20-28	17-21-30	18-22-32	19-23-33
		Throw V	1-2-3	2-3-4	2-3-5	3-4-6	3-4-6	4-5-7	4-5-7	4-5-8	5-6-8
		NC	<15	<15	15	23	29	35	40	44	47

**PLENUM SLOT  
DIFFUSERS**
**PLENUM DIFFUSERS WITH  
HIGH CAPACITY FIXED  
PATTERN CONTROLLERS**
**XG-PHCS**

**SERIES XG-PHCS PERFORMANCE DATA**  
**MODEL XG-PHCS/XG-PHCSI-DB**

	CFM/LF	20	30	40	50	60	70	80	90	100	110	
10" Oval Inlet 12" x 7/16" Down Blow Slot	3' Length	CFM	60	90	120	150	180	210	240	270	300	330
		Ps	.015	.034	.060	.094	.136	.185	.241	.305	.377	.456
		Pt	.016	.036	.065	.101	.145	.198	.258	.327	.404	.488
		Throw H	1-2-6	2-4-8	3-6-11	5-7-14	6-8-17	7-10-19	8-11-21	8-13-22	9-14-23	10-16-24
		Throw V	1-1-2	1-1-2	1-2-3	1-2-4	2-2-4	2-3-5	2-3-5	2-4-5	3-4-5	3-4-6
		NC	<15	16	21	25	29	33	37	41	44	47
	4' Length	CFM	80	120	160	200	240	280	320	360	400	440
		Ps	.015	.034	.060	.093	.134	.182	.238	.302	.372	.451
		Pt	.017	.038	.067	.105	.151	.206	.269	.340	.420	.508
		Throw H	1-3-8	3-6-11	5-8-15	6-9-19	8-11-21	9-13-22	10-15-24	11-17-25	13-19-27	14-20-28
		Throw V	1-1-2	1-2-3	1-2-4	2-3-4	2-3-5	3-4-5	3-4-6	3-4-6	4-4-6	4-5-7
		NC	<15	<15	20	25	30	34	38	41	45	49
	5' Length	CFM	100	150	200	250	300	350	400	450	500	-
		Ps	.014	.031	.055	.086	.124	.169	.221	.280	.345	-
		Pt	.017	.038	.067	.105	.151	.206	.269	.340	.420	-
		Throw H	2-5-9	5-7-14	6-9-19	8-12-21	9-14-23	11-16-25	13-19-27	14-20-29	16-21-30	-
		Throw V	1-1-3	1-2-4	2-3-4	2-3-5	3-4-5	3-4-6	4-4-6	4-5-7	4-5-7	-
		NC	<15	<15	<15	21	28	34	39	43	47	-
12" Oval Inlet 12" x 7/16" Down Blow Slot	4' Length	CFM	80	120	160	200	240	280	320	360	400	440
		Ps	.013	.029	.051	.080	.115	.157	.205	.259	.320	.387
		Pt	.014	.031	.056	.087	.126	.171	.223	.282	.349	.422
		Throw H	1-3-7	3-5-11	5-7-14	6-9-18	7-11-20	8-12-22	10-14-23	11-16-25	12-18-26	13-19-27
		Throw V	1-1-2	1-2-3	1-2-4	2-3-4	2-3-5	3-4-5	3-4-6	3-4-6	4-4-6	4-5-7
		NC	<15	<15	18	24	28	32	36	40	43	47
	5' Length	CFM	100	150	200	250	300	350	400	450	500	550
		Ps	.012	.027	.049	.076	.109	.149	.194	.246	.303	.367
		Pt	.014	.031	.056	.087	.125	.171	.223	.282	.348	.421
		Throw H	2-4-9	4-7-13	6-9-18	7-11-21	9-13-23	10-16-24	12-18-24	13-20-28	15-21-29	16-22-31
		Throw V	1-1-3	1-2-4	2-3-4	2-3-5	3-4-5	3-4-6	4-4-6	4-5-7	4-5-7	4-5-7
		NC	<15	<15	<15	19	26	32	36	41	45	49

**PERFORMANCE NOTES FOR SERIES PHP**  
**MODEL XG-PHCS/XG-PHCSI-DB**

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Pt Total pressure (inches of water column)

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Throw Isothermal throw (supply air temperature the same as average room temperature); values are for 150, 100 and 50fpm velocities

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