

PAS Performance Data (continued)

Flush Face • Supply • Steel • Adjustable

		300	400	500	600	700	800	1000	1200	1400	
24 x 24 Module	Neck Velocity	300	400	500	600	700	800	1000	1200	1400	
	Velocity Pressure	0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122	
	6" Dia.	Airflow, cfm	59	79	98	118	137	157	196	236	275
		Total Pressure	0.016	0.028	0.044	0.064	0.087	0.113	0.177	0.255	0.347
		NC (Noise Criteria)	-	-	-	16	21	25	32	38	43
		1-Way - Horizontal Throw	1-2-8	2-4-10	3-7-13	4-8-15	6-9-17	7-10-18	9-13-20	10-15-22	12-17-23
		2-Way - Horizontal Throw	1-2-6	2-4-8	3-5-10	4-6-11	4-7-13	5-8-15	6-10-17	8-11-18	9-13-20
		3-Way - Horizontal Throw	1-2-5	2-3-6	3-4-8	3-5-10	4-6-11	4-6-12	5-8-14	6-10-15	8-11-16
	4-Way - Horizontal Throw	1-2-4	2-2-5	2-3-6	2-4-7	3-4-9	3-5-10	4-6-11	5-7-12	6-9-13	
	6 x 6 Neck	Airflow, cfm	75	100	125	150	175	200	250	300	350
		Total Pressure	0.017	0.029	0.046	0.066	0.090	0.118	0.184	0.265	0.360
		NC (Noise Criteria)	-	-	13	19	23	28	35	41	45
		1-Way - Horizontal Throw	1-3-9	2-5-12	3-7-15	5-9-17	7-10-19	8-12-20	10-15-22	12-17-24	14-19-26
		2-Way - Horizontal Throw	1-3-6	2-4-9	3-5-11	4-6-13	5-8-15	6-9-17	7-11-19	9-13-21	10-15-22
		3-Way - Horizontal Throw	1-3-5	2-4-7	3-5-9	4-5-11	4-6-13	5-7-14	6-9-16	7-11-17	9-13-19
	4-Way - Horizontal Throw	1-2-4	2-3-6	2-3-7	3-4-8	3-5-10	4-6-11	5-7-12	6-8-13	7-10-15	
	8" Dia.	Airflow, cfm	105	140	175	209	244	279	349	419	489
		Total Pressure	0.018	0.032	0.049	0.071	0.097	0.126	0.197	0.284	0.386
		NC (Noise Criteria)	-	-	16	22	27	31	38	44	49
		1-Way - Horizontal Throw	1-3-10	3-6-14	4-9-17	6-10-20	8-12-22	9-14-24	12-17-26	14-20-29	16-22-31
		2-Way - Horizontal Throw	1-3-8	3-5-10	4-6-13	5-8-15	6-9-18	7-10-20	8-13-22	10-15-25	12-18-27
		3-Way - Horizontal Throw	2-3-6	3-4-9	4-5-11	4-6-13	5-8-15	6-9-17	7-11-18	9-13-20	10-15-22
	4-Way - Horizontal Throw	1-2-5	2-3-7	3-4-8	3-5-10	4-6-12	4-7-13	5-8-15	7-11-18	8-12-17	
	8 x 8 Neck	Airflow, cfm	133	178	222	267	311	356	444	533	622
Total Pressure		0.019	0.034	0.052	0.075	0.103	0.134	0.210	0.302	0.411	
NC (Noise Criteria)		-	12	19	25	29	34	41	47	51	
1-Way - Horizontal Throw		2-4-12	3-7-16	5-10-20	7-12-23	9-14-25	10-16-27	13-20-30	16-23-33	18-25-35	
2-Way - Horizontal Throw		2-4-9	3-6-11	5-7-14	6-9-17	7-10-20	8-11-23	10-14-25	11-17-28	13-20-30	
3-Way - Horizontal Throw		2-4-7	3-5-10	4-6-12	5-7-15	6-9-17	6-10-19	8-12-21	10-15-23	11-17-25	
4-Way - Horizontal Throw	1-3-6	2-4-7	3-5-9	4-6-11	4-7-13	5-7-15	6-9-16	7-11-18	9-13-19		
10" Dia.	Airflow, cfm	164	218	273	327	382	436	545	654	764	
	Total Pressure	0.020	0.036	0.056	0.080	0.109	0.143	0.223	0.321	0.437	
	NC (Noise Criteria)	-	14	21	27	32	36	43	49	54	
	1-Way - Horizontal Throw	2-4-13	3-7-17	5-11-22	7-13-26	10-15-28	12-17-30	15-22-33	17-26-36	20-28-39	
	2-Way - Horizontal Throw	2-4-10	3-6-13	5-8-16	6-10-19	7-11-22	8-13-25	11-16-28	13-19-31	15-22-33	
	3-Way - Horizontal Throw	2-4-8	4-5-11	4-7-13	5-8-16	6-9-19	7-11-21	9-13-23	11-16-25	13-19-27	
4-Way - Horizontal Throw	1-3-6	3-4-8	3-5-10	4-6-12	5-7-14	5-8-16	7-10-18	8-12-20	10-14-21		
10 x 10 Neck	Airflow, cfm	208	278	347	417	486	556	694	833	972	
	Total Pressure	0.022	0.039	0.061	0.087	0.119	0.155	0.243	0.349	0.476	
	NC (Noise Criteria)	-	16	23	29	34	38	45	51	56	
	1-Way - Horizontal Throw	2-5-15	4-8-20	6-12-25	8-15-29	11-17-31	13-20-33	16-25-37	20-29-41	23-31-44	
	2-Way - Horizontal Throw	2-5-11	4-7-14	6-9-18	7-11-21	8-13-25	10-14-28	12-18-32	14-21-35	17-25-37	
	3-Way - Horizontal Throw	2-5-9	4-6-12	5-8-15	6-9-18	7-11-21	8-12-23	10-15-26	12-18-29	14-21-31	
4-Way - Horizontal Throw	2-3-7	3-5-9	4-6-12	5-7-14	5-8-16	6-9-18	8-12-20	9-14-22	11-16-24		
12" Dia.	Airflow, cfm	236	314	393	471	550	628	785	942	1100	
	Total Pressure	0.032	0.057	0.089	0.128	0.174	0.227	0.355	0.510	0.695	
	NC (Noise Criteria)	-	18	25	30	35	40	47	52	57	
	1-Way - Horizontal Throw	7-12-22	10-16-25	13-19-28	16-22-31	18-23-33	20-25-35	23-28-40	25-31-43	27-33-47	
	2-Way - Horizontal Throw	6-8-17	8-11-21	9-14-24	11-17-26	13-20-28	15-21-30	19-24-34	21-26-37	23-28-40	
	3-Way - Horizontal Throw	5-7-14	6-10-18	8-12-20	10-14-21	11-16-23	13-18-25	16-20-28	18-21-30	19-23-33	
4-Way - Horizontal Throw	4-6-11	5-7-14	6-9-15	7-11-17	9-13-18	10-14-19	12-15-22	14-17-24	15-18-26		
12 x 12 Neck	Airflow, cfm	300	400	500	600	700	800	1000	1200	1400	
	Total Pressure	0.033	0.059	0.092	0.133	0.181	0.236	0.369	0.531	0.723	
	NC (Noise Criteria)	-	20	27	33	38	42	49	55	60	
	1-Way - Horizontal Throw	8-13-24	12-18-28	15-22-32	18-24-35	20-26-37	23-28-40	26-32-45	28-35-49	31-37-53	
	2-Way - Horizontal Throw	6-10-19	9-13-24	11-16-27	13-19-29	15-22-32	17-24-34	21-27-38	24-29-42	26-32-45	
	3-Way - Horizontal Throw	5-8-16	7-11-20	9-14-22	11-16-24	13-19-26	14-20-28	18-22-31	20-24-34	21-26-37	
4-Way - Horizontal Throw	4-6-12	6-8-16	7-10-17	8-12-19	10-15-21	11-16-22	14-17-25	16-19-27	17-21-29		
14" Dia.	Airflow, cfm	321	428	535	641	748	855	1069	1283	1497	
	Total Pressure	0.034	0.060	0.093	0.135	0.183	0.239	0.374	0.538	0.733	
	NC (Noise Criteria)	12	21	28	34	38	43	50	56	60	
	1-Way - Horizontal Throw	8-14-25	12-18-29	15-23-33	18-25-36	21-27-39	24-29-41	27-33-46	29-36-51	32-39-55	
	2-Way - Horizontal Throw	7-10-20	9-13-25	11-17-28	13-20-30	15-23-33	18-25-35	22-28-39	25-30-43	27-33-47	
	3-Way - Horizontal Throw	6-8-17	7-11-20	9-14-23	11-17-25	13-19-27	15-20-29	19-23-32	20-25-35	22-27-38	
4-Way - Horizontal Throw	4-6-13	6-9-16	7-11-18	9-13-20	10-15-21	11-16-23	14-18-25	16-20-28	17-21-30		
16" Dia.	Airflow, cfm	419	559	698	838	977	1117	1396	1676	1955	
	Total Pressure	0.036	0.063	0.099	0.143	0.194	0.253	0.396	0.570	0.776	
	NC (Noise Criteria)	14	23	31	36	41	45	53	58	63	
	1-Way - Horizontal Throw	10-16-29	14-21-33	17-26-37	21-29-41	24-31-44	27-33-47	31-37-53	33-41-58	36-44-63	
	2-Way - Horizontal Throw	8-11-23	10-15-28	13-19-32	15-23-35	18-26-38	20-28-40	25-32-45	28-35-49	31-38-53	
	3-Way - Horizontal Throw	6-10-19	9-13-23	11-16-26	13-19-29	15-22-31	17-23-33	21-26-37	23-29-41	25-31-44	
4-Way - Horizontal Throw	5-7-15	7-10-18	8-12-21	10-15-23	11-17-24	13-18-26	16-21-29	18-23-32	20-24-34		

Performance Data

PAS, PDS Performance Notes

- Data obtained from tests conducted in accordance with ANSI / ASHRAE Standard 70-1991. Actual performance, with flexible duct inlet, may vary in the field. See the Engineering Guidelines section of this catalog for additional information.

- Throw values given are for terminal velocities of 150, 100 and 50 fpm and for isothermal conditions.
- For an explanation of catalog throw data, see the section, Engineering Guidelines.
- NC values based on octave band 2 to 7 sound power levels minus a room absorption of 10 dB.

- Each NC value represents the noise criteria curve that will not be exceeded by the sound pressure in any of the octave bands, 2 through 7, with a room absorption of 10 dB, re 10⁻¹² watts.
- Dash (-) in space denotes an NC value of less than 10.
- All pressures are given in inches of water.
- To obtain static pressure, subtract the velocity pressure from the total pressure.

PAR, PXP, PMR, PXP-DR, PDR Performance Data

PAR, PXP, PMR • Flush Face • Return; PXP-DR, PDR • Drop Face • Return

	Neck Size	Neck Vel, fpm	300	400	500	600	700	800	1000	1200	1400	
		Vp, in. Wg	0.01	0.01	0.02	0.02	0.03	0.04	0.06	0.09	0.12	
		Ps (-), in. Wg	0.03	0.06	0.09	0.13	0.17	0.23	0.36	0.51	0.70	
12 x 12 Face	6 Dia. *	Flow Rate, cfm	59	78	98	118	137	157	196	235	275	
		Room NC	-	-	-	14	18	21	27	32	36	
	6 x 6 Neck *	Flow Rate, cfm	75	100	125	150	175	200	250	300	350	
		Room NC	-	-	12	17	21	24	30	35	39	
10 x 10 Neck	Flow Rate, cfm	208	278	347	417	486	556	694	833	972		
	Room NC	15	23	29	33	37	41	47	51	55		
24 x 24 Face	Neck Size	Neck Vel, fpm	300	400	500	600	700	800	1000	1200	1400	
		Vp, in. Wg	0.01	0.01	0.02	0.02	0.03	0.04	0.06	0.09	0.12	
			Ps (-), in. Wg	0.03	0.06	0.09	0.13	0.18	0.24	0.37	0.54	0.73
	6 Dia. *	Flow Rate, cfm	59	78	98	118	137	157	196	235	275	
		Room NC	-	-	-	13	17	20	26	31	34	
	6 x 6 Neck *	Flow Rate, cfm	75	100	125	150	175	200	250	300	350	
		Room NC	-	-	-	14	18	21	27	32	35	
	8 Dia. *	Flow Rate, cfm	105	140	174	209	244	279	349	419	488	
		Room NC	-	-	13	17	21	24	30	35	38	
	8 x 8 Neck *	Flow Rate, cfm	133	178	222	267	311	356	444	533	622	
		Room NC	-	-	14	18	22	25	31	36	39	
	10 Dia. *	Flow Rate, cfm	164	218	273	327	382	436	545	654	763	
		Room NC	-	-	16	20	24	27	33	38	41	
	10 x 10 Neck *	Flow Rate, cfm	208	278	347	417	486	556	694	833	972	
		Room NC	-	11	17	21	25	28	34	39	42	
	12 Dia. *	Flow Rate, cfm	235	314	392	471	549	628	785	942	1099	
		Room NC	-	12	17	22	26	29	34	39	43	
	12 x 12 Neck *	Flow Rate, cfm	300	400	500	600	700	800	1000	1200	1400	
		Room NC	-	15	20	24	28	31	37	42	45	
	14 Dia. *	Flow Rate, cfm	320	427	534	641	748	855	1068	1282	1495	
Room NC		-	15	21	25	29	32	38	43	46		
15 x 15 Neck *	Flow Rate, cfm	469	625	781	938	1094	1250	1563	1875	2188		
	Room NC	-	16	22	26	30	33	39	44	47		
16 Dia. *	Flow Rate, cfm	419	558	698	837	977	1116	1395	1674	1953		
	Room NC	11	18	24	28	32	35	41	46	49		
18 x 18 Neck *	Flow Rate, cfm	675	900	1125	1350	1575	1800	2250	2700	3150		
	Room NC	11	18	24	28	32	36	41	46	49		
22 x 22 Neck	Flow Rate, cfm	1008	1344	1681	2017	2353	2689	3361	4033	4706		
	Room NC	13	20	26	30	34	37	43	47	51		
Other Sizes	Neck Size	Neck Vel, fpm	300	400	500	600	700	800	1000	1200	1400	
		Vp, in. Wg	0.01	0.01	0.02	0.02	0.03	0.04	0.06	0.09	0.12	
		Ps (-), in. Wg	0.03	0.06	0.09	0.13	0.17	0.23	0.36	0.51	0.70	
10 x 22 (12 x 24 Face)	Flow Rate, cfm	458	611	764	917	1069	1222	1528	1833	2139		
	Room NC	-	-	-	14	18	21	27	32	36		
14 x 14 (16 x 16 Face)	Flow Rate, cfm	408	544	681	817	953	1089	1361	1633	1906		
	Room NC	-	-	12	17	21	24	30	35	39		
18 x 18 (20 x 20 Face)	Flow Rate, cfm	675	900	1125	1350	1575	1800	2250	2700	3150		
	Room NC	-	11	17	22	26	29	35	40	44		
22 x 46 (24 x 48 Face)	Flow Rate, cfm	2108	2811	3514	4217	4919	5622	7028	8433	9839		
	Room NC	12	20	25	30	34	38	43	48	52		

PAR, PXP, PMR, PXP-DR, PDR Performance Notes

- * Supply unit with deflectors removed.

- Static pressures are negative, in inches of water, measured per ANSI/ASHRAE Standard 70-91.
- Noise Criteria (NC) based on a room absorption of 10 dB, re 10⁻¹² watts, measured per ANSI/ASHRAE Standard 70-91.

- These products have been tested per ANSI/ASHRAE Standard 70-91. Actual performance, with flexible duct inlet, may vary in the field.
- See the section, Engineering Guidelines for additional information.