



# ENGINEERING DATA

## APPS, APPSF, 1-Slot

6" Inlet 1 Slot									
1" Slot Width	24"	Airflow (CFM)	50	73	95	118	140	163	185
		Total Pressure	0.023	0.048	0.083	0.126	0.179	0.241	0.313
		Static Pressure	0.018	0.039	0.066	0.102	0.144	0.194	0.252
		Noise Criteria	-	18	25	30	35	38	41
		Throw	5-10-18	9-14-22	12-18-25	15-20-28	17-21-30	19-23-32	20-24-35
	48"	Airflow (CFM)	80	118	155	193	230	268	305
		Total Pressure	0.033	0.070	0.122	0.188	0.269	0.364	0.473
		Static Pressure	0.021	0.045	0.079	0.122	0.174	0.236	0.307
		Noise Criteria	-	17	24	29	34	37	41
		Throw	4-9-22	9-16-28	14-21-32	18-25-35	21-27-39	24-29-42	26-31-44
1-1/2" Slot Width	24"	Airflow (CFM)	100	125	150	175	200	225	250
		Total Pressure	0.037	0.058	0.084	0.115	0.150	0.190	0.234
		Static Pressure	0.020	0.031	0.044	0.060	0.078	0.099	0.122
		Noise Criteria	17	22	27	31	34	37	40
		Throw	3-6-14	4-9-17	6-11-19	8-12-21	9-14-22	11-16-23	12-17-25
	48"	Airflow (CFM)	150	188	225	263	300	338	375
		Total Pressure	0.055	0.086	0.124	0.169	0.221	0.280	0.345
		Static Pressure	0.015	0.023	0.034	0.046	0.060	0.076	0.094
		Noise Criteria	18	23	28	32	35	38	41
		Throw	2-4-15	3-7-19	4-10-22	6-13-25	8-15-27	10-17-29	12-19-30

8" Inlet 1 Slot									
1" Slot Width	24"	Airflow (CFM)	50	78	105	133	160	188	215
		Total Pressure	0.018	0.043	0.080	0.127	0.185	0.254	0.334
		Static Pressure	0.016	0.039	0.072	0.115	0.167	0.230	0.302
		Noise Criteria	-	17	25	31	35	39	42
		Throw	5-10-18	10-15-22	14-18-26	17-21-29	19-23-32	20-25-35	22-26-37
	48"	Airflow (CFM)	100	140	180	220	260	300	340
		Total Pressure	0.028	0.055	0.091	0.136	0.190	0.252	0.324
		Static Pressure	0.021	0.041	0.069	0.102	0.143	0.190	0.245
		Noise Criteria	-	19	25	30	34	37	41
		Throw	6-14-25	13-19-30	16-24-34	20-27-38	24-29-41	25-31-44	27-33-47
1-1/2" Slot Width	24"	Airflow (CFM)	120	143	165	188	210	233	255
		Total Pressure	0.035	0.049	0.066	0.085	0.107	0.131	0.157
		Static Pressure	0.025	0.035	0.047	0.061	0.076	0.093	0.112
		Noise Criteria	16	20	24	27	30	33	35
		Throw	4-8-17	5-10-19	7-12-20	9-13-21	10-15-23	11-16-24	12-18-25
	48"	Airflow (CFM)	180	230	280	330	380	430	480
		Total Pressure	0.040	0.065	0.096	0.133	0.177	0.227	0.282
		Static Pressure	0.017	0.028	0.042	0.058	0.077	0.099	0.123
		Noise Criteria	17	23	28	32	36	39	42
		Throw	3-6-18	5-11-23	7-14-26	10-16-28	13-19-30	14-21-32	16-24-34

Notes:

1. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70-1991. Actual performance with flexible duct inlet may vary in the field.
2. Throws listed are for the 1-way pattern. For divided airflow, select the airflow in each direction according to the number of slots aimed in that direction, with the total airflow apportioned between slots.
3. Engineering Units: Static Pressure = in. wc; Total Pressure = in. wc; Throw = ft at 150, 100, & 50 fpm.
4. Airflow given is for the length of the diffuser.
5. Throw values given are for isothermal conditions.
6. NC is based upon 10dB room absorption (Re:  $10^{-12}$  watts) evaluated at 125 through 4000 Hz octave bands.
7. Dash (-) in space denotes an NC value of less than 10.



# ENGINEERING DATA

## APPS, APPSF, 1-Slot

10" Inlet 1 Slot									
1" Slot Width	24"	Airflow (CFM)	60	85	110	135	160	185	210
		Total Pressure	0.028	0.056	0.094	0.142	0.199	0.266	0.343
		Static Pressure	0.027	0.054	0.090	0.135	0.190	0.254	0.327
		Noise Criteria	-	18	24	29	33	37	40
		Throw	7-12-20	11-17-23	14-19-27	17-21-30	19-23-32	20-24-35	21-26-37
	48"	Airflow (CFM)	100	145	190	235	280	325	370
		Total Pressure	0.021	0.044	0.076	0.117	0.166	0.223	0.289
		Static Pressure	0.017	0.037	0.063	0.097	0.137	0.185	0.239
		Noise Criteria	-	18	25	30	34	38	41
		Throw	6-14-25	13-20-31	17-25-35	22-28-39	25-30-43	26-32-46	28-35-49
1-1/2" Slot Width	24"	Airflow (CFM)	145	158	170	183	195	208	220
		Total Pressure	0.045	0.053	0.061	0.071	0.081	0.092	0.103
		Static Pressure	0.037	0.044	0.051	0.059	0.067	0.076	0.085
		Noise Criteria	17	19	21	23	24	26	27
		Throw	5-10-19	6-11-20	7-12-20	8-13-21	9-14-22	10-15-22	10-15-23
	48"	Airflow (CFM)	220	270	320	370	420	470	520
		Total Pressure	0.040	0.061	0.085	0.114	0.147	0.184	0.225
		Static Pressure	0.023	0.034	0.048	0.064	0.083	0.104	0.127
		Noise Criteria	18	23	28	31	34	37	40
		Throw	4-10-22	6-13-26	9-16-28	12-18-30	14-21-32	16-23-34	17-25-35
12" Inlet 1 Slot									
1" Slot Width	48"	Airflow (CFM)	120	170	220	270	320	370	420
		Total Pressure	0.026	0.052	0.088	0.132	0.185	0.248	0.319
		Static Pressure	0.024	0.048	0.081	0.122	0.171	0.229	0.295
		Noise Criteria	-	19	25	30	34	38	41
		Throw	9-16-28	16-23-33	20-27-38	24-30-42	26-32-46	28-35-49	30-37-52
1-1/2" Slot Width	48"	Airflow (CFM)	275	313	350	388	425	463	500
		Total Pressure	0.043	0.055	0.069	0.085	0.102	0.121	0.141
		Static Pressure	0.032	0.042	0.053	0.065	0.078	0.092	0.107
		Noise Criteria	18	21	24	27	29	31	33
		Throw	7-14-26	9-15-28	11-17-29	13-19-31	14-21-32	15-23-33	17-25-35

Notes:

1. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70-1991. Actual performance with flexible duct inlet may vary in the field.
2. Throws listed are for the 1-way pattern. For divided airflow, select the airflow in each direction according to the number of slots aimed in that direction, with the total airflow apportioned between slots.
3. Engineering Units: Static Pressure = in. wc; Total Pressure = in. wc; Throw = ft at 150, 100, & 50 fpm.
4. Airflow given is for the length of the diffuser.
5. Throw values given are for isothermal conditions.
6. NC is based upon 10dB room absorption (Re:  $10^{-12}$  watts) evaluated at 125 through 4000 Hz octave bands.
7. Dash (-) in space denotes an NC value of less than 10.

Plenum Slots



# ENGINEERING DATA

## APPS, APPSF, 2-Slot

6" Inlet 2 Slot									
1" Slot Width	24"	Airflow (CFM)	90	125	160	195	230	265	300
		Total Pressure	0.041	0.079	0.130	0.193	0.269	0.357	0.457
		Static Pressure	0.027	0.051	0.084	0.125	0.174	0.231	0.297
		Noise Criteria	-	19	25	30	34	37	40
		Throw	5-12-24	10-17-28	15-22-32	18-25-36	21-27-39	24-29-41	25-31-44
	48"	Airflow (CFM)	150	185	220	255	290	325	360
		Total Pressure	0.085	0.130	0.183	0.246	0.319	0.400	0.491
		Static Pressure	0.045	0.069	0.097	0.130	0.168	0.211	0.260
		Noise Criteria	-	15	20	23	26	29	32
		Throw	5-11-29	8-17-35	11-21-38	15-25-41	19-28-43	21-32-46	23-34-48
1-1/2" Slot Width	24"	Airflow (CFM)	90	130	170	210	250	290	330
		Total Pressure	0.030	0.063	0.108	0.165	0.234	0.315	0.408
		Static Pressure	0.016	0.033	0.057	0.086	0.122	0.165	0.213
		Noise Criteria	14	23	30	36	40	44	47
		Throw	2-5-13	4-9-18	7-12-20	10-15-23	12-17-25	14-19-26	15-20-28
	48"	Airflow (CFM)	150	190	230	270	310	350	390
		Total Pressure	0.055	0.089	0.130	0.179	0.236	0.301	0.373
		Static Pressure	0.015	0.024	0.035	0.049	0.064	0.082	0.102
		Noise Criteria	18	24	29	33	36	39	42
		Throw	2-4-15	3-7-19	5-11-23	6-13-26	9-15-27	11-17-29	13-19-31

  

8" Inlet 2 Slot									
1" Slot Width	24"	Airflow (CFM)	90	130	170	210	250	290	330
		Total Pressure	0.023	0.047	0.081	0.124	0.175	0.236	0.306
		Static Pressure	0.021	0.044	0.076	0.116	0.165	0.221	0.287
		Noise Criteria	-	17	24	29	33	37	40
		Throw	5-12-24	11-18-29	16-23-33	19-26-37	23-28-40	25-31-43	27-33-46
	48"	Airflow (CFM)	170	230	290	350	410	470	530
		Total Pressure	0.051	0.093	0.147	0.214	0.294	0.386	0.491
		Static Pressure	0.046	0.083	0.133	0.193	0.265	0.348	0.443
		Noise Criteria	-	18	24	28	32	35	38
		Throw	7-15-33	12-22-39	19-28-43	23-24-48	27-36-52	30-39-55	34-41-59
1-1/2" Slot Width	24"	Airflow (CFM)	120	160	200	240	280	320	360
		Total Pressure	0.035	0.062	0.097	0.139	0.189	0.247	0.313
		Static Pressure	0.025	0.044	0.069	0.100	0.135	0.177	0.224
		Noise Criteria	16	23	29	33	37	41	44
		Throw	4-8-17	6-11-20	9-14-22	11-17-24	13-18-26	15-20-28	17-21-30
	48"	Airflow (CFM)	180	250	320	390	460	530	600
		Total Pressure	0.040	0.077	0.125	0.186	0.259	0.344	0.441
		Static Pressure	0.017	0.033	0.055	0.082	0.113	0.151	0.193
		Noise Criteria	17	25	31	36	41	44	47
		Throw	3-6-18	6-12-25	9-16-28	13-19-31	15-23-33	18-25-36	20-27-38

Notes:

1. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70-1991. Actual performance with flexible duct inlet may vary in the field.
2. Throws listed are for the 1-way pattern. For divided airflow, select the airflow in each direction according to the number of slots aimed in that direction, with the total airflow apportioned between slots.
3. Engineering Units: Static Pressure = in. wc; Total Pressure = in. wc; Throw = ft at 150, 100, & 50 fpm.
4. Airflow given is for the length of the diffuser.
5. Throw values given are for isothermal conditions.
6. NC is based upon 10dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands.
7. Dash (-) in space denotes an NC value of less than 10.



# ENGINEERING DATA

## APPS, APPSF, 2-Slot

10" Inlet 2 Slot									
1" Slot Width	24"	Airflow (CFM)	100	145	190	235	280	325	370
		Total Pressure	0.021	0.044	0.076	0.117	0.166	0.223	0.289
		Static Pressure	0.020	0.042	0.073	0.112	0.158	0.213	0.277
		Noise Criteria	-	18	25	30	34	38	41
		Throw	6-14-14	13-20-20	17-25-25	22-28-28	25-30-30	26-32-32	28-35-35
	48"	Airflow (CFM)	175	258	340	423	505	588	670
		Total Pressure	0.034	0.073	0.127	0.196	0.281	0.380	0.494
		Static Pressure	0.031	0.067	0.117	0.180	0.257	0.348	0.453
		Noise Criteria	-	19	26	31	35	39	42
		Throw	7-16-34	15-25-41	22-33-47	27-37-52	33-40-57	36-44-62	38-47-66
1-1/2" Slot Width	24"	Airflow (CFM)	150	200	250	300	350	400	450
		Total Pressure	0.048	0.085	0.133	0.191	0.261	0.340	0.431
		Static Pressure	0.040	0.071	0.110	0.159	0.216	0.282	0.357
		Noise Criteria	18	25	31	35	39	43	46
		Throw	6-11-19	9-14-22	12-17-25	14-19-27	16-21-29	18-22-31	19-23-33
	48"	Airflow (CFM)	220	300	380	460	540	620	700
		Total Pressure	0.040	0.075	0.120	0.176	0.243	0.320	0.408
		Static Pressure	0.023	0.042	0.068	0.100	0.137	0.181	0.231
		Noise Criteria	18	26	32	37	41	44	47
		Throw	4-10-22	8-15-27	13-19-30	15-23-33	18-26-36	20-27-39	23-29-41

12" Inlet 2 Slot									
1" Slot Width	48"	Airflow (CFM)	200	285	370	455	540	625	710
		Total Pressure	0.025	0.050	0.085	0.129	0.181	0.242	0.313
		Static Pressure	0.023	0.048	0.080	0.122	0.171	0.229	0.296
		Noise Criteria	-	19	25	30	34	38	41
		Throw	9-19-36	18-28-43	24-35-49	29-38-54	34-42-59	37-45-64	39-48-68
1-1/2" Slot Width	48"	Airflow (CFM)	250	350	450	550	650	750	850
		Total Pressure	0.035	0.069	0.114	0.171	0.238	0.317	0.408
		Static Pressure	0.027	0.053	0.087	0.130	0.182	0.242	0.310
		Noise Criteria	15	24	30	35	40	43	47
		Throw	6-12-25	11-17-29	15-22-33	18-26-36	21-28-40	25-30-43	26-32-45

Notes:

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